Report Information from ProQuest

02 October 2023 01:49

TABLE OF CONTENTS

TABLE OF CONTENTS

SEARCH STRATEGY

Set No.	Searched for	Databases	Results
S1	american journal of public health.	Ebook Central, Public Health Database, Publicly Available Content Database	595021*

* Duplicates are removed from your search, but included in your result count.

The Potential and Challenges for Common Ground on Abortion

Magnan, Sanne, MD, PhD [1] [1] the HealthPartners Institute, Bloomington, MN.

ABSTRACT (ENGLISH)

Discussing the recent US Supreme Court decision Dobbs vJackson Women's Health Organization (Dobbs), a colleague commented, "I am not in favor of abortion, but I don't want to see women in back-street, illegal clinics either." I feel the same way. I understand that women who want abortions advocate reproductive rights; however, who advocates reproductive rights for the unborn? Does it have to be "us" versus "them"? Can we build bridges of empathy for common ground? Can we be a better nation by the process of "listening, asking and understanding"?1 To be empathetic2 is to be curious, get outside our bubbles, and interact with those who do not think as we do. Start with making others feel respected in conversations, even if we do not agree with their positions. Suspend judgments. Acknowledge and explore our privileges and biases. It may lead to shared experiences or understanding differing views on abortion. Is there a shared project, no matter how small, in reproductive rights that could provide a beginning common ground?

Religion is not necessarily a stumbling block for common ground. For example, per the Pew Research Center, the African Methodist Episcopal Church, the Roman Catholic Church, the Southern Baptist Convention, and Hinduism generally oppose abortion rights. The groups on the opposite end of the spectrum (e.g., the Presbyterian Church (USA) and Conservative and Reform Judaism) support abortion rights with few or no limits. There are also religious groups with unclear positions on abortion (e.g., Buddhism, Islam, and OrthodoxJudaism).3 Additionally, individual members may have opinions that do not equate with the official position of their religious group.

FULL TEXT

Note. The opinions expressed in this editorial are solely the author's and do not necessarily reflect the opinions and beliefs of the HealthPartners Institute.

Discussing the recent US Supreme Court decision Dobbs vJackson Women's Health Organization (Dobbs), a colleague commented, "I am not in favor of abortion, but I don't want to see women in back-street, illegal clinics either." I feel the same way. I understand that women who want abortions advocate reproductive rights; however, who advocates reproductive rights for the unborn? Does it have to be "us" versus "them"? Can we build bridges of empathy for common ground? Can we be a better nation by the process of "listening, asking and understanding"?1 To be empathetic2 is to be curious, get outside our bubbles, and interact with those who do not think as we do. Start with making others feel respected in conversations, even if we do not agree with their positions. Suspend judgments. Acknowledge and explore our privileges and biases. It may lead to shared experiences or understanding differing views on abortion. Is there a shared project, no matter how small, in reproductive rights that could provide a beginning common ground?

Religion is not necessarily a stumbling block for common ground. For example, per the Pew Research Center, the African Methodist Episcopal Church, the Roman Catholic Church, the Southern Baptist Convention, and Hinduism generally oppose abortion rights. The groups on the opposite end of the spectrum (e.g., the Presbyterian Church (USA) and Conservative and Reform Judaism) support abortion rights with few or no limits. There are also religious groups with unclear positions on abortion (e.g., Buddhism, Islam, and OrthodoxJudaism).3 Additionally, individual members may have opinions that do not equate with the official position of their religious group.

An article based on Pew Research Center data has a chart with the heading "85 Percent of American Voters Think Abortion Should Be Legal in Some or All Circumstances."4 On closer examination, however, this statement is somewhat misleading. The number of people who support legal abortion actually decreases with gestational age. For example, 26% of Americans indicated that abortion should be illegal at the gestational age of six weeks (i.e., illegal with some exceptions, illegal, or illegal in all cases with no exceptions). This number increases to 33% for 14weeks gestation and 48% for 24weeks gestation.4 Therefore, the changing views of Americans on abortion for various stages of gestation may provide fruitful ground for discussion.

But what if seeking common ground on abortion requires uncomfortable listening? On the one hand, there can be the denial of women's bodily autonomy; on the other hand, there can be the denial ofthe unborn's life-both of which may seem offensive. Finding common ground requires us to listen to each other's rational perspectives, to look for a Venn diagram of next steps. We must start with listening without judgment.

There are two significant challenges for f nding common ground: values and views on death and the beginning of life. For example, liberals and conservatives share values such as caring, liberty, and fairness; however, conservatives also tend to embrace others, such as loyalty, authority, and sanctity.5 Liberty isa key value for advocating women's autonomous decisions about abortion; these reproductive rights are defined from the mother's standpoint: "Who has a right to tell me what to do with my pregnancy and my body?"

Liberty and sanctity are key values for advocating the reproductive rights ofthe unborn, especially for conservatives, although there is the group Democrats for Life of America (https:// www.democratsforlife.org). Underlying sanctity are views on conception and death. Philosopher R. George states, "Each of us who is now an adult is the same human being who was atan earliertime an adolescent, a child, an infant, a fetus, an embryo and a zygote."6(p191) Death at any point along this continuum is still death and deprives fetuses of their future life-the good things in life they could have had-ifthey had lived.7,8

Philosopher M. Jali provides another perspective:

It is very difficult to justify any specific time as the point at which a conceptus becomes a person and as such a bearer of moral rights. The pro-life group draws the line as to when the conceptus becomes a person too early. Moderates would find it difficult to accept that a group of cells (regardless of their potentiality) without any form has to be considered as a person. On the other hand, it is also difficult to accept the notion that personhood begins at birth as indicated by the pro-choice group. This view disregard[s] the potentiality towards actual human life that occurs throughout pregnancy.9(p30)

Egregious actions after Dobbs may spur attention for finding a different way. Criminalizing or creating fear of reprisals in the medical management of spontaneous abortions (i.e., miscarriages), ectopic pregnancies, and noninduced intrauterine fetal death as well as other pregnancy-related issues do not serve either side well and may prompt searches for common ground. On the other hand, introducing legislation with no restrictions on abortion even to the point of birth may be just as egregious.10,11 However, we could find common ground issues of valuing and investing more in the well-being of our children and families-including in the child tax credit, early childhood education, childcare, and workplace protections for equitable pay, family leave, and suitable medical benefits for pregnant women-ways to support women and families and decrease abortions.12 Creating the policy environment for such actions will require skillful coalition building, especially in states where such programs have not been supported or funded.

Are these discussions from prolife and prochoice perspectives beneficial for our democracy even if we do not find common ground? Stating and defending beliefs while exploring others' beliefs increase our cognitive capacity. Looking at principles such as justice and equality, we practice our civic duty. Civic care1 through reasonable disagreements guards against one common perspective becoming entrenched without challenge, decreasing our ability to make good democratic decisions. These disagreements require patience, curiosity, and a willingness to provide a platform for people to be heard. Years from now, will we look back and question whether we created good public policy on abortion?6 Could slavery in this country have ended earlier ifwe had done more civic caring?

On November 15, 2022, the Washington Post's Post Reports podcast released an episode13 about the "covert

abortion pill pipeline," a pregnant young woman in a loving relationship, her initial ambivalence, and her residence in a state where abortion is illegal. The story is tragic for the impact on her and her pregnancy and best understood by listening to the podcast. In the end, where have we failed this woman and her boyfriend; where have we failed the little one she aborted and they buried? Exploring these questions will not be easy, and building "common ground is not for the faint of heart."14 _4jPU

CORRESPONDENCE

Correspondence should be sent to Sanne Magnan, HealthPartners Institute, Mailstop 21112R, PO Box 1309, Minneapolis, MN 554401309 (e-mail: sannemagnan@gmail.com). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Magnan S. The potential and challenges for common ground on abortion. AmJ Public Health. 2023;113(4):380-381.

Acceptance Date: February 2, 2023.

DOI: https://doi.org/10.2105/AJPH.2023.307252

CONFLICTS OF INTEREST

The author has no conflicts of interest to disclose.

References

REFERENCES

1. Miller JP. Caring to disagree: democratic disagreement as civic care. Polity. 2012;44(3):400-425. https://doi.org/10.1 057/pol.2012.5

2. Miller CC. How to be more empathetic. New York Times. January 31,2019. Available at: https://www.nytimes.com/guides/year-of-living-better/ how-to-be-more-empathetic. Accessed January 19, 2023.

3. Masci D. Where major religious groups stand on abortion. June 21, 2016. Available at: https://www.pewresearch.org/fact-tank/2016/06/21/ where-major-religious-groups-stand-on-abortion. Accessed January 17, 2023.

4. Molla R. What Americans think about abortions, in 3 charts. June 24, 2022. Available at: https://www.vox.com/policy-and-politics/23167397/ abortion-public-opinion-polls-americans. Accessed January 19, 2023.

5. Haidt J. The Righteous Mind: Why Good People Are Divided by Politics and Religion. New York, NY: Pantheon Books; 2012.

6. George RP. Democracy and moral disagreement: reciprocity, slavery, and abortion. In: Macedo S, ed. Deliberative Politics: Essays on Democracy and Disagreement. New York, NY: Oxford University Press; 1999:184-197.

7. Marquis D. Why abortion is immoral. J Philos. 1989;86(4):183-202. https://doi.org/10.2307/ 2026961

8. Marquis D. Deprivations, futures and the wrongness of killing. J Med Ethics. 2001;27(6):363-369. https://doi.org/10.1136/jme.27.6.363

9. Jali MN. Abortion-a philosophical perspective. Curationis. 2001;24(4):25-31. https://doi.org/10.4102/curationis.v24i4.878

10. Deng G. Right to abortion bill clears first hurdle in Minnesota House. Minnesota Reformer. January 5, 2023. Available at: https://minnesotareformer.com/ 2023/01/05/right-to-abortion-bill-in-minnesotaclears-first-hurdle. Accessed January 14, 2023.

11. Minnesota Citizens Concerned for Life. Extreme abortion bill passes Minnesota House committee. January 5, 2023. Available at: https://www. mccl.org/post/extreme-abortion-bill-passesminnesota-house-committee. Accessed January 14, 2023.

12. Koppelman A. The neglected common ground on abortion. The Hill. July 17, 2022. Available at: https://thehill.com/opinion/civil-rights/3562469the-neglected-common-ground-on-abortion. Accessed January 20, 2023.

13. Kitchener C. Inside the covert abortion pill pipeline. Washington Post. November 15, 2022. Available at:

https://www.washingtonpost.com/podcasts/postreports/inside-the-covert-abortion-pill-pipeline. Accessed January 18, 2023.
14. Savage S. From frustration to friend: how building common ground made us better. June 15, 2017. Available at: https://www.thindifference. com/2017/06/building-common-ground-madeus-better. Accessed January 10, 2023.

DETAILS

Subject:	Abortion; Reproductive rights; Womens health; Values; Pregnancy; Religion; Democracy; Children; Taxation; Legislation; Listening; Gestational age; Philosophers; Congressional committees; Supreme Court decisions; Hinduism; Research facilities; Islam; Supreme courts; Advocacy; Buddhism; Court decisions; Women; Baptists; Religious cultural groups; Judaism; Clinics; Public health
Business indexing term:	Industry: 92112 : Legislative Bodies
Location:	Minnesota; New York; United States--US
Company / organization:	Name: Pew Research Center; NAICS: 541720; Name: HealthPartners; NAICS: 524114, 621491
Classification:	92112: Legislative Bodies
Publication title:	American J ournal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	380-381
Publication year:	2023
Publication date:	Apr 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English

Structural Racism and Pedestrian Safety: Measuring the Association Between Historical Redlining and Contemporary Pedestrian Fatalities Across the United States, 2010–2019

Taylor, Nandi L, MPH; Porter, Jamila M, DrPH, MPH; Bryan, Shenee, MPH, MPA; Harmon, Katherine J, PhD; Sandt, Laura S, PhD

ABSTRACT (ENGLISH)

Objectives. To examine the association between historical redlining and contemporary pedestrian fatalities across the United States. Methods. We analyzed 2010-2019 traffic fatality data, obtained from the Fatality Analysis Reporting System, for all US pedestrian fatalities linked by location of crash to 1930s Home Owners' Loan Corporation (HOLC) grades and current sociodemographic factors at the census tract level. We applied generalized estimating equation models to assess the relationship between the count of pedestrian fatalities and redlining. Results. In an adjusted multivariable analysis, tracts graded D ("Hazardous") had a 2.60 (95% confidence interval = 2.26, 2.99) incidence rate ratio (per residential population) of pedestrian fatalities compared with tracts graded A ("Best"). We found a significant dose-response relationship: as grades worsened from A to D, rates of pedestrian fatalities increased. Conclusions. Historical redlining policy, initiated in the 1930s, has an impact on present-day transportation inequities in the United States. Public Health Implications. To reduce transportation inequities, understanding how structurally racist policies, past and present, have an impact on community-level investments in transportation and health is crucial.

FULL TEXT

Headnote

Objectives. To examine the association between historical redlining and contemporary pedestrian fatalities across the United States.

Methods. We analyzed 2010-2019 traffic fatality data, obtained from the Fatality Analysis Reporting System, for all

US pedestrian fatalities linked by location of crash to 1930s Home Owners' Loan Corporation (HOLC) grades and current sociodemographic factors at the census tract level. We applied generalized estimating equation models to assess the relationship between the count of pedestrian fatalities and redlining.

Results. In an adjusted multivariable analysis, tracts graded D ("Hazardous") had a 2.60 (95% confidence interval = 2.26, 2.99) incidence rate ratio (per residential population) of pedestrian fatalities compared with tracts graded A ("Best"). We found a significant dose-response relationship: as grades worsened from A to D, rates of pedestrian fatalities increased.

Conclusions. Historical redlining policy, initiated in the 1930s, has an impact on present-day transportation inequities in the United States.

Public Health Implications. To reduce transportation inequities, understanding how structurally racist policies, past and present, have an impact on community-level investments in transportation and health is crucial. (Am J Public Health. 2023;113(4):420-428. https://doi.org/10.2105/AJPH.2022.307192)

Transportation is an important social determinant of health that affects the ability of people to move efficiently and safely through public and private spaces. Active transportation- specifically walking, cycling, and rolling- has direct and indirect impacts on health at both individual and community levels.1 Injuries and deaths among road users, especially those walking, continue to be a significant public health problem. In the past decade, pedestrian deaths have risen by 54% while all other traffic deaths have increased by 13%.2 Low-income communities and communities of color bear a disproportionate burden of pedestrian injuries and fatalities, with Native/Indigenous and Black pedestrians being especially overrepresented.3-8 Moreover, roadway designs that enable speeding and discourage walking are more likely to be in areas that experience high rates of pedestrian fatalities, which are often lower-income, Black, or Hispanic/Latinx communities.9,10 However, research focuses on identifying factors that increase or decrease risk rather than characterizing the policies that created and facilitated these unsafe built environments.

There is a current shift in public health, both research and fields of practice, that seeks to understand the ways in which structural racism fundamentally causes the health inequities we see today in the United States. Bailey et al. define structural racism as

> the totality of ways in which societies foster racial discrimination, through mutually reinforcing inequitable systems (in housing, education, employment, earnings, benefits, credit, media, health care, criminal justice, and so on) that in turn reinforce discriminatory beliefs, values, and distribution of resources, which together affect the risk of adverse health outcomes.11(p1454)

Inequities in residential housing practices measured by residential racial segregation or historical redlining are a common indicator of structural racism.12 "Redlining" is a term that refers to a federally sponsored policy that was initiated in the United States in the 1930s. The government-sponsored Home Owners' Loan Corporation (HOLC), created as part of President Franklin D. Roosevelt's New Deal, made loans to new homeowners by refinancing mortgages at low-interest rates. HOLC used color-coded and lettergraded maps to group neighborhoods into financial risk and lending categories.13 Areas color-coded green ("A" or "Best") and blue ("B" or "Still Desirable") were predominantly White and were systematically approved for privately and publicly guaranteed home loans. However, neighborhoods color-coded yellow ("C" or "Definitely Declining") and red ("D" or "Hazardous"), which were populated by Black people and immigrants, were denied homeownership loans, ultimately impacting generational wealth and limiting community-level investments. Redlining legalized discrimination in housing and systematized structural racism on a national scale.14 For an example of the language and maps created by HOLC, see Figure 1 and Figure A (available as a supplement to the online version of this article at https://ajph.org).15

Redlining is associated with a wide variety of contemporary adverse health outcomes, both at the individual and community level. These health outcomes include (but are not limited to) smoking, infant mortality, life expectancy, and firearm violence.16-24 Krieger et al. found that census tracts assigned worse HOLC grades in New York City had an elevated risk of adverse maternal health outcomes.19 Research on violence and historical redlining also found that neighborhoods that were redlined (graded D) in Louisville, Kentucky, had a greater incidence of gun violence compared with areas graded A, even after adjusting for census-level demographic factors.16 Moreover,

redlining continues to be associated with racial segregation, poverty, and income inequality.23,25 Mitchell et al. found that areas graded "Hazardous" by redlining maps remain areas with lower household incomes.25 By tying the presence of Black people to low property values, negating the generational wealth of Black households, cementing the racial wealth gap, and perpetuating disinvestment in segregated Black neighborhoods, redlining continues to adversely affect community health throughout the United States.

To date, potential connections between redlining and transportationrelated health outcomes have not been explored. Previous research has focused on how specific demographic, environmental, and behavioral factors are associated with pedestrian injuriesand fatalities and may contribute to observed disparities in safety outcomes.7,8,26 However, there is a gap in knowledge surrounding the impacts of inequitable neighborhood-level investments created by historical structurally racist policies, such as redlining and transportationrelated disinvestments. As the field of traffic safety shifts from focusing primarily on changing individual-level factors to transforming structures that reinforce inequities in the transportation systems, there will be a need to understand how policies have created these inequitable systems. To hypothesize these relationships, we used a conceptual model to identify potential pathways between redlining and contemporary, neighborhood-level inequities in pedestrian fatalities.

We sought to address a gap in transportation safety research by assessing the impact of historical policies on contemporary pedestrian safety outcomes. In this study, we aimed to assess the impact of historical redlining on pedestrian fatalities within the United States between 2010 and 2019. Given that redlining is a leading contributing factor to economic disinvestment in neighborhoods, which may lead to a lack of pedestrian infrastructure in redlined neighborhoods, we hypothesized that historical redlining is associated with pedestrian fatalities throughout the United States. Specifically, we hypothesized that areas impacted by redlining or classified as "Definitely Declining" or "Hazardous" (graded C or D, respectively) will have higher contemporary rates of pedestrian fatalities. To our knowledge, this is the first study that seeks to describe the relationship between historical redlining and present-day transportation-related health outcomes on a national scale.

METHODS

We obtained the geocoded locations of all US traffic-related pedestrian fatalities from 2010 to 2019 from the Fatality Analysis Reporting System from the National Highway Traffic Safety Administration.27 Of the 53 407 pedestrian fatalities that occurred between 2010 and 2019, we omitted 412 from the analysis because of unusable latitude and longitude values that were unreported, reported as unknown, or not available. We mapped the remaining 52 995 usable geographic coordinates by using ArcMap version 10.8 (ESRI, Redlands, CA). We then aggregated the counts ofthe pedestrian fatalities at the census tract level by using the 2019 US TIGER/Line Shapefiles.

Determining Redlined Areas

Our main exposure of interest was historical redlining, measured by the color-coded, A-D grades illustrated in the 1930s HOLC maps (Figure 1). For our analyses, we obtained shapefiles of all original HOLC maps from the University of Richmond Mapping Inequality project.15 The original HOLC boundaries do not align spatially with current census tract boundaries. Like other studies, we used the area of overlap technique to assign HOLC grades to census tracts.16,17,28 We overlayed redlining shapefiles with 2019 US census tracts to determine the number of intersections and areas of HOLC grades that fell within each census tract. We selected the HOLC grade with the largest area within the census tract boundary as the HOLC color-coded categorization for that census tract. We dropped tracts with less than 10% area overlap with HOLC grades or coded as "E" (uncharacterized) in the data set from the analysis. We completed all spatial processes in ArcMap version 10.8.

Covariates

We obtained covariates of interest including census tract-level self-reported race, ethnicity, age, gender, poverty, education, and population density from the 2010-2015 (5-year) American Community Survey (ACS), based on categories and descriptions developed by the US Census.29 These variables included the percentage of non-Hispanic Black/ African American, Hispanic/Latinx, male, those older than 18 years, those older than 65years, those in poverty aged 18 years or older, and those older than 25years with at least a high school degree or completion of general education development. We regrouped all variables, except for population density, into discrete "high" and

"low" categories using mean and median distributions. We included population density as a continuous variable.

Statistical Analysis

We used descriptive statistics to assess the relationship between historical redlining, pedestrian fatalities, and sociodemographic factors at the census tract level. Our dependent variable was the count of pedestrian fatalities per census tract; therefore, we used models that account for count distributions and clustering at the census tract. We assessed generalized estimating equation regression, with log function and exchangeable correlation, to model the relationship between historical redlining and counts of pedestrian fatalities. We calculated incidence rate ratios (IRRs) with 95% confidence intervals (CIs) using population as an offset. Because of the potential clustering of pedestrian fatalities within our study area, we assessed residual spatial dependence among census tracts by using Moran's I statistic. We found that our model indicated a weak but significant spatial dependence (Moran's I statistic = 0.06; P <.001).

First, we modeled the unadjusted relationship between historical redlining and pedestrian fatalities using grade A as the referent. Second, we assessed multivariable models, using the goodness-of-fit statistic, by adjusting for census-tract level age, gender, and population density. We did not include all sociodemographic factors because of concerns that these factors may be mediators and could lead to overadjustment in our models.30 To determine if redlining exhibited a dose-response effect for pedestrian fatalities across HOLC grades A to D, we performed the Kruskal-Wallistest fortrends. We performed all statistical analyses with SAS version 9.4 (SAS Institute, Cary, NC).

RESULTS

We included a total of 15 289 census tracts in our analysis. We excluded census tracts with less than a 10% overlay with 1930s HOLC areas (n = 2412), with HOLC grade E (n = 10), and with zero population according to the 2015 ACS (n 5 96). Our final sample included 13 377 census tracts across 38 states and 202 cities. Table 1 shows the characteristics of our study population. Within areas impacted by redlining, a total of 9631 pedestrian fatalities occurred between 2010 and 2019 with a maximum count of pedestrian fatalities per census tract of 17 (mean = 0.72; SD = 1.2). Roughly 45.1 % of our 13 377 census tracts were graded C (n = 6037) followed by D (28.5%; n = 3816), B (20.0%; n 5 2671), and A (6.3%; n = 853).

The overall rate of pedestrian fatalities was 2.0 per 100 000 person-years, with tracts assigned worse HOLC grades having higher pedestrian fatality rates per 100 000 person-years: A 5 1.1; B 5 1.6; C 5 1.9; and D 5 2.6. In addition, sociodemographic factors also varied by HOLC grades. Tracts graded D had a higher percentage of people of color (non-Hispanic Black and Hispanic/Latinx) and poverty compared with other tracts (Figure 2).

Comparison of Models and Multivariable Analysis

Table 2 illustrates the relationship between HOLC grades, demographic factors, and pedestrian fatalities. In our multivariable analysis, we found a significant relationship between historical redlining and contemporary pedestrian fatalities. In model 1,the unadjusted IRRs for HOLC grade D was 2.33 (95% CI 5 2.03, 2.60) times the rate of pedestrian fatalities compared with grade A (Table 2, model 1). Tracts graded C (IRR 5 1.71; 95% CI 5 1.50,1.96) or B (IRR 5 1.38; 95% CI 5 1.20,1.60) were also associated with a higher IRR for pedestrian fatalities compared with tracts graded A. The estimated IRR from tracts graded D to those graded A showed a significant dose-response relationship (Kruskal-Wallis test: P< .001). After adjusting for census tract-level demographic factors, the relationship between HOLC grade designation and pedestrian fatalities remained. When compared with tracts graded A, census tracts graded D (IRR = 2.60; 95% CI = 2.26, 2.99), C (IRR = 1.84; 95% CI = 1.61, 2.11), or B (IRR 5 1.49; 95% CI = 1.29, 1.72) were associated with higher incidence rates of pedestrian fatalities (Table 2, model 2).

DISCUSSION

In this novel study, we found a significant relationship between structural racism via historical redlining and contemporary, neighborhood-level inequities in pedestrian fatalities across the United States. More specifically, we found that census tracts graded D ("Hazardous") in the 1930s had an increased rate of present-day pedestrian fatalities compared with tracts graded A or "Best." In addition, we found a significant dose-response relationship from grades A to D, meaning that as grade color categorization worsened, pedestrian fatality rates increased. This finding adds to the current literature describing the impact of historical redlining on present-day neighborhood-level

health inequities.11,16-18'21'22 Similarto other studies, after adjustment for present-day demographic factors, the effect of redlining remained significant in tracts graded D, C, and B as compared with tracts graded A or "Best."16'21'22

While redlining is not a perfect or sole measure of structural racism, the long-lasting and intergenerational effects of this structurally racist policy are undeniable. Similar to other research, our study showed that census tracts adversely impacted by historical redlining (graded D) continue to be areas with a higher percentage of populations that are impoverished and belong to communities of color.25 Furthermore, research continues to show that areas with high poverty rates and reliance on public transit or active transportation (e.g., walking, rolling, and cycling) have an increased risk of pedestrian crashes and are often characterized by limited, unsafe, high-speed roadway infrastructure.10,26

Our findings indicate that redlining, a policy first implemented in the 1930s, which led to inequitable investments in communities, continues to adversely affect neighborhood-level transportation outcomes today. This is particularly noteworthy, given that most modernday transportation safety programs, such as Vision Zero and the Safe System approach, do not typically acknowledge the impacts of structurally racist policies and racial inequities related to neighborhood-level transportation investments. They also do not undertake concrete efforts to rectify structural inequities in transportation and land use plans and investments. Rather than using "colorblind" approaches to transportation safety (e.g., allocating funds equally to communities for pedestrian infrastructure, regardless of the history of structural racism), these programs should aim to intentionally and directly address the underlying drivers of inequities in transportation safety and forge cross-agency partnerships with professionals in housing, community development, or public health to develop multidisciplinary approaches to rectify transportation inequities.

This study adds to a growing body of literature that confirms that historical policies that led to intergenerational neighborhood disinvestment must be redressed to improve public health, including the reduction of pedestrian fatalities throughout the nation. Departments of transportation at the local, state, and national level play key roles in the distribution and utilization of funding for roadway infrastructure, especially for large-scale highway projects. However, pedestrian infrastructure, such as sidewalks, is often left to the responsibility of private developers and property owners.31 Therefore, lower-income neighborhoods often lack sidewalks or have poorly maintained sidewalks with limited connectivity. Structural racism has governed the trajectories of communities across the United States, creating multidecade place-based effects. These effects are often not acknowledged as a fundamental cause oftransportation inequities. Individually focused behavioral countermeasures and siloed infrastructure projects cannot sufficiently address present-day inequities. Transportation researchers must understand and address upstream factors-like redlining-that continue to undermine positive population-level transportation outcomes.

To our knowledge, this is the first study that (1) connects redlining to transportation, a key social determinant of health, and (2) connects redlining to a transportation-related health outcome by collectively examining all known redlined cities across the United States. Contrasting with other studies that have focused on the identification of specific risk factors or countermeasures that might pertain to individual road users or roadway locations, this study focuses on root causes of inequities and quantifies the multigenerational effects on population-level health outcomes.

Research focused on the effects of historical redlining beyond a single or multicity level has been limited; however, our study examines the national-level impacts of historical redlining and neighborhood health. Our study underscores the ubiquity of this harmful policy and its longstanding effects on the health and safety of communities affected. Currently, the transportation and health communities suffer from an overreliance on individual-based research and behavior-based approaches to injury prevention, known to have limited effectiveness on complex, population-level challenges. More population-level research is needed to illuminate the effects of structural racism; assess historical, political, and social contexts; and highlight opportunities for systemic interventions that offer redress and high-impact, population-level health benefits.

Limitations

In our analysis, our outcome only included fatalities and did not include nonfatal injuries, which are also a significant

public health problem. Although pedestrian fatalities are relatively rare events, census tracts with few or no fatalities may have had numerous nonfatal events. Moreover, residential population may not be the ideal denominator for examining exposure for all pedestrian behaviors (e.g., commuting or recreation); however, nationwide walking exposure information is limited. In addition, given that our data were aggregated to the census tract level, our findings are impacted by ecological fallacy. However, our findings support a well-established understanding that historical redlining impacts neighborhoodlevel health and can ultimately be used to explain place-based exposures and transportation inequities. Our results may also be impacted by both the uncertain geographic context problem and the modifiable areal unit problem. Census tracts are arbitrary boundaries, and pedestrian fatalities and roadway networks do not follow tract borders. However, less than 1% of crash locations fell within a 0.1 -mile radius of borders that cross tracts that were graded D and A.

Our data are also subject to potential misclassification because of the assignment of 1930s HOLC grades to currentday census tracts when using overlay techniques. Roughly 16% of census tracts had less than 10% overlay with HOLC polygons, and removal ofthese tracts had little impact on our associations. While smaller geographic units may offer better resolution for interpretation of neighborhoods, studies using alternative geographic boundaries (e.g., HOLC polygons) have found similar results to our findings; therefore, we predict our relationship would remain.17,24

Furthermore, our analysis did not account for potential temporal changes in HOLC grades from the 1930s to the present day and did not measure changes to neighborhood-level trajectories in health and investment attributable to gentrification or displacement. However, like other studies, we found that redlined census tracts remain areas with higher percentages of populations that are impoverished and belongto communities of color.16,19,23,25

Despite controlling for census tractlevel factors, there may still be unmeasured confounding effects, such as factors related to civic engagement, political power, or other processes that have an impact on policy decisions (e.g., voting rights). In addition, our analysis did not completely account for spatial dependence; therefore, to further address the relationship between historical redlining and transportation outcomes, studies should consider spatial analysis methods. Finally, our analysis focused on the national-level impacts of HOLC policies on present-day neighborhood-level pedestrian fatalities; therefore, findings cannot be used to determine the impacts of redlining on transportation safety within a specific city or state. Future studies may focus on smaller geographic areas to calibrate estimates and offer more context-specific interpretations.

Public Health Implications

Our study adds to the current literature by examining the legacy of structurally racist historical policies that perpetuated transportation inequities that can be observed today. Our study has a variety of implications for public health and transportation safety. Public health efforts that address traffic safety-such as Vision Zero and the Safe System approach-must focus on actions that modify the political, social, and built environments that result in inequitable transportation systems driven by structural racism. The US Department of Transportation Equity Action Plan identified equitable actions focused on empowering communities, expanding access, increasing resources, and wealth creation; however, more should be done to provide state and local guidance on best practices to measure and reduce inequities created by past and present policies and transportation investments including redlining.32 Findings from this study underscore the importance of historical context and the availability of novel data sources, such as redlining maps, to support more nuanced and equity-focused decisions in land use, planning, policymaking, and transportation engineering.

Lessons learned from past interventions are also essential to public health approaches. Place-based funding interventions, often implemented by housing or revenue-focused governmental agencies, have increased property values and investment in disinvested communities; however, they have also led to gentrification and the residential displacement of low-income populations.14,33 Some federal place-based funding programs that have attempted to equitably distribute funding to redlined areas have been associated with increases in property value.14 However, these gains in neighborhood wealth were also associated with reductions in Black resident homeownership in areas formerly graded D.14 These types of interventions show the possible benefits of place-based investments and

reveal the consequences of displacement. Transportation interventions that focus on place-based funding should seek to reduce injuries and fatalities while also minimizing the consequences of displacement by centering community governance in transportation decision-making.

Future research should focus on 3 areas to address injury prevention inequities at the population level for pedestrian fatalities. First, more research is needed that focuses on measuring structural racism as the main exposure that drives health inequities. Racism is a public health crisis and has significant impacts on health across generations; however, investigations into how structural racism is a leading cause oftransportation inequities have been limited and should be a focal point for future research. Analyzing other indicators of structural racism, such as school and residential racial segregation, racially discriminatory enforcement policies and practices, and the construction of high-speed roadways through communities of color, is important to understand and address presentday transportation inequities.11,34

Second, epidemiological research should focus on analyzing modifiable exposures, multidimensional pathways, and potential mediators that result in disparate outcomes for communities of color within the United States. Differences in specific built environment and roadway features, as well as impacts of gentrification and displacement, could be assessed in future studies to determine if relationships exist between the presence of these features, disinvestments tied to structurally racist policies like redlining, and presentday transportation outcomes.

Finally, research should focus on the intergenerational impacts of historical policies on neighborhood development that ultimately affect public health. Several pathways, at the community level-which include social, policy, and built environment factors-should be further explored to better understand how redlining is associated with pedestrian fatalities and to develop sustained policy solutions that focus on redress and make progress toward health and transportation equity. >4JPH

ABOUT THE AUTHORS

Nandi L. Taylor Is with the Injury Prevention Research Center and Department of Epidemiology, Gillings School of Global Public Health, University of North Carolina at Chapel Hill. Jami la M. Porter is with the Office of the CEO, de Beaumont Foundation, Bethesda, MD. Shenee Bryan is with S. Bryan Consulting LLC, Atlanta, GA. KatherineJ. Harmon is with Injury Prevention Research Center and Highway Safety Research Center, University of North Carolina at Chapel Hill. Laura S. Sandt is with the Highway Safety Research Center, University of North Carolina at Chapel Hill.

CORRESPONDENCE

Correspondence should be sent to Nandi L. Taylor, MPH, UNC Injury Prevention Research Center and Department of Epidemiology, University of North Carolina at Chapel Hill, 725 Martin Luther King Jr Blvd, CB #7505, Chapel Hill, NC 27599 (e-mail: nandi.taylor@unc.edu). Reprints can be ordered at https://ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

FullCitation: Taylor NL, PorterJM, Bryan S, Harmon KJ, Sandt LS. Structural racism and pedestrian safety: measuring the association between historical redlining and contemporary pedestrian fatalities across the United States, 2010-2019. Am J Public Health. 2023;113(4):420-428.

Acceptance Date: November 23, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307192

CONTRIBUTORS

N. L. Taylor contributed to conceptualizing the study, conducted data management for geographic information system (GIS) processing of Home Owners' Loan Corporation (HOLC) grade and Fatality Analysis Reporting System (FARS) data, epidemiologicalmethods, analysis, and interpretation of results, and led writing of the article. J. M. Porter conceptualized the study and contributed to writing and revising the article. S. Bryan contributed to conceptualizing the study, data management of FARS and HOLC data, and revision of the article. K.J. Harmon contributed to epidemiological methods, data analysis, interpretation of results, and revision of the article. L. S. Sandt contributed to the writing and revision of the article. All authors approved submission of the article to be published. We applied the sequence-determines-credit approach for the sequence of authors.

ACKNOWLEDGMENTS
This research was supported by the de Beaumont Foundation, a philanthropic organization dedicated to advancing policy, building partnerships, and strengthening public health, and the Collaborative Sciences Center for Road Safety, a US Department of Transportation NationalUniversity Transportation Center promoting safety (USDOT grant 69A3551747113).
N. L. Taylor acknowledges William Covington for insights into GIS data management. N. L. Taylor and K.J. Harmon acknowledge Stephen W. Marshall, PhD, at the Injury Prevention Research Center at the University of North Carolina at ChapelHill for insight into statistical analysis and methods.
Note. The contents of this study reflect the views of the authors, who are responsible for the facts and the accuracy of the information presented herein. This research is disseminated in the interest of information exchange. The study is funded, partially or entirely, by a grant from the US Department of Transportation's University Transportation Centers Program. However, the US government assumes no liability for the contents or use thereof.
CONFLICTS OF INTEREST
All authors have no conflicts ofinterest to declare.
HUMAN PARTICIPANT PROTECTION
No protocol approval was needed for this study because the data used were publicly available, de-identified, and obtained from secondary sources.

References

REFERENCES

1. Office of Disease Prevention and Health Promotion, US Department of Health and Human Services. Social determinants of health. Healthy People 2030. Available at: https://health.gov/ healthypeople. Accessed August 9, 2022.
2. Governors Highway Safety Association. Pedestrian traffic fatalities by state 2021 preliminary data. 2022. Available at: https://www.ghsa.org/ resources/Pedestrians22. Accessed January 25, 2023.
3. Governors Highway Safety Association. An analysis of traffic fatalities by race and ethnicity. 2021. Available at: https://www.ghsa.org/resources/ Analysis-of-Traffic-Fatalities-by-Race-andEthnicity21. Accessed June 29, 2022.
4. Chong SL, Chiang LW, Allen JC, Fleegler EW, Lee LK. Epidemiology of pedestrian-motor vehicle fatalities and injuries, 2006-2015. Am J Prev Med. 2018;55(1):98-105. https://doi.org/10.10167j. amepre.2018.04.005
5. Harmon KJ, Peticolas K, Redding Erika M, Ising A, Waller AE. Examining the effect of pedestrian crashes on vulnerable populations in North Carolina. N C Med J. 2021;82(4):237-243. https://doi. org/10.18043/ncm.82.4.237
6. Hamann C, Peek-Asa C, Butcher B. Racial disparities in pedestrian-related injury hospitalizations in the United States. BMC Public Health. 2020; 20(1):1459. https://doi.org/10.1186/s12889-02009513-8
7. Sanders RL, Schneider RJ. An exploration of pedestrian fatalities by race in the United States. Transp Res Part D Transp Environ. 2022;107:103298. https://doi.org/10.1016/j.trd.2022.103298
8. Yu CY, Zhu X, Lee C. Income and racial disparity and the role ofthe built environment in pedestrian injuries. J Plann Educ Res. 2018;42(2):136-149. https://doi.org/10.1177/0739456X18807759
9. Lowe K. Environmental justice and pedestrianism: sidewalk continuity, race, and poverty in New Orleans, Louisiana. Transp Res Rec. 2016; 2598(1):119-123. https://doi.org/10.3141/2598-14
10. Rajaee M, Echeverri B, Zuchowicz Z, Wiltfang K, Lucarelli JF. Socioeconomic and racial disparities of sidewalk quality in a traditional rust belt city. SSM Popul Health. 2021;16:100975. https://doi. org/10.1016/j.ssmph.2021.100975
11. Bailey ZD, Krieger N, Agénor M, Graves J, Linos N, Bassett MT. Structural racism and health inequities in the USA: evidence and interventions. Lancet. 2017;389(10077):1453-1463. https://doi.org/ 10.1016/S0140-6736(17)30569-X
12. Groos M, Wallace M, Hardeman R, Theall KP. Measuring inequity: a systematic review of methods used to quantify structural racism. J Health Disparities Res Pract. 2018;11(2):13. Available at: https://digitalscholarship.unlv.edu/jhdrp/vol11/ iss2/13. Accessed February 13, 2023.

13. Hillier AE. Who received loans? Home Owners' Loan Corporation lending and discrimination in Philadelphia in the 1930s. J Plann Hist. 2003;2(1): 3-24. https://doi.org/10.1177/15385132022 39694
14. Robertson C, Parker E, Tach L. Historical redlining and contemporary federal place-based policy: a case of compensatory or compounding neighborhood inequality? Hous Policy Debate. 2022:1-24. https://doi.org/10.1080/10511482.2022.2026994
15. Nelson R, Winling L, Marciano R, et al. Mapping inequality. American Panorama. Available at: https://dsl.richmond.edu/panorama/redlining/ #loc=4/36.71/-97.194. Accessed January 11, 2022.
16. Benns M, Ruther M, Nash N, Bozeman M, Harbrecht B, Miller K. The impact of historical racism on modern gun violence: redlining in the city of Louisville, KY. Injury. 2020;51(10):2192-2198. https://doi.org/10.1016/j.injury.2020.06.042
17. Huang SJ, Sehgal NJ. Association of historic redlining and present-day health in Baltimore. PLoS ONE. 2022;17(1):e0261028. https://doi.org/10. 1371/journal.pone.0261028
18. Jacoby SF, Dong B, Beard JH, Wiebe DJ, Morrison CN. The enduring impact of historical and structural racism on urban violence in Philadelphia. Soc Sci Med. 2018;199:87-95. https://doi.org/10. 1016/j.socscimed.2017.05.038
19. Krieger N, van Wye G, Huynh M, et al. Structural racism, historical redlining, and risk of preterm birth in New York City, 2013-2017. Am J Public Health. 2020;110(7):1046-1053. https://doi.org/ 10.2105/AJPH.2020.305656
20. Nardone A, Chiang J, Corburn J. Historic redlining and urban health today in US cities. Environ Justice. 2020;13(4):109-119. https://doi.org/10.1089/ env.2020.0011
21. Poulson M, Neufeld MY, Dechert T, Allee L, Kenzik KM. Historic redlining, structural racism, and firearm violence: a structural equation modeling approach. Lancet Reg Health Am. 2021;3:100052. https://doi.org/10.1016/j.lana.2021.100052
22. Schwartz E, Onnen N, Craigmile PF, Roberts ME. The legacy of redlining: associations between historical neighborhood mapping and contemporary tobacco retailer density in Ohio. Health Place. 2021;68:102529. https://doi.org/10.1016/j. healthplace.2021.102529
23. Lynch EE, Malcoe LH, Laurent SE, Richardson J, Mitchell BC, Meier HCS. The legacy ofstructural racism: associations between historic redlining, current mortgage lending, and health. SSM Popul Health. 2021;14:100793. https://doi.org/10.1016/ j.ssmph.2021.100793
24. Nardone A, Rudolph KE, Morello-Frosch R, Casey JA. Redlines and greenspace: the relationship between historical redlining and 2010 greenspace across the United States. Environ Health Perspect. 2021;129(1):17006. https://doi.org/10.1289/ EHP7495
25. Mitchell B, Franco J. HOLC "redlining" maps: the persistent structure of segregation and economic inequality. 2018. Available at: https://dataspace. princeton.edu/bitstream/88435/dsp01 dj52w776n/ 1/NCRC-Research-HOLC-10.pdf. Accessed June 10, 2022.
26. Lin PS, Guo R, Bialkowska-Jelinska E, Kourtellis A, Zhang Y. Development ofcountermeasures to effectively improve pedestrian safety in low-income areas. J Traffic Transp Eng. 2019;6(2): 162-174. https://doi.org/10.1016/j.jtte.2019.02.001
27. National Highway Traffic Safety Administration. Fatality Analysis Reporting System. Available at: https://www.nhtsa.gov/file-downloads?p=nhtsa/ downloads/FARS. Accessed November 17, 2021.
28. Noelke C, Outrich M, Baek M, et al. Connecting past to present: examining different approaches to linking historical redlining to present day health inequities. PLoS One. 2022;17(5):e0267606. https://doi.org/10.1371/journal.pone.0267606
29. US Census Bureau. American Community Survey. Available at: https://www.census.gov/programssurveys/acs. Accessed March 3, 2022.
30. Schisterman EF, Cole SR, Platt RW. Overadjustment bias and unnecessary adjustment in epidemiologic studies. Epidemiology. 2009;20(4):488-495. https:// doi.org/10.1097/EDE.0b013e3181a819a1
31. Gelinne D. Steps to prioritize and implement sidewalks. Georgia's Cities Newspaper. February 11, 2019. Available at: https://www.gacities.com/News/ Viewpoints/Steps-to-Prioritize-and-ImplementSidewalks.aspx.

Accessed August 9, 2022.
32. US Department of Transportation. Equity Action Plan. 2022. Available at: https://www.transportation.gov/sites/dot.gov/files/2022-04/ Equity_Action_Plan.pdf. Accessed July 27, 2022.
33. Marcuse P. Gentrification, abandonment, and displacement: connections, causes, and policy responses in New York City. Wash U J Urb Contemp L. 1985;28(1):195. Available at: https://openscholarship.wustl.edu/law_urbanlaw/vol28/ iss1/4. Accessed July6, 2022.
34. Hardeman RR, Homan PA, Chantarat T, Davis BA, Brown TH. Improving the measurement ofstructural racism to achieve antiracist health policy. Health Aff (Millwood). 2022;41(2):179-186. https://doi.org/10.1377/hlthaff.2021.01489.

DETAILS

Subject:	Public health; Transportation; Systemic racism; Racial discrimination; Pedestrians; Censuses; Discrimination; Population density; Violence; Fatalities; Redlining; Pedestrian safety; Segregation; Poverty; Inequality; Confidence intervals; Black people; Traffic accidents &safety; Income inequality; Mortality; Sociodemographics; Hispanic people; Neighborhoods; Loans; Firearms; Education
Business indexing term:	Subject: Redlining Income inequality Loans
Location:	United States--US
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	420-428
Publication year:	2023
Publication date:	Apr 2023
Section:	RESEARCH &ANALYSIS
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English

Housing Instability and Evictions Linked to Elevated Intimate Partner and Workplace Violence Among Women Sex Workers in Vancouver, Canada: Findings of a Prospective, Community-Based Cohort, 2010–2019

Goldenberg, Shira M, PhD, MSc; Buglioni, Natalie, MPH; Krüsi, Andrea, PhD, MPH; Frost, Elizabeth, MSW; Moreheart, Sarah, MPH; Braschel, Melissa, MSc; Shannon, Kate, PhD, MPH

ABSTRACT (ENGLISH)

Objectives. To model the relationship of unstable housing and evictions with physical and sexual violence perpetrated against women sex workers in intimate and workplace settings. Methods. We used bivariate and multivariable logistic regression with generalized estimating equations to model the association of unstable housing exposure and evictions with intimate partner violence (IPV) and workplace violence among a community-based longitudinal cohort of cisgender and transgender women sex workers in Vancouver, Canada, from 2010 through 2019. Results. Of 946 women, 85.9% experienced unstable housing, 11.1% eviction, 26.2% IPV, and 31.8% workplace violence. In multivariable generalized estimating equation models, recent exposure to unstable housing (adjusted odds ratio [AOR] = 2.04; 95% confidence interval [CI] = 1.45, 2.87) and evictions (AOR = 2.45; 95% CI = 0.99, 6.07) were associated with IPV, and exposure to unstable housing was associated with workplace violence (AOR = 1.46; 95% CI = 1.06, 2.00). Conclusions. Women sex workers face a high burden of unstable housing and evictions, which are linked to increased odds of intimate partner and workplace violence. Increased access to safe, women-centered, and nondiscriminatory housing is urgently needed.

FULL TEXT

Headnote
Objectives. To model the relationship of unstable housing and evictions with physical and sexual violence perpetrated against women sex workers in intimate and workplace settings.
Methods. We used bivariate and multivariable logistic regression with generalized estimating equations to model the association of unstable housing exposure and evictions with intimate partner violence (IPV) and workplace violence among a community-based longitudinal cohort of cisgender and transgender women sex workers in Vancouver, Canada, from 2010 through 2019.
Results. Of 946 women, 85.9% experienced unstable housing, 11.1% eviction, 26.2% IPV, and 31.8% workplace violence. In multivariable generalized estimating equation models, recent exposure to unstable housing (adjusted odds ratio [AOR] = 2.04; 95% confidence interval [CI] = 1.45, 2.87) and evictions (AOR = 2.45; 95% CI = 0.99, 6.07) were associated with IPV, and exposure to unstable housing was associated with workplace violence (AOR = 1.46; 95% CI = 1.06, 2.00).
Conclusions. Women sex workers face a high burden of unstable housing and evictions, which are linked to increased odds of intimate partner and workplace violence. Increased access to safe, women-centered, and nondiscriminatory housing is urgently needed. (AmJ Public Health. 2023;113(4):442-452. https://doi.org/10.2105/AJPH.2022.307207)
Housing is a critical social determinant of health and well-being and has been described as a key pathway through which health inequities emerge and are sustained over time.1 In recent years, Vancouver, Canada, like many other places in North America, has experienced an intensifying housing crisis. Community concerns regarding affordable and appropriate housing have continued to intensify, as lowincome family housing, single-room occupancy hotels, and social housing continue to be upscaled or replaced by new housing and retail units.
Women sex workers often face intense marginalization stemming from criminalization, stigma and discrimination, and limited labor protections. These are all structural factors that have been strongly associated with an elevated burden of violence among sex workers, including both occupational and intimate partner violence (IPV).2,3 The estimated prevalence of workplace violence (i.e., physical or sexual violence perpetuated against sex workers) in the past 6 months is 50% to 70% for physical violence and 80% for sexual violence.4 In regard to IPV, an estimated 60% of women sex workers have experienced physical violence and 40% have experienced sexual violence over their lifetimes.4
In comparison with the general population, sex workers face disproportionate risks related to housing instability and evictions because of structural factors, including pervasive criminalization and stigma.5,6 Despite growing concerns regarding the negative health and social consequences of unaffordable housing and, in particular, evictions amid the COVID-19 pandemic,7,8 epidemiologic data are lacking on the role of housing instability and evictions as structural determinants of violence across both intimate partner and occupational contexts among sex workers. This information is needed to inform housing-centered interventions for marginalized women. Previous literature suggests that women experiencing IPV may be more likely to face housing precarity.9-13 Research from Baltimore, Maryland,11 and Vancouver12 documents associations of homelessness with younger age, drug use, sexual IPV, client volume, and working in public or outdoor workplaces.
Research on housing and marginalized women's health has focused mainly on homelessness, which is the most visible and commonly studied form of housing precarity and, more narrowly, refers to experiences of being unhoused or unsheltered. However, less attention has been paid to the needs of marginalized women affected by other forms of housing precarity, such as evictions and housing instability. We define "housing instability" as requiring temporary or marginal overnight sleeping arrangements- such as in a shelter, a hotel, supportive housing, a car, or a recovery house; on the street; with family or friends; or couch surfing-that could lead to loss of housing and eventual homelessness. We operationalize "eviction" as changing one's place of living or sleeping owing to being evicted or forced to move by one's landlord or housing operator. Research has found that some types of sleeping arrangements (e.g., couch surfing) among those experiencing homelessness are more common for youths and are associated with deleterious mental and physical health outcomes.14,15

Previous qualitative literature has described housing as a critical determinant shaping marginalized women's health and safety. Women who use drugs and experience poverty report frequent exposure to rental discrimination, gender-based violence, exploitation, and lack of security and privacy in traditional co-ed low-income housing settings (e.g., single-room occupancy hotels). These inequities may be heightened for transgender women.16,17 Furthermore, the criminalization of aspects of sex work can result in rental discrimination, such as proprietors being less likely to rent to and more likely to evict sex workers.6 Additionally, in the absence of a safe place to take dates, sexual transactions may be relegated to unsafe or isolated settings where sex workers have few protections from occupational violence.6,18 However, few epidemiological studies have analyzed housing instability or evictions in relation to health and safety outcomes, particularly experiences of violence, among women sex workers.19,20 Such research remains critically needed given previous work that has highlighted strong links between IPV and housing precarity among women in the general population and that shows that women experiencing violence are often forced to rely on provisional, overcrowded, or unaffordable housing.21

Building on previous research indicating a high burden of homelessness12 and ofviolence22,23 in intimate partner and occupational settings among women sex workers, we assessed the independent association of exposure to unstable housing and evictions with IPV and occupational violence among women sex workers in Vancouver, Canada, over a 9-year study period (2010-2019).

METHODS

We collected data from An Evaluation of Sex Workers Health Access (AESHA), an open longitudinal community-based cohort of sex workers in Vancouver, Canada. AESHA is overseen by a community advisory board of 15 or more community agencies. Eligibility criteria were self-identifying as a woman (cisgender and transgender inclusive), being aged 14years or older, having exchanged sex for money in the past 30 days in Metro Vancouver, and being able to provide informed consent. We recruited participants through timespace sampling, as described previously,24 across various workplaces (e.g., streets, indoor venues) and online. After providing written informed consent, participants completed baseline and biannual study visits composed of an interviewer-administered questionnaire and serological testing. Visits took place at participants' location of choice (i.e., study office or women's homes or workplaces) and were conducted by experienced (current or former sex workers) and community-based interviewers and clinical staff. We used Biolytical INSTI (Biolytical Laboratories, Inc., Richmond, BC) rapid tests for HIV screening, with confirmation of reactive tests by blood draw for Western blot. We collected urine samples to test for gonorrhea and chlamydia, and drew blood to test for syphilis, HSV-2 (herpes simplex virus 2) antibody, and HCV (hepatitis C). Project nurses provided pre- and posttest counseling as well as treatment of symptomatic sexually transmitted infections onsite and offered referrals for HIV care to participants living with HIV. Serology and Papanicolaou testing were available to community members regardless of study participation. Participants received an honorarium of 40.00 CAD (Canadian dollars) per study visit.

Measures

We assessed demographics and other lifetime exposures using baseline data only; for other study variables (e.g., housing, violence, substance use), we used time-updated data, examining events with recall periods in the past 6 months at baseline and each biannual study visit. Except for age, income, and place of solicitation, all study variables were binary.

Housing exposure variables. We defined "unstable housing" with participants' response to the question "In which of the following types of places have you slept overnight in the last six months?" We coded having temporary or marginal housing experiences in the past 6 months (e.g., street, shelter, hostel, hotel, supportive housing, car, family or friends, couch surfing, recovery house) as "yes." We coded permanent housing (e.g., living in apartment or house on own or with others) as "no." We evaluated evictions with participants' response to the question "Have you changed the main place where you live or sleep overnight in the last 6 months? If yes, why?" We coded women who changed their place of living or sleeping because of being evicted or forced to move in the past 6 months as "yes." Those who did not change their place of living or sleeping or who did so for reasons other than evictions made up the comparison group. We measured unstable housing across the duration of the study (January 2010-February

2019), and we collected data on evictions from September 2014 through February 2019.

Violence outcomes. As with previous research,22 we defined IPV as moderate to severe physical or sexual violence perpetrated by any male intimate partners in the past 6 months, as measured on the World Health Organization Intimate Partner Violence Scale.25 We evaluated IPV based on participants' response to the question "Have you ever experienced any of the following by your intimate male partners (boyfriends, spouse) in the past six months?" Types of IPV were "moderate physical IPV (e.g., being slapped, thrown at, pushed, or shoved); "severe physical IPV" (e.g., being hit, kicked, dragged, beaten, choked, or burned); and "sexual IPV" (e.g., being forced to have sex against one's will). We considered women who responded yes to any of the measures of violence to have experienced IPV.

Workplace violence consisted of physical or sexual violence perpetrated by aggressors posing as clients. We evaluated workplace violence based on participants' response to the question "Have you experienced any of the following bad dates or experienced violence by clients in the past six months?" We considered women who reported any experiences of physical or sexual violence perpetrated by aggressors posing as clients (e.g., abduction or kidnap, sexual or physical assault or rape, strangulation, or being locked or trapped in a car or room) to have experienced workplace violence.

Potential confounders. Time-fixed (i.e., lifetime) covariates assessed only at baseline were age (in years), educational attainment (whether graduated from high school), Indigenous ancestry (First Nations, Metis, or Inuit ancestry), whether immigrant to Canada (i.e., born outside Canada), sexual orientation (gay, lesbian, bisexual, two spirit, asexual, or queer vs straight), gender identity (transgender woman, transexual woman, or other transfeminine identity vs cisgender woman), whether ever diagnosed with a mental health condition (yes vs no), and whether experienced childhood trauma (i.e., physical or sexual assault before 18 years old).

Time-updated confounders included noninjection (excluding alcohol and cannabis) and injection drug use, inconsistent condom use with clients, client condom refusal, being forced to have sex against will with clients, having experienced sexual assault (by anyone other than intimate partners or clients), and having experienced violence from community members (verbal harassment or physical violence by community residents or business owners). Timeupdated structural factors were average monthly income from all sources (in CAD), having access to health care services when needed, always or usually having privacy where currently living, ever feeling in danger where currently sleeping, primary place of solicitation, having experienced police harassment while working (excluding arrest), and incarceration (i.e., in detention, prison, or jail overnight or longer).

We defined primary place of solicitation as 1 of 3 mutually exclusive categories: street or public space, indoor establishment (e.g., crack or drug house; bar, nightclub, or strip club; massage or beauty parlor; microbrothel; singleroom occupancy hotel or supportive housing), and independent (e.g., escort agency, newspaper ads, online or telephone or texting, arranged by third party). Police harassment consisted of a range of harmful policing practices (e.g., being threatened with arrest, detainment, or fine; verbal harassment; physical assault; confiscation of harm-reduction materials; coercion into providing sexual favors).

Statistical Analyses

We restricted analyses to observations for which participants reported active engagement in sex work in the past 6 months at each study visit (2010-2019). We restricted models examining IPV to observations for which participants had at least 1 intimate male partner in the past 6 months. We further restricted analyses of evictions to participants interviewed after these questions were added (September 2014-February 2019).

We examined descriptive statistics at baseline, stratified by outcomes in the past 6 months at baseline (i.e., unstable housing and evictions). We used the Pearson x2 test (or the Fisher exact test for small cell counts) for categorical variables and the Wilcoxon rank-sum test for continuous variables to test for significant differences between participants who had and those who had not experienced the outcome of interest. We conducted all bivariate and multivariable analyses using logistic regression with generalized estimating equations (GEE) and an exchangeable correlation matrix. We first used bivariate analyses to examine associations between hypothesized exposures and outcomes. To examine independent effects of housing exposures (i.e., unstable housing and evictions) on violence

outcomes (i.e., IPV and workplace violence), we developed 4 separate multivariable GEE logistic regression confounder models using the procedure described by Maldonado and Greenland.26

We included key confounders that we identified in bivariate analyses and hypothesized to impact gender-based violence outcomes as potential confounders in full models. To determine the most parsimonious models, we removed potential confounders in a stepwise manner. We removed all potential confounding variables that altered the association of interest by less than 5% from models. We performed all analyses using SAS version 9.4 (SAS, Cary, NC). All P values were 2 sided.

RESULTS

Analyses of unstable housing included 4765 observations among 946 participants interviewed from January 2010 through February 2019. Over the study period, the majority (85.9%) of participants experienced unstable housing (3796 events), and 45.7% reported feeling in danger where they slept. Participants reported a high burden ofviolence over the 9-year study, with 26.2% experiencing IPV(451 events) and 31.8% experiencing workplace violence (552 events) in the past 6 months at any study visit. Analyses of evictions included 1891 observations among 550 participants interviewed from September 2014 through February 2019. Among participants who answered questions about evictions from September 2014 through February 2019,11.1% experienced eviction (74 events) at least once over a 4.5-year period.

At baseline, the median income was $3000 CAD per month (interquartile range [IQR] = $1790-$5620), and 55.6% had graduated from high school (Table 1); 31.9% reported minority sexual orientation, and 38.1 % were of Indigenous ancestry. Two thirds (66.2%) had used noninjection drugs and 40.7% had used injection drugs in the past 6 months. Almost half (48.7%) of participants reported soliciting on the street or in public, whereas 30.2% solicited services in indoor establishments, and 20.4% solicited services independently at baseline.

At baseline, younger participants were more likely to have experienced unstable housing (34years; IQR = 27-42 vs 37years; IQR = 31 -43) and evictions (35years; IQR = 30-42 vs 40years; IQR 5 31-47) than were older participants (Tables 1 and 2). We also observed higher proportions of unstable housing and evictions among those identifying as gender and sexual minorities. Indigenous participants were more likely to have experienced unstable housing (46.9% vs 13.3%) and evictions (63.0% vs 42.8%) than were non-Indigenous women.

Women who used noninjection (82.5% vs 20.5%) and injection (52.1% vs 8.8%) drugs were significantly more likely to experience unstable housing, which followed a similar pattern for evictions (85.2% vs 58.5% and 66.7% vs 44.7%, respectively). Women diagnosed with mental illness were more likely to experience unstable housing (58.3% vs 24.1%) and evictions (74.1 % vs 56.4%). A higher proportion of women who solicited on the street or in public spaces experienced unstable housing (61.7% vs 12.5%) and evictions (70.4% vs 36.9%), a pattern that was reversed for women who solicited in indoor establishments (14.6% vs 73.9% for unstable housing and 3.7% vs 26.4% for evictions).

In separate multivariable GEE confounder models (Table 3) adjusted for confounders (e.g., childhood trauma, Indigenous ancestry, drug use), exposure to recent unstable housing was significantly correlated with elevated odds of both recent IPV (adjusted odds ratio [AOR] 5 2.04; 95% CI = 1.45, 2.87) and workplace violence (AOR 5 1.46; 95% CI 5 1.06, 2.00) over the 9-year period (2014-2019). Additionally, exposure to recent eviction was associated with increased odds of recent IPV (AOR 5 2.45; 95% CI 5 0.99, 6.07) over a 4.5-year period (2014-2019) after adjustment for key confounders (e.g., age, childhood trauma abuse, income). Evictions were not significantly associated with workplace violence in GEE analyses.

DISCUSSION

We have documented a high burden of unstable housing and evictions in a diverse cohort of women sex workers in Metro Vancouver, British Columbia, Canada. Housing instability was associated with increased odds of intimate partner and workplace violence, and evictions were further associated with increased odds of IPV. More than three quarters of sex workers faced housing insecurity, almost half reported feeling in danger where they slept, and 1 in 10 experienced eviction.

We also documented a high prevalence of gender-based violence, with more than one quarter of women reporting

recent IPV and almost one third reporting recent workplace violence. These human rights violations highlight housing precarity as an important form of institutionalized discrimination faced by sex workers and highlight the need for urgent policy reforms- including decriminalization of sex work-to support access to safe, stable, and nondiscriminatory housing options for women sex workers. This is particularly important for reducing inequities in housing and health faced by marginalized subgroups that our analysis showed experienced a higher burden of unstable housing and evictions. These subgroups include sexual and gender minorities, youths, Indigenous women, women who use drugs, and women with mental health diagnoses.

Our study provides some of the first rigorous prospective cohort data regarding the relationship between housing and violence among women sex workers. Our findings are consistent with previous research demonstrating a high prevalence ofviolence among precariously housed women.27-29 Our findings provide new insights into the relationship between various indicators of housing precarity-housing instability and evictions-with physical and sexual violence across both intimate partner and occupational settings. These findings are particularly important, as rising gendered violence and housing precarity have become increasing concerns amid the COVID-19 pandemic.30 In Canada-as in other high-income contexts-many sex workers have been unable to access government benefits and supports afforded to other service workers during the pandemic,31 and temporary moratoria on rental evictions ended in August 2020. Many sex workers in British Columbia further reside in housing settings that were not covered by these moratoria (e.g., emergency shelters, transitional or recovery housing, some single-room occupancy hotels, and accommodations shared with property owners), contributing to housing precarity. In addition, many buildings in which sex workers live and work in Vancouver implemented "noguest" policies because of COVID-19 concerns, which may have forced women to work in more dangerous settings or lose their housing.

Finally, women in our study who used both injection and noninjection drugs faced far higher proportions of unstable housing and evictions than those who did not use drugs. Previous work examining the relationship between housing and violence among women who use drugs has articulated the inadequacy of singleroom occupancy hotels, which are among the most common affordable housing options for marginalized women who use substances in Vancouver.32,33 More research is needed on harm-reduction housing strategies as a potential means to reduce IPV. The scale-up of programs that provide women who use substances with affordable, safe, and dignified housing options is urgently needed.

Limitations and Strengths

Our study has several limitations of note. There is potential for information bias resulting from the use of self-reported measures; to mitigate this, trained interviewers with lived experiences and strong personal connections to the community conducted outreach and administered surveys. In addition, our measure of IPV captured experiences of violence perpetuated by only male partners and did not address IPV by other perpetrators. Some effect sizes, particularly for analyses of exposure to evictions, may be a result of limited statistical power.

Our study also has several strengths. Our analysis provides a foundation for beginning to quantitatively understand the relationship between housing instability and gender-based violence among women sex workers. Future mixedmethods and path analyses may be beneficial to understand specific explanatory mechanisms underpinning the observed associations. Future research should also evaluate structural interventions to improve housing stability and safety among sex workers, as well as the impact ofthe COVID-19 pandemic on housing instability and gender-based violence among sex workers.

Policy and Practice Implications

There is a crucial need to address housing instability, evictions, and high rates of IPV and workplace violence experienced by sex workers, including youths, gender and sexual minorities, and Indigenous women. The high burden of housing instability and evictions documented in this study highlights the urgent need to decriminalize sex work to address barriers related to criminalization and stigma, which undermine sex workers' human rights related to housing. Decriminalization is a recognized best practice and evidence-based intervention for improving sex workers' health, safety, and human rights, which includes the right to an adequate standard of living.

Women-specific supportive housing options that meaningfully address sex workers' health and safety are also

needed, for example, affordable, womencentered housing with flexible guest policies, security measures, communitybased support staff, and integrated harm-reduction supports.6,18,34 More broadly, scale-up of affordable housing options is needed for marginalized women, as research has shown that rising gentrification poses a high risk of disconnecting women from essential services.35 In addition, the extension of government-implemented eviction moratoria could potentially mitigate the risk of gender-based violence for sex workers facing housing instability.

Conclusions

We have documented a high burden of unstable housing and evictions among women sex workers in Metro Vancouver. We found that exposure to unstable housing was associated with significantly higher odds of experiencing IPV and workplace violence over a 9-year observation period and that exposure to evictions was associated with elevated odds of IPV over a 4.5-year observation period. To support sex workers' occupational safety and human rights, public health interventions should include structural changes to scale up safe, affordable, and supportive housing for marginalized women as well as decriminalization of sex work to address housing barriers that are produced and reproduced by pervasive criminalization and stigma. ÂfPU

ABOUT THE AUTHORS

Shira M. Goldenberg is with the Schoolof Public Health, San Diego State University, CA. Natalie Buglioni recently graduated from the Faculty of Health Sciences, Simon Fraser University, Burnaby, BC. Andrea Krüsi and Kate Shannon are with the Department of Medicine, University of British Columbia (UBC), Vancouver. Elizabeth Frost is a doctoralstudent in the Joint DoctoralProgram in Public Health (Epidemiology), San Diego State University-University of California, San Diego. Sarah Moreheart is a doctoralstudent in the Faculty of Health Sciences, Simon Fraser University. Melissa Braschel is with the Centre for Gender &SexualHealth Equity, UBC.

CORRESPONDENCE

Correspondence should be sent to Shira M. Goldenberg, PhD, Assistant Professor, Division of Epidemiology and Biostatistics, Schoolof Public Health, San Diego State University, 5500 Campanile Dr, San Diego, CA 92182-1308 (e-mail: dr. goldenberg@cgshe.ubc.ca). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

FullCitation: Goldenberg SM, Buglioni N, Krüsi A, et al. Housing instability and evictions linked to elevated intimate partner and workplace violence among women sex workers in Vancouver, Canada: findings of a prospective, community-based cohort, 2010-2019. Am J Public Health. 2023;113(4): 442-452.

Acceptance Date: December 13, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307207

CONTRIBUTORS

S.M. Goldenberg and N. Buglioni conceptualized the study and wrote the article. S. M. Goldenberg, N. Buglioni, A. Krüsi, and M. Braschelinterpreted the data. S. M. Goldenberg, N. Buglioni, and E. Frost performed the literature review. S. M. Goldenberg, A. Krüsi, E. Frost, S. Moreheart, and K. Shannon critically reviewed and revised the article. S.M. Goldenberg, S. Moreheart, and K. Shannon oversaw collection of the data. S. M. Goldenberg and K. Shannon acquired study funding. M. Braschel developed the statistical methods and analyzed the data.

ACKNOWLEDGMENTS

This research was supported by the US National Institutes of Health (NIH;grant R01DA028648) and the Canadian Institutes of Health Research. S. M. Goldenberg was partially supported by the NIH. N. Buglioni was partially supported by Mitacs. S. Moreheart was supported by a Simon Fraser University doctoral scholarship. K. Shannon was partially supported by a Canada Research Chair in Gender Equity, Sexual Health and Global Policy and the NIH.

We are tremendously gratefulto all An Evaluation of Sex Workers Health Access (AESHA) participants for their valuable contributions of time and expertise to this research. We thank allthose who contributed their time and expertise to this project, including AESHA community advisory board members and partner agencies and the

AESHA team, including the following: Emma Ettinger, Christie Gabriel, Jennifer McDermid, Jennifer Morris, Emily Luo, Becca Norris, Alka Murphy, Natasha Feuchuk, Alex Martin, Jennie Pearson, Yinong Zhao, Amber Stefanson, Maddie Hibbs, Arveen Kaur, Peter Vann, and Preet Dhanda.
Note. The content of this article is solely the responsibility of the authors and does not necessarily represent the officialviews of the funders.
CONFLICTS OF INTEREST
The authors have no conflicts of interest to report.
HUMAN PARTICIPANT PROTECTION
The study received ethicalapprovalfrom the Providence Health Care and University of British Columbia and Simon Fraser University research ethics boards. All participants provided written informed consent before participating in the study.
References
REFERENCES
1. Swope CB, Hernandez D. Housing as a determinant of health equity: a conceptual model. Soc Sci Med. 2019;243:112571. https://doi.org/10. 1016/j.socscimed.2019.112571
2. Shannon K, Crago AL, Baral SD, et al. The global response and unmet actions for HIV and sex workers. Lancet. 2018;392(10148):698-710. https://doi.org/10.1016/S0140-6736(18)31439-9.
3. Decker MR, Crago AL, Chu SKH, et al. Human rights violations against sex workers: burden and effect on HIV. Lancet. 2015;385(9963):186-199. doi: 10.1016/S0140-6736(14)60800-X
4. Deering KN, Amin A, Shoveller J, et al. A systematic review of the correlates of violence against sex workers. Am J Public Health. 2014;104(5):e42-e54. https://doi.org/10.2105/AJPH.2014.301909
5. Lyons T, Krüsi A, Edgar E, Machat S, Kerr T, Shannon K. The impacts of intersecting stigmas on health and housing experiences of queer women sex workers in Vancouver, Canada. J Homosex. 2021;68(6):957-972. https://doi.org/10.1080/ 00918369.2019.1694337
6. Lazarus L, Chettiar J, Deering K, Nabess R, Shannon K. Risky health environments: women sex workers' struggles to find safe, secure and non-exploitative housing in Canada's poorest postal code. SocSci Med. 2011;73(11):1600-1607. https://doi.org/10. 1016/j.socscimed.2011.09.015
7. Sandoval-Olascoaga S, Venkataramani AS, Arcaya MC. Eviction moratoria expiration and COVID-19 infection risk across strata of health and socioeconomic status in the United States. JAMA Netw Open. 2021;4(8):e2129041. https://doi.org/10. 1001/jamanetworkopen.2021.29041
8. Leifheit KM, Linton SL, RaifmanJ, et al. Expiring eviction moratoriums and COVID-19 incidence and mortality. Am J Epidemiol. 2021;190(12): 2503-2510. https://doi.org/10.1093/aje/kwab196
9. Pavao J, Alvarez J, Baumrind N, Induni M, Kimerling R. Intimate partner violence and housing instability. Am J Prev Med. 2007;32(2):143-146. https://doi.org/10.1016/j.amepre.2006.10.008
10. Gilroy H, McFarlaneJ, MaddouxJ, Sullivan C. Homelessness, housing instability, intimate partner violence, mental health, and functioning: A multi-year cohort study of IPV survivors and their children. J Soc Distress Homeless. 2016;25(2):86-94. https://doi.org/10.1080/10530789.2016.1245258
11. Footer KHA, White RH, ParkJN, Decker MR, Lutnick A, Sherman SG. Entry to sex trade and longterm vulnerabilities of female sex workers who enter the sex trade before the age of eighteen. J Urban Health. 2020;97(3):406-417. https://doi. org/10.1007/s11524-019-00410-z
12. Duff P, Deering K, Gibson K Tyndall M, Shannon K. Homelessness among a cohort of women in streetbased sex work: the need for safer environment interventions. BMC Public Health. 2011;11(1):643. https://doi.org/10.1186/1471-2458-11-643
13. Surratt HL, InciardiJA. HIV risk, seropositivity and predictors of infection among homeless and non-homeless women sex workers in Miami, Florida, USA. AIDS Care. 2004;16(5):594-604. doi: 10.1080/09540120410001716397
14. Petry L, Hill C, Milburn N, Rice E. Who is couchsurfing and who is on the streets? Disparities among racial and sexual minority youth in experiences of homelessness. J Adolesc Health. 2022;70(5):743-750.

https://doi.org/10.1016/j. jadohealth.2021.10.039
15. Hail-Jares K, Vichta-Ohlsen R, Nash C. Safer inside? Comparing the experiences and risks faced by young people who couch-surfand sleep rough. J Youth Stud. 2020;24(3):305-322. https://doi.org/10.1080/13676261.2020.1727425
16. Knight KR, Lopez AM, Comfort M, Shumway M, Cohen J, Riley ED. Single room occupancy (SRO) hotels as mental health risk environments among impoverished women: the intersection of policy, drug use, trauma, and urban space. Int J Drug Policy. 2014;25(3):556-561. https://doi.org/10.1016/j. drugpo.2013.10.011
17. Lyons T, Krüsi A, Pierre L, Smith A, Small W, Shannon K. Experiences oftrans women and twospirit persons accessing women-specific health and housing services in a downtown neighborhood of Vancouver, Canada. LGBT Health. 2016;3(5): 373-378. https://doi.org/10.1089/lgbt.2016.0060
18. Krüsi A, Chettiar J, Ridgway A, Abbott J, Strathdee SA, Shannon K. Negotiating safety and sexual risk reduction with clients in unsanctioned safer indoor sex work environments: a qualitative study. Am J Public Health. 2012;102(6):1154-1159. https://doi.org/10.2105/AJPH.201 1.300638
19. Reed E, Gupta J, Biradavolu M, Devireddy V, Blankenship KM. The role of housing in determining HIV risk among female sex workers in Andhra Pradesh, India: considering women's life contexts. SocSci Med. 2011;72(5):710-716. https:// doi.org/10.1016/j.socscimed.2010.12.009
20. Katsulis Y, Durfee A, Lopez V, Robillard A. Predictors of workplace violence among female sex workers in Tijuana, Mexico. Violence Against Women. 2015; 21(5):571 -597. https://doi.org/10.1177/107780121 4545283
21. Yakubovich AR, Bartsch A, Metheny N, Gesink D, O'Campo P. Housing interventions for women experiencing intimate partner violence: a systematic review. Lancet Public Health. 2022;7(1):e23-e35. https://doi.org/10.1016/S2468-2667(21)00234-6
22. Argento E, Muldoon KA, Duff P, Simo A, Deering KN, Shannon K. High prevalence and partner correlates of physical and sexual violence by intimate partners among street and off-street sex workers. PLoS ONE. 2014;9(7):e102129. https://doi.org/10. 1371/journal.pone.0102129
23. Goldenberg SM, Liyanage R, Braschel M, Shannon K. Structural barriers to condom access in a community-based cohort of sex workers in Vancouver, Canada: influence of policing, violence, and end-demand criminalization. BMJ Sex Reprod Health. 2020;46(4):301-307. https://doi.org/10. 1136/bmjsrh-2019-200408
24. Stueve A, O'Donnell LN, Duran R, San Doval A, Blome J. Time-space sampling in minority communities: results with young Latino men who have sex with men. Am J Public Health. 2001 ;91(6): 922-926. https://doi.org/10.2105/ajph.91.6.922
25. Garcia-Moreno C, Jansen HAFM, Ellsberg M, Heise L, Watts C. WHO Multi-Country Study on Women's Health and Domestic Violence Against Women: Initial Results on Prevalence, Health Outcomes and Women's Responses. Geneva, Switzerland: World Health Organization; 2005.
26. Maldonado G, Greenland S. Simulation study of confounder-selection strategies. Am J Epidemiol. 1993;138(11):923-936. https://doi.org/10.1093/ oxfordjournals.aje.a116813
27. Riley ED, Cohen J, Knight KR, Decker A, Marson K, Shumway M. Recent violence in a communitybased sample of homeless and unstably housed women with high levels of psychiatric comorbidity. Am J Public Health. 2014;104(9): 1657-1663. https://doi.org/10.2105/AJPH.2014. 301958
28. Riley ED, Vittinghoff E, Kagawa RMC, et al. Violence and emergency department use among community-recruited women who experience homelessness and housing instability. J Urban Health. 2020;97(1):78-87. https://doi.org/10. 1007/s11524-019-00404-x
29. Kennedy MC, McNeil R, Milloy MJ, Dong H, KerrT, Hayashi K. Residential eviction and exposure to violence among people who inject drugs in Vancouver, Canada. Int J Drug Policy. 2017;41:59-64. https://doi.org/10.1016/j.drugpo.2016.12.017
30. Roesch E, Amin A, Gupta J, García-Moreno C. Violence against women during COVID-19 pandemic restrictions. BMJ. 2020;369:m1712. https://doi. org/10.1136/bmj.m1712
31. Pearson J, Shannon K, Krusi A, et al. Barriers to governmental income supports for sex workers during COVID-

19: results of a community-based cohort in Metro Vancouver. Available at: https:// www.mdpi.com/2076-0760/11/9/383. Accessed January 14, 2023.
32. Collins AB, Boyd J, Damon W, et al. Surviving the housing crisis: social violence and the production of evictions among women who use drugs in Vancouver, Canada. Health Place. 2018;51:174-181. https://doi.org/10.1016/j.healthplace.201 8.04.001
33. Vancouver Coastal Health Authority. Women's health and safety in the downtown Eastside: companion paper to the second generation strategy design paper. October 2016. Available at: http://www.vch.ca/Documents/DTES-WomensCompanion-Paper.pdf. Accessed January 14, 2023.
34. Collins AB, Boyd J, Hayashi K, Cooper HLF, Goldenberg S, McNeil R. Women's utilization of housing-based overdose prevention sites in Vancouver, Canada: an ethnographic study. Int J Drug Policy. 2020;76:102641. https://doi.org/10.1016/j. drugpo.2019.102641
35. Goldenberg SM, Amram O, Braschel M, Moreheart S, Shannon K. Urban gentrification and declining access to HIV/STI, sexual health, and outreach services amongst women sex workers between 2010-2014: results ofa community-based longitudinal cohort. Health Place. 2020;62:102288. https:// doi.org/10.1016/j.healthplace.2020.102288

DETAILS

Subject:	Womens health; Criminalization; Intimate partner violence; Domestic violence; Housing; Workers; Evictions; Workplace violence; Women; Transgender persons; Violence; Prostitution; Community; Statistical analysis; Sex industry; Aggression; Hotels &motels; Human immunodeficiency virus--HIV; Confidence intervals; Homeless people; Exposure; Bivariate analysis; Sexual assault; Sex crimes; Public health
Business indexing term:	Subject: Workplace violence Hotels &motels; Industry: 62422 : Community Housing Services 72111 : Hotels (except Casino Hotels) and Motels
Location:	Canada
Classification:	62422: Community Housing Services; 72111: Hotels (except Casino Hotels) and Motels
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	442-452
Publication year:	2023
Publication date:	Apr 2023
Section:	RESEARCH &ANALYSIS
Publisher:	American Public Health Association
Place of publication:	Washington

Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
DOI:	https://doi.org/10.2105/AJPH.2022.307207
ProQuest document ID:	2792106480
Document URL:	https://www.proquest.com/scholarly-journals/housing-instability-evictions-linked-elevated/docview/2792106480/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Apr 20 23
Last updated:	2023-08-31
Database:	Public Health Database

Methamphetamine-Related Mortality in the United States: Co-Involvement of Heroin and Fentanyl, 1999–2021

Hoopsick, Rachel A, PhD, MS, MPH, MCHES; Yockey, R Andrew, PhD

ABSTRACT (ENGLISH)

Objectives. To examine trends in methamphetamine-related mortality in the United States from 1999 to 2021 and the extent to which these deaths co-involved heroin or fentanyl. Methods. We obtained final and provisional data from the CDC WONDER (Centers for Disease Control and Prevention Wide-ranging ONline Data for Epidemiologic Research) multiple causes of death database for deaths that involved methamphetamine and deaths that involved both methamphetamine and heroin or fentanyl mong US residents aged 15 to 74 years. We plotted the age-adjusted methamphetamine-related mortality rate by year and quantified the proportion of deaths with heroin or fentanyl co-involvement. Finally, we used joinpoint regression to quantify trends in the methamphetamine mortality rate and proportion of deaths with heroin or fentanyl co-involvement. Results. From 1999 to 2021, there was a 50-fold increase in the methamphetamine mortality rate, which was accompanied by an increasing proportion of deaths that co-involved heroin or fentanyl, peaking at 61.2% in 2021. Conclusions. Unprecedented increases in

methamphetamine-related mortality have occurred during the last decade, and an increasing proportion of these deaths co-involved heroin or fentanyl. Public Health Implications. Stark increases in methamphetamine-related mortality and heroin or fentanyl co-involvement warrant robust harm reduction efforts, especially for people who engage in polysubstance use.

FULL TEXT

Headnote

Objectives. To examine trends in methamphetamine-related mortality in the United States from 1999 to 2021 and the extent to which these deaths co-involved heroin or fentanyl.

Methods. We obtained final and provisional data from the CDC WONDER (Centers for Disease Control and Prevention Wide-ranging ONline Data for Epidemiologic Research) multiple causes of death database for deaths that involved methamphetamine and deaths that involved both methamphetamine and heroin or fentanyl mong US residents aged 15 to 74 years. We plotted the age-adjusted methamphetamine-related mortality rate by year and quantified the proportion of deaths with heroin or fentanyl co-involvement. Finally, we used joinpoint regression to quantify trends in the methamphetamine mortality rate and proportion of deaths with heroin or fentanyl co-involvement.

Results. From 1999 to 2021, there was a 50-fold increase in the methamphetamine mortality rate, which was accompanied by an increasing proportion of deaths that co-involved heroin or fentanyl, peaking at 61.2% in 2021.

Conclusions. Unprecedented increases in methamphetamine-related mortality have occurred during the last decade, and an increasing proportion of these deaths co-involved heroin or fentanyl.

Public Health Implications. Stark increases in methamphetamine-related mortality and heroin or fentanyl co-involvement warrant robust harm reduction efforts, especially for people who engage in polysubstance use. (AmJ Public Health. 2023;113(4):416-419. https://doi.org/10.2105/AJPH.2022.307212)

A staggering increase in drug overdose deaths was observed in the United States in 2020.1 Moreover, the Centers for Disease Control and Prevention (CDC) reported that 2021 included the deadliest rolling 12-month period for drug overdose deaths on record thus far.2 Prepandemic data show upward trends in methamphetamine use,3 methamphetamine and heroin co-use,4 and methamphetaminerelated mortality in the United States.3 In 2019, more than half of all psychostimulant overdose deaths also involved opioids,5 suggesting that the second (i.e., heroin) and third (i.e., fentanyl) waves of the opioid overdose crisis may be driving recent methamphetaminerelated mortality. Given the steep increases in overall drug overdose mortality observed in 2020 and 2021,1'2 an updated examination of the trends in methamphetamine-related mortality is warranted. Moreover, it is critical to contextualize these deaths within the ongoing opioid overdose crisis by examining the extent to which methamphetamine-related mortality may be exacerbated by the co-involvement of heroin and fentanyl.

Qualitative data suggest that the co-use of methamphetamine and opioids is motivated by a desire to achieve specific embodied experiences not attained by methamphetamine or opioid use alone.6 Moreover, a recent qualitative study suggests that there is significant variation in the presentation and severity of stimulant-involved overdoses ("overamping"), which may limit the ability of people who use stimulants to recognize and respond to an overdose.7 The last 2 decades have also been marked by increased contamination ofthe unregulated drug supply with fentanyl and fentanylrelated analogs,8,9 suggesting that intentional and unintentional co-use may be catalyzing methamphetaminerelated mortality in the United States. In this descriptive epidemiological analysis, we quantify the trends in methamphetamine-related mortality and the proportion ofthese deaths that also involved heroin or fentanyl, including time-sensitive changes not captured in prepandemic data.

METHODS

We obtained 1999-2021 death certificate data from the CDC Wide-ranging ONline Data for Epidemiologic Research (WONDER) final (for 1999 through 2020) and provisional (for 2021) multiple causes of death databases.10 We examined the annual number of deaths involving methamphetamine and the age-adjusted overdose mortality rates per 100 000 population among US residents aged 15 to 74 years. We included causes of death in the following

categories (International Classification of Diseases, 10th Revision codes): accidental/ unintentional poisoning (X40-X44), intentional self-poisoning/suicide (X60-X64), assault/homicide (X85), and undetermined intent (Y10-Y14). In addition, methamphetamine-related deaths included deaths with a contributing cause of poisoning by psychostimulants with abuse potential (T43.6). We then examined what proportion of methamphetamine-related deaths co-involved heroin (T40.1) or other synthetic narcotics (T40.4; i.e., fentanyl and fentanyl-related analogs) each year. As a post hoc analysis for comparison, we also examined the annual number of cocaine-related deaths (T40.5), ageadjusted cocaine mortality rate, and the proportion of cocaine-related deaths that also included heroin or fentanyl over the same time period.

We quantified trends in the ageadjusted methamphetamine mortality rate and proportion of deaths with heroin or fentanyl co-involvement using joinpoint regression, which uses permutation to fit a series of straight lines on a logarithmic scale to aggregated data to estimate annual percent change (APC) trends of variable length and the slopes ofthese trends (b). We also estimated 95% confidence intervals (CIs) with each APC and reported the corresponding P value. The APC was considered statistically significant if the P value was less than .05. We conducted analyses with Stata/MP version 17.0 (StataCorp LP, College Station, TX) and Joinpoint Regression Program version 4.9.1.0 (National Cancer Institute, Bethesda, MD https://surveillance.cancer.gov/ joinpoint/).

RESULTS

From 1999 to 2021, there were 135 433 methamphetamine-related deaths among US residents aged 15 to 74 years, and 42.8% ofthese deaths also involved heroin or fentanyl. Across these 23 years of data, there was a 58-fold increase in the annual number of methamphetamine-related deaths (545 methamphetamine-related deaths in 1999 vs 32 353 methamphetaminerelated deaths in 2021; Figure 1, panel a) and more than a 50-fold increase in the age-adjusted methamphetaminerelated mortality rate (0.27 deaths per 100 000 in 1999 vs 13.93 deaths per 100 000 in 2021; Figure 1, panel b). Annual co-involvement of heroin or fentanyl ranged from 7.3% (2005) to 61.2% (2021), with stark increases observed over the last decade. Post hoc analyses suggest there have also been increases in cocaine-related mortality and co-involvement with heroin or fentanyl, but these trends were more variable over time (Figure A, available as a supplement to the online version of this article at http://www.ajph.org).

The age-adjusted methamphetaminerelated mortality rate increased annually by 20.1 % from 1999 to 2005 (APC = 20.1 %; 95% CI = 14.9, 25.6; P< .001; b 5 0.18), remained stable from 2005 to 2008 (APC 5 -8.6%; 95% CI = -29.7, 18.8; P>.05; b 5 -0.09), continued to increase 21.8% annually from 2008 to 2014 (APC 5 21.8%; 95% CI 5 14.9, 29.1; P<.001; b 5 0.20), and further increased by 32.5% annually from 2014 to 2021 (APC 5 32.5%; 95% CI 5 28.0, 37.2; P<.001; b 5 0.28). The proportion of methamphetamine-related deaths with heroin or fentanyl co-involvement decreased by 6.6% annually from 1999 to 2005 (APC 5 -6.6%; 95% CI 5 -9.4, -3.6; P<.001; b 5 -0.07), increased by 8.9% annually from 2005 to 2010 (APC 5 8.9%; 95% CI 5 2.7,15.5; P<.01; b 5 0.09), and increased by 17.3% annually from 2010 to 2021 (APC 5 17.3%; 95% CI 5 15.8,18.8; P <.001; b 5 0.16).

DISCUSSION

Consistent with overall drug overdose deaths observed in 2020 and 2021,1,2 our results suggest that methamphetaminerelated mortality has accelerated over the last 2 decades, peaking in 2021. Importantly, this was accompanied by a dramatic growth in the percentage of these deaths that co-involved heroin or fentanyl. The proportional increases in methamphetamine-related mortality and illicit opioid involvement suggest that these stimulant deaths are largely driven by polysubstance use. Intentional co-use of stimulants and opioids has increased over time,4 which appears to be motivated in part by desire, pleasure, and control.6 However, the illicit drug supply in the United States has also become increasingly toxic with the adulteration of street opioids and other drugs with fentanyl and fentanyl-related analogs.8,9

This study has some limitations. Deaths of nonresidents (e.g., nonresident aliens, nationals living abroad, residents of Puerto Rico, Guam, the Virgin Islands, and other US territories) are not recorded in CDC WONDER10 and were not included in the current study. Additionally, deaths in which toxicology tests were not performed or were unable to detect the substances examined here were excluded. However, the exclusion of nonresidents and death certificates without drug-specific information is likely to result in an underestimation of methamphetamine-related mortality.

Similarly, data for 2021 are provisional and therefore subject to reporting lags, necessitating future updates. Additional research is needed to examine whether there have been any shifts in unique subgroup risks for methamphetaminerelated mortality by age, race/ethnicity, and gender over time.

PUBLIC HEALTH IMPLICATIONS

Findings from the current study demonstrate that methamphetamine-related mortality has increased dramatically over the last 2 decades, with the greatest annual increases occurring from 2014 to 2021. Moreover, an increasing proportion ofthese methamphetamine deaths co-involved heroin orfentanyl over time, with the greatest annual increases occurring from 2010 to 2021. Our results show that both the ageadjusted methamphetamine mortality rate and co-involvement of heroin or fentanyl were the greatest in 2021, with neither trend showing any sign of abatement. These findings underscore the need to develop, implement, and expand the availability and accessibility of robust harm reduction services, with particular attention to polysubstance use. ÂfPU

ABOUT THE AUTHORS

Rachel A. Hoopsick is with the Department of Kinesiologyand Community Health, College of Applied Health Sciences, University of Illinois, UrbanaChampaign. R. AndrewYockey is with the Department of Biostatistics and Epidemiology, University of North Texas Health Science Center, Fort Worth.

CORRESPONDENCE

Correspondence should be sent to Rachel A. Hoopsick, PhD, MS, MPH, MCHES, Department of Kinesiology and Community Health, College of Applied Health Sciences, University of Illinois Urbana-Champaign, 1206 S. Fourth St, 2017 Khan Annex, Huff Hall, Champaign, IL 61820 (e-mail: hoopsick@illinois.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Hoopsick RA, Yockey RA. Methamphetamine-related mortality in the United States: co-involvement of heroin and fentanyl, 1999-2021. Am J Public Health. 2023;113(4): 416-419.

Acceptance Date: December 15, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307212

CONTRIBUTORS

R.A. Hoopsick conceptualized the study, conducted the statistical analyses, and wrote the first draft of the manuscript with sections contributed by R.A. Yockey. Both authors reviewed and approved the final version of this manuscript.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to disclose.

HUMAN PARTICIPANT PROTECTION

The University of Illinois Urbana-Champaign institutional review board determined that this study was exempt from review.

References

REFERENCES

1. Friedman J, Akre S. COVID-19 and the drug overdose crisis: uncovering the deadliest months in the United States, January-July 2020. Am J Public Health. 2021;111(7):1284-1291. https://doi.org/ 10.2105/AJPH.2021.306256

2. National Center for Health Statistics. Drug overdose deaths in the US top 100,000 annually. 2021. Available at: https://www.cdc.gov/nchs/ pressroom/nchs_press_releases/2021/20211117. htm. Accessed October 6, 2022.

3. Han B, Compton WM, Jones CM, Einstein EB, Volkow ND. Methamphetamine use, methamphetamine use disorder, and associated overdose deaths among US adults. JAMA Psychiatry. 2021;78(12):1329-1342. https://doi.org/10.1001/ jamapsychiatry.2021.2588

4. Strickland JC, Stoops WW, Dunn KE, Smith KE, Havens JR. The continued rise of methamphetamine use among people who use heroin in the United States. Drug Alcohol Depend. 2021;225: 108750. https://doi.org/10.1016/j.drugalcdep.2021. 108750

5. Hedegaard H, Miniño A, Warner M. Co-involvement of opioids in drug overdose deaths involving cocaine and

psychostimulants. April 2021. NCHS Data Brief no. 406. https://doi.org/10.15620/cdc103966
6. Ivsins A, Fleming T, Barker A, et al. The practice and embodiment of "goofballs": a qualitative study exploring the co-injection of methamphetamines and opioids. Int J Drug Policy. 2022; 107:103791. https://doi.org/10.1016/j.drugpo. 2022.103791
7. Mansoor M, McNeil R, Fleming T, et al. Characterizing stimulant overdose: a qualitative study on perceptions and experiences of "overamping." Int J Drug Policy. 2022;102:103592. https://doi.org/ 10.1016/j.drugpo.2022.103592
8. ParkJN, Rashidi E, Foti K, Zoorob M, Sherman S, Alexander GC. Fentanyl and fentanyl analogs in the illicit stimulant supply: results from US drug seizure data, 2011 -2016. Drug Alcohol Depend. 2021;218:108416. https://doi.org/10.1016/]. drugalcdep.2020.108416
9. DiGennaro C, Garcia G-GP, Stringfellow EJ, Wakeman S, Jalali MS. Changes in characteristics of drug overdose death trends during the COVID-19 pandemic. Int J Drug Policy. 2021;98:103392. https://doi.org/10.1016/j.drugpo.2021.103392
10.Centers for Disease Control and Prevention, National Center for Health Statistics. CDC Wideranging ONline Data for Epidemiologic Research: multiple cause of death. Available at: https:// wonder.cdc.gov. Accessed July 18. 2022.

DETAILS

Subject:	Public health; Disease control; Epidemiology; Mortality; Trends; Amphetamines; Health sciences; Fentanyl; Methamphetamine; Prevention; Narcotics; Drug overdose; Heroin; Poisoning; Nonresidents; Residents; Cocaine; Fatalities; Harm reduction
Business indexing term:	Industry: 92312 : Administration of Public Health Programs
Location:	United States--US
Company / organization:	Name: University of Illinois; NAICS: 611310; Name: Centers for Disease Control &Prevention--CDC; NAICS: 923120
Classification:	92312: Administration of Public Health Programs
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	416-419
Publication year:	2023
Publication date:	Apr 2023
Section:	RESEARCH &ANALYSIS
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington

Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
DOI:	https://doi.org/10.2105/AJPH.2022.307212
ProQuest document ID:	2792106474
Document URL:	https://www.proquest.com/scholar ly-journals/methamphetamine-related-mortality-united-states/docview/2792106474/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Apr 2023
Last updated:	2023-07-11
Database:	Public Health Database

Abortion Restrictions Threaten All Reproductive Health Care Clinicians

Brandi, Kristýn, MD, MPH [1] ; Gill, Puneet, BA [2] [1] American College of Obstetricians and Gynecologists, Washington, DC [2] College of Osteopathic Medicine, New York Institute of Technology, Old Westbury, NY

ABSTRACT (ENGLISH)

The Supreme Court's decision on Dobbs vJackson will have an impact on reproductive health care provision for years to come, not only where abortion care is now restricted but across the country. As of January 2023,14 states have outlawed or severely restricted abortion.1 Morbidity and mortality around the time of labor is already on the rise nationally, from 658 in 2018 to 861 in 20202-particularly in places where abortion is restricted and labor care is increasingly sparse because of loss of the workforce after the COVID-19 pandemic.3 It is important to understand how the criminalization of abortion providers will affect all other forms of reproductive health care moving forward. In states where abortion care is currently severely limited, clinicians who provide abortion care face criminalization that can include insurmountable legal fees, loss of their medical license, and even imprisonment. Abortion restrictions create a duality in which providers feel they must serve as agents of the state-reporting any suspicious pregnancy-related issues-or have their license called into question, all while trying to best help their patients. Since these laws took effect, we are already seeing delays in health care services for patients needing early pregnancy care management-for abortion as well as miscarriage management and ectopic pregnancies.4 Health care providers

may be called on to increase surveillance and report signs of abortion that can violate their protection of HIPAA (the Health Insurance Portability and Accountability Act) rights, while also facing malpractice claims if they, by delaying or denying early pregnancy care management, are providing what medical evidence shows to be substandard care.

FULL TEXT

The Supreme Court's decision on Dobbs vJackson will have an impact on reproductive health care provision for years to come, not only where abortion care is now restricted but across the country. As of January 2023,14 states have outlawed or severely restricted abortion.1 Morbidity and mortality around the time of labor is already on the rise nationally, from 658 in 2018 to 861 in 20202-particularly in places where abortion is restricted and labor care is increasingly sparse because of loss of the workforce after the COVID-19 pandemic.3 It is important to understand how the criminalization of abortion providers will affect all other forms of reproductive health care moving forward.

In states where abortion care is currently severely limited, clinicians who provide abortion care face criminalization that can include insurmountable legal fees, loss of their medical license, and even imprisonment. Abortion restrictions create a duality in which providers feel they must serve as agents of the state-reporting any suspicious pregnancy-related issues-or have their license called into question, all while trying to best help their patients. Since these laws took effect, we are already seeing delays in health care services for patients needing early pregnancy care management-for abortion as well as miscarriage management and ectopic pregnancies.4 Health care providers may be called on to increase surveillance and report signs of abortion that can violate their protection of HIPAA (the Health Insurance Portability and Accountability Act) rights, while also facing malpractice claims if they, by delaying or denying early pregnancy care management, are providing what medical evidence shows to be substandard care.5

Beyond losing providers to criminalization, there is the very reasonable reaction that providers may have to these laws, which is to leave their communities and instead provide care in less restrictive states. Many providers are not willing to face the moral injury of restrictive laws preventing them from providing comprehensive, evidencebased care. There are also the potential legal fees providers in states with restrictions will ultimately face, which they may not be able to pay. Thus, some are already leaving their communities to find jobs in states where they can practice without fear or the burden of legal challenges.6

It is important to note that providers of abortion care are also providers of other reproductive health care, such as prenatal care, gynecologic services, and gender-affirming care. Communities providers are forced to leave will be left with diminished access to these lifesaving forms of care. This is particularly challenging in rural areas, where there are already scarce prenatal and labor care resources. There is a possibility that providers leaving these communities because of real or perceived risk of criminalization for providing abortion care will result in worse disparities in care for patients overall. This would compound already existing disparities in care in marginalized communities, such as BIPOC (Black, Indigenous, and other people of color), LGBTQI (lesbian, gay, bisexual, transgender/-sexual, queer or questioning, or intersex people), rural areas, those who are incarcerated, those who are undocumented, and those with disabilities.

This is not how health care should work. Health care decisions should be guided by science and evidence, not by politics. Patients will be harmed if providers are forced to choose between their best judgment and their medical license. Communities losing clinicians will lose access to not only abortion care but also other critical reproductive health care. We have an obligation to advocate the reversal of these abortion restrictions and the reestablishment of federal protections so that patients and their doctors can make personal health care decisions that are based in science. ÂjPU

CORRESPONDENCE

Correspondence should be sent to Krlstyn Brandi, MD, MPH, 409 12th St SW, Washington, DC 20024-2188 (e-mail: kbrandi@acog.org). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Brandi K, Gill P. Abortion restrictions threaten all reproductive health care clinicians. Am J Public Health. 2023;113(4):384-385.

Acceptance Date: January 22, 2023.
DOI: https://doi.org/10.2105/AJPH.2023.307239
CONTRIBUTORS
K. Brandi provided the majority of the writing and editing. P. Gillprovided background research and editing.
ACKNOWLEDGMENTS
The authors would like to thank the American College of Obstetricians and Gynecologists and RachelKingery for their review of this article.
CONFLICTS OF INTEREST
The authors have no conflicts of interest to disclose.

References

REFERENCES

1. Nash E, Ephross P. State policy trends 2022: in a devastating year, US Supreme Court's decision to overturn Roe leads to bans, confusion and chaos. December 19, 2022. Available at: https://www. guttmacher.org/2022/12/state-policy-trends-2022-devastating-year-us-supreme-courts-decisionoverturn-roe-leads. Accessed December 22, 2022.
2. Hoyert DL. Maternal mortality rates in the United States, 2020. NCHS Health E-Stats. February 2022. Available at: https://www.cdc.gov/nchs/data/ hestat/maternal-mortality/2020/E-stat-Maternal-Mortality-Rates-2022.pdf. Accessed January 28, 2023.
3. Declercq E, Barnard-Mayers R, Zephyrin L, John-son K. How new state abortion bans and restric-tions could worsen access to maternal care and health outcomes. December 2022. Available at: https://www.commonwealthfund.org/publications/ issue-briefs/2022/dec/us-maternal-health-dividelimited-services-worse-outcomes. Accessed January 28, 2023. https://doi.org/10.26099/z7dz-8211
4. Arey W, Lerma K, Beasley A, Harper L, Moayedi G, White K. A preview ofthe dangerous future of abortion bans-Texas Senate Bill 8. N Engl J Med. 2022;387(5):388-390. https://doi.org/10.1056/ NEJMp2207423
5. Kimport K. Abortion after Dobbs: defendants, denials, and delays. Sci Adv. 2022;8(36):eade5327. https://doi.org/10.1126/sciadv.ade5327
6. Noor P. Four months after Roe v Wade was overturned, some providers have left states restricting abortions or changed careers. The Guardian. October 26, 2022. Available at: https://www.theguardian. com/world/2022/oct/26/us-abortion-ban-providersdoctors-leaving-states. Accessed December 22, 2022.

DETAILS

Subject:	Criminalization; Trends; Mortality; Reproductive health; Legal fees; Pregnancy; Personal health; Bans; Correspondence; Supreme Court decisions; Abortion; Pandemics; COVID-19; Morbidity; Supreme courts; Surveillance; Health care; Pregnancy complications; Health services; Reproductive systems; Health care industry; Labor; Imprisonment; Malpractice; Patients; Management; Health insurance; Public health
Location:	United States--US
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	384-385

Publication year:	2023
Publication date:	Apr 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Commentary
ProQuest document ID:	2792106451
Document URL:	https://www.proquest.com/scholarly-journals/abortion-restrictions-threaten-all-reproductive/docview/2792106451/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Apr 2023
Last updated:	2023-08-31
Database:	Public Health Database

Improving Early Childhood Caries for American Indian 3- to 5-Year-Old Children Through Interprofessional Outreach: 2018–2022

Larsson, Laura S, RN, PhD, MPH; Hodgson, Christine, RN, PhD, MSN, CPNP-PC

ABSTRACT (ENGLISH)

We sought to determine the effectiveness of an interprofessional health team in improving access to oral health care among American Indian children enrolled in Head Start. Our team provided preventive treatments and case

management during 11 visits from 2018 to 2022. Case management reduced the time between referral and dental treatment from a median of 166 days to 58.3 days over four years. An interprofessional team is an effective way to improve access to oral health care among rural American Indian Head Start children.

FULL TEXT

Headnote

We sought to determine the effectiveness of an interprofessional health team in improving access to oral health care among American Indian children enrolled in Head Start. Our team provided preventive treatments and case management during 11 visits from 2018 to 2022. Case management reduced the time between referral and dental treatment from a median of 166 days to 58.3 days over four years. An interprofessional team is an effective way to improve access to oral health care among rural American Indian Head Start children. (Am J Public Health. 2023;113(4):368-371. https://doi.org/10.2105/ AJPH.2022.307205)

Dental and public health experts have drawn attention to the persistent disparities with respect to early childhood caries (ECC) among American Indian and Alaska Native (AI/AN) children over the past 20 years and called for better prevention efforts and an interdisciplinary approach. Current recommendations emphasize increased integration of oral health education and preventive care in early childhood intervention programming.

INTERVENTION AND IMPLEMENTATION

Our interprofessional team delivered an intervention over four years with a Tribal Head Start program to address gaps in access to dental care among young children. The goals were to reduce rates of untreated decay and to decrease the time to dental treatment. Services included prophylaxis, fluoride varnish application, dental sealant placement and repair, and silver diamine fluoride application. Also, in response to COVID-19, we added synchronous and asynchronous teledentistry in November 2020 including X-rays, intraoral photos, limited examinations, and consultations.

Our team consisted of nursing students, nurse practitioners, a project coordinator, and dental hygienists who traveled to eight Head Start classrooms in the fall, winter, and spring. All children were assessed for vision and hearing acuity, oral health status, height, and weight. We employed case management principles including oral health guidance to families and assistance in making appointments.

At each visit, we provided a letter to parents and oral health supplies for home and supervised twice-daily classroom brushing. Services were free of charge to families; however, Montana Medicaid was billed forthose with public insurance.

PLACE, TIME, AND PERSONS

The goals of Tribal Head Start are to offer preschool nutrition services and family support services for low-income children three to five years of age who live on Native American lands. Children in the study (n = 475) attended the Northern Cheyenne Tribal Head Start program between 2018 and 2022. The Northern Cheyenne Nation, home to 5000 Montana residents, includes parts of Rosebud and Big Horn counties, both designated as dental professional shortage areas.1

PURPOSE

ECC (commonly known as tooth decay), the most prevalent infectious disease among children, is rooted in both individual and environmental factors.2 The prevalence of ECC is high among preschool-aged children across the United States but as much as five times higher among AI/AN preschoolers than among preschoolers in general.3,4 In addition, AI/AN children have decay that presents earlier and is more severe.3

Although the epidemiology of ECC among indigenous children is complex, access to care is the most glaring obstacle to oral health in Montana's AI communities. Eleven of Montana's 56 counties lack a residing dentist, and 86 locations are designated dental shortage areas.1 In response, the American Academy of Pediatrics3 and the State of Montana Oral Health Strategic Plan5 have recommended integration of oral health education, preventive care, and an interdisciplinary approach involving the Special Supplemental Nutrition Program for Women, Infants, and Children; Head Start; and other maternal and child programs.6 Further recommendations include workforce

expansion7,8 and having allied health care providers operate to their full scope of practice.9,10

EVALUATION AND ADVERSE EFFECTS

Our team visited classrooms during the fall, winter, and spring of each year except during 2020-2021, when we visited only twice because of the pandemic. We provided 313 cleanings, 442 fluoride varnish applications, 801 sealant placements or repairs, and 99 applications of silver diamine fluoride for 475 preschoolers. We referred 161 children, of whom 123 completed treatment (76.4%; 59 boys).

The median number of days between referral and treatment improved over the project period from 166 days to 58.3 days (Figure 1 and Table A, available as a supplement to the online version of this article at http://www.ajph. org). Outdated telephone numbers, long distances to dentists, and disappointment when the first appointment is a consultation rather than treatment are ongoing challenges to prompt treatment.

ECC rates (mean = 58.7%; SD = 4.0%) remained stable over the project period relative to the baseline rate of 57.4% and remained below the 71.3% national average among AI/AN children three to five years old. This rate was above the 24.9% rate among White children.4 The average untreated caries rate was 33.8% (SD 5 10.7%), which was below the 37.7% baseline rate, below the 43.4% national average among AI/AN children three to five years of age, and higher than the 10.0% rate among White children.4 Untreated caries rates stayed below the national benchmark for the first eight visits but exceeded the national average for the final three visits (with rates of 62.9%, 53.6%, and 46.7%), when supervised classroom toothbrushing was suspended during the COVID-19 pandemic (Figure 2). The associated increase in caries rates is noteworthy. New guidance for reopened classroom toothbrushing emphasizes safety for children and staff with children brushing at their desks ratherthan at the sink.11 This not only reduces transmission of droplets but increases the time fluoride is on the teeth.

The program offered benefits for students as well as the Head Start program. At the outset of the project, the Head Start program was challenged to meet health program performance standards. Today, the program is in compliance with completion rates for medical examinations (74%), hearing examinations (79%), vision screenings (81%), and dental screenings (82%).12

SUSTAINABILITY

Our integrated team of nursing students, nurse practitioners, dental hygienists, and tribal leaders was able to establish a sustainable model that is expanding to three other AI communities in the new project period (2022-2026). Our team will grow to include an educational therapist and a psychiatric mental health nurse practitioner to help Head Start comply with required developmental assessments and interventions.

The Northern Cheyenne Nation invited us to provide school-based care in its kindergarten through 12th-grade classrooms, where wrap-around services can be enhanced with monthly clinics. These expansions are funded through a combination of federal, state, and private grants, but we see this as a transitional measure. The tribal health department is currently activating an agreement in which it will contract with the Indian Health Service to independently provide health care services using the provisions of the Indian Self Determination Act. With planning for this transition under way, the department will be able to conduct third-party billing for these school-based services while contracting with the nurse-led interprofessional team to provide care.

PUBLIC HEALTH SIGNIFICANCE

Two lessons from this study suggest that community-based research can result in immediate action, far earlier than upon dissemination ofresults. First, one sociopolitical effect of this study occurred when the state of Montana expanded the authorization to apply silver diamine fluoride to limitedaccess permit-endorsed dental hygienists operating under general supervision of the team dentist. Our inaugural application of silver diamine fluoride was in September 2019, and the results demonstrate that enhancing the autonomy of dental hygienists is both safe and effective. Second, because ofthe COVID-19 pandemic, we successfully implemented the use of teledentistry to address gaps in access to care among AI children enrolled in a Head Start program in a rural area.

The results from our study support the hypothesis that receipt of care from the interprofessional team would have reduced Head Start preschool children's time to treatment by a dentist after identification of ECC. Reduced time to treatment is significant in that it reflects reduced pain from dental caries along with other effects of ECC on young

children such as eating disturbances, speech and language issues, school attendance, and missed work for parents. Our study demonstrated the success of an interprofessional team in providing critical dental services. The partnership among tribal communities, university researchers, and clinicians has served as a model for this program to grow across the state of Montana. Since initiation of the intervention, we have reached four tribal nations and prepared five campuses of nursing students for rural practice. We have developed a curriculum addressing social determinants of health, medical-dental integration, and multicultural care. In the literature,3,6,10 effectiveness of mobile dental units partnering with schools and Head Start programs has a convincing evidence base. Our results suggest that interprofessional teams with members operating to their full scope of practice not only provide missing pieces to the puzzle of access to dental care in rural areas but bring oral health into the whole picture of school readiness, overall health, and general well-being. ÂfPU

ABOUT THE AUTHORS

Laura S. Larsson is with the Mark &Robyn Jones College of Nursing, Montana State University, Bozeman. Christine Hodgson is with the College of Nursing, University of Arizona, Tucson.

CORRESPONDENCE

Correspondence should be sent to Laura S. Larsson, 173560 APS Hall, Bozeman, MT 59717 (e-mail: llarsson@montana.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Larsson LS, Hodgson C. Improving early childhood caries for American Indian 3- to 5-year-old children through interprofessional outreach: 2018-2022. Am J Public Health. 2023; 113(4):368-371.

Acceptance Date: December 12, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307205

CONTRIBUTORS

L. S. Larsson originated the study, collected and analyzed the data, wrote the results section, and revised and edited drafts of the article. C. Hodgson wrote the review of literature, methods, and implications sections and revised and edited drafts of the article.

ACKNOWLEDGMENTS

We acknowledge Crystal Spring and the Smiles Across Montana team; Emily Killsback, Roberta Harris, and Lanita LittleWhiteman at Northern Cheyenne Head Start; Mina Seminole, tribal liaison to the project; and the following funders who were all essential to this work: Montana Innovations in Prevention (grant HRSA-18-014); the Nurse Education, Practice, Quality and Retention Program (grant HRSA UK1HP31719); the Otto Bremer Trust; Blue Cross Blue Shield Healthy Kids Healthy Families; the Dennis &Phyllis Washington Foundation; and AstraZeneca.

CONFLICTS OF INTEREST

The authors have no potential or actual confllicts of interest to disclose.

HUMAN PARTICIPANT PROTECTION

Informed consent documents and the research process were approved by Chief Dull Knife College and Montana State University.

References

REFERENCES

1. Health Resources and Services Administration. Shortage areas. Available at: https://data.hrsa. gov/topics/health-workforce/shortage-areas. Accessed September 22, 2022.

2. National Institute of Dental and Craniofacial Research. Oral health across the lifespan: children. Available at: https://www.nidcr.nih.gov/research/ oralhealthinamerica/section-2-summary. Accessed September 25, 2022.

3. Holve S, Braun P, Irvine JD, et al. Early childhood caries in indigenous communities. Pediatrics. 2021;147(6):e2021051481. https://doi.org/10. 1542/peds.2021-051481

4. Phipps KR, Ricks TL, Mork NP, Lozon TL. The oral health of American Indian and Alaska Native children aged 1-5 years: results of the 2018-2019 IHS oral health survey. Available at: https://www. ihs.gov/doh/documents/surveillance/2018-19% 20Data%20Brief%20of%201-5%20Year-Old% 20AI-

AN%20Preschool%20Children.pdf. Accessed September 22, 2022.
5. Montana Department of Health and Human Services. The state of the state's oral health. Available at: https://dphhs.mt.gov/assets/ecfsd/ OralHealth/OralHealthBurden2020FINAL.pdf. Accessed September 22, 2022.
6. Milgrom P, Weinstein P, Huebner C, Graves J, Tut O. Empowering Head Start to improve access to good oral health for children from low income families. Matern Child Health J. 2011;15(7):876-882. https://doi.org/10.1007/s10995-008-0316-6
7. Mathu-Muju KR, Friedman JW, Nash DA. Oral health care for children in countries using dental therapists in public, school-based programs, contrasted with that of the United States, using dentists in a private practice model. Am J Public Health. 2013;103(9):e7-e13. https://doi.org/10. 2105/AJPH.2013.301251
8. Nash DA, Nagel RJ. Confronting oral health disparities among American Indian/Alaska Native children: the pediatric oral health therapist. Am J Public Health. 2005;95(8):1325-1329. https://doi. org/10.2105/AJPH.2005.061796
9. Taylor E, Marino D, Thacker S, DiMarco M, Huff M, Biordi D. Expanding oral health preventative services for young children: a successful interprofessional model. J Allied Health. 2014;43(1):e5-e9.
10. Biordi DL, Heitzer M, Mundy E, et al. Improving access and provision of preventive oral health care for very young, poor, and low-income children through a new interdisciplinary partnership. Am J Public Health. 2015;105(suppl 2):e23-e29. https://doi.org/10.2105/AJPH.2014.302486
11. Indian Health Service Head Start Program. Classroom circle brushing. Available at: https://www. ihs.gov/HeadStart/documents/ClassroomCircle BrushingPoster.pdf. Accessed September 22, 2022.
12. Northern Cheyenne Tribe. Northern Cheyenne Head Start 2020-2021 annual report. Available at: https://www.cheyennenation.com/index.html. Accessed August 29, 2022.

DETAILS

Subject:	Health care access; Students; Head Start project; Nursing education; Teams; Oral hygiene; Health services; Intervention; Health care; Interdisciplinary aspects; Nurse practitioners; Families &family life; Preschool children; Fluorides; Dental care; Treatment methods; COVID-19; Classrooms; Case management; Correspondence; American Indians; Health education; Dental caries; Children; Dentists; Pandemics; Native North Americans; Childhood; Public health; Preschool education; Rural areas; Preventive medicine; Disease transmission
Business indexing term:	Industry: 62441 : Child Care Services 62121 : Offices of Dentists 62139 : Offices of All Other Health Practitioners
Location:	Montana; United States--US
Company / organization:	Name: National Head Start Association; NAICS: 624120, 624410, 813910
Classification:	62441: Child Care Services; 62121: Offices of Dentists; 621 39: Offices of All Other Health Practitioners
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4

Pages:	368-371
Publication year:	2023
Publication date:	Apr 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
DOI:	https://doi.org/10.2105/AJPH.2022.307205
ProQuest document ID:	2792106446
Document URL:	https://www.proquest.com/scholarly-journals/improving-early-childhood-caries-american-indian/docview/2792106446/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Apr 2023
Last updated:	2023-03-29
Database:	Public Health Database

Republicans Die More From COVID-19: Why We Care

Anonymous

FULL TEXT

In a September 2022 study from the National Bureau of Economic Research (NBER), in Cambridge, Massachusetts (http://www.nber. org/papers/w30512), Wallace et al. compared the excess mortality among Republicans and Democrats from 2018 to 2022. Excess deaths during the pandemic were computed relative to the number of deaths observed in 2019. There was no difference in excess deaths along partisan lines in 2018, indicating that the two groups were comparable. However, since the introduction of COVID-19 vaccines, the excess death rate among Republicans was 10.4 percentage points higher than among Democrats, or 1.5 times that of the Democrats.

If 234000 deaths from COVID-19 could have been prevented with a primary series of vaccinations (https://bit.ly/3XrFXfz) between June 2021 and March 2022, I estimate that 140400 of these deaths would have been among Republicans. This is, of course, nota surprise because Republicans are less likely to be vaccinated than Democrats, and, as the Texas Department of Health put it, "Texas Data Shows Unvaccinated People 20 times More Likely to Die From COVID-19" (https://bit.ly/3H0ACog). The Republicans die at higher rates than Democrats mostly in counties with low vaccination rates.

This is not a study based on county-level statistics, which are often tricky to interpret in terms of causalrelation. The authors have linked individual-levelinformation both on mortality from 2018to 2021 and on political affiliation from 2017 voter registration in Ohio and Florida.

In the current state oftension between the most vocaland extremist faction of the Republican party and Democrats, some people may think: if COVID-19 kills Republicans, why should we care? The answer is very clear. Such reasoning is incompatible with the public health approach. Public health needs to be all-inclusive to succeed. Viruses do not sense political affiliation. The overmortality among Republicans stems from sectors of the population being unvaccinated. This has translated into a longer duration of the pandemic, more new variants, more deaths, more schoolclosures, smallbusinesses filing for bankruptcy, and misery for everyone. The response to a public health emergency is either successfully collective, or it fails. A striking finding of the NBER study is that in the counties with at least 50% of the population vaccinated, there were no excess death differences between Republicans and Democrats. The vaccinated protected the unvaccinated.

There are three reasons why some Americans may not have been vaccinated. The first and most important one is that some people may want to be vaccinated and do not have access to the intervention. This is the main challenge for public health. It is also the main reason why protecting the community involves using the force of the law when needed to implement a public health mandate. Most Americans got the point that vaccines are a collective response to a collective threat and that the mandates are also the optimal solution for individuals. They voted with their arms.

A second reason for not being vaccinated comes from a misunderstanding about what public health is. Vaccines are different from a medicalprescription that each of us is free to accept or refuse. They are prescribed for the whole community. Vaccinated persons protect those who are unvaccinated, and the unvaccinated put vaccinated persons at risk. The main and often only interface between Americans and the health sector is clinicalmedicine, not public health. The current pandemic is an opportunity to explain the difference between the individualapproach of clinical medicine and the collective approach of public health. Both have the same goal: protecting each individual.

Finally, the third reason for not being vaccinated isto be opposed to it. The public health approach prioritizes trying to convince as much of the population as possible to follow public health recommendations. Making public health mandates the law enables reaching a political consensus that makes them enforceable. Few willdisagree that today's employers should be punished if they employ minors intheirwarehouse, but the principle behind the 1938 Fair Labor Standards Act is the same as for a vaccine mandate, a collective defense of the right to health that no individualcan wage alone.

So, yes, we should care about Republicans dying more than Democrats because of the COVID-19 pandemic. Public health is allinclusive. It should be able to reach and protect everyone: Republicans, immigrants, the poor- everyone.

/4JPI-I

Alfredo Morabia, MD, PhD

AJPH Editor-in-Chief

@AlfredoMorabia
30 Years Ago
* Pennsylvania's Birth Rates After Medicaid Abortion Restrictions
The right to legal abortion was effectively terminated for many Pennsylvania women in 1985, when state lawmakers restricted Medicaid funding for abortion to pregnancies that are life-threatening or result from rape or incest. An examination of state health department statistics from 1980 through 1990 ... reveals that, beginning in 1985, there was a marked increase in the ratio of live births to abortions.... During these years, live birth rates did not increase nationwide to the degree that they did in Pennsylvania and in other states with newly initiated Medicaid restrictions. Thus, one might reasonably infer that the change in Pennsylvania rates was due in large partto Medicaideligible women who, faced with unintended pregnancy, chose to give birth as the only affordable option. Because of the ramifications of poverty, the denial of Medicaid-funded abortionto poorwomen is likely to cause financial, emotional, and physical hardships even beyond those that would be experienced by more affluent women who for some reason were unable to get legal abortions. Thus, many of the babies born to these lower-income women must begin their lives with the risks of poverty compounded by the risks of unwantedness.
From AJPH,June 1993, pp. 911-912
52 Years Ago
* Legal Authority of Health Departments to Regulate Abortion Practice
The first health department to take action to regulate abortion practice was in New York City which enacted amendments to its Health Code.... The New York City regulations are quite thorough and detailed. The greatest amount of publicity has been given to the prohibition of abortions in doctors' offices. All legal abortions in New York City under these tions must be in an "abortion service."... It has been argued that prevention of abortions in doctors' offices forces the entire load on inadequate facilities in hospitals and clinics and that waiting lists will be dangerously long. This is a serious problem. However, it is aggravated in New York City by the fact that the population is so great and by large numbers of nonresidents comingto the city for abortions. It points up the fact that the change in the laws in this country on a state-by-state basis is a problem in itself, particularlyon such matters as abortion.
From AJPH, March 1971, pp. 623 and 625

DETAILS

Subject:	Birth rate; COVID-19 vaccines; Womens health; COVID-19; Medicaid; Poverty; Pandemics; Women; Public health; Pregnancy; Abortion; Coronaviruses; Government programs
Business indexing term:	Subject: Medicaid
Location:	Texas; United States--US; Pennsylvania; New York City New York
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	349
Publication year:	2023
Publication date:	Apr 2023

Section:	EDITOR'S CHOICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Editorial
DOI:	https://doi.org/10.2105/AJPH.2023.307237
ProQuest document ID:	2792106378
Document URL:	https://www.proquest.com/scholarly-journals/republicans-die-more-covid-19-why-we-care/docview/2792106378/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Apr 2023
Last updated:	2023-07-10
Database:	Public Health Database

Minor Consent Laws for Sexually Transmitted Infection and Human Immunodeficiency Virus Services in the United States: A Comprehensive, Longitudinal Survey of US State Laws

Nelson, Kimberly M, PhD, MPH; Skinner, Alexandra, MPH; Stout, Claire D, BA; Raderman, Will, MSc; Unger, Emily, PhD; Raifman, Julia, ScD, SM; Agénor, Madina, ScD, MPH; Ybarra, Michele L, PhD, MPH; Dunsiger, Shira I, PhD; Austin, S Bryn, ScD, SM; Underhill, Kristen, DPhil, JD

ABSTRACT (ENGLISH)

Objectives. To assess changes in minor consent laws for sexually transmitted infection (STI) and HIV testing, treatment, and prevention services in all 50 US states and the District of Columbia from 1900 to 2021. Methods. We coded laws into minor consent for (1) health care generally; (2) STI testing, treatment, and prevention; (3) HIV testing, treatment, and prevention; and (4) pre- or postexposure prophylaxis for HIV prevention. We also coded confidentiality protections and required conditions (e.g., threshold clinician judgments). Results. The largest increase in states allowing minors to consent to STI services occurred during the 1960s and 1970s. By 2021, minors could consent independently to STI and HIV testing and treatment in all 50 states plus DC, STI prevention services in 32 jurisdictions, and HIV prevention services in 33 jurisdictions. Confidentiality protections for minors are rare. Prerequisites are common. Conclusions. Although the number of states allowing minors to consent independently to STI and HIV services has increased considerably, these laws have substantial limitations, including high complexity, prerequisites requiring clinician judgments, and neglect of confidentiality concerns.

FULL TEXT

Headnote

Objectives. To assess changes in minor consent laws for sexually transmitted infection (STI) and HIV testing, treatment, and prevention services in all 50 US states and the District of Columbia from 1900 to 2021.
Methods. We coded laws into minor consent for (1) health care generally; (2) STI testing, treatment, and prevention; (3) HIV testing, treatment, and prevention; and (4) pre- or postexposure prophylaxis for HIV prevention. We also coded confidentiality protections and required conditions (e.g., threshold clinician judgments).
Results. The largest increase in states allowing minors to consent to STI services occurred during the 1960s and 1970s. By 2021, minors could consent independently to STI and HIV testing and treatment in all 50 states plus DC, STI prevention services in 32 jurisdictions, and HIV prevention services in 33 jurisdictions. Confidentiality protections for minors are rare. Prerequisites are common.
Conclusions. Although the number of states allowing minors to consent independently to STI and HIV services has increased considerably, these laws have substantial limitations, including high complexity, prerequisites requiring clinician judgments, and neglect of confidentiality concerns. (Am J Public Health. 2023;113(4):397-407. https://doi.org/10.2105/AJPH.2022.307199)

Adolescents in the United States are significantly burdened by sexually transmitted infections (STIs), including HIV.1,2 Sexual, gender, and racial/ethnic minority adolescents are disproportionately affected.1,2 Despite elevated risk of STI and HIV transmission and clinical recommendations for routine screening and access to prevention services,3,4 STI and HIV testing rates and use of preventive care, including pre- and postexposure prophylaxis (PrEP and PEP, respectively), are low among adolescents who are having sex.5,6 There are also pronounced inequities in STI and HIV service use by sexual orientation, gender, and race/ethnicity.5,6

Guardian consent requirements are a significant barrier to care for minors who are unable or unwilling to involve their guardian when they are seeking STI or HIV services.7-9 Minors seeking STI or HIV services may need to disclose information about their sexual activity, sexual orientation, or gender identity to their clinician and guardian. These disclosures can be difficult, risky, or impossible for adolescents whose guardians may react with discipline, rejection, or abuse, or for adolescents who are unstably housed, not living with their guardian, institutionalized, or in foster care.7-9 To address this obstacle, states have enacted statutes granting minors legal capacity to consent to STI and HIV services without their guardians' consent. These statutes benefit both minors and clinicians; they reduce minors' barriers to STI and HIV care, and they enable clinicians to provide services without risking legal repercussions because of their patients' age. Since 1970, US minors have also had the capacity to consent independently to family planning services, including STI and HIV services, delivered through federal Title X program grants.10 Although Title X programs are helpful, there are substantial limitations to adolescent uptake,11-13 and most minors receive care in clinicians' offices.14 State statutes granting minors legal capacity to independently consent to STI and HIV services, therefore, remain critical.

Research on the impact of minor consent laws on the use of STI and HIV services among adolescents is limited.15-18 One potential contributor to the lack of research in this area is the absence of rigorous, longitudinal data mapping

the history of these laws and the complex conditions and confidentiality protections that are involved when minors independently seek care. Previous reviews of minor consent laws for STI and HIV services are cross-sectional, dated, and methodologically unclear, and they lack data on required conditions (e.g., threshold clinician judgments) and confidentiality requirements.19-27

This article extends and elaborates on existing reviews19-27 by examining minor consent laws for STI and HIV services, including prerequisites and confidentiality protections, in all 50 states and the District of Columbia from 1900 to 2021. This longitudinal analysis of state law will be useful for legal, policy, and public health researchers who can capitalize on the natural experiments created by differences in the laws over time and between states. Furthermore, the detailed accounting of the current law can inform clinical practice and identify areas where additional legal protections are necessary. The goal of this work is to facilitate research, practice, and policies that will reduce barriers to STI and HIV care for adolescents and promote sexual health equity nationwide.

METHODS

Using best practices for creating longitudinal data sets of state health laws,28 our team followed a replicable process of identifying, double coding, reconciling, and analyzing relevant laws. The objective was to generate a legal survey of state statutes (enacted by legislatures), state regulations (enacted by state agencies), and state and federal case law (judges' decisions) regulating the legal capacity of minors in each state and DC to consent to STI and HIV testing, treatment, and prevention services without guardian permission. We divided laws into 4 categories: (1) consent to health care generally; (2) consent to STI testing, treatment, or prevention; (3) consent to HIV testing, treatment, or prevention; and (4) consent to PrEP or PEP for HIV prevention. We also surveyed confidentiality protections that may allow or require clinicians to avoid disclosing health care information to guardians, as well as laws that protect against health care payor communications (e.g., explanation of benefits [EOB]) disclosure to guardians. Because we defined "minors" as people below a state's legal age of majority, we coded state laws on majority age. We also identified specific conditions that some states require before granting minors legal capacity to consent to care.

Although Congress could enact a federal statute on minors' capacity to access health care, they have not done so. With the exception of care delivered in Title X grantee programs, states decide minors' capacity to consent to care. As such, our data set summarizes state law.

We generated a list of legal variables and coding schemes, defining each variable with a preset list of responses. We revised the coding schemes after coding 5 preliminary states. Four legal research assistants conducted initial coding duringJune through December 2020 by systematically searching, collecting, and coding state legislation, regulations, and judicial decisions in Westlaw for each jurisdiction. They used separate search strings for laws regulating minor consent to general health care (< [minor! adolesc! child! age!]/p ["medical care" "health" "healthcare" doctor! physician! provider! treat! prevent! diagnos!] >) and laws regulating minor consent to HIV and STI care (< [minor! adolesc! child! age!]/p [HIV STI STD sexual! venereal immunodeficien!] >). Because our focus was on STI and HIV care, we excluded laws focusing exclusively on reproductive health care and family planning, including contraception and abortion. Searches for cases included both state and federal cases applicable in each jurisdiction.

Where we identified a relevant state law, we tracked the legal rule backward through all available past versions, examining any changes since its enactment. We recorded any changes that affected our variables of interest. We were occasionally unable to obtain versions of legislation from specific past years. In these situations, we used all available contextual information to identify possible changes at the missing time point (e.g., legislative history, legislative findings, case law, editors' comments), and if we could not identify a change, we assumed that no relevant changes were made. Because a majority of amendments were nonsubstantive for our variables of interest, this was a conservative assumption. All relevant citations were Shepardized, a process of tracking citations to examine any cases or legislative changes that may have affected the validity or application ofthe law.

We abstracted data from legal source material into an Excel spreadsheet for each state, noting all relevant amendments and their years. All data were redundantly collected and coded by 2 independent research assistants

who reconciled discrepancies by discussion and referral to the legal expert on our team (K. U). We compared findings to existing cross-sectional surveys to ensure completeness and reviewed all findings to identify coding errors.

After initial coding was complete, 2 independent researchers (C. S. and W. R.), analyzed each state to prepare a master set of rules. Data were cleaned and updated in a collaborative process between the team's legal and public health researchers in October 2021, which involved applying this master set of rules, checking the most up-to-date laws, and revising data to include any updates since initial coding.

For each type of care, we identified the youngest age at which mentally competent minors have capacity to consent independently. Where multiple laws provided capacity to consent to the same type of care, we coded the youngest age at which the minor has capacity to consent both with conditions and without conditions. Mental capacity to consent is already a prerequisite to providing informed consent in every state. As such, we did not code redundant conditions that specified that minors would need mental capacity.

Furthermore, although some analyses and popular press articles have labeled certain minor consent laws as being PrEP-specific,27'29 these statutes are worded in terms of HIV prevention generally; thus, we did not separate PrEP from HIV prevention in our results. States adopted minor consent fortesting and treatment concurrently; in each state, the youngest age of allowable consent to testing (for STI or HIV) was the same as that for treatment. We therefore present STI and HIV testing and treatment jointly in our results. Legal citations are available in Table A (available as a supplement to the online version of this article at https://ajph. org). State-specific data on age of majority and youngest age of legal capacity of mentally competent minors to consent to STI and HIV care from 1900 to 2021 are available in Tables B and C (available as supplements to the online version of this article at https://ajph. org). Additional details about procedures, assumptions, and definitions have been published previously.30

RESULTS

The number of states allowing minors to consent independently to STI and HIV services has increased considerably in the past century.

1900-1959

Between 1900 and 1959, minors were allowed to consent independently to general care in 1 state, STI testing and treatment in 9 states, and STI prevention services in 1 state (Figure 1). In Massachusetts, minors were able to consent independently to STI testing and treatment only if the services were provided in a public clinic. No other states required conditions. Only 2 states had laws that specified confidentiality protections for minors (Table 1), both of which stated that it was a clinician's discretion whether they kept the services confidential from guardians.

1960-1979

During the 1960s and 1970s, there was a substantial increase in the number of states that allowed minors to consent independently to general care (14 jurisdictions), STI testing and treatment (41 jurisdictions), and STI-prevention services (21 jurisdictions; Figure 1). However, multiple states had conditions that must be met. Among the most common conditions were 2 prerequisites: (1) in the clinician's judgment, delaying care would substantially increase the risk to the minor's life or health or (2) the patient believes themselves to be afflicted with a relevant illness or disease. Additional conditions are captured in Table B.

By 1979, among the 41 jurisdictions that allowed minors to consent independently to STI testing and treatment, 17 specified confidentiality protections for minors who access these services (Table 1). One state had distinct levels of confidentiality protections for STI testing versus treatment; in South Dakota, confidentiality protections applied for minors seeking STI treatment (according to the clinician's discretion), but not for STI testing. Among the 21 jurisdictions that allowed minors to consent independently to STI prevention services during this period, 11 specified confidentiality protections for minors who access these services (Table 1).

1980-1999

Steady growth in the number of states allowing minors to consent independently to general care and STI services continued during the 1980s and 1990s. Minors also gained the ability to consent to HIV testing, treatment, and prevention services in some states. By December 1999, minors were able to consent independently to general care

in 17 jurisdictions, STI testing and treatment in all 50 states plus DC, and STI prevention services in 25 jurisdictions (Figure 1). Furthermore, minors could independently consent to HIV testing and treatment in all 50 states plus DC and to HIV prevention services in 25 jurisdictions (Figure 1). Many states continued existing conditions or added additional prerequisites, as captured in Tables B and C.

Among the 51 jurisdictions that allowed minors to consent independently to STI testing and treatment, 24 specified confidentiality protections for minors who access these services (Table 1). South Dakota's protections remained distinct for STI testing versus treatment. Among the 25 jurisdictions that allowed minors to consent independently to STI-prevention services, 13 specified confidentiality protections (Table 1). Among the 51 jurisdictions that allowed minors to consent independently to HIVtesting and treatment, 23 specified confidentiality protections (Table 2). One state had distinct levels of confidentiality protections for HIV testing versus treatment; in Delaware, there were confidentiality protections for minors seeking HIV testing (according to the clinician's discretion), but none for HIV treatment. Among the 25 jurisdictions that allowed minors to consent independently to HIV-prevention services, 13 specified confidentiality protections for minors who access these services (Table 2). Lastly, as of 1986, when a minor receives any health care without guardian consent in Florida, their health care payor EOB form and other communications (i.e., billing, online claims records) are protected against disclosure to guardians (Table 3).

2000-2021

From 2000 through 2021, the number of states allowing minors to consent to STI- and HIV-prevention services continued to increase. As of December 2021, minors can independently consent to general care in 20 states, STI and HIVtesting and treatment in all 50 states plus DC, STI-prevention services in 32 jurisdictions, and HIVprevention services in 33 jurisdictions (Figure 1). Prerequisites continue to be common, as captured in Tables B and C.

Confidentiality protections changed minimally during this period. Among the 51 jurisdictions that allowed minors to consent independently to STI testing and treatment, 27 specified confidentiality protections for minors who access these services (Table 1). Among the 32 jurisdictions that allowed minors to consent independently to STI-prevention services, 17 specified confidentiality protections (Table 1). Among the 51 jurisdictions that allowed minors to consent independently to HIV testing and treatment, 29 specified confidentiality protections (Table 2). Among the 33 jurisdictions that allowed minors to consent independently to HIV-prevention services, 18 specified confidentiality protections (Table 2).

Lastly, additional states adopted payor-related protection provisions (Table 3). Specifically, Colorado, New York, and Washington joined Florida in protecting health care payor EOBs against disclosure to guardians when a minor receives any health care without guardian consent. Similarly, Delaware, New York, and Washington joined Florida in protecting other communications from the health care payor (i.e., billing, online claims records) against disclosure to guardians when a minor receives any health care without guardian consent.

DISCUSSION

Adolescents in the United States are disproportionately affected by STIs and HIV and require access to testing, treatment, and prevention services.1,2 Laws that give minors capacity to consent to care are important for minors who are unable or unwillingto involve guardians when they are seeking STI and HIV services.7-9 These laws may be especially critical for addressing the STI and HIV inequities experienced by marginalized youths.9

Many minor consent statutes on STI testing and treatment date back to the earliest years of the 20th century and are written with reference to "venereal disease." Minor consent statutes in this era reflect Progressive concerns about STIs amongyoung people and members of the armed forces, as well as Reformer beliefs that STIs were an acute threat to childbearing and marriage.32 States in this era enacted minor consent laws that enabled STI testing before marriage or enlistment for people who married or registered for the military before the age of majority (often age 21).

The number of states allowing minors to consent independently to STI services increased slowly until the late 1960s and early 1970s, when there was a dramatic increase in states adopting these statutes. Social changes (e.g., civil rights activism, the sexual revolution), sexual health advances (e.g., the introduction of birth control pills and intrauterine devices, the inception of Title X grants), legal developments (e.g., nondiscrimination laws), and an increased understanding of minors' capacity all likely contributed to the evolution of minor consent statutes during

this time.33 These decades also saw landmark court decisions identifying individual due process rights to access contraception (e.g., Eisenstadt v Baird) and abortion (e.g., Roe v Wade). The 1960s and 1970s also drew attention to children as "rights-bearing persons," and children's rights advocates emphasized that minors had needs and interests that were separate from those of their guardians and the state.34 Many courts, including the Supreme Court (e.g., Bellottiv Baird), made decisions that recognized an independent legal and developmental status for minors during this time.

Adoption of minor consent statutes for STI services continued to slowly increase through 1999, by which time everyjurisdiction allowed minors to consent independently to STI testing and treatment. When HIV testing became widely available in 1985,31 many states already had sufficiently expansive STI testing and treatment minor consent laws for them to apply to HIV services as well. Other states passed new HIV-specific laws throughout the 1980s and 1990s to accommodate HIV testing and treatment. These laws reflected keen attention to HIV as a health risk for adolescents during the peak of the national HIV epidemic (i.e., 1981 -1996) and before the widespread availability of highly active antiretroviral therapy.

Since 2000, laws have increasingly focused on facilitating minors' access to biomedical STI and HIV prevention (e.g., human papillomavirus vaccination, PrEP, PEP). Because STI and HIV prevention in earlier eras was mostly limited to over-the-counter barrier methods (e.g., condoms), many earlier laws specifically named access to testing and treatment but not prevention. Generic laws allowing minors to consent to STI and HIV "care" or "services" are broad enough to encompass prevention, and some states have amended their laws to include prevention explicitly. But, in states without these features, capacity to consent to STI and HIV prevention still depends on whether there is a right to consent to general medical care that includes preventive care. Without these options, the legal age of majority is the earliest that young people can independently consent to STI and HIV prevention.

Critically, across all years, most states have neglected or only cursorily addressed confidentiality obligations for clinicians who deliver care to independently consenting minors. In states where there are no explicit laws protecting the confidentiality of minors' STI or HIV services, default rules under the Health Insurance Portability and Accountability Act allow guardians to access their children's medical records. The Act also allows clinicians to exercise discretion over disclosures "to the extent allowed by law" when minors consent independently to care and where states have no law on the subject. Where states have their own laws on confidentiality, these take priority. Among states that have addressed confidentiality, the most common rule is to allow clinicians to exercise discretion over which information they disclose to guardians. More rarely, some states require that clinicians keep information about care confidential, with some exceptions for permissible or required disclosures (e.g., when the clinician believes that nondisclosure would jeopardize the health of the minor patient). For minors who may face rejection or abuse, the capacity to consent to their own care is incomplete and fraught if their clinicians can, or must, disclose their information to guardians.

Very few states address insurance billing and claims processes that may inadvertently break confidentiality. Only a handful of states have acted to protect EOBs and other records against disclosure to guardians. Because the majority of adolescents are covered by their guardians' insurance,35 inadvertent disclosure through payment processes is a substantial barrier to care for adolescents and could be dangerous for youths who face rejection or abuse if receipt of services is disclosed. It is critical that states address these potential loopholes to confidentiality. At the point of care, clinicians should help minors understand their payment options (e.g., insurance, paying out of pocket, locating free services) and their implications for maintaining confidentiality.

Strengths and Limitations

Our study has many strengths, including our longitudinal approach to tracking laws from their inception, our canvassing of not only state statutes but also judicial opinions and regulations, our systematic approach to redundant coding and reconciliation, and our simultaneous application of multiple sets of laws that affect minors' capacity to consent to STI and HIV testing, treatment, and prevention services. Furthermore, our study provides critical information about potential conditions and confidentiality protections for adolescents who are independently seeking STI and HIV services in each state. This information is necessary to gain a full understanding of what is

required for adolescents to independently obtain these services and maintain their confidentiality.

Our study also has limitations. We did not assess municipal law, and cities within individual states may have differing rules. We also did not assess the full scope of minor consent statutes related to sexual health (e.g., contraception, abortion) but, rather, focused only on laws pertinent to STI and HIV care. Laws that did not mention STIs or HIV (e.g., laws that only included "family planning") were not retrieved by our search. As mental capacity to consent is already a prerequisite to providing informed consent in every state, our findings do not apply to minors who lack mental competence. In addition, our search was not optimized to identify laws that had been long discontinued, for which an updated or repealed version would have been unavailable at the time of our initial Westlaw queries. We also acknowledge that minors who access STI and HIV care through Title X grantee programs have capacity to consent independently regardless of state law.

Public Health Implications

Increasing STI and HIV testing, treatment, and prevention service use is key to decreasing STI and HIV rates among adolescents in the United States. Minor consent laws were enacted for the purpose of expanding access to care. Although the number of states allowing minors to consent independently to STI and HIV services has increased considerably over the past century, these laws have substantial limitations, including being complex, relying on clinician judgments, and leaving significant confidentiality concerns unaddressed. Understanding the history, intricate structure, and limitations of these laws is essential to assess their impacts on access, to inform clinical practice, to identify areas where additional legal protections are necessary, and, ultimately, to promote sexual health equity and access to care for US adolescents. ÂfPH

ABOUT THE AUTHORS

Kimberly M. Nelson and Claire D. Stout are with the Department of Community Health Sciences, Boston University Schoolof Public Health, Boston, MA. Alexandra Skinner, WillRaderman, and Julia Raifman are with the Department of Health Law, Policy, and Management, Boston University Schoolof Public Health. Emily Unger and S. Bryn Austin are with the Department of Social and BehavioralSciences, Harvard T. H. Chan School of Public Health, Boston. Madina Agénor and Shira I. Dunsiger are with the Department of Behavioraland SocialSciences, Brown University Schoolof Public Health, Providence, RI. Michele L. Ybarra is with the Center for Innovative Public Health Research, San Clemente, CA. Kristen Underhillis with CornellLaw School, Ithaca, NY.

CORRESPONDENCE

Correspondence should be sent to Kimberly Nelson, PhD, MPH, Boston University School of Public Health, 801 Massachusetts Ave, 4th Floor, Boston, MA 02118 (e-mail: knel@bu.edu). Reprints can be ordered at https://ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

FullCitation: Nelson KM, Skinner A, Stout CD, et al. Minor consent laws for sexually transmitted infection and human immunodeficiency virus services in the United States: a comprehensive, longitudinalsurvey of US state laws. Am J Public Health. 2023;113(4):397-407.

Acceptance Date: December 2, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307199

CONTRIBUTORS

All authors made substantialcontributions to this article. K. Nelson and K. Underhillconceptualized the study. K. Nelson acquired the funding. K. Underhillled the legalcoding, cleaning, and updating process. C. Stout and W. Raderman conducted data cleaning and updating. K. Underhill in collaboration with E. Unger and A. Skinner finalized the data set. K. Nelson, K. Underhill, and A. Skinner wrote the initialarticle draft. J. Raifman, M. Agénor, M. Ybarra, S. Dunsiger, and S. B. Austin provided criticalfeedback throughout the development of the data set. All authors reviewed and edited the article.

ACKNOWLEDGMENTS

This work is supported by the National Institute of MentalHealth (R01MH119892; PI: K. M. N.). S.B. Austin is supported by Maternaland Child Health Bureau, Health Resources and Services Administration grant T76-MC00001.

We would like to thank the Youth Advisory Board and the 4 law student research assistants who helped code the data.
Note. The content of this publication is solely the responsibility of the authors and does not represent the officialviews of the NationalInstitutes of Health. The NationalInstitutes of Health had no role in the design and conduct of the study;collection, management, analysis, and interpretation of the data;preparation, review, or approvalof the article;or decision to submit the article for publication.
CONFLICTS OF INTEREST
The authors have no conflicts to report.
HUMAN PARTICIPANT PROTECTION
This study was exempted by the Boston University Medical Campus institutionalreview board.
References
REFERENCES
1. Centers for Disease Control and Prevention. Sexually transmitted disease surveillance, 2019. 2021. Available at: https://www.cdc.gov/std/ statistics/2019/std-surveillance-2019.pdf. Accessed March 15, 2022.
2. Centers for Disease Control and Prevention. HIV Surveillance Report, 2019; Vol 32. 2021. Available at: http://www.cdc.gov/hiv/library/reports/hivsurveillance.html. Accessed March 18, 2022.
3. Workowski KA, Bachmann LH, Chan PA, et al. Sexually transmitted infections treatment guidelines, 2021. MMWR Recomm Rep. 2021 ;70(4):1 -187.
4. The Committee on Adolescence, Committee on Pediatric and Adolescent HIV, Section on Adolescent Health, Section on LGBT Health and Wellness. Adolescent sexual health AAP policy statements. American Academy of Pediatrics. 2022. Available at: http://www.aap.org/en/patient-care/adolescentsexual-health/adolescent-sexual-health-aap-policystatements. Accessed March 15, 2022.
5. Centers for Disease Control and Prevention. Youth Risk Behavior Survey data summary &trends report: 2009-2019. 2020. Available at: https://www.cdc.gov/healthyyouth/data/yrbs/pdf/ YRBSDataSummaryTrendsReport2019-508.pdf. Accessed March 23, 2022.
6. Magnuson D, Hawkins T, Mera R. Adolescent use of Truvada (FTC/TDF) for HIV pre-exposure prophylaxis (PrEP) in the United States: (2012-2017). Presented at: 22nd International AIDS Conference; July 23-27, 2018; Amsterdam, the Netherlands. Available at: https://www.natap.org/2018/ IAC/IAC_26.htm. Accessed March 15, 2022.
7. Cuffe KM, Newton-Levinson A, Gift TL, McFarlane M, Leichliter JS. Sexually transmitted infection testing among adolescents and young adults in the United States. J Adolesc Health. 2016;58(5): 512-519. https://doi.org/10.1016/jjadohealth. 2016.01.002
8. Leichliter JS, Copen C, Dittus PJ. Confidentiality issues and use of sexually transmitted disease services among sexually experienced persons aged 15-25 years-United States, 2013-2015. MMWR Morb Mortal Wkly Rep. 2017;66(9): 237-241. https://doi.org/10.15585/mmwr. mm6609a1
9. National Academies of Sciences, Engineering, and Medicine. Sexually Transmitted Infections: Adopting a Sexual Health Paradigm. Washington, DC: National Academies Press; 2021. https://doi. org/10.17226/25955
10.Congressional Research Service. Title X Family Planning Program. 2022. Available at: https:// crsreports.congress.gov/product/pdf/IF/IF10051 #:~:text=The%202021%20rule%20states%20 that, Title%20X%20family%20planning%20 services. Accessed November 9, 2022.
11. Krass P, Tam V, Min J, et al. Adolescent access to federally funded clinics providing confidential family planning following changes to Title X funding regulations. JAMA Netw Open. 2022;5(6): e2217488. https://doi.org/10.1001/jamanetwork open.2022.17488
12. US Department of Health and Human Services. Ensuring access to equitable, affordable, clientcentered, qualityfamily planning services. 86 FR 19812 (2021). Available at: https://www. federalregister.gov/documents/2021/04/15/202107762/ensuring-access-to-equitable-affordableclient-centered-quality-family-planning-services. Accessed November 9, 2022.
13. Wu JP, Van Sparrentak M, Waselewski M, DeJonckheere M, Remen R, Chang T. Youth opinions about Title X

funding and policy in the United States: a mixed methods text message survey. Contraception. 2021;103(2):92-96. https:// doi.org/10.1016/j.contraception.2020.10.008
14. Simon AE, Rossen LM, Schoendorf KC, Larson K, Olson LM. Location of usual source of care among children and adolescents in the United States, 1997-2013. J Pediatr. 2015;167(6): 1409-1414. https://doi.org/10.1016/jjpeds.2015. 09.026
15. Nelson KM, Underhill K, Carey MP. Consent for HIV testing among adolescent sexual minority males: legal status, youth perceptions, and associations with actual testing and sexual risk behavior. AIDS Behav. 2020;24(2):373-378. https://doi. org/10.1007/s10461-019-02424-9
16. Pampati S, Liddon N, Dittus PJ, Adkins SH, Steiner RJ. Confidentiality matters but how do we improve implementation in adolescent sexual and reproductive health care? J Adolesc Health. 2019;65(3):315-322. https://doi.org/10.1016/j. jadohealth.2019.03.021
17. Phillips II G, Wang X, Ruprecht MM, et al. Associations between HIV testing and consent policies among sexually active adolescents: differences by sexual behavior. AIDS Care. 2022;34(7): 862-868. https://doi.org/10.1080/09540121. 2021.1991878
18. Cordoba E, Kuhns LM, Radix A, Hirsh S. Are state-level HIV testing policies for minors associated with HIV testing behavior and awareness of home-based HIV testing in young men who have sex with men? J Adolesc Health. 2022;70(6): 902-909. https://doi.org/10.1016/jjadohealth. 2021.12.023
19. Culp L, Caucci L. State adolescent consent laws and implications for HIV pre-exposure prophylaxis. Am J Prev Med. 2013;44(1 suppl 2):S119-S124. https://doi.org/10.1016/j.amepre.2012.09.044
20. Centers for Disease Control and Prevention. State laws that enable a minor to provide informed consent to receive HIV and STD services. 2021. Available at: https://www.cdc.gov/hiv/ policies/law/states/minors.html. Accessed March 15, 2022.
21. Boonstra H, Nash E. Minors and the right to consent to health care. Guttmacher Report on Public Policy. Available at: https://www.guttmacher.org/ sites/default/files/article_files/gr030404.pdf. Accessed March 15, 2022.
22. Ford CA, Skiles MP, English A, et al. Minor consent and delivery of adolescent vaccines. J Adolesc Health. 2014;54(2):183-189. https://doi.org/ 10.1016/j.jadohealth.2013.07.028
23. English A, Shaw FE, McCauley MM, Fishbein DB. Legal basis of consent for health care and vaccination for adolescents. Pediatrics. 2008;121 (suppl 1): S85-S87. https://doi.org/10.1542/peds.2007-1115J
24. English A, Bass L, Boyle AD, Eshragh F. State Minor Consent Laws: A Summary. 3rd ed. San Francisco, CA: Center for Adolescent Health &the Law; 2010.
25. English A, Gold RB, Nash E, Levine J. Confidentiality for individuals insured as dependents: a review of state laws and policies. Guttmacher Institute. 2012. Available at: https://www.guttmacher.org/report/ confidentiality-individuals-insured-dependentsreview-state-laws-and-policies. Accessed March 23, 2022.
26. Guttmacher Institute. Minors' access to STI services as of March 1, 2022. 2022. Available at: https://www.guttmacher.org/state-policy/explore/ minors-access-sti-services. Accessed March 23, 2022.
27. National Alliance of State and Territorial AIDS Directors. Minor consent and confidentiality laws for HIV treatment and PrEP. 2022. Available at: https://nastad.org/sites/default/files/2022-02/ PDF_Minor_Consent_and_Confidentiality_Laws. pdf. Accessed March 24, 2022.
28. Anderson ED, Tremper C, Thomas S, Wagenaar AC. Measuring statutory law and regulations for empirical research. In: Wagenaar AC, Burris SC, eds. Public Health Law Research: Theory and Methods. San Francisco, CA: Wiley; 2013:237-260.
29. Gaines DE. Md. lawmakers pass bill giving youth access to HIV-prevention drug without parental consent. WTOPnews. March 27, 2019. Available at: https://wtop.com/maryland/2019/03/mdlawmakers-pass-bill-giving-youth-access-to-hivprevention-drug-without-parental-consent. Accessed March 24, 2022.
30. Nelson KM, Skinner A, Underhill K. Minor consent laws for sexually transmitted infection and HIV services. JAMA. 2022;328(7):674-676. https://doi. org/10.1001/jama.2022.10777
31. Alexander TS. Human immunodeficiency virus diagnostic testing: 30 years of evolution. Clin Vaccine Immunol.

2016;23(4):249-253. https:// doi.org/10.1128/CVI.00053-16
32. Brandt AM. No Magic Bullet: A Social History of Venereal Disease in the United States Since 1880. Exp ed. New York, NY: Oxford University Press; 1987.
33. Allyn D. Make Love, Not War: The Sexual Revolution: An Unfettered History. 1st ed. New York, NY: Routledge; 2001.
34. Huntington C, Scott E. Conceptualizing legal childhood in the twenty-first century. Mich Law Rev. 2020;118(7):1371 -1458. https://doi.org/10. 36644/mlr.118.7.conceptualization
35. Alker J, Pham O. Nation's progress on children's health coverage reverses course. Georgetown University Health Policy Institute: Centers for Children and Families. 2018. Available at: https:// ccf.georgetown.edu/wp-content/uploads/2018/ 11/UninsuredKids2018_Final_asof1128743pm. pdf. Accessed April 5, 2019.

DETAILS

Subject:	Sexual orientation; Case law; Prophylaxis; Sexually transmitted diseases--STD; Human immunodeficiency virus--HIV; Disease prevention; Prevention; Confidentiality; Services; State laws; Longitudinal studies; Consent; Jurisdiction; States; Viruses; Legal research; Minors; Family planning; Disease transmission; Age; Health care; Infections; Informed consent; Medical tests; Variables; Public health; Medical treatment; Gender identity; Teenagers
Business indexing term:	Industry: 92312 : Administration of Public Health Programs
Location:	United States--US; Washington DC
Classification:	92312: Administration of P ublic Health Programs
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	397-407
Publication year:	2023
Publication date:	Apr 2023
Section:	RESEARCH &ANALYSIS
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036

Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
DOI:	https://doi.org/10.2105/AJPH.2022.307199
ProQuest document ID:	2792106375
Document URL:	https://www.proquest.com/scholarly-journals/minor-consent-laws-sexually-transmitted-infection/docview/2792106375/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Apr 2023
Last updated:	2023-08-04
Database:	Public Health Database

Overview of the 2019 National Health Interview Survey Questionnaire Redesign

Zablotsky, Benjamin, PhD; Lessem, Sarah E, PhD; Gindi, Renee M, PhD; Maitland, Aaron K, PhD; Dahlhamer, James M, PhD; Blumberg, Stephen J, PhD

ProQuest document link

ABSTRACT (ENGLISH)

Data System. Federal health surveys, like the National Health Interview Survey (NHIS), represent important surveillance mechanisms for collecting timely, representative data that can be used to monitor the health and health care of the US population. Data Collection/Processing. Conducted by the National Center for Health Statistics (NCHS), NHIS uses an address-based, complex clustered sample of housing units, yielding data representative of the civilian noninstitutionalized US population. Survey redesigns that reduce survey length and eliminate proxy reporting may reduce respondent burden and increase participation. Such were goals in 2019, when NCHS implemented a redesigned NHIS questionnaire that also focused on topics most relevant and appropriate for surveillance of child and adult health. Data Analysis/Dissemination. Public-use microdata files and selected health estimates and detailed documentation are released online annually. Public Health Implications. Declining response rates may lead to biased estimates and weaken users' ability to make valid conclusions from the data, hindering public health efforts. The 2019 NHIS questionnaire redesign was associated with improvements in the survey's response rate, declines in respondent burden, and increases in data quality and survey relevancy. (Am J Public Health. 2023;113(4): 408-415. https://doi.org/10.2105/AJPH.2022.307197)

FULL TEXT

Headnote
Data System. Federal health surveys, like the National Health Interview Survey (NHIS), represent important surveillance mechanisms for collecting timely, representative data that can be used to monitor the health and health care of the US population.
Data Collection/Processing. Conducted by the National Center for Health Statistics (NCHS), NHIS uses an address-based, complex clustered sample of housing units, yielding data representative of the civilian noninstitutionalized US population. Survey redesigns that reduce survey length and eliminate proxy reporting may reduce respondent burden and increase participation. Such were goals in 2019, when NCHS implemented a redesigned NHIS questionnaire that also focused on topics most relevant and appropriate for surveillance of child and adult health.
Data Analysis/Dissemination. Public-use microdata files and selected health estimates and detailed documentation are released online annually.
Public Health Implications. Declining response rates may lead to biased estimates and weaken users' ability to make valid conclusions from the data, hindering public health efforts. The 2019 NHIS questionnaire redesign was associated with improvements in the survey's response rate, declines in respondent burden, and increases in data quality and survey relevancy. (Am J Public Health. 2023;113(4): 408-415.
https://doi.org/10.2105/AJPH.2022.307197)
The health landscape is in constant flux, with changes in the types and availability of insurance, new places to access care, and novel public health concerns. Data from health surveys are frequently used by policymakers and researchers to set public health agendas and allocate resources.1 Therefore, survey content needs to reflect the ever-changing health landscape, including changing priorities of sponsoring groups or agencies. In addition, declining survey response rates challenge key assumptions about the representativeness of recruited survey samples.2 Low response rates may lead to biased estimates and weaken users' ability to make valid conclusions from the data,2 hindering data used for informing public health efforts.
The National Health Interview Survey (NHIS) has provided data on the nation's health for more than 65 years. The last major redesign ofthe NHIS questionnaire occurred in 1997 when the survey moved from paper-and-pencil administration to computer-assisted personal interviewing. It "was undertaken because interviews were too long; new or different kinds of information were needed, including better measures of health status and chronic conditions."3(p509) The 1997-2018 NHIS questionnaire, sample design, and data collection procedures are available online at https:// www.cdc.gov/nchs/nhis/1997-2018.htm.
During the 2 decades following the 1997 redesign, similar concerns about relevance and interview procedures emerged. Decreasing relevance and increasing burden are associated with lower response rates.4,5 Lower response rates may be linked to response bias and lower data quality.6 Therefore, the NHIS underwent another major questionnaire redesign for the 2019 survey period, with the goals of reducing respondent burden and increasing survey relevancy and ultimately Increasing response rates and data quality.
In this article, we provide key elements of this redesign, particularly a commitment to reducing survey length and eliminating proxy reporting, which, in turn, reduces measurement error and improves data quality.7,8 In addition, we evaluate whether the redesign achieved its goals by examining quantitative metrics (e.g., response rates, survey length) and established data quality dimensions, including relevancy, accuracy, and reliability.9 To assist longtime NHIS users, we note major differences from the 1997-2018 NHIS design. We conclude by discussing the public health implications of improved federal health survey data and the continued need for evaluation of the NHIS redesign.

DATA SYSTEM

NHIS is a household survey conducted by the National Center for Health Statistics (NCHS). NCHS is part of the Centers for Disease Control and Prevention (CDC) within the Department of Health and Human Services (DHHS). The NHIS has been fielded continuously since 1957 with periodic updates of survey content and methods.

Purpose

The NHIS is a principal source of health information about the US civilian noninstitutionalized population. NHIS

collects data about health insurance, functioning and disability, social determinants of health, and other topics.

Public Health Significance

The NHIS supports DHHS priorities by establishing national benchmarks, monitoring progress toward agency milestone objectives (e.g., Healthy People),10 and providing nationally representative data on a variety of topics. It is widely used in epidemiological and policy analyses to identify the number and demographics of people with various health conditions, understand the barriers individuals face in accessing and using health care, and evaluate federal health programs.10

The NHIS must undergo periodic redesigns to ensure that its content remains relevant while addressing emerging public health topic areas. Questionnaire redesigns allow for alignment with changing DHHS and other public health priorities and may lead to surveys that are more relevant to respondents. This, in turn, may increase participation because of interest in survey topic areas and reduced perceived burden ofthe survey.

DATA COLLECTION/ PROCESSING

The US Census Bureau is the contracted data collection agent for the NHIS, with 650 to 750 interviewers nationally collecting data. The NHIS is conducted by using computer-assisted personal interviewing, either through face-to-face interviewing in the respondents' homes or over the telephone. In-person interviewing is preferred, but a telephone interview may be conducted when the respondent requests one or when in-person interviewing is infeasible before the required completion date.

Population and Geographic Coverage

The target population for the NHIS is the civilian noninstitutionalized population residing within the 50 states and the District of Columbia. The NHIS sample excludes active-duty military personnel; people living on military bases, in long-term-care institutions, or in correctional facilities; unhoused individuals; and US nationals living abroad. Residents of households and noninstitutional group quarters (e.g., group homes) are eligible for the survey.

Rostering and Interviewing Participants

As the NHIS sampling frame consists of addresses rather than individuals, the interviewer first asks 1 household respondent to name and provide demographic information about all people living at the address. After the roster, 1 adult ("sample adult," herein referred to as "SA") and, in households with children, 1 child ("sample child," herein referred to as "SC") are randomly selected for detailed health-related questions.

From 1997 to 2018, the NHIS included a family questionnaire after the household roster and before the SA or SC interview. The family questionnaire asked about the family and the health of each family member. In the redesigned NHIS, the family questionnaire was eliminated to reduce interview length and proxy reporting. Family-level content is now collected within the SA or SC interview, and no health questions are asked about other family members. The instrument is optimized to only ask family-level questions ofthe first respondent when the SA and SC are in the same family. When the SA and SC are in different families, familylevel questions are asked in both interviews. For more information about changes to the questionnaire structure, reference the 2019 Survey Description documentation.11

Unit of Data Collection and Sample Size

The SA and SC are the main units of data collection in the redesigned NHIS. Approximately 30 000 SA and 9000 SC interviews are completed annually. Sample size may vary annually depending on budget and supplementary funding.

Surveillance Design and Frequency of Data Collection

Because the NHIS uses in-person interviewing, the costs of interviewing a nationally representative simple random sample of households and noninstitutional group quarters would be prohibitive. To keep survey operations manageable, affordable, and timely, the NHIS uses geographically clustered sampling techniques to select the sample of dwelling units for the NHIS. Data collection on the NHIS is continuous (January-December), and each month's sample is nationally representative.

Sample areas are reselected every 10 years to account for changes in the distribution ofthe US population.12 The 2016-2025 NHIS sampling plan was designed with results ofthe 2010 Decennial Census.13 NHIS uses an address-based sample-interviewers travel to selected properties rather than tracking down persons. Commercial address

lists are supplemented by address lists developed by Census canvassing operations.

Ethical Procedures

NHIS is a public health surveillance activity excluded from the regulatory requirements of 45 CFR 46; procedures and protocols are reviewed and approved by the NCHS Ethics Review Board to protect the rights and welfare of participants. Before the interview, each sample household is mailed an "advance letter" describing the NHIS. Interviewers arrive at the household, offer another copy ofthe advance letter to respondents, and obtain their verbal consent to participate. Parents or guardians provide consent and answer questions on behalf oftheir children.

National Health Interview Survey Funding

While the majority of NHIS data collection costs are covered by NCHS's appropriated funding, the NHIS serves as a platform to meet the needs of other federal agencies who provide additional funds for survey content. Sponsored content helps ensure that the redesigned NHIS questionnaire stays relevant in a continually changing health landscape. The amount of content added each year is limited to reduce burden. Sponsored content may be annual or periodic.

Key Data Elements and Data Quality and Editing

During the 2019 redesign efforts, questions from the most recent NHIS questionnaires were reviewed to address survey length and respondent burden. Categories of questions dropped from the redesigned NHIS questionnaire were those (1) about rare conditions and services (< 2% prevalence), (2) for which data were better collected elsewhere (e.g., federal surveys or administrative records), (3) that did not align with DHHS priorities, and (4) that were rarely used (based on public comment solicitations and literature reviews of published findings).

In the redesigned NHIS, some questions are included annually while others are included with fixed periodicity (e.g., every other year, 2 out of 3 years). Introducing a larger number of topics enhances survey relevancy. Including them periodically reduces annual survey length and respondent burden. Similar topics are addressed for both SA and SC interviews each year.

Topic prioritization and survey relevancy. Topic areas that are well-measured through household interviews, produce reliable estimates for demographic subgroups using 1 or 2 years of data, and are used for long-term monitoring, such as leading causes of morbidity and mortality and associated risk factors (e.g., social determinants), were prioritized in the redesigned NHIS. Topics featured in the DHHS Strategic Plan 2018-202214and Healthy People 2020 leading health indicators11 were also prioritized.

NCHS engaged stakeholders on the redesign by meeting with staff across CDC centers, agency partners, federal interagency working groups, and professional associations, and sought input about the redesign through online reach and Federal Register notices. NCHS also invited technical experts in child health, income, pain, injury, and opioid use to provide feedback on topic relevancy and efficient measurement approaches.

Another way the redesigned NHIS stays relevant is by reserving limited space for NCHS to add emerging content on key DHHS priorities. Content is considered emerging if it is experimental (having never, or not recently, been fielded on the NHIS) or is of growing interest (but long-term monitoring may be unnecessary). A focused effort on including questions in a survey that reflects the current health landscape naturally allows for an alignment with changing departmental priorities, and it may lead to a survey that is more relevant for respondents. Previous research has found respondents who have a strong interest in questionnaire content are more attentive,15 which can lead to less burden and better-quality data.16,17 For more information on NHIS redesign priorities and public outreach activities, visit https://www.cdc.gov/nchs/nhis/ 2019_quest_redesign.htm.

Question validity and reliability. When developing questions on new topics, survey methodologists looked for validated health scales and questions from other surveys that had undergone testing and been found effective at capturing the construct of interest. For example, the redesign incorporated the validated Washington Group Extended Set on Functioning18 and the Washington Group/UNICEF Module on Child Functioning19 to assess disability. This process increased the relevance of the NHIS and provided data coherence, allowing for standardized comparisons across different countries and languages.20 When no appropriate question could be found, questions were developed internally. All new questions were tested at the Collaborating Center for Questionnaire Design and

Evaluation Research within NCHS, which used cognitive interviewing to evaluate survey questions, uncover the constructs questions measure, and identify potentially confusing questions.21

As part of the redesign, efforts were also made to decrease the question difficulty by shortening question length, lowering reading level, and eliminating medical terminology when possible. Combined, these reductions in question difficulty and cognitive burden were aimed to improve data quality.22

Approximately 5% of NHIS interviews are conducted in Spanish. Before the redesign, there was no standardized approach for translating questions into Spanish, with questions translated by different people. This resulted in inconsistent wordings, styles, and overall quality. In the redesign, all English questions were translated or retranslated with more consistent wording and syntax.

Weighting. As part of the redesign, weighting processes were updated to better address potential nonresponse bias,23 further enhancing data quality by improving the accuracy and reliability of NHIS estimates. Multilevel logistic regression models with variables from multiple sources were used to predict response propensities, and raking procedures included more variables for calibration to population control totals.

Edits to protect confidentiality. The NCHS has strict procedures to prevent disclosure of survey respondents' identities. In addition to restricting geographical information, data appearing on publicly released files are edited to minimize the potential for inadvertent disclosure of confidential information. Data from some questions have been coarsened, including top and bottom coding and collapsing response categories. Data from multiple questions may be collapsed into 1 variable, and statistical noise may be added at either or both the variable level and record level to protect confidentiality.

Data imputation. To address high nonresponse rates to questions on total family income, files containing imputations of family income and income-to-poverty ratio (as continuous and categorical top-coded variables) are made available annually. As part ofthe redesign effort, to improve data quality, NCHS now includes 10 imputed data files (compared with 5 used previously) to reflect recent literature24 that recommends increasing the number of imputations to 10 or higher to establish scientific integrity and produce more efficient estimates for a wide variety of analyses. Additional information on the imputation method for total family income and how to use imputed values is available at http://www.cdc.gov/nchs/nhis.htm.

DATA ANALYSIS/ DISSEMINATION

The annual NHIS data release now includes a data file and an imputed income file for both the SA and SC, as well as a paradata file. Unlike previous data releases, there is no longer a person or family data file.

Data Release Accessibility

Data users interested in learning more about the purpose, goals, and history ofthe NHIS, or in downloading public data sets, codebooks, and survey documentation, should visit the NHIS Web site (https://www.cdc.gov/nchs/nhis.htm). Data users should read the Survey Description documents, which include sample sizes and provide instructions to properly account for the NHIS complex survey design. NHIS public-use data files since 1963 are available online. Analysts interested in working with restricted data may apply for access through the NCHS Research Data Center. For more information, see https://www.cdc.gov/rdc.

Throughout each year, NCHS releases a series of reports in various forms (e.g., NCHS Data Briefs,25 National Health Statistics Reports26). NCHS also provides an interactive data query system that produces tables and charts for key indicators, nationally or by select demographics (known as Summary Health Statistics27). In addition, NHIS has an Early Release program that provides key health estimates and preliminary microdata files on an expedited schedule.

Interpretation Issues

Research shows that self-respondents and proxy respondents give different answers to health questions.28 While proxy respondents may report accurately on observable events, such as physical tasks of daily living, they cannot always accurately answer questions about chronic physical and mental health conditions and pain.9,28 The elimination of the family interview virtually eliminated proxy reporting for adults (previously 55% of all responses for adults in the family were through a proxy). Proxy health-related information about adults is only collected if the SA is

unable to answer for themselves (< 2% of all interviews).
Adding, dropping, or rotating questions may affect question order and context. These changes may affect responses by changing respondents' interpretations of the questions. However, to minimize this impact, new questions were embedded into existing sections when appropriate. When this was not possible, new questions with similar content were grouped together.
Given these redesign changes detailed previously, many data users may ask if it is appropriate to trend data before and afterthe NHIS redesign, particularly as it relates to content previously in the family interview. NCHS evaluated a set of 19 Early Release indicators measured in the 2018 and 2019 NHIS to examine the impact of the weighting and questionnaire redesign on the comparability of estimates.29 The report showed variable results, although for 6 out of the 19 indicators neither the questionnaire nor the updated weighted approach appeared to have an impact. NCHS will continue to evaluate the ability to conduct trend analyses across the redesign period and monitor the ability to trend between survey years moving forward. Users should be aware ofthis issue when analyzing years that span the redesign.
Linkage Capabilities
NHIS is part of the Data Linkage Program at NCHS, which links NCHS survey data with data from vital and other administrative records, including the National Death Index, the Centers for Medicare and Medicaid Services, the Department of Housing and Urban Development, and the Department of Veterans Affairs. These linked data are available for NHIS participants who have provided consent, as well as the necessary personally identifiable information, and for whom NCHS was able to match with the administrative records source. Linked data allow richer analyses of the survey data by augmenting the information collected from the surveys with vital or administrative data that let researchers examine factors that influence disability, chronic disease, health care utilization, morbidity, and mortality.30
Key Sources
* NHIS Web site: https://www.cdc. gov/nchs/nhis.htm
* 2019 NHIS Survey Description: https://ftp.cdc.gov/pub/Health_ Statistics/NCHS/Dataset_ Documentation/NHIS/2019/ srvydesc-508.pdf
* 2019 NHIS Weighting Report:<https://ftp.cdc.gov/pub/Health Statistics/NCHS/Dataset_> Documentation/NHIS/2019/ nonresponse-report-508.pdf
IMPLICATIONS
The response rates for the SA and SC interviews were calculated by first dividing the number of completed and sufficient partial SA or SC interviews, respectively, by the number of eligible SAs or SCs, respectively, and then multiplying by the household roster competition rate, which is the percentage of interviewed and nonresponding (including noncontacts and refusals) households with a completed roster.11,31 These served as key metrics in evaluating the redesign impact, along with factors that may have longer-term impacts on response rate including survey length, item nonresponse, and respondent burden.
Given the impact of the COVID-19 pandemic on survey operations,32 response rates and other metrics are not presented for the 2020 NHIS.
Response Rate
Afterthe first year of data collection, differences between the redesigned and previous NHIS were evaluated by examining response rate and survey length (pooling 2016-2018 given survey-length fluctuations). There was a significant increase in the SA interview response rate in the 2019 NHIS (59.1% vs 53.1%), while SC interview response rate (59.1 % vs 59.2%; Figure 1) and overall response rate (61.1 % vs 64.2%) were comparable.
Survey Length
Longer questionnaires are associated with higher respondent fatigue, which can lead to greater missing data as respondents become less attentive, answer questions faster, and show smaller variability in their responses.33 The 2019 survey had a median length of 48.0 minutes per completed interview (n 5 30 532), significantly shorter than before (72.5 minutes; n = 81 031). Most of this reduction can be attributed to the elimination of the family

interview (median time of 18.4 minutes in 2016-2018). The rostering component of the 2019 and 2016-2018 NHISwere comparable in length (3.0 vs 4.1 minutes), while the 2019 SA interview was shorter than the 2016-2018 SA interview (33.7 vs 37.9 minutes), and the 2019 SC interview was longer than the 2016-2018 SC interview (15.8 vs 11.3 minutes). The longer SC interview can be attributed to the addition of topic areas to create a more comprehensive picture of a child's health and environment.

Item Nonresponse

Data quality is a multidimensional construct,10 lending itself to an array of metrics for evaluation. Many of the NHIS redesign efforts were focused on enhancing data accuracy and reliability of survey responses. Reducing survey length and proxy reporting has been shown to reduce item nonresponse.34 Changes to both weighting and multiple imputation procedures during the redesign were meant to address nonresponse, be it at the survey or item level. Doing such reduces the potential for systematic bias in responses and may produce larger sample sizes forgiven items.

Consideringjust items included in both the 2019 and 2018 SA interviews, the percentage of interviews with any item nonresponse was significantly lower in the redesigned NHIS (66.4% vs 72.9%). Similarly, the percentage of SC interviews with any item nonresponse was significantly lower in the redesigned NHIS (13.3% vs 21.0%; Table 1).

Respondent Burden

The burden experienced by respondents completing the NHIS can be tied to several factors, including item difficulty, sensitivity, and questionnaire length.35 From October to December 2018, NCHS conducted a test to determine whether health estimates and respondents' perception of burden differed between the 2018 NHIS and the redesigned NHIS. A split-sample comparison was conducted in which sample addresses were randomly assigned to receive either the 2018 NHIS orthe redesigned NHIS. This overlap in data collection served as a "bridge" between the 2 designs. Differences in health estimates were identified for several key indicators (e.g., unmet needs for medical and mental health care because of cost) and have been reported elsewhere.29

After completing the survey, respondents were asked, "How burdensome was this survey to you?" A total of 11.9% of respondents assigned to the redesigned questionnaire reported that they found the interview to be moderately to extremely burdensome, significantly less than the 17.5% of respondents who were assigned to the 2018 questionnaire (Table 2).

Conclusions

Federal health surveys such as NHIS are an important surveillance mechanism for collecting timely and representative data that are used to monitor the health and health care ofthe US population. Federal surveys must remain flexible to accommodating new questions on emerging issues that help to fulfill departmental and agency data needs and current missions and priorities. In some instances, like that ofthe NHIS, this may require redesigning the survey to ensure it remains relevant and of high quality and produces low burden for respondents, while incorporating advances in survey methodology to reduce nonresponse. By doing such, policymakers and researchers can continue to rely on federal statistics for making timely and informed public health decisions. Efforts to evaluate these elements must be ongoing, drawing from multiple years of data as they become available, and responding and adapting to changes in the survey climate. ÂfPU

ABOUT THE AUTHORS

Benjamin Zablotsky, Renee M. Gindi, Aaron K. Maitland,James M. Dahlhamer, and StephenJ. Blumberg are with the NationalCenter for Health Statistics, Centers for Disease Controland Prevention, Hyattsville, MD. Sarah E. Lessem is with RTI International, Washington, DC.

Note. The findings and conclusions in this report are those ofthe authors and do not necessarily represent the officialposition ofthe Centers for Disease Controland Prevention or RTI International.

CORRESPONDENCE

Correspondence should be sent to Benjamin Zablotsky, PhD, NationalCenter for Health Statistics, 3311 Toledo Rd, Hyattsville, MD 20782 (e-mail: bzablotsky@cdc.gov). Reprints can be ordered at https://ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION
FullCitation: Zablotsky B, Lessem SE, Gindi RM, Maitland AK, DahlhamerJM, Blumberg SJ. Overview ofthe 2019 NationalHealth Interview Survey questionnaire redesign. Am J Public Health. 2023; 113(4):408-415.
Acceptance Date: December 2, 2022.
DOI: https://doi.org/10.2105/AJPH.2022.307197
CONTRIBUTORS
B. Zablotsky, S. E. Lessem, and R. M. Gindi conceptualized the study and drafted the article. A. K. Maitland, J. M. Dahlhamer, and S.J. Blumberg provided significant input, review, and editing. All authors read and approved the final version of the article.
CONFLICTS OF INTEREST
The authors have no conflicts of interest relevant to this article to disclose.
HUMAN PARTICIPANT PROTECTION
Centers for Disease Control and Prevention research on human participants complies with Department of Health and Human Services Policy for Protection of Human Research Subjects. All National Health Interview Survey procedures and protocols have been reviewed and approved by the National Center for Health Statistics Research Ethics Review Board.
References
REFERENCES
1. Blewett LA, Call KT, TurnerJ, Hest R. Data resources for conducting health services and policy research. Annu Rev Public Health. 2018;39(1):437-452. https:// doi.org/10.1146/annurev-publhealth-040617013544
2. National Research Council. Panel on a Research Agenda for the Future of Social Science Data Collection, Committee on National Statistics. Washington, DC: The National Academies Press; 2013.
3. Fowler FJ Jr. The redesign ofthe National Health Interview Survey. Public Health Rep. 1996;111(6): 508-51 1.
4. Groves RM, Presser S, Dipko S. The role of topic interest in survey participation decisions. Public Opin Q. 2004;68(1):2-31. https://doi.org/10.1093/ poq/nfh002
5. Andreadis I, Kartsounidou E. The impact of splitting a long online questionnaire on data quality. Survey Res Methods. 2020;14(1):31-42. https://doi. org/10.18148/SRM/2020.V14I1.7294
6. Deutskens E, De Ruyter K, Wetzels M, Oosterveld P. Response rate and response quality of internetbased surveys: an experimental study. Mark Lett. 2004;15(1):21 -36. https://doi.org/10.1023/B:MARK. 0000021968.86465.00
7. PeytchevA, Peytcheva E. Reduction of measurement error due to survey length: evaluation of the split questionnaire design approach. Suixey Res Methods. 2017;11(4):361-368. https://doi.org/ 10.18148/SRM/2017.V11I4.7145
8. Andresen EM, Vahle VJ, Lollar D. Proxy reliability: health-related quality of life (HRQoL) measures for people with disability. Qual Life Res. 2001; 10(7):609-619. https://doi.org/10.1023/A: 1013187903591
9. Federal Committee on Statistical Methodology. A framework for data quality. FCSM 20-04. September 2020. Available at: https://nces.ed.gov/fcsm/ pdf/FCSM.20.04_A_Framework_for_Data_Quality. pdf. Accessed January 12, 2023.
10. US Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Healthy People 2020. Available at: https:// www.cdc.gov/nchs/healthy_people/hp2020.htm. Accessed October 12, 2020.
11. National Center for Health Statistics. Survey Description, National Health Interview Survey, 2019. 2020. Available at: https://ftp.cdc.gov/pub/Health_ Statistics/NCHS/Dataset_Documentation/NHIS/ 2019/srvydesc-508.pdf. Accessed October 12, 2022.
12. Parsons VL, Moriarity C, Jonas K, et al. Design and estimation for the National Health Interview Survey, 2006-2015. National Center for Health Statistics. Vital Health Siat 2. 2014;(165):1-53.
13. Moriarity C, Parsons VL, Jonas K, Schar BG, Bose J, Bramlett MD. Sample design and estimation structures for the National Health Interview Survey, 2016-2025. National Center for Health Statistics. Vital Health Stat I.

2022;(191):1 -30.
14. Department of Health and Human Services. Overview: HHS Strategic Plan, FY 2018-2022. Available at: https://www.hhs.gov/about/strategicplan/overview/index.html#overview. Accessed September 29, 2022.
15. Couper MP. Survey introductions and data quality. Public Opin Q. 1997;61(2):317-338. https://doi.org/10.1086/297797
16. Silber H, Danner D, Rammstedt B. The impact of respondent attentiveness on reliability and validity. ItnjSoc ResMethodol. 2019;22(2):153-164. https://doi.org/10.1080/13645579.2018.1507378
17. Crawford SD, Couper MP, Lamias MJ. Web surveys: perceptions of burden. Soc Sci Comput Rev. 2001;19(2):146-162. https://doi.org/10.1177/ 089443930101900202
18. Washington Group on Disability Statistics. Washington Group Extended Set on Functioning. Available at: https://www.washingtongroup-disability.com/ question-sets/wg-extended-set-on-functioning-wges. Accessed May 31,2020.
19. Washington Group on Disability Statistics. Washington Group/UNICEF Module on Child Functioning. Available at: https://www.washingtongroup-disability. com/question-sets/wg-unicef-child-functioningmodule-cfm. Accessed May 31, 2020.
20. MadansJH, Loeb M. Methods to improve international comparability of census and survey measures of disability. Disabil Rehabil. 2013;35(13): 1070-1073. https://doi.org/10.3109/09638288. 2012.720353
21. Miller K, Willson S, Chepp V, Padilla JL. Cognitive Interviewing Methodology. Hoboken, NJ: Wiley; 2014. https://doi.org/10.1002/9781 118838860
22. Robinson SB, Leonard KF. Designing Quality Survey Questions. Los Angeles, CA: Sage Publications; 2018.
23. Bramlett MD, DahlhamerJM, BoseJ, Blumberg SJ. New procedures for nonresponse adjustments to the 2019 National Health Interview Survey sampling weights. September 2020. Available at: https://ftp.cdc.gov/pub/Health_Statistics/NCHS/ Dataset_Documentation/NHIS/2019/nonresponsereport-508.pdf. Accessed September 29, 2022.
24. Van Buuren S. Flexible Imputation of Missing Data. 2nd ed. New York, NY: Chapman and Hall/CRC; 2018. https://doi.org/10.1201/9780429492259
25. National Center for Health Statistics. Data Briefs from the National Health Interview Survey. Available at: https://www.cdc.gov/nchs/nhis/nhis_db. htm. Accessed May 31,2022.
26. National Center for Health Statistics. Reports from the National Health Interview Survey. Available at: https://www.cdc.gov/nchs/nhis/nhis_nhsr. htm. Accessed May 31,2022.
27. National Center for Health Statistics. Interactive Data Query Systems. Available at: https://www. cdc.gov/nchs/nhis/shs.htm. Accessed May 31, 2022.
28. Lee S, Mathiowetz N, Tourangeau R. Perceptions of disability: the effect of self and proxy response. j Off Stat. 2004;20:671 -686.
29. National Center for Health Statistics. Preliminary evaluation ofthe impact ofthe 2019 National Health Interview Survey questionnaire redesign and weighting adjustments on Early Release Program estimates. September 2020. Available at: https://www.cdc.gov/nchs/data/nhis/earlyrelease/ EReval202009-508.pdf. Accessed May 31, 2022.
30. Golden C, Mirel LB. Enhancement of health surveys with data linkage. In: Chun AY, Larsen MD, Durrant G, Reiter JP, eds. Administrative Records for Survey Methodology. Hoboken, NJ: John Wiley and Sons Inc; 2021:271 -292. https://doi.org/10. 1002/9781119272076.ch11
31. American Association for Public Opinion Research. Standard Definitions: Final Disposition of Case Codes and Outcomes Rates for Surveys. 9th ed. 2016. Available at: https://www-archive.aapor. org/AAPOR_Main/media/publications/StandardDefinitions20169theditionfinal.pdf. Accessed January 12, 2023.
32. Blumberg SJ, Parker JD, Moyer BC. National Health Interview Survey, COVID-19, and online data collection platforms: adaptations, tradeoffs, and new directions. Am j Public Health. 2021; 111(12):2167-2175. https://doi.org/10.2105/ AJPH.2021.306516
33. Galesic M, Bosnjak M. Effects of questionnaire length on participation and indicators of response quality in a

web survey. Public Opin Q. 2009;73(2):349-360. https://doi.org/10.1093/ poq/nfp031
34. De Leeuw ED, van der Zouwen J. Data quality in telephone and face-to-face surveys: a comparative meta-analysis. In: Groves RM, Biemer PP, Lyberg LE, et al, eds. Telephone Survey Methodology. New York, NY: John Wiley and Sons; 1988.
35. Bradburn N. Respondent burden. In: Proceedings of the Survey Research Methods Section of the American Statistical Association. Alexandria, VA: American Statistical Association; 1978.

DETAILS

Subject:	Data processing; Health surveillance; Public health; Surveillance; Data collection; Data analysis; Health surveys; Funding; Questionnaires; Data systems; Families &family life; Military bases; Statistical analysis; Data quality; Interviews; Population (statistical); Sample size; Health care; Population statistics; Response rates; Estimates; Surveys; Documentation; Households; Statistics; Polls &surveys; Responses
Business indexing term:	Industry: 92811 : National Security
Location:	United States--US
Company / organization:	Name: National Center for Health Statistics; NAICS: 923120
Classification:	92811: National Security
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	408-415
Publication year:	2023
Publication date:	Apr 2023
Section:	RESEARCH &ANALYSIS
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal

Language of publication:	English
Document type:	Journal Article
DOI:	https://doi.org/10.2105/AJPH.2022.307197
ProQuest document ID:	2792106238
Document URL:	https://www.proquest.com/scholarly-journals/overview-2019-national-health-interview-survey/docview/2792106238/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Apr 2023
Last updated:	2023-09-14
Database:	Public Health Database

Implications of Dobbs v Jackson Women's Health Organization

Palacio, Herminia, MD, MPH [1] [1] the Guttmacher Institute, New York, NY.

ABSTRACT (ENGLISH)

During its consideration of Dobbs v Jackson Women's Health Organization, the US Supreme Court received several scientifically, medically, and ethically sound amicus briefs in strong opposition to Mississippi's abortion ban. Among those briefs was one that stated clearly and succinctly that "abortion is a safe, common, and essential component of healthcare." This amicus brief was submitted jointly by the nation's leading medical professional membership organizations: the American College of Obstetricians and Gynecologists, the American Medical Association, the American Association of Public Health Physicians, the American Academy of Family Physicians, the American Academy of Nursing, and the American Academy of Pediatrics.1 The abundance of compelling evidence notwithstanding, on June 24, 2022, the Supreme Court issued its ruling in Dobbs, overturning 50years of a federally protected right to abortion services while simultaneously telegraphing, through a concurring opinion written byJustice Clarence Thomas, that "all of this Court's substantive due process precedents" should be up for reconsideration.

FULL TEXT

During its consideration of Dobbs v Jackson Women's Health Organization, the US Supreme Court received several scientifically, medically, and ethically sound amicus briefs in strong opposition to Mississippi's abortion ban. Among those briefs was one that stated clearly and succinctly that "abortion is a safe, common, and essential component of healthcare." This amicus brief was submitted jointly by the nation's leading medical professional membership organizations: the American College of Obstetricians and Gynecologists, the American Medical Association, the

American Association of Public Health Physicians, the American Academy of Family Physicians, the American Academy of Nursing, and the American Academy of Pediatrics.1 The abundance of compelling evidence notwithstanding, on June 24, 2022, the Supreme Court issued its ruling in Dobbs, overturning 50years of a federally protected right to abortion services while simultaneously telegraphing, through a concurring opinion written byJustice Clarence Thomas, that "all of this Court's substantive due process precedents" should be up for reconsideration.

Six months later, what are the realized and potential consequences, especially as they relate to maternal health outcomes? As of January 1,2023, the Guttmacher Institute has categorized 26 states as having restrictive abortion policies.2 Many of the abortion-restrictive states are geographically contiguous, further extending the travel distance required for residents of some states to obtain a legal abortion in another state.2 This also has the potential to create regions in the country where health care providers are unable to learn basic skills in providing abortion care, which can have ripple effects on the workforce and quality of abortion care nationally.

A recent analysis identified differences in maternal and neonatal outcomes by state abortion policy category.3 Compared with the District of Columbia and the 24 states where abortion is more accessible,2,3 states with restrictive policies had fewer maternity health care resources, higher maternal mortality rates, and higher infant and perinatal mortality rates.3 Taken together, these results highlight a troubling reality: the very same states in which legislators have passed sweeping abortion restrictions concurrently have a terrible track record of promoting health and protecting against preventable maternal, neonate, and older infant deaths. And although such adverse consequences continue to be disproportionately experienced by people of color in both abortionrestricted and abortion-accessible states, when the authors applied the Commonwealth Fund health equity health system performance scorecard, they found more equitable outcomes in abortion-accessible states.3

Evidence continues to demonstrate that access to abortion services is an important tool for promoting maternal health. A recent study of women with pregnancy complications before 22 weeks' gestation found that 57% who underwent state-mandated expectant management experienced a serious maternal morbidity, compared with 33% who chose an abortion under similar clinical circumstances in states without such a mandate.4 As this study shows, such policy approaches do not improve maternal health but may actually worsen it. To better protect pregnant individuals and children, states have an urgent need to repeal abortion restrictions. But that is not enough. They must also direct increased resources to improving maternal and child care and to eliminating inequities in access and outcomes.

Although these policies play out on a state-by-state basis, at the federal level, even after the Dobbs decision, Congress has not yet managed to pass either the Women's Health Protection Act5 or the Equal Access to Abortion Coverage in Health Insurance Act.6

I have focused on the potential impact of the Dobbs decision on maternal and neonatal outcomes; however, I must circle back to the ominous concurring opinion of Justice Thomas. The 117th Congress partially took him at his word- and it passed, and President Biden signed, the Respect for Marriage Act, which protects same-sex marriage and interracial marriage.7,8 Nevertheless, the assaults on abortion care via state legislation and regulation continue,9 as do the assaults on gender-affirming care.10

"Public health is what we, as a society, do collectively to assure the conditions in which people can be healthy."11(p1) Protecting the full scope of sexual and reproductive health and rights, and doing so in a manner that accelerates and ensures equity and justice, are imperative components of what we, as a society, must do collectively. ,4JPH

CORRESPONDENCE

Correspondence should be sentto Herminia Palacio, MD, MPH, President, CEO, Guttmacher Institute, 125 Maiden Ln, 7th Floor, New York, NY 10038 (e-mail: hpalacio@guttmacher.org). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Palacio H. Implications of Dobbs v Jackson Women's Health Organization. Am J Public Health. 2023;113(4):388-389.

Acceptance Date: January 22, 2023.
DOI: https://doi.org/10.2105/AJPH.2023.307244
CONFLICTS OF INTEREST
The author has no conflicts of interest to declare.

References

REFERENCES
1. Brief of American College of Obstetricians and Gynecologists, et al. Dobbs v. Jackson Women's Health Organization (2021). Available at: https:// www.supremecourt.gov/DocketPDF/19/19-1392/ 193074/20210920174518042_19-1392%20bsac ACOGetal.pdf. Accessed January 5, 2023.
2. Guttmacher Institute. Interactive map: US abortion policies and access after Roe. January 2023. Available at: https://states.guttmacher.org/policies. Accessed January 7, 2023.
3. Declercq E, Barnard-Mayers R, Zephyrin L, Johnson K. The US maternal health divide: the limited maternal health services and worse outcomes of states proposing new abortion restrictions. December 14, 2022. Available at: https://www. commonwealthfund.org/publications/issue-briefs/ 2022/dec/us-maternal-health-divide-limitedservices-worse-outcomes. Accessed January 7, 2023.
4. Nambiar A, Patel S, Santiago-Munoz P, Spong CY, Nelson DB. Maternal morbidity and fetal outcomes among pregnant women at 22 weeks' gestation or less with complications in 2 Texas hospitals after legislation on abortion. Am J Obstet Gynecol. 2022;227(4):648-650.e1. https://doi.org/ 10.1016/j.ajog.2022.06.060
5. Congress.gov. HR 3755-Women's Health Protection Act of 2021. 117th Congress (2021-2022). Available at: https://www.congress.gov/bill/117thcongress/house-bill/3755/text. Accessed January 7, 2023.
6. Congress.gov. HR 1692-Equal Access to Abortion Coverage in Health Insurance (EACH Woman) Act of 2019. 116th Congress (2019-2020). Available at: https://www.congress.gov/bill/116th-congress/ house-bill/1692. Accessed January 7, 2023.
7. American Presidency Project. President Biden signs the Respect for Marriage Act. December 14, 2022. Available at: https://www.presidency. ucsb.edu/documents/what-they-are-sayingpresident-biden-signs-the-respect-for-marriageact. Accessed January7, 2023.
8. Congress.gov. HR 8404-Respect for Marriage Act. 117th Congress (2021-2022). Available at: https://www.congress.gov/bill/117th-congress/ house-bill/8404/text. Accessed January 7, 2023.
9. Nash E, Ephross P. In a devastating year, US Supreme Court's decision to overturn Roe leads to bans, confusion and chaos. December 19, 2022. Available at: https://www.guttmacher.org/2022/ 12/state-policy-trends-2022-devastating-year-ussupreme-courts-decision-overturn-roe-leads. Accessed January 7, 2023.
10. Migdon B. Here are the states planning to restrict gender-affirming care next year. December 29, 2022. Available at: https://thehill.com/changingamerica/respect/diversity-inclusion/3789757-hereare-the-states-planning-to-restrict-gender-affirmingcare-next-year. Accessed January 7, 2023.
11. Institute of Medicine. The Future of Public Health. Washington, DC: National Academies Press; 1988.

DETAILS

Subject:	Mortality; Maternal &child health; Public health; Womens health; Same sex marriage; Gender-affirming care; Gynecology; Abortion; Health insurance; Supreme courts; Health services; Court decisions; Pediatrics; Physicians; Nursing; Medical personnel; Nurses
Business indexing term:	Subject: Health insurance
Location:	United States--US

People:	Biden, Joseph R Jr
Company / organization:	Name: Supreme Court-US; NAICS: 922110; Name: Congress; NAICS: 921120
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	388-389
Publication year:	2023
Publication date:	Apr 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Commentary
ProQuest document ID:	2792106068
Document URL:	https://www.proquest.com/scholarly-journals/implications-dobbs-v-jackson-womens-health/docview/2792106068/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Apr 2023
Last updated:	2023-09-11
Database:	Public Health Database

Document 11 of 48

Credits

Anonymous

ProQuest document link

FULL TEXT

TVM:UNDEFINED

DETAILS

Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	346
Publication year:	2023
Publication date:	Apr 2023
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Credits
ProQuest document ID:	2792106064
Document URL:	https://www.proquest.com/scholarly-journals/credits/docview/2792106064/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Apr 2023
Last updated:	2023-03-29
Database:	Public Health Database

Bringing an Equity Lens to Address the Evolving Overdose Crisis: A Public Health of Consequence, April 2023

Kapadia, Farzana, PhD, MPH [1] [1] School of Global Public Health, New York University, New York

ABSTRACT (ENGLISH)

Beginning with the expansion of prescription opioid use in the mid1990s, the opioid crisis has unfolded in overlapping waves and the United States is now entering its fourth wave of the opioid epidemic (https://bit.ly/3XDsIIj). With the evolution of the epidemic, we have witnessed changes in the types of substances driving overdoses and overdose-related deaths, from prescription opioids to heroin and then to synthetic opioids such as fentanyl, to heroin, and now polysubstance use involving both opioids and psychostimulants such as methamphetamines. In this issue of the Journal, we present information on trends in methamphetamine-related deaths as well as efforts to reduce overdose-related deaths. These findings highlight the need for ongoing and timely tracking of trends in overdose to ensure an equitable approach to preventing overdose deaths.

FULL TEXT

Beginning with the expansion of prescription opioid use in the mid1990s, the opioid crisis has unfolded in overlapping waves and the United States is now entering its fourth wave of the opioid epidemic (https://bit.ly/3XDsIIj). With the evolution of the epidemic, we have witnessed changes in the types of substances driving overdoses and overdose-related deaths, from prescription opioids to heroin and then to synthetic opioids such as fentanyl, to heroin, and now polysubstance use involving both opioids and psychostimulants such as methamphetamines. In this issue of the Journal, we present information on trends in methamphetamine-related deaths as well as efforts to reduce overdose-related deaths. These findings highlight the need for ongoing and timely tracking of trends in overdose to ensure an equitable approach to preventing overdose deaths.

METHAMPHETAMINERELATED

DEATHS

Hoopsick and Yockey (p. 416) provide further evidence on the significant escalation of methamphetaminerelated mortality in the United States between 1999 and 2021. In addition to the alarming 58-fold overall increase in methamphetamine-related mortality- from 545 to 32 353 methamphetaminerelated deaths between 1999 and 2021 - the involvement of heroin with or without fentanyl in these deaths increased by 17.3% annually from 2010 to 2021. These dramatic increases in methamphetamine-related deaths and polysubstance use deaths parallel trends in nonprescription opioid-, synthetic opioid-, and cocaine-related overdose deaths.1

DISPARITIES IN OVERDOSE DEATHS

These findings by Hoopsick and Yockey emphasize, once again, the significant burden of overdose deaths in the United States. However, these overall estimates mask disparities in deaths by racial/ethnic background and socioeconomic status indicators, which cannot be ignored. Earlier waves of the opioid epidemic saw increased overdose deaths among younger, White men and women in rural areas. As this crisis continues to evolve, drug use patterns shift; non-Hispanic, Native American Indian and Alaskan Native, and nonHispanic Black persons now experience higher rates of drug overdose deaths than in prior waves of the opioid epidemic. And although to a lesser degree, overdose deaths have also increased among Hispanic people and Asian/ Pacific Islanders in recent waves

of the opioid epidemic.

Sociodemographic disparities in overdose and overdose deaths, and the way these disparities have shifted over time, can be traced back to a history of interrelated structural disadvantages that are the fundamental drivers of overdose mortality. These drivers include lower educational attainment, lower income status due to low wages and weak employment opportunities, no or inadequate health insurance coverage, disability status, increasing mental health burdens coupled with inadequate mental health care providers and access to care, and criminal justice involvement.2 And these factors converged in economically depressed areas across the United States-the Midwest, Appalachia, and the Northeast-creating microepidemics of overdose deaths in states and regions often with already weakened physical and mental health care infrastructure.

The population health impacts of overdose deaths are reverberating across multiple generations. The sharp increase in overdose mortality starting in the 2000s, particularly among adults 25 to 44years old, has produced a decline in overall life expectancy in the United States since 2014. Deaths due to unintentional injuries, which include overdose-related deaths, have dramatically increased among non-Hispanic White, non-Hispanic Black, and Hispanic people since 2013.3 In many cases, grandparents or other available family members are caring for the children of adults who are either unable to care for them or have died from overdose, creating unique economic, social, and health challenges for these caretakers (https:// bit.ly/3HfH5Ny) as well as for the children they are raising. Finally, between 2010 and 2017, there has been an 82% increase in infants born with neonatal abstinence syndrome (https://www.cdc. gov/pregnancy/opioids/data.html).

OVERDOSE PREVENTION POLICY

Griffith et al. (p. 372) present findings from an analysis examining the impact of Rhode Island's 2017 statewide mandate that providers prescribe or provide take-home naloxone to anyone presenting to emergency departments (EDs) with opioid overdose. This state mandate, in response to the high rates of overdose mortality in Rhode Island, recognized the need for state-level guidelines to inform delivery of overdose prevention services, to benefit not only patients but also health care organizations and health care systems with uniform guidance and policy on distributing naloxone. Their findings indicate that between 2018 and 2019, 82% of patients presenting to EDs for an overdose were offered naloxone, and that about half of this group accepted a prescription or take-home kit. Receipt of naloxone was associated with a prior ED visit.

From an equity perspective, implementing an "upstream" statewide policy intervention and eliminating naloxone distribution based on provider discretion can achieve greater equity in overdose prevention than "downstream" interventions that focus on individuallevel changes. And although the study results indicate no major differences in naloxone uptake across demographic groups, an ED intervention by its nature means that it is only available for those patients who are able to access an ED. Rather than considering this an inadequate policy intervention, it may be viewed as one of many necessary policy interventions that seek to undo the harms wrought by legacies of institutional advantages and disadvantages that affect population-level health.

Moreover, changes in drug supply and drug demand have shaped, and will continue to shape, the evolution of overdose and overdose deaths in the United States, and require harm reduction approaches to adapt quickly and appropriately. Most recently, a New York Times article (https://nyti.ms/3wbpobN) reported that increased use of xylazine, a sedative used by veterinarians, along with fentanyl is increasing health risks to persons who use drugs, and is challenging current harm reduction efforts.

A HEALTH EQUITY RESPONSE TO THE OVERDOSE CRISIS

As the overdose crisis in the United States continues to evolve, with new and more potent substances introduced into the US drug supply, we need to double down on our commitment to providing a comprehensive and health equity-motivated public health approach to address this crisis.4 The first step begins with redoubling our efforts to reduce the stigma and discrimination experienced by persons who use drugs to prevent exacerbating inequalities. Next, decriminalizing possession of drugs and criminal justice reform are two necessary policy actions that can reduce racial and ethnic disparities in the overdose crisis. Finally, expansion of prevention and treatment efforts that are community based and that respect and rely on the knowledge of persons who use drugs will have greater impact

on reducing health inequalities and drug overdose. ÂfPU

CORRESPONDENCE

Correspondence should be sentto Farzana Kapadia, PhD, MPH, New York University, School of Global Public Health, 708 Broadway, Room 729, New York, NY 10003 (e-mail: farzana. kapadia@nyu.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Kapadia F. Bringing an equity lens to address the evolving overdose crisis: a public health of consequence, April 2023. Am J Public Health. 2023;113(4):359-360.

Acceptance Date: January 21, 2023.

DOI: https://doi.org/10.2105/AJPH.2023.307240

CONFLICTS OF INTEREST

The author has no conflicts of interest to disclose.

References

REFERENCES

1. Spencer MR, Miniño AM, Warner M. Drug Overdose Deaths in the United States, 2001-2021. Hyattsville, MD: National Center for Health Statistics; 2022. NCHS Data Brief no. 457. https://doi.org/10. 15620/cdc:122556

2. Dasgupta N, Beletsky L, Ciccarone D. Opioid crisis: no easy fix to its social and economic determinants. Am J Public Health. 2018;108(2):182-186. https://doi.org/10.2105/AJPH.2017.304187

3. Curtin SC, Xu JQ. Death Rates for Leading Causes of Death for People Aged 25-44 Among the Three Largest Race and Ethnicity Groups: United States, 20002020. Hyattsville, MD: National Center for Health Statistics; 2022. NCHS Data Brief no. 451. https:// doi.org/10.15620/cdc:121796

4. Hansen H, Netherland J. Is the prescription opioid epidemic a white problem? Am J Public Health. 2016; 106(12):2127-2129. https://doi.org/10.2105/AJPH. 2016.303483

DETAILS

Subject:	Health care access; Trends; Health care policy; Mortality; Mental health care; Intervention; Health disparities; Prescription drugs; Global health; Fentanyl; Narcotics; Drug overdose; Heroin; Prevention; Public health; Hispanic people; Methamphetamine; Harm reduction; Epidemics; Amphetamines; Opioids; Overdose; Crises; Fatalities
Location:	New York; United States--US; Rhode Island
Company / organization:	Name: National Center for Health Statistics; NAICS: 923120
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	359-360
Publication year:	2023
Publication date:	Apr 2023

Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
ProQuest document ID:	2792105965
Document URL:	https://www.proquest.com/scholarly-journals/bringing-equity-lens-address-evolving-overdose/docview/2792105965/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Apr 2023
Last updated:	2023-07-11
Database:	Public Health Database

Minors' Rights to Access Sexual and Reproductive Health Care

Hill, B Jessie, JD [1] [1] School of Law, Case Western Reserve University, Cleveland, OH

ABSTRACT (ENGLISH)

Young people face significant unaddressed health care needs in the United States. For example, as Nelson et al. explain in this issue of AJPH, adolescents-especially those who are already marginalized because of their racial, ethnic, sexual, or gender identity-are significantly affected by sexually transmitted infections (STIs) such as HIV(https://bit.ly/3jKUzYL). Yet, the law governing minors' access to sensitive health care services is a morass.1 A sensible policy response, recognizing the basic human and constitutional right of mature minors to access health care without parental involvement, is urgently needed.

FULL TEXT

Young people face significant unaddressed health care needs in the United States. For example, as Nelson et al. explain in this issue of AJPH, adolescents-especially those who are already marginalized because of their racial, ethnic, sexual, or gender identity-are significantly affected by sexually transmitted infections (STIs) such as HIV(https://bit.ly/3jKUzYL). Yet, the law governing minors' access to sensitive health care services is a morass.1 A sensible policy response, recognizing the basic human and constitutional right of mature minors to access health care without parental involvement, is urgently needed.

THE PATCHWORK OF MINOR CONSENT LAWS

Although individuals younger than the age of majority are generally deemed legally incapable of consenting to health care on their own, states have made numerous exceptions to this broad (and perhaps overstated) rule. Nelson et al. point out that all 50 states and the District of Columbia allow minors to seek testing and treatment of STIs without parental consent (https://bit.ly/3jKUzYL). In addition, many states allow minors to consent on their own to substance abuse treatment, mental health services (on an outpatient basis), examination and treatment for sexual assault, prenatal care, and contraceptive services.1

Numerous states permit minors deemed "mature" to consent to care as if they were adults. This includes "emancipated" minors who are living on their own and supporting themselves, as well as those mature minors who are found to have sufficient capacity to "appreciate] the nature, extent, and consequences" of the treatment and to "weigh the risks and benefits,"2 as determined on a case-by-case basis (though some states have also established a minimum age for a minor to qualify as such). These pathways have their limitations, however; not all states recognize the so-called mature-minor doctrine, and even in those that do, a clinician may not feel comfortable providing care to a young person if that decision may later be second-guessed by an unhappy and litigious guardian.3

Moreover, even minors who are considered mature or emancipated are not always considered to have the same capacity as adults to make health care decisions. For example, in 1989, the Illinois Supreme Court found that a 17-year-old suffering from terminal leukemia was mature enough to refuse blood transfusions for religious reasons.4 However, the court also held that, despite her maturity, the minor's decision would have to be weighed against the state's interests, such as in preserving life and maintaining the ethical integrity of the medical profession.

MINORS' HUMAN RIGHT TO REPRODUCTIVE AND SEXUAL HEALTH CARE

Access to health care, including sexual and reproductive health care, is a human right.5 It should not be subject to a confusing patchwork of rules that obstructs some of the most vulnerable among us from achieving good health. Indeed, World Health Organization guidelines urge expanded access for adolescents to sexual and reproductive health care, in recognition of its importance "for the human rights, health and well-being of adolescents."6(p1) Similarly, through the federal Title X program, which provides free or lowcost sexual and reproductive health care to adolescents as well as adults, the US government has recognized "that without access to confidential care, many adolescents would not seek needed health services."7(p48) However, Title X's confidentiality requirements apply only to clinics that receive Title X grants, and Nelson et al. point out that those clinics are not where the majority of adolescents access care (https://bit. ly/3jKUzYL). Minors should have the right to access all medically appropriate reproductive and sexual health care services-including treatment and testing for STIs and HIV, examination for and treatment of sexual assault, gender-affirming health care, prenatal care, contraceptive services, and abortion care-across the board without parental consent or notification, regardless of whether they access that care at a federally funded Title X site.

One possibility would be to adopt universally the approach that Title X currently takes, requiring parental participation when feasible but disclaiming any legal requirement of notice or consent. That rule states that family involvement should be encouraged "[t]o the extent practical," but also that "Title X projects may not require consent of parents or guardians for the provision of services to minors, nor... notify a parent or guardian before or after a minor has requested and/or received" family planning services.8

Another possibility would be a mature minor rule that applies nationwide. In the 1979 case Bellotti v. Baird, the US Supreme Court held that minors who are mature and well-informed must have a right to access abortion without parental consent.9 The same is true for minors for whom the abortion would be in their best interests. Although the right identified in Bellotti has not been explicitly extended to other medical services, as Bellotti relied partly on the Court's recognition of a constitutional right to reproductive privacy, it is unclear why minors who are sufficiently mature, or for whom immediate treatment would be in their best interests, should not possess the same ability. While pregnant minors are in a somewhat unique situation in that they are facing a time-sensitive decision with potentially profound long-term effects on that young person's future, minors suffering from STIs, for example, are similarly positioned in terms of the gravity of their situations and the need for immediate treatment.

ATTACKS ON REPRODUCTIVE AND SEXUAL HEALTH CARE

As Nelson et al. demonstrate, the trend toward empowering minors to access health care without parental involvement steadily strengthened throughout the twentieth century, but it has recently plateaued (Figure 1 in Nelson et al., https://bit.ly/3jKUzYL). Unfortunately, the prospects for breaking through the plateau are grim. With the overruling of Roe v. Wade and the rise of controversies over minors' access to genderaffirming care, even with parental consent, minors' access to sensitive health care is increasingly threatened. The US Supreme Court'sJune 2022 ruling in Dobbs v.Jackson Women's Health Organization threw into question the basis for minors' constitutional rights to access abortion and contraception without parental consent, opening up the possibility of further attacks on minors' access to health care.10 And several states, including Alabama, Arkansas, Florida, Tennessee, and Texas, have sought to take action against minors' access to trans health care, even when parents are involved in the care.11

Moreover, Title X has been under attack, as some groups have sought not only to push parental participation but also to hamstring Title X providers and prevent them from offering nondirective, comprehensive counseling. A rule that was briefly in effect during the Trump administration encouraged family participation in minors' care without emphasizing the need for confidentiality and included other requirements that, together, resulted in approximately one fifth of the clinics previously in the program leaving the program and, thus, a severe reduction in the program's capacity to serve all populations.12

The continuing harm to the health and human rights of young people in the United States is unjustifiable, especially given that policymakers have recognized the need for confidential access without parental involvement in some states and for some types of services. It is well past time to extend that right to all minors seeking confidential reproductive and sexual health services. ÂfPU

CORRESPONDENCE

Correspondence should be sent to B. Jessie Hill, Case Western Reserve University School of Law, 11075 East Boulevard, Cleveland, OH 44106 (e-mail: bjh11@case.edu). Reprints can be ordered at https://ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Hill BJ. Minors' rights to access sexual and reproductive health care. Am J Public Health. 2023;113(4):350-352.

Acceptance Date: January 14, 2023.

DOI: https://doi.org/10.2105/AJPH.2023.307235

CONFLICTS OF INTEREST

The author has no conflicts of interest.

References

REFERENCES

1. Hill BJ. Medical decision making by and on behalf of adolescents: reconsidering first principles. J Health Care Law Policy. 2012;15(1):37-73.

2. Cardwell v. Bechtol, 724 SW2d 739 (Tenn 1987).

3. Benston S. Not of minor consequence?: Medical decision-making autonomy and the Mature Minor Doctrine.

Indiana Health Law Rev. 2016;13(1):1 -16. https://doi.org/10.1 8060/3911.0011
4. In re E.G., 549 NE2d 322 (Ill 1989).
5. Gable L. Reproductive health as a human right. Case West Reserve Law Rev. 2010;60(4):957-996. https://doi.org/10.2139/SSRN.1865841
6. World Health Organization. WHO Recommendations on Adolescent Sexual and Reproductive Health and Rights. 2018. Available at: https:// www.who.int/publications/i/item/9789241 514606. Accessed January 28, 2023.
7. Hasstedt K. Ensuring adolescents' ability to obtain confidential family planning services in Title X. Guttmacher Policy Rev. 2018;21:48-54.
8. 45 CFR 59.10(b).
9. Bellotti v. Baird, 443 US 622 (1979).
10. Dobbs v. Jackson Women's Health Org, 142 S Ct 2228 (2022).
11. Fiore K. It's been a tough year for transgender medicine-hospitals have been threatened, scientific debate has been weaponized. MedPage Today. December 28, 2022. Available at: https:// www.medpagetoday.com/special-reports/ features/102408. Accessed January 28, 2023.
12. Dawson R. Trump administration's domestic gag rule has slashed the Title X network's capacity by half. Guttmacher Institute. February 2020. Available at: https://www.guttmacher.org/article/2020/ 02/trump-administrations-domestic-gag-rule-hasslashed-title-x-networks-capacity-half. Accessed January 28, 2023.

DETAILS

Subject:	Health care access; Contraception; Health care; Drug abuse; Minors; Teenagers; Abortion; Womens health; Sex crimes; Reproductive health; Human immunodeficiency virus--HIV; Sexually transmitted diseases--STD; Sexual assault; Adolescents; Gender identity; Ethnic identity; Health services; Marginality; Young adults; Constitutional rights; Sexual behavior; Reproductive systems; Access; Sexuality; Gender aspects; Youth; Parent participation; Public health
Location:	United States--US
Company / organization:	Name: World Health Organization; NAICS: 923120; Name: Supreme Court-US; NAICS: 922110
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	350-352
Publication year:	2023
Publication date:	Apr 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Ass ociation

Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Commentary
ProQuest document ID:	2792105884
Document URL:	https://www.proquest.com/scholarly-journals/minors-rights-access-sexual-reproductive-health/docview/2792105884/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Apr 2023
Last updated:	2023-08-31
Database:	Public Health Database

Impact of School Shootings on Adolescent School Safety, 2009–2019

Hodges, James C, MSW, LCSW; Walker, Danielle T, MSN, PMHNP-BC; Baum, Christopher F, PhD; Hawkins, Summer Sherburne, PhD, MS

ABSTRACT (ENGLISH)

Objectives. To examine the impact of school shootings on indicators of adolescent school safety in the United States. Methods. We linked 2009-2019 Youth Risk Behavior Survey data on 211 236 adolescents aged 14 to 18 years from 24 school districts with data on high school shootings from the Center for Homeland Defense and Security. We conducted 2-way fixed-effects logistic regression models to assess the impact of shootings on self-report of 3 indicators of school safety: avoiding school because of feeling unsafe, carrying a weapon at school, and being threatened or injured with a weapon at school. Results. High school shootings were associated with adolescents having 20% greater odds of avoiding school because of feeling unsafe (adjusted odd ratio [AOR] = 1.20; 95% confidence interval [CI] 5 1.11,1.29) than those who had not. Findings were slightly attenuated in sensitivity analyses that tested exposure to shootings at any school in the district or state. High school shootings were associated with a statistically nonsignificant (P = .08) elevated risk of carrying a weapon at school (AOR = 1.11; 95% CI = 0.99,1.25). Conclusions. The negative ramifications of school shootings extend far beyond the event

itself to adolescents' concerns about school safety.

FULL TEXT

Headnote

Objectives. To examine the impact of school shootings on indicators of adolescent school safety in the United States.

Methods. We linked 2009-2019 Youth Risk Behavior Survey data on 211 236 adolescents aged 14 to 18 years from 24 school districts with data on high school shootings from the Center for Homeland Defense and Security. We conducted 2-way fixed-effects logistic regression models to assess the impact of shootings on self-report of 3 indicators of school safety: avoiding school because of feeling unsafe, carrying a weapon at school, and being threatened or injured with a weapon at school.

Results. High school shootings were associated with adolescents having 20% greater odds of avoiding school because of feeling unsafe (adjusted odd ratio [AOR] = 1.20; 95% confidence interval [CI] 5 1.11,1.29) than those who had not. Findings were slightly attenuated in sensitivity analyses that tested exposure to shootings at any school in the district or state. High school shootings were associated with a statistically nonsignificant (P = .08) elevated risk of carrying a weapon at school (AOR = 1.11; 95% CI = 0.99,1.25).

Conclusions. The negative ramifications of school shootings extend far beyond the event itself to adolescents' concerns about school safety. (Am J Public Health. 2023;113(4):438-441. https://doi.org/10.2105/AJPH.2022.307206)

In 2020, firearm-related deaths were the leading cause of mortality for children and adolescents, with more than 3500 youths dying by gun violence.1,2 School shootings have also increased, peaking in 2018 and 2019, with 75 shootings occurring annually.3 Over recent years, almost one third of states have weakened their gun laws,4 which has implications for adolescent health.

Ghiani et al. found that states that adopted stricter gun laws decreased the likelihood of adolescents avoiding school because of safety concerns or of carrying or being threatened by weapons at school.5 However, whether exposure to school shootings is associated with these behaviors remains unknown. Using representative samples across 24 school districts, we examined the impact of school shootings on 3 indicators of adolescent school safety: avoiding school because of feeling unsafe, carrying a weapon at school, and being threatened by a weapon at school.

METHODS

We used repeated cross-sectional data from the 2009-2019 Youth Risk Behavior Survey (YRBS) biennial school district surveys, which collect self-reported health-related behaviors on 9th through 12th graders in public and private schools.6 Among the 31 districts that participated across study years with at least 2 years of data collection, we excluded 7 because the Centers for Disease Control and Prevention did not have permission to release the data. Our analytic sample included 211 236 adolescents aged 14 to 18 years from 24 districts that collected information on 3 outcomes: (1) number of days not attending school because of feeling unsafe at school or on the way to or from school during the past month,

(2) number of days carrying a weapon on school property during the past month, and (3) number of times threatened or injured with a weapon on school property during the past year. Each outcome was dichotomized (0 vs >1), and analytic samples were based on available responses for each outcome measure.

We obtained school shootings data from the Center for Homeland Defense and Security from April 2007 to March 2019, which we defined as shootings resulting in an injury or death that occurred at any high school in the district.7 We linked the shootings to each adolescent based on whether the event occurred between April 1 of the previous survey year to March 31 of the current survey year, as the YRBS is administered biennially in the spring.6 We dichotomized school shootings (0 vs >1) for each survey period.

We first examined the associations between demographic characteristics (age, gender, race/ethnicity) and each outcome using adjusted logistic regression models with year and district fixed effects. Next, we conducted 2-way fixedeffects logistic regression models to assess the impact of school shootings on each indicator of school safety,

controlling for demographics with year and district fixed effects. We tested interactions between school shootings and age, gender, and race/ethnicity using the Wald test. Only 1 interaction was jointly significant (P<.05), but none ofthe stratum-specific estimates were significant (results not shown).

We conducted 2 sensitivity analyses: (1) shootings that occurred at any elementary, middle, or high school in the district; (2) shootings that occurred at any school in the state. We also conducted 2 robustness checks with the main model (results not shown). We first included county-level indicators of percentage Black, percentage Hispanic, and ratio of 90th to 10th percentile of income,8 but none ofthe factors had any effect. Second, we included an indicator of any school shooting in the prior 2 to 4 years (i.e., in the prior wave), but it did not alter the effect size or the significance of exposure to recent shootings.

We conducted analyses using Stata statistical software version 17.0 (StataCorp LP, College Station, TX), with robust standard errors and survey weights to account for the cluster sampling design.6

RESULTS

Over the study period, 17 of 24 school districts experienced at least 1 shooting, with a total of 56 shootings across districts (Table A, available as a supplementto the online version ofthis article at http://www.ajph.org). Overall, 9.2% of adolescents reported avoiding school because of feeling unsafe, 3.5% reported carrying a weapon at school, and 7.3% reported being threatened with a weapon at school. Age was positively associated with each outcome, and males were less likely to avoid school because of feeling unsafe than females but more likely to have weapon exposure (Table B, available as a supplement to the online version ofthis article at http://www.ajph.org). Black and Hispanic adolescents were more likely to report all outcomes than White adolescents.

We found that being exposed to high school shootings was associated with adolescents having 20% greater odds of avoiding school because of feeling unsafe (adjusted odds ratio [AOR] = 1.20; 95% confidence interval [CI] = 1.11,1.29) than those who had not (Table 1). Findings were consistent, but slightly attenuated, in sensitivity analyses that tested exposure to shootings at any school in the district or state.

We found some evidence that high school shootings were associated with an elevated risk of carrying a weapon at school (AOR 5 1.11; 95% CI = 0.99, 1.25), but at a P level of .08 (Table 1). There were no effects of shootings on being threatened with a weapon at school. The alternative specifications were not significant for either outcome.

DISCUSSION

Adolescents exposed to school shootings in their district or state were more likely to avoid at least 1 day of school during the past month because of feeling unsafe compared with adolescents who were not. We found some evidence, albeit marginally significant, that adolescents were more likely to carry weapons at school in response to shootings. Although school safety outcomes varied by age, gender, and race/ethnicity, the effects of shootings did not vary across these characteristics. These results extend previous work5 by demonstrating that simply being exposed to school shootings increases adolescents' school avoidance because of feeling unsafe and, possibly, increases weapon carrying at school.

Using large, representative samples of adolescents linked with government data, our work highlights that the negative ramifications of school shootings extend far beyond the event itself.9 These effects are evident for exposure to shootings that occur not only in high schools within the district that adolescents attend school, but in any type of school in their district or state. Because of ever-expanding news coverage and social media, exposure to such events beyond school districts will likely increase.

Despite these strengths, limitations remain. Outcomes were self-reported and subject to reporting bias. Because our analysis included only 24 school districts, the findings may not be generalizable to all high school students. Although the YRBS collects limited demographic information, we found that county-level indicators of race/ethnicity and income were not associated with any outcomes other than individual-level factors. The YRBS also does not release school identifiers, so it was not possible to isolate the effects of attending the actual school where a shooting occurred, or whether adolescents moved into the district after the shooting took place. We could not control for community-based violence, which may affect school safety. Because the YRBS is cross-sectional, we were also not able to follow adolescents over time. The YRBS was administered in school, and students who avoided school

because of feeling unsafe may be underrepresented in the data set if they were absent on the day of the survey. This suggests that our findings may underestimate the true association between experiencing a shooting firsthand and adolescent concerns about school safety.

PUBLIC HEALTH IMPLICATIONS

School shootings are disturbingly common, occurring in more than 70% of the included districts. Our results highlight that, with firearm violence on the rise,1 health care providers need to screen for the educational and psychosocial sequelae ofthese events. Furthermore, screening should occur for adolescents who attend neighboring schools or adjacent districts with a shooting, in addition to those in the immediate vicinity, as the adverse effects appear to extend well beyond the schools where the shooting occurs. For these districts, a universal, traumainformed approach to providing psychosocial support to adolescents appears warranted. Our findings also underscore the need for continued advocacy to implement policies that reduce school shootings and gun-related violence, as they have previously been found to reduce adverse outcomes.5 Minimizing the number of adolescents affected by these horrific events remains a public health imperative. _4jpn

ABOUT THE AUTHORS

James C. Hodges and Summer Sherburne Hawkins are with the School of SocialWork, Danielle T. Walker is with the William F. ConnellSchool of Nursing, and Christopher F. Baum is with the Department of Economics and School of Social Work, Boston College, Chestnut Hill, MA. Christopher F. Baum is also with the Department of Macroeconomics, German Institute for Economic Research (DIW Berlin), Berlin, Germany.

CORRESPONDENCE

Correspondence should be sent to Summer Sherburne Hawkins, PhD, MS, Boston College, Schoolof SocialWork, McGuinn Hall, 140 Commonwealth Ave, Chestnut Hill, MA 02467 (e-mail: summer.hawkins@bc.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

FullCitation: HodgesJC, Walker DT, Baum CF, Hawkins SS. Impact of schoolshootings on adolescent schoolsafety, 2009-2019. AmJ Public Health. 2023;113(4):438-441.

Acceptance Date: December 10, 2022

DOI: https://doi.org/10.2105/AJPH.2022.307206

CONTRIBUTORS

J.C. Hodges and D.T. Walker are joint first authors and contributed equally to this article. S. S. Hawkins conceptualized and designed the study. J. C. Hodges and C. F. Baum procured the data and carried out the analyses.J.C. Hodges and D.T. Walker contributed to the initial draft ofthe article. All the authors reviewed and edited the article.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

HUMAN PARTICIPANT PROTECTION

The Boston College institutionalreview board reviewed this study and considered it exempt.

References

REFERENCES

1. Goldstick JE, Cunningham RM, Carter PM. Current causes of death in children and adolescents in the United States. N Engl J Med. 2022;386(20):1955-1956. https://doi.org/10.1056/NEJMc2201761

2. Everytown Research &Policy. The impact of gun violence on children and teens. Updated December 28, 2021. Available at: https://everytownresearch. org/report/the-impact-of-gun-violence-on-childrenand-teens. Accessed June 17, 2022.

3. National Center for Education Statistics. Violent deaths at school and away from school and school shootings. US Dept of Education, Institute of Education Sciences. Updated May 2022. Available at: https://nces.ed.gov/programs/coe/ indicator/a01. Accessed June 17, 2022.

4. State Firearm Laws Project. State firearm law database. Available at: http://statefirearmlaws.org. Accessed June

27, 2022.
5. Ghiani M, Hawkins SS, Baum CF. Gun laws and school safety. J Epidemiol Community Health. 2019; 73(6):509-515. https://doi.org/10.1136/jech-2018211246
6. Underwood JM, Brener N, Thornton J, et al. Overview and methods for the Youth Risk Behavior Surveillance System-United States, 2019. MMWR Suppl. 2020;69(1):1-10. https://doi.org/10.15585/ mmwr.su6901a1
7. Center for Homeland Defense and Security. K-12 school shooting database. Available at: https://www.chds.us/ssdb. Accessed June 24, 2022.
8. US Census Bureau. American Community Survey Data. Updated November 23, 2021. Available at: https://www.census.gov/programs-surveys/acs/ data.html. Accessed June 6, 2022.
9. Lowe SR, Galea S. The mental health consequences of mass shootings. Trauma Violence Abuse. 2017;18(1):62-82. https://doi.org/10.1177/1524838015591572.

DETAILS

Subject:	Behavior; Weapons; School districts; Adolescents; Regression analysis; Gun violence; Safety; Demographics; Regression models; Gender; Indicators; Violence; National security; Ethnicity; Confidence intervals; Firearm laws &regulations; Statistical analysis; Risk taking; School safety; Risk behavior; School violence; Sensitivity analysis; Public health; Secondary schools; Firearms; Teenagers
Business indexing term:	Industry: 61111 : Elementary and Secondary Schools
Classification:	61111: Elementary and Secondary Schools
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	438-441
Publication year:	2023
Publication date:	Apr 2023
Section:	RESEARCH &ANALYSIS
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal

Language of publication:	English
Document type:	Journal Article
DOI:	https://doi.org/10.2105/AJPH.2022.307206
ProQuest document ID:	2792105684
Document URL:	https://www.proquest.com/scholarly-journals/impact-school-shootings-on-adolescent-safety-2009/docview/2792105684/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Apr 2023
Last updated:	2023-07-13
Database:	Public Health Database

Improving Unequal Food Access Requires Understanding and Addressing the Social Inequalities That Contribute to It

Bowen, Sarah, PhD [1] ; Hardison-Moody, Annie, PhD [2] [1] Department of Sociology and Anthropology, North Carolina State University, Raleigh [2] Department of Agricultural and Human Sciences, North Carolina State University

ProQuest document link

ABSTRACT (ENGLISH)

The food landscape in rural communities Is shifting. Dollar stores have moved in as grocery stores have closed. However, we still know little about whether and how this has altered people's food-shopping behaviors. In last month's issue of AJPH, Feng et al.1 used a national data set of food expenditures to chart changes in food spending at different types of retail outlets between 2008 and 2020. They found that, over this period, dollar stores grew faster than any other type of food retailer in terms of share of food spending and that rural households' share outpaced that of other households.

The research by Feng et al. offers clear evidence of the need to consider dollar stores in conversations about improving food access, especially in rural areas. They also call for additional research on the implications for public health. We concur. Furthermore, we argue that improving unequal food access requires understanding and addressing the structural inequalities that contribute to it. We offer the following key considerations to ground this work.

First, it is important to recognize that rural areas are not a monolith. Rurality shapes food access in important ways, but food access also varies widely in rural areas. As Feng et al. show, rural Black households spend, by far, the largest share (11.6%) of their food budget at dollar stores, and the share of food spending at dollar stores is higher for rural households in the South. Similarly, many of the counties with the highest rates of food insecurity are rural Southern counties with large shares of people of color.2 Structural racism, in the form of decades of disinvestment

and discrimination, has shaped economic development and access to both social services and food in these communities.

FULL TEXT

The food landscape in rural communities Is shifting. Dollar stores have moved in as grocery stores have closed. However, we still know little about whether and how this has altered people's food-shopping behaviors. In last month's issue of AJPH, Feng et al.1 used a national data set of food expenditures to chart changes in food spending at different types of retail outlets between 2008 and 2020. They found that, over this period, dollar stores grew faster than any other type of food retailer in terms of share of food spending and that rural households' share outpaced that of other households.

The research by Feng et al. offers clear evidence of the need to consider dollar stores in conversations about improving food access, especially in rural areas. They also call for additional research on the implications for public health. We concur. Furthermore, we argue that improving unequal food access requires understanding and addressing the structural inequalities that contribute to it. We offer the following key considerations to ground this work.

First, it is important to recognize that rural areas are not a monolith. Rurality shapes food access in important ways, but food access also varies widely in rural areas. As Feng et al. show, rural Black households spend, by far, the largest share (11.6%) of their food budget at dollar stores, and the share of food spending at dollar stores is higher for rural households in the South. Similarly, many of the counties with the highest rates of food insecurity are rural Southern counties with large shares of people of color.2 Structural racism, in the form of decades of disinvestment and discrimination, has shaped economic development and access to both social services and food in these communities.3

Second, to understand the implications ofthe increased reliance on dollar stores, we need to look more closely at how people are using them. As Feng et al. note, the stores themselves vary. Although many dollar stores carry only shelf-stable foods and beverages, others offer eggs, milk, and even fresh produce. We also know from previous research on food access that shopping patterns are complicated; people base their decisions on where to shop on a range of criteria, including proximity, price, and quality.4,5 Understanding the particulars of food decisions requires paying attention to the stories and complexities of life for people in rural communities.

Between 2012 and 2020, we conducted four waves of semistructured interviews with 124 low-income female caregivers in North Carolina, including 85 rural households.6 In one set of interviews, we asked caregivers to describe their shopping habits in detail. Although most people shopped primarily at supermarkets,5 many-especially in the most rural county-also relied on dollar stores. Not surprisingly, proximity was important; people said that if they ran out of only one or two items, they would try to get it at the dollar store rather than going all the way to the supermarket (which was often much farther away). Many people also shopped at dollar stores purposefully as part of a strategy focused on feeding their families on very tight budgets. They discussed buying specific items at dollar stores- snacks, but also spices, canned goods, cereal, rice, bread, and even, participants told us, ground beef or frozen tilapia-because they were cheapest. Alyssa, a mother of three, said she went to the dollar store first to get sides and basics: "So I can see how much money I save before I go over [to the supermarket]." As Feng et al. point out, people make food decisions for complex reasons, and efforts to improve food access should start by recognizing this.

Third, it is important to consider how dollar stores affect communities. On one hand, dollar stores can serve as community assets as affordable and local options for buying food.7 On the other hand, they also can displace local businesses and often fail to offer healthy options such as fresh produce.8,9 Improving dollar stores' offerings requires understanding them as part of communities. Some of the caregivers in our study worked in dollar stores or had friends or relatives who worked in them. They talked about going to (or avoiding) specific stores because the employees were helpful or made them feel welcome (or, conversely, made them feel unwelcome). Dollar stores' offerings also vary. Although previous research clearly shows that they offer fewer healthy items than

supermarkets,8 some in our study were better than others (offering fresh meat or fish, for example, or frozen vegetables).

We also saw examples of how communities are partnering with dollar stores to improve food access. In one of the rural counties in our study, a family and consumer science agent connected local farmers who wished to sell their produce at dollar and corner stores in an effort to support local agriculture and make healthy, convenient snacks available to consumers. Anecdotes like these, although rare, demonstrate how community members need to be at the center of conversations about the impacts of dollar stores on the places where they live.10

Finally, we want to underscore what other researchers have also argued: food access is, most fundamentally, about money. It is important that people have access to stores offering the foods they need at prices they can afford. However, the most critical step for improving food access is addressing the systemic inequities that leave people without adequate economic resources. During the COVID-19 pandemic, various social support programs were created or expanded, providing a natural experiment on how increasing social support improves people's access to food. Using repeated surveys of a nationally representative sample of US households, Shafer et al. showed how the introduction of advance payments for the Child Tax Credit was associated with a 26% reduction in household food insufficiency.11 When the payments expired, food insufficiency increased.12

We conducted a qualitative study of experiences of food insecurity during the pandemic, interviewing families in rural and urban counties in five states (Michigan, Mississippi, North Carolina, South Carolina, and South Dakota).13 People told us that programs like the expansion of SNAP (the Supplemental Nutrition Assistance Program), stimulus checks, and the Child Tax Credit had allowed them to stock up on key freezer and nonperishable foods, sometimes for the first time in years, providing an important buffer against future food insecurity.

In closing, the analysis by Feng et al. offers an important glimpse into how food purchases are shifting in rural US communities. As public health researchers and practitioners seek to understand why these changes are happening and how they matter, it is critical to center the lives and histories of the people and communities who are most affected by these changes. We must use a food justice lens to improve food access, seeking to understand where inequities exist and who is affected, as well as how community members and leaders are responding.

CORRESPONDENCE

Correspondence should be sent to Sarah Bowen, Campus Box 8107, Raleigh, NC 27695 (e-mail: sarah_bowen@ncsu.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

FullCitation: Bowen S, Hardison-Moody A. Improving unequal food access requires understanding and addressing the socialinequalities that contribute to it. Am J Public Health. 2023;113(4):353-355.

Acceptance Date: January 21, 2023.

DOI: https://doi.org/10.2105/AJPH.2023.307243

CONTRIBUTORS

Both authors participated in the conceptualization and writing of the editorialand in the research project mentioned in the editorial.

ACKNOWLEDGMENTS

Research discussed in this editorialwas supported by the US Department of Agriculture, NationalInstitute of Food and Agriculture (grant 2011-68001-30103), the RussellSage Foundation (grant G-1902-11562), and the NationalScience Foundation (grant 2032563).

Note. Allthe opinions, findings, and recommendations expressed here are those of the authors and do not necessarily reflect the views of the funders.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to disclose.

References

REFERENCES

1. Feng W, Page ET, Cash SB. Dollar stores and food access for rural households in the United States, 2008-2020.

Am J Public Health. 2023; 1 13(3):331-340.
2. Hake M, Engelhard E, Dewey A. Map the meal gap 2022: a report on county and congressional district food insecurity and county food cost in the United States in 2020. July 2022. Available at: https://www.feedingamerica.org/sites/default/ files/2022-09/Map%20the%20Meal%20Gap% 202022%20Report_0.pdf. Accessed January 24, 2023.
3. Bowen S, Elliott S, Hardison-Moody A. The structural roots of food insecurity: how racism is a fundamental cause of food insecurity. Sociol Compass. 2021;15(7):e12846. https://doi.org/10. 1111/soc4.12846
4. Cannuscio CC, Tappe K, Hillier A, Buttenheim A, Karpyn A, Glanz K. Urban food environments and residents' shopping behaviors. Am J Prev Med. 2013;45(5):606-614. https://doi.org/10.1016/j. amepre.2013.06.021
5. MacNell L. A geo-ethnographic analysis of lowincome rural and urban women's food shopping behaviors. Appetite. 2018;128:311-320. https:// doi.org/10.1016/j.appet.2018.05.147
6. Bowen S, Elliott S, Hardison-Moody A. Rural food insecurity: a longitudinal analysis of low-income rural households with children in the South. RSF. 2022;8(3):50-77. https://doi.org/10.7758/RSF. 2022.8.3.02
7. Coughenour C, Bungum TJ, Regalado MN. Healthy food options at dollar discount stores are equivalent in quality and lower in price compared to grocery stores: an examination in Las Vegas, NV. Int J Environ Res Public Health. 2018; 15(12):2773. https://doi.org/10.3390/ijerph 15122773
8. Caspi CE, Pelletier JE, Harnack L, Erickson DJ, Laska MN. Differences in healthy food supply and stocking practices between small grocery stores, gas-marts, pharmacies and dollar stores. Public Health Nutr. 2016;19(3):540-547. https:// doi.org/10.1017/S1368980015002724
9. Marchesi K, Lopez R, Steinbach S. Dollar store expansion, food retail competition, and rural employment. Paper presented at: Allied Social Sciences Association Annual Meeting, New Orleans, LA; January 6-8, 2023.
10. Greenfield N. From farms to dollar stores, one woman's fight for justice. August 23, 2019. Available at: https://www.nrdc.org/stories/farms-dollarstores-one-womans-fight-justice. Accessed January 20, 2023.
11. Shafer PR, Gutiérrez KM, Ettinger de Cuba S, Bovell-Ammon A, Raifman J. Association ofthe implementation of child tax credit advance payments with food insufficiency in US households. JAMA Netw Open. 2022;5(1):e2143296. https://doi. org/10.1001/jamanetworkopen.2021.43296
12. Bovell-Ammon A, McCann NC, Mulugeta M, Ettinger de Cuba S, Raifman J, Shafer P. Association of the expiration of child tax credit advance payments with food insufficiency in US households. JAMA Netw Open. 2022;5(10):e2234438. https://doi. org/10.1001/jamanetworkopen.2022.34438
13. Bowen S, Hardison-Moody A, Eshleman K, et al. The impact ofCOVID-19 on experiences offood insecurity across place: a qualitative research protocol. Int J Qual Methods. 2021;20. https://doi. org/10.1177/16094069211062416

DETAILS

Subject:	Food stamps; Supermarkets; Child tax credit; Health care; Low income groups; Public health; Rural areas; Caregivers; Households; Grocery stores; Research; Community; Shopping; Interviews; Agriculture; Correspondence; Pandemics; Expenditures; Counties; Food security; Rural communities; Social inequality; Social services; Retail stores; Discrimination; Rurality; Economic development; Food conversion; Systemic racism; Access; Food; Food service
Business indexing term:	Subject: Supermarkets Child tax credit Grocery stores; Industry: 44511 : Supermarkets and Other Grocery Retailers (except Convenience Retailers)
Location:	United States--US; North Carolina

Classification:	44511: Supermarkets and Other Grocery Retailers (except Convenience Retailers)
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	353-355
Publication year:	2023
Publication date:	Apr 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
ProQuest document ID:	2792105675
Document URL:	https://www.proquest.com/scholarly-journals/improving-unequal-food-access-requires/docview/2792105675/se-2?accountid=211160
Copyright:	Copyright American Pub lic Health Association Apr 2023
Last updated:	2023-04-10
Database:	Public Health Database

Building Broad Public Health Coalitions in the Post-Roe World

Morabia, Alfredo, MD, PhD [1] [1] the editor-in-chief of AJPH, Washington, DC.

ABSTRACT (ENGLISH)

As in every year's April issue of the Journal, coinciding with National Public Health Week (#NPHW), we set up a dialogue between people of radically different political views who have in common a dedication to public health and an agreement that policy should be based as much as possible on scientific evidence. The dialogue has covered sensitive issues: racism and structural racism, gun violence prevention, single payer health insurance, public health advocacy, the Environmental Protection Agency, and more (e.g., https://ajph. aphapublications.org/toc/ajph/108/4). This issue is the first to address reproductive rights. It has proven to be the most difficult one to prepare.
The authors of the opinion pieces were invited to comment on the public health consequences ofthe US Supreme Court's decision to overturn Roe v Wade and, in particular, which strategies, at the local and national levels, could best protect pregnant individuals and their children in the new context.

FULL TEXT

As in every year's April issue of the Journal, coinciding with National Public Health Week (#NPHW), we set up a dialogue between people of radically different political views who have in common a dedication to public health and an agreement that policy should be based as much as possible on scientific evidence. The dialogue has covered sensitive issues: racism and structural racism, gun violence prevention, single payer health insurance, public health advocacy, the Environmental Protection Agency, and more (e.g., https://ajph. aphapublications.org/toc/ajph/108/4). This issue is the first to address reproductive rights. It has proven to be the most difficult one to prepare.
The authors of the opinion pieces were invited to comment on the public health consequences ofthe US Supreme Court's decision to overturn Roe v Wade and, in particular, which strategies, at the local and national levels, could best protect pregnant individuals and their children in the new context.
The comments we received, both from progressives and conservatives, stressed the disaster that the decision Dobbs vJackson Women's Health Organization has created for women in this country and beyond.
Frank C. Worrell, PhD, past president of the American Psychological Association, stresses that psychological research shows that the best strategy to prevent mental health issues for women seeking abortions is to make them safe, affordable, and accessible (p. 382).
Kristyn Brandi, MD, MPH, DarneyLandy Fellow at the American College of Obstetricians and Gynecologists, and Puneet Gill, third-year medical student, explain that abortion restrictions will negatively affect the gynecologic profession and the availability of patient care (p. 384).
For Megan Simmons,JD, MPA, policy director ofthe National Birth Equity Collaborative, and Deneen Robinson, director of religious spiritual policy strategy, National Birth Equity Collaborative, state legislatures codifying abortion rights and access is the best way to ensure bodily autonomy (p. 386).
Herminia Palacio, MD, MPH, president and CEO ofthe Guttmacher Institute, reminds us that states in which legislators have passed sweeping abortion restrictions concurrently have a terrible track record of promoting health and protecting against preventable maternal, infant, and neonatal deaths (p. 388).
All these comments are consistent with the evidence published in AJPH (https://ajph.aphapublications.org/toc/ajph/112/9). However, all ofthe conservative persons we invited who could be expected to support the Supreme Court decision in one way or another declined to submit or did not even respond.
I therefore asked Sanne Magnan, MD, PhD, senior fellow ofthe HealthPartners Institute and former Minnesota commissioner of health, to write an opinion editorial. Magnan belongs to a group ofthe Association of State and Territorial Health Officials alumni, which has been advising for the preparation ofthe April issues ofthe Journal since 2018. I know she is both dedicated to public health and in favor of alternatives to abortion.

Sanne Magnan is not alone in public health in thinking in these terms, and we need to face this discussion and find, as she insists, "common ground." The cancellation of a federal right to abortion requires broad coalitions to protect reproductive rights in states. Immediate objectives may include preventing unwanted pregnancies using contraception, protecting parents through family and child development policies and Medicaid expansion, and, when possible, avoiding total bans on abortion and the health disasters associated with illegal procedures.
The conclusion of my previous piece titled "Reproductive Rights and Fascist Threat" still reflects my thinking: "Altogether, these [common ground] policies may reduce health inequities and decrease children living in poverty, until the right to abortion and contraception is inserted in the US Constitution."1(p1229)>4jPH

CORRESPONDENCE
Correspondence should be sent to Alfredo Morabia, MD, PhD, Barry Commoner Center for Health and the Environment, Queens College, CUNY, 65-30 Kissena Blvd, Flushing, NY 11367 (e-mail: amorabia@qc.cuny.edu).

PUBLICATION INFORMATION
FullCItatIon: Morabla A. Building broad public health coalitions In the post-Roe world. Am J Public Health. 2023;113(4):378-379.
Acceptance Date: February 1, 2023.
DOI: https://doi.org/10.2105/AJPH.2023.307251

CONFLICTS OF INTEREST
The author has no conflicts of Interest to declare.

References

REFERENCE
1. Morabia A. Reproductive rights and fascist threat. Am J Public Health. 2022;112(9):1229. https://doi.org/10.2105/AJPH.2022.307001

DETAILS

Subject:	Reproductive rights; Fascism; Womens health; Collaboration; Public health; Birth control; Environmental protection; Supreme Court decisions; Abortion; Supreme courts; Gun violence; Discrimination; Radicalism; Prevention; Aggression; Health care industry; Public buildings; Systemic racism; Health insurance
Location:	United States--US
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	378-379
Publication year:	2023
Publication date:	Apr 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association

Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Commentary
ProQuest document ID:	2792105606
Document URL:	https://www.proquest.com/scholarly-journals/building-broad-public-health-coalitions-post-roe/docview/2792105606/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Apr 2023
Last updated:	2023-04-10
Database:	Public Health Database

Abortion-Related Laws and Concurrent Patterns in Abortion Incidence in Indiana, 2010–2019

Moseson, Heidi, PhD, MPH; Smith, Mikaela H, PhD; Chakraborty, Payal, PhD, MS; Gyuras, Hillary J, MA; Foster, Abigail, BS; Bessett, Danielle, PhD; Wilkinson, Tracey A, MD, MPH; Norris, Alison H, MD, PhD

ProQuest document link

ABSTRACT (ENGLISH)

Objectives. To analyze abortion incidence in Indiana concurrent with changes in abortion-related laws. Methods. Using publicly available data, we created a timeline of abortion-related laws in Indiana, calculated abortion rates by geography, and described changes in abortion occurrence coincident with changes in abortion-related laws between 2010 and 2019. Results. Between 2010 and 2019, Indiana's legislature passed 14 abortion-restricting laws, and 4 of 10 abortion-providing clinics closed. The Indiana abortion rate decreased from 7.8 abortions per 1000 women aged 15 to 44 years in 2010 to 5.9 in 2019. At all time points, the abortion rate was 58% to 71% of the Midwestern rate and 48% to 55% of the national rate. By 2019, nearly 1 in 3 (29%) Indiana residents who obtained abortion care did so outside the state. Conclusions. Access to abortion in Indiana over the past decade was low, required increases in interstate travel to obtain care, and co-occurred with the passage of numerous abortion restrictions. Public Health Implications. These findings preview unequal abortion access and increases in interstate travel as state-level restrictions and bans go into effect across the country. (Am J Public Health. 2023;113(4):429-437.

https://doi.org/10.2105/AJPH.2022.307196)

FULL TEXT

Headnote

Objectives. To analyze abortion incidence in Indiana concurrent with changes in abortion-related laws.

Methods. Using publicly available data, we created a timeline of abortion-related laws in Indiana, calculated abortion rates by geography, and described changes in abortion occurrence coincident with changes in abortion-related laws between 2010 and 2019.

Results. Between 2010 and 2019, Indiana's legislature passed 14 abortion-restricting laws, and 4 of 10 abortion-providing clinics closed. The Indiana abortion rate decreased from 7.8 abortions per 1000 women aged 15 to 44 years in 2010 to 5.9 in 2019. At all time points, the abortion rate was 58% to 71% of the Midwestern rate and 48% to 55% of the national rate. By 2019, nearly 1 in 3 (29%) Indiana residents who obtained abortion care did so outside the state.

Conclusions. Access to abortion in Indiana over the past decade was low, required increases in interstate travel to obtain care, and co-occurred with the passage of numerous abortion restrictions.

Public Health Implications. These findings preview unequal abortion access and increases in interstate travel as state-level restrictions and bans go into effect across the country. (Am J Public Health. 2023;113(4):429-437. https://doi.org/10.2105/AJPH.2022.307196)

The United States has experienced a surge in abortion-related legislation over the past decade,1 culminating in the overturning of federal protections for abortion by the US Supreme Court's Dobbs vJackson Women's Health Organization opinion in June 2022.2 In the 12 years leading up to the Dobbs opinion, states passed more than 470 state-level abortion restrictions that limited abortion access in direct (e.g., requiring unnecessary hospital admitting privileges)3 and indirect (e.g., medically unnecessary waiting periods that can cause increases in travel)4 ways and approximately 70 policies that protected abortion access.5

Compared with other state governments, Indiana's government has a particularly hostile legislative and policy history toward abortion6: the state enacted more abortion restrictions between 1973 and 2020 than most other states7 and has consistently been categorized as very hostile toward abortion.6 Restrictions have included an 18-hour waiting period following statedirected counseling, written and notarized parental consent or judicial bypass requirements for minors, prohibition on the use of telemedicine to administer medication abortion, limitations on abortion provision beyond 14 weeks gestation, and severe restrictions on public funding for abortion.8 With the removal of constitutional protections for abortion, however, Indiana became the first state in the country to pass a ban on abortion at zero weeks and immediate delicensure of all freestanding abortion clinics.9 The law went into effect on September 15,2022, with limited exceptions for rape and incest (up to 12 weeks of pregnancy dated from last menstrual period), fatal fetal diagnoses (up to 22 weeks after last menstrual period), and the life and health of the pregnant person. One week later, a judge granted a preliminary injunction on the ban. On October 12, 2022, the Indiana Supreme Court allowed the injunction to stand and abortions to continue at least until a ruling is issued following oral arguments that took place on January 19,2023-typically issued at least 2 months after the hearing.

Counter to their stated intention of protecting pregnant people's health, laws restricting abortion access have been demonstrated to increase mortality and morbidity during pregnancy,10 to delay or block access to necessary health care, and to otherwise burden or harm abortion seekers and providers.3,11 But abortion care access is not just a critical component of public health, it is also essential to reproductive autonomy and justice.12 At its core, abortion access recognizes each individuals' fundamental right to bodily autonomy, and the repercussions of granting versus denying that right are profound. Among the many established benefits of abortion access are improved physical health,13 lower risk of intimate partner violence,14 improved socioeconomic conditions,15 and better developmental outcomes for one's existing and subsequent children.16

Given its history of abortion restrictions, Indiana can serve as a case study for examining how changes in abortion policy coincide with changes in abortion utilization, especially as more states enact extremely restrictive abortion

bans-including total abortion bans and bans after the detection of fetal cardiac activity-following the loss of federal abortion protections. The demographic makeup ofthe state allows some examination of how abortion restrictions may affect abortion seekers unevenly in terms of geography: Indiana's 92 counties are almost equally split between metropolitan (44) and nonmetropolitan (48).17,18

However, the peer-reviewed research on abortion incidence or abortion care-seeking experiences in Indiana is extremely scarce. A 1997 study examined the impact of parental involvement laws on abortion incidence among minors in Indiana and found that these laws reduced the in-state abortion rate for minors, delayed them in obtaining abortion care, and increased their out-ofstate travel.19 Aside from this 1997 study, we identified no peer-reviewed public health research on abortion access in Indiana. To address this gap in the literature, we endeavored to provide a descriptive review of Indiana's regulatory environment over the past decade and to conduct an empirical analysis of abortion incidence patterns in the state. We evaluated abortion incidence overall and by duration of pregnancy in the state versus in the region and in the nation. We also determined abortion incidence by Indiana county as well as Indiana residents' out-of-state abortion utilization between 2010 and 2019, the most recent years for which data are available.

METHODS

Data on individual abortion-related laws, including dates of proposal and enactment, were from the Indiana General Assembly Web site, supplemented by researcher review of news reports, court filings, and legal advocacy organization reports. Specifically, we used the search by subject function on the Indiana General Assembly Web site to locate each piece of abortion-related legislation signed into law between 2014 and 2019, and we then reviewed the Indiana General Assembly's list of archived bills to locate those related to abortion between 2010 and 2013. We cross-referenced the list of legislation with Indiana abortion laws included in the LawAtlas (https://lawatlas.org) and Guttmacher Institute Web sites. From these sources, we extracted and organized information on abortion-related laws in Indiana into a table, including content and dates of enactment. Using this compiled data set, we then created a timeline that depicts Indiana's new abortion-related laws over the past decade and plotted these alongside concurrent abortion-providing clinic closures and openings.

Data on the number and location of sites providing abortions in Indiana were from Indiana Department of Health Clinical Licensing Program materials (publicly available on the Indiana Department of Health Web site between 2008 and 2020) as well as from newspaper articles, court records, and digital archives (via the Wayback Machine). From these data, we determined the number of abortion facilities in the state for each year. We used this to calculate the facility density (i.e., facilities per million women aged 1 5-44 years) by extracting the number of facilities in the state from the Indiana State Licensing program data and dividing this by the US Census estimate ofthe number of women aged 15 to 44 years in the state forthat year. We similarly estimated facility density for the Midwest and the United States, extracting data on the number of facilities from Guttmacher Institute data20; however, because Guttmacher Institute data on facility numbers are available only for 2014 and 2017, we calculated facility density for the Midwest and the United States for these 2 years only. We used the word "women" in our description of denominators to be consistent with the language ofthe US Census methods that generated these estimates, but we acknowledge that this is a limitation of the measure because transgender, nonbinary, and gender-expansive people also have abortions.

Measures

To calculate abortion rates (number of abortions per year per 1000 women aged 15-44 years) overtime by county, state, region, the United States, and percentage of patients leaving their state of residence for abortion care, we accessed several publicly available state- and national-level data sets. Publicly available data included Centers for Disease Control and Prevention (CDC) annual abortion surveillance reports,21 Indiana Department of Health Terminated Pregnancy Reports,22 and the US Census.23 To calculate the abortion rate in Indiana, we extracted the number of abortions that took place in Indiana (abortions by occurrence) for each year between 2010 and 2019 from CDC data and divided this by the US Census estimate of the number of women aged 15 to 44years in Indiana forthat year.

To calculate the abortion rate in the Midwestern region, we similarly extracted the number of abortions that took place in all states with a Midwestern designation in the US Census (IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, and WI) and divided this annual total of Midwestern abortions by the US Census estimate of the number of women aged 15 to 44 years in those 12 states for each year. Finally, to calculate the national abortion rate, we extracted the total number of abortions reported in the United States for each year and divided each annual abortion total by the US Census estimate for the number of women aged 15 to 44 years in the states that reported abortions in that year. Because reporting data to the CDC is voluntary, not all states report abortion counts to the CDC and thus are missing from the CDC estimates. Specifically, we excluded the following states when calculating national abortion rates because of either not reporting to the CDC or not following reporting guidelines: California, Maryland, New Hampshire, and NewJersey (2010-2019); District of Columbia and Wyoming (2010-2018); Maine (2012); and Florida (2010-2016, for rates by residence only).

To create abortion rates for each county in Indiana, we extracted the total number of abortions reported for each county in each year from the Terminated Pregnancy Reports data and divided that by the US Census data's estimated number of women aged 15 to 44 years in each county. To explore abortion rates by county classification (metro, urban, or rural), we relied on a county classification system based on the US Department of Agriculture rural-urban continuum codes, most recently updated in 2013.17 Specifically, the Department of Agriculture designates counties as "metro" (based on Office of Management and Budget metro designations24), "nonmetro-urban" (nonmetro and >2500 people), and "nonmetro-rural" (nonmetro and <2500 people). The Indiana Termination of Pregnancy Reports designated counties that saw between 1 and 5 abortions per year as missing; to include these 10 counties in the analysis, we assigned them as having 3 abortions each (the median value in the possible range).

To calculate the percentage of Indiana residents who left the state to obtain an abortion, we extracted the number of abortions Indiana residents obtained out of state each year from the CDC surveillance reports and divided this out-of-state abortion count by the total number of abortions that Indiana residents received (inside and outside the state) for that year, per Smith et al.25 For Midwest and national estimates, we repeated the steps using counts for each specific region. We excluded all states that were missing or had incomplete data from any of our study years to keep consistent the states represented across years. To examine the states to which Indiana residents traveled to obtain their abortions, we used the same CDC data to obtain the total number of abortions Indiana residents received each year in each of the states that reported abortions given to Indiana residents for each year between 2010 and 2019.

Data Analysis

To evaluate patterns in abortion rate over the full period, we calculated percentage changes in abortion rates as follows: (rate2019 - rate2010)/rate2010. To calculate average abortion rates for metro, urban, and rural counties, we summed county-level rates for all counties with the specific classification and divided by the number of counties with that designation. To present findings visually, we plotted key results over time via line graphs or maps.

We used Stata version 17 (StataCorp, College Station, TX) for all analyses and ArcGIS Pro (Esri, Redlands, CA) for all maps.

RESULTS

Between 2010 and 2019, Indiana's state legislature passed 14 abortionrestricting bills; all contained multiple provisions (Table A, available as a supplement to the online version of this article at http://www.ajph.org). Although each bill was signed into law by the governor, 6 were blocked from going into effect-in whole or in part-because of court cases challenging their constitutionality. Those that went into effect included requirements for abortion providers to have written admitting privileges at nearby hospitals (i.e., formal agreements between a physician and a specific hospital allowing the physician to directly admit patients to the hospital and provide services to their patients in that hospital as medical staff), restrictions on judicial bypass options for minors, and a telemedicine ban.

Abortion-Providing Facilities

During this period, shifts occurred in the number of abortion-providing facilities in Indiana (Figure 1). In 2010, there were 9 clinics that provided procedural abortions and 1 additional clinic that provided only medication abortion services. Between 2010 and 2019,4 of these 10 abortion-providing clinics closed and 1 new clinic opened in 2019,

so that Indiana had a facility density of 7.7 in 2010 and 5.4 in 2019. The densities are slightly lower than are those in the Midwest (7.4 in 2014 and 7.0 in 2017) and less than half those in the United States (15.3 in 2014 and 15.5 in 2017).

Abortion Incidence

The abortion rate by state of provision in Indiana decreased from 7.8 abortions per 1000 women aged 15 to 44years in 2010 to 5.9 abortions in 2019 (Table B, part 1, available as a supplement to the online version of this article at http:// www.ajph.org; Figure 2a). Although the United States and the Midwestern regions also saw a decline in the abortion rate by state of provision over this period, the decline in the abortion rate in Indiana (24%) was more than 3 times that of the decrease in the Midwest region (7%) and slightly more than the decrease in the United States (20%). Notably, the in-state Indiana abortion rate is lower than are the regional and national rates throughout this period; in any given year, the Indiana abortion rate by state of provision was only 48% to 55% of the national abortion rate and 58% to 71% of the Midwestern rate.

Conversely, the abortion rate by state of residence did not decrease as sharply over the same period (Table B, part 2; Figure 2b). The abortion rate among Indiana residents, including Indiana dents who out of state for their abortions, decreased by 11%-only 46% of the decrease seen in the abortion rate in Indiana and like the decrease observed nationally (10%). Thus, the abortion rate among Indiana residents did not decrease as steeply as the abortion rate within the borders of the state.

Abortions by County

The average abortion rate from 2010 to 2019 was highest among people from Indiana's metropolitan counties (6.7 per 1000 women aged 15-44 years), followed by those from urban, nonmetropolitan counties (3.1 per 1000 women aged 15-44 years) and then by rural, nonmetropolitan counties (1.5 per 1000 women aged 15-44 years; Figure 3). The metropolitan rate has decreased over time, whereas the urban and rural rates have remained extremely low. When comparing abortion rates and facility locations in 2010 versus 2019 (Figure 3), decreases in rates in the northwest corner of the state are particularly notable given the loss of a clinic there between 2010 and 2019.

Out-of-State Travel for Abortion Care

Both the number and percentage of Indiana residents traveling out of state for abortion care ("percentage leaving") increased between 2010 and 2019: from 13% of all abortions (1471) in 2010 to 29% (2868) in 2019 (Table C, available as a supplement to the online version of this article at http://www. ajph.org; Figure 4). Compared with the region and the United States, Indiana has a higher average percentage leaving over the 10-year period (22% vs 9% in the Midwest and 7% nationally), and Indiana's percentage leaving more than doubled over the period, whereas national and Midwest percentages leaving increased only slightly.

Indiana residents who left the state for abortion care between 2010 and 2019 traveled to 1 of 4 states: Illinois, Kentucky, Michigan, or Ohio (Figure A, available as a supplement to the onlineversion of this article at https://www.ajph.org). From 2011 through 2019, an increasing majority of those who traveled for abortion care went to neighboring Illinois, a state with fewer abortion restrictions.1

DISCUSSION

This retrospective analysis of abortionrelated laws and abortion incidence in Indiana between 2010 and 2019 highlights that (1) abortion utilization was strikingly lower in Indiana than the region and the nation, (2) abortion utilization was unequal across the state, and (3) a high and increasing proportion of Indiana residents traveled outside the state for abortion care. With abortion incidence in Indiana consistently lower than that in Midwestern regional levels, and with nearly 1 in 3 patients who had abortions leaving the state to obtain abortion care, Indiana residents did not have sufficient abortion care access in their home state-even before the enactment of the full abortion ban in September 2022 and the legal uncertainty following injunction.

Study findings demonstrate inequities in abortion access in Indiana by geography. Residents in rural counties had an extremely low abortion rate over the period analyzed-only 22% of the abortion rate of Indiana residents who lived in metropolitan counties. This pattern is similar to that observed in neighboring Ohio, where abortion is also accessed more frequently by people living in urban areas and least by people living in rural areas.26 This may be

the result of a larger trend of reproductive health access deserts in rural areas27-29 and could be exacerbated by Indiana laws that require abortion providers to have admitting privileges at nearby hospitals, thereby restricting abortion-providing facilities to being located primarily in urban areas near hospitals.3

Furthermore, these findings reveal a high and increasing percentage of Indiana residents who left the state to access abortion care. People seeking abortion care may travel out oftheir state of residence for many reasons, including policy-driven requirements related to gestational limits,29 waiting periods,30 parental notification, and judicial bypass31 or simply location convenience (i.e., the closest clinic to them is in another state)32 or shorter wait times.33 Our finding that the percentage of people leaving Indiana for abortion care increased sharply from 13% to 29% alongside a decade of policy restrictions and facility closures reflects a larger US trend in which states with more restrictive abortion laws or a lower facility density have a higher percentage of patients leaving the state for care.25 Although the rate of abortions taking place in Indiana decreased across our study period, the rate among people from Indiana was relatively consistent, reflecting a continued need for abortions among Indiana residents and thus the increasing percentage of those leaving overtime.

Given the legal uncertainty following the total abortion ban enacted and enjoined in September 2022, the number of Indiana residents who will need support to travel across state lines to access abortion care in Illinois or another state may increase dramatically.34 Previous research indicates that burdens associated with interstate travel include lack of insurance coverage as well as additional costs associated with transportation, overnight stays, missing work, and childcare.25 Given that nearly one third of Indiana abortion recipients in 2019 were already traveling out of state for care and that there was an anticipated increase in this percentage following uncertainty induced by Indiana's contested abortion ban, the financial and logistical support that Indiana residents will need to obtain abortion care will correspondingly increase. Importantly, these burdens associated with increased travel are likely experienced disproportionately. Particularly affected are Black people, Indigenous people, and other people of color; transgender and nonbinary people; and those experiencing financial hardships. This is true especially given racism in the reproductive health care system35-38 as well as experiences of reproductive oppression and coercion on the pathway to abortion care.39,40 Targeted outreach and support for abortion seekers from these communities will be an important public health imperative.

Limitations and Strengths

Although these findings highlight important aspects of abortion access in Indiana, we note that these aggregate data do not provide information on individual experiences, particularly barriers or facilitators to abortion access in the state. Although we see aggregate differences in abortion incidence by geography, our data cannot speak to the overlapping barriers that Indiana residents may face when seeking reproductive health care, particularly for adolescents, those with marginalized racial or gender identities, and those who are struggling financially.41 Future work should examine how systems of racial oppression intersect with classand location-based forms of oppression to result in differential access to care. Our data also cannot illuminate the experience of people who wanted abortions and were unable to obtain one in Indiana or in a neighboring state, and yet certainly there are people unrepresented in our findings for whom the barriers were insurmountable.42

Furthermore, because of missingness in CDC data from several key states that do not routinely provide data on abortion incidence to the CDC, we likely underestimated the national abortion rate in this analysis. Therefore, our comparison ofthe Indiana abortion rate to the national abortion rate likely underestimates the magnitude ofthe difference between Indiana's trends and national trends and thereby underestimates how much lower abortion access is in Indiana than nationally. This is a conservative bias and is quantified in Table D (available as a supplement to the online version of this article at http://www.ajph.org), which presents the CDC and Guttmacher rates side by side for the years when Guttmacher estimates are available.

Finally, our descriptive public health analysis of laws related to abortion access and provision in Indiana does not provide causal analysis of individual or other factors that influence Indiana's abortion rates but instead illuminates concurrent changes in abortion incidence, location, and patient characteristics over time. Our analysis is strengthened by our use of multiple large, publicly available data sets with data reported across state, regional, and

national geographies.

Public Health Implications

Based on this public health description of patterns in state, regional, and national abortion rates overtime, we conclude that abortion access in Indiana over the past decade was strikingly low, required increases in interstate travel to obtain care, and cooccurred with the passage of numerous abortion restrictions. With the uncertainty Indiana's contested abortion ban imposes,43 abortion access will be even more strongly curtailed, and these findings suggest that effects may be unevenly felt, with disproportionate impact across Indiana. The change in abortion utilization seen in Indiana that coincided with legislative restrictions can serve as a potential preview of what may be expected as state-level restrictions and complete bans go into effect in additional states across the country.

Â1PU

ABOUT THE AUTHORS

Heidi Moseson is with Ibis Reproductive Health, Oakland, CA. Mikaela H. Smith, HillaryJ. Gyuras, Abigail Foster, and Alison H. Norris are with the Ohio Policy Evaluation Network, Ohio State University, Columbus. Danielle Bessett is with the Ohio Policy Evaluation Network, University of Cincinnati, Cincinnati. Payal Chakraborty is with the Department of Population Medicine, Harvard Medical School and Harvard Pilgrim Health Care Institute, Boston, MA. TraceyA. Wilkinson is with the Indiana University School of Medicine, Indianapolis.

CORRESPONDENCE

Correspondence should be sent to Heidi Moseson, PhD, MPH, Ibis Reproductive Health, 1736 Franklin St, Suite 600, Oakland, CA 94612 (e-mail: hmoseson@ibisreproductivehealth.org). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Moseson H, Smith MH, Chakraborty P, et al. Abortion-related laws and concurrent patterns in abortion incidence in Indiana, 2010-2019. Am J Public Health. 2023;113(4): 429-437.

Acceptance Date: December 2, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307196

CONTRIBUTORS

H. Moseson drafted the article with support from M. H. Smith and contributions, input, and review from all authors. H. Moseson and M.H. Smith extracted and analyzed the abortion incidence data and generated the related figures. H. Moseson, M. H. Smith, D. Bessett, and A. H. Norris designed the study. P. Chakraborty conducted the geospatial analyses and generated the related figures. H.J. Gyuras and A. Foster reviewed and extracted the data on state laws and clinic closures. T.A. Wilkinson provided clinical and scientific expertise on abortion provision in Indiana and verified and interpreted the results.

ACKNOWLEDGMENTS

H. Moseson was funded by the Society of Family Planning (grant SFPRF14-MA6) and the National Cancer Institute (grant 1R21CA256759-01). M. H. Smith, P. Chakraborty, H.J. Gyuras, A. Foster, D. Bessett, and A. H. Norris were supported by a philanthropic foundation that makes grants anonymously. P. Chakraborty was also supported by the National Heart, Lung, and Blood Institute (grant T32 HL098048).

We are grateful to the staff at the Indiana State Department of Health and the United States Centers for Disease Control and Prevention for their efforts in collecting and reporting data on abortion incidence in Indiana and across the United States.

Note. The funders played no role in the design or conduct of this study or in the preparation and review of the article. The content is the responsibility of the authors and does not necessarily reflect the views of the funders.

CONFLICTS OF INTEREST

T.A. Wilkinson receives projectfundingfrom Organon, Merck, and Cooper Surgical. All authors declare no potential or actual conflicts of interest.

HUMAN PARTICIPANT PROTECTION

This study was exempt from institutional review board review under the federal regulations for human participants

(45 CFR, part 46) research because this analysis involved only publicly available data sets and de-identified data.

References

REFERENCES

1. Guttmacher Institute. An overview of abortion laws. August 1, 2021. Available at: https://www. guttmacher.org/state-policy/explore/overviewabortion-laws. Accessed January 9, 2019.
2. US Supreme Court. Dobbs v. Jackson Women's Health Organization. 213 (2022). Available at: https://www.supremecourt.gov/opinions/21pdf/ 19-1392_6j37.pdf. Accessed January 9, 2023.
3. Guttmacher Institute. Targeted regulation of abortion providers (TRAP) laws. January 2020. Available at: https://www.guttmacher.org/ evidence-you-can-use/targeted-regulationabortion-providers-trap-laws. Accessed August 20, 2021.
4. JermanJ, Frohwirth L, Kavanaugh ML, Blades N. Barriers to abortion care and their consequences for patients traveling for services: qualitative findings from two states. Perspect Sex Reprod Health. 2017;49(2):95-102. https://doi.org/10.1363/psrh. 12024
5. Nash E, Mohammed L, Cappello O, Naide S. State policy trends 2019: a wave of abortion bans, but some states are fighting back. 2019. Available at: https://www.guttmacher.org/article/2019/12/ state-policy-trends-2019-wave-abortion-banssome-states-are-fighting-back. Accessed September 1,2022.
6. Nash E. State abortion policy landscape: from hostile to supportive. 2021. Available at: https:// www.guttmacher.org/article/2019/08/stateabortion-policy-landscape-hostile-supportive. Accessed May 12, 2021.
7. Nash E. Louisiana has passed 89 abortion restrictions since Roe: it's about control, not health. 2020. Available at: https://www. guttmacher.org/article/2020/02/louisiana-haspassed-89-abortion-restrictions-roe-its-aboutcontrol-not-health. Accessed January 10, 2023.
8. Guttmacher Institute. State facts about abortion: Indiana. June 2020. Available at: https://www. guttmacher.org/fact-sheet/state-facts-aboutabortion-indiana. Accessed February 11,2020.
9.Indiana General Assembly. Senate Bill 1. Available at: https://iga.in.gov/legislative/2022ss1/bills/ senate/1. Accessed August 30, 2022.
10. Vilda D, Wallace ME, Daniel C, Evans MG, Stoecker C, Theall KP. State abortion policies and maternal death in the United States, 2015-2018. Am J Public Health. 2021;111(9):1696-1704. https://doi.org/10.2105/AJPH.2021.306396
11. Foster DG. The Turnaway Study: Ten Years, a Thousand Women, and the Consequences of Having-or Being Denied-an Abortion . New York, NY: Simon &Schuster; 2021.
12. Ross L, Solinger R. Reproductive Justice. Oakland: University of California Press; 2017.
13. Gerdts C, Dobkin L, Foster DG, Schwarz EB. Side effects, physical health consequences, and mortality associated with abortion and birth after an unwanted pregnancy. Womens Health Issues. 2016;26(1):55-59. https://doi.org/10.1016/j.whi. 2015.10.001
14. Roberts SC, Biggs MA, Chibber KS, Gould H, Rocca CH, Foster DG. Risk of violence from the man involved in the pregnancy after receiving or being denied an abortion. BMC Med. 2014;12(1): 144. https://doi.org/10.1186/s12916-014-0144-z
15. Foster DG, Biggs MA, Ralph L, Gerdts C, Roberts S, Glymour MM. Socioeconomic outcomes of women who receive and women who are denied wanted abortions in the United States. Am J Public Health. 2022;112(9):1290-1296. https://doi. org/10.2105/AJPH.2017.304247r
16. Foster DG, Biggs MA, Raifman S, Gipson J, Kimport K, Rocca CH. Comparison of health, development, maternal bonding, and poverty among children born after denial ofabortion vs after pregnancies subsequent to an abortion. JAMA Pediatr. 2018;172(11):1053-1060. https://doi.org/ 10.1001/jamapediatrics.2018.1785
17. US Department of Agriculture. Rural-urban continuum codes. 2020. Available at: https://www. ers.usda.gov/data-products/rural-urbancontinuum-codes. Accessed February 28, 2022.
18. US Census Bureau. American Community Survey 2015-2019 5-year data release. October 8, 2021. Available at: https://www.census.gov/newsroom/ press-kits/2020/acs-5-year.html. Accessed April 12, 2022.

19. Ellertson C. Mandatory parental involvement in minors' abortions: effects of the laws in Minnesota, Missouri, and Indiana. Am J Public Health. 1997; 87(8):1367-1374. https://doi.org/10.2105/ajph.87. 8.136720.
20. Jones RK, Witwer E, Jerman J. Abortion incidence and service availability in the United States, 2017. September 2019. Available at: https://www. guttmacher.org/report/abortion-incidence-serviceavailability-us-2017. Accessed May 16, 2022.
21. Centers for Disease Control and Prevention. CDCs abortion surveillance system FAQs. November 25, 2020. Available at: https://www.cdc.gov/ reproductivehealth/data_stats/abortion.htm. Accessed February 12, 2021.
22. Indiana Department of Health. Terminated pregnancy reports. Available at: https://www.in.gov/ health/vital-records/vital-statistics/terminatedpregnancy-reports. Accessed January 12, 2023.
23. US Census Bureau. American Community Survey 5-year data (2009-2021). December 8, 2022. Available at: https://www.census.gov/data/ developers/data-sets/acs-5year.html. Accessed January 12, 2023.
24. Office of Management and Budget. Revised delineations of metropolitan statistical areas, micropolitan statistical areas, and combined statistical areas, and guidance on uses of the delineations of these areas. February 28, 2013. Available at: https://obamawhitehouse.archives.gov/sites/ default/files/omb/bulletins/2013/b-13-01.pdf. Accessed February28, 2022.
25. Smith MH, Muzyczka Z, Chakraborty P, et al. Abortion travel within the United States: an observational study of cross-state movement to obtain abortion care in 2017. Lancet Reg Health - Am. 2022;10:100214. https://doi.org/10.1016/_j. lana.2022.100214
26. Norris AH, Chakraborty P, Lang K, et al. Abortion access in Ohio's changing legislative context, 2010-2018. Am J Public Health. 2020;110(8): 1228-1234. https://doi.org/10.2105/AJPH.2020. 305706
27. Martins SL, Starr KA, Hellerstedt WL, Gilliam ML. Differences in family planning services by ruralurban geography: survey of Title X-supported clinics in Great Plains and Midwestern states. Perspect Sex Reprod Health. 2016;48(1):9-16. https://doi.org/10.1363/48e7116
28. Bennett T. Reproductive health care in the rural United States. JAMA. 2002;287(1):112. https://doi. org/10.1001/jama.287.1.112-JMS0102-6-1
29. Upadhyay UD, Weitz TA, Jones RK, Barar RE, Foster DG. Denial of abortion because of provider gestational age limits in the United States. Am J Public Health. 2014;104(9):1687-1694. https:// doi.org/10.2105/AJPH.2013.301378
30. Finer LB, Frohwirth LF, Dauphinee LA, Singh S, Moore AM. Timing of steps and reasons for delays in obtaining abortions in the United States. Contraception. 2006;74(4):334-344. https://doi. org/10.1 016/j.contraception.2006.04.01 0
31. Dennis A, Henshaw SK, Joyce TJ, Finer LB, Blanchard K. The impact of laws requiring parental involvement for abortion: a literature review. March 18, 2009. Available at: https://www.guttmacher. org/report/impact-laws-requiring-parentalinvolvement-abortion-literature-review. Accessed July 29,2021.
32. Fuentes L, Jerman J. Distance traveled to obtain clinical abortion care in the United States and reasons for clinic choice. J Womens Health (Larchmt). 2019;28(12):1623-1631. https://doi. org/10.1089/jwh.2018.7496
33. Gerdts C, Fuentes L, Grossman D, et al. Impact of clinic closures on women obtaining abortion services after implementation ofa restrictive law in Texas. Am J Public Health. 2016;106(5):857-864. https://doi.org/! 0.2105/AJPH.2016.303134r
34. Maddow-Zimet I, Kost K. Even before Roe was overturned, nearly one in 10 people obtaining an abortion traveled across state lines for care. July 21, 2022. Available at: https://www.guttmacher. org/article/2022/07/even-roe-was-overturnednearly-one-10-people-obtaining-abortiontraveled-across. Accessed August 19, 2022.
35. Joffe C, ParkerWJ. Race, reproductive politics and reproductive health care in the contemporary United States. Contraception. 2012;86(1):1 -3. https:// doi.org/10.1016/j.contraception.2012.03.009
36. Dehlendorf C, Weitz T. Access to abortion services: a neglected health disparity. J Health Care Poor Underserved. 2011;22(2):415-421. https:// doi.org/10.1353/hpu.2011.0064
37. Thompson TM, Young YY, Bass TM, et al. Racism runs through it: examining the sexual and reproductive health

experience of Black women in the South. Health Aff (Millwood). 2022;41(2):195-202. https://doi.org/10.1377/hlthaff.2021.01422
38. Troutman M, Rafique S, Plowden TC. Are higher unintended pregnancy rates among minorities a result of disparate access to contraception? Contracept Reprod Med. 2020;5:16. https://doi.org/10. 1186/s40834-020-00118-5
39. Roberts DE. Killing the Black Body: Race, Reproduction, and the Meaning of Liberty. New York: Vintage; 1997.
40. Harris LH, Wolfe T. Stratified reproduction, family planning care and the double edge of history. Curr Opin Obstet Gynecol. 2014;26(6):539-544. https://doi.org/10.1097/GC0.0000000000000121
41. Solazzo AL. Different and not equal: the uneven association of race, poverty, and abortion laws on abortion timing. Soc Probl. 2019;66(4):519-547. https://doi.org/10.1093/socpro/spy015
42. Moseson H, Seymour JW, Zuniga C, et al. "It just seemed like a perfect storm": a multi-methods feasibility study on the use of Facebook, Google Ads, and Reddit to collect data on abortionseeking experiences from people who considered but did not obtain abortion care in the United States. PLoS One. 2022;17(3):e0264748. https://doi.org/10.1371/journal.pone.0264748
43. Stracqualursi V. Judge blocks Indiana's near-total abortion ban. CNN. September 22, 2022. Available at: https://www.cnn.com/2022/09/22/ politics/indiana-abortion-ban-blocked/index.html. Accessed September 23, 2022.

DETAILS

Subject:	Abortion; Geography; Womens health; Censuses; Public health; Digital archives; Pregnancy; Travel restrictions; Travel; Bans; Interstate travel; Residents; Menstruation; Clinics; Legislation; Non-binary gender; Legislatures
Business indexing term:	Industry: 51921 : Libraries and Archives
Location:	Indiana; United States--US
Company / organization:	Name: Department of Health-Indiana; NAICS: 923120
Classification:	51921: Libraries and Archives
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	429-437
Publication year:	2023
Publication date:	Apr 2023
Section:	RESEARCH &ANALYSIS
Publisher:	American Public Health Association
Place of publication:	Washington

Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
DOI:	https://doi.org/10.2105/AJPH.2022.307196
ProQuest document ID:	2792105592
Document URL:	https://www.proquest.com/scholarly-journals/abortion-related-laws-concurrent-patterns/docview/2792105592/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Apr 2023
Last updated:	2023-03-29
Database:	Public Health Database

Home Owners' Loan Corporation Maps and Place-Based Injury Risks: A Complex History

Jacoby, Sara F, PhD MSN MPH [1] [1] School of Nursing, University of Pennsylvania, Philadelphia

ABSTRACT (ENGLISH)

In a piece for Ebony magazine in 1965, James Baldwin made a statement now inscribed on a wall at the National Museum of African American History and Culture that "the great force of history comes from the fact that we carry it within us ... history is literally present in all that we do."1(p.47) Historical context shapes the ways in which individuals embody the circumstances to which they are born and in which they live.2 It is the backdrop for every public health problem and all that public health data can enumerate.

The historical context of the United States is inseparable from its history of racism and ofthe institutions and policies that reify racialized economic segregation and social inequality.3 Let us consider the public health problem of physical injuries as a leading cause of death and disability across the life span.4 There are persistent populationlevel disparities in injury risks and outcomes associated with race, ethnicity, economic resources, and geography.4 Treating these disparities as ahistorical phenomena has some advantages for simple, structural public health interventions. However, viewing any health disparity through a solely contemporary lens may obscure critical opportunities for intervention that require appreciation for how injury risks and outcomes have been racialized and

emplaced across US geography.

FULL TEXT

In a piece for Ebony magazine in 1965, James Baldwin made a statement now inscribed on a wall at the National Museum of African American History and Culture that "the great force of history comes from the fact that we carry it within us ... history is literally present in all that we do."1(p.47) Historical context shapes the ways in which individuals embody the circumstances to which they are born and in which they live.2 It is the backdrop for every public health problem and all that public health data can enumerate.

The historical context of the United States is inseparable from its history of racism and ofthe institutions and policies that reify racialized economic segregation and social inequality.3 Let us consider the public health problem of physical injuries as a leading cause of death and disability across the life span.4 There are persistent populationlevel disparities in injury risks and outcomes associated with race, ethnicity, economic resources, and geography.4 Treating these disparities as ahistorical phenomena has some advantages for simple, structural public health interventions. However, viewing any health disparity through a solely contemporary lens may obscure critical opportunities for intervention that require appreciation for how injury risks and outcomes have been racialized and emplaced across US geography.

LINKING REDLINING AND PEDESTRIAN INJURIES

Following the digital publication ofthe University of Richmond's Mapping Inequality project,5 there has been a notable increase in research attempting to link historical structural racism in the housing market to the contemporary distribution of fatal and nonfatal injuries. In their article in this issue of AJPH, Taylor et al. (p. 420) add to this area of work. They overlay mortality data from the Fatality Analysis Reporting System ofthe National Highway Traffic Safety Administration onto digitized renderings of more than 200 Home Owners' Loan Corporation (HOLC) security maps from across US metropolitan areas. Taylor et al. tested their proposition that historical structural racism in the housing market created the conditions for lower-income communities and communities of color to experience higher risks for pedestrian injuries today. Structural racism, in this study, was operationalized as the grading of the geography depicted in HOLC maps from which the term redlining is derived. They found statistically significant associations between the spatial distribution of pedestrian fatalities in the past decade and HOLC grading schemas created in the 1930s.

Taylor et al. make clear that operationalizing structural racism through HOLC maps creates important limitations in the interpretation of their findings. They discuss why HOLC maps offer a limited view of structural racism as defined in Bailey et al. as "mutually reinforcing systems of housing, education, employment, earnings, benefits, credit, media, health care, and criminal justice ... [that] reinforce discriminatory beliefs, values, and the distribution of resources."6(p.1545) What is missing from this discussion is that HOLC grading schemas when aggregated at the national level can conceal how structural racism plays out within local context and local change overtime. In some places, HOLC maps may be an artifact of discriminatory thought at a specific and limited point in history, and in others they will have had a direct contributory role in the perpetuation of discrimination in the private housing market.7

LIMITATIONS OF INTERPRETATION

Hillier determined substantial inconsistencies between grades on HOLC maps and actual mortgage lending practices using the history ofthe city of Philadelphia as an example.8 Many HOLC maps are likely misrepresentations. This should prompt additional pause when interpreting this current analysis within the growing body of work that uses HOLC spatial data to represent the processes that forged racialized economic segregation and their impact on present-day injury outcomes.

Historian Robert Gioielli emphasizes that while maps can be powerful models for health communication, as sources of data they can "flatten and simplify complex stories."7 He describes the ways in which HOLC maps were just one manifestation of forms of racism that shaped the history of the US housing market. There were discriminatory policies and practices that existed before the creation of HOLC maps, and there are discriminatory policies and

practices after their creation that maintain racial and economic inequality in the marketing of private property and its ownership. Focusing on the direct statistical association between HOLC map grading and public health outcomes, he maintains, overattributes determinants of health to long-gone actors and institutions. This kind of interpretation lets society too easily "off the hook" for the ways in which structural racism plays out through contemporary actions and institutions.

Beyond interpretative limitations, Taylor et al. discuss the methodological challenge they encountered when linking historical spatial data at a census tract level to data from the US Census's American Community Survey and injury fatality registries. Noelke et al. determined that when comparing HOLC area boundaries to the present distribution ofvarious health outcomes at the census tract level, there is an array of analytic choices that can affect model performance.9 They found that while there are opportunities to optimize models, most previously used approaches perform more or less similarly in their ability to predict health outcomes. Without concerted effort, even the most optimized models will not address the influence of intermediary and intermediate forms of structural racism in housing market on pedestrian injury risks and mortality.

CONTEXT FOR INTERVENTION

Graetz and Esposito advance the work of connecting historical HOLC maps to the distribution of health outcomes through causal mediation analyses. They tested the relationship between life expectancy and racialized publicprivate investment, valuation of place, steering in the real estate market, and economic inequality.10 They found that HOLC area grades predict only a small proportion of total disparity between contemporary Black and White life expectancy and concluded that redlining should not be interpreted as a point-intime exposure but, rather, as a series of processes and relationships embedded in the distribution of proximate influences on place-based health.

Future public health injury research will ideally address more complex interpretations of the ways in which injury outcomes are impacted by structural racism in the housing market. The field would likely benefit from collaboration with historians and other social scientists who can deepen the nuance of approaches used when modeling data and when deriving meaning from model outcomes. But despite interpretive and methodologic limitations, the work by Taylor et al. is important as a new perspective on the trajectory between historical racism and inequities in transportation and traffic safety. Their results reinforce other studies indicating a statistically supported association between HOLC area grading and injury-related morbidity and mortality. Taylor et al. conclude that, in addition to prompting more research, their findings indicate that public health safety interventions should focus on modifying the underlying causes of political, social, and built environmental inequities. In other words, it may well be time to use this kind of research evidence to inform the extent of resources and infrastructure committed to traffic and transportation safety as reparations for the consequences of racism in the housing market a century ago and through the present day.11 .4JPH

CORRESPONDENCE

Correspondence should be sent to Sara F. Jacoby, Department of Family and Community Health, University ofPennsylvania School of Nursing, 418 Curie Boulevard, Philadelphia, PA 19104 (e-mail: sfjacoby@nursing.upenn.edu). Reprints can be ordered at https://ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Jacoby SF. Home Owners' Loan Corporation maps and place-based injury risks: a complex history. Am J Public Health. 2023;113(4): 356-358.

Acceptance Date: January 22, 2023.

DOI: https://doi.org/10.2105/AJPH.2023.307242

CONFLICTS OF INTEREST

The author has no conflicts of interest to disclose.

References

REFERENCES

1. Baldwin J. The White man's guilt. Ebony. August 1965:47.

2. Krieger N. Methods for the scientific study of discrimination and health: an ecosocial approach. Am J Public

Health. 2012;102(5):936-944. https:// doi.org/10.2105/AJPH.2011.300544
3. Hardeman RR, Homan PA, ChantaratT, Davis BA, Brown TH. Improving the measurement of structural racism to achieve antiracist health policy. Health Aff (Millwood). 2022;41(2):179-186. https:// doi.org/10.1377/hlthaff.2021.01489
4. Moore M, Conrick KM, Fuentes M, et al. Research on injury disparities: a scoping review. Health Equity. 2019;3(1):504-511. https://doi.org/10. 1089/heq.2019.0044
5. Nelson RK, Winling L, Marciano R, et al. Mapping Inequality. Eds. Nelson RK, Ayers EL. American Panorama. Available at: https://dsl.richmond.edu/ panorama/redlining/#loc=5/39.1/-94.58. Accessed January 2, 2023.
6. Bailey ZD, Krieger N, Agénor M, Graves J, Linos N, Bassett MT. Structural racism and health inequities in the USA: evidence and interventions. Lancet. 2017;389(10077):1453-1463. https://doi.org/ 10.1016/S0140-6736(17)30569-X
7. Gioielli R. The tyranny of the map: rethinking redlining. The Metropole. Available at: https://themetropole. blog/2022/11/03/the-tyranny-of-the-map-rethinkingredlining. Accessed January 2,2023.
8. Hillier AE. Redlining and the Home Owners' Loan Corporation. J Urban Hist. 2003;29(4):394-420. https://doi.org/10.1177/0096144203029004002
9. Noelke C, Outrich M, Baek M, et al. Connecting past to present: examining different approaches to linking historical redlining to present day health inequities. PLoS One. 2022;17(5):e0267606. https:// doi.org/10.1371/journal.pone.0267606
10. Graetz N, Esposito M. Historical redlining and contemporary racial disparities in neighborhood life expectancy. Soc Forces. 2022;soac114. https://doi.org/10.1093/sf/soac114
11. Bassett MT, Galea S. Reparations as a public health priority-a strategy for ending BlackWhite health disparities. N Engl J Med. 2020; 383(22):2101 -2103. https://doi.org/10.1056/ NEJMp2026170

DETAILS

Subject:	Censuses; Mortality; Health disparities; Segregation; Fatalities; Public health; Spatial data; History; Systemic racism; Injuries; Redlining; Life expectancy; Maps; Housing; Inequality; Geography; Minority &ethnic groups; Context; Social inequality; Ethnicity; Racial differences; Intervention; Resources; Health risks; American history; Life span; Black history; Racism; Discrimination; African Americans; Risk
Business indexing term:	Subject: Redlining
Location:	United States--US
Publication title:	American Journa l of Public Health; Washington
Volume:	113
Issue:	4
Pages:	356-358
Publication year:	2023
Publication date:	Apr 2023
Section:	OPINIONS, IDEAS, &PRACTICE

Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
ProQuest document ID:	2792105530
Document URL:	https://www.proquest.com/scholarly-journals/home-owners-loan-corporation-maps-place-based/docview/2792105530/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Apr 2023
Last updated:	2023-07-10
Database:	Public Health Database

Table of Contents

Anonymous

FULL TEXT

TVM:UNDEFINED

DETAILS

Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4

Pages:	347
Publication year:	2023
Publication date:	Apr 2023
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Table Of Contents
ProQuest document ID:	2792105302
Document URL:	https://www.proquest.com/scholarly-journals/table-contents/docview/2792105302/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Apr 2023
Last updated:	2023-04-10
Database:	Public Health Database

Improving the US and Global Pandemic Response: Lessons From Cuba

Galea, Sandro, MD, DrPH [1] ; Erwin, Paul C, MD, DrPH [2 1] School of Public Health, Boston University, Boston, MA [2] School of Public Health, University of Alabama at Birmingham

ABSTRACT (ENGLISH)

At this point, it is abundantly clear that the global response to the COVID-19 pandemic has fallen far short of what we might have hoped. More than six million people have died globally from COVID-19, with more than a million of those deaths in the United States. The United States has had more deaths by far than any other country worldwide.

Although there probably is no one country that can claim to have performed well in all dimensions of its COVID-19 response, there are some countries that did better than others on important dimensions of the response, and it behooves us to start the process of learning from these countries toward the end of improving both US and global responses in the inevitable event of future pandemics.

Such lessons can be drawn from the recently published report "Cuba's COVID-19 Vaccine Enterprise: Report From a High-Level Fact-Finding Delegation to Cuba."1 This international delegation was organized by Medical Education Cooperation with Cuba (MEDICC), a US-based nonprofit that promotes health-related dialogue and collaboration, especially between the United States and Cuba.2 Cuba had substantially lower mortality during the COVID-19 pandemic, with about 750 deaths per million, comparable with New Zealand, a country that has often been spotlighted for its handling of the pandemic. The report is an efficient summary of Cuba's success in two particular dimensions during COVID-19 that contributed to its weathering the pandemic as well as it did: Cuba's ability to develop an effective vaccine rapidly, and its ability to subsequently vaccinate a large portion (>90%) of its population quickly. Although we leave it to the reader to read the MEDICC report, we suggest that there are three key observations that emerge from the report that are helpful to bear in mind as we consider how to improve the US national pandemic response.

FULL TEXT

At this point, it is abundantly clear that the global response to the COVID-19 pandemic has fallen far short of what we might have hoped. More than six million people have died globally from COVID-19, with more than a million of those deaths in the United States. The United States has had more deaths by far than any other country worldwide. Although there probably is no one country that can claim to have performed well in all dimensions of its COVID-19 response, there are some countries that did better than others on important dimensions of the response, and it behooves us to start the process of learning from these countries toward the end of improving both US and global responses in the inevitable event of future pandemics.

Such lessons can be drawn from the recently published report "Cuba's COVID-19 Vaccine Enterprise: Report From a High-Level Fact-Finding Delegation to Cuba."1 This international delegation was organized by Medical Education Cooperation with Cuba (MEDICC), a US-based nonprofit that promotes health-related dialogue and collaboration, especially between the United States and Cuba.2 Cuba had substantially lower mortality during the COVID-19 pandemic, with about 750 deaths per million, comparable with New Zealand, a country that has often been spotlighted for its handling of the pandemic. The report is an efficient summary of Cuba's success in two particular dimensions during COVID-19 that contributed to its weathering the pandemic as well as it did: Cuba's ability to develop an effective vaccine rapidly, and its ability to subsequently vaccinate a large portion (>90%) of its population quickly. Although we leave it to the reader to read the MEDICC report, we suggest that there are three key observations that emerge from the report that are helpful to bear in mind as we consider how to improve the US national pandemic response.

First, much of the success ofvaccine development and vaccine delivery built on decades of investment in both areas. Rapid vaccine development was possible because Cuba has been investing in its biotech sector for 40 years. This has had previous successes (e.g., vaccines against Haemophilus influenzae type b and serogroup B meningococcus) on which the country was able to build its COVID-19 vaccine development. This history of prior investment in biomedical technology is not substantially different from such investment in the United States, and both rapidly yielded effective vaccines. However, Cuba has also invested in a primary care system that provides the infrastructure for delivery of health care on which vaccination efforts were built. We have long known that access to a primary care provider is one of the central determinants of vaccination; that access, long built into the Cuban health care system, has become invaluable for the delivery of vaccines. Moreover, Cuba's primary care system served as the vehicle for its COVID vaccine clinical trials, allowing for countrywide implementation, with results immediately available to the Ministerio de Salud Pública (Ministry of Public Health) for subsequent scaling up and widescale deployment.3

Second, Cuba's successes were dependent on national central investment and coordination both ofvaccine

development and delivery efforts. This is in stark contrast with US efforts, which were characterized by deeply fragmented systems, particularly when it came to vaccine delivery. Cuba here clearly has the advantage of being a much smaller country than the United States. However, US states that are smaller than Cuba suffered from fragmentation of service delivery, showing that size was not the only factor leading to the failure of the US COVID-19 response. Rather, a lesson from the Cuban experience is that it is difficult to deal with an epidemic without a national coordinated response that applies standards across the country in a manner that is data-driven and evidence-informed. Cuba was able to do that in part through a history of building a centralized health care infrastructure that provided the pillars on which a nationally coordinated response could be built. That should offer much encouragement for a careful consideration of comparable centralized efforts to deal with future epidemic responses in the United States. In retrospect, one of the shortcomings of the initial US COVID-19 vaccine delivery was the failure to include primary health care providers; because of the trust people have in them, their involvement from the outset might have prevented much of the subsequent vaccine hesitancy we have experienced.

Third, the ongoing economic and social isolation of Cuba because of US-imposed restrictions hindered both Cuba's and the world's efforts to respond to the COVID-19 pandemic. Cuba was developing approaches, including vaccines, that could have helped global efforts to vaccinate as large a proportion of the world's population as possible, as quickly as possible. These efforts were available principally to countries with preexisting ties to Cuba and offered little help to the broader global community. Because US restrictions on Cuba extend to other countries, those without preexisting ties to Cuba could not benefit from either the Cuban vaccines or boosters. Similarly, the isolation of the Cuban scientific community resulted in fewer articles published documenting the successes in Cuba, therefore limiting the lessons learned and the generalizability of the Cuban experience. Conversely, as has often been the case because of its economic isolation, Cuba was inventing approaches to dealing with COVID-19 out of whole cloth, not benefiting much from approaches-including vaccine technology-that were gaining rapid prominence in the United States and other countries. In the context of a pandemic that does not respect artificial human-made borders, the persistence of human-made limits on commerce and knowledge hampers our ability as a global community to adopt the best possible strategies, incurring loss to human life in the process.

It is always important when discussing medical and public health successes to ask, at what cost was success achieved? This is particularly the case in a country like Cuba, whose communist political system has been opposed by the United States for more than 60 years. And yet, the development of effective vaccine and vaccination efforts has little to do with political systems and should not diminish our interest in learning from Cuban approaches, or our commitment to helping Cuba build a healthier country, grounded in human rights. One might hope that a global pandemic can be the catalyst for transcending both borders and long entrenched political perspectives that can hold back health both in Cuba and in the United States. „4JPH

CORRESPONDENCE

Correspondence should be sent to PaulC. Erwin, MD, DrPH, Dean and Professor, Schoolof Public Health, the University of Alabama at Birmingham, 1665 University Blvd, RPHB 140B, Birmingham, AL 35294-0022 (e-mail: perwin@uab.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

FullCitation: Galea S, Erwin PC. Improving the US and global pandemic response: lessons from Cuba. Am J Public Health. 2023;113(4):361 -362. Acceptance Date: January 9, 2023.

DOI: https://doi.org/10.2105/AJPH.2023.307229

CONTRIBUTORS

S. Galea completed an initialdraft. Both authors participated fully in subsequent writing, editing, and revising, and approved the final version.

CONFLICTS OF INTEREST

PaulC. Erwin is a board member of the Medical Education Cooperation With Cuba (MEDICC) but was not involved in the work of the delegation as described in this editorial.

References

REFERENCES
1. Medical Education Cooperation With Cuba. Cuba's COVID-19 vaccine enterprise: report from a high-level fact-finding delegation to Cuba. 2022. Available at: http://mediccreview.org/executive-summary-insightsfrom-cubas-covid-19-vaccine-enterprise. Accessed January 4, 2023.
2. Medical Education Cooperation With Cuba. Available at: http://medicc.org/ns. Accessed January 4, 2023.
3. Reed G. Putting science to work: Cuba's COVID-19 pandemic experience. 2022. Available at: http://mediccreview.org/wp-content/uploads/2022/10/ MR2022-Vol24-N3%E2%80%934.pdf. Accessed January 4, 2023.

DETAILS

Subject:	Pandemics; Clinical trials; COVID-19 vaccines; Medical education; Public health; Vaccines; Success; COVID-19; Immunization; Correspondence; Cooperation; Primary care; Social interactions; Coronaviruses; Political systems; International cooperation; Health education; Fatalities
Business indexing term:	Industry: 81394 : Political Organizations
Location:	United States--US; Cuba
Classification:	81394: Political Organizations
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	361-362
Publication year:	2023
Publication date:	Apr 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English

Codify Abortion Rights and Access by Way of State Legislatures

Robinson, Deneen, BSW [1] ; Simmons, Megan, JD, MPA [1] [1] National Birth Equity Collaborative, Washington, DC

ABSTRACT (ENGLISH)

On June 24, 2022, the US Supreme Court overturned Roe v Wade. The ruling in Dobbs vJackson Women's Health Organization (Dobbs) essentially left decisions on the legality and accessibility of abortion care in the United States to state legislatures. Furthermore, the holding left to the discretion of states the permissibility ofterminating an unintended pregnancy in instances of rape or incest.1

Although Roe v Wade was often lauded as having legalized abortion, disparities based on race and socioeconomic status have been prevalent since it was passed in 1973. Shortly after the ruling, in 1977, antichoice senator HenryJ. Hyde (R, IL) proposed that no federal funds go toward supporting abortion access. The Hyde Amendment barred the use of federal Medicaid funds for abortion except when the life of the person would be endangered by carrying the pregnancy to term. This began the long fight to upend abortion access.

Ironically, states that criminalize and surveil abortion the most stringently, primarily the most religious states, are among the worst states for maternal and infant health outcomes2; they often fail to implement adequate and sustainable Medicaid and children's health insurance programs to support the births that have been forced on the pregnant people of these states. People of color, especially Black women, have been disparately affected by this rollback of bodily autonomy couched in the notion of care and concern for the unborn.

FULL TEXT

On June 24, 2022, the US Supreme Court overturned Roe v Wade. The ruling in Dobbs vJackson Women's Health Organization (Dobbs) essentially left decisions on the legality and accessibility of abortion care in the United States to state legislatures. Furthermore, the holding left to the discretion of states the permissibility ofterminating an unintended pregnancy in instances of rape or incest.1

Although Roe v Wade was often lauded as having legalized abortion, disparities based on race and socioeconomic

status have been prevalent since it was passed in 1973. Shortly after the ruling, in 1977, antichoice senator HenryJ. Hyde (R, IL) proposed that no federal funds go toward supporting abortion access. The Hyde Amendment barred the use of federal Medicaid funds for abortion except when the life of the person would be endangered by carrying the pregnancy to term. This began the long fight to upend abortion access.

Ironically, states that criminalize and surveil abortion the most stringently, primarily the most religious states, are among the worst states for maternal and infant health outcomes2; they often fail to implement adequate and sustainable Medicaid and children's health insurance programs to support the births that have been forced on the pregnant people of these states. People of color, especially Black women, have been disparately affected by this rollback of bodily autonomy couched in the notion of care and concern for the unborn.

CONSEQUENCES

Strains on abortion care facilities were seen almost immediately in states that abut states with some of the most restrictive abortion laws. An influx of women seeking services from neighboring communities increased wait times and put additional pressure on services that were often already sparse. Heartbeat laws, which prohibit an abortion after cardiac activity is detected (which anti-abortion advocates describe as a heartbeat), have complicated medical care, as doctors now hesitate to provide care that was at one time routine and at their medical discretion.

Representative Neal Collins (R, SC), during a public hearing on legislation to ban most abortions, decided not to vote.3 His concern was prompted by the case of a 19-year-old woman who was 15 weeks pregnant when her water broke. A doctor could not legally extract the fetus because South Carolina had enacted the Fetal Heartbeat Bill (which Representative Collins had voted for). Representative Collins was worried because the doctor told him the young woman had a "50 percent chance of losing her uterus, and there was a 10 percent chance she would develop sepsis and die."3

The ramifications of abortion restrictions are particularly problematic in the South, where many states with the most restrictive laws are located and border each other. These facts make it difficult to obtain abortion care because an individual has to travel through more than one state to reach a medical facility. This is particularly a hardship for Black women, as 56% of Black people live in the South.4 Furthermore, Black women are disparately affected by wage and economic inequality, which impedes access to child care, transportation, leave from work, and out-of-town accommodations. Discussions about self-managed abortions have become more prevalent and are a realistic option when reproductive rights have been inhibited.

Financial constraints account for most decisions to terminate a pregnancy.5 In an amicus brief filed on behalf of the respondents in Dobbs, 154 economists said, "A substantial body of welldeveloped and credible research" shows that abortion legalization and access has had a significant impact on women's educational attainment and wages, "with impacts most strongly felt by Black women."6 Restrictions on bodily autonomy subjugate women and solidify them as a permanent economic underclass. Although this may align with the religious sensibilities of those in power in our country, it does not support the desires of women to be full citizens experiencing full bodily autonomy.

The legal Inconsistencies from making abortion a state Issue have made It more cumbersome to educate constituents on accessibility options. Navigating this rollback of Individual rights requires advocates to simultaneously know about developing solutions that are actionable, such as the creation of mobile abortion clinics on state borders and fundraising for abortions services; facilitate outreach; and demand statutes that are auxiliaries to abortion, such as telemedicine options (which are particularly beneficial In rural communities), and the revocation of laws that encourage medical surveillance and mandates for physicians to report legally obtained abortions.

STRATEGIES TO PROTECT WOMEN AND CHILDREN

On January 5, 2023, the South Carolina Supreme Court held that the state constitution provides the right to privacy, which Includes the right to obtain an abortion.4 There have been approximately 19 lawsuits that have been filed In other states to codify the right to abortion care. Given this Intrusion and revocation of rights, the most optimal strategic plan Is for state legislatures to codify abortion rights and access. The laws' language should be clear and concise to ensure that It Is Interpreted to protect bodily autonomy without overreach and Interruption from the government. Concurrently, stakeholders should continue to work toward policies that support access to the full range

of reproductive care for all people with the capacity to become pregnant, Including broadband accessibility; workplace protections for leave, pay equity, and suitable medical benefits; and regulations that support equitable maternal health and education. >4JPH

CORRESPONDENCE
Correspondence should be sent to Megan Simmons, Policy Director, National Birth Equity Collaborative, 1301 Connecticut Ave NW, Suite 200, Washington, DC 20026 (e-mail: mrsimmonsjd@gmail.com). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION
Full Citation: Robinson D, Simmons M. Codify abortion rights and access byway of state legislatures. Am J Public Health. 2023;113(4):386-387. Acceptance Date:January 23, 2023.
DOI: https://doi.org/10.2105/AJPH.2023.307238

CONTRIBUTORS
Both authors drafted and revised the article.

CONFLICTS OF INTEREST
The authors have no known conflicts of interest.

References

REFERENCES

1. Dobbs v. Jackson Women's Health Organization, docket no. 19-1392 (June 24, 2022). Available at: https://www.supremecourt.gov/opinions/21pdf/ 19-1392_6j37.pdf. Accessed February 1, 2023.
2. Landi H. In states with abortion bans, maternal and infant death rates are significantly higher, study finds. December 14, 2022. Available at: abortion-bans-maternal-and-infant-death-rates-aredramatically-higher-study-finds. Accessed February
3. Patterson C. S.C. rep. who voted for abortion restriction shares emotional account ofteen affected: "that weighs on me." August 23, 2022. Available at: https://people.com/health/southcarolina-rep-who-voted-for-abortion-restrictionshares-emotional-account-of-teen-affected. Accessed February 1, 2023.
4. Zernike K. South Carolina constitution includes abortion right, state supreme court rules. New York Times. January 5, 2023. Available at: https:// www.nytimes.com/2023/01/05/us/south-carolinaabortion-supreme-court.html. Accessed February 1, 2023.
5. Foster DG, Biggs MA, Ralph L, Gerdts C, Roberts S, Glymour MM. Socioeconomic outcomes ofwomen who receive and women who are denied wanted abortions in the United States. Am J Public Health. 2018;108(3):407-413. https://doi.org/10.2105/ AJPH.2017.304247
6. Brief of Amici Curiae Economists in Support of Respondents. Dobbs v. Jackson Women's Health Organization, docket no. 19-1392 (September 20, 2021). Available at: https://www.supremecourt. gov/DocketPDF/19/19-1392/193084/2021092 0175559884_19-1392bsacEconomists.pdf. Accessed February 1, 2023.

DETAILS

Subject:	Bodily integrity; Socioeconomic factors; Womens health; Medicaid; Pregnancy; Legislatures; Black people; Public health; Abortion; Federal court decisions; Socioeconomic status; Supreme courts; Maternal and infant welfare; Childrens health; Codification; State legislatures; Infants; Incest; Access; Government programs; Funds; Reproductive rights; Health care industry; Rape; Socioeconomics; Decriminalization; Health insurance; Black women; Sexual assault
Business indexing term:	Subject: Medicaid; Industry: 92112 : Legislative Bodies
Location:	South Carolina; United States--US

Classification:	92112: Legislative Bodies
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	386-387
Publication year:	2023
Publication date:	Apr 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Commentary
ProQuest document ID:	2792104153
Document URL:	https://www.proquest.com/scholarly-journals/codify-abortion-rights-access-way-state/docview/2792104153/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Apr 2023
Last updated:	2023-09-27
Database:	Public Health Database

Identifying COVID-19 Vaccine Deserts and Ways to Reduce Them: A Digital Tool to Support Public Health Decision-Making

Weintraub, Rebecca L, MD; Miller, Kate, PhD, MPH; Rader, Benjamin, MPH; Rosenberg, Julie, MPH; Srinath, Shreyas, MS; Woodbury, Samuel R, BA; Schultheiss, Marinanicole D, MPH; Kansal, Mansi, MBA; Vispute, Swapnil, MS; Serghiou, Stylianos, MD, PhD; Flores, Gerardo, BA; Kumok, Akim, MS; Shekel, Tomer, MBA; Gabrilovich, Evgeniy, PhD; Ahmad, Iman, BS; Chiang, Molly E; Brownstein, John S, PhD

ABSTRACT (ENGLISH)

A private-academic partnership built the Vaccine Equity Planner (VEP) to help decision-makers improve geographic access to COVID-19 vaccinations across the United States by identifying vaccine deserts and facilities that could fill those deserts. The VEP presented complex, updated data in an intuitive form during a rapidly changing pandemic situation. The persistence of vaccine deserts in every state as COVID-19 booster recommendations develop suggests that vaccine delivery can be improved. Underresourced public health systems benefit from tools providing real-time, accurate, actionable data. (Am J Public Health. 2023; 113(4):363-367. https://doi.org/10.2105/AJPH.2022.307198)

FULL TEXT

Headnote

A private-academic partnership built the Vaccine Equity Planner (VEP) to help decision-makers improve geographic access to COVID-19 vaccinations across the United States by identifying vaccine deserts and facilities that could fill those deserts. The VEP presented complex, updated data in an intuitive form during a rapidly changing pandemic situation. The persistence of vaccine deserts in every state as COVID-19 booster recommendations develop suggests that vaccine delivery can be improved. Underresourced public health systems benefit from tools providing real-time, accurate, actionable data. (Am J Public Health. 2023; 113(4):363-367. https://doi.org/10.2105/AJPH.2022.307198)

Public health leaders can make better, more equitable decisions when they can clearly see and understand the problems. Being presented with potential solutions based on evidence further supports their decisionmaking and can aid in supporting health equity.

INTERVENTION AND IMPLEMENTATION

We built the Vaccine Equity Planner (VEP) in spring 2021. We intended the VEP to serve US public health planners as an open-access online tool with four main functions:

1.Identify COVID-19 vaccine deserts for both adults and children;

2.Identify facilities within vaccine deserts that could serve as vaccination sites;

3. Focus on specific geographic areas, such as those with high social vulnerability; and

4. Estimate the size of the unvaccinated population in each county as well as the population's intention to be vaccinated.

We plotted all active COVID-19 vaccination site locations, calculating a catchment area around each site based on the amount of time to reach that site by different methods of transportation (walking, public transit, driving). We defined "vaccine deserts" as areas that did not fall within the catchment area of any in-state vaccination site.1 To identify potential vaccination sites in the deserts, we used publicly available, national, updated data sets of facilities that people would "very likely" trust to get vaccinated: doctors' offices, pharmacies, community health clinics, schools, grocery stores, and churches or religious centers. We repeated this process using only vaccination sites offering the Pfizer age 12 years and up vaccine and the Pfizer age 5-11 years vaccine (the only vaccines available under emergency use authorization for the pediatric population at the time) to create pediatric vaccine deserts. As vaccines were approved for different age demographics, we added additional displays to the tool.

We overlaid our map with data from the Social Vulnerability Index and data on intention to be vaccinated from the COVID-19 Trends and Impact Survey (for full data sources and methods, see Appendix A, available as a supplement to the online version of this article at http://www.ajph.org). We sought feedback from potential users and refined the design and tool accordingly.

We directly disseminated the VEP by e-mail to all state- and jurisdiction-level health commissioners with publicly available contact information and shared the tool on social media. Several leaders and the Association of Immunization Managers responded to our communications with requests for training on the tool, specific data, updates to the tool, or other queries, which we addressed.

PLACE, TIME, AND PERSONS

Our target user was a state or county public health planner in the United States who wanted to expand geographic access to COVID-19 vaccination in their jurisdiction. We refreshed data on vaccination sites, vaccine deserts, and potential vaccination sites weekly starting in June 2021 as demand for vaccination fell.

PURPOSE

Vaccines reduce hospitalization and the risk of escape variants, supporting pandemic response.2 The World Health Organization (WHO) has classified vaccine hesitancy into "three Cs": people may lack confidence in the effectiveness or safety of the vaccine, may feel complacent about the risk and severity of the disease, or may not have convenient access to the vaccine.3 In the United States, these three Cs vary, resulting in inequitable uptake of vaccines and, in turn, differential disease burden of COVID-19.4

One common method for understanding convenience or geographic access to services is the "desert," an area devoid of the service in question. Unfortunately, in spring 2021, few US public health departments had the bandwidth available to collect and analyze data from disparate sources to identify COVID-19 deserts and potential ways to ameliorate them.

To provide planners with the necessary data for increasing equitable access to COVID-19 vaccines, members from Ariadne Labs, the Computational Epidemiology Lab at Boston Children's Hospital, and Google collaborated to gather, curate, and display data from various public sources. The aim was to identify COVID-19 deserts and potential vaccination sites within those deserts as well as share the population's social vulnerability and intentions to be vaccinated. The goal was to enable better-informed public health planning and decision-making.

EVALUATION AND ADVERSE EFFECTS

We launched the VEP on May 24, 2021. By September 20,2021, it had roughly 7400 unique page views originating within the United States. Nearly 70% of the incoming Web traffic originated from direct entry of the URL to a browser, suggesting that spread occurred through our communication campaign and word of mouth.

Vaccine Deserts

Vaccine deserts existed in every US state, but the extent and location of those deserts depended on the chosen transportation mode and travel time. In general, vaccine deserts were more expansive when the transportation mode was public transit or walking. ally, pediatric deserts tended to be more expansive than adult vaccine deserts because not all vaccination sites offered the Pfizer age 5-11 years vaccine. Many vaccine deserts had one or more potential vaccination sites, including primary care sites, schools, and retail sites (Figure 1, county anonymized).

Potential Vaccination Sites Located in Deserts

Over 13 weeks with available data, the VEP identified approximately 21 000 potential vaccination sites across the United States. Most of these sites were places of worship (10 000), schools (7000-8000), or retail sites (1000). The smallest categories-with fewerthan 1000 potential sites each-included health-related facilities that were not already providing COVID-19 vaccination: primary care sites, federally qualified health centers, and pharmacies (Figure 2).

SUSTAINABILITY

There is great potential for intersectoral partnerships to support public health leaders by leveraging data, analytic, communication, and technological skills to generate evidence to support decisionmaking. The VEP continues to support the Association of Immunization Managers in increasing vaccine access across its jurisdictions.

PUBLIC HEALTH SIGNIFICANCE

The VEP revealed vaccine deserts in every US state. In general, it showed that vaccine deserts were more common in rural areas, and many potential vaccination sites within these deserts were schools; however, there are also many untapped medical clinics.

A successful response to the COVID-19 pandemic is supported by widespread, equitable access to the COVID-19 vaccines. Geographic access is necessary to the WHO's convenience factor and is a potentially powerful lever for increasing equity of access. Surveys have found that 15% of unvaccinated people are concerned about the difficulty of traveling to a vaccination site, and 20% are concerned about the need to take time off work, which would be exacerbated by long travel times.4 Additionally, geographic access can support the confidence of unvaccinated people: 53% of unvaccinated people report that they were more likely to accept the vaccine from their own trusted health care provider, such as a primary health care site, family medicine physician, or pediatrician, compared with other types of sites.5 Improving local access leads to local reporting from friends and neighbors communicating why they got vaccinated and boosted, and the unvaccinated are influenced by their peers.6

In the rapid deployment of COVID-19 vaccines in the United States, the barriers to equitable distribution were numerous and closely related to larger structural barriers in public health delivery.7 Planners had to consider a population's confidence and complacency regarding vaccines, as well as to promote convenient access, which would support equitable distribution to the most vulnerable.3,8 Meeting these goals required a certain bandwidth to analyze data, understand needs, and plan accordingly. After months of battling the pandemic, not all public health departments in the United States had the time or resources to do so. For our part, we will consider applying what we have learned from building the VEP to display other clinical and service deserts. The VEP was built through a partnership between academia and the private sector, and further investment is needed to promote such collaboration to build tools to support data-driven public health decision-making. ÂfPU

ABOUT THE AUTHORS

At the time of this work, Rebecca L. Weintraub, Kate Miller, Julie Rosenberg, Shreyas Srinath, Samuel R. Woodbury, and Iman Ahmad were with Ariadne Labs, Boston, MA. Benjamin Rader, Marinanicole D. Schultheiss, Molly E. Chiang, and John S. Brownstein were with Computational Epidemiology Lab, Boston Children's Hospital, Boston. Mansi Kansal, Swapnil Vispute, Stylianos Serghiou, Gerardo Flores, Akim Kumok, Tomer Shekel, and Evgeniy Gabrilovich were with Google Inc, Mountain View, CA.

CORRESPONDENCE

Correspondence should be sent to Rebecca L. Weintraub, 401 Park Dr, 3rd Fl, Boston, MA 02215 (e-mail: rlweintraub@bwh.harvard.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

FullCitation: Weintraub RL, Miller K, Rader B, et al. Identifying COVID-19 vaccine deserts and ways to reduce them: a digitaltoolto support public health decision-making. AmJ Public Health. 2023;113(4):363-367.

Acceptance Date: December 3, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307198

CONTRIBUTORS

Study conceptualization and methodology activities were conducted by R. L. Weintraub, K. Miller, B. Rader, J. Rosenberg, M. Schultheiss, M. Kansal, S. Vispute, S. Serghiou, T. Shekel, E. Gabrilovich, I. Ahmad, M. E. Chiang, and J. S. Brownstein. Data curation, formalanalysis, investigation, provision of resources, and software activities were conducted by R. L. Weintraub, K. Miller, B. Rader, J. Rosenberg, S. Srinath, S. Woodbury, M. Kansal, S. Vispute, S. Serghiou, G. Flores, A. Kumok, I. Ahmad, M. E. Chiang, and J. S. Brownstein. Funding acquisition and supervision activities were conducted by R. L. Weintraub, K. Miller, B. Rader, J. Rosenberg, M. Kansal, E. Gabrilovich, andJ.S. Brownstein. Visualization activities were conducted by R. L. Weintraub, K. Miller, J. Rosenberg, S. Srinath, S. Woodbury, and S. Vispute. Project administration activities were conducted by R. L. Weintraub,J. Rosenberg, M. Schultheiss, M. Kansal, T. Shekel, and I. Ahmad. R. L. Weintraub, B. Rader,J. Rosenberg, M. Schultheiss, and E. Gabrilovich wrote the original draft. All authors reviewed and approved the final draft.

ACKNOWLEDGMENTS

The Ariadne Labs COVID-19 Vaccine Delivery team was funded in part by The Commonwealth Fund. The ComputationalEpidemiology Lab at Boston Children's Hospitalwas funded in part by the Centers for Disease Controland Prevention, Facebook, and The Rockefeller Foundation. HealthLandscape provided some of the data used.
Thank you to all reviewers and public health leaders who provided feedback.
CONFLICTS OF INTEREST
The authors have no conflicts of interest to disclose.
HUMAN PARTICIPANT PROTECTION
No human participants were involved in the conduct of this research. Therefore, this study has not been subject to review by an institutional review board.

References

REFERENCES

1. Rader B, Astley CM, Sewalk K, et al. Spatial accessibility modeling of vaccine deserts as barriers to controlling SARS-CoV-2. medRxiv. Published online June 12, 2021. https://doi.org/10.1 101/2021.06.09. 21252858
2. Read AF, Baigent SJ, Powers C, et al. Imperfect vaccination can enhance the transmission of highly virulent pathogens. PLoS Biol. 2015;13(7):e1002198. https://doi.org/10.1371/joumal.pbio.1002198
3. SAGE Working Group. Report of the SAGE Working Group on Vaccine Hesitancy. Geneva, Switzerland: World Health Organization; 2014.
4. Kaiser Family Foundation. Latest data on COVID-19 vaccinations by race/ethnicity. Available at: https:// data-on-covid-19-vaccinations-race-ethnicity. Accessed September 23, 2021.
5. American COVID-19 Poll. Available at: https://covidvaccinepoll.com/app/aarc/covid-19vaccine-messaging/#. Accessed October 8, 2021.
6. Schneider KE, Dayton L, Rouhani S, Latkin CA. Implications ofattitudes and beliefs about COVID-19 vaccines for vaccination campaigns in the United States: a latent class analysis. Prev Med Rep. 2021; 24:101584. https://doi.org/10.1016/j.pmedr.2021. 101584
7. Shen AK, Hughes Iv R, DeWald E, Rosenbaum S, Pisani A, Orenstein W. Ensuring equitable access to COVID-19 vaccines in the US: current system challenges and opportunities. Health Aff (Millwood). 2021;40(1):62-69. https://doi.org/10.1377/hlthaff. 2020.01554
8. Kaiser Family Foundation. KFF COVID-19 vaccine monitor: experiences with vaccine access and information needs. Available at: https://www.kff.org/ coronavirus-covid-19/poll-finding/kff-covid-19vaccine-monitor-experiences-vaccine-accessinformation-needs. Accessed October 8, 2021.

DETAILS

Subject:	Pandemics; Population; COVID-19 vaccines; Public transportation; Public health; COVID-19; Vaccines; Epidemiology; Immunization; Deserts; Decision making; Pediatrics; Pharmacy; Primary care; Jurisdiction; Children &youth; Coronaviruses
Business indexing term:	Corporation: Pfizer Inc; Industry: 92312 : Administration of Public Health Programs
Location:	United States--US
Company / organization:	Name: Childrens Hospital-Boston MA; NAICS: 622310; Name: Pfizer Inc; NAICS: 325412, 339113
Classification:	92312: Administration of Public Health Programs

Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	363-367
Publication year:	2023
Publication date:	Apr 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
DOI:	https://doi.org/10.2105/AJPH.2022.307198
ProQuest document ID:	2792104137
Document URL:	https://www.proquest.com/scholarly-journals/identifying-covid-19-vaccine-deserts-ways-reduce/docview/2792104137/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Apr 2023
Last updated:	2023-03-29
Database:	Public Health Database

Statewide Policy to Increase Provision of Take-Home Naloxone at Emergency Department Visits for Opioid Overdose, Rhode Island, 2018–2019

Griffith, Jennifer, BA; Yorlets, Rachel R, MPH; Chambers, Laura C, PhD, MPH; Davis, Corey S, MSPH; Wentz, Anna, PhD, MPH; Beaudoin, Francesca L, MD, PhD; Baird, Janette, PhD; Samuels, Elizabeth A, MD, MPH, MHS

ABSTRACT (ENGLISH)

In 2017, Rhode Island responded to rising overdose deaths by establishing statewide emergency department (ED) treatment standards for opioid overdose and opioid use disorder. One requirement of the policy is that providers prescribe or provide take-home naloxone to anyone presenting to EDs with opioid overdose. Among adults presenting to EDs with opioid overdose from 2018 to 2019, approximately half received take-home naloxone. Receipt of naloxone was associated with administration of naloxone before ED presentation, ED policy certification level, and regional overdose frequency. (Am J Public Health. 2023;113(4):372-377. https://doi.org/10.2105/AJPH.2022.307213)

FULL TEXT

Headnote

In 2017, Rhode Island responded to rising overdose deaths by establishing statewide emergency department (ED) treatment standards for opioid overdose and opioid use disorder. One requirement of the policy is that providers prescribe or provide take-home naloxone to anyone presenting to EDs with opioid overdose. Among adults presenting to EDs with opioid overdose from 2018 to 2019, approximately half received take-home naloxone. Receipt of naloxone was associated with administration of naloxone before ED presentation, ED policy certification level, and regional overdose frequency. (Am J Public Health. 2023;113(4):372-377. https://doi.org/10.2105/AJPH.2022.307213)

In 2021, more than 107 000 people died of an overdose in the United States, a 15% increase from 2020.1 With rising overdose deaths, hospitals and emergency departments (EDs) have expanded treatment and harmreduction services for patients with opioid use disorder (OUD), including distribution ofthe opioid antagonist naloxone. As a primary treatment site for opioid overdose and OUD, EDs are optimal settings for naloxone distribution and other harm-reduction services.2

INTERVENTION AND IMPLEMENTATION

To help standardize and improve ED postoverdose and OUD care, in 2017, the Rhode Island Department of Health (RIDOH) and the Rhode Island Department of Behavioral Healthcare, Developmental Disabilities, and Hospitals established statewide treatment standards for opioid overdose and OUD in EDs and hospitals (known as the "Levels of Care" policy).3 The policy outlines three levels of certification based on facilities' opioid-related care, with level 1 designating provision ofthe most comprehensive care and level 3the minimum treatment standard, and requires all EDs to offer a take-home naloxone kit or naloxone prescription to patients with suspected opioid overdose.3,4 Previously, ED provision of take-home naloxone was at the discretion ofthe provider.

RIDOH provided technical assistance to all EDs in Rhode Island to develop and implement protocols in alignment with state policy. This included site visits, review of existing protocols, training of staff, development of patient education materials, and additional implementation support as needed.5 In the 21 months following policy implementation, 82% of ED patients treated for an opioid overdose were offered takehome naloxone, but less than half received it.6 While barriers and facilitators to overall policy implementation have been described previously,5 patient- and facility-level factors influencing provision oftake-home naloxone are unknown.

PLACE, TIME, AND PERSONS

Rhode Island has one ofthe highest rates of overdose death in the United States, ranking 13th in 2020.7 In 2020, the age-adjusted rate of overdose death was 38.2 deaths per 100 000 residents in Rhode Island (vs 28.3 deaths per

100 000 residents nationally).7,8
The ED treatment standards policy was released in March 2017, and ED naloxone distribution protocols were implemented from March 2017 to June 2018 across all Rhode Island EDs. We evaluated ED distribution of take-home naloxone from nine Rhode Island acute care hospital EDs from January 1,2018, to December 31,2019, following policy implementation. Opioid overdose visits to psychiatric and obstetric/gynecologic specialty hospitals were rare and excluded from this analysis.
Our study included all adult patients treated and discharged from a Rhode Island ED after a suspected opioid overdose. Data were obtained from a RIDOH overdose surveillance system to which all Rhode Island EDs are mandated to report suspected opioid overdoses.9 We excluded patients who were minors, who were incarcerated, who died, who were admitted to the hospital, who left the ED against medical advice, who left without being seen, or who were transferred to another facility.
PURPOSE
The statewide treatment standards aim to improve postoverdose ED care to reduce overdose deaths. Providing take-home naloxone is one component of this strategy. Identifying factors associated with provision oftake-home naloxone to ED patients treated for a suspected opioid overdose is essential for improving postoverdose naloxone access.3
EVALUATION AND ADVERSE EFFECTS
We aimed to identify patient- and facility-level factors associated with provision oftake-home naloxone for ED patients treated after an opioid overdose. From January 1,2018, to December 31,2019,1900 people presented to EDs in Rhode Island for opioid overdose at 2009 unique visits that met inclusion criteria. At more than half of these visits (58.2%; n = 1170) take-home naloxone was provided at discharge, either directly (1110 kits distributed from the ED) or via prescription (60 naloxone prescriptions sent to a pharmacy; Table 1). The primary formulation distributed by hospitals was intranasal.
Among the 1170 visits where naloxone was distributed from the ED, most patients were White (66.8%; n = 782), male (68.8%; n = 805), and aged 25 to 34 years (39.1 %; n = 458), as originally recorded in the patient's electronic health record. Among visits where naloxone was not provided (839 visits), more than half declined (54.0%; n = 453), more than a quarter were not offered take-home naloxone (39.1 %; n = 328), and a minority reported already having naloxone (6.9%; n 5 58).
There were no meaningful differences in patient demographics between different categories of naloxone receipt, and most of our analytic sample was White, male, and young. These graphics the overall composition of people treated in the ED for an opioid overdose.10 Individuals who died from an opioid overdose had similar race and sex demographic composition but were slightly older compared with the study population (20%-23% of opioid overdose deaths in 2018 and 2019 were among people aged 25 to 34 years).11,12 Potential explanations for the relatively little diversity found in our analytic sample include limitations of race data recorded in electronic health records, that Rhode Island is a predominantly White state, and potential selection bias in our study because we only included people who were treated in an ED following their opioid overdose.
We fit a multivariable log-binomial regression model specified a priori to estimate the association between patient- and facility-level characteristics and provision oftake-home naloxone. Regional frequency of opioid overdose, ED certification level, and administration of naloxone before ED presentation were associated with receipt oftake-home naloxone in the ED; these associations were conditional on patient sex, age, race, and whether the patient had a previous ED visit for opioid overdose within the past 12 months (Table 2).
Specifically, patients treated at EDs with a regional frequency of more than 200 emergency medical services (EMS) calls for opioid overdose annually were 1.21 times more likely to receive takehome naloxone in the ED than those treated at EDs with a regional frequency of fewer than 100 opioid overdose EMS calls (95% confidence interval [CI] 5 1.10,1.33). Patients treated at level-1 EDs were 1.18 times more likely to receive take-home naloxone than those at level-3 EDs (95% CI 5 1.05, 1.33). Finally, patients who were administered naloxone just before ED arrival were 1.29 times more likely to receive take-home naloxone in the ED than those who were not administered naloxone

before ED presentation (95% CI 5 1.14,1.46).

There were no known adverse effects or unintended consequences attributable to implementation of the policy or distribution oftake-home naloxone in Rhode Island EDs. However, there has not yet been a comprehensive evaluation of ED take-home naloxone receipt to measure its use or other individual outcomes. We identified factors associated with receipt oftake-home naloxone at ED visits for opioid overdose in the context of a statewide mandate to offer naloxone to all opioid overdose patients at discharge. This evaluation suggests that additional implementation and training efforts are needed in EDs with a lower certification level (level 3) and in areas that receive fewer than 100 EMS calls for opioid overdose annually. In areas where overdose is treated less frequently, more education and risk awareness are needed among both providers and patients to increase naloxone receipt. Education should also emphasize identifying people at risk for overdose, which includes those who do not receive naloxone before ED arrival.

SUSTAINABILITY

Naloxone for ED distribution is currently purchased by individual hospitals and is not reimbursable, which raises a sustainability concern given rising costs of naloxone13 and insufficient access to naloxone in the community.14 Strategies to improve supply, reduce costs of naloxone, and establish insurance reimbursements for naloxone distribution are needed.

PUBLIC HEALTH SIGNIFICANCE

Rhode Island's statewide treatment standards for postoverdose care in EDs aim to improve naloxone access among people at high risk of opioid overdose, with the goal of preventing opioid overdoserelated deaths. There are opportunities to improve ED naloxone provision in areas with lower overdose incidence and in EDs with less-comprehensive overdose treatment protocols. Establishing and maintaining a high level of ED naloxone distribution may help to close the naloxone access gaps when community supply is constrained. >4JPH

ABOUT THE AUTHORS

Jennifer Griffith is with Brown University, Providence, RI. RachelR. Yorlets is with the Department of Epidemiology at the Brown University Schoolof Public Health. Laura C. Chambers is with the Substance Use Epidemiology Program at the Rhode Island Department of Health. Corey S. Davis is with the Network for Public Health Law, Edina, MN. Anna Wentz and Francesca L. Beaudoin are with the Department of Epidemiology at the Brown University School of Public Health. Janette Baird and Elizabeth A. Samuels are with the Department of Emergency Medicine at the Warren Alpert Medical School of Brown University.

CORRESPONDENCE

Correspondence should be sent to Elizabeth A. Samuels, MD, MPH, MHS, Associate Professor, Department of Emergency Medicine, University of California, Los Angeles, Los Angeles, CA 90095 (e-mail: lizsamuels@ucla.edu). Reprints can be ordered at https://ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

FullCitation: Griffith J, Yorlets RR, Chambers LC, etal. Statewide policy to increase provision of take-home naloxone at emergency department visits for opioid overdose, Rhode Island, 2018-2019. Am J Public Health. 2023;113(4): 372-377.

Acceptance Date: December 15, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307213

CONTRIBUTORS

L.C. Chambers, C.S. Davis, E.A. Samuels, and R.R. Yorlets contributed to study concept and study design. L. C. Chambers, A. Wentz, and R. R. Yorlets contributed to data extraction. L.C. Chambers and R. R. Yorlets performed data analysis. L. C. Chambers, C.S. Davis,J. Griffith, E.A. Samuels, and R.R. Yorlets interpreted results.J. Griffith, E.A. Samuels, and R. R. Yorlets contributed to initial drafting of the article. All authors contributed to criticalrevision of the article.

ACKNOWLEDGMENTS

This study was funded by the Centers for Disease Controland Prevention (grants R01CE003149 and

NU17CE924967). E.A. Samuels was partially supported by the NationalInstitutes of Health (grants P20GM125507 and U54GM115677) and the Substance Abuse and Mental Health Serrvices Administration (grant UR1TI080209). The authors would like to acknowledge and thankJennifier Koziol, MPH, RachelScagos, MPH, and the Rhode Island Department of Health Overdose Prevention Program.
Note. The content of this article is solely the responsibility of the authors and does not necessarily represent the officialviews of the Centers for Disease Controland Prevention, the National Institutes of Health, or the Substance Abuse and MentalHealth Services Administration.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to disclose.

HUMAN PARTICIPANT PROTECTION

This study was reviewed and approved by the Lifespan institutionalreview board.

References

REFERENCES

1. National Center for Health Statistics. US overdose deaths in 2021 increased half as much as in 2020-but are still up 15%. May 11,2022. Available at: https://www.cdc.gov/nchs/pressroom/ nchs_press_releases/2022/202205.htm. Accessed December 7, 2022.
2. Vivolo-Kantor AM, Seth P, Gladden RM, et al. Vital signs: Trends in emergency department visits for suspected opioid overdoses-United States, July 2016-September 2017. MMWR Morb Mortal Wkly Rep. 2018;67(9):279-285. https://doi.org/10. 15585/mmwr.mm6709e1
3. Rhode Island Department of Health and Department of Behavioral Healthcare, Developmental Disabilities, and Hospitals. Levels of care for Rhode Island emergency departments and hospitals for treating overdose and opioid use disorder. 2017. Available at: https://health.ri.gov/ publications/guides/LevelsOfCareForTreating OverdoseAndOpioidUseDisorder.pdf. Accessed March 22, 2022.
4. Naloxone effectiveness. A systematic review. J Addict Nurs. 2018;29(3):E1-E2. https://doi.org/ 10.1097/JAN.0000000000000246
5. Samuels EA, McDonald JV, McCormick M, Koziol J, Friedman C, Alexander-Scott N. Emergency department and hospital care for opioid use disorder: implementation of statewide standards in Rhode Island, 2017-2018. Am J Public Health. 2019;109(2):263-266. https://doi.org/10.2105/ AJPH.2018.304847
6. Samuels EA, Wentz A, McCormick M, et al. Rhode Island's opioid overdose hospital standards and emergency department naloxone distribution, behavioral counseling, and referral to treatment. Ann Emerg Med. 2021;78(1):68-79. https://doi. org/10.1016/j.annemergmed.2021.02.004
7. Centers for Disease Control and Prevention. Drug overdose mortality by state. Available at: https://www.cdc.gov/nchs/pressroom/sosmap/ drug_poisoning_mortality/drug_poisoning.htm. Accessed December 7, 2022.
8. Hedegaard H, Miniño AM, Spencer MR, Warner M. Drug overdose deaths in the United States, 1999-2020. NCHS Data Brief. 2021;(426):1-8.
9. McCormick M, Koziol J, Sanchez K. Development and use of a new opioid overdose surveillance system, 2016. R I MedJ (2013). 2017;100(4):37-39.
10. Rhode Island Department of Health. Drug Overdose Surveillance Data Hub. Opioid related emergency visits. Available at: https://ridoh-drug-overdose-surveillanceeddashboard-rihealth.hub.arcgis.com. Accessed December 7, 2022.
11. PreventOverdoseRI. Overdose death data. Available at: https://preventoverdoseri.org/overdosedeaths. Accessed December 7, 2022.
12. Rhode Island Department of Health. Drug Overdose Surveillance Data Hub. Fatality data: Office of the State Medical Examiners. Available at: https://ridoh-drug-overdose-surveillanceosmedashboard-rihealth.hub.arcgis.com. Accessed December 7, 2022.
13. Gupta R, Shah ND, RossJS. The rising price of naloxone-risks to efforts to stem overdose deaths. N Engl J Med.

2016;375(23):2213-2215. https://doi.org/10.1056/NEJMp1609578
14. Irvine MA, Oller D, BoggisJ, et al. Estimating naloxone need in the USA across fentanyl, heroin, and prescription opioid epidemics: a modelling study. Lancet Public Health. 2022;7(3):e210-e218. https://doi.org/10.1016/S2468-2667(21)00304-2

DETAILS

Subject:	Certification; Emergency medical care; Public health; Epidemiology; Islands; Opioids; Hospitals; Emergency response; Drug abuse; Substance use disorder; Narcotics; Overdose; Patients; Drug overdose; Emergency medical services; Adults; Naloxone; Education
Business indexing term:	Industry: 92312 : Administration of Public Health Programs 62211 : General Medical and Surgical Hospitals
Location:	United States--US; Rhode Island
Company / organization:	Name: Department of Health-Rhode Island; NAICS: 923120; Name: Brown University; NAICS: 611310
Classification:	92312: Administration of Public Health Programs; 62211: General Medical and Surgical Hospitals
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	372-377
Publication year:	2023
Publication date:	Apr 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English

Denying Abortions Endangers Women's Mental and Physical Health

Worrell, Frank C, PhD [1] [1] School of Education at the University of California, Berkeley

ABSTRACT (ENGLISH)

State restrictions or outright bans on abortions are putting women's psychological and medical health at risk. Fifty years of psychological research showcase the harmful effects of abortion denial and provide public health leaders with valuable insights on how to promote women ' s reproductive rights and foster maternal and child health. Key findings from research studies show that, despite claims to the contrary, having an abortion is not linked to mental health problems.

FULL TEXT

State restrictions or outright bans on abortions are putting women's psychological and medical health at risk. Fifty years of psychological research showcase the harmful effects of abortion denial and provide public health leaders with valuable insights on how to promote women ' s reproductive rights and foster maternal and child health. Key findings from research studies show that, despite claims to the contrary, having an abortion is not linked to mental health problems.

THE LATEST PSYCHOLOGICAL RESEARCH

In a five-year, longitudinal study of more than 1000 women across 21 states, researchers at the University of California, San Francisco, found that those who had abortions were no more likely to report negative emotions, mental health symptoms, or suicidal thoughts than those who were denied an abortion.1 Five years later, 99% of those who obtained an abortion felt that they had made the right decision, and their most common emotional reaction was relief.

Moreover, women denied abortions have more psychological problems than those who receive them. For example, Biggs et al. found that women who wanted to get an abortion, but were denied one, initially experienced more anxiety symptoms and stress, lower self-esteem, and less life satisfaction than those who received one.2 Over time, those same women developed more physical health problems than those who received abortions, and two of them later died from complications related to childbirth.3

ECONOMIC ISSUES PROMOTING DISTRESS

Women denied abortions also face greater economic hardships. In their summary of research derived from Turnaway Study, the Advancing New Standards in Reproductive Health group at the University of California, San Francisco, noted that women who were denied abortions struggled more financially than those who received an abortion, as evidenced by lower credit scores, more bankruptcies and evictions, and higher poverty rates.4 These women were also more likely to remain with a violent partner or to raise children alone.

The children of unwanted pregnancies suffer the consequences as well. Because mothers denied abortions are more likely to live in poverty, their children also live in poverty. These children fail to bond well with their mothers, which is connected to poorer outcomes both immediately and later in life.5 These children also have more social, emotional, and mental health problems over time, and are more likely to be hospitalized for psychiatric problems than their siblings orthan children whose pregnancies were planned.6,7

Travel for abortion exacts additional psychological and financial tolls. State bans or restrictions on abortion create barriers for those seeking to obtain the procedure. These barriers lead to greater stress, anxiety, and depression, as well as a loss of autonomy-for example, having to tell someone that they were traveling to get the procedure.8 Indeed, obtaining an abortion is hardest on those with the fewest resources. The new abortion restrictions highlight the harsh reality of health inequities. Women who are least able to access or pay for abortions-those living in poverty, people of color, people in rural areas, sexual and gender minorities, and young people-are most likely to be adversely affected by abortion bans.9,10

In sum, psychological research shows the best strategy to prevent mental health issues for women seeking abortions is to make them safe, affordable, and accessible. ÂfPU

CORRESPONDENCE

Correspondence should be sentto Frank C. Worrell, School Psychology Program, Berkeley School of Education, 2121 Berkeley Way (4th Floor), University of California, Berkeley, CA 94720-1670 (e-mail: frankc@berkeley.edu).

PUBLICATION INFORMATION

Full Citation: Worrell FC. Denying abortions endangers women's mental and physical health. Am J Public Health. 2023;113(4):382-383.

Acceptance Date: January 22, 2023.

DOI: https://doi.org/10.2105/AJPH.2023.307241

CONFLICTS OF INTEREST

The author has no conflicts of interest to disclose.

References

REFERENCES

1. Rocca CH, Samari G, Foster DG, Gould H, Kimport K. Emotions and decision rightness over five years following an abortion: an examination of decision difficulty and abortion stigma. Soc Sci Med. 2020;248:112704. https://doi.org/10.1016/j. socscimed.2019.112704

2. Biggs MA, Upadhyay UD, McCulloch CE, Foster DG. Women's mental health and well-being 5 years after receiving or being denied an abortion: a prospective, longitudinal cohort study. JAMA Psychiatry. 2017;74(2):169-178. https://doi. org/10.1001/jamapsychiatry.2016.3478

3. Ralph LJ, Schwarz EB, Grossman D, Foster DG. Self-reported physical health ofwomen who did and did not terminate pregnancy after seeking abortion services. Ann Intern Med. 2019;171(4): 238-247. https://doi.org/10.7326/M18-1666

4. Foster DG, Biggs MA, Ralph L, Gerdts C, Roberts S, Glymour MM. Socioeconomic outcomes of women who receive and women who are denied wanted abortions in the United States. Am J Public Health. 2022;112(9):1290-1296. https://doi. org/10.2105/AJPH.2017.304247r
5. Doyle FL, Dickson SJ, Eapen C, et al. Towards preventative psychiatry: concurrent and longitudinal predictors of postnatal maternal-infant bonding. Child Psychiatry Hum Dev. 2022; epub ahead of print May 26, 2022. https://doi.org/10.1007/ s10578-022-01365-0
6. Dagg PK. The psychological sequalae of therapeutic abortion-denied and completed. Am J Psychiatry. 1991;148(5):578-585. https://doi.org/ 10.1176/ajp.148.5.578
7. David HP. Born unwanted, 35 years later: The Prague Study. Reprod Health Matters. 2006; 14(27):181 -190. https://doi.org/10.1016/S09688080(06)27219-7
8. Biggs MA, Kaller S, Ralph L. Barriers accessing abortion care and their association with psychological well-being. Contraception. 2020;101(5):355. https:// doi.org/10.1016/j.contraception.2020.03.010
9. Kozhimannil KB, Hassan A, Hardeman RR. Abortion access as a racial justice issue. N Engl J Med. 2022;387(17):1537-1539. https://doi.org/10. 1056/NEJMp2209737
10. Redd SK, Rice WS, Aswani MS, et al. Racial/ethnic and education inequities in restrictive abortion policy variation and adverse birth outcomes in the United States. BMC Health Serv Res. 2021;21(1):1139. https://doi.org/10.1186/s12913-021-07165-x

DETAILS

Subject:	Abortion; Womens health; Longitudinal studies; Poverty; Emotions; Birth control; Mental disorders; Bans; Maternal &child health; Rural areas; Psychological research; Public health; Mental health; Child &adolescent psychiatry; Childrens health; Women; Reproductive rights; Womens rights
Location:	San Francisco California; United States--US; California
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	4
Pages:	382-383
Publication year:	2023
Publication date:	Apr 2023
Section:	OPINIONS, IDEAS, &P RACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences

ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
ProQuest document ID:	2792101882
Document URL:	https://www.proquest.com/scholarly-journals/denying-abortions-endangers-womens-mental/docview/2792101882/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Apr 2023
Last updated:	2023-08-23
Database:	Public Health Database

The First Publication on Contraception in a US Medical Journal, 1928: Hannah Mayer Stone's Case for Contraceptive Care Before the Pill

Jensen, Robin E, PhD

ABSTRACT (ENGLISH)

Today, as access to women's reproductive health care in the United States has proven less than ensured, it behooves scholars of public health to explore how US medical contraceptive care was successfully established and perpetuated initially in the early to mid-twentieth century. This article highlights the work of Hannah Mayer Stone, MD, in building and advocating such care. From the moment she accepted the position of medical director for the first contraceptive clinic in the country in 1925 until her untimely death in 1941, Stone campaigned relentlessly for women's access to the best contraceptive regimes available, all the while navigating extensive legal, social, and scientific challenges. In 1928, she published the first scientific report on contraception in a US medical journal, thereby legitimating the provision of contraception as a medical endeavor and providing empirical grounds for clinical contraceptive work in the years that followed. Her scientific publications and professional correspondence provide insight into the processes through which medical contraceptive care became increasingly available in US history and offer guidance for a contemporary era when reproductive health care hangs in the balance. (AmJ Public Health. 2023;113(4):390-396. https://doi.org/10.2105/AJPH.2022.307215)

FULL TEXT

Headnote
Today, as access to women's reproductive health care in the United States has proven less than ensured, it behooves scholars of public health to explore how US medical contraceptive care was successfully established and perpetuated initially in the early to mid-twentieth century. This article highlights the work of Hannah Mayer Stone, MD, in building and advocating such care. From the moment she accepted the position of medical director for the first contraceptive clinic in the country in 1925 until her untimely death in 1941, Stone campaigned relentlessly for women's access to the best contraceptive regimes available, all the while navigating extensive legal, social, and scientific challenges. In 1928, she published the first scientific report on contraception in a US medical journal, thereby legitimating the provision of contraception as a medical endeavor and providing empirical grounds for clinical contraceptive work in the years that followed. Her scientific publications and professional correspondence provide insight into the processes through which medical contraceptive care became increasingly available in US history and offer guidance for a contemporary era when reproductive health care hangs in the balance. (AmJ Public Health. 2023;113(4):390-396. https://doi.org/10.2105/AJPH.2022.307215)
The story of US women gaining access to safe and effective contraception is one that often focuses on major technological advancements, such as the development of the birth control pill.1 Yet, long before the pill went on the market in the 1960s, a network of medical contraceptive care prescribing largely female-controlled contraceptive devices and products had already been established.2 Hannah Mayer Stone, MD, (Figure 1) played a central role in buildingthe empirical foundation for that care in the 1920s and '30s. Today, in an era when access to effective contraception is more imperative than it has been in the last 50 years, it behooves scholars of public health to identify the processes through which contraceptive care was made increasingly available in US history, particularly as those processes unfolded alongside the accumulation of medical knowledge about developing birth control technologies.
In 1928, Stone authored the first report on contraception ever published in a US medical journal, in the Medical Journal and Record3 Just three years before, she had agreed to become medical director of the country's first legal contraceptive clinic, the Clinical Research Bureau of the American Birth Control League (later renamed the Birth Control Clinical Research Bureau), directed by Margaret Sanger and located in downtown New York City. At that point, there were scarce scientific data concerning the safety or efficacy of available contraceptives.
It was only in 1918 that-in the state of New York-physicians alone were granted the right to discuss or prescribe contraceptives at all,4 but this right was of limited value without associated medical information concerning which methods worked and under what circumstances. To address this problem, Stone coupled her in-depth consultations at the clinic with meticulous record-keeping about patients' experiences with specific contraceptive regimes. Overall, she collaborated with patients to collect almost 100 000 contraceptive case histories before her untimely death in 1941.5 Her 1928 publication was based on the earliest of these histories and reveals that Stone's patients themselves-in undergoing examination and study enrollment- played a vital role in shaping subsequent medical practice.
Drawing from a selection of Stone's scientific publications and archived professional correspondence, this article explores how Stone managed to practice medicine and perform foundational research despite a hostile legal and social climate. By translating her patients' individualized case histories into published medical data and fostering a professional network of data sharing and collaboration, Stone made it increasingly possible for health care providers, herself included, to offer the kind of empirically based care that best fit individuals' specific circumstances and facilitated desired outcomes. Given the parallels between Stone's provision of individualized birth control in the 1920s and recent calls concerning the need for such care among underserved and marginalized patients in particular in 2022,6 I argue that Stone's research and interprofessional advocacy offer contemporary providers guidance for navigating the contested landscape of current US reproductive health care and social justice.
CHALLENGES TO EARLY CONTRACEPTIVE CARE
Extensive challenges stood in the way of efforts to establish safe and effective contraceptive care in the early twentieth century. Beginning in 1873, Comstock laws went into effect that categorized all contraceptive information

and products as obscene and therefore as illegal to possess or send through the US mail.7 When birth control advocate Margaret Sanger first tried to establish a contraceptive clinic in 1916 that was modeled on clinics in the Netherlands, her clinic was raided by police and shut down under the Comstock laws.

In 1918, the New York State Court of Appeals made a provision for licensed physicians specifically to prescribe contraception to married couples for the prevention or cure of disease, which the judge interpreted broadly to include any change in the body that could disturb health.8 In accordance with this ruling, Sanger re-established her contraceptive clinic in 1923 with a licensed physician at the helm. Sanger first hired Dorothy Bocker, MD, to serve as medical director, but she dismissed Bocker two years later for failure to keep adequate records and hired Stone as her replacement. At the time, Stone was a practicing physician at New York City's Lying-In Hospital who was trained in pharmacology and shared a joint practice with her husband, the urologist Abraham Stone, MD.

Stone originally met Sanger when she attended the first national birth control conference in 1921 and expressed interest in the emergent birth control movement. In her role as medical director, Stone turned the clinic into something of an "über-clinic" that offered clinical care and generated empirical data about contraceptives.9 Her research provided other clinics being established across the country and internationally with the statistical and qualitative data needed to prescribe the most effective medical contraceptive care available.

This was the case even as contraceptive care providers continued to struggle for years to offer services within the bounds of an unfavorable legal backdrop. Although Sanger and Stone would win the right for physicians to send and receive contraceptives through the US mail in 1936 in US v. One Package,10 it was not until 1965 that the Supreme Court established the federal right to contraception for married couples, 1972 that it granted the right to contraception for unmarried individuals, and 1977 that it found unconstitutional all restrictions on the advertising, selling, or distributing of contraception.11

Throughout the twentieth century, legal barriers to establishing contraceptive care were compounded by associated social and professional challenges. As Sanger recalled of the 1920s, "few doctors wanted to take the risk of identifying themselves with the birth control cause, the risk of becoming a martyr, of losing professional license or standing, of being expelled from their medical societies."12 As it happened, all of these fates befell Stone, who-as one of very few female practicing physicians at the time-had already experienced significant marginalization and discrimination throughout her early career. Upon signing on as medical director, a position for which she never accepted remuneration,13 Stone was dismissed from her position at the Lying-In Hospital, blocked from professional societies, and shunned by former colleagues.14

When she was attempting to publish her scientific findings on contraception, her professional correspondence provides evidence of the rejection she faced. In a letter from 1925, the editor of the Medical Journal and Record (the same outlet that eventually published her work three years later under a different editor) reported, "I have made inquiries regardingthe publication of articles on birth control, and I regret to be obliged to return your manuscript on 'Contraceptive Methods of Choice,' as ourJournal would be unmailable with this article included."15 Other letters illustrate that this type of professional rebuff reverberated into the public sphere as well. In 1937, a radio station's legal counselor informed Stone that the station did "not wish to jeopardize its license from the Federal Communications Commission" to broadcast an address she was to give on contraception.16 At every turn, Stone's ability to circulate her findings and facilitate care was hampered, sometimes publicly, but more often via interactions outside public view.

The legal and professional hardships that Stone encountered also overlapped with challenges posed at the levels of science and medical inquiry. When Stone began her directorship, there was inadequate scientific data to guide clinical contraceptive care. Several physicians from this time spoke to this effect, including practitioners such as Robert L. Dickinson, MD. As a renowned gynecologist in his own right and director of the at-times-competing Committee on Maternal Health,17 Dickinson's assessment held weight. In his introduction to Stone's 1928 medical publication, he explained:

the library of argument and invective on the subject of birth control was built on an absurdly small amount of medical information. At that time the Committee on Maternal Health did not find over thirty cases, properly accredited and

followed up, on which to start clinical studies. The gynecological and obstetrical departments of medical colleges have been reluctant to bestir themselves in accumulating records of cases requiring contraceptive advice for the safeguarding of life and health.18

Without existing data to consult, Stone gathered, analyzed, and presented her own data from the clinic's patients to begin establishing contraceptive care as an empirically based pursuit.19

TRANSLATING WOMEN'S EMBODIED EXPERIENCES INTO EMPIRICAL DATA

In a remembrance of Stone delivered in 1941, Sanger said of her that "no one, certainly, has more thoroughly explored the clinical aspects of contraception."20 Long before the first randomized controlled trials, Stone oversaw and administered the country's first large-scale clinical study of contraception by documenting her patients' experiences with specific contraceptive regimes and compiling these considerable data into scientific reports. When she published one report in a US medical journal in 1928, she initiated the broader process of validating contraceptive care among US physicians by providing them with the empirical evidence needed to offer such care and delivering it in a professionally recognized outlet.

At that point, contraception had been rejected by polite society and physicians alike as the stuff of immorality and vice,21 and the task of legitimizing contraception as part of standard US medical practice remained far from complete until well into the 1970s.22 Stone's 1928 publication helped to begin the long process of situating birth control culturally as aboveboard and within the expertise of authorized medical practitioners. Given it was only physicians who had the legal ability to council on and prescribe contraception, their eventual willingness to perceive birth control care as a legitimate part of their work was the pivot upon which the US birth control movement rested for much of the twentieth century.

Stone's 1928 article performed its legitimacy by detailing how she designed her patient consultations to support a rigorous statistical study of available contraceptive regimes (Figure A, available as a supplement to the online version of this article at https://ajph.org). Stone explained that she reduced potential biases in design through extraordinary efforts that included overseeing every one of the 1655 patient consultations herself(with multiple consultations across patients) and performing the consultations over the same period (1925-1927). She described instituting a system of record keeping that allowed her to detail each aspect of her study design including the specific type of contraceptive regimen each participant was prescribed (primarily different formulas of spermicidal jellies combined with occlusive pessaries), exact chemical content of jellies employed, processes involved in measuring and fitting pessaries and diaphragms, precise instructions participants received during initial and follow-up consultations, period of adherence, qualitative feedback, and regime outcome. She noted, "each patient was asked to return at certain intervals, or else to report by mail the results with the method prescribed."23 Stone's report highlighted her efforts to obtain comprehensive information about the contraceptive experiences of as many women as possible.

Above all else, Stone's article contended that effective contraceptive care must be personalized and attendant to every patient's unique body, circumstances, and experiences, and not just because pessaries and diaphragms required medical fittings. Scattered throughout Stone's numeric findings are notations about how "each patient was examined individually, and a contraceptive chosen according to the needs and indications of the particular case,"24 and reminders that "much tact and care must be employed in obtaining reports from patients. The use of contraceptives is a very intimate problem with the woman."25 She reported that some patients found specific regimens uncomfortable, physically irritating, or requiring of more privacy than they had available. Stone upheld these responses as valid reasons for regime noncompliance and therefore as issues for other physicians to anticipate in their own consultations.

In her conclusion, Stone made recommendations about which contraceptive regimes were most effective. But rather than recommending the most statistically effective regimen across the board (a Ramses-type pessary with "Formula I" jelly), she endorsed a different regime (a Ramses-type pessary with "Formula V" jelly) for many cases because some patients reported "trouble" with the former.26 In this way, Stone modeled how to balance statistical findings with qualitative patient feedback.

ESTABLISHING A SYSTEM OF COLLECTIVE PRACTICES

Although Stone composed the earliest of her reports from her own patient consultations alone, she knew the long-term establishment of robust contraceptive care would require incorporation of more diverse data and the explicit sharing of clinical information and experiences across contexts and demographics. Stone's work to foster a network of contraceptive care knowledge was less visible than her clinical research because it was initiated largely behind the scenes. Beginning as early as 1927, Stone contacted physicians who were "actively engaged in contraceptive work" across the country and internationally to provide overviews of her data and the clinic's contraceptive resources. She distributed surveys asking them to share their emergent contraceptive insights, promising "due credit" for those "willing to contribute" to future reports.27 In a letter from 1933, she explained:

We hope that this questionnaire may serve to develop a more regular exchange of information and data among the various clinics in this country.... We shall be glad to supply information on any of the methods which we have already tested, and to investigate in the laboratory any newer methods that other clinics might be interested in.28

Additional correspondence, along with the more comprehensive evidence included in her subsequent medical reports, revealed that Stone's efforts to foster cooperative values were fruitful. In a 1935 letter addressed to a physician in Florida, for instance, Stone wrote, "I was very much pleased to receive your application blanks and to know that you are willing to cooperate with us in our new project," before noting, "Our aim is to be mutually helpful in developing the practice of contraception and we shall, no doubt, find many occasions in the future to exchange data, findings and information."29 Stone's correspondence also revealed that she started a "Printed Matter Exchange" so that providers would not have to create materials from scratch and could compare their processes and procedures with other clinics.30

In addition, Stone's correspondence demonstrated that she fostered collaboration by interacting one on one with other physicians concerning the ins and outs of contraceptive care. In some instances, Stone had to forgo niceties to critique others' regimes or products. In 1935, she wrote to a collaborating physician, "The jelly which you sent us, which is made up from the Dupont product, I found to be too irritating. Women complained of burning and irritation very soon after the insertion of the jelly. It is likely that the percentage is too strong, or that irritation could be obviated by changes in the form of manufacture."31 In a 1938 correspondence with Dickinson, she explained that a series of trials she conducted revealed that a particular pessary's "construction of its rim makes it too stiff and apt to cause too much pressure," concluding that "it still requires a certain amount of technical improvement."32 Stone coupled calls for cooperation with a willingness to engage honestly about what would serve individuals' needs best, drawing from patient feedback as evidence for objections. If she found existing products and regimes unsatisfactory, she called for collaborative efforts to make improvements.

Moreover, for Stone, persuading others to collaborate involved demonstrating that she, too, would meet individual patients where they were and provide them with what they needed. She regularly responded-via letter and often with requested materials such as medical directories-to women who were desperate for contraceptive information.33 She gave them sometimes lengthy, always personalized advice and encouraged them not to "hesitate to write again at any time we can be of any help."34 Stone's care for individuals led her to send contraceptive supplies to, in one case, a woman in Barranquilla, Colombia, who wrote her and was without access.35 In this way, she modeled her belief that personalized, direct engagement was imperative for providing contraceptive care that would work in any given case.

CONTRACEPTIVE CARE TODAY

Today, much can be garnered from Stone's record of contraceptive care advocacy. Comparatively, the good news is that contemporary providers and public health advocates are facing different, and arguably fewer, headwinds than did Stone in their fight to create and sustain safe and effective contraceptive care. Unlike in Stone's time, there exists vast scientific, empirical evidence about contraceptive uses, outcomes, and risks across a variety of circumstances and demographics, evidence that is generated by pharmaceutical companies rather than already overtaxed practicing physicians. Moreover, contraceptive methods today are more varied, available, and effective. Yet, there are still significant obstacles to providing reproductive health care in the twenty-first century. These

involve factors such as evolving federal and state legislative restrictions, inadequate clinical guidelines and training, vast health care-access inequities and biases, and a lack of "person-centered approaches" to contraceptive care.36 Given that contraceptive care remains precarious, Stone's approach to providing and advocating care in a fraught reproductive health climate offers guidance for today. First, even in contexts in which generating statistical results was necessary, Stone saw that her patients' embodied experiences with contraceptive regimes were accounted for. She argued that effective care depends on personalized engagement with patients as much as on prescribing methods grounded in statistical outcomes. To highlight the importance of finding this balance, she included in her 1928 statistical report references to the embodied experiences of individuals in her care, and she incorporated specific ideas generated from those references in making recommendations about prescribed contraceptive regimes. Stone did so to such an extent that the integral role clinic patients themselves played in shaping subsequent medical practice becomes clear.

Today's physicians do not need to prove contraceptive regime effectiveness as Stone did, but the success of their work depends no less on individualized, patient-centered clinical care and contraceptive counseling. Such an approach, grounded in listening and dedicated attention to patients' unique situations and positionalities, aligns with efforts to foster reproductive justice. A reproductive justice framework centers individuals' intersectional identities considering systemic inequalities to provide increasingly safe, effective, and equitable care.37 It involves upholding patient experiences and histories as agentic, as did Stone, and illuminating hard truths related to, for instance, the history of coercion and deception employed against Black, Latinx, and Indigenous individuals by medical authorities in the context of US contraceptive care.38

Second, Stone's work involved advocating a system of sharing and collaboration among fellow physicians. She built bridges, speaking and acting in ways that emphasized cooperation and a mutual vision. Her surviving professional correspondence reveals how she initiated large-scale campaigns that involved sharing information among contraceptive care providers. It also reveals her efforts to engage openly with other providers about patient experiences. Throughout her career, Stone made it clear that the effective provision of contraceptive care always starts and stops with attention to the experiences and needs of individual patients. In the twenty-first century, as in the early twentieth, there can be no more important lesson to be taken from her body of work. _4jPH

ABOUT THE AUTHOR

Robin E. Jensen is a professor in the Department of Communication, University ofUtah, Salt Lake City.

CORRESPONDENCE

Correspondence should be sentto Robin E. Jensen, PhD, Department of Communication, University of Utah, 255 S Central Campus Drive, Salt Lake City, UT 84112 (e-mail: r.e.jensen@utah. edu). Reprints can be ordered at https://ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Jensen RE. The first publication on contraception in a US medical journal, 1928: Hannah Mayer Stone's case for contraceptive care before the pill. Am J Public Health. 2023; 113(4):390-396.

Acceptance Date: December 15, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307215

ACKNOWLEDGMENTS

Funding for this study was provided by a National Endowment for the Humanities Faculty Fellowship (FEL-267498-20).

I am grateful to archivists Kate Long and Maureen Callahan at Smith College's Special Collections, as well as archivist Stephanie Krauss at the Center for the History of Medicine in the Francis A. Countway Library of Medicine at Harvard University, for helping me to obtain access to the materials cited in this essay. Many thanks, also, are extended to the editor and four anonymous reviewers for their engagement and dedication to this research.

Note. Any views, findings, conclusions, or recommendations expressed in this article do not necessarily represent those of the National Endowment for the Humanities.

CONFLICTS OF INTEREST

The author declares no conflicts of interest.

Footnote

ENDNOTES

1. See, for instance, Elaine Tyler May, America and the Pill: A History of Promise, Peril, and Liberation (New York, NY: Basic Books, 2011); Elizabeth Siegel Watkins, On the Pill: A Social History of Oral Contraceptives, 1950-1970 (Baltimore, MD: Johns Hopkins University Press, 2001). The history of US birth control more generally and especially before the pill is a vast field explored extensively in Ellen Chesler, Woman of Valor: Margaret Sanger and the Birth Control Movement in America (New York, NY: Simon &Schuster, 2007); Linda Gordon, The Moral Property of Women: A History of Birth Control Politics in America (Urbana, IL: University of Illinois Press, 2007); Carole R. McCann, Birth-Control Politics in the United States, 1916-1945 (Ithaca, NY: Cornell University Press, 1999); and James Reed, From Private Vice to Public Virtue: The Birth Control Movement and American Society Since 1830 (New York, NY: Basic Books, 1978).

2. Cathy Moran Hajo, Birth Control on Main Street: Organizing Clinics in the United States, 1916-1939 (Urbana, IL: University of Illinois Press, 2010); Melissa R. Klapper, Ballots, Babies, and Banners of Peace (New York, NY: New York University Press, 2013). By 1937, there were approximately 320 functioning birth control clinics in the United States: "A New Day Dawns for Birth Control" (New York, NY: National Committee Federal Legislation for Birth Control, 1937).

3. Hannah M. Stone, "Therapeutic Contraception," Medical Journal and Record (March 1928): 9-17. After this initial publication, US medical journals such as the American Journal ofPublic Health and the Journal of the American Medical Association began publishing articles on contraception with increasing regularity.

4. People v. Sanger, 222 NY 192 (1918).

5. Margaret Sanger, "Hannah M. Stone-In Mem- oriam," Human Fertility 6, no. 4 (August 1941): 109.

6. See, for instance, Anu Manchikanti Gomez, Liza Fuentes, and Amy Allina, "Women or LARC First? Reproductive Autonomy and the Promotion of Long-Acting Reversible Contraceptive Methods," Perspectives on Sexual and Reproductive Health 46, no. 3 (2014): 171-175; Michelle H. Moniz et al., "Inpatient Postpartum Long-Acting Reversible Contraception: Care That Promotes Reproductive Justice," Obstetrics and Gynecology 130, no. 4 (2017): 783-787.

7. Act ofthe Suppression ofTrade in, and Circula- tion of, Obscene Literature and Articles of Im- moral Use, Ch 258, 17 Stat 596-600 (1873).

8. People v. Sanger.

9. Hajo, Birth Control on Main Street, 6.

10. United States v. One Package, 86 F 2nd 737 (1936).

11. Griswold v. Connecticut, 381 US 479 (1965); Eisen- stadt v. Baird, 405 US 438 (1972); and Carey v. Population Services International, 431 US 678 (1977).

12. Sanger, "Hannah M. Stone-In Memoriam," 109.

13. Robert L. Dickinson, "Hannah M. Stone-In Memoriam," Human Fertility 6, no. 4 (August 1941): 111.

14. Chesler, Woman of Valor, 278-279.

15. Gregory Stragnell to Hannah Mayer Stone, 15 December 1925, box 36, folder 4, Margaret Sanger Papers, Sophia Smith Collection of Women's History, Smith College.

16. Irving H. Jurow to Hannah M. Stone, 12 January 1937, box 36, folder 5, Margaret Sanger Papers, Sophia Smith Collection of Women's History, Smith College.

17. Gordon, The Moral Property of Women, 181-182.

18. Robert L. Dickinson, "Open Forum: Birth Control," Medical Journal and Record (March 1928): 7.

19. Clinic patients were required to be married and not pregnant. Services were offered for free to those who could not afford to pay, and members of immigrant communities were recruited with informational materials translated into multiple languages. A small percentage of Black women visited the clinic, many ofwhom commuted from Harlem: McCann, Birth-Control Politics.

20. Sanger, "Hannah M. Stone-In Memoriam," 109.
21. Janet Farrell Brodie, Contraception and Abortion in 19th-Century America (Ithaca, NY: Cornell Universi- ty Press, 1994); Nicola Beisel, Imperiled Innocents: Anthony Comstock and Family Reproduction in Vic- torian America (Princeton, NJ: Princeton University Press, 1997).
22. Ellen S. More, The Transformation ofAmerican Sex Education: Mary Calderone and the Fight for Sexual Health (New York, NY: New York University Press, 2022).
23. Stone, "Therapeutic Contraception," 12.
24. Stone, "Therapeutic Contraception," 11.
25. Stone, "Therapeutic Contraception," 13.
26. Stone, "Therapeutic Contraception," 17.
27. Hannah M. Stone to Doctor, 27 June 1933, box 36, folder 4, Margaret Sanger Papers, Sophia Smith Collection ofWomen's History, Smith College.
28. Ibid.
29. Hannah M. Stone to Lydia Allen DeVilbiss, 25 September 1935, box 36, folder 4, Margaret Sanger Papers, Sophia Smith Collection of Women's History, Smith College.
30. Hannah M. Stone to birth control organizations in the United States, 2 May 1938, box 36, folder 5, Margaret Sanger Papers, Sophia Smith Collec- tion of Women's History, Smith College.
31. Hannah M. Stone to Lydia Allen DeVilbiss, 1 June 1935, box 36, folder 4, Margaret Sanger Papers, Sophia Smith Collection of Women's History, Smith College.
32. Hannah M. Stone to Robert L. Dickinson, 22 March 1938, box 36, folder 5, Margaret Sanger Papers, Sophia Smith Collection of Women's His- tory, Smith College.
33. Woman's Activities to Hannah Stone, 8 March 1932, box 12, folder 28, Abraham Stone Papers, Francis A. Countway Library of Medicine, Harvard University.
34. Hannah M. Stone to Frieda L. Greenson, 4 Febru- ary 1937, box 36, folder 5, Margaret Sanger Papers, Sophia Smith Collection of Women's His- tory, Smith College.
35. Hannah M. Stone to Lily Sendra, 12 September 1938, box 36, folder 5, Margaret Sanger Papers, Sophia Smith Collection of Women's History, Smith College.
36. Nikita M. Malcolm et al., "Using Evidence to Ex- pand Contraceptive Access," American Journal of Public Health 112, no. S5 (June 2022): S470-S472.
37. Loretta J. Ross, "Reproductive Justice as Intersectional Feminist Activism," Souls 19, no. 3 (2017): 286-314; Loretta Ross and Rickie Solinger, Reproductive Justice: An Introduction (Berkeley, CA: University of California Press, 2017).
38. Dorothy Roberts, Killing the Black Body: Race, Reproduction, and the Meaning of Liberty (New York, NY: Pantheon Press, 1997); HarrietA. Washington, Medical Apartheid: The Dark History of Medical Experimentation on Black Americans From Colonial Times to the Present (New York, NY: Broadway Books, 2006).

DETAILS

Subject:	Contraceptives; Womens health; Public health; Birth control; Contraception; Health care; Reproductive health; Physicians; Reproductive systems; Couples; 20th century; Correspondence; Maternal &child health; Health services
Location:	New York City New York; New York; United States--US
People:	Sanger, Margaret
Publication title:	American Journal of Public Health; Washington

Volume:	113
Issue:	4
Pages:	390-396
Publication year:	2023
Publication date:	Apr 2023
Section:	RESEARCH &ANALYSIS
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
DOI:	https://doi.org/10.2105/AJPH.2022.307215
ProQuest document ID:	2792101865
Document URL:	https://www.proquest.com/scholarly-journals/first-publication-on-contraception-us-medical/docview/2792101865/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Apr 2023
Last updated:	2023-08-22
Database:	Public Health Database

Judicial Review of Public Health Powers Since the Start of the COVID-19 Pandemic: Trends and Implications

Parmet, Wendy E, JD; Khalik, Faith, JD

ABSTRACT (ENGLISH)

During the COVID-19 pandemic, officials in the United States at all levels of government utilized their legal authorities to impose a wide range of measures designed to control the spread of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2; the causative agent of COVID-19), including shutting down businesses, limiting the size of gatherings, requiring masking, and mandating vaccination. These orders and regulations were challenged in court cases that resulted in more than 1000 judicial decisions. Common claims were based on alleged procedural and substantive due process violations, violations of religious liberty, and violations of officials' scope of authority. In more than three fourths of the decisions, the court refused to grant the plaintiffs the relief sought. However, plaintiffs found success in several notable cases, especially in federal court. These recent decisions, as well as broader prepandemic trends, have important implications for public health officials' exercise of their public health powers, especially when those exercises implicate religious liberty. In this legal environment, officials may need to rely more on the powers of persuasion than on their legal authority alone. (Am J Public Health. 2023;113(3):280-287. https://doi.org/10.2105/ AJPH.2022.307181)

FULL TEXT

Headnote

During the COVID-19 pandemic, officials in the United States at all levels of government utilized their legal authorities to impose a wide range of measures designed to control the spread of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2; the causative agent of COVID-19), including shutting down businesses, limiting the size of gatherings, requiring masking, and mandating vaccination.

These orders and regulations were challenged in court cases that resulted in more than 1000 judicial decisions. Common claims were based on alleged procedural and substantive due process violations, violations of religious liberty, and violations of officials' scope of authority. In more than three fourths of the decisions, the court refused to grant the plaintiffs the relief sought. However, plaintiffs found success in several notable cases, especially in federal court.

These recent decisions, as well as broader prepandemic trends, have important implications for public health officials' exercise of their public health powers, especially when those exercises implicate religious liberty. In this legal environment, officials may need to rely more on the powers of persuasion than on their legal authority alone. (Am J Public Health. 2023;113(3):280-287. https://doi.org/10.2105/ AJPH.2022.307181)

Since March 2020, officials at all levels of government (federal, state, and local) have utilized their legal authorities to issue a wide range of orders and regulations designed to slow the transmission of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2; the causative agent of COVID-19). In response, individuals and entities around the country filed legal challenges. Courts have issued more than 1000 decisions in these cases.1

In more than three fourths of the more than 1000 decisions that we have collected, the court refused to give the plaintiff the relief sought. Nevertheless, some courts, including the US Supreme Court, have granted health officials less deference than they have traditionally received, especially in cases involving religious liberty or scope of authority.2 This presents significant challenges to officials' ability to prevent and respond to future health threats. In the discussion that follows, we offer an overview of the decisions we have compiled, describe the courts' approaches to these claims, and considerthe implications of these decisions for public health practice.

JUDICIAL DECISIONS DURING THE COVID-19 PANDEMIC

Using legal research methods, our team collected state and federal judicial decisions in Westlaw's legal database issued between March 1,2020, and July 1,2022, that relate to COVID-19 orders. Each decision in a case was

counted separately. For example, we counted a trial court decision and a later appellate decision as 2 decisions. For the Supreme Court, we did not count denials of petition for certiorari but did include decisions on petitions for emergency relief (i.e., decisions from the so-called shadow docket) in which a justice or the majority wrote an opinion, including a concurrence or dissent. We did not include decisions that only discussed certain procedural or evidentiary matters, such as discovery motions. We also did nottracktribal cases.

Search terms included topics such as "mask mandate," "face coverings," "quarantine,""vaccination requirements," "public health order," and "eviction moratorium," and legal issues such as "free exercise," "due process," "equal protection," "second amendment," and "administrative procedure."

We supplemented the decisions we found through Westlaw with decisions compiled by the Solomon Center for Health Law and Policy at Yale Law School, which also tracked COVID-19related decisions. For each decision we found through either Westlaw or the Solomon Center's list, we utilized the "Citing References" function in Westlaw to find additional decisions. Each decision was entered into a spreadsheet and tagged by date, jurisdiction, topic, legal issues, and outcome. Each decision and its tags were subsequently reviewed by another research assistant or our senior researcher. Limitations to our approach include that we included decisions that were subsequently overruled or vacated, or, in the case of the Supreme Court, were signed by a minority of justices. We also did not give greater weight to precedential decisions. Nevertheless, our compilation sheds light on the landscape of judicial decisions concerning public health authorities duringthe pandemic.

The decisions that we collected dealt with the authority of government actors, including governors, state and federal agencies, city officials, health departments, and school districts. We did not include decisions that related solely to breach of contract claims, election procedures, immigration detention, or incarceration. We found 887 decisions in federal courts and 182 decisions in state courts. Most of the decisions dealt with challenges to state measures (945 decisions) versus federal measures (124 decisions). The measures most commonly discussed were social distancing measures (including business closures and restrictions, stay-at-home orders, and gathering restrictions; 500 decisions), mask mandates (242 decisions), and vaccine mandates (211 decisions; Figure 1). Many decisions discussed more than 1 ofthese issues.1

Not surprisingly, the mix of decisions followed the changing nature of the public health response to the pandemic. In 2020, most decisions dealt with business closures, stay-at-home orders, restrictions on gatherings (including for worship), and, later in the year, mask mandates. As restrictions on businesses and gatherings eased in 2021,3 most decisions reviewed mask or vaccine mandates.

This article describes in further detail decisions analyzing legal claims relating to (1) individual rights, (2) scope of authority, and (3) administrative procedures.

INDIVIDUAL RIGHTS

Many of the public health orders issued duringthe pandemic restricted individual liberty and implicated (or at least potentially implicated) fundamental constitutional rights.4 For example, stayat-home orders affected the right to travel. Restrictions on worship raised issues relating to the First Amendment's guarantee of free exercise of religion. Plaintiffs brought a wide range of individual rights claims. In 430 of the decisions we collected, plaintiffs argued that public health orders violated their rights under the Fourteenth Amendment to procedural due process, which concerns the process that is owed to an individual subjected to a government order, or substantive due process, which encompasses the right to privacy, including the right to abortion (before Roe v Wade was overturned). Courts ruled for plaintiffs in full or in part in 61 ofthese decisions.1

Equal protection claims were raised in 329 decisions we collected. Courts ruled for plaintiffs in full or in part in 45 ofthese decisions. Many plaintiffs argued that orders that shuttered or restricted some but not all businesses violated the Fourteenth Amendment's guarantee of equal protection. We collected 126 such decisions. For example, in Big Tyme Investments v Edwards, bar owners argued that Louisiana violated their right to equal protection by prohibiting the sale of alcohol and food at bars while allowing it in restaurants.5 The US Court of Appeals for the Fifth Circuit disagreed, reasoning that because bars (unlike race or gender) is not a "suspect classification" for equal protection purposes, the plaintiffs had to prove that the government's order lacked a rational basis. The court then found that

the plaintiff had not made such a showing. Most courts used similar reasoning to reject equal protection claims; in only 1 5 of the decisions we collected did courts rule partially or fully in favor of plaintiffs who raised such claims.
Several businesses alleged that COVID-19 orders, including eviction moratoria and shutdown orders, violated the Constitution's ban on impairment of contracts or its prohibition on the taking of property without just compensation. Courts ruled partially or fully in favor of plaintiffs in 16 of 149 decisions we found. For example, in Auracle Homes v Lamont, landlords argued that Connecticut's eviction moratorium "violates [their] constitutional rights under both the Contracts Clause and the Takings Clause ofthe US Constitution."6 Denying plaintiffs a temporary restraining order, the US District Court in Connecticut reasoned that the Contracts Clause claim failed because the moratorium was reasonable and served a "significant and legitimate public purpose."The court rejected plaintiffs' takings claim because "reasonable investment-backed expectations cannot operate apart from 'public programs adjusting the benefits and burdens of economic life to promote the common good.'" Other decisions echoed this reasoning.
In 27 decisions, plaintiffs claimed that the state restricted their Second Amendment rights by closing gun stores or shooting ranges.1 In 4 decisions, the court ruled that the order likely violated the Second Amendment. For example, in Connecticut Citizens Defense League v Lamont, the US District Court in Connecticut granted a preliminary injunction against Governor Lamont's executive order allowing police departments to suspend fingerprinting for obtaining a handgun permit, noting that "the courts retain a role to examine the use of governmental power even during a public health emergency."7
In spring 2020, 35 states had capacity limits or bans on gatherings that applied to in-person worship.8 In at least 143 decisions, plaintiffs argued that these gathering restrictions violated the Free Exercise Clause ofthe First Amendment as well as, in some cases, statutory protections for religious liberty. Although most decisions rejected such claims, plaintiffs were more successful in these claims than in many other types of individual rights claims, as courts ruled partially or fully for plaintiffs in 37 ofthe 143 decisions in our compilation in which plaintiffs challenged gathering restrictions based on religious liberty claims.
In November 2020, the Supreme Court enjoined a New York order limiting the number of people who could gather for worship in COVID "hot zones," finding that it likely violated the Free Exercise Clause.9 According to the court, the order was not neutral as to religion, and was therefore subject to strict scrutiny, the most stringent form of review. The court then ruled that the order failed strict scrutiny because it was not, in the court's assessment, the least restrictive means of achieving a compelling state interest. Over the next 6 months, the Supreme Court issued several additional decisions in favor of plaintiffs who challenged public health orders on free exercise grounds. In 3 of these decisions, the order that was challenged did not specify or explicitly target religion (Table 1). Nevertheless, most free exercise challenges continued to fail in the lower courts.
After restrictions on gatherings were lifted, religious liberty litigation focused on vaccine mandates. Plaintiffs argued that mandates without religious exemptions discriminated against religion by allowing medical, but not religious, exemptions.10 Plaintiffs also challenged denials of religious exemptions that were available but were not granted to them as individuals. Although courts were more likely than not to rule against plaintiffs, plaintiffs were more successful with these cases than in many other individual rights claims, succeeding or partially succeeding in 21 of 81 free exercise vaccination decisions.

SCOPE OF AUTHORITY

For the most part, executive branch officials can only exercise powers granted to them by acts of the legislature through statutes. Each state has legislation granting the governor and other officials, at both the state and local levels, broad authority to respond to emergencies. Few of these statutes explicitly enumerate many of the measures used in response to COVID-19, such as stay-at-home orders or mask mandates. As a result, officials generally relied on broad statutory language that authorizes them to take actions that they find to be necessary to safeguard health or respond to an emergency.11
Many challengers argued that officials overstepped their authority by imposing measures that were not explicitly authorized by statute. Twenty cases challenging the scope of authority of state officials resulted in decisions by the state's supreme court, the final judicial authority on state statutory authority (Table 2). In 10 states, the high court

affirmed officials' use of public health or emergency powers. For example, in Grisham v Romero, the New Mexico Supreme Court sided with Governor Lujan Grisham, stating that the Public Health Emergency Response Act granted her broad authority to impose measures to protect public health.12 However, in 3 "purple" states with a Democratic governor and a Republican-led state legislature (Wisconsin, Michigan, and Pennsylvania), the state supreme court held that executive officials had exceeded the scope of their statutory authority. For example, in Wisconsin v Palm, the Republican-led state legislature argued that the Democratic governor's secretary-designee of the Department of Health Services exceeded her authority in issuing a stay-at-home order. The Wisconsin Supreme Court agreed.13 Four state supreme courts, all in states with divided government, also weighed in on governors' authority to declare or extend states of emergency (Table 2). Two courts (Kentucky and Massachusetts) held that the governors properly declared or extended a state of emergency. Two courts (Michigan and Wisconsin) held that the governors exceeded their authority by extending emergencies.

After the Biden administration took office, numerous scope of authority challenges were brought against federal orders, including the eviction moratorium issued by the Centers for Disease Control and Prevention (CDC), federal vaccine mandates, and mask mandates for travel. In August 2021, the Supreme Court relied on the relatively novel "major questions doctrine," which holds that administrative agencies cannot issue orders or regulations with major economic or political significance without explicit statutory authority, to block the CDC's eviction moratorium (Table 1). In January 2022, the court used that same doctrine to block an emergency rule by the Occupational Safety and Health Administration that would have required large employers to mandate either vaccination or testing and masking. The Supreme Court did permit the Centers for Medicare and Medicaid Services to require that health care workers be vaccinated, ruling that the agency had ample statutory authority to condition providers' participation in Medicare and Medicaid (Table 1). Following these decisions, lower federal courts have applied the major questions doctrine to block several other federal initiatives, including vaccine mandates for federal contractors14 and the CDC's mask mandate for transportation.15

CHALLENGES BASED ON ADMINISTRATIVE PROCEDURES

State and federal administrative procedure acts require agencies, such as the CDC or state health departments, to go through a notice-and-comment process before enacting a rule. However, these acts usually allow agencies to bypass this process when it would be impractical, as in emergencies. Many plaintiffs challenged such emergency orders, arguing that agencies should have gone through the lengthier rulemaking process.

Challenges on federal or state administrative procedure act grounds were more likely to be decided in favor of plaintiffs than challenges based on any other legal issue we tracked. Of the 85 relevant decisions we found, 33 ruled partially or fully in favor of plaintiffs.1

AN EVOLVING APPROACH TO JUDICIAL REVIEW

The exercise of public health powers can facilitate a quick and effective response to public health threats. Although far more research is needed, some studies have found that the use of such powers during the COVID-19 pandemic helped to reduce its toll.16,17 Public health orders, however, can also be abused, as when San Francisco, California, targeted people of Asian descent during a bubonic plague outbreak in 1900.18 Litigation and the judicial review it invokes can play a powerful role in preventing such abuses, ensuring that public health powers are utilized in a manner that is consistent with constitutional rights and the rule of law.

Traditionally, courts have granted health officials significant (but not total) deference when reviewing challenges to public health powers.19 Most famously, in 1905 in Jacobson v Massachusetts, the Supreme Court expressed the importance of public health expertise when it upheld a vaccine mandate, explaining that the legislature could delegate the determination of whether a mandate was appropriate "to a board of health composed of persons residing in the locality affected, and appointed, presumably, because of their fitness to determine such questions."20 The court concluded that the judiciary's role in reviewing such expert decisions should be limited.20

Even before the pandemic, judicial deference to public health powers was fading in response to challenges from both ends ofthe political spectrum.21 Some legal scholars argued that courts should review public health orders more vigorously to safeguard constitutional liberties and reduce the misapplication of public health powers against

minorities and vulnerable individuals.22,23 Corporations and libertarians challenged public health laws relating to noncommunicable diseases as unduly paternalistic.24 Some courts seemed convinced by such arguments. In 1 notable case, the New York Court of Appeals ruled that New York City's health department could not use its broad public health powers to limit portion sizes for sugary beverages.25 Increased scrutiny of commercial speech regulations also led courts to block laws compelling graphic warnings for cigarettes and warnings in beverage advertisements.21

Despite these forewarnings, early in the COVID-19 pandemic, most courts noted the existence of a public health emergency and granted considerable (though varied) levels of deference to officials even when constitutionally protected rights were implicated.26 In 1 widely cited case, the US Court of Appeals for the Fifth Circuit rejected a challenge to Texas Governor Greg Abbott's emergency order banning abortions, which at the time were still constitutionally protected, stating that during a public health emergency judicial review must be limited to determining if the order "has no real or substantial relation to [public health], or is, beyond all question, a plain, palpable invasion of rights."27 A few weeks later, the Supreme Court in South Bay United Pentecostal Church v Newsom refused to block a California order restricting worship. Although the full court did not issue an opinion in that case, ChiefJustice John Roberts wrote a concurring decision, stating, "Our Constitution principally entrusts 'the safety and the health ofthe people' to the politically accountable officials ofthe States."28

As the pandemic progressed and became more politically polarized, and especially after Justice Amy Coney Barrett replaced Ruth Bader Ginsburg on the high court, the Supreme Court appeared to grant officials less deference, especially in free exercise cases. This was initially evident in the court's decision to block New York's capacity limits on worship in hot zones.9 Tellingly, the court in that case did not discuss Jacobson. Nor did it do so several months later when it ruled that a California order restricting gatherings of all types in private homes was subject to strict judicial scrutiny because it interfered with plaintiffs' ability to hold a Bible study group while some secular activities, like shopping, faced looser restrictions.29 In reaching that conclusion, and in contrast with ChiefJustice Roberts' call for deference in South Bay, the majority gave no weight to health officials' determination that gatherings in private homes were different from and more dangerous than the public gatherings that were less strictly regulated. Indeed, the court did not discuss any ofthe public health evidence in the record.

The Supreme Court's new stance toward free exercise claims opened the door to religious liberty challenges to vaccine mandates. Before the pandemic, courts uniformly rejected such claims.10 Since 2021, the courts have been divided as to whether public vaccine mandates must include religious exemptions, or whether the denial of a requested exemption is unconstitutional. For example, in US Navy Seals 1-26 v Biden, the Fifth Circuit ruled that the Navy's failure to grant religious exemptions likely violated service members' statutory rights to religious liberty. In reaching that conclusion, the court rejected the Navy's contention that its vaccine mandate was essential to ensuring the safety and readiness of the troops.30 The Supreme Court narrowed the injunction in that case, allowing the Navy to consider "respondents' vaccination status in deployment, assignment, and other operational decisions" but still preventing the Navy from enforcing the vaccination requirement on plaintiffs.31 Conversely, federal appellate courts in the First and Second Circuits rejected religious challenges to vaccine mandates for health care workers.32,33 To date, the Supreme Court has chosen not to consider a free exercise challenge to a state vaccine mandate. Several justices, however, published opinions arguing that states' failure to provide religious exemptions violates the Constitution.34 These statements, when combined with the Supreme Court's new approach to religious liberty claims, may invite challenges to childhood vaccine laws and many other public health measures that individuals may believe interfere with their religious practices or views.10

Using the major questions doctrine and related approaches to statutory construction, the Supreme Court and some lower courts have also begun to read broad delegations of public health powers narrowly to prohibit officials from issuing measures that are not explicitly enumerated in a statute. This cramped reading of public health statutes can make it difficult for health officials to respond to novel health problems that require interventions that legislatures could not have anticipated. It also means that officials must wait for the legislature to act before issuing needed orders or risk having them struck down. Political gridlock and the fact that most state legislatures do not meet year-

round compound the problem.

IMPLICATIONS FOR PUBLIC HEALTH PRACTICE

Although courts continue to reject most challenges to public health measures, decisions issued during the COVID-19 pandemic show that health officials cannot assume that courts will give them the benefit of the doubt. In this climate, it is more essential than ever that health officials base their decisions on the best available science and assemble a robust record that can demonstrate the necessity of their actions. This may not forestall litigation or guarantee success in it, but it is an essential first step.

Officials also need to take special care when issuing orders that may touch upon religious practices and beliefs. Public health measures that specify religious practices, such as limitations on worship, face heighted constitutional risk, but so do orders that are neutral on their face as to religion but may still interfere with an individual's ability to practice their faith. In particular, laws that appear to restrict an exercise of religion more strictly than "comparable" secular activities (even if the scientific evidence does not back up that comparability) may be subject to strict judicial scrutiny and held unconstitutional. To avoid this risk, officials should ensure that the lines they draw are grounded in the best available science. Officials must also understand that simply providing religious exemptions on paper will not insulate a mandate or other order from a free exercise challenge; they must have strong evidence to justify denying any religious exemptions that are requested. Even then, the order may be struck.

Given the high percentage of administrative procedure cases won by plaintiffs, officials should consider commencing rule-making procedures as quickly as possible if they want emergency orders to stay in place. When a new health threat, such as a pandemic, strikes, officials need to act swiftly; rulemaking is often impossible at that point. But as a pandemic or other emergency continues, the rule-making process can avoid some legal problems and enable the public to weigh in on whether particular health measures should continue.

Most importantly, health officials need to recognize both the extent and limits of their legal powers. Officials continue to win most cases and should not be dissuaded from issuing critical orders or regulations because of overblown fears of litigation. The decisions issued during the COVID-19 pandemic show that, especially in the early days of a health threat, most courts will still give officials considerable deference.

Nevertheless, public health officials have lost some very important, highprofile cases. In addition, the very process of litigation, even when the outcome is successful from a public health perspective, can deplete resources and distract officials from doingtheir job. Further, in our highly polarized political climate, officials need to accept that litigation can play a politically performative role, in which partisans run to court to challenge and politically weaken their opponents, as when the Republican legislature challenged the Democratic governor's public health orders in Wisconsin13 or when several "red states" challenged Biden's vaccine mandates.1

In this legal environment, health officials should remember that persuasion is among their most potent powers. A public that distrusts or doesn't understand health measures is more likely to challenge them in court. And judges may find it easier to strike orders that are deeply unpopular. Conversely, a public that trusts public health authorities and understands the rationale for recommended measures is probably less likely to litigate. Although obtaining the public's support can be difficult in the current political and informational climate, it will be increasingly essential if the judiciary further constricts officials' legal authorities. Although many health departments face limited resources, investing in training or additional help in communicating with the public may be well worth the costs, leading to better outcomes and decreased litigation. yjjPH

ABOUT THE AUTHORS

Wendy E. Parmet and Faith Khalik are with the Center for Health Policy &Law, Northeastern University School of Law, Boston, MA.

CORRESPONDENCE

Correspondence should be sent to Wendy E. Parmet, Center for Health Policy &Law, Northeastern University School of Law, 416 Huntington Ave, Boston, MA 02115 (e-mail: w.parmet@ northeastern.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Parmet WE, Khalik F. Judicial review of public health powers since the start of the COVID-19 pandemic: trends and implications. Am J Public Health. 2023;113(3):280-287. Acceptance Date: November 16, 2022. DOI: https://doi.org/10.2105/AJPH.2022.307181

CONTRIBUTORS

Each author contributed to conceptualizing and writing the article. F. Khalik oversaw the compilation of cases discussed in the article.

ACKNOWLEDGMENTS

Research was supported by a grant from the Robert Wood Johnson Foundation (via ChangeLab Solutions) as a component of the Act for Public Health Initiative.

Research assistance was provided by Julia Winett, Gavin Hunter, Robert Benjamin McMichael, Marcus Jones, John Matthew Catoe, Catherine Kuchel, Kyla Portnoy, and Julia Brown. Many thanks to Scott Burris for his comments on an earlier draft of this article.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to disclose.

HUMAN PARTICIPANT PROTECTION

This study did not involve any human participants.

References

REFERENCES

1. Public Health Law Watch. List of Public Health Authority cases as of 7/1/2022. Available at: https://www.publichealthlawwatch.org/pha7122. Accessed November 10, 2022.

2. Mello MM, Parmet WE. US public health lawfoundations and emerging shifts. N Engl J Med. 2022;386(9):805-808. https://doi.org/10.1056/ NEJMp2200794

3. International Monetary Fund. Policy responses to COVID-19. Updated July 2, 2021. Available at: https://www.imf.org/en7Topics/imf-and-covid19/ Policy-Responses-to-COVID-19. Accessed November 7, 2022.

4. Network for Public Health Law. Individual rights and the public's health: constitutional, ethical, and political aspects of COVID-19 measures and their enforcement. February 24, 2021. Available at: https://www.networkforphl.org/news-insights/ individual-rights-and-the-publics-healthconstitutional- ethical-and-political-aspects-ofcovid- 19-measures-and-their-enforcement. Accessed November 7, 2022.

5. Big Tyme Investments LLC v Edwards, 985 F3d 456 (5th Cir 2021).

6. Auracle Homes LLC v Lamont, 478 F Supp3d 199 (D Conn 2020).

7. Connecticut Citizens Defense League v Lamont, 465 F Supp3d 56 (D Conn 2020).

8. Villa V. Most states have religious exemptions to COVID-19 social distancing rules. Pew Research Center. April 27, 2020. Available at: https://www. pewresearch.org/fact-tank/2020/04/27/moststates- have-religious-exemptions-to-covid-19- social-distancing-rules. Accessed August 2, 2022.

9. Roman Catholic Diocese of Brooklyn v Cuomo, 141 S Ct 63 (2020) (per curiam).

10. Parmet WE. From the shadows: the public health implications of the Supreme Court's COVID-free exercise cases. J Law Med Ethics. 2021;49(4): 564-579. https://doi.org/10.1017/jme.2021.80

11. Wiley LF. Democratizing the law of social distancing. Yale J Health Policy Law Ethics. 2020;19(3): 50-121. https://doi.org/10.2139/ssrn.3634997

12. Grisham v Romero, 483 P3d 545 (NM 2021).

13. Wisconsin Legislature v Palm, 942 NW2d 900 (Wis 2020).

14. Georgia v Biden, 574 F Supp3d 1337 (SD Ga 2021).

15. Health Freedom Defense Fund Inc v Biden, 2022 WL 1134138 (MD Fla April 18, 2022).

16. Huang J, Fisher BT, Tam V, et al. The effectiveness of government masking mandates on COVID-19 county-level case incidence across the United States, 2020. Health Aff(Millwood). 2022;41(3): 445-453. https://doi.org/10.1377/hlthaff.2021. 01072

17. Zhang X, Warner ME. COVID-19 policy differences across US states: shutdowns, reopening, and mask

mandates. Int J Environ Res Public Health. 2020;17(24):9520. https://doi.org/10.3390/ ijerph17249520
18. Jew Ho v Williamson, 103 F 10 (ND Cal 1900).
19. Gostin LO. Jacobson v Massachusetts at 100 years: police power and civil liberties in tension. Am J Public Health. 2005;95(4):576-581. https://doi. org/10.2105/AJPH.2004.055152
20. Jacobson v Massachusetts, 197 US 11 (1905).
21. Parmet WE, Jacobson PD. The courts and public health: caught in a pincer movement. Am J Public Health. 2014;104(3):392-397. https://doi.org/10. 2105/AJPH.2013.301738
22. Mariner WK, Annas GJ, Glantz LH. Jacobson v Massachusetts: it's not your great-great-grandfather's public health law. Am J Public Health. 2005; 95(4):581-590. https://doi.org/10.2105/AJPH. 2004.055160
23. Gostin LO, Burris S, Lazzarini Z. The law and the public's health: a study of infectious disease law in the United States. Columbia Law Rev. 1999; 99(1):59-128. https://doi.org/10.2307/1123597
24. Sullivan S. Tobacco talk: why FDA tobacco advertising restrictions violate the First Amendment. William Mitchell Law Rev. 1997;23:743-785.
25. NY Statewide Coalition of Hispanic Chambers of Commerce v New York City Dep't of Health &Mental Hygiene, 16 NE3d 538 (NY 2014).
26. Mok K, Posner EA. Constitutional challenges to public health orders in federal courts during the COVID-19 pandemic. BU Law Review. 2022; 102:1729-1785.
27. In re Abbott, 954 F3d 772, 784 (quoting Jacobson v Massachusetts, 197 US at 31).
28. South Bay United Pentecostal Church v Newsom, 140 S Ct 1613 (2020) (Roberts, CJ, concurring).
29. Tandon v Newsom, 141 S Ct 1294 (2021) (per curiam).
30. US Navy Seals 1-26 v Biden, 27 F4th 336 (5th Cir 2022).
31. Austin v US Navy Seals 1-26, 142 S Ct 1301 (2022).
32. Does 1-6 v Mills, 16 F4th 20 (1st Cir 2021).
33. We The Patriots USA v Hochul, 17 F4th 266 (2d Cir 2021).
34. Dr A v Hochul, 142 S Ct 552 (2021) (Gorsuch, J, dissenting).

DETAILS

Subject:	Pandemics; Public health; COVID-19; Disease control; Immunization; Severe acute respiratory syndrome coronavirus 2; Viral diseases; State court decisions; Coronaviruses; Trends; Vaccination; Freedoms; Masks; Decisions
Location:	Connecticut; United States--US
Company / organization:	Name: District Court-US; NAICS: 922110; Name: Westlaw; NAICS: 513140, 516210
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	280-287
Publication year:	2023
Publication date:	Mar 2023

Section:	RESEARCH &ANALYSIS
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
DOI:	https://doi.org/10.2105/AJPH.2022.307181
ProQuest document ID:	2781304670
Document URL:	https://www.proquest.com/scholarly-journals/judicial-review-public-health-powers-since-start/docview/2781304670/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Mar 2023
Last updated:	2023-03-02
Database:	Public Health Database

Caring for Military- Affiliated Transgender and Gender-Diverse Youths: A Call for Protections

Klein, David A, MD, MPH [1] ; Schvey, Natasha A, PhD [2] ; Baxter, Thomas A, DO [3] ; Larson, Noelle S, MD [4] ; Roberts, Christina M, MD, MPH [5] [1] the Departments of Family Medicine and Pediatrics, Uniformed Services University, Bethesda, MD, and the Department of Family Medicine, David Grant Medical Center, Travis Air Force Base, CA [2] the Department of Medical and Clinical Psychology, Uniformed Services University [3] the Department of Family Medicine, David Grant Medical Center, Travis Air Force Base, CA. [4] the Department of Pediatrics, Uniformed Services University, and the Department of Pediatrics, Walter Reed National Military Medical Center, Bethesda [5] Division of Adolescent Medicine, Children's Mercy Kansas City, and the Department of Pediatrics, University of Missouri-Kansas City School of Medicine

ABSTRACT (ENGLISH)

In the United States, 1.4% of youths between the ages of 13 and 17 years (or approximately 300 000 adolescents) identify as transgender or genderdiverse (TGD),1 indicating that their gender identity, expression, or perception does not conform to the traditional gender roles and stereotypes associated with their assigned sex.2 The recent increase in adolescents and young adults reporting a TGD identity is thought to be due to increased awareness of the full range of gender identities, social acceptance, and improvements in medical care.1-4 Greater acceptance supports wellness.2 Indeed, in a study examining the health of those referred to care between 2000 and 2016, those recently referred seemed to have better psychological functioning than those referred previously, whereas a similar proportion across the study time period chose to initiate gonadotropin-releasing hormone agonists (GnRH-a; used for puberty suppression) or gender-affirming hormones.4

Similar trends have occurred in the Military Health System (MHS). The number of new pediatric-age patients presenting for gender-affirming care in the MHS increased from 109 individuals a year in 2010 to over 600 a year in 2016.3 In 2017, when gender-affirming medical care was included in the list of TRICARE benefits for about one year, at least 2500 children actively sought care for gender dysphoria through TRICARE Prime insurance at military or civilian treatment facilities, and 900 received GnRH-a or gender-affirming hormones

FULL TEXT

Note. The opinions and assertions expressed herein are those of the authors and are not to be construed as reflecting the views of Uniformed Services University (USU), the Department of the Air Force, the Department of the Army, the US Department of Defense, or the US Government.

In the United States, 1.4% of youths between the ages of 13 and 17 years (or approximately 300 000 adolescents) identify as transgender or genderdiverse (TGD),1 indicating that their gender identity, expression, or perception does not conform to the traditional gender roles and stereotypes associated with their assigned sex.2 The recent increase in adolescents and young adults reporting a TGD identity is thought to be due to increased awareness of the full range of gender identities, social acceptance, and improvements in medical care.1-4 Greater acceptance supports wellness.2 Indeed, in a study examining the health of those referred to care between 2000 and 2016, those recently referred seemed to have better psychological functioning than those referred previously, whereas a similar proportion across the study time period chose to initiate gonadotropin-releasing hormone agonists (GnRH-a; used for puberty suppression) or gender-affirming hormones.4

Similar trends have occurred in the Military Health System (MHS). The number of new pediatric-age patients presenting for gender-affirming care in the MHS increased from 109 individuals a year in 2010 to over 600 a year in 2016.3 In 2017, when gender-affirming medical care was included in the list of TRICARE benefits for about one year, at least 2500 children actively sought care for gender dysphoria through TRICARE Prime insurance at military or civilian treatment facilities, and 900 received GnRH-a or gender-affirming hormones.3

MILITARY-AFFILIATED YOUTHS

Approximately 918 000 youths aged 6 to 18 years have parents on active duty or ready reserve status, and one third of all military service members have children younger than 18 years.5 Military-affiliated youths are faced with unique challenges and stressors, such as family separation and lack of parental support duringtraining and deployments, heightened risk of anticipated or actual parental injury and death, and frequent geographic relocations, leading to disruptions of peer networks, scholastic environments, and health care.6 The following sections examine the intersection between military-affiliated youths and gender-affirming care.

AFFIRMING MEDICAL CARE

Military dependent and nondependent TGD youths are at high risk for chronic stressors that may lead to poor mental health outcomes and risk-taking behaviors.2,7 Compared with their siblings without gender dysphoria, TGD youths seen in the MHS had over five times greater odds of a mental health diagnosis and seven times greater odds of suicidal ideation or self-harm.7 The stressors encountered by TGD youths include experiences of discrimination,

harassment, stigma, and marginalization at multiple social-ecological levels, and unaddressed gender dysphoria.2'8'9 Gender-affirming health care, such as puberty suppression and affirming hormones, mitigates these risks and optimizes patient-oriented outcomes, but many TGD youths have difficulty accessing services.2'8-11

BARRIERS TO CARE

Health care system barriers to genderaffirming treatment include discrimination, poor access, fear of mistreatment, and lack of trained clinicians willingto provide gender-affirming care.9 Among military-affiliated physicians in the MHS, 87% indicated they did not have sufficient training to prescribe genderaffirming hormones to transgender adults and 53% said they would not prescribe gender-affirming hormones regard less of training.12

TGD youths in some states also face new legal barriers to accessing genderaffirming treatments.13,14 Three states in the United States have outlawed all gender-affirming medical care for minors,15 and one state government has classified it as child abuse. Sixteen state public insurance programs (e.g., Medicaid) that serve persons of low income and a disproportionate number of racial/ethnic minorities do not pay for gender-affirming care. Nineteen state legislatures are considering laws to ban aspects of gender-affirming medical care, including creating criminal penalties for parents and clinicians who seek out or provide gender-affirming care for minors.14,15

CRISIS IN GENDERAFFIRMING CARE FOR MINORS

Legislative efforts to restrict genderaffirming care for youths have been described as a public health crisis. New state laws directly harm TGD adolescents by denying access to potentially lifesaving medical care and further exacerbating health care inequities, health risk behaviors, and preventable deaths.13,14

These current legislative efforts, along with efforts to exclude gender identity from legal discrimination protections, restrict sports participation, and regulate bathroom use, also harm TGD youths indirectly by increasing exposure to discrimination, stigma, and marginalization that underlie the mental health disparities associated with gender dysphoria.13,14 In a recent survey of 16 000 TGD civilian and military-affiliated youths aged 13 to 24 years across the United States, approximately half reported suicidality and 93% reported worry about transgender people being legally denied access to gender-affirming medical care.8 In a recent study of parents of TGD youths, the majority feared that laws prohibiting care would worsen their child's mental health and decrease autonomy over medical decision-making for their children, including when they experience suicidality.16

These laws and regulations are especially harmful to youths who identify as Black, Indigenous, or people of color and those from disadvantaged backgrounds.9 Such youths may be more likely to depend on state-financed medical coverage, which specifically excludes coverage for gender-affirming care, and many families may not have the resources to travel or relocate to access appropriate care.

LEGISLATION AND MILITARY-AFFILIATED YOUTHS

These restrictive state laws uniquely affect military TGD youths. Thirteen percent of the active-duty force lives in Texas, Arizona, Alabama, or Arkansas, states with the most restrictive laws on TGD-related care, and four of the five largest US military bases are located in states that have passed or are considering a ban on TGD-related care for minors.5,15 Military-affiliated TGD youths with parents assigned to these states may have limited or no access to genderaffirming care. This will make it difficult for youths in the MHS to initiate or continue GnRH-a or gender-affirming hormones. Military families have limited autonomy in geographic assignment and may not have any choice about moving into states that deny their children this potentially life-saving care, or the resources and commander support to regularly travel out of state to obtain care.5,15 Unwanted discontinuation of GnRH-a or gender-affirming hormones will lead to demonstrably harmful and nonsensical partial masculinization or feminization and may lead to depression, suicidality, poor quality of life, and other untoward outcomes.17

Providing gender-affirming care on a military base may not be a viable solution, as this may not protect parents or clinicians from criminal prosecution in states where rendering evidencebased, potentially lifesaving care to TGD youths is illegal or classified as child abuse. Similar to the case with local, non-military-affiliated clinicians, military clinicians who are qualified and willing to provide this care will be placed in a precarious and daunting situation when state laws conflict with ethical medical practice and the standard of care.12,14,18 Clinicians, many of whom are concurrently serving honorably as active-duty officers in the United States Military, may be forced to choose

between withholding recommended and medically necessary treatments to act in accordance with state law, and providing ethical and evidence-based treatment while facing legal or financial persecution, dishonorable military service, or allegations of child abuse. Families serving the country may face similar dilemmas and consequences. State laws banning gender-affirming care forTGD youths are currently blocked by court injunctions as they progress through litigation. However, given the "Originalist"judicial philosophy of the majority of the current Supreme Court and the recent rejection of substantive due process protections for private health care decisions, it is plausible that these laws may soon be enforced.

THREATS TO MILITARY READINESS

The family unit is the foundation of a strong military force.6 Threats to militaryaffiliated youths, parents, guardians, and clinicians are threats to military readiness. Service members frequently base their decision to reenlist or to extend military service on family factors, such as appropriate health care for dependents. Lack of health care services could affect the service member's retainability, morale, performance, operational readiness, recruitment, and overall health; optimal care can reduce stress.6 For example, missed time at work, inability to deploy, and early return from deployment affect both home station and deployed missions.

ADDRESSING CONCERNS WITH GENDER-AFFIRMING CARE

In April 2022, a team of scholars at Yale University deconstructed the major arguments in which these laws are rooted.19 State legislation overstates uncertainties in the medical literature supporting gender-affirming care, exaggerates associated risks, falsely claims that medical standards authorize sterilization for minors, and fails to consider and acknowledge the substantial benefits of gender-affirming treatment.19 Current treatment guidelines describe the most effective and evidence-based treatment options, includingthe risks and benefits, based on four decades of research and clinical experience with TGD adolescents specifically, and substantially longer with TGD adults.2,11

These laws also assume that TGD adolescents and their parents are incapable of understanding the risks and benefits of gender-affirming medical care and then deciding what is in the youth's best interest. Prior research has found that children can begin participating in their medical decisionmaking as early as age seven years with gradual increases in decision-making capacity, and adolescents prefer shared decision-making.2,20-22 Furthermore, military-affiliated adolescents who initiate gender-affirming hormones continue their medication at rates similar to or higher than those of adults, reflecting a similar understanding and tolerance of the effects of hormonal therapy.23 Deontological and consequentialist reasoning, rooted in empirical evidence and human rights, suggests that youths with decisional capacity, in an informed consent model of care, have an inherent ability and right to consent to gender-affirming therapy.20

RECOMMENDATIONS: A PATH FORWARD

The United States Military has a long history of overcoming discriminatory policies affecting minoritized groups. In the case of gender diverse youths, the Department of Defense (DoD) can leverage its robust, intact systems to overcome evolving barriers to the provision of and access to care.

1. Publicly declare a position. The DoD through the Defense Health Agency (DHA) should publicly declare a gender-affirmative position on this issue, in accordance with the recommendations from multiple major medical societies that voice support for patients, parents, caregivers, and clinicians. Alternatively, a less public approach could involve a statement voicing support for insurance beneficiaries receiving evidence-based medical care informed by relevant medical organizations, while simultaneously fostering access to the full range of services. This may lead to less resistance and politicization, which could work against the overarching goals. However, affirming care has only recently become politicized; protection of gender-affirming medical care for military-affiliated TGD youths may require a declarative position without tolerance for personal biases, as the DoD has historically achieved for other minoritized groups.

2. Clarify boundaries. Clinicians who care for military-affiliated TGD youths should be familiar with relevant state laws that may limit provision of care, and available local and nonlocal resources. This information may fluctuate. To protect patients, parents, caregivers, and clinicians, current guidance should be updated regularly on relevant DHA

Web sites for transparency. Nuanced information related to legalities by location of care (e.g., military treatment facilities, perhaps based on receipt of federal funding) and care provision rules (e.g., permissibility of telehealth or medical temporary duty based on physical location of patient or clinician) should be clearly elucidated by DHA legal advisors. The DHA should also make a commitment to defending clinicians and families who render genderaffirming care to minors in accordance with DHA legal guidance from prosecution under state laws or policies that criminalize this care.

3. Leverage the Exceptional Family Member Program (EFMP). The DoD can codify specific and definitive policies through the EFMP, ensuring protections for youths with TGD identities, their families, and their health care teams. The United States Air Force has publicly discussed this strategy using command-driven personnel actions to move affected families to locations with available care; it has also discussed the robust use of the EFMP to prevent relocation of enrolled families to areas unable to provide indicated care because of state law.24 The DoD must ensure that members of all military services have equitable benefits.

4. Use medical temporary dutyjudiciously. In states that permit travel for care across state lines, patients should be allowed access to medical temporary duty central funding to travel to states with a full range of care for specialized services. This model has been proven; military-affiliated patients from countries with barriers to genderaffirming services have temporarily visited a specialized military clinic in the United States periodically for care.25 For example, an implantable puberty blocker, which is generally effective for at least two years, can be administered at a tertiary care military hospital, requiring only routine services easily accomplished in primary care over time. This could be a temporizing measure prior to relocation.

5. Foster telehealth capabilities. Telehealth has greatly evolved during the COVID-19 pandemic and has the potential to meaningfully increase access to care. The United States Air Force has piloted a telehealth program for transgender activeduty members and found high rates of patient satisfaction, suggesting the infrastructure is in place. Use of this platform will depend on details of specific state law, credentialing, and licensure.

6. Provide education and training. The extent to which gender-affirming care exists at each location of care varies.12 The DHA, in partnership with the Uniformed Services University, can boost educational efforts for medical students, residents, and clinicians at military treatment facilities. Use of evidence-based clinical guidelines,11 consultation with experts in military settings,25 or civilian training programs (e.g., https:// www.lgbtqiahealtheducation.org; https://www.wpath.org) can ensure relevant content.

Some well-intentioned militaryaffiliated clinicians may not be aware that a "watchful waiting" approach has a different risk profile than a gender-affirmative approach (which allows for gender identity exploration), and that "conversion therapy" is unethical, harmful, and generally illegal.2 Patients may face "gatekeeping" and major delays in care, including protracted and pathologizing psychiatric evaluations that question patient motives. With proper training, clinicians can provide care in an informed-consent, longitudinal primary care model that integrates mental health, or multidisciplinary care, based on patient complexity and need, clinician comfort and training, state laws, and family preferences.2,11

7. Optimize treatment platforms. Clinicians serving military-affiliated TGD youths can ensure that their treatment platforms-such as their clinic environments, staff, and care recommendations-are welcoming, accessible, and evidence-based.2 Facility commanders can be empowered to ensure institutional cultural responsiveness and humility among its clinical and support staff.

8. Sponsor research. Longitudinal research is needed to better understand long-term patient, family, and military outcomes associated with access to timely genderaffirming care. An investment in further educational and population-based health services research through military and civilian funding sources is warranted.

Military-affiliated youths with financial resources and strong parental support, as seen in other circumstances, may navigate the system to find appropriate solutions for lack of local care. Unfortunately, not all military-affiliated families or youths will have similar agency, leadingto additional health care inequities among those without financial means or those at highest risk because of their multiple marginalization experiences. Low- or no-cost care through the TRICARE insurance program, including allowances for timely provision of GnRH-a-which can be cost-prohibitive for

some nonaffiliated peers-already attenuates barriers to care. Additional supports from the DHA and local military commanders in the form of medical temporary duty sponsorship, as allowed, can further reduce risk.

A considerable worry is that for some youths with TGD identities, the stress of state laws and potential denial of necessary care will be insurmountable, resulting in poor mental health outcomes or suicide. The loss of these youths and the consequential suffering of the affected military families would be unfathomable and unacceptable. Those in immediate need can be referred to crisis resources (e.g., The Trevor Project; https://www.thetrevorproject.org); military-specific resources are available as well (https://modernmilitary.org/ portfolio-items/milpride). In 2016, TRICARE formally approved coverage of care to TGD youths.3 We believe the DoD can continue to lead in this domain. ÂfPU

CORRESPONDENCE

Correspondence should be sentto David A. Klein, MD, MPH, Department of Family Medicine, Uniformed Services University, 4301 Jones Bridge Rd, Bethesda, MD 20814 (e-mail: david.a.klein26.mil@ health.mil). Reprints can be ordered at http:// www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Klein DA, Schvey NA, Baxter TA, Larson NS, Roberts CM. Caring for military-affiliated transgender and gender-diverse youths: a call for protections. Am J Public Health. 2023;113(3): 251-255.

Acceptance Date: October 20, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307163

CONTRIBUTORS

All authors sufficiently contributed to the conceptualization, design, drafting, and revision of content of this opinion editorial, and approved the final version.

ACKNOWLEDGMENTS

Children's Mercy Kansas City funded open access fees.

CONFLICTS OF INTEREST

The authors have no potential or actual conflicts of interest from funding or affiliation-related activities.

References

REFERENCES

1. Herman JL, Flores AR, O'Neill KK. How many adults identify as transgender in the United States? The Williams Institute. University of California, Los Angeles School of Law. 2022. Available at: https:// williamsinstitute.law.ucla.edu/publications/transadults-united-states. Accessed November 7, 2022.

2. RaffertyJ, Committee on Psychosocial Aspects of Child and Family Health, Committee on Adolescence, Section on Lesbian, Gay, Bisexual, and Transgender Health and Wellness, Yogman M, Baum R, et al. Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents. Pediatrics. 2018;142(4): e20182162. https://doi.org/10.1542/peds.20182162

3. Klein DA, Roberts TA, Adirim TA, et al. Transgender children and adolescents receiving care in the US Military Health Care System. JAMA Pediatr. 2019;173(5):491 -492. https://doi.org/10.1001/ jamapediatrics.2019.0105

4. Arnoldussen M, Steensma TD, Popma A, van der Miesen AIR, TwiskJWR, de Vries ALC. Re-evaluation of the Dutch approach: are recently referred transgender youth different compared to earlier referrals? [erratum in Eur Child Adolesc Psychiatry. 2020;31(5):843.] Eur Child Adolesc Psychiatry. 2020; 29(6):803-811. https://doi.org/10.1007/s00787019-01394-6

5. Dept of Defense, Office of the Deputy Assistant Secretary of Defense for Military Community and Family Policy. 2020 Demographics profile of the military community. 2021. Available at: https:// www.militaryonesource.mil/data-research-andstatistics/military-community-demographics/ 2020-demographics-profile. Accessed November 7, 2022.

6. National Academies of Sciences, Engineering, and Medicine. Strengthening the Military Family Readiness System for a Changing American Society. Washington, DC: National Academies Press; 2019.

7. Hisle-Gorman E, Schvey NA, Adirim TA, et al. Mental healthcare utilization of transgender youth before and after affirming treatment. J Sex Med. 2021;18(8):1444-1454. https://doi.org/10. 1016/j.jsxm.2021.05.014

8. The Trevor Project. National Survey on LGBTQ Youth. 2022. Available at: https://www.thetrevor project.org/survey-2022/assets/static/trevor01_ 2022survey_final.pdf. Accessed November 7, 2022.
9. Chong LSH, Kerklaan J, Clarke S, et al. Experiences and perspectives of transgender youths in accessing health care: a systematic review. JAMA Pediatr. 2021;175(11):1159-1173. https://doi.org/ 10.1001/jamapediatrics.2021.2061
10. Chew D, Anderson J, Williams K, May T, Pang K. Hormonal treatment in young people with gender dysphoria: a systematic review. Pediatrics. 2018;141(4):e20173742. https://doi.org/10.1542/ peds.2017-3742
11. Hembree WC, Cohen-Kettenis PT, Gooren L, et al. Endocrine treatment of gender-dysphoric/gender-incongruent persons: an Endocrine Society clinical practice guideline. J Clin Endocrinol Metab. 2017;102(11):3869-3903. https://doi.org/10. 1210/jc.2017-01658
12. Schvey NA, Blubaugh I, Morettini A, Klein DA. Military family physicians' readiness for treating patients with gender dysphoria. JAMA Intern Med. 2017;177(5):727-729. https://doi.org/10.1001/ jamainternmed.2017.0136
13. Barbee H, Deal C, Gonzales G. Anti-transgender legislation-a public health concern for transgender youth. JAMA Pediatr. 2022;176(2):125-126. https://doi.org/10.1001/jamapediatrics.2021.4483
14. Park BC, Das RK, Drolet BC. Increasing criminalization of gender-affirming care for transgender youths-a politically motivated crisis. JAMA Pediatr. 2021 ;175(12):1205-1206. https://doi.org/10.1001/ jamapediatrics.2021.2969
15. Movement Advancement Project. Equality maps: healthcare laws and policies. 2022. Available at: https://www.lgbtmap.org/equality-maps/health care_laws_and_policies. Accessed November 7, 2022.
16. Kidd KM, Sequeira GM, Paglisotti T, et al. "This could mean death for my child": parent perspectives on laws banning gender-affirming care for transgender adolescents. J Adolesc Health. 2021; 68(6):1082-1088. https://doi.org/10.1016/]. jadohealth.2020.09.010
17. Wu SS, Raymer CA, Kaufman BR, Isakov R, Ferrando CA. The effect of preoperative gender affirming hormone therapy use on perioperative adverse events in transmasculine individuals undergoing masculinizing chest surgery for gender affirmation. AesthetSurgJ. 2022. https://doi.org/10. 1093/asj/sjac091
18. WarlingA, Keuroghlian AS. Clinician-level implications of bans on gender-affirming medical care for youth in the US. JAMA Pediatr. 2022;176(10): 963. https://doi.org/10.1001/jamapediatrics. 2022.2771
19. Boulware SD, Kamody R, Luper L, et al. Biased science: the Texas and Alabama measures criminalizing medical treatment for transgender children and adolescents rely on inaccurate and misleading scientific claims. Yale University. 2022. Available at: https://medicine.yale.edu/lgbtqi/ research/gender-affirming-care/biased-science. Accessed November 7, 2022.
20. Clark BA, Virani A. "This wasn't a split-second decision": an empirical ethical analysis of transgender youth capacity, rights, and authority to consent to hormone therapy. J Bioeth Inq. 2021; 18(1):151 -164. https://doi.org/10.1007/s11673020-10086-9
21. Dubin S, Lane M, Morrison S, et al. Medically assisted gender affirmation: when children and parents disagree. J Med Ethics. 2020;46(5):295-299. https://doi.org/10.1136/medethics-2019-105567
22. Vrouenraets LJJJ, de Vries ALC, de Vries MC, van der Miesen AIR, Hein IM. Assessing medical decision-making competence in transgender youth. Pediatrics. 2021;148(6):e2020049643. https://doi.org/10.1542/peds.2020-049643
23. Roberts CM, Klein DA, Adirim TA, Schvey NA, Hisle-Gorman E. Continuation of gender-affirming hormones among transgender adolescents and adults. J Clin Endocrinol Metab. 2022;107(9): e3937-e3943. https://doi.org/10.1210/clinem/ dgac251
24. Youn S. Air Force offers help to LGBTQ personnel, families hurt by state laws. Washington Post. April 16, 2022. Available at: https://www.washington post.com/politics/2022/04/16/air-force-lgbtq-lawshelp-families. Accessed November 7, 2022.
25. Van Donge N, Schvey NA, Roberts TA, Klein DA. Transgender dependent adolescents in the US military health care system: demographics, treatments sought, and health care service utilization. Mil Med. 2019;184(5-6):e447-

e454. https://doi. org/10.1093/milmed/usy264

DETAILS

Subject:	Hormones; Families &family life; Low income groups; Decision making; Children &youth; Military service; Transgender persons; Social exclusion; Gender-affirming care; Military bases; Health care; Mental health; Child abuse &neglect; Teenagers; Suicides &suicide attempts; Parents &parenting; Gender dysphoria; State laws; Puberty; Gender identity; Adults; Adolescents; Military; Young adults; Stereotypes; Military facilities; Pediatrics; Medicine; Gonadotropins; Sex roles; Health services; Gonadotropin-releasing hormone; Armed forces; Gender aspects; Gender; Pituitary (anterior); Social acceptance; Public health
Business indexing term:	Industry: 92811 : National Security
Location:	United States--US
Company / organization:	Name: TRICARE; NAICS: 524114
Classification:	92811: National Security
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	251-255
Publication year:	2023
Publication date:	Mar 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article

Trends in US State Public Health Emergency Laws, 2021–2022

Platt, Elizabeth, JD, MA; Moran-McCabe, Katie, JD; Cook, Amy, JD; Burris, Scott, JD

ABSTRACT (ENGLISH)

Objectives. To identify and categorize US state legislation introduced between January 1,2021, and May 20, 2022, that addresses emergency health authority. Methods. We adapted standard policy surveillance methods to collect and code state bills and enacted laws limiting or expanding the emergency public health authority of state and local officials and agencies. Results. State legislators introduced 1531 bills addressing public health authority; 191 of those were enacted in 43 states and the District of Columbia, including 17 expanding and 65 contracting emergency authority, 163 regulating use, and 30 preempting local use of specific measures such as mask mandates. Conclusions. State laws setting the scope and limits of emergency authority are crucial to effective public health response. These laws are changing in ways that threaten to reduce response capacity. Tracking changes in health law infrastructure is important for evaluating changes in health authority and ensuring that stakeholders recognize these changes. Public Health Implications. The COVID-19 pandemic called for quick, decisive action to limit infections, and when the next outbreak hits, new laws limiting health authority will make such action even more difficult. (AmJ Public Health. 2023;113(3):288-296. https://doi.org/10.2105/AJPH.2022.307214)

FULL TEXT

Headnote

Objectives. To identify and categorize US state legislation introduced between January 1,2021, and May 20, 2022, that addresses emergency health authority.

Methods. We adapted standard policy surveillance methods to collect and code state bills and enacted laws limiting or expanding the emergency public health authority of state and local officials and agencies.

Results. State legislators introduced 1531 bills addressing public health authority; 191 of those were enacted in 43 states and the District of Columbia, including 17 expanding and 65 contracting emergency authority, 163 regulating use, and 30 preempting local use of specific measures such as mask mandates.

Conclusions. State laws setting the scope and limits of emergency authority are crucial to effective public health response. These laws are changing in ways that threaten to reduce response capacity. Tracking changes in health

law infrastructure is important for evaluating changes in health authority and ensuring that stakeholders recognize these changes.

Public Health Implications. The COVID-19 pandemic called for quick, decisive action to limit infections, and when the next outbreak hits, new laws limiting health authority will make such action even more difficult. (AmJ Public Health. 2023;113(3):288-296. https://doi.org/10.2105/AJPH.2022.307214)

In the US legal system, states have the primary responsibility for enacting pandemic control measures. State legislatures define the nature and extent of public health agency authority and the emergency powers of governors and mayors, which are crucial to public health preparedness and response. Executive agencies are the first responders to unexpected events, such as a new pathogen. Their capacity to obtain and interpret information and subsequently launch appropriate testing, vaccination, treatment, and nonpharmaceutical interventions provides the best chance of preventing a major outbreak. The ability of health officials to do this work depends in significant part on what the law requires or allows.

Flexible authority to manage epidemics and other emergencies was built into US public health law at least as far back as the first boards of health at the turn of the 19th century.1 From the legal point of view, public health administration has depended on 2 distinct features of the law: (1) grants of authority to officials typically included a catchall reference to "any other actions" the health officer deemed necessary in response to unanticipated health threats, and (2) courts tended to interpret this residual authority broadly and with deference.1,2 In modern times, mechanisms for declaring official emergencies and triggering broad powers were added to state (and federal) law. Thus, as COVID-19 struck, federal, state, and local officials were able to respond rapidly with sweeping emergency orders.3

Initially, courts upheld these measures, deferring to the judgments of health officials.3 As COVID-19 control measures grew more tendentious in politics and public opinion, fewer judges deferred, and a shifting Supreme Court majority adopted new doctrines of general administrative law that limit health and other administrative agencies to powers and measures expressly stated in law and applied First and Second Amendment protections more stringently.4 As courts examine health measures with less deference and interpret the law more narrowly, the ability of state and local officials to address health threats depends more than ever on the language of state health laws defining their powers.

This body of state public health law is changing. In the legislative sessions starting in January 2021, state legislators introduced more than 1500 bills to change the legal authority of state and local health agencies and executive officers. In our legal mapping research, we documented state bills that affected the nature or allocation of public health authority at the state and local levels and state laws limiting public health emergency authority from January 1,2021, through May 20, 2022. Our results provide an initial look at the authority state and local officials will have-and the political headwinds they will face-as they manage major threats to public health in the future.

METHODS

We adapted standard policy surveillance methods5 to support rapid collection and reporting of bill and enacted law data. Legal researchers defined the topical scope ofthe research and developed a coding scheme. A commercial bill-tracking firm engaged by the Association of State and Territorial Health Officials identified legislation covering January 1,2021, to May 20, 2022, using proprietary methods. The Association of State and Territorial Health Officials screened identified bills and laws and transmitted them to the Center for Public Health Law Research collaborating team. Data, codebooks, and research protocols are available at lawatlas.org.

Bills Addressing Public Health Authority

We included bills if they set limits on authority to declare public health emergencies or issue emergency orders ("limits on health authority"), changed the agency or official responsible for an emergency public health response ("public health authority reallocation"), expanded the emergency authority of a public health agency or official ("public health authority expansions"), limited state or local enforcement of federal health mandates ("limits on federal laws"), regulated the deployment of specific response measures ("regulation of emergency measures"), or preempted local public health authority to enact emergency control measures ("preemption of emergency

measures"). We organized each category of bills as a separate longitudinal data set.
We checked identified bills against a separate list compiled by collaborating attorneys from the Network for Public Health Law, who reviewed state legislative Web sites, news media reports, and personal communications to identify bills in the regions they serve. Six Center for Public Health Law Research attorneys individually assigned bills to topical data sets and coded the variables on the policy-tracking software MonQcle (Center for Public Health Law Research, Philadelphia, PA). We resolved ambiguous cases through further review and group discussion. We logged definitions and coding rules into research protocol notes shared among the team for cohesiveness. Supervising attorneys reviewed final coding.

Laws Limiting Public Health Authority

We created 1 longitudinal data set of enacted laws that limited public health authority. Researchers used search alerts from the Westlaw legal research platform and active keyword searches on openstates.org to verify initial research and identify missing laws. We used Westlaw to check for further amendments for each law in the data set. One researcher coded each record, and a supervising attorney reviewed the data set.

RESULTS

From the beginning ofthe 2021 -2022 state legislative sessions to May 20, 2022, legislators introduced 1531 total bills to change the scope and allocation of emergency health authority generally or with respect to COVID-19 (Table 1). The most common type of bill regulated the use of specific control measures, such as vaccination, testing, and masks, followed by bills that limited the public health authority of a governor, state health official, or local health official. Bills frequently addressed multiple topics, so totals reported by category will not sum to the total number of bills. Interactive maps and tables containing state-level details-including bill text- about the legislation for each topic can be found on lawatlas.org.

As of May 20, 2022,191 of the 1531 bills were enacted into law in 43 states and the District of Columbia, including 7 via veto override. Of those, 554 failed (i.e., were voted down or expired at the end of the session), 7 remained vetoed, and 779 remained in consideration at the end of our observation period. States saw an average of 30 introduced bills, with a range of 3 (Delaware) to 113 (New York). States enacted an average of 4 laws, ranging from none in 7 states (DE, IL, MA, MI, MO, NM, and RI) to 13 in Virginia. In states that enacted a law, pass rates as a percentage of all bills introduced varied from 1 % in Minnesota to 80% in North Dakota.

Laws Expanding Public Health Authority

Twelve states (CO, GA, IN, LA, MD, NJ, OR, PA, SC, VA, VT, and WV) passed 17 laws expanding emergency authority. Expansion measures included laws that enhanced the organizational independence of health agencies (Colorado House Bill 22-1352), expanded authority during the COVID-19 pandemic (Indiana House Bill 1001, Pennsylvania House Bill 1861), or created new emergency rule-making procedures (Louisiana Senate Bill 136). Three states both expanded and contracted emergency response options: Georgia authorized local health authorities to disseminate vaccination information to manage a disease outbreak (Georgia Senate Bill 46) but also barred state and local governments from requiring proof of COVID-19 vaccination (Georgia Senate Bill 345). Indiana authorized state health authorities to issue standing orders, prescriptions, or protocols for immunizations (Indiana House Bill 1001) but also prohibited the state from requiring a COVID-19 vaccine passport (Indiana House Bill 1405). New Jersey passed a law establishing a COVID-19 pandemic taskforce on health disparities (New Jersey Assembly Bill 4004), coded as an expansion, but also terminated the governor's COVID-19 public health emergency and several executive orders (New Jersey Assembly Bill 5820).

Laws Limiting Emergency Authority

Twenty-five states enacted 65 laws that limited the emergency authority of governors, other state officials, or local health officials (Figure 1; Table A, available as a supplement to the online version of this article at http://www.ajph.org). Figure 1 shows the types of limitations and the officials subject to them. Most common were laws limiting the scope of orders, with 21 states enacting 54 such laws. Idaho, for example, enacted 4 laws that limited emergency authority to measures "essential to protect life or property from the occurrence or imminent threat of the state of [sic] disaster emergency threatening the safety of persons or property" (Idaho House Bill 393) and prohibited the

governor and all other state and local officials from limiting "any rights guaranteed by the United States constitution or constitution of the state of Idaho, including but not limited to the right to peaceable assembly or free exercise of religion" (Idaho House Bill 391); prohibited the governor from altering or creating any provision of the Idaho Code during a disaster emergency (Idaho House Bill 392); and required that emergency orders "be narrowly focused without placing unnecessary restrictions on the ability for a person ... to work, provide for their families, or otherwise contribute to the economy" (Idaho Senate Bill 1217).

Sixteen states enacted 20 laws that limited the issuance of emergency orders, for example by requiring that an executive order be submitted to a Legislative Council for review. In Montana, the law now states that after declaring a state of emergency, the governor "may not declare another state of emergency or disaster based on the same or substantially similar facts and circumstances without legislative approval"(Montana House Bill 230).

Fifteen states enacted 18 laws limiting the duration of emergencies. Limits averaged 33 days, ranging from 90 in Ohio (Ohio Senate Bill 22) to as few as 10 in Wyoming (for a stay-at-home order to limit the transmission of a contagious disease; Wyoming House Bill 127).

Eleven states enacted 16 laws addressing termination of emergency orders by the legislature or another entity. For example, Florida Senate Bill 2006 added a provision that allowed the legislature to terminate emergency orders by concurrent resolution, whereas Montana House Bill 121 allowed local health official orders to be terminated by county commissioners or other local elected officials. Kansas enacted Senate Bill 40, which limited gubernatorial orders by allowing local governments to supersede them with less strict rules.

Laws Reallocating Emergency Authority

We categorized a law as "reallocating" authority when it removed an emergency power from a governor or health official and gave it to the legislature or another official or agency. Six laws in 6 states reallocated authority. For example, Kansas Senate Bill 40 requires that county commissioners approve local health officer orders mandating the use of face masks, limiting gatherings, or restricting business operations.

Laws Limiting Federal Enforcement

Five states (ID, MT, SC, UT, and WY) enacted laws purporting to regulate the enforcement of federal public health laws or orders by state or local officials. In the US federal system, state officers are generally permitted, but not required, to enforce federal laws. These measures eliminate that discretion. For example, South Carolina House Bill 3126 provides that a federal vaccine mandate shall not be enforced unless a state or federal court holds it to be enforceable. Wyoming House Bill 1002 states that no public entity shall enforce any federal rule requiring an employer to mandate that employees receive a COVID-19 vaccination.

Laws Regulating Specific Measures Use

Forty-one states and the District of Columbia enacted 163 laws that addressed state executive or local authority to impose specific disease control measures, including mask mandates, vaccination requirements, and school or business closures (Figure 2). Some laws enhanced or otherwise supported authority to deploy these measures. For example, Virginia required the Department of Health to establish a volunteer program for eligible health care providers to administer the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) vaccinations (Virginia House Bill 2333 and Senate Bill 1445), and New York made it a crime to falsify SARS-CoV-2 vaccination records (New York Assembly Bill 8700 and Senate Bill 4516). Other laws restricted authority. Iowa prohibited school districts from adopting or enforcing face mask requirements and prohibited the mandatory disclosure of vaccination status (Iowa House File 847 and House File 889). Some states enacted both kinds of laws. More than half of these laws (57%)-55 of 95 restrictive measures and 38 of 68 expansive measures-applied exclusively to COVID-19, so they will not apply to other threats now or in the future (Table B, available as a supplement to the online version of this article at http://www.ajph.org).

Twelve states enacted 30 laws that preempted local authorities from implementing 1 or more specific health measures. Vaccine requirements were the most common targets, followed by mask mandates and limits on religious gatherings. Almost half (14) of these apply exclusively to COVID-19 (Table B).

Party Control

There was little partisan difference in the intensity of legislative activity, but there was a striking difference in outcome. The 15 states that saw the most bill introductions were fairly evenly divided between Republican and Democratic control of the legislature and governorship, but all except 1 (CT) of the states that enacted more than 1 restrictive public health measure bill had Republican control of the legislature (Figure 3; Table C, available as a supplement to the online version of this article at http://www.ajph.org).

DISCUSSION

Public health law reform is to be expected after a major shock. The terrorist attacks and severe acute respiratory syndrome outbreak early in this century were both followed by significant attention to laws governing emergency preparedness and response.6,7 Research demonstrates the high prevalence of emergency laws and the complexity of implementation networks they created.8 Public health lawyers have analyzed responses to the emergencies and developed the Model State Emergency Health Powers Act,6,9 which was subjected to robust public debate.10,11 More than 40 states adopted 1 or more of its provisions over the following decade.12 By contrast, legislation responding to COVID-19 has been highly politically partisan, rapid, and uninformed by careful and sustained research and analysis of the COVID-19 emergency response. In the first legislative session after COVID-19 hit, most states changed their law in some way.

The most frequently introduced and enacted laws addressed specific public health measures. These laws, more than half of which were specific to COVID-19, restrict measures that could reduce morbidity and mortality in the continuing COVID-19 pandemic; they reflect legislative interest in setting policy for COVID-19 without changing public health authority generally. Twentyfive states enacted laws limiting state or local officials' authority to respond to public health emergencies (Table A). Laws that limit the scope and duration of emergency orders or that shift emergency authority from executives to legislatures are concerning because they impose arbitrary limits on the discretion of the officials charged with taking action.

Although the duration of COVID-19 measures strained common expectations of how long an emergency should last, the experience also suggests that state legislatures, many of which were not even in session, are not institutionally disposed or well suited to enacting emergency legislation or managing response during a health crisis. Similarly, some new laws were written, unintentionally or intentionally, in ways that may chill the actual use of powers and invite court challenges. Idaho's new law, for example, will require health officials to be confident that emergency measures are essential to address an imminent threat and to be prepared for court challenges contending that the measures are not narrowly tailored enough. Laws like these pose a serious threat to the state's practical ability to respond in a timely way to an emergency.

Contextualizing legislative activity quantitatively is difficult because the output of legislatures is not systematically tracked. On average, state legislators reportedly introduce more than 109 000 bills each session.13 On average, according to a commercial bill-tracking company, 20% of introduced bills are enacted, but state enactment rates vary from 5% to more than 60%.14 An analysis ofthe 20122014 state legislative sessions, using data from the same tracking firm we used, found 804 bills across 12 health law domains, including housing and chronic disease control and core public health powers. Of these, only 13 addressed emergency preparedness and response. Ofthe 804 bills, 242 were enacted into law, including 5 of the 13 dealing with emergency preparedness.15 These reports are consistent with the perception that the amount of public health emergency powers legislation was dramatically higher than usual in the 2021 -2022 session.

Bills do not reflect actual levels of legislator or public interest in or concern about an issue. Any legislator can introduce a bill, allowing proposals that are best described as bizarre and that legislators do not give serious consideration. For example, New Hampshire House Bill 1027 sought to establish the crime of "undermining the legislative process by false claim of emergency" and accused President Biden of colluding with the Occupational Safety and Health Administration to bypass the legislative process under a false claim of an emergency. Several bills were introduced that allowed pharmacists and physicians to prescribe ivermectin and hydroxychloroquine for preventing COVID-19.

Historically, disputes over the division of authority in government are common. There is no correct division of power.

Each entity has its strengths and weaknesses in terms of efficiency, accountability, and innovation. In practice, the allocation tends to be a matter of politics rather than rational, evidenceinformed governance optimization.16,17

It is well established that in the United States, industry and conservative political forces have worked to limit the public health authority of liberal cities in relation to conservative state legislatures and to use state law to limit health regulation generally.18-23 State legislatures' widespread preemption of local health and welfare legislation is a welldocumented problem,19,21 and research has suggested that preemption has harmful health effects.24 In the case of public health powers, organized efforts include a model emergency powers law written by the American Legislative Exchange Council. The American Legislative Exchange Council Emergency Power Limitation Act would subject all emergency measures to the most stringent constitutional standard ("narrowly tailored to serve a compelling state interest") and set an automatic expiration date of as few as 7 days for executive orders.25 Our research team identified at least 26 bills limiting public health authority as identical to or based on the American Legislative Exchange Council model. The fact that new limits on authority have been concentrated in "red" states is worrisome in light of evidence that conservative state legislatures' policy choices are already causing disparities in state life expectancy.26

Events in the courts have made the scope and language of state laws more important. Courts, including the Supreme Court, have increasingly adopted major questions and general nondelegation rules that require grants of authority to administrative agencies, including health departments, to be explicit and specific.27 Construing state and federal law according to these doctrines parallels the much older practice of narrowly interpreting state grants of authority to local governments, an approach that has limited local health authority in many states.28

COVID-19 revealed problems with public health capacity and professional culture in the United States,29 and there has long been a need for more systematic research on the relationship of public health law infrastructure, agency effectiveness, and health outcomes.30 COVID-19 produced considerable rapid research on specific health measures, but the empirical question of how various forms of authority affect outcomes is a matter of continuing importance in need of further, more rigorous study. Policy surveillance-the systematic, scientific tracking of laws of public health importance-provides data for evaluating changes in health authority.31 Tracking changes and proposed changes in health law also enables stakeholders to recognize these changes and helps supporters of effective public health to weigh in. Finally, scientific legal mapping of proposed and enacted legislation can help distinguish political bluster and fringe legal proposals from those that actually become law.

Our research period ended before the conclusion of the legislative session or special sessions in the 2021 -2022 legislative period. Bills that have been categorized as pending or vetoed in our study could still be enacted into law, as could new bills introduced after May 20, 2022.

Conclusions

COVID-19 posed a daunting challenge to health agencies everywhere. The transmissibility and adaptability of SARS-CoV-2 in a closely linked world explain much of the failure to prevent a global pandemic, but there were mistakes of both under- and overreaction. The ideal combination and timing of nonpharmaceutical interventions, and the best approaches to achieve high levels of vaccination, likely vary by setting and will be difficult to determine or sustain. Careful assessment of health agency performance and sensible revision of law are indicated.

Given the politicization of public health work during COVID-19 and the social shock of the pandemic, rapid and substantial changes to public health authority seem to reflect the frustration and irritation of a painful experience rather than a well-considered and evidence-informed analysis of the authority that health agencies need and what factors-leadership, funding, and other resources-drive strong health agency performance. Although restrictions specific to COVID-19 may not directly limit action in future emergencies, new legislation rarely seems to address the nuanced challenges of applying legal authority to stop pandemic disease. Rather, these laws appear to legislate a particular political position disdainful of public health and indifferent to the long-term dictates of effective public health practice.

Public Health Implications

The COVID-19 pandemic called for quick and decisive action to limit initial infections and subsequently a sustained

effort to reduce transmission via nonpharmaceutical interventions and, when available, vaccines. When the next outbreak hits, new laws limiting health department discretion will make deploying these measures even more difficult. Now is the time for those concerned with effective public health action to focus on the basic law defining the scope, distribution, and nature of health authority. /(JPH

Sidebar

See also Parmet and Erwin, p. 267, Wiley, p. 269, Gostin, p. 272, Hodge et al., p. 275, and Parmet and Khalik, p. 280.

ABOUT THE AUTHORS

All authors are with the Center for Public Health Law Research, Temple University Beasley School of Law, Philadelphia, PA.

CORRESPONDENCE

Correspondence should be sent to Katie MoranMcCabe, JD, 1719 N. Broad St, Room 509, Philadelphia, PA 19122 (e-mail: kathleen.mccabe@ temple.edu). Reprints can be ordered at http:// www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Platt E, Moran-McCabe K, Cook A, Burris S. Trends in US state public health emergency laws, 2021-2022. Am J Public Health. 2023; 113(3):288-296.

Acceptance Date: December 18, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307214

CONTRIBUTORS

E. Platt led the project. E. Platt, K. Moran-McCabe, and S. Burris contributed substantially to the analysis and writing of the article. K. MoranMcCabe helped manage the project. A. Cook contributed substantially to the research.

ACKNOWLEDGMENTS

Support for this research was provided by the Robert Wood Johnson Foundation (awards 77249 and 79045). Members of the following organizations provided assistance, guidance, or feedback in the research: ChangeLab Solutions, Network for Public Health Law, Public Health Law Center, Public Health Law Watch, the Association of State and Territorial Health Officials, and the Local Solutions Support Center. The authors thank Leslie Zellers for coordinating the collaborating teams. The authors thank Center for Public Health Law Research (CPHLR) staffers Adrienne Ghorashi and Lindsay Cloud, who provided guidance and assistance on this work, and Adam Herpolsheimer, Alexander Willhouse, Jonathan Larsen, Alexander Frazer, Caitlin Davie, DeAnna Baumle, Sterling Johnson, and Lindsey Gellar, who participated in building the data sets. The authors also thank Bethany Saxon and Hope Holroyd from CPHLR, who provided assistance with data visualization.

Note. The views expressed in this article do not necessarily reflect the views of the Robert WoodJohnson Foundation.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to disclose.

HUMAN PARTICIPANT PROTECTION

No protocol approval was necessary because no human participants were involved in this study.

References

REFERENCES

1. Gostin LO, Burris S, Lazzarini Z. The law and the public's health: a study of infectious disease law in the United States. Columbia Law Rev. 1999; 99(1):59-128. https://doi.org/10.2307/1123597

2. Gostin LO, Wiley LF. Public Health Law: Power, Duty, Restraint. 3rd ed. Berkeley: University of California Press; 2016.

3. Burris S, de Guia S, Gable L, Levin D, Parmet WE, Terry NP. The legal response to COVID-19: legal pathways to a more effective and equitable response. J Public Health Manag Pract 2021; 27(suppl 1):S72-S79. https://doi.org/10.1097/ PHH.0000000000001277

4. Parmet WE, Khalik F. Judicial review of public health powers since the start of the COVID-19 pandemic: trends and implications. Am J Public Health. In press.
5. Anderson E, Tremper C, Thomas S, Wagenaar AC. Measuring statutory law and regulations for empirical research. In: Wagenaar A, Burris S, eds. Public Health Law Research: Theory and Methods. San Francisco: Wiley; 2013:237-260.
6. Gostin LO, Sapsin JW, Teret SP, et al. The Model State Emergency Health Powers Act: planning for and response to bioterrorism and naturally occurring infectious diseases. JAMA. 2002;288(5): 622-628. https://doi.org/10.1001/jama.288.5.622
7. Shaw FE, McKie KL, Liveoak CA, Goodman RA; State Public Health Counsel Review Team. Legal tools for preparedness and response: variationin quarantine powers among the 10 most populous US states in 2004. Am J Public Health. 2007; 97(suppl 1):S38-S43. https://doi.org/10.2105/ AJPH.2005.083311
8. Guclu H, Ferrell Bjerke E, Galvan J, Sweeney P, Potter MA. State-level legal preparedness for nuclear and radiological emergencies in the US: a network analysis of state laws and regulations. Public Health Rep. 2014;129(suppl 4):154-165. https://doi.org/10.1177/00333549141296S420
9. Rothstein MA, Alcalde MG, Elster NR, et al. Quarantine and Isolation: Lessons Learned From SARS: A Report to the Centers for Disease Control and Preventon. Louisville, KY: Institute for Bioethics, Health Policy and Law; 2003.
10. Annas GJ. Bioterrorism, public health, and civil liberties. N Engl J Med. 2002;346(17):1337-1342. https://doi.org/10.1056/NEJM200204253461722
11. Richards EP, Rathbun KC. Legislative Alternatives to the Model State Emergency Health Powers Act (MSEHPA). Baton Rouge, LA: LSU Program in Law, Science, and Public Health; 2003. White paper no. 2.
12. Network for Public Health Law. The Model State Emergency Health Powers Act: summary matrix. 2012. Available at: https://web.archive.org/web/ 20180722213558/https:/www.networkforphl. org/_asset/80p3y7/MSEHPA-States-Table022812.pdf. Accessed August 8, 2022.
13. Erickson B. Limiting bill introductions. LegisBriefs. 2017;25(23). Available at: https://web.archive.org/web/20220929211235/https://www.ncsl.org/ research/about-state-legislatures/limiting-billintroductions.aspx. Accessed January 12, 2023.
14. LexisNexis. Why state legislative passage rates vary. 2020. Available at: https://www.lexisnexis.com/community/insights/legal/capitol-journal/b/ state-net/posts/state-legislative-passage-rates. Accessed August 8, 2022.
15. Presley D, Burris S. Comparing Federal Health Law Recommendations With State Health Legislation. Philadelphia: Center for Public Health Law Research; 2014.
16. Goodman CB, Hatch ME, McDonald BD III. State preemption of local laws: origins and modern trends. Perspect Public Manag Gov. 2021;4(2): 146-158. https://doi.org/10.1093/ppmgov/gvaa018
17. Fowler L, Witt SL. State preemption of local authority: explaining patterns of state adoption of preemption measures. Publius. 2019;49(3):540-559.
18. Haddow K, Carr D, Winig BD, Adler S. Preemption, public health, and equity in the time of COVID-19. In: Burris S, de Guia S, Gable L, Levin DE, Parmet WE, Terry NP, eds. COVID-19 Policy Playbook: Legal Recommendations for a Safer, More Equitable Future. Boston: Public Health Law Watch; 2021:69-74.
19. PomeranzJL, Silver D. State legislative strategies to pass, enhance, and obscure preemption of local public health policy-making. Am J Prev Med. 2020;59(3):333-342. https://doi.org/10.1016/_j. amepre.2020.03.023
20. Carr D, Adler S, Winig BD, Montez JK. Equity first: conceptualizing a normative framework to assess the role of preemption in public health. Milbank Q. 2020;98(1):131 -149. https://doi.org/10.1111/ 1468-0009.12444
21. Hodge JG Jr, Corbett A, Weidenaar K, Wetter SA. Public health "preemption plus."J Law Med Ethics. 2017;45(1):156-160. https://doi.org/10.1177/ 1073110517703110
22. PomeranzJL, Pertschuk M. State preemption: a significant and quiet threat to public health in the United States. Am J Public Health. 2017;107(6): 900-902. https://doi.org/10.2105/AJPH.2017. 303756
23. Pertschuk M, Pomeranz JL, Aoki JR, Larkin MA, Paloma M. Assessing the impact of federal and state

preemption in public health: a framework for decision makers. J Public Health Manag Pract. 2013;19(3):213-219. https://doi.org/10.1097/ PHH.0b013e3182582a57
24. Wolf DA, Monnat SM, Montez JK. Effects of US state preemption laws on infant mortality. Prev Med. 2021;145:106417. https://doi.org/10.1016/_j. ypmed.2021.106417
25. American Legislative Exchange Council. Emergency Power Limitation Act. 2021. Available at: https://alec.org/model-policy/emergency-powerlimitation-act. Accessed November 18, 2022.
26. Montez JK, BeckfieldJ, Cooney JK, et al. US state policies, politics, and life expectancy. Milbank Q. 2020;98(3):668-699. https://doi.org/10.1111/ 1468-0009.12469
27. Gostin LO, Parmet WE, Rosenbaum S. The US Supreme Court's rulings on large business and health care worker vaccine mandates: ramifications for the COVID-19 response and the future of federal public health protection. JAMA. 2022; 327(8):713-714. https://doi.org/10.1001/jama. 2022.0852
28. Swindell D, Svara J, Stenberg C. Local government options in the era of state preemption. LGR: Local Government Review. July 2018. Available at: https://issuu.com/sdmunicipalleague/docs/9_ sept_2018/s/14174881. Accessed January 7, 2023.
29. Anderson E, Burris S. Imagining a better public health (law) response to COVID-19. Univ Richmond Law Rev. 2022;56:955-1006.
30. Burris S, Mays GP, Douglas Scutchfield F, Ibrahim JK. Moving from intersection to integration: public health law research and public health systems and services research. Milbank Q. 2012;90(2): 375-408. https://doi.org/10.1111/j.1468-0009. 2012.00667.x
31. Burris S, Hitchcock L, IbrahimJK, Penn M, Ramanathan T. Policy surveillance: a vital public health practice comes of age. j Health Polit Policy Law. 2016;41(6):1151 -1167. https://doi.org/10.1215/ 03616878-3665931

DETAILS

Subject:	Pandemics; COVID-19 vaccines; Legislation; Public health; COVID-19; Datasets; Surveillance; Emergencies; Attorneys; Constraining; Emergency response; Immunization; Government mandates; Authority; States; Legal research; Legislators; Epidemics; Medical research; Law; Governors; Coronaviruses; Disease transmission; Bills; Health surveillance
Business indexing term:	Industry: 92111 : Executive Offices 92112 : Legislative Bodies 92312 : Administration of Public Health Programs 54111 : Offices of Lawyers
Location:	Indiana; New Jersey; Georgia; United States--US; Washington DC
Company / organization:	Name: Westlaw; NAICS: 513140, 516210; Name: Senate; NAICS: 921120
Classification:	92111: Executive Offices; 92112: Legislative Bodies; 92312: Administration of Public Health Programs; 54111: Offices of Lawyers
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	288-296

Publication year:	2023
Publication date:	Mar 2023
Section:	RESEARCH &ANALYSIS
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
DOI:	https://doi.org/10.2105/AJPH.2022.307214
ProQuest document ID:	2781298157
Document URL:	https://www.proquest.com/scholarly-journals/trends-us-state-public-health-emergency-laws-2021/docview/2781298157/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Mar 2023
Last updated:	2023-03-07
Database:	Public Health Database

Dollar Stores and Food Access for Rural Households in the United States, 2008–2020

Feng, Wenhui, PhD, MPP; Page, Elina T, PhD, MS; Cash, Sean B, PhD, MA, MS

ABSTRACT (ENGLISH)

Dollar stores have rapidly expanded their food offerings In recent years. These foods tend to be higher In calories and lower in nutrients, raising public health concerns, especially in rural and low-income areas where food-access

challenges are often greatest. However, there is limited empirical evidence evaluating the impact of this expansion on household food purchases on a national scale. Using data from a yearly, nationally representative panel of approximately 50 000 households, we estimated the share of food purchases from 2008 to 2020 by store type and evaluated the role of dollar stores as food retailers in the United States. We found that dollar stores were the fastest-growing food retailers by household expenditure share (increasing by 89.7%), with rural growth outpacing growth elsewhere (increasing by 102.9%). Though dollar stores still represent a small share of national household food purchases (2.1% in 2020), they play an increasingly prominent role in food-at-home purchases for certain disadvantaged and rural communities. Understanding the quality of the foods they offer and how this may affect diet-related health outcomes is warranted. (Am J Public Health. 2023;113(3):331 -336. https://doi.org/10.2105/AJPH.2022.307193)

FULL TEXT

Headnote

Dollar stores have rapidly expanded their food offerings In recent years. These foods tend to be higher In calories and lower in nutrients, raising public health concerns, especially in rural and low-income areas where food-access challenges are often greatest. However, there is limited empirical evidence evaluating the impact of this expansion on household food purchases on a national scale.

Using data from a yearly, nationally representative panel of approximately 50 000 households, we estimated the share of food purchases from 2008 to 2020 by store type and evaluated the role of dollar stores as food retailers in the United States.

We found that dollar stores were the fastest-growing food retailers by household expenditure share (increasing by 89.7%), with rural growth outpacing growth elsewhere (increasing by 102.9%). Though dollar stores still represent a small share of national household food purchases (2.1% in 2020), they play an increasingly prominent role in food-at-home purchases for certain disadvantaged and rural communities. Understanding the quality of the foods they offer and how this may affect diet-related health outcomes is warranted. (Am J Public Health. 2023;113(3):331 -336. https://doi.org/10.2105/AJPH.2022.307193)

The absolute number of grocery stores in the United States has been declining since the Great Recession. Supercenters and dollar stores have picked up most of the lost shares of grocery stores, especially in rural areas.1 In particular, dollar stores, tionally viewed a destination for discount purchases, offer foods that are mostly packaged, shelf-stable, higher in calories, and lower in nutrients.2 In recent years, dollar stores have rapidly expanded their retail footprint in ways that are highly visible in communities across the country,3 yet there is limited empirical evidence investigating the impact of this expansion on household food purchases on a national scale.

Rural communities especially face a substantial challenge with regard to food access. Rural areas have significantly fewer food retailers than urban areas,4 and rural households with lower incomes are likely to be located farther from the closest food stores.5 Some studies have found that increased access to healthy foods is associated with better health outcomes at the community level, including lower levels of obesity.6,7 However, findings on this relationship are mixed, and the evidence on causal pathways is inconclusive.8,9 Given that rural populations have higher baseline levels of obesity,10 food access and the healthfulness of food purchases in rural areas are of great public health interest. In this study, we analyzed the role of dollar stores as food retailers in rural areas of the United States and the impact on food purchases for at-home consumption. Our results showed that there is substantial growth of dollar stores in the food retail landscape.

METHODS

The primary data set used in this analysis was the Information Resources Inc (IRI) Consumer Network, a yearly, nationally representative panel of approximately 50 000 households that provide a detailed account of their retail food purchases, including both perishable, random-weight items and consumer packaged goods. We included all currently available years of data (2008-2020) in this analysis. The Consumer Network differentiates purchases made at different store types (e.g., grocery stores, drug stores, and mass merchandisers) and includes dollar stores as a

retail channel category. We applied survey sample weights (projection15K) to be geographically and demographically representative of the contiguous United States.

To assess the rurality of households participating in the panel, we matched and merged household zip-code data with rural-urban commuting area (RUCA) codes developed by the US Department of Agriculture.11 These codes, based on data from the 2010 Decennial Census and the 2006-2010 American Community Survey, classify US census tracts using measures of population density, urbanization, and daily commuting. We categorized communities into 4 groups based on the primary RUCA codes: metropolitan (1-3), micropolitan (4-6), small town (7-9), and rural (10).

Finally, we aggregated household food expenditures by household, store type, and year. We classified store types the same way as IRI: grocery stores, drug stores, mass merchandisers, supercenters, convenience stores, dollar stores, club stores, and other. For the purposes of this analysis, we excluded nonfood items, such as liquor and tobacco products. We also dropped purchases of food items with single-trip costs beyond $500, as these were more likely to be reporting errors or purchases not intended for regular household consumption (e.g., purchasing snacks for an event) or other nontypical shopping events. The use of a $500 cutoff in this study is ultimately an arbitrary one, but we note that it only removed 0.02% (i.e., 1/50 of 1%) of shopping trips for 2008 to 2020.

Our main variable of interest was the share of food expenditures in dollar stores. We first show how food expenditure shares changed from 2008 to 2020, compared with other store types, for all regions and for rural regions; we assessed statistical significance ofthese changes through an analysis of variance test for each store type treating time as a categorical variable. We then further analyzed dollar store expenditure shares by rurality as well as by income, race and ethnicity, and region.

RESULTS

Figure 1 shows the change in household food expenditure shares by each store type, for all regions as well as just rural regions, from 2008 to 2020; complete statistics on the absolute food expenditure shares by store type and year are provided in Appendix A (available as a supplement to the online version ofthis article at https://ajph.org). All changes were highly statistically significant (P<.001). In 2008, households spent an average of 62.3% of their food budget in grocery stores. This number declined to 58.3% in 2020. This loss was picked up by club stores (2.4 percentage points), supercenters (1.5 percentage points), dollar stores (1.0 percentage point), and convenience stores (0.2 percentage point). Dollar stores were the fastest-growing retail channel (increasingtheir share of household food purchases by 89.7%), followed by convenience stores (47.6%) and club stores (30.8%).

Among households living in rural areas, expenditure shares at grocery stores decreased from 57.4% in 2008 to 50.3% in 2020. This loss was picked up mostly by supercenters (4.6 percentage points), dollar stores (2.5 percentage points), and club stores (1.7 percentage points). Notably, household spending at dollar stores in rural areas increased from 2.5% in 2008 to 5.0% in 2020. In fact, dollar stores were the fastest-growing food-retail channel in rural areas (increasing their share of household food purchases by 102.9%), followed by club stores (49.2%) and supercenters (18.5%). Although supercenters gained a greater share in terms of absolute value, dollar stores increased the most by relative magnitude, doublingtheir share in household expenditures.

Figure 2 shows the distribution of food expenditure in dollars by urbanicity and a few key demographic indicators. Rural households purchased more foods in dollar stores across almost all demographic groups. The exceptions were rural Hispanic and non-Hispanic Asian households, for whom the sample size might be too small from which to draw meaningful conclusions (Appendix B, available as a supplement to the online version of this article at https://ajph.org). As income decreased, the share of food expenditures in dollar stores increased. Households in the South also purchased more food in dollar stores; within rural areas, households in the South spent the most, and those in the West spent the least. Perhaps the most notable group was rural non-Hispanic Black shoppers; these households spent 11. 6% of their food budgets in dollar stores.

DISCUSSION

Food purchases in rural areas over the past decade are largely characterized by a shift in expenditures away from grocery stores toward both larger supercenters and smaller dollar stores. Our focus here is on the latter because of

the concerns posed by how the foods dollar stores carry differ from those in traditional grocery stores; more research is needed to ascertain whether and how this evolution has also changed the nature of the foods being purchased by consumers.

Dollar stores have experienced the greatest growth in household food purchases over the past decade in terms of relative magnitude, having doubled their market share in rural areas. This rapid growth of dollar stores across the United States since the Great Recession has largely been driven by the rapid expansion of 3 major national chains, which have primarily opened stores in small, rural towns with limited retail options. One chain, Dollar General, planned to open 1100 stores in 2022.12

The concerns surrounding dollar stores and food access center around selection and healthfulness.13 The selection of foods available in dollar stores is typically both less diverse and less healthful than what is found in grocery stores. Historically, dollar stores have only carried shelf-stable beverages and snacks, but now many also carry eggs and dairy, and, more recently, select locations also carry fresh produce.14 Such changes may also partially explain the observed increase in household food purchases at these outlets. Public health advocates have raised concerns that the foods sold in dollar stores are mostly packaged, higher in calories, and lower in nutrients.15,16 Several studies support these claims; they have found that the foods and beverages sold in dollar stores tend to be lower in nutrients and higher in calories.2,4

The recent growth in dollar store food expenditures along with the decline in grocery store food spending, particularly in rural areas, raises concerns that dollar stores may challenge and force out local grocers through competitive pricing, leaving consumers with limited, less-healthy food options. Several localities have already acted on the basis of these concerns. Twentyfive local governments across the country have established policies to curb the expansion of dollar stores. Among them, 9 have specified exemptions if a new dollar store provides certain levels of access to fresh food and produce.17

Alternatively, dollar stores may be filling food voids where local grocers do not have enough business to support maintaining a store,18 providing consumers with food options in low-access areas. Similarly, grocery stores' consolidation may also leave residents with fewer food options, especially in rural areas.19 In communities where other food storefronts are much farther away, dollar stores may be the only option in terms of food access.

Future Work

Although both characterizations ofthe impact of dollar stores on food acquisition may be sensible theoretically, empirical evidence is still lacking. Further research is needed to explore the full impact of dollar stores in areas with low food access and their impact on health and health equity. Our findings suggest that dollar stores are a significant food source for certain disadvantaged populations, especially non-Hispanic Black households in rural areas. We hope our study can instigate more conversation about the role of dollar stores in the food retail landscape and food access across subpopulations.

The lack of studies may partially be explained by the lack of data on food purchases over an extended period. Traditional survey methods, such as the National Health and Nutrition Examination Survey, rely on recall of food purchase and consumption, which may be prone to bias and only captures brief windows oftime.20 Innovative methods or the usage of underutilized data sets can create a pathway for future studies in this direction.

Limitations

This study does have a few limitations. Despite the richness ofthe IRI Consumer Network data, its sampling strategy is focused on metropolitan areas, leaving the sample size relatively small in rural areas. Similarly, the panel of participants in the IRI data overrepresents nonHispanic White persons. Interpretation of results pertaining to certain racial minorities (e.g., non-Hispanic Asian persons), especially those in rural areas, should be done with caution.

The available data capture a broad variety of shopping trips, and it is not obvious a priori howto distinguish household food shopping trips from those purchases of food by Consumer Network participants that may not be for "typical" household consumption. At the same time, the data also only capture purchases from stores, while nonretail acquisitions such as informal exchanges and community-based meals cannot be assessed, which may be an important part of food consumption for many rural households.21

Our analysis also does not include distance to stores; lower-income households may bypass their closest stores to shop at destinations with lower prices.22 Methods like groundtruthing or robust spatial analysis that go beyond shop proximity are needed to fully understand the role of dollar stores in the American diet.21,23 In addition, while this study only explored food expenditures in dollar stores, future studies should assess the types of foods being purchased and healthfulness of those foods through indicators such as the Healthy Eating Index. Lastly, our study reveals strong regional differences in food purchases in dollar stores, but is not well-positioned to explain those differences.

Public Health Implications

The increasing market share of dollar stores, especially in rural areas, calls for more attention to dollar stores and their role as food retailers. As dollar stores become a major source of foodat-home purchases for rural communities, understanding the quality of the foods they offer is warranted.

ABOUT THE AUTHORS

Wenhui Feng is with the Department of Public Health and Community Medicine, Tufts University, Boston, MA. Elina T. Page is with the Economic Research Service, US Department of Agriculture, Washington, DC. Sean B. Cash is with the Friedman School of Nutrition Science and Policy, Tufts University.

CORRESPONDENCE

Correspondence should be sent to Wenhui Feng, 136 Harrison Ave, Boston, MA 02111 (e-mail: wenhui.feng@tufts.edu). Reprints can be ordered at https://ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Feng W, Page ET, Cash SB. Dollar stores and food access for rural households in the United States, 2008-2020. Am JPublic Health. 2023;113(3):331-336.

Acceptance Date: November 23, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307193

CONTRIBUTORS

W. Feng led the study. All authors contributed to the study design, analysis, and drafting the article. All authors read and approved the final article.

ACKNOWLEDGMENTS

This study was supported in part by US Department of Agriculture (USDA) Cooperative Agreement (58-4000-0-0021) and Tufts University Springboard award (M530868).

The authors would like to thank Bangyao Sun and Divya Saravana for assisting with the analysis, and Hailey Fromkin for editorial assistance.

Note. The findings and conclusions in this publication are those of the authors and should not be construed to represent any official USDA or US government determination or policy. The analysis, findings, and conclusions expressed in this publication also should not be attributed to Information Resources Inc.

CONFLICTS OF INTEREST

No authors have conflicts of interest to report.

HUMAN PARTICIPANT PROTECTION

The Tufts Social, Behavioral, and Educational Research institutional review board reviewed the protocol and deemed this study is not research involving human participants.

References

REFERENCES

1. Stevens A, Cho C, Cakir M, Kong X, Boland MA. The food retail landscape across rural America. US Department of Agriculture. 2021. Available at: http://www.ers.usda.gov/publications/pubdetails/?pubid=101355. Accessed May 23, 2022.

2. Caspi CE, Pelletier JE, Harnack L, Erickson DJ, Laska MN. Differences in healthy food supply and stocking practices between small grocery stores, gas-marts, pharmacies and dollar stores. Public Health Nutr. 2016;19(3):540-547. https:// doi.org/10.1017/S1368980015002724

3. MacGillis A. The true cost of dollar stores. The New Yorker. June 29, 2020. Available at: https:// www.newyorker.com/magazine/2020/07/06/thetrue-cost-of-dollar-stores. Accessed October 28, 2022.
4. Powell LM, Slater S, Mirtcheva D, Bao Y, Chaloupka FJ. Food store availability and neighborhood characteristics in the United States. Prev Med. 2007;44(3):189-195. https://doi.org/10. 1016/j.ypmed.2006.08.008
5. Rhone A, Ploeg MV, Williams R, Breneman V. Understanding low-income and low-access census tracts across the nation: subnational and subpopulation estimates of access to healthy food. US Department of Agriculture. 2019. Available at: http://www.ers.usda.gov/publications/pub-details/ ?pubid=93140. Accessed May 23, 2022.
6. Morland K, Diez Roux AV, Wing S. Supermarkets, other food stores, and obesity: the Atherosclerosis Risk in Communities Study. Am J Prev Med. 2006;30(4):333-339. https://doi.org/10.1016/j. amepre.2005.1 1.003
7. Powell LM, Auld MC, Chaloupka FJ, O'Malley PM, Johnston LD. Associations between access to food stores and adolescent body mass index. Am J Prev Med. 2007;33(4, suppl):S301-S307. https:// doi.org/10.1016/j.amepre.2007.07.007
8. Li Y, Luo M, Wu X, Xiao Q, Luo J, Jia P. Grocery store access and childhood obesity: a systematic review and meta-analysis. ObesRev. 2021;22(suppl 1):e12945. https://doi.org/10.1111 /obr.12945
9. Allcott H, Diamond R, Dube JP, HandburyJ, Rahkovsky I, Schnell M. Food deserts and the causes of nutritional inequality. QJ Econ. 2019;134(4): 1793-1844. https://doi.org/10.1093/qje/qjz015
10. Trivedi T, Liu J, Probst J, Merchant A, Jhones S, Martin AB. Obesity and obesity-related behaviors among rural and urban adults in the USA. Rural Remote Health. 2015;15(4):3267. https://doi.org/ 10.22605/RRH3267
11. US Department ofAgriculture, Economic Research Service. Rural-urban commuting area codes. August 17, 2020. Available at: https:// www.ers.usda.gov/data-products/rural-urbancommuting-area-codes.aspx. Accessed April 26, 2022.
12. Shoulberg W. Dollar stores, big lots, off-pricers will open thousands ofstores in 2022. Forbes. January 16, 2022. Available at: https://www.forbes.com/ sites/warrenshoulberg/2022/01/16/dollar-storesbig-lots-off-pricers-will-open-thousands-of-storesin-2022. Accessed May 23, 2022.
13. Morris F. How Dollar General is transforming rural America. NPR. December 11, 2017. Available at: https://www.npr.org/2017/12/11/569815331/ loving-and-hating-dollar-general-in-rural-america. Accessed May 23, 2022.
14. Troy M. Dollar General adding produce to 10,000 stores. Progressive Grocer. July 1,2021. Available at: https://progressivegrocer.com/dollar-general-addingproduce-10000-stores. Accessed May 23, 2022.
15. Center for Science in the Public Interest. The rise of dollar stores: how the proliferation of discount stores may limit healthy food access. 2020. Available at: https://cspinet.org/sites/default/files/ attachment/Dollar%20Store%20Fact%20Sheet. pdf. Accessed February 13, 2020.
16. Mitchell S, Donahue M. Report: dollar stores are targeting struggling urban neighborhoods and small towns. One community is showing how to fight back. Institute for Local Self-Reliance. 2018. Available at: https://ilsr.org/dollar-stores-targetcities-towns-one-fights-back. Accessed October 25, 2022.
17. McCarthy J, Minovi D, Singleton CR. Local measures to curb dollar store growth: a policy scan. Nutrients. 2022;14(15):3092. https://doi.org/10. 3390/nu14153092
18. Chenarides L, Cho C, Nayga RM, Thomsen MR. Dollar stores and food deserts. Appl Geogr. 2021;134:102497. https://doi.org/10.10167j. apgeog.2021.102497
19. Bitto EA, Morton LW, Oakland MJ, Sand M. Grocery store access patterns in rural food deserts. J Study Food Soc. 2003;6(2):35-48. https://doi.org/ 10.2752/152897903786769616
20. Grandjean AC. Dietary intake data collection: challenges and limitations. Nutr Rev. 2012; 70(suppl 2):S101 - S104. https://doi.org/10.1111/_j. 1753-4887.2012.00545.X
21. Sharkey JR. Measuring potential access to food stores and food-service places in rural areas in the U.S. Am J Prev Med. 2009;36(4, suppl): S151-S155. https://doi.org/10.1016/_j.amepre. 2009.01.004
22. LeDoux TF, Vojnovic I. Going outside the neighborhood: the shopping patterns and adaptations of disadvantaged consumers living in the lower eastside neighborhoods of Detroit, Michigan. Health Place. 2013;19:1-

14. https://doi.org/10. 1016/j.healthplace.2012.09.010
23. Shannon J, Reese AM, Ghosh D, Widener MJ, Block DR. More than mapping: improving methods for studying the geographies offood access. Am J Public Health. 2021;111(8):1418-1422. https://doi.org/10.2105/AJPH.2021.306339

DETAILS

Subject:	Public health; Food; Households; Rural communities; Rural areas; Food quality; Drug stores; Codes; Demography; Expenditures; Retail stores; Disadvantaged; Great Recession; Calories; Purchasing; Nutrients; Panel data; Low income areas; Consumption; Packaged goods; Hispanic people; Convenience stores; Diet; Mass merchandising; Grocery stores; Dollar stores
Business indexing term:	Subject: Drug stores Great Recession Consumption Retail stores Packaged goods Convenience stores Mass merchandising Grocery stores Dollar stores; Industry: 44511 : Supermarkets and Other Grocery Retailers (except Convenience Retailers) 44513 : Convenience Retailers and Vending Machine Operators 45611 : Pharmacies and Drug Retailers
Location:	United States--US
Classification:	44511: Supermarkets and Other Grocery Retailers (except Convenience Retailers); 44513: Convenience Retailers and Vending Machine Operators; 45611: Pharmacies and Drug Retailers
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	331-336
Publication year:	2023
Publication date:	Mar 2023
Section:	RESEARCH &ANALYSIS
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal

Language of publication:	English
Document type:	Journal Article
DOI:	https://doi.org/10.2105/AJPH.2022.307193
ProQuest document ID:	2781298145
Document URL:	https://www.proquest.com/scholarly-journals/dollar-stores-food-access-rural-households-united/docview/2781298145/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Mar 2023
Last updated:	2023-09-28
Database:	Public Health Database

The Challenges to Public Health Law in the Aftermath of COVID-19

Parmet, Wendy E, JD [1] ; Erwin, Paul C, MD, DrPH [2 1] Center for Health Policy &Law, Northeastern University, Boston, MA [2] School of Public Health, University of Alabama at Birmingham

ABSTRACT (ENGLISH)

Scholars have come to recognize that law operates as a social determinant of health.1 That has been especially apparent since the start of the COVID-19 pandemic, during which federal and state laws abetted the rapid development and deployment of lifesaving vaccines, supported health care systems that faced unprecedented strain, and provided critical economic support to individuals and businesses. State and local laws also helped enforce physical distancing, required masking, and in some instances mandated vaccination. Taken together, these legal responses undoubtedly saved lives and prevented economic disaster.2,3

The pandemic, however, also highlighted the limit of law's capacity to support public health. As early as 2021, it was apparent that "for law to be effective, there must be strong leadership, ample resources fairly distributed, and the public's trust."4(p.48) Two years later, as the articles in this special section document, it is also evident that the use of law to protect the public's health faces considerable political and judicial resistance. As these articles show, this pushback raises serious questions about law's continued capacity to protect population health and address health inequities moving forward.

In their opinion editorial, Hodge et al. (p. 275) assess the state of public health emergency laws before, during, and after the pandemic. They begin by discussing the 2001 Model State Emergency Health Powers Act, which was designed to provide officials with a range of authorities they might need during a pandemic. After showing how the model act foresaw the types of measures that states used in response to COVID-19, they explain that most states relied on general emergency laws rather than their specific public health powers duringthe pandemic. Regardless, state orders faced resistance in both the political and judicial arenas, in part because of what the authors term

COVID-19 "denialism." They conclude by highlighting several responses to that denialism and calling for efforts to reform public health laws to make them more robust and limit "denialist political influences."

FULL TEXT

Scholars have come to recognize that law operates as a social determinant of health.1 That has been especially apparent since the start of the COVID-19 pandemic, during which federal and state laws abetted the rapid development and deployment of lifesaving vaccines, supported health care systems that faced unprecedented strain, and provided critical economic support to individuals and businesses. State and local laws also helped enforce physical distancing, required masking, and in some instances mandated vaccination. Taken together, these legal responses undoubtedly saved lives and prevented economic disaster.2,3

The pandemic, however, also highlighted the limit of law's capacity to support public health. As early as 2021, it was apparent that "for law to be effective, there must be strong leadership, ample resources fairly distributed, and the public's trust."4(p.48) Two years later, as the articles in this special section document, it is also evident that the use of law to protect the public's health faces considerable political and judicial resistance. As these articles show, this pushback raises serious questions about law's continued capacity to protect population health and address health inequities moving forward.

In their opinion editorial, Hodge et al. (p. 275) assess the state of public health emergency laws before, during, and after the pandemic. They begin by discussing the 2001 Model State Emergency Health Powers Act, which was designed to provide officials with a range of authorities they might need during a pandemic. After showing how the model act foresaw the types of measures that states used in response to COVID-19, they explain that most states relied on general emergency laws rather than their specific public health powers duringthe pandemic. Regardless, state orders faced resistance in both the political and judicial arenas, in part because of what the authors term COVID-19 "denialism." They conclude by highlighting several responses to that denialism and calling for efforts to reform public health laws to make them more robust and limit "denialist political influences."

Parmet and Khalik (p. 280) describe the challenges to public health and elected officials' use of emergency powers and other legal authorities in their analysis of the more than 1000 judicial decisions related to or precipitated by COVID-19 between March 1,2020, and July 1,2022. The decisions were broadly categorized by legal claims relating to (1) individual rights, (2) scope of authority, and (3) administrative procedures. Individual rights claims were the most common challenges, including claims alleging violations of the right to due process and equal protection under the Fourteenth Amendment (e.g., shuttering or restricting some but not all businesses), the Second Amendment (e.g., closing gun stores or shooting ranges), and the Free Exercise Clause of the First Amendment (e.g., limiting or banning in-person worship).

Many of the challenges to scope of authority pertained to measures that were not explicitly authorized by statute, including cases challenging governors' authority to declare or extend states of emergency and the eviction moratorium of the Centers for Disease Control and Prevention (CDC). Challenges to administrative procedures included claims that uses of emergency powers bypassed the usual rulemaking processes. Although smallest in number of the three categories of legal claims, courts were more likely to rule in favor of plaintiffs (33 of 85 relevant decisions) in challenges to tive procedures in the other two categories. The analysis of these judicial decisions indicates that, in contrast to earlier periods, public health officials can no longer assume that courts will give them the benefit of doubt when they impose measures to control or mitigate disease. This is especially evident in the Supreme Court's decisions regarding the free exercise of religion.

Platt et al. (p. 288) review 1531 bills addressing emergency health authority that were introduced by state legislators between January 1,2021, and May 20, 2022. The authors group these bills into six categories: limiting public health authority, expanding public health authority, shifting public health authority responsibility, limiting federal laws, regulating emergency measures, and preempting emergency measures. Of the 1531 bills introduced, 191 were passed by 43 states and the District of Columbia during the observation period, including 65 laws limiting public health authority (by limiting the authority of governors, other state officials, or local health officials), 17 expanding

authority, 163 regulating the use of public health authority, and 30 preempting local use of public health measures. Although the authors found no significant difference in political party affiliation for bills that were introduced, there was a striking difference in affiliation for the outcomes of these bills: all states but one (Connecticut) that enacted one or more restrictive public health laws were controlled by Republican legislators.

The authors characterize the environment of this outpouring of legislative activity in clear language:

Given the politicization of public health work during COVID-19, and the social shock of the pandemic, rapid and substantial changes to public health authority seem to reflect the frustration and irritation of a painful experience rather than a well-considered and evidence informed analysis of the authority health agencies need and what factors-leadership, funding, and other resources-drive strong health agency performance. (p. 294)

In her editorial, Wiley (p. 269) looks forward to the Supreme Court's 20222023 term. After noting that the cases the court will decide in 2023 are likely to have a "less direct and less dramatic" effect on health than the major decisions of 2022, Wiley discusses several pending cases that may have significant implications for health. Among them are cases regarding the ability of Medicaid beneficiaries and providers to enforce federal requirements for that program, the right of businesses to refuse to comply with civil rights laws when doing so conflicts with their selfexpression, the continuation of affirmative action in higher education, the maintenance oftribal sovereignty, and the ability of state courts to check efforts by state legislatures to gerrymander or even ignore the voters' will in federal elections.

Other important cases relating to firearm regulations, abortion access, and the Affordable Care Act may come from the court's so-called "shadow docket" that deals with emergency petitions. Although the outlook for health before the current deeply conservative Supreme Court majority does not seem propitious, Wiley notes that the "legal landscape " is "changing rapidly" and today's health-harming decisions may not have long legs. To facilitate the short reign ofthese decisions, she calls on dissenting jurists and legal commentators to "lay the groundwork for more just approaches in the future."

Gostin's editorial (p. 272) concludes this special section. Although his initial focus is on the article authored by Parmet and Khalik, Gostin's piece serves as a coda to the section's main themes, emphasizing howjudicial decisions have undercut the ability of federal administrative agencies to protect health. The Supreme Court's decision to block the CDC's eviction moratorium, as described by Parmet and Khalik, is an example of how the court has used the "major questions" doctrine during the pandemic to limit administrative agency actions that may have major economic or political impact to those with explicit statutory authority. Moreover, the application of this approach may extend beyond health emergencies to more "settled" areas of law, including the Clean Water Act, which the court will consider in the upcoming term.

Gostin also reminds us that, although science matters in helping to shield against uninformed legal challenges, ultimately courts are more likely to rule in the direction of what the public views as favorable. Has there ever been a more critical period for a well-informed citizenry? >4JPH

CORRESPONDENCE

Correspondence should be sent to PaulC. Erwin, MD, DrPH, Dean and Professor, Schoolof Public Health, University of Alabama at Birmingham, 1665 University Blvd, RPHB 140B, Birmingham, AL 35294-0022 (e-mail: perwin@uab.edu, 205934-9416). Reprints can be ordered at http:// www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Parmet WE, Erwin PC. The challenges to public health law in the aftermath of COVID-19. Am J Public Health. 2023;113(3):267-268.

Acceptance Date: December 20, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307208

CONTRIBUTORS

Both authors participated fully in drafting the editorialand in subsequent writing, editing, and revising.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to disclose.

References

REFERENCES
1. Bent Weber S, Pepin D. Why law is a determinant of health. Stetson Law Rev. 2020;50:401.
2. Borjas GJ. Business closures, stay-at-home restrictions, and COVID-19 testing outcomes in New York City. Prev Chronic Dis. 2020;17:E109. https://doi.org/ 10.5888/pcd17.200264
3. Aylward J, Laderman E, Oliveira LE, Teng G. How much did the CARES Act help households stay afloat? Available at: https://www.frbsf.org/wpcontent/uploads/sites/4/el2021-18.pdf. Accessed October 20, 2022.
4. Parmet WE, Burris S, Gable L, de Guia S, Levin DE, Terry NP. COVID-19: the promise and failure of law in an inequitable nation. Am J Public Health. 2021;111(1):47-49. https://doi.org/10.2105/AJPH. 2020.306008

DETAILS

Subject:	COVID-19 diagnostic tests; Firearm laws &regulations; Denialism; COVID-19; Correspondence; Pandemics; Public health; Firearms; Equal rights; Politics; Legislation; Vaccines; Immunization; Law; Resistance; Emergencies
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	267-268
Publication year:	2023
Publication date:	Mar 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
DOI:	https://doi.org/10.2105/AJPH.2022.307208
ProQuest document ID:	2781298140

Achieving Healthiest Nation Status Is Both Attainable and Desirable

Benjamin, Georges C, MD [1] [1] American Public Health Association

FULL TEXT

This issue of AJPH contains a thoughtful commentary by Zohoori (p. 259) about the issues surrounding the American Public Health Association (APHA) strategic vision to create the healthiest nation in one generation. Achieving healthiest nation status is indeed an ambitious, audacious goal. But those in public health have the responsibility of being the chief health strategists for the nation's health, and if we are to accept that responsibility, we must set a goal that meets the highest possible vision ofthat challenge. It is true that the United States spends much more on health care than do other highincome countries.1 Despite this level of investment, we have poorer overall health system performance and poorer overall health outcomes.2 History has shown that the United States has the capacityto be an exemplar in anything that it puts its national will, creativity, and enormous resources to. When the APHA originally took as our strategic direction becoming the national leader in health improvement, we understood the enormous challenge it would be. We also understood that we as an association could not do it alone. We took seriously the 1988 Institute of Medicine report's description of the mission of public health as "fulfilling society's interest in assuring conditions in which people can be healthy" (https://www.ncbi.nlm.nih.gov/books/NBK218215). To that end, the APHA has worked on building the political will to make becoming the healthiest nation a goal and has advocated adequate resources for a robust and adequately resourced national public health system to achieve this goal. During National Public Health Week in April 2016, which focused on becoming the healthiest nation by 2030, we brought attention to this effort.3 We have now built a movement through social media called Generation Public Health that has more than one million individuals dedicated to improving the public's health and that we believe is building the political will for change.

There have clearly been setbacks along the way. Epidemics of obesity, opioids, and now COVID-19 have stymied this effort, resulting in continued decreases in life expectancy over the past few years. For 2020, life expectancy fell an additional 0.6 year because of increases in mortality attributable to "COVID-19, unintentional injuries, chronic liver disease and cirrhosis, suicide, and homicide."4(p6) Nevertheless, the APHA continues to believe healthiest nation status is achievable. Whether it is international sports, scientific achievement, or the space race, Americans are a competitive people. We like to win. Imagine what we could achieve if our national will was focused on having healthy people in healthy communities. What if we received the best value for our enormous fiscal investment in

health by ensuring universal health coverage, increasing our focus on prevention and primary care, and addressing with intention the social determinants of health? What if we truly strove to achieve equity in health status? Following this pathway would lead us to success. We have work to doto reverse several years of declining life expectancy. Choosing to take the pathway toward becoming the healthiest nation is desirable and attainable and is, in fact, our only choice. >4JPM

Sidebar

CORRESPONDENCE
Correspondence should be sentto Georges C. Benjamin, Executive Director, American Public Health Association, 800 I St, NW, Washington, DC 20001 (e-mail: georges.benjamin@apha.org). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION
Full Citation: Benjamin GC. Achieving healthiest nation status is both attainable and desirable.
Am J Public Health. 2023;113(3):262.
Acceptance Date: January 4, 2023.
DOI: https://doi.org/10.2105/AJPH.2023.307219

CONFLICTS OF INTEREST
The author has no conflicts of interest to declare.

References

REFERENCES
1. Wager E, Ortaliza J, Cox C. How does health spending in the US compare to other countries? January 21, 2022. Available at: https://www.healthsystemtracker. org/chart-collection/health-spending-u-s-comparecountries-2. Accessed January 5, 2023.
2. Schneider EC, Shah A, Doty MM, Tikkanen R, Fields K, Williams RD II. Mirror, mirror 2021: reflecting poorly: health care in the U.S. compared to other highincome countries. August 4, 2021. Available at: https://www.commonwealthfund.org/publications/ fund-reports/2021/aug/mirror-mirror-2021reflecting-poorly. Accessed January5, 2023.
3. Benjamin GC. Building a movement to be the healthiest nation. Am J Public Health. 2016;106(5):777. https://doi.org/10.2105/AJPH.2016.303196
4. Xu J, Murphy SL, Kochanek KD, Arias E. Mortality in the United States, 2021. NCHS Data Brief. 2022;(456): 1-8.

DETAILS

Subject:	Primary care; Public health; Life expectancy; Health care; Public buildings; Social media; Prevention; Coronaviruses; COVID-19
Location:	United States--US
Company / organization:	Name: American Public Health Association; NAICS: 813910
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	262

Publication year:	2023
Publication date:	Mar 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Letter
DOI:	https://doi.org/10.2105/AJPH.2023.307219
ProQuest document ID:	2781298112
Document URL:	https://www.proquest.com/scholarly-journals/achieving-healthiest-nation-status-is-both/docview/2781298112/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Mar 2023
Last updated:	2023-03-16
Database:	Public Health Database

Credits

Anonymous

FULL TEXT

TVM:UNDEFINED

DETAILS

Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	242
Publication year:	2023
Publication date:	Mar 2023
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Credits
ProQuest document ID:	2781298102
Document URL:	https://www.proquest.com/scholarly-journals/credits/docview/2781298102/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Mar 2023
Last updated:	2023-03-02
Database:	Public Health Database

The 2023 US Supreme Court Term: Implications for Public Health

Wiley, Lindsay F, JD, MPH [1] [1] University of California, Los Angeles School of Law

ABSTRACT (ENGLISH)

The US Supreme Court's 2023 term will have important implications for public health, equity, and the power of communities to create healthier living conditions.1 For the second year in a row, the Court has granted review in cases in which the results would previously have been considered obvious under settled law. The majority's choice to take these cases up may signal that more precedent-refuting decisions are in the offing.
This year, the focus is on the rights of Medicaid beneficiaries, freedom of expression, equal protection, tribal sovereignty, and voting rights. The health consequences of the Court's decisions this year may be less direct and less dramatic than those triggered by Dobbs v. Jackson Women's Health Organization (ending federal constitutional protection for reproductive freedom)2 and New York State Rifle and Pistol Association v Bruen (expanding the right to bear arms) in 2022.3 The questions the Court has taken up for 2023 are more technical, and the majority's decisions may be more nuanced, making it harder to convey to the public how high the stakes are.

FULL TEXT

The US Supreme Court's 2023 term will have important implications for public health, equity, and the power of communities to create healthier living conditions.1 For the second year in a row, the Court has granted review in cases in which the results would previously have been considered obvious under settled law. The majority's choice to take these cases up may signal that more precedent-refuting decisions are in the offing.
This year, the focus is on the rights of Medicaid beneficiaries, freedom of expression, equal protection, tribal sovereignty, and voting rights. The health consequences of the Court's decisions this year may be less direct and less dramatic than those triggered by Dobbs v. Jackson Women's Health Organization (ending federal constitutional protection for reproductive freedom)2 and New York State Rifle and Pistol Association v Bruen (expanding the right to bear arms) in 2022.3 The questions the Court has taken up for 2023 are more technical, and the majority's decisions may be more nuanced, making it harder to convey to the public how high the stakes are.

THE RIGHTS OF MEDICAID BENEFICIARIES

The case with the most direct relevance to public health invites the Court to block individuals from suing state officials to enforce requirements that attach to federal spending programs. In Health and Hospital Corporation of Marion County v Talevski,4 a patient's family has sued nursing facility administrators for damages arising from violations of Medicaid quality-of-care standards. The nursing home administrators argue that Medicaid is like a contract between states and the federal government, reasoning that enrollees and providers must rely on federal officials to vindicate their interests. If the Talevski decision leaves enforcement entirely in the hands of federal officials with limited capacity, it will weaken protection for Medicaid beneficiaries and the safetynet providers who serve them, including provisions related to enrollment, benefits, and choice of providers. It may also have an impact on other federally funded, state-administered programs like the Children's Health Insurance Program and the Supplemental Nutrition Assistance Program.

FREEDOM OF EXPRESSION AS A SHIELD FOR DISCRIMINATION

In 303 Creative v Elenis,5 the Court will consider the extent to which commercial activity constitutes constitutionally protected expression that trumps laws prohibiting discrimination by businesses that hold themselves out as offering services to the general public. A forprofit business that designs Web sites is asserting its right to discriminate against same-sex couples seeking assistance with wedding Web sites. The case has implications for efforts to protect lesbian, gay, bisexual, transgender, queer, or questioning people and other groups from discrimination, stigmatization, and associated health harms by limiting the reach of civil rights laws. More broadly, characterization of an expanded range of commercial activity as "expression" that triggers strict scrutiny of government intervention could have implications for efforts to regulate the commercial determinants of health. It could lay the groundwork for businesses to assert that the prices they charge, the products they sell, and the configurations in which they sell

them are forms of expression protected from regulation.

EQUAL PROTECTION, DIVERSITY, AND ANTISUBORDINATION

The Court is also hearing cases on whether race-conscious college admissions (Students for Fair Admissions v Harvard College and Students for Fair Admissions v UNC6) and preferences for placing children who are eligible to be members of Indian Tribes with families who are also members (Brackeen v Haaland7) violate the Constitution's guarantee of equal protection under law. The Supreme Court majority has indicated a preference for race-blind policies and could use the Equal Protection Clause as a basis for invalidating programs that draw distinctions based on race, ethnicity, or tribal membership for the purposes of providing benefits to historically subordinated groups and increasing diversity, equity, and inclusion. Ending race-conscious admissions could have dire consequences for efforts to create a more diverse health workforce, with resulting impacts on quality of care and on who is at the table in discussions about equity in public health. A decision treating "Indian" as a racial classification, rather than a political classification, would call into question programs that protect tribal members from violence and provide them with health benefits.

TRIBAL SOVEREIGNTY AND SELF-DETERMINATION

In addition to challengingthe Indian Child Welfare Act on the grounds that it impermissibly discriminates on the basis of race, Brackeen v. Haaland raises the possibility that the Supreme Court could further erode tribal sovereignty. Tribal sovereignty and self-determination have important implications for public health, as indicated by recent clashes between tribes and state governors who sought to reverse COVID-19 mitigation measures and anticipated conflicts over reproductive health.8

ELECTION LAW AND THE FUTURE OF DEMOCRATIC GOVERNANCE

Moore v Harper9 is likely to be the most closely watched decision of the term because of its importance to the future of democratic governance. The petitioners are challenging a decision by the North Carolina Supreme Court rejecting a politically gerrymandered election map, which by itself might be unremarkable. Their reliance on the controversial "independent state legislature" theory raises the stakes. If the US Supreme Court were to accept the petitioners' argument that state courts are prohibited by the federal Constitution from reviewing election rules adopted by state legislatures, the decision could pave the way for state legislatures to revamp elections in a host of ways that favor the political party in power. Democratic governance is vital to ensure communities are empowered to create the conditions required for people to be healthy. Giving state legislators carte blanche to set redistricting and election rules with virtually no checks and balances could disempower communities and exacerbate distrust of government as a mechanism for collective action to improve health.

WATCHING THE SHADOW DOCKET

In addition to the cases that are already on the docket, the Court is also likely to continue its trend of intervening more actively via the expedited and less transparent process of the so-called "shadow docket."10 The Court could grant review in several additional cases with major public health implications. The lower federal courts are still grappling with the fallout from the Supreme Court's blockbuster 2021 and 2022 terms. The environment is dynamic and highly partisan, and the Court could take up a question presented by ongoing litigation on a moment's notice. For example, several recent lower court decisions have invalidated longstanding gun-control regulations under the new "history and tradition" standard adopted in Bruen.11 Complex abortion issues are emerging in the aftermath of Dobbs.12 For example, lower courts are split over whether federal health law preempts criminalization of pregnancy termination when necessary to stabilize an emergency medical condition.13 Lower courts are also split over whether the Supreme Court's new approach to religious liberty means that refusal of religious exemptions from government vaccination requirements triggers strict scrutiny.14 In addition, some lower court judges- perhaps emboldened by the Court's willingness to abandon precedents it disagrees with on ideological grounds-are pushing fringe ideas into the mainstream, offering them up for the new majority's consideration. For example, a case making its way up through the lower courts could unwind the Affordable Care Act's requirement to cover preventive services with no out-of-pocket costs.15

ENVISIONING A MORE JUST FUTURE IN A TIME OF RADICAL RETRENCHMENT

The legal landscape public health interventions must navigate is changing rapidly. The analysis of the current majority of the Court may ultimately make It easier for a future majority to reverse recent decisions. The conservative legal movement has played a long game to achieve dramatic reversals of the precedents that stood in the way of their ideological goals. Dissenting justices and legal commentators play an important role by documenting the inaccuracies of the current majority's analysis and laying the groundwork for more just approaches in the future.

CORRESPONDENCE
Correspondence should be sentto Lindsay F. Wiley, UCLA School of Law, 385 Charles E Young Dr E, Los Angeles, CA 90095 (e-mail: wiley@law.ucla.edu). Reprints can be ordered at https://ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION
Full Citation: Wiley LF. The 2023 US supreme court term: implications for public health. Am J Public Health. 2023;113(3):269-271.
Acceptance Date: December 18, 2022.
DOI: https://doi.org/10.2105/AJPH.2022.307210

CONFLICTS OF INTEREST
The author has no conflicts of interest to disclose.

References

REFERENCES

1. Williams MA, Gostin LO. Will there be a Supreme assault on public health? STAT. October 3, 2022. Available at: https://www.statnews.com/2022/10/ 03/will-there-be-a-supreme-court-assault-on-public-health. Accessed December 8, 2022.
2. Dobbs vJackson Women's Health Organization, 142 SCt 2228 (2022).
3. New York State Rifle and Pistol Association v Bruen, 142 SCt 2111 (2022).
4. Rudowitz R, Sobel L. What is at stake for Medicaid in Supreme Court Case Health &Hospital Corp v. Talevski? KFF Policy Watch. October 28, 2022. Available at: https://www.kff.org/policy-watch/what-is-at-stake-for-medicaid-in-supreme-court-case-health-hospital-corp-v-talevski. Accessed December 8, 2022.
5. Keren H. The alarming legal strategy behind a SCOTUS case that could undo decades of civil rights protections. Slate. March 9, 2022. Available at: https://slate.com/news-and-politics/2022/03/ supreme-court-303-creative-coordinated-anti-lgbt-legal-strategy.html. Accessed December 8, 2022.
6. Hodge JG. Affirmative action and public health repercussions. Network for Public Health Law. November 23, 2022. Available at: https://www. networkforphl.org/resources/affirmative-action-and-public-health-repercussions. Accessed December 8, 2022.
7. National Council of Urban Indian Health signs on to amicus briefin support ofthe Indian Child Welfare Act. September 9, 2022. Available at: https://indiancountrytoday.com/the-press-pool/ national-council-of-urban-indian-health-signs-on-to-amicus-brief-in-support-of-the-indian-child-welfare-act. Accessed December 8, 2022.
8. Hoss A. Toward Tribal health sovereignty. Wisconsin Law Review. 2022;(2):413-442.
9. Savitzky A. and Graunke K. Explaining Moore v. Harper, the Supreme Court case that could upend democracy. ACLU. December 6, 2022. Available at: https://www.aclu.org/news/voting-rights/ explaining-moore-v-harper-the-supreme-courtcase-that-could-upend-democracy. Accessed December 8, 2022.
10. Vladeck S. "Shadow dockets" are normal. The way SCOTUS is using them is the problem. Slate. April 12, 2021. Available at: https://slate.com/news-and-politics/2021/04/scotus-shadow-docket-use-problem.html. Accessed December 8, 2022.
11. Charles J. Worrying trends in the lower courts after Bruen. Duke Center for Firearms Law. September 30, 2022. Available at: https://firearmslaw.duke. edu/2022/09/worrying-trends-in-the-lower-courts-after-bruen. Accessed December 8, 2022.
12. Cohen DS, Donley G, Rebouché R. The new abortion battleground. Columbia Law Review. August 30, 2022. Available at: https://papers.ssrn.com/ sol3/papers.cfm?abstract_id=4032931. Accessed December 8, 2022.
13. American Health Law Association. Courts split on whether EMTALA preempts state abortion ban laws. Health

Law Weekly. August 26, 2022. Available at: https://www.americanhealthlaw.org/content-library/ health-law-weekly/article/5e14aee8-db53-4517-8579-7f818cdaa9ea/Courts-Split-on-Whether-EMTALA-Preempts-State-Abor. Accessed December 8, 2022.
14. Doster v Kendall, 22-3497/3702 (6th Cir 2022).
15. Braidwood Management v Becerra, Civil Action 4:20-cv-00283-O (ND Tex2022).

DETAILS

Subject:	Womens health; Medicaid; Child welfare; Firearm laws &regulations; Sovereignty; Public health; Federal court decisions; Civil rights; Equal rights; Supreme courts; Freedoms; Living conditions; Government programs; Equal protection; Voting rights; Decision making; Freedom of speech; Protection; Decisions
Business indexing term:	Subject: Medicaid
Location:	New York; United States--US
Company / organization:	Name: Supreme Court-US; NAICS: 922110; Name: New York State Rifle &Pistol Association; NAICS: 813410
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	269-271
Publication year:	2023
Publication date:	Mar 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article

A Community-Engaged Social Marketing Campaign to Promote Equitable Access to COVID-19 Services Among Latino Immigrants

Shah, Harita S, MD; Miller, Alejandra Flores; Yang, Cui, PhD; Grieb, Suzanne M, PhD, MSPH; Lipke, Mitchell; Bigelow, Benjamin F; Phillips, Katherine H, MSN, MPH; Palomino, Pedro; Page, Kathleen R, MD

ABSTRACT (ENGLISH)

To address disparities in COVID-19 outcomes among Latinos with limited English proficiency in Maryland, our team developed a culturally congruent intervention that coupled a statewide social marketing campaign with community-based COVID-19 services. In the first year, we reached 305122 people through social media advertisements and had 9607 visitors to the Web site. Social marketing campaigns represent an opportunity to promote COVID-19 testing and vaccine uptake among Latino populations, especially when they are paired with community services that simultaneously address structural barriers to care. (AmJ Public Health. 2023;113(3):263-266. https://doi.org/10.2105/ AJPH.2022.307191)

FULL TEXT

Headnote

To address disparities in COVID-19 outcomes among Latinos with limited English proficiency in Maryland, our team developed a culturally congruent intervention that coupled a statewide social marketing campaign with community-based COVID-19 services. In the first year, we reached 305122 people through social media advertisements and had 9607 visitors to the Web site. Social marketing campaigns represent an opportunity to promote COVID-19 testing and vaccine uptake among Latino populations, especially when they are paired with community services that simultaneously address structural barriers to care. (AmJ Public Health. 2023;113(3):263-266. https://doi.org/10.2105/ AJPH.2022.307191)

The COVID-19 pandemic has disproportionately affected Latino populations in the United States, with Latinos accounting for 18% of the US population but 27% of all COVID-19 cases in 2020.1 A number of factors (e.g., occupational exposures, higher household occupancy, lack of insurance, limited English proficiency) have led to

Latino immigrant communities experiencing a disproportionate burden of COVID-19 infections and mortality.2,3 Social marketing interventions have been shown to be effective in reaching populations with barriers to accessing traditional health care settings, including Latino populations.4,5 We sought to address disparities in COVID-19 testing and vaccination by coupling a social marketing campaign with accessible community-based COVID-19 services in Maryland.

INTERVENTION AND IMPLEMENTATION

Our team developed the Mejor Vive Sin Duda (Better to Live Without Doubt) social marketing intervention (hereafter referred to as Sin Duda) through community-based participatory research.6 The Sin Duda campaign was coupled with community health worker (CHW) navigation and communitybased COVID-19 services to simultaneously address structural barriers to care. The campaign evolved with the COVID-19 pandemic in three main iterations focused on COVID-19 testing, COVID-19 vaccination, and COVID-19 home tests and treatment.

Our team began by developing accessible COVID-19 testing and vaccination services in partnership with local community-based organizations (CBOs).7,8 Services included free community-based events conducted twice a week as well as a COVID-19 hotline for Latinos, each staffed by a team of bilingual CHWs. We then developed and implemented the Sin Duda campaign, guided by a community advisory board at each stage. The campaign name was developed through a crowdsourcing open contest to incorporate community input.9

The campaign's "call to action" was to visit the project Web site (www.sinduda. org), which included COVID-19 information in English and Spanish and options to request CHW navigation to COVID-19 services via a Qualtrics form or the hotline. The campaign content was designed to have not only linguistic concordance but also cultural congruence, incorporating cultural beliefs from diverse countries of origin guided by input from Latino community members and team members (e.g., the community advisory board, CHWs, media designers).

Advertisements were distributed through Facebookand Instagram (Figure A, available as a supplement to the online version of this article at http://www.ajph.org) as well as Facebook and WhatsApp CBO groups. The campaign's testing and vaccination phases each consisted of two social media pushes six to eight weeks in duration that featured four to six new advertisements to capture users' attention and prevent advertisement fatigue. Finally, we included offline advertisements (e.g., radio, billboards) for two- to three-month periods to build campaign recognition and reach those without social media access.

PLACE, TIME, AND PERSONS

The Sin Duda campaign launched across Maryland on March 1,2021, and remains active. Here we present the first year of data (through March 1, 2022), which included the COVID-19 testing and COVID-19 vaccination iterations. Services are designed to meet the needs of Latino adults and children in Maryland, with a focus on those with limited English proficiency.

PURPOSE

The Sin Duda campaign seeks to improve COVID-19 outcomes among Latino populations with barriers to accessing traditional health care settings by (1) promoting awareness and uptake of community-based COVID-19 services, (2) disseminating timely, evidence-based COVID-19 information to combat misinformation, and (3) empowering community members through community-based participatory research and partnerships with CBOs.

EVALUATION AND ADVERSE EFFECTS

Reach was evaluated via online metrics and surveys conducted at 30 different community-based venues (e.g., churches, consulates, parks) from March to July 2022. Participants were asked to provide information on demographic characteristics and were asked whether and how they had seen or heard of Sin Duda. We report descriptive statistics from the first year of the campaign and the survey period.

From March 1,2021, to March 1, 2022, the Sin Duda campaign reached 305122 people through paid advertisements on Facebook and Instagram (as measured by these platforms). Further organic (unpaid) reach was achieved via posts on CBO WhatsApp groups and social media pages. For context, the Latino adult population in Maryland is estimated at 492 262 residents; of these individuals, 274298 are estimated to be foreign born.10 Figure A displays examples of advertisements with high performance as defined by social media industry benchmarks (e.g., reach,

click-through rates).

During the first year, we had 9607 unique visitors to the project Web site (Table 1). After the addition of a vaccination-focused page in May 2021, there were 1075 Web site requests for COVID-19 vaccinations. Requests via telephone calls were more common than requests via Qualtrics forms.

Among the 424 survey respondents, 29% (n 5 121) indicated they had seen or heard of the Sin Duda campaign. Facebook was the most common means of exposure (n = 102; 84% of those exposed), followed by WhatsApp (n 5 64; 53%). Of the respondents exposed to the campaign, 61% (n = 74) reported that it influenced their decision to get vaccinated, 32% (n = 39) reported that it helped them understand how to obtain vaccination or testing, 12% (n 5 14) reported that it influenced their decision to undergo COVID-19 testing, and 16% (n 5 19) reported that it did not influence them.

There were no known adverse effects stemming from this intervention.

SUSTAINABILITY

We adapted the Sin Duda campaign to focus on home-based testing and linkage to COVID-19 treatment. As a result of improved testing and vaccine availability via state and local agencies, CHW navigation has shifted to include these services. After the current funding period, the Web site will remain a resource to Maryland communities as long as it is relevant in terms of the COVID-19 pandemic.

PUBLIC HEALTH SIGNIFICANCE

The Sin Duda campaign is one of the first social marketing interventions to promote COVID-19 services in Latino communities that are home to residents with limited English proficiency. Community engagement at each project stage was key to ensuring relevant and effective content. In its first year, the campaign reached 305122 Latino individuals across Maryland, and survey data demonstrated comparable reach to previous interventions.5 The majority of survey respondents exposed to the campaign reported that it influenced their decision to get vaccinated or helped them understand how to obtain services. However, 71% of survey respondents did not report campaign exposure, highlighting the need for further efforts to more effectively reach underserved populations.

By coupling the reach of social marketing with community-based services to address systemic barriers to care, we were able to serve Latino populations in Maryland in multiple ways. First, the campaign increased awareness of local COVID-19 services, thereby expanding the potential client base for COVID-19 testing and vaccination. Second, social marketing provided a nimble medium to disseminate timely, evidence-based COVID-19 information. Third, Sin Duda provided culturally congruent avenues of communication for Latino individuals outside of traditional health care settings.

Our experience may inform future social marketing interventions seeking to reach underserved populations. Although Instagram and Tiktok have eclipsed platforms such as Facebook and WhatsApp among younger and English-speaking populations, CBO Facebook and WhatsApp groups have proven key in reaching Latino immigrant adults.5,11 This represents an ongoing opportunity to financially support local CBOs while distributing information through trusted community channels.

In terms of content, the highest performing advertisements featured themes of self-efficacy and collective efficacy.9 Media coverage of COVID-19 in Latino populations has often focused on vaccine hesitancy.12 Our team has found that, in addition to addressing intersectional factors that contribute to vaccine hesitancy, strength-based messaging can be more effective than deficit-based messaging. Future social marketing interventions can tailor lessons learned from the Sin Duda campaign to local communities and should incorporate access to culturally congruent services to address systemic barriers to care. yflPH

ABOUT THE AUTHORS

Harita S. Shah Is with the Department of Medicine, University of Chicago, Chicago, IL. Alejandra Flores Miller, Suzanne M. Grieb, MitchellLipke, Benjamin F. Bigelow, and Kathleen R. Page are with the Johns Hopkins University Schoolof Medicine, Baltimore, MD. Cui Yang is with the Rutgers Schoolof Public Health, Piscataway, NJ. Katherine H. Phillips is with the Esperanza Center, Baltimore, MD. Pedro Palomino is with Somos Baltimore Latino, Baltimore, MD.

CORRESPONDENCE
Correspondence should be sent to Harita S. Shah, MD, University of Chicago, 5841 S Maryland Ave, MC 3051, Chicago, IL 60637 (e-mail: harita. shah@bsd.uchicago.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.
PUBLICATION INFORMATION
Full Citation: Shah HS, Miller AF, Yang C, et al. A community-engaged social marketing campaign to promote equitable access to COVID-19 services among Latino immigrants. AmJ Public Health. 2023;113(3):263-266.
Acceptance Date: November 23, 2022.
DOI: https://doi.org/10.2105/AJPH.2022.307191
CONTRIBUTORS
H. S. Shah led the social marketing intervention development and implementation and the writing of the article. A. Flores Miller, C. Yang, S. M. Grieb, and K. R. Page served as project mentors and guided intervention development and implementation with the involvement of the community advisory board. M. Lipke provided survey data and analysis. B. F. Bigelow led the implementation of community-based services. K. H. Phillips and P. Palomino were key community-based implementation partners. Allof the authors contributed to the study design, research process, and critical editing of the article.
ACKNOWLEDGMENTS
Research reported in this Rapid Acceleration of Diagnostics-Underserved Populations (RADx-UP) publication was supported by the National Institutes of Health (award R01DA045556-04S1).
We are gratefulfor the contributions of Altavista Studios, Ana Ortega Meza, Melissa Cuesta, the Esperanza Center, Somos Baltimore Latino, and the members of our community advisory board.
Note. The content is solely the responsibility of the authors and does not necessarily represent the officialviews of the NationalInstitutes of Health.
CONFLICTS OF INTEREST
The authors have no potentialor actualconflicts of interest to disclose.
HUMAN PARTICIPANT PROTECTION
This project was deemed exempt by the Johns Hopkins University Schoolof Medicine institutionalreview board because it involved surveys with no more than minimalrisk to participants.

References

REFERENCES
1. Centers for Disease Control and Prevention (CDC). Demographic trends of COVID-19 cases and deaths in the US reported to CDC: cases by race/ethnicity; deaths by race/ethnicity; cases by age group; deaths by age group; cases by sex; deaths by sex. Available at: https://stacks.cdc. gov/view/cdc/99332. Accessed March 29, 2022.
2. Poulson M, Neufeld M, Geary A, et al. Intersectional disparities among Hispanic groups in COVID-19 outcomes. J Immigr Minor Health. 2021; 23(1):4-10. https://doi.org/10.1007/s10903-02001111-5
3. Page KR, Flores-Miller A. Lessons we've learnedCOVID-19 and the undocumented Latinx community. N Engl J Med. 2021;384(1):5-7. https:// doi.org/10.1056/NEJMp2024897
4. Hunt IV, Dunn T, Mahoney M, Chen M, Nava V, Linos E. A social media-based public health campaign encouraging COVID-19 vaccination across the United States. Am J Public Health. 2022;112(9): 1253-1256. https://doi.org/10.2105/AJPH.2022. 306934
5. Shah HS, Dolwick Grieb SM, Flores-Miller A, Greenbaum A, Castellanos-Aguirre J, Page KR. Sólo Se Vive Una Vez: the implementation and reach of an HIV screening campaign for Latinx immigrants. AIDS Educ Prev. 2020;32(3):229-242. https://doi.org/10.1521/aeap.2020.32.3.229
6. Calva A, Matthew RA, Orpinas P. Overcoming barriers: practical strategies to assess Latinos living in low-income communities. Health Promot Pract. 2020;21(3):355-362. https://doi.org/10.1177/ 1524839919837975
7. Bigelow BF, Saxton RE, Flores-Miller A, et al. Community testing and SARS-CoV-2 rates for Latinxs in Baltimore. Am J Prev Med. 2021;60(6):e281-e286. https://doi.org/10.1016/j.amepre.2021.01.005

8. Bigelow BF, Saxton RE, Martinez DA, et al. High uptake and series completion of COVID-19 vaccine at community-based vaccination for Latinos with limited English proficiency. J Public Health Manag Pract. 2022;28(6):E789-E794. https://doi. org/10.1097/PHH.0000000000001625
9. Shah HS, Dolwick Grieb SM, Flores-Miller A, et al. A crowdsourcing open contest to design a Latino-specific COVID-19 campaign: a mixed methods analysis. JMIR Form Res. 2022;6(5): e35764. https://doi.org/10.2196/35764
10.US Census Bureau. Explore census data. able at: Accessed March 29, 2022.
11. Powell R, Rosenthal J, August EM, et al. Ante La Duda, Pregunta: a social marketing campaign to improve contraceptive access during a public health emergency. Health Commun. 2022; 37(2):177-184. https://doi.org/10.1080/ 10410236.2020.1828534
12. Wan W. Coronavirus vaccines face trust gap in black and Latino communities, study finds. Available at: https://www.washingtonpost.com/health/ 2020/11/23/covid-vaccine-hesitancy. Accessed March 29, 2022.

DETAILS

Subject:	Polls &surveys; COVID-19 vaccines; Public health; Social marketing; COVID-19; Vaccines; Participatory research; Health services; Intervention; Social networks; Websites; Community; Advertising; COVID-19 diagnostic tests; Hispanic Americans; Immunization; Immigrants; Community services; Advertising campaigns; Correspondence; Marketing; Social media; Pandemics; Latin American cultural groups; Coronaviruses
Business indexing term:	Subject: Social marketing Social networks Advertising campaigns
Location:	Chicago Illinois; Maryland; Baltimore Maryland; United States--US
Company / organization:	Name: University of Chicago; NAICS: 611310; Name: WhatsApp Inc; NAICS: 513210
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	263-266
Publication year:	2023
Publication date:	Mar 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences

ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
DOI:	https://doi.org/10.2105/AJPH.2022.307191
ProQuest document ID:	2781297947
Document URL:	https://www.proquest.com/scholarly-journals/community-engaged-social-marketing-campaign/docview/2781297947/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Mar 2023
Last updated:	2023-03-07
Database:	Public Health Database

Breast Cancer Prevention Misinformation on Pinterest: One Side of a Thick Coin/Respond

Anonymous

FULL TEXT

Stephen M. Modell, MD, MS, Amy H. Ponte, PhD, MPH, Haley R. Director, MPH, Samantha K. Pettersen, MPH, Sharon L. R. Kardia, PhD, Heather Honoré Goltz, PhD, MEd, MPH

ABOUT THE AUTHORS

Stephen M. Modell and Sharon L. R. Kardia are with the Department of Epidemiology, University of Michigan School of Public Health, Ann Arbor. Amy H. Ponte is with Genedu Health Solutions, Beaufort, SC. Haley R. Director is with the Departments of Health Policy and Management and Human Genetics, University of Pittsburgh School of Public Health, Pittsburgh, PA. Samantha K. Pettersen is with the Association for Molecular Pathology, Rockville, MD. Heather Honore Goltz is with the Department of Criminal Justice and Social Work, College of Public Service, University of Houston-Downtown, Houston, TX.

Note. The views expressed by Samantha K. Pettersen are her own and do not necessarily reflect those of the Association for Molecular Pathology.

Letters to the editor referring to a recent AJPH article are encouraged up to 3 months after the article's appearance. By submitting a letter to the editor, the author gives permission for its publication in AJPH. Letters should not duplicate material being published orsubmitted elsewhere. The editors reserve the rightto edit and abridge letters

and to publish responses. Text is limited to 400 words and 7 references. Submit online at www.editorialmanager.com/ajph. Queries should be addressed to the Editor-inChief, Alfredo Morabia, MD, PhD, at editorajph@apha. org
Is using social media detrimental to cancer prevention? Wilner and Holton examined 178 breast cancer prevention and treatment pins from Pinterest. They found that 51.1% contained misinformation, more than half of which made exaggerated claims for anticancer or cancer prevention effects.1 We subsequently identified 82 cancer and social media articles and reviewed 27 (2011 to present; 16 from the past two years) focused on breast cancer prevention policy (e.g., cancer nutrition, self-examination, and mammography). Wilner and Holton's findings are corroborated by the pieces we reviewed identifying breast cancer misinformation on Facebook(two articles), Pinterest (two), Reddit (one), Twitter (two), YouTube (one), and news digital media (two). The range of sampled content containing misinformation was 48.5% on Pinterest, which were mainly associated with commercial bias,2 and 14.7% on Twitter, which were pieces that were not scientifically supported.3 Moreover, Johnson et al., examining 200 cancer social media articles, identified misinformation in 32.5% (n = 65); only Pinterest engagements lacked harmful content.4
Social media can serve a useful health promotion purpose. Pinterest posts often relay early detection, treatment, and hereditary breast cancer survivorship stories with educational value. However, they spare little attention to counseling processes or promoting conversations with relatives and doctors to mitigate risk.5 Similarly, individuals and organizations use Twitter to advance awareness, with such messaging peaking during breast cancer awareness month. Yet, many of these tweets deliver fundraising messages rather than advising specific actions.
As health agencies and networks harness social media for breast cancer prevention via accurate, actionable health messaging, the choice of sender becomes crucial. Because of the Public Health Service Syphilis Study at Tuskegee and other research breaches, members of at-risk minoritized groups may be hesitant to receive messages from health care systems. The adoption of mommy bloggers targeting mothers and daughters and community-specific social influencers has proven effective in engaging users, especially when senders and users are culturally matched.6 Nuancing Wilner and Holton's conclusions, evidence suggests visuals and diverse images can heighten willingness to access cancer-related messages among users from varied racial/ethnic backgrounds.6
Business and legal authorities have proposed coalition-based models of social media industry self-regulation (e.g., the Financial Industry Regulatory Authority). Although it actively filters out misinformation, Pinterest could benefit from a hands-on community advisory. For the everyday monitoring of content, fact-checking by consumer groups themselves can help instill ownership in the critical assessment and discerning use of social media platforms.7 We propose usingthe full potential of social media and informed stakeholders to disseminate accurate breast cancer prevention messaging. Â1PU

CORRESPONDENCE
Correspondence should be sent to Stephen M. Modell, MD, MS, Research and Dissemination Activities Director, Center for Public Health and Community Genomics, Department of Epidemiology, University of Michigan Schoolof Public Health, M5049 SPH II, 1415 Washington Hts, Ann Arbor, MI 48109-2029 (e-mail: mod@umich.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION
FullCitation: ModellSM, Ponte AH, Director HR, Pettersen SK, Kardia SLR, Goltz HH. Breast cancer prevention misinformation on pinterest: one side of a thick coin. Am J Public Health. 2023;113(3): e1-e2.
Acceptance Date: December 10, 2022.
DOI: https://doi.org/10.2105/AJPH.2022.307203

CONTRIBUTORS
S.M. Modell was the principal writer and collated references in consultation with the other authors. A. H. Ponte and S. L. R. Kardia were responsible for policy-oriented sections, and H. H. Goltz was responsible for community-oriented sections of the letter. H. R. Director and S. K. Pettersen oversaw the letter's paragraph development. All authors contributed to writing and reviewing the letter.

ACKNOWLEDGMENTS
The authors express their appreciation to the American Public Health Association Genomics Forum Policy

Committee for discussion that led to the writing of this letter.

CONFLICTS OF INTEREST

The authors report no conflicts of interest.

REFERENCES

1.Wilner T, Holton A. Breast cancer prevention and treatment: misinformation on Pinterest, 2018. Am J Public Health. 2020;119(suppl 3):S300-S304. https://doi.org/10.2105/AJPH.2020.305812

2. Warner EL, Basen-Engquist KM, Badger TA, Crane TE, Raber-Ramsey M. The online cancer nutrition misinformation: a framework of behavior change based on exposure to cancer nutrition misinformation. Cancer. 2022;128(13):2540-2548. https:// doi.org/10.1002/cncr.34218

3. Nastasi A, Bryant T, Canner JK, Dredze M, Camp MS, Nagarajan N. Breast cancer screening and social media: a content analysis of evidence use and guideline opinions on Twitter. J Cancer Educ. 2018; 33(3):695-702. https://doi.org/10.1007/s13187017-1168-9

4. Johnson SB, Parsons M, Dorff T, et al. Cancer misinformation and harmful information on Facebook and other social media: a brief report. J Natl Cancer Inst. 2022;114(7):1036-1039. https://doi.org/10. 1093/jnci/djab141

5. Miller CA, Henderson AN, Guidry JP, McGuire KP, Fuemmeler BF. Pinning pink: messages about hereditary breast cancer risk on Pinterest. J Cancer Educ. 2022;37(3):532-538. https://doi.org/10.1007/ s13187-020-01842-x

6. Fisher CL, Wright KB, Rising CJ, et al. Culturally appropriate breast cancer and environmental risk messages: targeting racially and ethnically diverse mothers. J Cancer Educ. 2021;36(2):284-293. https://doi.org/10.1007/s13187-019-01626-y

7. Allen J, Arechar AA, Pennycook G, Rand DG. Scaling up fact-checking usingthe wisdom of the crowds. Sci Adv. 2021;7(36):eabf4393. https://doi.org/10.1126/ sciadv.abf4393

Wilner and Holton Respond

Tamar Wilner, MA, and Avery Holton, PhD

ABOUT THE AUTHORS

Tamar Wilner is with the School of Journalism and Media, University of Texas at Austin. Avery Holton is with the Department of Communication, University of Utah, Salt Lake City.

We thank Modell et al. for their informative and insightful letter. This discussion could not be more timely at this moment, as we find ourselves nearing three years of a health "infodemic," while Elon Musk's very recent takeover of Twitter poses significant challenges to the health not only of that particular platform but also of the larger information ecosystem.

Modell et al. are right to point out that social media platforms such as Pinterest can be used to disseminate information to facilitate earlier detection and treatment. They are also correct that much messaging about cancer advances a sort of generalized awareness that seems less likely to actually enhance health outcomes. In our study, 619 of 797 Pinterest posts (78%) did not make factual claims about how to prevent or treat breast cancer.1 Most of these instead offered inspirational messages or promotions for pink ribbon-themed products. We also agree with the authors that using communityspecific influencers could be key to social media-based public health promotion, given not only distrust of health institutions among minoritized groups but also how health topics have become increasingly politicized.2

Indeed, public health professionals face numerous challenges in using social media for health promotion. The past three years have shown as much. While many in public health performed admirably getting out messages about COVID-19, too often messaging was inconsistent or best practices known from the research literature were not followed.3 Now, Musk's large-scale layoffs of thousands, including content moderators and the company's internal watchdog team, coupled with the mogul's evident disregard for truth, threaten to make Twitter a place where misinformation overwhelms any attempts at health promotion.4,5 This could lead to knock-on effects as misinformation migrates from Twitter to other platforms and to mass media publications.

We are intrigued by the authors' suggestion of coalition-based and community-advisory social media regulation and wish to suggest a complementary approach that one of us (Wilner) has been involved in. The Center for Media

Engagement at the University of Texas at Austin, together with the National Conference on Citizenship, consulted with more than 100 technologists, scholars, and other experts; spent two years researching literature; and conducted 10 citizen focus groups to come up with Civic Signals, a set of principles that we suggest social media should follow for a flourishing public sphere-in much the same way that public squares and parks follow design principles.6 We received backing for our Civic Signals from our survey of more than 20 000 individuals in 20 countries, which found that people prioritized different principles on different platforms. Our expertreviewed white papers explain how these principles could be translated into action. These can be found at https:// newpublic.org/signals.

We remain optimistic that public health professionals can be among the forces shaping social media for good, and, similar to Modell et al., we feel the changes will need to be sweeping, systemic, and scientific. >1JPU

CORRESPONDENCE

Correspondence should be sent to Tamar Wilner, School of Journalism and Media, 300 W Dean Keeton, Austin, TX 78712 (e-mail: tamar.wilner@ utexas.edu). Reprints can be ordered at https:// ajph.org by clickingthe "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Wilner T, Holton A. Wilner and Holton respond. Am JPublic Health. 2023;113(3):e2-e3. Acceptance Date: December 10, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307202

CONTRIBUTORS

The two authors contributed equally to the writing of this letter.

ACKNOWLEDGMENTS

The authors wish to thank Gina M. Masullo and Natalia (Talia)Jomini Stroud for their assistance.

CONFLICTS OF INTEREST

The authors have no conflicts ofinterest.

REFERENCES

1. Wilner T, Holton A. Breast cancer prevention and treatment: misinformation on Pinterest, 2018. Am J Public Health. 2020;110(suppl 3):S300-S304. https://doi.org/10.2105/AJPH.2020.305812

2. Yeager VA. The politicization of public health and the impact on health officials and the workforce: charting a path forward. Am J Public Health. 2022; 112(5):734-735. https://doi.org/10.2105/AJPH. 2022.306744

3. Ngo T. Bad COVID public health messaging is blocking our path to a "new normal." Scientific American. June 15, 2022. Available at: https://www.scientificamerican.com/article/badcovid-public-health-messaging-is-blocking-ourpath-to-a-new-normal. Accessed January 6, 2023.

4. Bond S. Twitter employees quit in droves after Elon Musk's ultimatum passes. NPR. November 17, 2022. Available at: https://www.npr.org/2022/11/ 17/1137413251/twitter-employees-quit-elonmusk. Accessed January 6, 2023.

5. Goldman S. Why Meta and Twitter's AI and ML layoffs matter. VentureBeat. November 14, 2022. Available at: https://venturebeat.com/ai/why-metaand-twitters-ai-and-ml-layoffs-matter-the-ai-beat. Accessed January 6, 2023.

6. Masullo GM, WilnerT, Stroud NJ. What social media could be: normative frameworks for evaluating digital public spaces. Soc Media Soc. 2022;8(4). https://doi.org/10.1177/20563051221130447

DETAILS

Subject:	Citizen participation; Syphilis; Health promotion; Cancer; Breast cancer; Nutrition; COVID-19; Public sphere; Genomics; Citizenship; Ownership; Editors; Public health; Best practice; Social media; Mass media; Messages; Medical screening; Social networks; User behavior; Epidemiology; Mammography; Disease prevention; Health services; Prevention; Health education; Consumer groups; Correspondence; False information; Sexually transmitted diseases--STD; Minority groups; Principles; Digital media
Business indexing term:	Subject: Social networks; Industry: 92312 : Administration of Public Health Programs
Location:	United States--US; Ann Arbor Michigan
Company / organization:	Name: Pinterest; NAICS: 518210; Name: Association for Molecular Pathology; NAICS: 813910; Name: University of Texas; NAICS: 611310; Name: University of Michigan; NAICS: 611310
Classification:	92312: Administration of Public Health Programs
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	E1-E3
Publication year:	2023
Publication date:	Mar 2023
Section:	LETTERS &RESPONSES
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Letter To The Editor
ProQuest document ID:	2781297946

School-Based Interventions to Prevent Dating and Relationship Violence and Gender-Based Violence: Systematic Review and Network Meta-Analysis

Farmer, Caroline, PhD; Shaw, Naomi, MSc; Rizzo, Andrew J, PhD; Orr, Noreen, PhD; Chollet, Annah, BA; Hagell, Ann, PhD; Rigby, Emma, BA; Young, Honor, PhD; Berry, Vashti, PhD; Bonell, Chris, PhD; Melendez-Torres, G J, RN, DPhil, MPH

ABSTRACT (ENGLISH)

Background. Schools are sites of dating and relationship violence (DRV) and of gender-based violence (GBV) victimization and perpetration. School-based interventions can reach a broad range of students, targeting both individual and group processes that may underpin DRV and GBV. Considering DRV and GBVjointly is important because of their shared etiologies. Comparing the effectiveness of interventions using network meta-analysis (NMA) can support decision-making on optimal resource use. Objectives. To evaluate the comparative effectiveness of school-based interventions for children aged 5 to 18 years on DRV and GBV victimization, perpetration, and related mediators. Search Methods. We searched 21 databases in July 2020 and June 2021, alongside extensive supplementary search methods, including gray literature searches, forward and backward citation chasing, and searches on first and last author names. Selection Criteria. We included randomized-controlled trials of interventions for children of compulsory school age implemented within the school setting, and either partially or wholly aimed at changing DRV or GBV outcomes. Data Collection and Analysis. Pairwise meta-analyses using random-effects robust variance estimation considered intervention effectiveness on DRV and GBV victimization and perpetration using odds ratios, and on mediators (e.g., knowledge and attitudes) using standardized mean differences. Effects were divided into short-term (< 12 months postbaseline) and long-term (> 12 months postbaseline). NMAs on victimization and perpetration outcomes compared interventions categorized by breadth of mechanism and complexity of delivery and implementation. Meta-regression tested sensitivity to percentage of girls in the trial sample and country context. Main Results. Our analysis included 68 trials. Evidence was stronger overall for effects on DRV than for GBV, with significant long-term impacts on DRV victimization (odds ratio [OR] = 0.82; 95% confidence interval [CI] = 0.68, 0.99) and DRV perpetration (OR = 0.78; 95% CI = 0.64, 0.94). Knowledge and attitudinal effects were predominantly short-term (e.g., for DRV-related violence acceptance, d = 0.16; 95% CI = 0.08, 0.24). NMAs did not suggest the superiority of any intervention type; however, most analyses for GBV outcomes were inconsistent. A higher proportion of girls in the sample was associated with increased effectiveness on long-term victimization outcomes. Author's Conclusions. Evidence is stronger for DRV than for GBV, despite

considerable heterogeneity. Certainty of findings was low or very low overall. Public Health Implications. Violence reductions may require more than 1 school year to become apparent. More extensive interventions may not be more effective. A possible reason for stronger effectiveness for DRV is that whereas GBV is ingrained in school cultures and practices, DRV is potentially more open to change via addressing individual knowledge and attitudes. (Am J Public Health. 2023;113(3): 320-330. https://doi.org/10.2105/AJPH.2022.307153)

FULL TEXT

Headnote

Background. Schools are sites of dating and relationship violence (DRV) and of gender-based violence (GBV) victimization and perpetration. School-based interventions can reach a broad range of students, targeting both individual and group processes that may underpin DRV and GBV. Considering DRV and GBVjointly is important because of their shared etiologies. Comparing the effectiveness of interventions using network meta-analysis (NMA) can support decision-making on optimal resource use.

Objectives. To evaluate the comparative effectiveness of school-based interventions for children aged 5 to 18 years on DRV and GBV victimization, perpetration, and related mediators.

Search Methods. We searched 21 databases in July 2020 and June 2021, alongside extensive supplementary search methods, including gray literature searches, forward and backward citation chasing, and searches on first and last author names.

Selection Criteria. We included randomized-controlled trials of interventions for children of compulsory school age implemented within the school setting, and either partially or wholly aimed at changing DRV or GBV outcomes.

Data Collection and Analysis. Pairwise meta-analyses using random-effects robust variance estimation considered intervention effectiveness on DRV and GBV victimization and perpetration using odds ratios, and on mediators (e.g., knowledge and attitudes) using standardized mean differences. Effects were divided into short-term (< 12 months postbaseline) and long-term (> 12 months postbaseline). NMAs on victimization and perpetration outcomes compared interventions categorized by breadth of mechanism and complexity of delivery and implementation. Meta-regression tested sensitivity to percentage of girls in the trial sample and country context.

Main Results. Our analysis included 68 trials. Evidence was stronger overall for effects on DRV than for GBV, with significant long-term impacts on DRV victimization (odds ratio [OR] = 0.82; 95% confidence interval [CI] = 0.68, 0.99) and DRV perpetration (OR = 0.78; 95% CI = 0.64, 0.94). Knowledge and attitudinal effects were predominantly short-term (e.g., for DRV-related violence acceptance, d = 0.16; 95% CI = 0.08, 0.24). NMAs did not suggest the superiority of any intervention type; however, most analyses for GBV outcomes were inconsistent. A higher proportion of girls in the sample was associated with increased effectiveness on long-term victimization outcomes.

Author's Conclusions. Evidence is stronger for DRV than for GBV, despite considerable heterogeneity. Certainty of findings was low or very low overall.

Public Health Implications. Violence reductions may require more than 1 school year to become apparent. More extensive interventions may not be more effective. A possible reason for stronger effectiveness for DRV is that whereas GBV is ingrained in school cultures and practices, DRV is potentially more open to change via addressing individual knowledge and attitudes. (Am J Public Health. 2023;113(3): 320-330. https://doi.org/10.2105/AJPH.2022.307153)

PLAIN-LANGUAGE SUMMARY

Dating and relationship violence and gender-based violence in adolescents and young people remain major issues for school health, especially given that schools are major sites for perpetration and victimization of both DRV and GBV. School-based prevention of DRV and GBV has been tested in many forms, but patterns of effectiveness across both types of outcomes have not been considered. This is especially important because of growing social awareness of how DRV and GBV are linked by toxic patriarchal norms. We searched 21 databases to find randomized trials of school-based interventions for DRV and GBV, and meta-analyzed them by short-term (< 12 months from baseline) and long-term (> 12 months from baseline). We included 68 trials. These trials suggested that

long-term, but not short-term, impacts on victimization and perpetration for DRV were in evidence, but did not offer clear evidence of effectiveness for GBV outcomes. These trials also suggested that interventions could have short-term impacts on knowledge and attitudes, such as violence acceptance. An additional analysis that compared types of interventions did not find that more extensive (more components, broader implementation) interventions were necessarily more effective. This means that schools may need to wait longer than 1 school year to see impacts.
Conservative estimates suggest that between a quarter and a third of school-age children experience dating and relationship violence (DRV), such as physical, sexual, and psychological abuse (including online abuse and coercive control),1 although rates of DRV in excess of two thirds of students have been reported in some contexts.2 Students also describe gender-based violence (GBV) as "commonplace" in schools, including sexual harassment and homophobic and transphobic bullying, with sexual assaults reported in school spaces.3 DRV and GBV share risk factors and antecedent attitudes,4,5 including patriarchal gender norms at the societal level, inconsistently enforced violence prevention policies at the school level, and, at the individual level, exposure to and reinforcement of antisocial GBV-related norms.1,2,6 They also share pervasive consequences for both survivors and perpetrators, including poor mental health, low self-esteem, and risky sexual behavior2,7; consequences for academic performance and school engagement8,9; and elevated risk of intimate partner violence as adults.
Schools are sites of DRV and GBV victimization and perpetration, but they are also important venues for intervention. School-based interventions can reach a broad range of students, targeting both individual and group processes that may underpin DRV and GBV.10-12 Previous reviews11,13,14 have evaluated the effectiveness of interventions for DRV and GBV but have not considered how these affect DRV and GBV outcomesjointly, despite overlap in antecedents. Understanding the effectiveness on both outcomes together supports greater knowledge of approaches for each outcome and informs joint implementation of interventions to reduce DRV and GBV concurrently. Several older reviews require updating to assess newer interventions, but the most recent major review12 also missed relevant studies because of an unduly narrow approach to literature searches. Evaluations of school-based interventions are often published within gray literature (i.e., not in mainstream databases), and therefore reviews without rigorous searches of gray literature sources may exclude relevant data. Finally, to date, no previous review has undertaken a network meta-analysis (N MA) on DRV or GBV outcomes, capitalizing on a mature evidence base to estimate the comparative effectiveness of interventions. An N MA able to identify patterns in the effectiveness of interventions-such as in the breadth or level of delivery, mechanisms of action, and implementation efforts required-would be ofvalue for policymakers seeking to select an intervention for their schools, particularly given sustained policy interest in whole-school approaches despite their complexity.3,6 Thus, this systematic review sought to evaluate the effectiveness of schoolbased interventions on DRV and GBV victimization and perpetration among children aged 5 to 18 years, as well as the factors-including knowledge and attitudes-that might mediate reductions in victimization and perpetration. It also presents, for the first time, an NMA of the comparative effectiveness of intervention types on DRVand GBVvictimization and perpetration.

METHODS

This review was registered on PROSPERO (CRD42020190463).

Search Methods

In July 2020, we searched the following databases without limitation on date or language: MEDLINE, Embase, PsycINFO, Social Policy and Practice (Ovid); CINAHL, ERIC, British Education Index, Education Research Complete, EconLit, Criminal Justice Abstracts (EBSCOhost); Cochrane Database of Systematic Reviews and the Cochrane Central Register of Controlled Trials (via the Cochrane Library, Wiley); NHS Economic Evaluation Database (via the Centre for Reviews and Dissemination); Social Science Citation Index and Conference Proceedings Citation Index (Web of Science, Clarivate Analytics); Australian Education Index, ProQuest Dissertations &Theses Global, Sociological Abstracts including Social Services Abstracts, Applied Social Sciences Index and Abstracts (ProQuest); Trials Register of Promoting Health Interventions and Bibliomap (EPPI-Centre); and Campbell Systematic Reviews (Campbell Collaboration). We updated the bibliographic database searches in June 2021 and added further free-text search terms for named interventions. The timing of searches was chosen to

coincide with the requirements of the funder and in preparation for submission of the funder report.
Our database searches included free-text terms and subject headings for schools and for DRV and GBV. We used forward and backward citation chasing on included studies in Scopus (Elsevier), Web of Science, and Google Scholar, and we reviewed the reference lists of relevant systematic reviews and reports. To identify linked studies and further gray literature, we conducted targeted searches in Web of Science and Scopus using first and last author names, and searched Google Scholar for specific intervention names (e.g., Project Respect, Shifting Boundaries). We also searched or browsed publication lists on key Web sites, and searched clinical trial registers (ClinicalTrials.gov, WHO ICTRP). Where missing data from trial publications was expected to affect the analysis, we contacted authors to request additional information.
All search results were downloaded into EndNote x9 (Clarivate Analytics, London, UK) for deduplication. Further details are provided in Appendix A (available as a supplement to the online version of this article at http://www.ajph.org).
Selection Criteria
Randomized-controlled trials (RCTs) were eligible for inclusion, including cluster trials. The population was restricted to children of compulsory school age (5-18 years). Relevant interventions were implemented within the school setting (including out of school hours, provided these were conducted with school cohorts), and either partially or wholly aimed at changing DRV or GBV outcomes. We excluded interventions that might have had only opportunistic effects on DRV or GBV outcomes-for example, through another health promotion effect (e.g., healthy eating). No restriction was placed on the content of interventions, which may have involved delivery to individual or groups of students, training of staff or school personnel, and interventions targeting local and school policy changes. Interventions may have been delivered by school staff or by an external organization, or entirely peerled (e.g., through a computerized module). Comparisons with control or other active intervention were included.
Search records were screened by 2 reviewers at both the title and abstract level and full-text level. Publications were not excluded at the title and abstract level based on outcome. Disagreements were resolved through discussion and with a third reviewer where required. A reviewer extracted data into a data extraction form developed and piloted a priori and checked by a second reviewer. Data extracted included details about the study design, study sample, intervention characteristics, analysis methods, and outcome data.
Outcomes
Outcomes included victimization or perpetration of DRV or GBV. DRV included physical violence, emotional violence (including isolation, coercive control and cyber abuse), and sexual assault within a dating relationship. Where physical and sexual DRV were considered jointly in an outcome, this was treated as a separate outcome type. GBV included violence outside of a relationship, such as harassment and bullying on the basis of gender or sexuality (including homophobic and transphobic bullying), cyber abuse (including unwanted sexting or forwarding ofsexts), unwanted sexual contact (such as groping or "upskirting"), sexual assault, and rape. Trials varied in the measurement of DRV and GBV outcomes, and a pragmatic decision was taken to group together outcomes across studies based on the types of violence measured. Groupings were informed by outcome descriptions in the original studies and, where available, inspection of measurement items. For both DRV and GBV, "omnibus" measures were overall measures without differentiation (e.g., by emotional, physical, or cyber abuse). In addition, knowledge, attitudes, and behaviors related to DRV and GBV were included, such as rape myth acceptance, bystander attitudes, and GBV-condoning norms; these were grouped by similarity of construct. We did not include outcomes related to "honofi'-based violence, forced marriage, or female genital cutting. Outcomes were quantitative, and included categorical, count, and continuous measures, using bespoke or validated measures. We extracted relevant moderators in included trials.
Pairwise Meta-Analysis
Analyses were based on intentionto-treatdata reported by trials; per protocol data were only included if intention-to-treat analyses were not available, and were downgraded during quality appraisal. Outcomes were grouped, by length of follow-up, as short-term (< 1 year) or long-term (> 1 year). Pairwise meta-analyses of comparisons against

control were conducted, grouped by outcome (DRV or GBVtype) as per the review protocol and availability of evidence in the included trials.

The key metric for primary outcomes was the odds ratio (OR); where outcome measures were continuous, we converted these to ORs using a logistic transformation. We meta-analyzed mediators using standardized mean differences. Meta-analyses used robust variance estimation. This approach improves on previous strategies for dealing with multiple relevant effect sizes per study (e.g., from several treatment arms or effect estimates), such as artificially splitting meta-analyses or choosing 1 effect size, by including all relevant effect sizes but adjusting for interdependencies within studies.15 As heterogeneity across study designs and interventions was anticipated, metaanalyses used a random-effects model as default. We assessed heterogeneity in part using /2, defined as substantial (> 60%), moderate (31%-60%), little (6%-30%), and minimal (< 5%). For cluster trials, where the intracluster correlation coefficient was not explicitly modeled or reported, we imputed an estimate of 0.05 based on other studies used within the review, as recommended by Cochrane guidance.16 Following adjustment, data from cluster trials were pooled with RCTs.

Network Meta-Analysis

We conducted NMAs of study effects, including trials of head-to-head comparisons, to compare the effectiveness of intervention types on DRV and GBV perpetration and victimization outcomes. On the basis of a components analysis informed by stakeholder consultation and policy priorities for school health, we grouped interventions according to delivery type, breadth of mechanism, and implementation (single-component, curriculum, multicomponent, and multilevel interventions; Table 1). We used a frequentist framework via "network" in Stata version 17 (StataCorp LP, College Station, TX). We included correlations between arms in multiarm trials using estimates from trial reports, and a common betweenstudy variance parameter was used across the network. Because of unresolved heterogeneity in effects across trials identified in pairwise metaanalyses, only random-effects models were fitted. We explored analyses for inconsistency using design-by-treatment interaction models, and transitivity was assessed and explored by considering known effect modifiers (e.g., network meta-regression) and the similarity of interventions in each node with respect to the intervention groupings. We then ranked interventions in consistent models using 1000 bootstrap draws, with rankings summarized using the surface under the cumulative ranking curve (SUCRA). SUCRA values balance the precision of, and numerical differences between, estimates and integrate the probability of each intervention type at each rank. SUCRA values produce estimates of how interventions compare with a hypothetical situation where each intervention had 100% probability of ranking first. Where trials reported multiple effect sizes for the same outcome (e.g., different types of DRV victimization), we assumed outcomes to be correlated with p 5 0.8.15

Quality Appraisal and Sensitivity Analysis

Two reviewers (C. F. and a research assistant) appraised all trials for quality using an adapted Cochrane risk of bias tool.16 In the main, appraisals were guided by the tool; however, trials were not downgraded for unblinded outcome assessors within the outcome measurement domain. This decision avoided a floor effect in quality-appraisal ratings as in most trials it was infeasible for study authors to blind or obscure study aims from students. Appraisal decisions were quality assured by a third reviewer (G.J. M.-T.) and disagreements resolved through discussion. We generated comparison-adjusted funnel plots to investigate publication bias for primary outcomes. We sensitivity analyzed primary outcomes using meta-regression on country context (high-income vs low-income and middle-income) and percentage of girl children in the trial sample. These were most commonly identified by stakeholders as likely moderators of effectiveness. Pairwise meta-regressions used common between-study variance parameters between groups. Network metaregressions additionally assumed a common coefficient across all comparisons against control.

RESULTS

Characteristics of studies included in the review are provided in online Appendix B. Following de-duplication, we screened 40160 records on title and abstract, and 788 records on fulltext (Figure 1). Of these, we included 68 RCTs evaluating 80 interventions for DRV or GBV. These included 14 RCTs and 54 cluster RCTs that compared

interventions against a control intervention (n 5 66, including an active control intervention, usual practice, waitlist, or no intervention) or another active intervention (n 5 8). Head-to-head comparisons were of different interventions (n 5 4), of additional components (n 5 3), or of different methods of implementation (n 5 3). More interventions were identified as targeting DRV (n 5 43) than GBV(n 5 15), and 14 interventions were identified as targeting both. The intended target was unclear for 8 interventions, although these trials were included because the intervention content included topics considered relevant to either DRV or GBV.

Most studies (n 5 42) were conducted in North America, with the remaining split across Europe (n 5 9), Asia (n 5 8), Africa (n 5 6), and South America (n 5 3). Across these trials, 50 were undertaken in high-income country contexts. Sample sizes ranged from 47 to 89 707 participants (median 5 839). Studies were mostly conducted in middle or high schools (i.e., ages 11-18 years). Only 4 studies also or solely included students within primary or junior schools. Most trials were conducted with male and female students, whereas 4 and 6 studies, respectively, were conducted exclusively with male or female students. Only 2 studies permitted students to record gender beyond the binary, and only 5 studies included students' self-reported sexuality. No studies included solely LGBTQ + (lesbian, gay, bisexual, transgender, or queer) students. Only half of included studies (52.9%) reported student race or ethnicity; ofthese, more than 50% of students identified as White or Caucasian (37.8%), Hispanic or Latino (18.9%), and Black or African American (10.8%). School or students' socioeconomic status (SES) was reported for 35 studies, of which 11 included more than 50% of students from lower SES backgrounds (e.g., free or subsidized school lunches, or in areas with high economic deprivation). No identified studies exclusively included students who had experienced DRV or GBV; however, 2 studies included only participants considered at risk for DRV.

Interventions included singlecomponent interventions (n = 22 RCTs), curriculum interventions (n = 11), multicomponent interventions (n = 15), and multilevel interventions (n = 22). Half ofall interventions included full or partial implementation by external agencies (50.1 %). A minority of interventions included a self-study (12.5%) or digital (15.0%) component (e.g., use of virtual reality games). DRV and GBV interventions were not clearly different in choice of facilitator or delivery method.

Quality of Included Studies

Critical appraisals for included outcome evaluations are reported in online Appendix B. Only 1 included trial17 was appraised at overall low risk for bias (1.5%). The other trials were split between those appraised as having "some concerns" (54.4%) and those considered to be at high risk for bias (44.1%). The main risk of bias issues in the included trials were as follows:

* unclear allocation concealment, with most trials using simple randomization procedures that can be open to manipulation;

* potential for contamination in schools where students may mix with those in other intervention arms, or teachers trained to deliver the intervention may alter their behavior toward students in the control arm; and * loss of clusters following randomization without evidence that drop-out was unrelated to trial outcomes.

Pairwise Meta-Analyses

Pairwise meta-analyses for interventions compared with controls are reported in Table 2, with forest plots in online Appendix C. Findings suggested that school-based interventions were effective compared with controls in reducing the victimization and perpetration of DRV. A reduction in DRV was shown across subtypes of violence, and was greater at long-term follow-up. However, effect estimates were substantially heterogeneous, with wide confidence intervals (CIs) typically crossing the line of null effect. School-based interventions may be effective for reducing victimization and perpetration of GBV; however, effects were smaller than for DRV, and all effects were highly imprecise. Findings were similar across subtypes of GBV, and heterogeneity was also substantial in these analyses. GRADE for pairwise meta-analyses (Appendix C) led to all outcomes rated as low or very low certainty of evidence, owing primarily to substantial unexplained heterogeneity and risk of publication bias.

Meta-regression sensitivity analyses (Appendix C) also showed that country context moderated effects for DRV or GBV, particularly at long-term follow-up. At 1 year or longer after baseline, interventions in high-income contexts were associated with larger reductions in the odds of DRV and GBV victimization and perpetration (ORs = 0.71 -

0.86; all Ps<.05). Furthermore,the proportion of girls in the trial sample moderated effects for DRV and GBV victimization, but not for DRV or GBV perpetration. With each additional 10% points of girls in the sample, the odds of DRV victimization decreased by 22% (although the effect was marginally nonsignificant; OR 5 0.78; 95% CI = 0.59, 1.04) and the odds of GBV victimization decreased by 9% (OR 5 0.91; 95% CI5 0.85, 0.97).

Analyses of Knowledge and Attitudes

Meta-analyses of knowledge and attitudes are presented In online Appendix C. Overall, Interventions were effective at improving short-term DRV-focused violence acceptance (d 5 0.16; 95% CI = 0.08, 0.24), knowledge (d 5 0.69; 95% CI = 0.18,1.20), attitudes to intervening (d 5 0.14; 95% CI 5 0.01,0.26), and attitudes to personal help-seeking (d 5 0.14; 95% CI 5 0.06, 0.22), but none of these effects was maintained in long-term analyses. Interventions improved GBV-focused violence acceptance (d 5 0.29; 95% CI 5 0.11,0.33), knowledge (d 5 0.68; 95% CI 5 0.26,1.11), and individual selfefficacy (d 5 0.16; 95% CI 5 0.08, 0.25) in the shortterm, with only violence acceptance having a credible long-term effect.

Network Meta-Analyses

NMA findings (Table 3) suggested that single-component interventions may be useful for reducing short-term and long-term DRV victimization and perpetration, and also short-term GBV victimization (no single-component interventions were tested in long-term GBV victimization). Multilevel interventions also showed effectiveness for long-term DRV victimization. For GBV outcomes, there was strongest evidence for curriculum interventions, which were more successful than other intervention types at short-term followup of victimization and short-term and long-term perpetration. Consistency tests for short-term DRV outcomes yielded no evidence of inconsistency (victimization: x2 5 0.29, df 5 3, P 5 .96; perpetration: x2 5 0.16, df 5 3, P 5 .98). However, inconsistency tests were significant for all GBV analyses except for short-term GBV victimization (x2 5 7.24, df 5 3, P 5 .06), driven primarily by 1 trial.

Assessment of transitivity suggested that interventions were more similar within node than between node, but effect modifiers (specifically, country context and sex) were explored to evaluate the impact of imbalances (Appendix C). These analyses had minimal effect on DRV outcomes. However, accounting for the percentage of girls in the trial sample led to comparable effectiveness for short-term GBV victimization across intervention types (although no effect at long-term). Controlling for country context did not affect short-term GBV victimization or perpetration, although in long-term analyses curriculum interventions became more effective.

Rank data are presented in full in Appendix C for consistent NMAs. Overall, single-component interventions were most likely to be top-ranked for DRV victimization and perpetration (SUCRA 5 0.8-1.0). Curriculum interventions were most likely to be topranked for GBV victimization in the short term (SUCRA 5 0.9).

Publication Bias Analyses

Funnel plots (Appendix C) showed evidence of publication bias in short-term DRV victimization, DRV perpetration, and GBV victimization, and in long-term DRV perpetration and GBV victimization. In most cases, bias was toward publication of positive intervention effects by smaller trials, although for GBV victimization, smaller trials were more likely to report negative effects.

DISCUSSION

The results of this comprehensive systematic review and meta-analysis of school-based interventions for DRV and GBV suggest that evidence for the effectiveness of school-based interventions is stronger for DRV than for GBV. However, effects may not be immediate and may require more than 1 school year to become apparent. Effects are evident in the aggregate rather than for any specific type of DRV or GBV. This is an advantage of our analysis strategy, which used an innovative statistical method to integrate all relevant evidence. Interventions are also linked with primarily short-term effects on knowledge and attitudinal mediators. Our consideration of mediators is the most exhaustive to date. It is possible that, whereas effects on mediators may have faded after short-term measurement, longer-term behavior change occurred via changes in school social systems, practices, and norms that may be less amenable to measurement in terms of knowledge and attitudes.

However, there are some caveats in this body of evidence. First, there were clear differences in the sufficiency of

evidence for different types of violence. For example, homophobic GBV was evaluated in very few trials, despite clear evidence of DRV and GBV inequalities in sexual-minority groups.18 Moreover, most GBV analyses relied on omnibus measures that did not distinguish between types of violence. Very few studies reported data for groups at higher risk for DRV or GBV-for example, those with experience ofviolence, or sexual minorities.19 In addition, publication bias was assessed as a serious risk for several of the victimization and perpetration outcomes.

NMAs for most GBV outcomes were inconsistent, limiting interpretation of this evidence. Specifically, inconsistency in NMAs derived from conflicts between trials comparing different intervention types directly and trials comparing each intervention type against control. This again suggests that evidence supporting the effectiveness of interventions was stronger for DRV than for GBV. GBV victimization and perpetration effectiveness was also moderated by country context. Although this did suggest that interventions were effective for GBV in high-income contexts, these analyses relied on relatively few studies and meta-regressions are not causal. Future evaluations should also consider our findings related to the proportion of girls in trial samples and its relationship to victimization outcomes. Interventions addressed to mixed-sex audiences could only show effectiveness because of the positive effects on girls' victimization, rather than on adolescents' perpetration. This is important because decreases in victimization do not suggest specifically that primary prevention of violence is occurring, only that the violence being committed by anyone in the sample is (postintervention) more often directed outside of the sample.

Strengths and Limitations

Compared with prior reviews, our analysis has several strengths. First, the extensive and wide-ranging search permitted a clearer perspective as to the effectiveness of interventions on a range of mediators. Moreover, we were able to include a number of RCTs, including in the gray literature, that previous reviews have not included. Second, our joint consideration of DRV and GBV highlights an important gap in the evidence that requires further consideration; specifically, why intervention impacts appear stronger for DRV than for GBV.

However, our analysis has several limitations. First, we cannot exclude the possibility that relevant trials were missed either because of database indexing or the "file drawer problem," and indeed, our analysis of publication bias indicates some risk of this. Second, we did not analyze broader gender norms and related constructs (e.g., homophobia generally), given the need to identify clear inclusion and exclusion criteria. Third, substantial heterogeneity in intervention effects reflected that variation between interventions could not be explained by our intervention typology, or by variation in potential effect modifiers such as sample demographics, outcome measurement, or trial design. This suggests the need for careful consideration of fit between interventions and local contexts before implementing, and the possibility that explanations for heterogeneity arise from configurations of conditions and components rather than individual predictors. Finally, we adapted the Cochrane risk of bias tool to avoid a floor effect in qualityappraisal ratings across trials. This decision allowed greater comparison of quality across included studies, but the lack of blinding is nevertheless a significant risk of bias in the evidence base.

Implications for Policy and Practice

This is the first published systematic review in this area to compare different intervention types via NMA. Our classification strategy, led by stakeholder consultation suggesting the importance of understanding intervention breadth and difficulty of implementation, led to a surprising finding: that more extensive interventions targeting a broader range of system levels, stakeholders, and change mechanisms were not necessarily more effective than singlecomponent (and frequently technologically mediated) interventions. A possible reason for this relates to school capacity to implement complex interventions,20 such that the effectiveness of single-component interventions may be related to the relative ease of rigorous implementation. This finding may be significant for schools seeking to deliver an intervention for DRV or GBV to students, but with limited resources for complex, multilevel interventions.

Our analysis raises important questions about why interventions might be more effective-and more consistently effective-for DRV. A possible reason for this is that, whereas GBV is immanent and ingrained in school cultures and practices, DRV is a more private behavior3 and potentially more open to change via addressing individual knowledge and attitudes. Similarly, given rapid turnover in adolescent dating relationships, young people may have more opportunities to alter relationship dynamics in ways not present for GBV, given that peer relationships may be

less amenable to change.

Future trials and reviews should incorporate outcomes beyond individual behaviors, knowledge, or attitudes. Although these are useful at gauging intervention impacts on individuals, they do not capture the broader system and community effects of an intervention,21 which were not evidenced in our review. In addition, our findings suggest that interventions may require several years of implementation to show meaningful impacts for DRV and GBV. This may be a barrier for many schools given short-term improvement targets. Schools should consider preintervention implementation workto integrate delivery and maintenance of an intervention into existing school practices, and to maximize the public health benefits of implemented interventions. >4JPU

ABOUT THE AUTHORS

Caroline Farmer, Naomi Shaw, Noreen Orr, Vashti Berry, and G.J. Melendez-Torres are with the Faculty of Health and Life Sciences, University of Exeter, Exeter, UK. AndrewJ. Rizzo is with the College of Health and Human Performance, University of Florida, Gainesville. Annah Chollet is with the Department of Social Policy and Intervention, University of Oxford, Oxford, UK. Ann Hagell and Emma Rigby are with the Association for Young People's Health, London, UK. Honor Young is with the Centre for Development, Evaluation, Complexityand Implementation in Public Health Improvement (DECIPHer), Cardiff University, Cardiff, UK. Chris Bonell is with the Department of Public Health Environments and Society, London School of Hygiene and Tropical Medicine, London, UK.

Sidebar

CORRESPONDENCE

Correspondence should be sent to G.J. Melendez-Torres, Faculty of Health and Life Sciences, University ofExeter, EX1 2LU, Exeter, UK (e-mail: g.j.melendez-torres@exeter.ac.uk). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Farmer C, Shaw N, Rizzo AJ, et al. School-based interventions to prevent dating and relationship violence and gender-based violence: systematic review and network meta-analysis. Am J Public Health. 2023;113(3):320-330. Acceptance Date: October 13, 2022. DOI: https://doi.org/10.2105/AJPH.2022.307153

CONTRIBUTORS

C. Farmer, N. Shaw, and G.J. Melendez-Torres conceptualized and designed the study, collected the data, drafted the initial manuscript, and reviewed and revised the manuscript. A.J. Rizzo, N. Orr, and A. Chollet collected the data, contributed to interpretation, and reviewed and revised the manuscript. A. Hagell, E. Rigby, H. Young, V. Berry, and C. Bonell contributed to interpretation and reviewed and revised the manuscript.

ACKNOWLEDGMENTS

This study is funded by the National Institute for Health Research (NIHR) Public Health Research Programme (NIHR130144). In addition, V. Berry and G.J. Melendez-Torres are partly supported by the NIHR Applied Research Collaboration South West Peninsula (NIHR PenARC) and Chris Bonell is partly funded by an NIHR senior investigator award.

We gratefully acknowledge the assistance of Fraizer Kiff with study appraisal.

Note. The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care. The funders had no role in the design and conduct of the study.

CONFLICTS OF INTEREST

C. Bonell was the principal investigator, and H. Young and G.J. Melendez-Torres co-investigators, of one of the trials included in this meta-analysis.

HUMAN PARTICIPANT PROTECTION

This research did not require ethics approval as it was based on publicly available data. However, ethics approval from the University of Exeter (ID 488499) was received to access and generate summary descriptive statistics from 2 data sets (ICPSR 22660, ICPSR 36355).

References

REFERENCES

1. Young H, Long SJ, Melendez-Torres GJ, et al. Dating and relationship violence victimization and perpetration among 11-16 year olds in Wales: a cross-sectional analysis of the School Health Research Network (SHRN) survey. J Public Health (Oxf). 2021;43(1):111 -122. https://doi.org/10. 1093/pubmed/fdz084

2. Taquette SR, Monteiro DLM.Causes and consequences of adolescent dating violence: a systematic review. j Inj Violence Res. 2019;11(2):137-147. https://doi.org/10.5249/jivr.v11i2.1061

3. Office for Standards in Education, Children's Services and Skills (Ofsted). Review of sexual abuse in schools and colleges. 2021. Available at: https://www.gov.uk/government/publications/ review-of-sexual-abuse-in-schools-and-colleges/ review-of-sexual-abuse-in-schools-and-colleges. Accessed May 17, 2022.

4. Exner-Cortens D, EckenrodeJ, Bunge J, Rothman E. Revictimization after adolescent dating violence in a matched, national sample of youth. J Adolesc Health. 2017;60(2):176-183. https://doi. org/10.1016/j.jadohealth.2016.09.015

5. Exner-Cortens D, EckenrodeJ, Rothman E. Longitudinal associations between teen dating violence victimization and adverse health outcomes. Pediatrics. 2013;131(1):71-78. https://doi.org/10. 1542/peds.2012-1029

6. Earnest AA, Brady SS. Dating violence victimization among high school students in Minnesota: associations with family violence, unsafe schools, and resources for support. J Interpers Violence. 2014;31(3):383-406. https://doi.org/10.1177/ 0886260514555863

7. Bendixen M, Daveronis J, Kennair LEO. The effects of non-physical peer sexual harassment on high school students' psychological well-being in Norway: consistent and stable findings across studies. IntJ Public Health. 2018;63(1):3-11. https://doi.org/10.1007/s00038-017-1049-3

8. Chronister KM, Marsiglio MC, Linville D, Lantrip KR. The influence of dating violence on adolescent girls' educational experiences. Couns Psychol. 2013;42(3):374-405. https://doi.org/10. 1177/0011000012470569

9. Aragon SR, Poteat VP, Espelage DL, Koenig BW. The influence of peer victimization on educational outcomes for LGBTQ and non-LGBTQ high school students. J LGBT Youth. 2014;11(1):1 -19. https://doi.org/10.1080/19361653.2014.840761

10. Fellmeth GLT, Heffernan C, Nurse J, Habibula S, Sethi D. Educational and skills-based interventions for preventing relationship and dating violence in adolescents and young adults. Cochrane Database Syst Rev. 2013;(6):CD004534. https:// doi.org/10.1002/14651858.CD004534.pub3

11. Kettrey HH, Marx RA, Tanner-Smith EE. Effects of bystander programs on the prevention of sexual assault among adolescents and college students: a systematic review. Campbell Syst Rev. 2019;15(1 -2): e1013. https://doi.org/10.4073/csr.2019.1

12. Piolanti A, Foran HM. Efficacy of interventions to prevent physical and sexual dating violence among adolescents: a systematic review and meta-analysis. JAMA Pediatr. 2022;176(2):142-149. https://doi.org/10.1001/jamapediatrics.2021.4829

13. De La Rue L, Polanin JR, Espelage DL, Pigott TD. A meta-analysis of school-based interventions aimed to prevent or reduce violence in teen dating relationships. Rev Educ Res. 2016;87(1):7-34. https://doi.org/10.3102/0034654316632061

14. Stanley N, Ellis J, Farrelly N, Hollinghurst S, Downe S. Preventing domestic abuse for children and young people: a review of school-based interventions. Child Youth Serv Rev. 2015;59:120-131. https://doi.org/10.1016/j.childyouth.2015.10.018

15. Tanner-Smith EE, Tipton E. Robust variance estimation with dependent effect sizes: practical considerations including a software tutorial in Stata and SPSS. https://doi.org/10.1002/jrsm. 1091. Res Synth Methods. 2014;5(1):13-30.

16. Higgins JPT, Thomas J, Chandler J, et al., eds. Cochrane Handbook for Systematic Reviews ofInterventions. 2nd ed. Oxford, UK: John Wiley &Sons; 2019. https://doi.org/10.1002/9781119536604

17. Meiksin R, Crichton J, Dodd M, et al. A school intervention for 13- to 15-year-olds to prevent dating and relationship violence: the Project Respect pilot cluster RCT. Public Health Res. 2020;8(5):1 -338.

https://doi.org/10.3310/ phr08050
18. Olsen EOM, Vivolo-Kantor A, Kann L. Physical and sexual teen dating violence victimization and sexual identity among US high school students, 2015. J Interpers Violence. 2020;35(17-18):3581-3600. https://doi.org/10.1177/0886260517708757
19. Blondeel K, de Vasconcelos S, Garcia-Moreno C, Stephenson R, Temmerman M, Toskin I. Violence motivated by perception of sexual orientation and gender identity: a systematic review. Bull World Health Organ. 2018;96(1):29L-41L. https:// doi.org/10.2471/BLT.17.197251
20. Moore GF, Evans RE, Hawkins J, et al. From complex social interventions to interventions in complex social systems: future directions and unresolved questions for intervention development and evaluation. Evaluation. 2019/01/01 2019;25(1):23-45. https://doi.org/10.1177/1356389018803219
21. Burnham J, Banyard V, Ast RS, Edwards KM. Case study of community-level domestic and sexual violence prevention: using concept mapping to evaluate community narratives over time. J Fam Violence. 2022;37(1):43-57. https://doi.org/10. 1007/s10896-021-00296-z

DETAILS

Subject:	Grey literature; Students; Intervention; Domestic violence; Short term; Heterogeneity; Violence; Gender-based violence; Effects; Schools; Knowledge; Victimization; Decision analysis; Citation indexes; Search methods; Children; Girls; Effectiveness; Public health; Databases; Meta-analysis; Personal relationships; Education; Decision making; Data collection; Gender relations; Health behavior; Long term; Sex crimes; Statistical analysis; Aggression; Literature reviews; Gender; Confidence intervals; Public schools; Attitudes; Systematic review; Dating
Company / organization:	Name: Clarivate Plc; NAICS: 513140, 516210, 51 9290, 541511
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	320-330
Publication year:	2023
Publication date:	Mar 2023
Section:	RESEARCH &ANALYSIS
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036

Use of Judicial Bypass of Mandatory Parental Consent to Access Abortion and Judicial Bypass Denials, Florida and Texas, 2018–2021

Stevenson, Amanda Jean, PhD; Coleman-Minahan, Kate, RN, PhD, FNP-BC

ABSTRACT (ENGLISH)

Objectives. To describe minors' use of judicial bypass to access abortion and the percentage of bypass petitions denied in Florida and Texas. Methods. Data were derived from official state statistics on judicial bypasses and abortions by age in Texas and Florida; abortions in Texas among minor nonresidents were estimated. In addition, judicial bypass petitions as a percentage of abortions received by minors and judicial bypass denials as a percentage of petitions were calculated. Results. Between 2018 and 2021, minors received 5527 abortions in Florida and an estimated 5220 abortions in Texas. Use of judicial bypass was stable at 14% to 15% in Florida and declined from 14% to 10% in Texas. Among petitions for judicial bypass, denials increased in Florida from 6% to a maximum of 13% and remained stable in Texas at 5% to 7%. Conclusions. Minors' use of judicial bypass in Texas and Florida is substantial. The percentage of denials is higher and increasing in Florida. Public Health Implications. Minors who need confidential abortion care may now be forced to seek judicial bypass far from home. Parental involvement laws in states that do not ban abortion will compound barriers to abortion care.

FULL TEXT

Headnote

Objectives. To describe minors' use of judicial bypass to access abortion and the percentage of bypass petitions

denied in Florida and Texas.
Methods. Data were derived from official state statistics on judicial bypasses and abortions by age in Texas and Florida; abortions in Texas among minor nonresidents were estimated. In addition, judicial bypass petitions as a percentage of abortions received by minors and judicial bypass denials as a percentage of petitions were calculated.
Results. Between 2018 and 2021, minors received 5527 abortions in Florida and an estimated 5220 abortions in Texas. Use of judicial bypass was stable at 14% to 15% in Florida and declined from 14% to 10% in Texas. Among petitions for judicial bypass, denials increased in Florida from 6% to a maximum of 13% and remained stable in Texas at 5% to 7%.
Conclusions. Minors' use of judicial bypass in Texas and Florida is substantial. The percentage of denials is higher and increasing in Florida.
Public Health Implications. Minors who need confidential abortion care may now be forced to seek judicial bypass far from home. Parental involvement laws in states that do not ban abortion will compound barriers to abortion care.
(Am J Public Health. 2023;113(3):316-319. https://doi.org/10.2105/AJPH.2022.307173)
State-level abortion bans have expanded since the Supreme Court ended constitutional protection of abortion care in June 2022. For residents of states that ban abortion care, traveling to another state to obtain care may still be complicated by restrictive abortion laws in the state where care is sought. Here we call attention to one type of restriction, state parental involvement laws, which mandate that minors notify or secure consent from one or both parents before receiving abortion care unless they petition a judge for bypass of parental involvement.
For minors forced out of state, parental involvement laws will increase barriers to receiving timely abortion care. Once a state bans abortion, minors who would have sought bypasses there will need both care and bypasses out of state if they travel to a state with parental involvement laws.
Currently, 22 states that have not banned abortion still enforce parental involvement laws. Previous work demonstrates that parental involvement laws do not increase parental support1 and jeopardize adolescents' health and well-being by restricting and delaying care,2,3 increasing the likelihood of abuse from parents4,5 and sometimes forcing them to seekjudicial bypass.
Obtainingjudicial bypass involves overcoming numerous logistical hurdles3,6,7 to request a bypass of parental involvement in an often humiliating and sometimes traumatizing court hearing.6 Navigating and enduring this process far from home could prove an insurmountable barrier.
Texas and Florida are the 2 most populous states that enforce parental consent; Florida moved from parental notification to consent in 2020. Texas is now enforcing a total abortion ban.8 Florida may follow soon, but until it does the state is regionally consequential for abortion access and the rate of denials is salient as adolescents choose where to travel for care.
The fraction of minors who use judicial bypass to access abortion and how often judges deny bypass petitions are not systematically reported. To generate evidence needed to develop clinical, legal, and practical support for adolescents in states that mandate parental involvement, we calculated annual numbers of bypass petitions, estimated annual percentages of abortions obtained by minor adolescents after bypass, and annual percentages of bypass petitions denied by judges in Texas and Florida between 2018 and 2021.
METHODS
Data on number of judicial bypass petitions filed, number of bypass petitions denied, and number of abortions provided to minors were obtained for Texas and Florida annually between 2018 and 2021. Annual counts of judicial bypass petitions filed and denied during that period were obtained by request from the Florida Office of State Courts Administration and from the Web site of the Texas Office of Court Administration.9
Because minors are subject to parental involvement laws in the state where they receive care, the best measure of the population potentially needing a judicial bypass of parental consent is abortion incidence among people younger than 18 years, including residents and nonresidents. Data on annual numbers of abortions obtained by minors in Florida were requested from the Florida Agency for Health Care Administration for 2018 to 2021. Annual numbers of Texas resident abortions among minors are publicly available for 2018 to 2021, but nonresident Texas abortions are

reported by age group, with 1 age group (15-19 years) comprising both minors and nonminors. Therefore, we estimated annual abortions in Texas for nonresident minors. Estimation procedures are described in the Appendix (available as a supplement to the online version ofthis article at http://www.ajph.org). For each state and year, we computed bypass petitions as a percentage of abortions among minors and bypass petitions denied as a percentage of all bypasses.

RESULTS

Between 2018 and 2021, judicial bypass as a percentage of minors who obtained abortions in Florida was stable at 14% to 15% (from 193 petitions per 1398 abortions to 216 per 1406). In Texas, use of judicial bypass declined over the study period from 14% to 10% (from 205 per 1437 to 107 per 1081; Figure 1).

Denials of judicial bypasses increased in Florida from 6% to 9% between 2018 and 2019. In 2020, when Florida's parental involvement law changed from notification to consent, denials of judicial bypass roseto 13% before declining slightly to 12% the next year. In Texas, the percentage of judicial bypasses denied remained relatively flat, ranging from 5% to 7% over the study period.

DISCUSSION

In this study, we found that substantial numbers of adolescents rely on judicial bypass and that bypasses are routinely denied in both Florida and Texas. About 15% of minors obtaining abortion care in Florida used judicial bypass annually between 2018 and 2021. In Texas, this percentage declined from 14% to 10% during the study period, a trend that may be due to the increasing barriers to abortion in the state, which likely impact the most marginalized groups.8

Over our study period, denials as a percentage ofjudicial bypass petitions doubled in Florida. This increase was most marked after 2020, when Florida's law changed from parental notification to consent, a pattern also observed after Texas made its bypass process more burdensome in 2016.2 Texas has coordinated support for bypass seekers, whereas Florida does not, which could partly explain the higher level of denials in Florida later in the period and the steady rate of denials in Texas. Coordinated support networks are poised to become even more important in states maintaining abortion access.

Reasons for denials are not released, but previous research has shown that some Texas judges deny bypasses on grounds not supported by law, such as gestational duration or family socioeconomic status.6,10

Here we have described 2 basic statistics researchers and public health practitioners should construct as part of monitoring the effects of forced parental involvement laws: the extent of minors' reliance on judicial bypass to access abortion care (measured as bypasses as a percentage of abortions among minors) and the percentage of judicial bypasses denied.

Our study was limited by our inability to linkjudicial bypass petitions by petitioner. Individuals could have filed more than once and may not have received an abortion, resulting in overestimation of reliance on bypass to access abortion. In our estimates of nonresident Texas abortions, we assumed that the ratio of minor to nonminor Texas abortions was the same for residents and nonresidents, which is conservative because it likely led us to overestimate denominators.

PUBLIC HEALTH IMPLICATIONS

By estimating the percentages of young people who rely on judicial bypass in states that totally ban or are expected to totally ban abortion, we have demonstrated that hundreds of minors who may be forced to travel for care could need judicial bypasses if their best option is a state with a parental involvement law. Minors from states that ban abortion must either strategically travel to states without parental involvement laws or face forced parental involvement or judicial bypass in a state that is not their home, further delaying care and possibly resulting in abortion denial. To develop clinical, legal, and practical support for minors, states that allow abortion access but mandate parental involvement, such as Colorado and Maryland, should routinely report the percentage of minors using judicial bypass and the percentage of denials as basic abortion surveillance data. >4JPH

ABOUT THE AUTHORS

AmandaJean Stevenson is with the Department of Sociology and the University of Colorado Population Center,

University ofColorado, Boulder. Kate Coleman-Minahan is with the College of Nursing, University of Colorado Anschutz Medical Campus, and the University of Colorado Population Center, University ofColorado, Boulder.
CORRESPONDENCE
Correspondence should be sent to Amanda Jean Stevenson, PhD, Department ofSociology, UCB 327 Ketchum 195, Boulder, CO 80309 (e-mail: amanda.stevenson@colorado.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.
PUBLICATION INFORMATION
Full Citation: Stevenson AJ, Coleman-Minahan K. Use of judicial bypass of mandatory parental consent to access abortion and judicial bypass denials, Florida and Texas, 2018-2021. AmJ Public Health. 2023;113(3):316-319.
Acceptance Date: November 11, 2022.
DOI: https://doi.org/10.2105/AJPH.2022.307173
CONTRIBUTORS
A.J. Stevenson conceptualized the study, complied the statistical data, and drafted the article. K. Coleman-Minahan contributed to study design, data interpretation, and the writing of the article.
ACKNOWLEDGMENTS
This work benefited from research, administrative, and computing support provided by the University of Colorado Population Center, which is funded by the Eunice Kennedy Shriver National Institute of Child Health and Human Development (project 2P2CHD066613-06). We thank Margaret Wurth of Human Rights Watch for obtaining and sharing with us official state reports on Florida's judicial bypass of parental notice and consent for abortion.
CONFLICTS OF INTEREST
The authors have no conflicts of interest to disclose.
HUMAN PARTICIPANT PROTECTION
As an analysis of aggregate public data, this study was exempt from human participant review.

References

REFERENCES

1. Ralph LJ, King E, Belusa E, Foster DG, Brindis CD, Biggs MA. The impact ofa parental notification requirement on Illinois minors' access to and decision-making around abortion. J Adolesc Health. 2018;62(3):281-287. https://doi.org/10. 1016/j.jadohealth.2017.09.031
2. Stevenson AJ, Coleman-Minahan K, Hays S. Denials of judicial bypass petitions for abortion in Texas before and after the 2016 bypass process change: 2001 -2018. Am J Public Health. 2020;110(3):351 -353. https://doi.org/10.2105/ AJPH.2019.305491
3. Janiak E, Fulcher IR, Cottrill AA, et al. Massachusetts' parental consent law and procedural timing among adolescents undergoing abortion. Obstet Gynecol. 2019;133(5):978-986. https://doi. org/10.1097/AÜG.0000000000003190
4. Coleman-Minahan K, Stevenson AJ, Obront E, Hays S. Adolescents obtaining abortion without parental consent: their reasons and experiences of social support. Perspect Sex Reprod Health. 2020;52(1):15-22. https://doi.org/10.1363/psrh. 12132
5. American Academy ofPediatrics, Committee on Adolescence. The adolescent's right to confidential care when considering abortion. Pediatrics. 2022;150(3):e2022058780. https://doi.org/10. 1542/peds.2022-058780
6. Coleman-Minahan K, Stevenson AJ, Obront E, Hays S. Young women's experiences obtaining judicial bypass for abortion in Texas. J Adolesc Health. 2019;64(1):20-25. https://doi.org/10. 1016/j.jadohealth.2018.07.017
7. Ralph LJ, Chaiten L, Werth E, Daniel S, Brindis CD, Biggs MA. Reasons for and logistical burdens of judicial bypass for abortion in Illinois. J Adolesc Health. 2021;68(1):71-78. https://doi.org/10. 1016/j.jadohealth.2020.08.025
8. Center for Reproductive Rights. A state-by-state alert system if Roe fell. Available at: https:// reproductiverights.org/what-if-roe-fell. Accessed January 12, 2020.
9. TexasJudicial Branch. Statistics and other data: judicial bypass cases: report on disposition of judicial bypass cases by trial courts. Available at: https://www.txcourts.gov/statistics/judicialbypass-cases. Accessed May 15, 2022.

10.Coleman-Minahan K, Stevenson AJ, Obront E, Hays S. Judicial bypass attorneys' experiences with abortion stigma in Texas courts. Soc Sci Med. 2021;269:113508. https://doi.org/10.1016/j. socscimed.2020.113508

DETAILS

Subject:	Abortion; Bans; Public health; Minors; Parents &parenting; Nonresidents; Travel; Age groups; Law; Statistics; Teenagers; Judges &magistrates; Consent
Location:	Texas; United States--US; Florida
Company / organization:	Name: University of Colorado; NAICS: 611310
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	316-319
Publication year:	2023
Publication date:	Mar 2023
Section:	RESEARCH &ANALYSIS
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
DOI:	https://doi.or g/10.2105/AJPH.2022.307173
ProQuest document ID:	2781297926
Document URL:	https://www.proquest.com/scholarly-journals/use-judicial-bypass-mandatory-parental-consent/docview/2781297926/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Mar 2023

Last updated:	2023-03-02
Database:	Public Health Database

Protecting and Promoting Adolescent Health: A Public Health of Consequence, March 2023

Kapadia, Farzana, PhD, MPH [1] [1] deputy editor of AJPH and a professor of epidemiology at the School of Global Public Health, New York University, NY

ABSTRACT (ENGLISH)

This issue of AJPH presents information on interventions and policies related to two critical determinants of adolescent health and well-being: dating- and relationship-based violence and access to abortion care. Adolescence and young adulthood-roughly ages 1 5 to 24 years-is marked by cognitive, biological, emotional, and psychosocial development. Successful and healthy development across these domains is foundational for transitioning into healthy adulthood. However, widespread inequities in access to quality education, housing and food security, and culturally and developmental!/ appropriate health care services, as well as living in unsafe family, peer, or neighborhood environments can disrupt healthy development during this period. Additionally, experiences of dating violence or unintended pregnancy and their associated physical and mental health burdens can undermine successful transition into adulthood. Findings presented in this issue of AJPH on dating violence prevention and access to abortion care for adolescents can inform future policy and practice to protect adolescent health and well-being and ultimately promote successful transition into healthy adulthood.

FULL TEXT

This issue of AJPH presents information on interventions and policies related to two critical determinants of adolescent health and well-being: dating- and relationship-based violence and access to abortion care. Adolescence and young adulthood-roughly ages 1 5 to 24 years-is marked by cognitive, biological, emotional, and psychosocial development. Successful and healthy development across these domains is foundational for transitioning into healthy adulthood. However, widespread inequities in access to quality education, housing and food security, and culturally and developmental!/ appropriate health care services, as well as living in unsafe family, peer, or neighborhood environments can disrupt healthy development during this period. Additionally, experiences of dating violence or unintended pregnancy and their associated physical and mental health burdens can undermine successful transition into adulthood. Findings presented in this issue of AJPH on dating violence prevention and access to abortion care for adolescents can inform future policy and practice to protect adolescent health and well-being and ultimately promote successful transition into healthy adulthood.

PREVENTING ADOLESCENT DATING VIOLENCE

The prevalence of dating and relationship violence (DRV) among adolescents and young adults varies across national surveys and local studies because of differences in methodology, sampling, recruitment, definition of DRV,

and fear and stigma associated with disclosure. Despite these differences, one thing is clear: DRV is highly prevalent in the United States. Findings from the Centers for Disease Control and Prevention's 2019 Youth Risk Behavior Survey indicate that 1 in 8 high school students in a relationship in the past year experienced physical violence and that
1 in 12 experienced sexual dating violence. Estimates for both were higher among female as well as lesbian, gay, bisexual, transgender or transexual, and queer (LGBTQ+) high school students. The 2016-2017 National Intimate Partner and Sexual Violence Survey found that 27.1% of female and 21.4% of male respondents experienced sexual or physical violence or stalking by an intimate partner before they were 18 years old.1 Growing evidence points to cyberdating violence-improper use of social media and technology to harass, control, and abuse dating partners- as having similar harmful effects as in-person dating violence (https://bit.ly/ 3uYk5vt).
Preventing adolescent dating violence requires effective interventions that can be delivered widely during the preadolescent years. To this end, Farmer et al. (p. 320) conducted a meta-analysis of school-based interventions targeting DRV and gender-based violence (GBV). Included interventions had a stronger impact on reducing DRV than GBV, and intervention influences on attitude and knowledge were short term. Consequently, school-based interventions ought to be considered as one component of a broader range of preventive actions that weaken social acceptance of DRV and GBV.

ENSURING ACCESS TO SAFE ABORTION CARE

In 1979, the US Supreme Court ruled in Bellotti v. Baird that a Massachusetts statute requiring minors younger than 18 years to obtain parental consent to have an abortion was unconstitutional. The court held that parents could not have absolute veto power over a minor's decision to have an abortion and that all minors, as long as they were deemed mature and fully competent to make the decision, had a right to seek judicial authorization for an abortion. Currently, 36 US states mandate parental involvement in the form of parental consent from one or both parents before an abortion can be performed or parental notification by the medical provider 24 to 48 hours before the abortion (https://bit.ly/2HsVlE1). In 35 states where abortion care is still legal but parental involvement is mandated, seekingjudicial bypass as ruled in Bellotti v. Baird is available but requires overcoming significant hurdles. Most often, these barriers include lack of knowledge of the judicial bypass process and lack of availability of legal support to navigate the judicial system that lead to delays in abortion care seeking, increase associated costs, and limit the type of care available (https://bit.ly/3Qbc5kt).
With the Supreme Court decision in Dobbs v. Jackson Women's Health Organization (2022) overturning the landmark decision in Roe v. Wade (1973), minors' ability to obtain abortion care significantly worsened. Stevenson and ColemanMinahan (p. 316) provide data that sheds light on minors who are forced to travel from states that have newly banned abortion care as a result of the Dobbs decision to states that do not have such bans but do require the adolescent to obtain judicial bypass of parental involvement. Their findings reveal that Florida denied judicial bypass petitions at higher rates during 2020 to 2021 than in previous years. The harmful short- and long-term socioeconomic2 and health and well-being outcomes for both adolescents denied judicial bypass and their offspring are well documented (https://bit.ly/3GB8Zn0).
Additionally, Stevenson and ColemanMinahan offer two key metrics for tracking the burden on minors of parental involvement laws: judicial bypasses granted among minors obtaining an abortion and proportion of bypass denials among all bypasses sought. Providing such information is critical- without it, we lack information and evidence on the population-level burden of parental involvement laws on abortion care among minors. In addition, we lack information on how bypass denials are shaped by subjective judicial opinions on maturity or competence and whether and how these opinions differ for different groups of minors.

PROMOTING A HEALTHY ADOLESCENCE

Shifting the social and cultural norms that enable adolescent dating violence requires family-, community-, and structural-level interventions to bolster the impact of school-based interventions. By moving beyond individual-based interventions, we can shift our attention to policies and practices that change the contexts, structures, and systems that allow acceptance of adolescent dating violence and likely achieve long-term success. For example, equally

necessary are intervening in school- and universitybased policies on handling DRV and GBV, strengthening the ability of those who have experienced DRV or GBV to take criminal and legal action, providing appropriate counseling services and mental health care, and advocating efforts to support adolescents and young adults who have experienced DRV or GBV.

Additionally, dating violence intervention efforts need to be culturally relevant and appropriate for racially and ethnically diverse youths and LGBTQ + youths. To achieve this goal, and as described by De La Rue, DRV interventions require an intersectional approach that addresses racial-, gender-, and sexual orientation-based discrimination to address the lived realities that adolescents and young adults navigate to have safe and healthy realtionships.3

Protecting the autonomy of minors to determine whether to continue or discontinue a pregnancy, as decided in Bellotti v Baird, is in line with the reproductive justice framework. As the landscape of abortion care shifts across the United States, we can look to past programs that have successfully assisted minors seeking confidential abortion care. For example, between 2013 and 2022-when parental involvement was still mandated in Illinois-the American Civil Liberties Union of Illinois operated the Judicial Bypass Coordination Project. Over this period, the project provided a hotline that offered information about the judicial bypass process and free legal support for minors seeking abortion care throughout the state (https://www.aclu-il.org/en/pna).

Comprehensive practices and policies that lessen threats to a healthy adolescence, particularly related to DRV and judicial bypass denials for abortion care, are critical public health actions that allow adolescents to flourish, gain independence, and transition into successful adulthood. Attention to both ofthese distinct, but related, public health issues promotes health not just for this generation of adolescents but for our future. ÂIPU

CORRESPONDENCE

Correspondence should be sent to Farzana Kapadla, PhD, MPH, New York University, Schoolof Global Public Health, 708 Broadway, Room 729, New York, NY 10003 (e-mail: farzana.kapadia@nyu.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Kapadia F. Protecting and promoting adolescent health: a public health of consequence, March 2023. Am J Public Health. 2023; 113(3):249-250.

Acceptance Date: December 19, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307209

CONFLICTS OF INTEREST

The author has no conflicts of interest to disclose.

References

REFERENCES

1. Leemis RW, Friar N, Khatiwada S, et al. The National intimate Partner and Sexual Violence Survey: 2016/2017 Report on intimate Partner Violence. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2022.

2. Foster DG, Ralph LJ, Biggs MA, Gerdts C, Roberts SCM, Glymour MA. Socioeconomic outcomes of women who receive and women who are denied wanted abortions. Am J Public Health. 2018;108(3): 407-413. https://doi.org/10.2105/AJPH.2017.304247r

3. De La Rue L. Intersectionality and resilience: updating how we address adolescent dating violence. Am J Public Health. 2019;109(10):1324-1325. https://doi.org/10.2105/AJPH.2019.305302

DETAILS

Subject:	Domestic violence; Secondary school students; Young adults; Minors; Health care; Supreme Court decisions; Public health; Mental health; Personal relationships; Teenagers; Disease control; Child development; Womens health; Prevention; Abortion; Adolescents; Intimate partner violence; Dating; Food security; Violence; Pregnancy; Housing; Well being; Inequality; Unwanted pregnancy; Mental health services; Neighborhoods; Health services; Access; Health education; Aggression; Life transitions; Cognitive ability
Business indexing term:	Industry: 92312 : Administration of Public Health Programs
Location:	United States--US; Illinois; New York
Company / organization:	Name: Centers for Disease Control &Prevention--CDC; NAICS: 923120
Classification:	92312: Administration of Public Health Programs
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	249-250
Publication year:	2023
Publication date:	Mar 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Commentary
ProQuest document ID:	2781297883
Document URL:	https://www.proquest.com/scholarly-journals/protecting-promoting-adolescent-health-public/docview/2781297883/se-2?accountid=211160

The Future of Pharmacist- Delivered Status-Neutral HIV Prevention and Care

Weidle, Paul J, PharmD, MPH [1] ; Brooks, John T, MD [1] ; Valentine, Sheila Salvant, JD [1] ; Daskalakis, Demetre, MD, MPH [1] [1] Division of HIV Prevention, National Center for HIV, Viral Hepatitis, STD &TB Prevention, Centers for Disease Control and Prevention (CDC), Atlanta, GA

ABSTRACT (ENGLISH)

During 2019 in the United States, there were an estimated 1.2 million people with HIV and 34800 new HIV infections, among which people belonging to minority ethnic and racial groups were disproportionally affected: 41 % of new HIV diagnoses were among Black/African American people and 29% were among Hispanic/Latino people.1 In February 2019, the US Department of Health and Human Services launched Endingthe HIV Epidemic in the US, a multiagency initiative with four key strategies (Diagnose, Treat, Prevent, and Respond), which when implemented together can end the HIV epidemic in the United States by 2030.2 Pharmacists and community pharmacies are and will continue to be an essential part of the public health and medical infrastructure needed to end the HIV epidemic. Pharmacists are positioned to facilitate linkage to mainstream health care by reaching people from racial and ethnic groups that are disproportionately affected by HIV. Durable pharmacist impact hinges on addressing policy and practice barriers to enable expanded pharmacy-based HIV services.3 We call on leaders in public health, state and local health departments, professional organizations dedicated to addressing the needs of people with HIV, and community-based organizations to increase engagement with pharmacists and pharmacy associations within their jurisdiction. This could be accomplished, in part, by includingthem on HIV planning boards and utilizing their skills and availability to support a status-neutral approach to HIV services. These actions will not only help end the HIV epidemic in the United States, but will also help address the syndemic of HIV, viral hepatitis, sexually transmitted infections, and substance use disorder.

The value of pharmacists in public health response is exemplified by the transformational role they have undertaken duringthe COVID-19 pandemic,4 delivering more than 250 million doses of COVID-19 immunizations byJune 2022.5 The foundation to respond had been laid by the pharmacy profession years earlier by strategically establishing pharmacies as venues for immunization services, in particular annual influenza vaccination.6 Pharmacies can also be accessible sites to test and treat a variety of infectious diseases (e.g., influenza, COVID-19, group A streptococcus) under collaborative practice agreements with physicians or by using standing orders.7 With these expanded capacities, pharmacists have addressed key components of public health, described more than 100 years ago by C. E. A. Winslow, as "the control of community infections" and "the organization of medical and nursing service for the early diagnosis and preventive treatment of disease."8(p.30) These components also address elements in the framework called for in the 2006 Policy Statement from the American Public Health Association on the role of the pharmacist in public health.9 Much of what pharmacists do in the community and outpatient setting is clinical prevention provided to individuals through interventions that promote health and prevent disease- essential

components of health care and public health.

FULL TEXT

During 2019 in the United States, there were an estimated 1.2 million people with HIV and 34800 new HIV infections, among which people belonging to minority ethnic and racial groups were disproportionally affected: 41 % of new HIV diagnoses were among Black/African American people and 29% were among Hispanic/Latino people.1 In February 2019, the US Department of Health and Human Services launched Endingthe HIV Epidemic in the US, a multiagency initiative with four key strategies (Diagnose, Treat, Prevent, and Respond), which when implemented together can end the HIV epidemic in the United States by 2030.2 Pharmacists and community pharmacies are and will continue to be an essential part of the public health and medical infrastructure needed to end the HIV epidemic. Pharmacists are positioned to facilitate linkage to mainstream health care by reaching people from racial and ethnic groups that are disproportionately affected by HIV. Durable pharmacist impact hinges on addressing policy and practice barriers to enable expanded pharmacy-based HIV services.3 We call on leaders in public health, state and local health departments, professional organizations dedicated to addressing the needs of people with HIV, and community-based organizations to increase engagement with pharmacists and pharmacy associations within their jurisdiction. This could be accomplished, in part, by includingthem on HIV planning boards and utilizing their skills and availability to support a status-neutral approach to HIV services. These actions will not only help end the HIV epidemic in the United States, but will also help address the syndemic of HIV, viral hepatitis, sexually transmitted infections, and substance use disorder.

The value of pharmacists in public health response is exemplified by the transformational role they have undertaken duringthe COVID-19 pandemic,4 delivering more than 250 million doses of COVID-19 immunizations byJune 2022.5 The foundation to respond had been laid by the pharmacy profession years earlier by strategically establishing pharmacies as venues for immunization services, in particular annual influenza vaccination.6 Pharmacies can also be accessible sites to test and treat a variety of infectious diseases (e.g., influenza, COVID-19, group A streptococcus) under collaborative practice agreements with physicians or by using standing orders.7 With these expanded capacities, pharmacists have addressed key components of public health, described more than 100 years ago by C. E. A. Winslow, as "the control of community infections" and "the organization of medical and nursing service for the early diagnosis and preventive treatment of disease."8(p.30) These components also address elements in the framework called for in the 2006 Policy Statement from the American Public Health Association on the role of the pharmacist in public health.9 Much of what pharmacists do in the community and outpatient setting is clinical prevention provided to individuals through interventions that promote health and prevent disease- essential components of health care and public health.

Adoption of a status-neutral approach to HIV services-in which HIV testing serves as an entry point to services for people with either a positive or negative result-can improve prevention and care outcomes.10 As front-line providers, pharmacists are well positioned to provide status-neutral care and advance the capacity to control HIV in the United States. People who receive a negative HIV test result can be offered powerful tools that prevent HIV, including preexposure prophylaxis and information about access to condoms, sexual health, and harm reduction services. People who receive a positive HIV test result can be quickly engaged in HIV primary care and prescribed effective treatment to help them rapidly achieve and durably maintain an undetectable viral load, which not only enables people with HIV to live long, healthy lives but prevents sexual HIV transmission.

Pharmacies are widely accessible, nonstigmatizing retail venues that could be more strategically leveraged to support a greater range of HIV prevention, care, and treatment services.11 HIV self-testing has been passively supported through pharmacy-based sales of HIV self-test kits since they were first marketed in 2012. The advent of pointof-care tests for HIV and hepatitis C infection has created opportunities for pharmacists and community pharmacies to expand these prevention services more actively.7 Health departments or community-based organizations could partner with pharmacies to increase distribution of HIV self-test kits or mail-in self-collection kits for HIV or for sexually transmitted infections through their extensive network in urban, suburban, and rural

communities. Pharmacists have a well-established role supporting antiretroviral treatment of, and preexposure prophylaxis against, HIV infection through conventional practice of education and timely reminders for refilling prescriptions. Pharmacists' participation in HIV clinic-based settings, alongside other medical practitioners, has been supported by the Ryan White AIDS Care Program for decades.12 Engaging community pharmacists as key players in a care team can increase retention in care and adherence to antiretroviral therapy and maintain viral suppression.13 Pharmacists' involvement in preexposure prophylaxis care and delivery includes initiation of antivirals through standing orders or collaborative practice agreements with physicians, including through legislation in a growing number of states.14 Pharmacists are critical for the timely dispensing of medications for postexposure prophylaxis against HIV infection in coordination with HIV prevention public health programs and clinicians.
Pharmacists have a major role in ensuringthat HIV medications are effectively used. An emerging concept is to link medical claims data and pharmacy claims data for real-time public health action to identify people who have a diagnosis of HIV infection (medical claims) and ensure that they are filling prescriptions for antiretroviral therapy (pharmacy claims); the effectiveness of this approach is currently being determined.15 Pharmacy claims data can also be used in real time to identify persons who have stopped or interrupted antiretroviral therapy and then, in turn, initiate a rapidly escalating series of interventions from the pharmacist, the medical provider, and the health department. In this way, public health can fulfill its function of ensuring that all people with HIV are taking antiretroviral therapy with resultant viral suppression. Using claims data in this manner requires logistical and administrative planning between different agencies and organizations, including the establishment of data use agreements. The pharmacist generates the data used for action and is integral to implementation of the intervention.
There are also underutilized opportunities for pharmacists to play a more prominent role in preventing the transmission of HIV and other infectious diseases through nonprescription syringe sales. More than 25% of persons who inject drugs obtain sterile syringes from pharmacies.16 There are programs that provide a framework, developed by the state or local health department, that integrates syringe sales with HIV prevention counseling, and educates pharmacists and pharmacy staff on harm reduction strategies, syringe disposal, access to naloxone for opioid overdose treatment, and referrals for substance use disorder treatment.17 Although most states allow for nonprescription syringe sales to people who inject drugs, implementation is typically left to the discretion of the pharmacist on duty. Without a clear strategy in place, conflict may arise between the public health need to prevent the spread of infectious diseases and personal beliefs regarding injection drug use, prior negative experiences, perceptions about persons with substance use disorder, and laws against distribution or possession of drug paraphernalia. Education and support for pharmacists, from both pharmacy management and policymakers, are needed for consistent application of nonprescription syringe sales in practice so pharmacists feel they are part of the solution to the prevention of infectious disease transmission, not part of the problem of the illicit drug use.
The Ending the HIV Epidemic in the US initiative provides a once-in-a-generation opportunity to control HIV in America. Doing so will require strengthening partnerships among public health leaders at the federal, state, and local levels, professional medical societies, HIV advocacy organizations, community-based organizations, health care providers, academic institutions, the business community, and other partners. Public health leaders, policymakers, pharmacists, and pharmacy associations should look for opportunities in their locality to expand the role of pharmacists in ending the HIV epidemic.

CORRESPONDENCE

Correspondence should be sent to PaulJ. Weldle, PharmD, MPH, Centers for Disease Controland Prevention, 1600 Clifton Rd, MS USB-5, Atlanta GA, 30329 (e-mail: pweidle@cdc.gov). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Weidle PJ, Brooks JT, Valentine SS, Daskalakis D. The future of pharmacist-delivered status-neutral HIV prevention and care. AmJ Public Health. 2023;113(3):256-258.
Acceptance Date: November 23, 2022. DOI: https://doi.org/10.2105/AJPH.2022.307190

CONTRIBUTORS

All authors contributed to the writingand provided critical review of the editorial.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

Sidebar

Note. The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the CDC.

References

REFERENCES

1. Centers for Disease Control and Prevention. Estimated HIV incidence and prevalence in the United States, 2015-2019. HIV Surveillance Supplemental Report 2021;26(No. 1). May 2021. Available at: https://www.cdc.gov/hiv/pdf/library/reports/ surveillance/cdc-hiv-surveillance-supplementalreport-vol-26-1.pdf. Accessed June 1, 2022.

2. Fauci AS, Redfield RR, Sigounas G, Weahkee M, Giroir BP. Ending the HIV epidemic: a plan for the United States. JAMA. 2019;321(9):844-845. https://doi.org/10.1001/jama.2019.1343

3. Crawford ND, Lewis CF, Moore R, Pietrandoni G, Weidle PJ. Examining the multilevel barriers to pharmacy-based HIV prevention and treatment services. Sex Transm Dis. 2022;49(11S suppl 2): S22-S25. https://doi.org/10.1097/OLQ.0000000 000001643

4. Earl G, Cillessen L, Lyons-Burney H, et al. Pharmacists' role in infectious pandemics: illustration with COVID-19. In: Adejare A, Amin PD, Earl GL, eds. Remington: The Science and Practice of Pharmacy. 23rd ed. London, UK: Elsevier Inc; 2021: 849-876. https://doi.org/10.1016/B978-0-12820007-0.00064-7

5. Centers for Disease Control and Prevention. The federal retail pharmacy program for COVID-19 vaccination. Available at: https://www.cdc.gov/ vaccines/covid-19/retail-pharmacy-program/ index.html. Accessed June 6, 2022.

6. Centers for Disease Control and Prevention. Influenza vaccinations administered in pharmacies and physician medical offices, adults, United States. Available at: https://www.cdc.gov/flu/ fluvaxview/dashboard/vaccination-administered. html. Accessed June 1, 2022.

7. Cillessen LM, Lyons-Burney H, Gubbins PO. Pharmacist use of point-of-care testing to improve access to care. In: Adejare A, Amin PD, Earl GL, eds. Remington: The Science and Practice ofPharmacy. 23rd ed. London, UK: Elsevier Inc; 2021:817-828. https:// doi.org/10.1016/B978-0-12-820007-0.00046-5

8. Winslow CE. The untilled fields of public health. Science. 1920;51(1306):23-33. https://doi.org/10. 1126/science.51.1306.23

9.American Public Health Association (APHA). The role of the pharmacist in public health. APHA policy no. 200614. 2006. Available at: //www.apha. org/policies-and-advocacy/public-health-policystatements/policy-database/2014/07/07/13/05/ the-role-of-the-pharmacist-in-public-health#: ~:text=Prominent%20considerations%20of%20the%20role,patients%20and%20health%20 team%20members. Accessed June 1, 2022.

10.The White House. National HIV/AIDS Strategy for the United States 2022-2025. 2021. Available at: https://www.hiv.gov/federal-response/national-hivaids-strategy/national-hiv-aids-strategy-20222025. Accessed June 1, 2022.

11. Myers JE, Farhat D, Guzman A, Arya V. Pharmacists in HIV prevention: an untapped potential. Am J Public Health. 2019;109(6):859-861. https:// doi.org/10.2105/AJPH.2019.305057

12. Cantwell-McNelis K, James CW. Role of clinical pharmacists in outpatient HIV clinics. Am J Health Syst Pharm. 2002;59(5):447-452. https://doi.org/ 10.1093/ajhp/59.5.447

13. Byrd KK, Hou JG, Bush T, et al. Adherence and viral suppression among participants ofthe patientcentered Human Immunodeficiency Virus (HIV) Care Model Project: a collaboration between community-based pharmacists and HIV clinical providers. Clin Infect Dis. 2020;70(5):789-797. https://doi.org/10.1093/cid/ciz276

14. Farmer EK, Koren DE, Cha A, et al. The pharmacist's expanding role in HIV pre-exposure prophylaxis. AIDS Patient Care STDS. 2019;33(5):207-213. https://doi.org/10.1089/apc.2018.0294

15. Byrd KK, Camp NM, Iqbal K, Weidle PJ. Pharmacy data as an alternative data source for implementation of a

data to care strategy. J Acquir Immune Defic Syndr. 2019;82(1):S53-S56. https://doi.org/10.1097/QAI.0000000000001969
16. Centers for Disease Control and Prevention. HIV infection risk, prevention, and testing behaviors among persons who inject drugs: National HIV Behavioral Surveillance, injection drug use, 23 US cities, 2018. HIV Surveillance Special Report 24. February 2020. Available at: https://www.cdc.gov/ hiv/pdf/library/reports/surveillance/cdc-hivsurveillance-special-report-number-24.pdf. Accessed June 1, 2022.
17. Anderson B, Mercier RC. The role of nonprescription syringe sales in ending the human immunodeficiency virus epidemic. J Am Pharm Assoc (2003). 2022;62(4):1158-1161. https://doi.org/10. 1016/j.japh.2022.02.017

DETAILS

Subject:	Drug stores; Disease transmission; Infectious diseases; Disease prevention; Health promotion; Minority &ethnic groups; Immunization; Health care; Human immunodeficiency virus--HIV; Influenza; COVID-19; Viral diseases; Community; Epidemics; Jurisdiction; Pharmacists; Medical treatment; Infections; Ethnic factors; Public health; Vaccination; Hepatitis; Pandemics; Vaccines; Organizations; Prevention; Public works; African Americans; Health education; Nursing; Substance use; Federal agencies; Sexually transmitted diseases--STD; Pharmacy; Health services; Streptococcus infections
Business indexing term:	Subject: Drug stores; Industry: 45611 : Pharmacies and Drug Retailers 92312 : Administration of Public Health Programs
Location:	United States--US
Classification:	45611: Pharmacies and Drug Retailers; 92312: Administration of Public Health Programs
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	256-258
Publication year:	2023
Publication date:	Mar 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences

ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
ProQuest document ID:	2781297882
Document URL:	https://www.proquest.com/scholarly-journals/future-pharmacist-delivered-status-neutral-hiv/docview/2781297882/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Mar 2023
Last updated:	2023-08-31
Database:	Public Health Database

Publishing in the American Journal of Public Health: Don't Be Desk Rejected

Morabia, Alfredo, MD, PhD; Costanza, Michael C, PhD

FULL TEXT

Since June 2015, we have received about 30 000 submissions. We have enjoyed many of them, but we also have learned quite a bit aboul our prospective authors'submission approaches.

Here is how our review process is organized: All submissions are first triaged by the editor-inchief and the senior deputy editor. Out of 100 new submissions, 33% are internally "desk rejected" (i.e., without further review), sometimes without being deeply read, because their content is not appropriate for this journal. This has nothing to do with their quality. If their content is appropriate, some common causes of desk rejection are outdated data (e.g., data collection completed 3 years before [which is too old for AJPH]); analysis of surveys not based on the latest data release; results of primarily etiological interest; pilot, feasibility, formative or process evaluation, or validation studies; lack of a comparison or controlgroup; low survey response rate(s); small samples; case studies; and convenience samples. Of the 67% left, another half are desk rejected because they are deemed to be of low priority in terms of novelty or mainly of local interest-the Journal favoring national data when it comes to surveys and surveillance.

The 33% of submissions retained beyond the triage stage are forwarded to the deputy editor, who decides whether to assign them to an associate editor. A substantialnumber of rejections "without reviews" occur at this stage. Beyond it, the papers either will be rejected "after review" or published.

These statistics are for all submissions, including Opinion Pieces and Notes From the Field. If we focus specifically

on Research Articles, Brief Research Articles, Analytic Essays, and Public Health Then and Now history manuscripts, which are strictly externally peer-reviewed, a simple way toput it is that 90% are rejected without review. We are very selective but make a huge effort to process these articles quickly. Five percent will be rejected after review, and 5% will be published. Both outcomes should be considered as successful, because the externalreviews mean that peers have been working on your paper, and their comments may help you in publishing the paper elsewhere. The problem is the 90% of desk rejections, which involve a large loss of time and area source of unwarranted frustration.

These desk rejections can be dramatically reduced if one reads the Instructions for Authors carefully and familiarizes oneself with the mission of AJPH by perusing its tables of contents over a few months and reading the most relevant articles. Explaining in the cover letter what the paper adds to what the Journal has already published is also useful. At triage, we are not necessarily aware of the whole literature, but we are aware of what we have published. largeting the submission to a journal that is expecting similar articles may be time consuming, but it is worth allocating sufficient time to this search given that getting funded, conducting the research, and preparing the paper may have taken years.

As a bottom line, desk-rejected articles are as frustrating for us as they are for you. A useful objective is to carefully target a journalin order primarily not to be desk rejected because, again, having externalreviews increases the chances of an article being published quickly and well, whereas a desk rejection just leaves the same paper older. We feelthat the knowledge we have today after triaging 30 000 submissions would have been usefulwhen we were researchers aspiring to publish, but, hopefully, these comments may be of great interest for young researchers or researchers coming from institutions where specific training about howto publish quickly and wellis neglected.

Alfredo Morabia, MD, PhD
Editor-in-Chief
AJPH
Michael C. Costanza, PhD
Senior Deputy Editor
AJPH

DETAILS

Subject:	Public health; Data collection; Surveys; Research; Journals; Scholarly publishing
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	245
Publication year:	2023
Publication date:	Mar 2023
Section:	EDITOR'S CHOICE
Publisher:	American Public Health Association
Place of publication:	Washington

Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Scienc es
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Editorial
DOI:	https://doi.org/10.2105/AJPH.2022.307218
ProQuest document ID:	2781297865
Document URL:	https://www.proquest.com/scholarly-journals/publishing-american-journal-public-health-dont-be/docview/2781297865/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Mar 2023
Last updated:	2023-06-12
Database:	Public Health Database

Judicial Trends in the Era of COVID-19: Public Health in Peril

Gostin, Lawrence O, JD, LLD [1] [1] Founding O'Neill Professor of Global Health Law and Faculty Director of the O'Neill Institute at Georgetown University, Washington, DC.

ABSTRACT (ENGLISH)

A pandemic can test and reshape health systems like no other event. The same can be said for the profound impacts of pandemics on public health law and governance. January 2023 marks the third anniversary of COVID-19. As the pandemic wrought devastation on health and the economy, public health officials exercised unprecedented powers, ranging from orders to mask, test, and vaccinate to social distancing, school and business closures, and stay-at-home orders. These powers unleashed an avalanche of legal challenges to curb emergency health powers and agencies' ability to safeguard the public's health and safety.

In this issue of AJPH, Parmet and Khalik (p. 280) provide a majestic analysis of judicial litigation duringthe COVID-19 pandemic, demonstrating the judiciary's outsized role. Their article shines a light into a modern judicial era where judges substitute their judgment for that of career scientists. Parmetand Khalikalso offer important insights on howto shape policies to withstand aggressive judicial scrutiny.

Donald Trump appointed one third of the US Supreme Court (now with a 6-3 conservative supermajority) and 30%

of all federal appellate judges.1 Many are hewing to the political ideologies of their appointing president, often closely tracking far-right policies. Litigators "forum shop" to get their cases in front of judges sympathetic to their cause. Consider how a single federal judge in Florida, a Trump appointee rated "unqualified" by the American Bar Association, was able to nationally block the Centers for Disease Control and Prevention's (CDC's) transit mask mandate in April 2022.2

Parmet and Khalik analyzed over 1000 federal and state judicial decisions opining on the lawfulness of public health powers duringthe COVID-19 pandemic. Although over three fourths ofthose decisions upheld pandemic orders, courts often gave precedence to personal and religious freedoms over public health powers. In highprofile cases, the Supreme Court has dangerously narrowed the scope of administrative agencies' rule-making powers-and that trend is only likely to accelerate in the court's 2023 term.

FULL TEXT

A pandemic can test and reshape health systems like no other event. The same can be said for the profound impacts of pandemics on public health law and governance. January 2023 marks the third anniversary of COVID-19. As the pandemic wrought devastation on health and the economy, public health officials exercised unprecedented powers, ranging from orders to mask, test, and vaccinate to social distancing, school and business closures, and stay-at-home orders. These powers unleashed an avalanche of legal challenges to curb emergency health powers and agencies' ability to safeguard the public's health and safety.

In this issue of AJPH, Parmet and Khalik (p. 280) provide a majestic analysis of judicial litigation duringthe COVID-19 pandemic, demonstrating the judiciary's outsized role. Their article shines a light into a modern judicial era where judges substitute their judgment for that of career scientists. Parmetand Khalikalso offer important insights on howto shape policies to withstand aggressive judicial scrutiny.

Donald Trump appointed one third of the US Supreme Court (now with a 6-3 conservative supermajority) and 30% of all federal appellate judges.1 Many are hewing to the political ideologies of their appointing president, often closely tracking far-right policies. Litigators "forum shop" to get their cases in front of judges sympathetic to their cause. Consider how a single federal judge in Florida, a Trump appointee rated "unqualified" by the American Bar Association, was able to nationally block the Centers for Disease Control and Prevention's (CDC's) transit mask mandate in April 2022.2

Parmet and Khalik analyzed over 1000 federal and state judicial decisions opining on the lawfulness of public health powers duringthe COVID-19 pandemic. Although over three fourths ofthose decisions upheld pandemic orders, courts often gave precedence to personal and religious freedoms over public health powers. In highprofile cases, the Supreme Court has dangerously narrowed the scope of administrative agencies' rule-making powers-and that trend is only likely to accelerate in the court's 2023 term.

RIGHTS-BASED CHALLENGES TO PUBLIC HEALTH MEASURES

In the landmark 1905 ruling Jacobson v Massachusetts, Justice Harlan famously stated, "The liberty secured by the Constitution to every person does not import an absolute right in each person to be, at all times and in all circumstances, wholly freed from restraint. There are manifold restraints to which every person is necessarily subject for the common good."3 Throughout the COVID-19 pandemic, courts largely upheld state and municipal measures to protect the common good.

However, as Parmet and Khalik's research revealed, legal challenges to COVID-19 containment measures were most often successful when grounded in religious freedoms. Conservative courts are viewing religious freedom as a near-absolute right-a dangerous trend that could weaken public health.4 Consider howthe Supreme Court repeatedly rejected religious challenges to restrictions on gatherings with a narrow five to four majority. When Amy Coney Barrett replaced Ruth Bader Ginsburg in October 2020, the court abruptly reversed itself, all but ignoring its recent precedents. The court struck down gathering restrictions in New York5 and California,6 designed to mitigate COVID-19 mass spreading events- ignoring a history of mass spreading events at religious congregations.

This could just be the beginning of courts jeopardizing public health powers in the name of religious freedom. In a

concurring opinion last term, Justice Alito urged overturning Employment Division vSmith, which ruled that individuals cannot disobey general health and safety rules for religious reasons.7 Overturning this precedent would open the door to vast discrimination in the name of religion, contributing to physical and psychological health harms and widening health inequities. Further, as Parmet and Khalik point out, the Supreme Court's stance on religion could undermine state vaccine mandates that fail to provide broad religious exemptions. Vaccine-preventable childhood diseases like measles often occur in geographic areas with high rates of unvaccinated individuals, principally in religious communities.8

REGULATORY AUTHORITY OF EXECUTIVE AGENCIES

Administrative agencies provide a web of protection for health, safety, and the environment. Agencies are staffed with career professionals who can evaluate evolving scientific standards, while acting far more rapidly and flexibly than a legislature. Legislatures have thus delegated wide rule-making powers to agencies to curtail threats to health and the environment. Since Franklin Delano Roosevelt, courts have granted considerable deference to executive discretion. Ignoring long-standing precedent, the Supreme Court, as well as lower courts, have begun to rein in executive action, arguing that legislatures had not explicitly authorized the action. Parmet and Khalik identify a dangerous trend: courts were most likely to weigh in and overturn executive action in "purple states"-that is, those with a Democratic governor and a Republicanmajority legislature. This finding makes it ever clearer that courts are putting partisan politics ahead of public health.

The Supreme Court has similarly narrowed the scope of what federal agencies can do, such as by blocking the CDC's housing eviction moratorium using the "major questions" doctrine, which provides that any administrative measure of broad economic or political significance must be backed by explicit statutory authority. Until recently, this doctrine never captured a majority of justices; today, it is a conservative highway for striking down agency actions. In a concurrence to National Federation of Independent Business v Department of Labor (in which the Supreme Court invalidated an Occupational Safety and Health Administration [OSHA] emergency measure requiring COVID-19 vaccination or weekly testing for large employers),9 three justices (Gorsuch, Alito, and Thomas) advocated for the major questions doctrine. In West Virginia v Environmental Protection Agency (EPA), Justice Robert's majority opinion, joined by the five other conservative justices, relied on the major questions doctrine to hold the EPA's emissions rules for protecting against harmful pollutants unconstitutional.10 Next term, the court will weigh in on the Clean Water Act, with a sadly all-too-predictable outcome of further narrowing health and safety powers.

When the next major health emergency strikes, we may begin to fully understand the ramifications of weakening agencies' authority to meet health and environmental challenges while protecting the most vulnerable.

NAVIGATING THE RESTORATION OF PUBLIC HEALTH AUTHORITY

Given these judicial trends, how can we secure the future of public health law and policy? Creating a more balanced, less partisan federal court system would require key reforms. Yet judicial reforms will require significant time and political will, so policymakers need to be able to operate effectively in the environment that we find ourselves in. Grounding public health measures in science is especially important, as sound scientific evidence could help shield against legal challenges. Scientific assessments, of course, are challenging during health emergencies when the evidence is uncertain and evolving. (Think back to the early days of the COVID-19 pandemic on issues like masking and aerosolized spread.) Scientists and lawmakers alike must be clear on what they know and what they don't know, and communicate transparently to gain public trust. As Parmet and Khalik observe, it may be more difficult for a judge to overturn a law or regulation that the public views favorably.

Lawmakers must also be cognizant of the possible impact of public health measures on the exercise of religion that could lead to legal and constitutional challenges. Religious groups must not become the enemy of public health; instead, policymakers should engage smartly with religious and community leaders, whom the public often holds in high regard. Finding common ground and engaging with diverse religious and political constituencies could potentially reduce opposition to public health measures.

When it comes to safeguarding the public against immediate and serious threats to public health, Parmet and Khalik speak compellingly. Public health officials "should not be dissuaded from issuing critical orders or regulations

because of overblown fears of litigation." To do so would be an abdication of the responsibility to act for the common good. Rather, when acting at the height of their powers, public health officials must anticipate litigation and be prepared to answer foreseeable challenges.

The COVID-19 pandemic seemed to unravel so many communal bonds of shared and mutual responsibilities to take care of one another. This splintering of the social fabric manifested in the political branches of government as well as in the judiciary. To avoid a future disaster ofthe magnitude of COVID-19 (or even worse), we have to find ways to come together, support science, and grant public health officials scope to act for the public welfare. ÂfPU

CORRESPONDENCE

Correspondence should be sent to Lawrence O. Gostin, JD, LLD, O'Neill Institute for National and Global Health Law, Georgetown University Law Center, 600 NewJerseyAve NW, Washington, DC 20001 (gostin@georgetown.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Gostin LO. Judicial trends in the era ofCOVID-19: public health in peril. Am J Public Health. 2023;113(3):272-274.

Acceptance Date: December 15, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307211

CONFLICTS OF INTEREST

The author has no conflicts of interest to declare.

References

REFERENCES

1. Scheindlin SA. Trump's judges will call the shots for years to come. The judicial system is broken. The Guardian. October 25, 2021. Available at: https://www.theguardian.com/commentisfree/ 2021/oct/25/trump-judges-supreme-courtjustices-judiciary. Accessed January 17, 2023.

2. Gostin LO, Hosie D. No matter how you feel about masks, you should be alarmed by this judge's decision. New York Times. April 25, 2022. Available at: https://www.nytimes.com/2022/04/25/ opinion/masks-covid-ban.html?referringSource= articleShare. Accessed January 17, 2023.

3. Jacobson v Massachusetts, 197 US 11 (1905).

4. Gostin LO. The Supreme Court's new majority threatens 155 years of deference to public officials handling public health emergencies. Forbes. December 11, 2020. Available at: https://www. forbes.com/sites/coronavirusfrontlines/2020/12/ 11/the-supreme-courts-new-majority-threatens115-years-of-deference-to-public-officials-handlinghealth-emergencies/?sh=205025283a4b. Accessed January 17, 2023.

5. Roman Catholic Diocese of Brooklyn, New York v Cuomo, 592 US __ (2020).

6. Tandon v Newsom, 593 US __ (2021).

7. Employment Division v Smith, 494 US 872 (1990).

8. Sinclair DR, Grefenstette JJ, Krauland MG, et al. Forecasted size of measles outbreaks associated with vaccination exemptions for schoolchildren. JAMA Netw Open. 2019;2(8):e199768. https://doi. org/10.1001/jamanetworkopen.2019.9768

9. National Federation of Independent Business v Department of Labor, Occupational Safety and Health Administration, 595 US __ (2022).

10.West Virginia v Environmental Protection Agency, 597 US _ (2022).

DETAILS

Subject:	Politics; Immunization; Public health; Law; Coronaviruses; Federal court decisions; Judges &magistrates; Disease transmission; COVID-19 vaccines; Trends; Litigation; Judiciary; Government mandates; Legislatures; Freedom of religion; Pandemics; Masks; COVID-19; Disease control; Supreme courts; Presidents; Prevention; Policies; Decision analysis; Political ideologies; Careers
Business indexing term:	Industry: 92615 : Regulation, Licensing, and Inspection of Miscellaneous Commercial Sectors 92112 : Legislative Bodies
Company / organization:	Name: Environmental Protection Agency--EPA; NAICS: 924110; Name: Occupational Safety &Health Administration--OSHA; NAICS: 926150
Classification:	92615: Regulation, Licensing, and Inspection of Miscellaneous Commercial Sectors; 92112: Legislative Bodies
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	272-274
Publication year:	2023
Publication date:	Mar 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
ProQuest document ID:	2781297859
Document URL:	https://www.proquest.com/scholarly-journals/judicial-trends-era-covid-19-public-health-peril/docview/2781297859/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Mar 2023

Last updated:	2023-03-16
Database:	Public Health Database

State Public Health Emergency Powers in Response to COVID-19

Hodge, James G, Jr, JD, LLM [1] ; Dunning, Lauren T, JD, MPH [2] ; Piatt, Jennifer L, JD [1] [1] the Center for Public Health Law and Policy, Sandra Day O'Connor College of Law, Arizona State University, Phoenix, AZ. [2] the Milken Institute Center for the Future of Aging, Santa Monica, CA.

ABSTRACT (ENGLISH)

The September 11 terrorist attacks and the anthrax exposures in fall 2001 changed perceptions of emergency risks in the United States, igniting an era of intense preparedness and response undergirded by substantial funding, interjurisdictional efforts, and comprehensive, state-based legal reforms. Over ensuing years, states infused "public health emergency" (PHE) declarations and powers to test, screen, separate, treat, survey, and vaccinate individuals and groups into their laws on the basis, in large part, ofthe foundational Model State Emergency Health Powers Act (MSEHPA) finalized in December 2001.1 Initial PHE declarations and limited exercises of these powers among select states emerged in response to infectious disease outbreaks including the H1 N1, Ebola, and Zika viruses. None of these threats, however, rivals COVID-19. With 630 million reported infections globally and more than a million confirmed US deaths in 2.9 years,2 the pandemic warranted "all-stops" efforts. Every state declared some type of emergency in the first 10 weeks of the pandemic in early 2020.1 Widespread implementation of social distancing requirements-isolation, quarantine, closures, travel restrictions, stay-at-home orders-unquestionably saved lives but also carried substantial societal costs.3

Public reactions to expansive use of PHE powers were fierce. The pandemic was rapidly politicized. A tsunami of litigation flooded courts nationally.3 Voters confronted governors and public health officials. Presidential administrations changed mid-pandemic. As the epidemiology of COVID-19 became clearer and safe, efficacious vaccines were developed and distributed, applications of state PHE laws and policies oscillated over multiple waves of infections. Uses of these powers were shaped by "denialist" laws and policies (expressly rejecting known and actual public health risks), federal shifts in responses, and judicial restraints based on misperceptions of individual rights and structural limits underlying governmental responses.4 We explore these themes here through assessments of core legal foundations for modern state emergency powers, their uses and challenges in response to COVID-19, and postpandemic reform proposals to improve state responses to future emergency threats.

FULL TEXT

The September 11 terrorist attacks and the anthrax exposures in fall 2001 changed perceptions of emergency risks in the United States, igniting an era of intense preparedness and response undergirded by substantial funding, interjurisdictional efforts, and comprehensive, state-based legal reforms. Over ensuing years, states infused "public health emergency" (PHE) declarations and powers to test, screen, separate, treat, survey, and vaccinate individuals and groups into their laws on the basis, in large part, ofthe foundational Model State Emergency Health Powers Act (MSEHPA) finalized in December 2001.1 Initial PHE declarations and limited exercises of these powers among

select states emerged in response to infectious disease outbreaks including the H1 N1, Ebola, and Zika viruses. None of these threats, however, rivals COVID-19. With 630 million reported infections globally and more than a million confirmed US deaths in 2.9 years,2 the pandemic warranted "all-stops" efforts. Every state declared some type of emergency in the first 10 weeks of the pandemic in early 2020.1 Widespread implementation of social distancing requirements-isolation, quarantine, closures, travel restrictions, stay-at-home orders-unquestionably saved lives but also carried substantial societal costs.3

Public reactions to expansive use of PHE powers were fierce. The pandemic was rapidly politicized. A tsunami of litigation flooded courts nationally.3 Voters confronted governors and public health officials. Presidential administrations changed mid-pandemic. As the epidemiology of COVID-19 became clearer and safe, efficacious vaccines were developed and distributed, applications of state PHE laws and policies oscillated over multiple waves of infections. Uses of these powers were shaped by "denialist" laws and policies (expressly rejecting known and actual public health risks), federal shifts in responses, and judicial restraints based on misperceptions of individual rights and structural limits underlying governmental responses.4 We explore these themes here through assessments of core legal foundations for modern state emergency powers, their uses and challenges in response to COVID-19, and postpandemic reform proposals to improve state responses to future emergency threats.

LEGAL FOUNDATIONS OF EMERGENCY HEALTH POWERS

Federal emergency preparedness and response laws are limited to appropriate exercises of constitutionally enumerated powers (e.g., to tax and spend, regulate interstate commerce, or protect national security). So long as federal laws are constitutionally crafted, they are supreme over state and local laws. Conversely, states are reserved broad "police powers" to provide for the health, safety, morals, and general welfare of populations as per the Constitution's Tenth Amendment. Pursuant to these authorities, states have crafted varied responses to an extensive array of threats (e.g., hurricanes, fires, floods, chemical releases, attacks, epidemics) through legal declarations of emergencies or disasters reflecting an "all-hazards approach."1

The 2001 terroristand bioterrorism attacks led to modernization of a patchwork of inconsistent and incongruous state emergency laws through the development of MSEHPA in fall 2001. Drafters ofthe act clearly distinguished health crises from other extant emergencies. A public health emergency was defined as "an occurrence or imminent threat of an illness or health condition" (stemming from bioterrorism, emerging infectious diseases, or other causes) posinga substantial risk of significant deaths, disabilities, or future health harms.1(p376) Emergency responses authorized via gubernatorial declarations ofa PHE, as per MSEHPA section 601, broadly included use of all available means to limit infectious disease transmissions and ensure that contagious cases are subject to proper control and treatment.

Unlike most existing state emergency laws, however, MSEHPA drafters also provided a comprehensive menu of provisions to detect and manage PHEs. As shown in Table 1, these provisions included expedited public health powers related to individuals (e.g., testing, vaccination, isolation, quarantine), entities (e.g., inspection, closure, evacuation), and private property (e.g., nuisance abatement). Subject to scholarly debate,5 these PHE measures were balanced in the act with express due process and other safeguards designed to protect civil liberties from governmental overreach. By 2006, 38 states had adopted various MSEHPA provisions through state legislation or regulatory reforms. In turn, these laws were selectively used in response to emerging viral diseases (e.g., H1N1 [2009/2010], Ebola [2015], and Zika [2018]) and other noninfectious public health threats (e.g., opioid use disorder, natural disasters, racism).6

USE OF EMERGENCY HEALTH POWERS DURING COVID-19

Limited exercises of state PHE powers, however, could not approximate the widescale, national implementation of responses to COVID-19. After early signs of a potentially deadly new strain of coronavirus emerged globally in late 2019, index COVID-19 cases were detected in the United States beginning in January 2020.7 Real-time public health responses quickly followed. On January 31, Department of Health and Human Services secretary Alex Azar declared a national PHE, followed by President Trump's emergency declarations on March 13, 2020.1 By the end of March, emergencies of all types had been declared across all 50 states, a first in US history.8 Despite widespread

adoption of MSEHPA provisions, only 13 states formally declared PHEs. Four states (Florida, Maryland, NewJersey, and Ohio) declared PHEs in combination with general emergencies.8 Most other states relied on the aforementioned "all-hazards" declarations of emergencies (33 states) or disasters (four states) to effectuate their responses.8 Multifarious practical, legal, and political reasons help explain the diversity of state-based declarations according to information garnered by the Network for Public Health Law and its national partners assisting public health actors during the COVID-19 pandemic. The sheer enormity of logistics challenges posed by the pandemic (e.g., managing patient surges, ensuring continued hospital operations, addressing supply chain interruptions) led some governors to seek a wider array of emergency powers through general declarations. Use of executive waiver authorities pursuant to emergency or disaster declarations enabled governors to selectively and temporarily set aside legislative or other nonconstitutional requirements inhibiting governmental response efforts (e.g., state-based procurement laws regarding agency purchases of needed supplies).

Broader legal options available under general emergency declarations facilitated executive branch efforts to address economic effects (e.g., temporary closures, job losses, unemployment claims) of the pandemic. Leaders declared emergencies to trigger statewide emergency operations plans, launch incident command systems, invoke intrastate mobilization agreements, or facilitate exchange of resources across state borders through the Emergency Management Assistance Compact. Some governors viewed emergency or disaster declarations as necessary to pursue expense reimbursements through the Federal Emergency Management Agency or receive direct federal assistance through the Department of Health and Human Services and other agencies. From a political perspective, emergency or disaster declarations may have heightened awareness among state populations ofthe immense risks posed by the pandemic.

Irrespective ofthe type of declaration, state governors and officials wielded emergency powers to issue numerous orders in the first 90 days ofthe pandemic clarifying public health responses via statutory or regulatory emergency provisions assimilating MSEHPA authorities (Table 1).8 Testing, screening, reporting, and surveillance efforts were activated. Initial cases were assessed through contact tracing. As epidemiologists surmised the stealthy nature of asymptomatic COVID-19 infections, creating distance among US residents became a central public health strategy.3 Mask requirements, shunned initially, were later instituted in many public settings for months on end. Widespread use of quarantine and isolation powers affected tens of thousands of residents. Most people voluntarily complied with measures consistent with model MSEHPA policies, but some recalcitrants faced more forceful interventions or penalties.1

Across the nation, nonessential businesses, religious institutions, and schools were closed beginning in spring 2020. Health care providers facing patient surges shut off access to visitors. Group assembly limits were implemented, including nightly curfews in select jurisdictions.3 Travel restrictions and limited border closures were instituted. Forty-five states issued stay-at-home orders for weeks beginning in late March 2020 through general emergency powers, including MSEHPA section 601.8 Work, school, and social activities were halted or shifted to virtual formats as people awaited safe, effective vaccines. Although residents' tolerance for extreme social distancing quickly waned as the effects of long-term separations mounted, initial implementation of these measures prevented countless infections and saved lives.9

CHANGING DYNAMICS AND LEGAL CHALLENGES

At the onset ofthe pandemic, President Trump deferred to states' frontline responses,10 focusing national efforts instead on vaccine development and production. Lacking federal leadership, state-based COVID-19 response efforts quickly diverged as legal and political objections arose. Through extensive judicial challenges, complainants argued that public health mitigation measures infringed on individual liberties, including freedoms of speech and association, religious liberty, rights to due process or bear arms, and equal protections.3

MSEHPA drafters had expressly stipulated that individual rights should be respected to the extent possible when implementing specific measures (e.g., requiring use of least restrictive means regarding isolation or quarantine).1 Despite long-standing constitutional recognition ofthe need to balance individual liberties with communal health needs, claimants asserted that their constitutionally protected interests predominated over public health. Litigation

over the scope of PHE powers was spearheaded by multiple US Supreme Court decisions striking down COVID-19 assembly restrictions affecting religious entities (November 2020) and deauthorizing the Centers for Disease Control and Prevention's national residential eviction moratorium (August 2021).1

Judicial cases also raised structural arguments centered on separation of powers,1 preemption, and local "home rule" authorities.11 In May 2020, Wisconsin's supreme court overturned the COVID-19 PHE order ofthe state's health department.12 The court determined that the department failed to follow procedural rules in promulgating the order as a regulation pursuant to Wisconsin's statutory definition of "rule."12 Rigid judicial interpretations limiting executive PHE powers diminished state and local health agencies' authorities in other states including Georgia, Kentucky, Michigan, and Ohio.

Federal public health powers were similarly debated. On January 13, 2022, the US Supreme Court renounced the authority ofthe Occupational Safety and Health Administration to require large businesses to impose vaccine-ortest requirements on employees13 while allowing a similar mandate affecting health care workers set by the Centers for Medicare &Medicaid Services. In April 2022, a federal district court struck down the Centers for Disease Control and Prevention's authority to issue its mass transportation mask order,14 leading multiple states to drop their requirements.

Politics contributed to temporary implementations or premature rescissions of emergency declarations, stay-athome orders, and other interventions.15 Extreme politicization led multiple states to limit or cease emergency authorities, vaccination and mask mandates, and social distancing efforts in furtherance of protecting individual freedoms and promoting economic interests. The public health consequences of these actions were immense. Failure to implement vaccine mandates or passport requirements (e.g., checking vaccination status for entry into specific public settings) inhibited immunization rates. School districts without universal masking protocols experienced elevated numbers of COVID-19 cases.16 One assessment of stay-at-home orders demonstrated faster declining COVID-19 case rates in 2647 counties implementing such orders in comparison with 368 counties without them over a three-week period in 2020.17

States' conservative approaches to public health prevention and response led to excess COVID-19 cases and deaths overall. From June 3 to December 13,2020, case and death counts in 26 states with Republican governors were up to 1.8 times higher per 100 000 residents than 25 states (and the District of Columbia) with Democratic leaders.15 Ultimately, thousands died from COVID-19 because their governments refused to employ proven, preventive measures. US life expectancy plunged by more than two years from the start of the pandemic to 2022.18

State legislative and regulatory responses also had an impact. A bevy of statutes and regulations across at least half of the states explicitly sought to curb public health powers in response to COVID-19, other health emergencies, and even in routine settings. Although the threat of denialist state laws was palpable, legal counterefforts surfaced as well, especially related to mask requirements.

Legislative or gubernatorial efforts to rescind school mask mandates in Arizona and Texas in 2021 were initially dismissed by courts on constitutional or procedural grounds.4 When Arizona governor Doug Ducey attempted on August 17, 2021, to deny federal response funds to school districts imposing mask requirements, the US Department ofthe Treasury rejected his authority to do so.4 That same day, federal Department of Education secretary Miguel Cardona announced legal actions to counter mask bans including challenges under the Americans with Disabilities Act.4 After the Michigan supreme court limited Governor Gretchen Whitmer's emergency authorities in October 2020, the state health department pivoted to order face coverings in schools through its existing routine public health powers.4

REFORM EFFORTS TO ENHANCE STATE PUBLIC HEALTH POWERS

A resounding legal takeaway from the COVID-19 pandemic is the continued need for clarity and consistency of authorized governmental actions when US residents' lives are at stake. Future coordinated federal responses may help resolve conflicting exercises of state PHE powers,4 but state-level public health interventions remain essential to effective emergency responses in our federalist system. Shortcomings of state responses to COVID-19, legislative and judicial challenges to public health powers, and discordance over levels of governmental authority

warrant ongoing assessments and efforts to bolster state PHE response capacities. Emerging disease outbreaks arising from new strains of COVID-19, monkeypox, measles, polio, Marburg virus, and other globally circulating conditions present extant threats substantiating real-time legal reforms.

Even as multiple states sought to limit PHE authorities duringthe pandemic through denialist laws and policies, other state legislatures introduced laws to reinforce health infrastructure or enhance public health powers19 through the following strategies:

1. Creating advisory bodies to assess and make recommendations on PHE authorities: Alabama's joint resolution (enacted April 29, 2021) promotes assessments of state COVID-19 responses to generate efficacious policies.20
2. Strengthening local public health authority and coordination: Oklahoma Senate Bill 736 (April 27, 2021) enables counties to form health districts sharing resources to improve health outcomes.21
3. Increasing transparency and accountability: Colorado's House Bill 1426 (July 14, 2020) requires regular gubernatorial briefings to the legislature in declared emergencies.22

State leaders and policymakers are aligning across states to remake the US public health infrastructure postpandemic. A national initiative, Act for Public Health, provides legislative bill tracking, information, and advocacy promoting public health authorities. Select states are reconsidering their powers given adverse judicial treatments and advisory bodies' analyses of COVID-19 responses. A drafting committee of the Uniform Law Commission is producing model language for states on allocation and use of legislative and executive powers in PHEs.23

These efforts should be undergirded by commitments to infuse health equity into legal reforms, including emerging PHE legal principles related to compulsory social distancing and allocations ofcritical medical or other resources pursuant to crisis standards of care.24 Complementary federal support for uniform response efforts through funding, interstate commerce authorities, and oversight of essential supplies and health services will help recalibrate interjurisdictional responses.4,11 During the pandemic, for example, states were allowed to use federal funds via the American Rescue Plan Act to incentivize individual vaccinations through direct cash payments, gift cards, lottery programs, and in-kind transfers.25

Additional efforts to analyze existing laws and identify solutions across federal and state governments are needed in light of ongoing shifts in constitutional interpretations via the US Supreme Court. Key legal reforms ahead include efforts to (1) clarify the scope and triggers of emergency declarations, (2) refine social distancing and other public health powers,(3) limit denialist political influences, (4) corral rampant misinformation swirling around vaccinations and other public health interventions, and (5) sustain fundingfor PHE preparedness and response. Rebuilding public health infrastructure and improving health system response capabilities may help ensure that lessons learned from the tragic losses ofthe COVID-19 pandemic contribute to constructive reforms that alleviate future health threats and promote health equity. ÂjPU

CORRESPONDENCE

Correspondence should be sent to James G. Hodge Jr., JD, LLM, Sandra Day O'Connor College of Law, Arizona State University, 111 E Taylor St, MC 9520, Phoenix, AZ 85004 (e-mail: james.hodge. 1@asu.edu). Reprints can be ordered at http:// www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Hodgejr.JG, Dunning LT, PiattJL. State public health emergency powers in response to COVID-19. Am J Public Health. 2022;113(3): 275-279.

Acceptance Date: October 17, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307158

CONTRIBUTORS

J.G. Hodge Jr. supervised and contributed to conceptualization, research, and the drafting and editing ofthe article in all phases. L.T. Dunning and J. L. Piatt contributed to conceptualization, research, and the drafting and editing ofthe article.

ACKNOWLEDGMENTS

The views expressed are those ofthe authors and not their institutions.

CONFLICTS OF INTEREST

The authors have no financial, personal, academic, or other conflicts of interest in the subject matter discussed in this article.

References

REFERENCES

1. Hodge JG. Public Health Law in a Nutshell. 4th ed. Eagan, MN: West Academic Publishing; 2021.
2. Johns Hopkins University. Coronavirus resource center. Available at: https://coronavirus.jhu.edu/ map.html. Accessed October 31, 2022.
3. Hodge JG, Piatt JL, Carey E, Reinke HN. COVID's constitutional conundrum: assessing individual rights in public health emergencies. Tenn Law Rev. 2022;88(1):838-887. https://doi.org/10.2139/ ssrn.3802045
4. Hodge JG, Piatt JL, Barraza L. Legal interventions to counter COVID-19 denialism. J Law Med Ethics. 2021;49(4):677-682. https://doi.org/10.1017/jme. 2021.92
5. Annas GJ. Bioterrorism, public health, and civil liberties. N Engl J Med. 2002;346(17):1337-1342. https://doi.org/10.1056/NEJM200204253461722
6. Gostin LO, Nuzzo JB. Twenty years after the anthrax terrorist attacks of 2001: lessons learned and unlearned for the COVID-19 response. JAMA. 2021;326(20):2009-2010. https://doi.org/10.1001/ jama.2021.19292
7. Holshue ML, DeBolt C, Lindquist S, et al. First case of 2019 novel coronavirus in the United States. N Engl J Med. 2020;382(10):929-936. https://doi.org/10.1056/NEJMoa2001191
8. Hodge JG. Emergency legal preparedness: COVID19.Available at: https://www.networkforphl.org/ resources/emergency-legal-preparednesscovid19. Accessed August 25, 2022.
9. Hsiang S, Allen D, Annan-Phan S, et al. The effect of large-scale anti-contagion policies on the COVID-19 pandemic. Nature. 2020;584(7820):262-267. https://doi.org/10.1038/s41586-020-2404-8
10. Haffajee RL, Mello MM. Thinking globally, acting locally-the U.S. response to Covid-19. N Engl J Med. 2020;382(22):e75. https://doi.org/10.1056/ NEJMp2006740
11. Gartner D. Pandemic preemption: limits on local control over public health. Available at: http:// nulawreview.org/volume-13-issue-2-articles/ gartner. Accessed August 25, 2022.
12. Wisconsin Legislature v Palm, 942 NW2d 900 (Wis 2020).
13. National Federation of Independent Business v Occupational Safety and Health Administration, 595 US (2022).
14. Health Freedom Defense Fund, Inc. v Biden, FSupp 3d (MD Fla 2022).
15. Neelon B, Mutiso F, Mueller NT, et al. Associations between governor political affiliation and COVID-19 cases, deaths, and testing in the U.S. Am J Prev Med. 2021;61(1):115-119. https://doi. org/10.1016/j.amepre.2021.01.034
16. Boutzoukas AE, Zimmerman KO, Inkelas M, et al. School masking policies and secondary SARS-CoV-2 transmission. Pediatrics. 2022;149(6):e2022056687. https://doi.org/10.1542/peds.2022-056687
17. FowlerJH, Hill SJ, Levin R, Obradovich N. Stay-athome orders associate with subsequent decreases in COVID-19 cases and fatalities in the United States. PLoS One. 2021;16(6):e0248849. https://doi. org/10.1371/journal.pone.0248849
18. Masters RK, Aron LY, Woolf SH. Changes in life expectancy between 2019 and 2021 in the United States and 21 peer countries. JAMA Netw Open. 2022;5(4):e227067. https://doi.org/10.1101/2022. 04.05.22273393
19. Parmet WE, Burris S, Gable L, et al. COVID-19: the promise and failure oflawin an inequitable nation. Am J Public Health. 2021;111(1):47-49. https://doi.org/10.2105/AJPH.2020.306008
20. LegiScan. Alabama Senate Joint Resolution 110. Available at: https://legiscan.com/AL/bill/SJR110/ 2021. Accessed August 25, 2022.
21. LegiScan. Oklahoma Senate Bill 736. Available at: https://legiscan.com/OK/bill/SB736/2021. Accessed August 25, 2022.
22. LegiScan. Colorado House Bill 1426. Available at: https://legiscan.com/CO/bill/HB1426/2020. Accessed August 25, 2022.
23. Uniform Law Commission. Public-Health-Emergency Authority Committee. Available at: https://www.

uniformlaws.org/committees/community-home? CommunityKey=be7c4af5-73e0-4307-8d5a-ca281 b8216cd. Accessed August 25, 2022.
24. Wiley LF. Democratizing the law of social distancing. Yale J Health Policy Law Ethics. 2020;19(3):50-121. https://doi.org/10.2139/ssrn.3634997
25. White House. President Biden to announce new actions to get more Americans vaccinated and slow the spread ofthe delta variant. Available at: https://www.whitehouse.gov/briefing-room/ statements-releases/2021/07/29/fact-sheetpresident-biden-to-announce-new-actions-to-getmore-americans-vaccinated-and-slow-the-spreadof-the-delta-variant. Accessed August 25, 2022.

DETAILS

Subject:	Social distancing; Zika virus; Religion; School closures; Shelter in place; Emergency preparedness; Regulatory reform; Public health; Disasters; Coronaviruses; Infections; Infectious diseases; COVID-19 vaccines; Quarantine; Pandemics; Biological &chemical terrorism; Epidemics; Ebola virus; Governors; Equal rights; Litigation; Epidemiology; COVID-19; Viral diseases; September 11 terrorist attacks-2001; Human rights; Threats; Emergency powers; Vector-borne diseases; Health risks; Vaccines; Reforms; Anthrax; Tsunamis; Disease control; Public health administration; Emergency response; Viruses; Travel restrictions; Policies; Terrorism
Business indexing term:	Industry: 92111 : Executive Offices 92312 : Administration of Public Health Programs
Location:	Wisconsin; United States--US
People:	Trump, Donald J
Company / organization:	Name: Department of Health &Human Services; NAICS: 923120
Classification:	92111: Executive Offices; 92312: Administration of Public Health Programs
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	275-279
Publication year:	2023
Publication date:	Mar 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington

Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
ProQuest document ID:	2781297856
Document URL:	https://www.proquest.com/scholarly-journals/state-public-health-emergency-powers-response/docview/2781297856/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Mar 2023
Last updated:	2023-03-17
Database:	Public Health Database

Multilevel Interventions to Improve Adolescent Mental Health in Low- and Middle-Income Countries

Baumann, Sara E, PhD, MPH [1] ; Devkota, Bhimsen, PhD [2 1] Department of Behavioral and Community Health Sciences, School of Public Health, University of Pittsburgh, Pittsburgh, PA [2] Department of Health Education, Faculty of Education, Tribhuvan University, Kirtipur, Nepal

ProQuest document link

ABSTRACT (ENGLISH)

Adolescence is a formative period in which foundational social and emotional habits are shaped, which inform health and well-being throughout the life course. It is a time of pronounced transition-physiologically, socially, and emotionally. Several lifelong risk factors put children and adolescents at risk for mental disorders, including but not limited to nutritional status; caregivers' physical and mental health; exposure to violence, armed conflict, and war; natural disasters; and gender disparities.1 When one or more of these factors coalesce, adolescents become vulnerable to poor mental health outcomes.2 Globally, one in seven adolescents experiences mental health conditions, which often go undiagnosed and untreated.3 This is of urgent concern in low- and middle-income countries (LMICs), where resources to detect and treat mental health concerns among children and adolescents are limited.1

FULL TEXT

Adolescence is a formative period in which foundational social and emotional habits are shaped, which inform health and well-being throughout the life course. It is a time of pronounced transition-physiologically, socially, and emotionally. Several lifelong risk factors put children and adolescents at risk for mental disorders, including but not limited to nutritional status; caregivers' physical and mental health; exposure to violence, armed conflict, and war; natural disasters; and gender disparities.1 When one or more of these factors coalesce, adolescents become vulnerable to poor mental health outcomes.2 Globally, one in seven adolescents experiences mental health conditions, which often go undiagnosed and untreated.3 This is of urgent concern in low- and middle-income countries (LMICs), where resources to detect and treat mental health concerns among children and adolescents are limited.1

RISK-TAKING BEHAVIOR AND MENTAL HEALTH

Poor mental health has broad-reaching effects, in both the immediate and the long term. Directly relevant to the findings of Ssewamala et al., published in this issue of AJPH (p. 306), is the link between mental health and HIV risk-taking behavior. Specifically, poor mental health conditions can lead to increased risktaking behavior, including early sexual activity, resulting in higher risk for HIV and other sexually transmitted infections and unwanted pregnancy.1 Youths often seek out risk-taking behaviors to cope with emotional difficulties. For example, research by Brown et al. highlights that adolescents with a major depressive disorder struggle with self-esteem and assertiveness, which are critical for supporting safer sex practices.4 Therefore, providing youths with appropriate and safe coping mechanisms and skills to regulate emotions and build resilience for overcoming adversity is needed to improve youths' mental health, reproductive health, and other health concerns.2

ECONOMIC EMPOWERMENT AND MENTAL HEALTH

In LMICs, poverty can have detrimental effects on social and emotional ment in Financial insecurity directly affects life decisions at the household level, which in turn affect health. Often, limited household income puts parents under pressure to choose between meeting the needs of sons versus the needs of daughters. Preference for sons over daughters is widespread globally, particularly in Asia and North Africa. A review of data from 66 developing countries found that preference given to sons disproportionally affects children of disadvantaged backgrounds, such as rural and poor families.6 As a result of prioritizing sons' needs, daughters tend to experience poorer health and development outcomes, such as malnutrition and dropping out of school, where they could have gained critical information about sexual health, HIV, and other health issues as well as the interpersonal and communication skills needed to negotiate in health decision-making. Out-of-school girls are also more likely to engage in risk-taking activities, such as transactional and unprotected sex, to either meet immediate financial needs or increase their social and economic status.7

To address these risks, conditional cash transfers are an example of a programmatic approach that seeks to improve financial security and, in doing so, can improve health and education outcomes. Such programs provide cash to families if they follow certain requirements, which allows families to meet immediate household needs and encourages them to invest in their children's health and development.8 Oportunidades, implemented in Mexico, is one of the first conditional cash transfer programs and serves as a global model.9 Cash is provided to the female head of household, conditional on children attending school and the family taking part in preventive health education talks. A randomized control trial of Oportunidades demonstrated reduced socioemotional problems in children aged 8 to 10 years and reduced behavioral problems. Thus, receiving cash reduces economic stress on the household and improves parental mental health and family relationships, directly affecting the mental health outcomes of children and adolescents.9 Furthermore, a systematic review by Klasen and Crombag indicates that parental training and engagement is promising for addressing behavioral disorders in LMICs.10

INTERVENTION

Acknowledging the importance of economic security is the foundation for the intervention of Ssewamala et al., which aims to reduce HIV risk-taking and improve mental health in Uganda. The authors investigated the effect of an economic empowerment intervention on HIV risk behaviors and mental health among school-going adolescent girls.

Although the intervention did not have significant effects on HIV risk behaviors, likely because of the young age ofthe participants, it significantly improved mental health outcomes for participants. This work, importantly, provides a model that combines an economic intervention with family strengthening, which can be applied in LMIC contexts to improve youth mental health.

Ssewamala et al. tested two arms of the intervention. The first was Youth Development Accounts (YDAs), in which each participant was provided a savings account with matched one-to-one funding. The second arm ofthe intervention included YDAs plus Multiple Family Group, a 16-session intervention facilitated by parents and community health workers that aimed to strengthen family relationships. The Multiple Family Group sessions included children, caregivers, siblings, and extended family members such as aunts, uncles, and grandparents. Training addressed an array of topics, including health knowledge and behaviors, stigma and discrimination, building family strengths, problem-solving at home, and respectful communication.

To test the intervention, participants were randomized at the school level to one of three options: (1) standard health and sex education (control), (2) YDA, and (3) YDA plus Multiple Family Group. Although both interventions that went beyond the standard health and sex education witnessed significantly lower depressive symptoms and better self-concept among participants, the YDA plus Multiple Family Group participants had significantly lower hopelessness than did those in the control group. This suggests that an economic intervention combined with family strengthening is a promising approach for improving mental health among adolescent girls.

LEVELS OF THE SOCIOECOLOGICAL MODEL

The work of Ssewamala et al. establishes the importance of intervening at multiple levels ofthe socioecological model for maximum impact. For example, in the Uganda study, intervening at the individual level through YDAs significantly improved mental health; however, the intervention that included an additional component of family strengthening (i.e., interpersonal level) had a positive impact on hopelessness, which was not found in the YDA arm ofthe intervention. These findings suggest that adolescent mental health is influenced by a variety of factors and that improving family life in combination with economic security can significantly affect mental health outcomes and outlook on life.

Future interventions aiming to build on this work may consider multilevel interventions that intervene not only at the individual and family level but also at the organizational, community, and policy levels. One example of this is intervention through peer education at school as part ofthe national curriculum. Another approach is intervention through women's groups and microfinance groups at the community level, which have demonstrated promise for addressing other complex health issues among youths such as malnutrition and child marriage.11,12 Finally, establishing a supportive policy environment that protects the rights of youths-such as child marriage laws- will help to ensure a fruitful living environment for healthy decision-making and improved health.

CONCLUSIONS

The findings of Ssewamala et al. highlight the importance of intervening at multiple levels. The intervention illuminates the critical link between economic status, family functioning, and mental health outcomes, which demonstrates potential for future scaling to improve adolescent health in LMICs. ÂfPU

CORRESPONDENCE

Correspondence should be sent to Sara E. Baumann, 130 DeSoto St, Pittsburgh, PA 15261 (e-mail: sarabaumann@pitt.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Baumann SE, Devkota B. Multilevel interventions to improve adolescent mental health in low- and middle-income countries. AmJ Public Health. 2023;113(3):246-248.

Acceptance Date: December 12, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307201

CONTRIBUTORS

S. E. Baumann led the writing of the editorial. B. Devkota reviewed and edited the editorial.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

References

REFERENCES

1. Kieling C, Baker-Henningham H, Belfer M, et al. Child and adolescent mental health worldwide: evidence for action. Lancet 2011;378(9801): 1515-1525. https://doi.org/10.1016/S0140-6736(11)60827-1

2. World Health Organization. Adolescent mental health. Available at: https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health. Accessed December 19, 2022.

3. Institute for Health Metrics and Evaluation. Global Burden of Disease Study. Available at: https://www.healthdata.org/gbd/2019. Accessed December 19, 2022.

4. Brown LK, Danovsky MB, Lourie KJ, DiClemente RJ, Ponton LE. Adolescents with psychiatric disorders and the risk of HIV. J Am Acad Child Adolesc Psychiatry. 1997;36(11):1609-1617. https://doi. org/10.1016/S0890-8567(09)66573-4

5. Grantham-McGregor S, Cheung YB, Cueto S, et al.; International Child Development Steering Group. Developmental potential in the first 5 years for children in developing countries. Lancet. 2007; 369(9555):60-70. https://doi.org/10.1016/S01406736(07)60032-4

6. Le K, Nguyen M. Son preference and health disparities in developing countries. SSM Popul Health. 2022;17:101036. https://doi.org/10.1016/j.ssmph. 2022.101036

7. Luke N, Kurz K. Cross-generational and transactional sexual relations in Sub-Saharan Africa. 2002. Available at: https://www.icrw.org/wpcontent/uploads/2016/10/Cross-generational-andTransactional-Sexual-Relations-in-Sub-SaharanAfrica-Prevalence-of-Behavior-and-Implications-forNegotiating-Safer-Sexual-Practices.pdf. Accessed December 9, 2022.

8. de Janvry A, Sadoulet E. Making conditional cash transfer programs more efficient: designing for maximum effect of the conditionality. World Bank Econ Rev. 2006;20(1):1-29. https://doi.org/10. 1093/wber/lhj002

9. Fernald LC, Gertler PJ, Neufeld LM. 10-year effect of Oportunidades, Mexico's conditional cash transfer programme, on child growth, cognition, language, and behaviour: a longitudinal follow-up study. Lancet. 2009;374(9706):1997-2005. [Erratum in: Lancet. 2010;376(9755):1828]. https://doi. org/10.1016/S0140-6736(09)61676-7

10.Klasen H, Crombag AC. What works where? A systematic review of child and adolescent mental health interventions for low and middle income countries. Soc Psychiatry Psychiatr Epidemiol. 2013; 48(4):595-611. https://doi.org/10.1007/s00127012-0566-x

11.Amigó MF, Gurung S. The transformational possibilities ofa peer education program to address child marriage in Nepal. Dev Pract. 2022;32(7): 890-900. https://doi.org/10.1080/09614524. 2021.1937572

12. Upreti YR, Bastien S, Bjønness B, Devkota B. The socio-ecological model as a framework for understanding junk food consumption among schoolchildren in Nepal. Nutr Health. 2021;27(3): 337-346. https://doi.org/10.1 177/0260106021 1 000169

DETAILS

Subject:	Behavior; Intervention; Mental disorders; Families &family life; Malnutrition; Child &adolescent mental health; Low income groups; Decision making; Caregivers; Households; Developing countries--LDCs; Correspondence; Empowerment; Girls; Systematic review; Sex education; Child marriage; Mental health; Childrens health; Habits; Natural disasters; Adolescents; Aggression; Children; Emotions; Income; Risk factors; Nutritional status; Teenagers; Public health
Business indexing term:	Subject: Developing countries--LDCs

Location:	Mexico; Uganda
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	246-248
Publication year:	2023
Publication date:	Mar 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
DOI:	https://doi.org/10.2105/AJPH.2022.307201
ProQuest document ID:	2781297845
Document URL:	https://www.proquest.com/scholarly-journals/multilevel-interventions-improve-adolescent/docview/2781297845/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Mar 2023
Last updated:	2023-08-31
Database:	Public Health Database

Is the Goal of "The Healthiest Nation" Attainable or Desirable?

Zohoori, Namvar, MD, PhD, MPH [1] [1] Fay W. Boozman College of Public Health, University of Arkansas for Medical Sciences

ABSTRACT (ENGLISH)

For several years, the American Public Health Association (APHA) has had its sights set on the laudable and lofty goal of creating the healthiest nation in one generation. Since the announcement of the theme "Healthiest Nation 2030" for the 2015 National Public Health Week, this theme has been echoed in various forms and has served as a "clarion call to action" by APHA.1 This focused attention to the nation's health has rightly generated many activities in several sectors in the nation and has identified and directed actions toward many important factors affecting health and health equity, such as racism, equal access to health care, and social determinants of health, among others.

At face value, the term "healthiest nation" may seem self-defining, but, in various publications, different definitions have been indirectly alluded to, such as making "the next United States generation the world's healthiest,"1(p777) or making the United States the "healthiest that we can be,"2(pS219) or stating that "the United States has the potential to become the healthiest nation in a healthier world."3(p1) Healthiest nation was also introduced as "an aspirational goal... that requires a culture change engaging all aspects of oursociety."1(p777) Therefore, variation in how healthiest nation is interpreted and understood is not trivial, because, to a large extent, the definitions set the goals, which, in turn, set the attitudes, strategies, and action steps toward achieving the goals. Moreover, the definition of healthiest nation also defines whether the goal is attainable, on the one hand, and desirable, on the other. In broad terms, healthiest nation can be defined in three ways, each of which should be examined in terms of its attainability and desirability.

FULL TEXT

For several years, the American Public Health Association (APHA) has had its sights set on the laudable and lofty goal of creating the healthiest nation in one generation. Since the announcement of the theme "Healthiest Nation 2030" for the 2015 National Public Health Week, this theme has been echoed in various forms and has served as a "clarion call to action" by APHA.1 This focused attention to the nation's health has rightly generated many activities in several sectors in the nation and has identified and directed actions toward many important factors affecting health and health equity, such as racism, equal access to health care, and social determinants of health, among others.

At face value, the term "healthiest nation" may seem self-defining, but, in various publications, different definitions have been indirectly alluded to, such as making "the next United States generation the world's healthiest,"1(p777) or making the United States the "healthiest that we can be,"2(pS219) or stating that "the United States has the potential to become the healthiest nation in a healthier world."3(p1) Healthiest nation was also introduced as "an aspirational goal... that requires a culture change engaging all aspects of oursociety."1(p777) Therefore, variation in how healthiest nation is interpreted and understood is not trivial, because, to a large extent, the definitions set the goals, which, in turn, set the attitudes, strategies, and action steps toward achieving the goals. Moreover, the definition of healthiest nation also defines whether the goal is attainable, on the one hand, and desirable, on the other. In broad terms, healthiest nation can be defined in three ways, each of which should be examined in terms of its attainability and desirability.

THE HEALTHIEST IN THE WORLD

One definition for healthiest nation alluded to in various fora is "healthiest in the world."1,3 Much has been written and said about the poor health ranking of the United States compared with other developed nations.4-6 Given the many social, economic, and political factors that have contributed to this ranking for many decades, many of which

continue to operate unabated, one can argue that this goal is unlikely to be attainable-that the United States can become the healthiest nation in the world by 2030, or even in one generation from now, as the goal has been variously promoted. However, regardless of whether this goal is attainable or not, we must also consider the implication and, thus, the desirability of such a goal. By definition, striving to become the healthiest nation in the world can indirectly promote the concepts of otherness and inequity. To strive to be the best in the world means striving to be better than others and leaving others behind-a goal that is not morally desirable or defensible. In any such race, there will only be one "winner" and many "losers," no matter how well everyone does.

Furthermore, striving to be the healthiest nation in the world is in many ways self-defeating. We have learned many lessons from the pandemic, but, if nothing else, we have learned that, especially when it comes to health in all its dimensions, no nation is an island. The pandemic has made it clear that nations and populations are more interdependent than ever for their health. Even before the pandemic, economic factors, trade, international travel, and migration made any nation's health dependent on health across the globe. The pandemic made that even clearer-as long as there are countries with substantial portions of their populations unvaccinated, there is fertile ground for new variants, or other infections, to emerge, putting all nations in peril. Therefore, no nation is safe or capable of winningthe health race without all other nations having adequate levels of health-a goal that requires not a race as its core concept, but mutual international and intranational cooperation and collaboration.

Similarly, this definition can be selfdefeating in another way-by creating a false sense of achievement and complacency. Being the healthiest among a group does not necessarily mean being healthy. An example from County Health Rankings may help illustrate this. An examination of states shows that in the state of Arkansas, for example, among its 75 counties, Benton County has consistently ranked at the top since 2010, scoring as the "healthiest" in the aggregate measures for both health outcomes and health factors, and as number 1 for both length and quality of life.7 However, among 34 "peer" counties across the United States (as designated by County Health Rankings based on key demographic, social, and economic indicators), Benton County scores worse than 11 counties for premature deaths, 27 for poor or fair health, 26 for poor physical health, 22 for poor mental health, 6 for low birth weight, 22 for food environment, 20 for uninsured rate, 21 for children in poverty, 19 for reported violent crime rates, and 27 for air pollution, to name a few.7 Being the healthiest among a group does not necessarily mean being healthy.

THE HEALTHIEST IT CAN BE

A second way in which heathiest nation can be interpreted is the "healthiest it can be."2 This definition as a goal is desirable but arguably unattainable. Health is a continuum, with no currently definable or measurable endpoint, based on our current understanding. Becoming the healthiest nation we can be implies knowing the limits of health and, more importantly, how to get there. There are many dimensions to health, some of which are poorly studied or understood. We do not yet know or understand all the threats to health-natural or manmade. If we define health not only in physical terms but also in terms of mental, psychological, emotional, and spiritual factors, not only do we not know the limits of health, but we also certainly do not know how all these factors interact to produce ultimate health. Our understanding of such a state of health is changing continuously with new scientific developments. It is, therefore, not possible to be the healthiest we can be, because it is a currently undefinable ideal.

An alternative interpretation ofthis second definition might be the healthiest we can be "under the current circumstances." But that is a moving target, because that is, in fact, where we are at any given time-our current health status is the product of our current circumstances. These circumstances encompass our scientific knowledge, our social institutions and infrastructures, and our political will- that is, our current health status is the result of a combination of not only what we know but also how we have chosen, or been forced, to apply that knowledge to the operation of our overall health care and public health systems in all their facets. And the result of all that is the level of health we currently have. It is only by changing these current, mostly social and political, circumstances that we can become healthier than we are now.

THE HEALTHIEST IT HAS EVER BEEN

The term healthiest nation can be defined in yet a third way that is both attainable and desirable: the "healthiest it

has ever been." This definition recognizes the fact that, no matter how healthy we have ever been as a nation, we can always be healthier. There is no limit to that. We can always go a step further, little by little, day by day. And that is potentially attainable.

This definition is also desirable. With this definition, our only "competition" is ourselves, and that means that every nation can be the healthiest nation and continue to strive for better. It puts every nation on its own desirable trajectory of continuous health improvement without having to leave other nations behind to achieve it. It also embodies the concept of continuous health maintenance and guarding against losing ground. Another benefit ofthis definition as a goal is that aid, assistance, and collaborations with other nations need not be at the expense of jeopardizing our own standing. We can all help each other on the path to health improvement and still maintain our own healthiest status, no matter how healthy other nations become as a result.

However, the desirability ofthis definition comes with a caveat. Even under this definition, the title of healthiest nation can hide significant levels of disparity within a nation. It is not enough for any nation to be able to say it is the healthiest it has ever been if all segments of the population within the nation cannot say the same thing. That is, it is not enough for average national health indicators to improve if that improvement is not experienced by all segments of society. This conceptualization requires us to think and plan differently about becoming the healthiest nation. Instead of trying to raise the national average-which statistically can be achieved by raising even higher the health of only those already doing the best, or raising their levels more than those at the lower end of the scale-it asks us to pay particular and focused attention to those at the bottom, and to raise their health levels at an even higher rate to close any gaps. In fact, it is likely that in many cases the national average can be raised even faster and more significantly by bringing up the lowest levels first and faster. This approach to the definition, then, requires us to not leave anyone behind, or increase the gap, in the quest to be the healthiest nation we have ever been.

CONCLUSIONS

Even with the attainable and desirable definition of the "healthiest we have ever been," we have, unfortunately, failed over the past few years. From 2019 to 2021, life expectancy at birth in the United States had its biggest twoyear decline since 1921 -1923, bringing us to 76.1 years, the lowest level since 1996.8 The largest contributors to this decline were COVID-19; increases in deaths from accidents, suicides, and unintentional injuries, including drug overdose deaths; and chronic diseases, all of which have shown disparities along gender, racial, and ethnic lines. This does not bode well for attaining our healthiest nation goal, regardless of what definition we choose to use.

This setback notwithstanding, as a nation, we have made great strides. The public health community can be proud of important campaigns and programs that have led to major gains in health and life expectancy in the United States since the latter part of the 19th century. These campaigns have spanned several decades in the areas of infectious diseases, sanitation, water quality, vaccines and immunizations, tobacco prevention and cessation, trauma systems, and maternal and child health, among others. Initiatives like the decades-long Department of Health and Human Services' Healthy People campaign, and the more recent APHA's Healthiest Nation 2030-the focus ofthis editorial-have impelled us to go further as a nation. These campaigns, and many others, are now calling on us to pay more attention to health equity, and that requires usto think more deliberately and inclusively about how we conceptualize being healthy and how we strive to become the healthiest nation in a way that is both attainable and desirable. ÂfPU

CORRESPONDENCE

Correspondence should be sent to Namvar Zohoori, MD, PhD, MPH, Arkansas Department of Health, 4815 W Markham St, Slot 60, Little Rock, AR 72207 (e-mail: namvar.zohoori@arkansas.gov). Reprints can be ordered at https://ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Zohoori N. Is the goal of "the healthiest nation" attainable or desirable? Am J Public Health. 2023;113(3):259-261.

Acceptance Date: December 10, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307204

ACKNOWLEDGMENTS

The author would like to thankJoseph Bates, MD, and Austin Porter III, DrPH, for their comments on an earlier draft.

CONFLICTS OF INTEREST

The author has no conflicts of interest to declare.

Sidebar

Note. The views expressed are solely those of the author and do not necessarily reflect those of the Arkansas Department of Health.

References

REFERENCES

1. Benjamin GC. Building a movement to be the healthiest nation. Am J Public Health. 2016; 106(5):777. https://doi.org/10.2105/AJPH.2016. 303196

2. Benjamin GC. Becoming the healthiest nation: the role of Healthy People 2030. J Public Health Manag Pract. 2021;27(suppl 6):S218-S219. https://doi. org/10.1097/PHH.0000000000001417

3. Association of State and Territorial Health Officials. A transformed health system in the 21st century white paper. Available at: https://www.astho.org/ globalassets/pdf/transformed-health-systemwhite-paper.pdf. Accessed September 20, 2022.

4. Tikkanen R, Abrams MK. US health care from a global perspective, 2019: higher spending, worse outcomes? Commonwealth Fund. January 30, 2020. Available at: https://www.commonwealthfund.org/ publications/issue-briefs/2020/jan/us-health-careglobal-perspective-2019. Accessed September 20, 2022.

5. Schneider EC, Shah A, Doty MM, et al. Mirror, mirror 2021: reflecting poorly. Health care in the US compared to other high-income countries. Commonwealth Fund. August 4, 2021. Available at: https://www.commonwealthfund.org/publications/ fund-reports/2021/aug/mirror-mirror-2021reflecting-poorly. Accessed September 20, 2022.

6. Kaiser Family Foundation. How does health spending in the US compare to other countries? January 21,2022. Available at: https://www.kff.org/ slideshow/health-spending-in-the-u-s-as-comparedto-other-countries-slideshow. Accessed September 20, 2022.

7. Muganda C, Hoffelder J, Olson-Williams H, et al. County Health Rankings state report 2022. University of Wisconsin. 2022. Available at: https://www. countyhealthrankings.org. Accessed September 20, 2022.

8. Centers for Disease Control and Prevention, National Center for Health Statistics. Life expectancy in the U.S. dropped for the second year in a row in 2021. August 31, 2022. Available at: https:// www.cdc.gov/nchs/pressroom/nchs_press_ releases/2022/20220831.htm. Accessed November 29, 2022.

DETAILS

Subject:	Health care; Public health; Outdoor air quality; Pandemics; Health disparities; Strategies; Objectives; Health services; Health care access; Racism; Discrimination; Action; Cultural change
Location:	United States--US
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	259-261

Publication year:	2023
Publication date:	Mar 2023
Section:	OPINIONS, IDEAS, &PRACTICE
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
DOI:	https://doi.org/10.2105/AJPH.2022.307204
ProQuest document ID:	2781297833
Document URL:	https://www.proquest.com/scholarly-journals/is-goal-healthiest-nation-attainable-desirable/docview/2781297833/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Mar 2023
Last updated:	2023-07-18
Database:	Public Health Database

Erratum In: "The Cruel Public Health Consequences of Anti-Immigrant Rhetoric"

Anonymous

FULL TEXT

In: Allen CD. The cruel public health consequences of anti-immigrant rhetoric. Am J Public Health. 2022;112(12): 1726-1728. https://doi.org/10.2105/AJPH.2022.307132

When originally published, an online reference was inadvertently omitted. On p. 1726, column 2, paragraph 2, the last sentence should read: "Use of benefits by US citizen children or other household members does not count against a green card applicant in public charge determinations (http://bitly.ws/y35D)."

On p. 1726, columns 2-3, paragraph 3, the first sentence should read: "Although very few immigrants are subject to the intended effects of this rule, there are widespread unintended effects (http://bitly.ws/y35D)."

This change does not affect the paper's conclusions. >4JPI-I

https://doi.org/10.2105/AJPH.2022.307132e

DETAILS

Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	E4
Publication year:	2023
Publication date:	Mar 2023
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Corrections/Retraction
DOI:	https://doi.org/10.2105/AJPH.2022.307132e
ProQuest document ID:	2781297809
Document URL:	https://www.proquest.com/scholarly-journals/erratum-cruel-public-health-consequences-anti/docview/2781297809/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Mar 2023

Last updated:	2023-03-06
Database:	Public Health Database

Table of Contents

Anonymous

FULL TEXT

TVM:UNDEFINED

DETAILS

Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	243
Publication year:	2023
Publication date:	Mar 2023
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Table Of Contents

Screening for and Experiences of Intimate Partner Violence in the United States Before, During, and After Pregnancy, 2016–2019

Kozhimannil, Katy B, PhD, MPA; Lewis, Valerie A, PhD; Interrante, Julia D, PhD, MPH; Chastain, Phoebe L, BA; Admon, Lindsay, MD, MSc

ABSTRACT (ENGLISH)

Objectives. To measure rates of intimate partner violence (IPV) screening during the perinatal period among people experiencing physical violence in the United States. Methods. We used 2016-2019 Pregnancy Risk Assessment Monitoring System data (n = 158 338) to describe the incidence of physical IPV before or during pregnancy. We then assessed the prevalence of IPV screening before, during, or after pregnancy and predictors of receiving screening among those reporting violence. Results. Among the 3.5% (n = 6259) of respondents experiencing violence, 58.7%, 26.9%, and 48.3% were not screened before, during, or after pregnancy, respectively. Those reporting Medicaid or no insurance at birth, American Indian/Alaska Native people, and Spanish-speaking Hispanic people faced increased risk of not having a health care visit during which screening might occur. Among those attending a health care visit, privately insured people, rural residents, and non-Hispanic White respondents faced increased risk of not being screened. Conclusions. Among birthing people reporting physical IPV, nearly half were not screened for IPV before or after pregnancy. Public health efforts to improve maternal health must address both access to care and universal screening for IPV. (Am J Public Health. 2023;113(3):297-305. https://doi.org/10.2105/AJPH.2022.307195)

FULL TEXT

Headnote

Objectives. To measure rates of intimate partner violence (IPV) screening during the perinatal period among people experiencing physical violence in the United States.

Methods. We used 2016-2019 Pregnancy Risk Assessment Monitoring System data (n = 158 338) to describe the incidence of physical IPV before or during pregnancy. We then assessed the prevalence of IPV screening before, during, or after pregnancy and predictors of receiving screening among those reporting violence.

Results. Among the 3.5% (n = 6259) of respondents experiencing violence, 58.7%, 26.9%, and 48.3% were not

screened before, during, or after pregnancy, respectively. Those reporting Medicaid or no insurance at birth, American Indian/Alaska Native people, and Spanish-speaking Hispanic people faced increased risk of not having a health care visit during which screening might occur. Among those attending a health care visit, privately insured people, rural residents, and non-Hispanic White respondents faced increased risk of not being screened. Conclusions. Among birthing people reporting physical IPV, nearly half were not screened for IPV before or after pregnancy. Public health efforts to improve maternal health must address both access to care and universal screening for IPV. (Am J Public Health. 2023;113(3):297-305. https://doi.org/ 10.2105/AJPH.2022.307195)

Maternal morbidity and mortality are increasing in the United States, with some individuals and communities experiencing disproportionate risk, including Black or American Indian/ Alaska Native people, low-income individuals, and rural residents.1-4 Many recent public health efforts addressing maternal mortality have focused on clinical risk factors and the quality of hospital-based care, but maternal safety outside the clinical setting, including in homes and communities, is equally important.5,6

Intimate partner violence (IPV) is a leading nonobstetric cause of maternal morbidity and mortality.7-11 IPV includes physical, emotional, and sexual violence and comprises patterns of behavior to gain or maintain power and control.12 Although physical violence is a commonly recognized form of IPV, emotional and sexual violence are also harmful and prevalent. Examples of emotional violence are verbal insults, humiliation, isolation from friends and family, threats of harm, controlling finances, and monitoring communication or location. Examples of sexual violence are forcing or attempting to force a partner to take part in a sex act, sexual touching, and nonphysical sexual events (e.g., sexting) when the partner does not or cannot consent.13,14 Maternal experiences of IPV are associated with higher rates of preterm birth, lower birth weights, and lower rates of breastfeeding.11,15 Risk of the most severe outcome, homicide perpetrated by an intimate partner, is heightened around the time of pregnancy and childbirth.7,8,16-18 Approximately 60% of homicides that occur around the time of pregnancy are related to IPV.7

People who give birth frequently interact with clinicians before, during, and after pregnancy, making health care a crucial setting for IPV screening and intervention. Since 2012, the American College of Obstetricians and Gynecologists has recommended regular IPV screening during pregnancy and postpartum, and in 2018, the US Preventive Services Task Force upgraded their recommendation for IPV screening for reproductive-aged individuals from I (insufficient evidence) to B (recommended), supporting universal screening nationally.19,20 Screening and referral to treatment may attenuate maternal and infant health inequities that are exacerbated by experiences of violence.21 Still, IPVscreening is not consistently provided for all reproductive age patients in either primary care or maternity services.19,22,23

Understanding the extent to which birthing people experience physical violence and whether they are screened for IPV before, during, and after pregnancy will provide critical insight for public health services and policy. We measured IPV screening during the perinatal period among those experiencing physical violence in a large representative sample of US residents who gave birth, and we discuss strategies to reduce the inequities identified.

METHODS

We used 2016-2019 data from 42 states and 2 jurisdictions (i.e., New York City and Washington, DC) from the Pregnancy Risk Assessment Monitoring System (PRAMS), conducted by the Centers for Disease Control and Prevention (CDC) in collaboration with state and city health departments.24 We used PRAMS data from phase 8 surveys, which survey postpartum individuals between 2 and 6 months after childbirth. For each survey year, the CDC releases data that meet a minimum response rate threshold (55% in 2016-2017; 50% in 2018-2019).24 Inclusion and exclusion criteria are described in Figure A (available as a supplement to the online version of this article at http://www.ajph.org).

Measures

Key outcome variables were (1) experiencing physical violence by a current or former intimate partner, and (2) screening for IPV at health care visits among those reporting physical violence.

The PRAMS survey asked whether a husband or partner or ex-husband or ex-partner pushed, hit, slapped, kicked, choked, or physically hurt the respondent in any other way. This outcome was coded as a dichotomous variable

indicating whether the respondent reported experiencing physical violence, either before or during pregnancy. Respondents were asked whether they had health care visits during the preconception period (12 months before pregnancy), prenatal care visits (during pregnancy), or any health care visits postpartum. If they reported a health care visit, they were asked whether a health care worker asked if someone was hurting them emotionally or physically. Although IPV comprises 3 types of violence (physical, emotional, and sexual), we described this as IPV screening, recognizing that respondents were asked about only 2 of the 3 potential aspects of IPV. Survey questions about screening were asked of individuals only about each respective period (preconception, pregnancy, postpartum) when they reported a health care visit, and we created a dichotomous indicator for screening for each of these periods among those reporting physical violence.

We selected the covariates included in our analyses a priori. Core sociodemographic variables were rural versus urban residency (based on National Center for Health Statistics UrbanRural Classification Scheme for Counties),25 race and ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic [English-speaking and Spanish-speaking], American Indian/Alaska Native, Asian/Pacific Islander, and multiple/other), and health insurance status at childbirth (private insurance, Medicaid, and no insurance). Other sociodemographic variables were age (< 24, 25-34, and >35 years), education (< high school, high school, >high school), marital status (married and not married). We obtained the core and other sociodemographic variables from the linked birth certificate data. Clinical variables included parity, prepregnancy comorbidities (diabetes, high blood pressure/ hypertension, depression, and smoking), and prepregnancy obesity, and we included them to account for the probability of greater health care interaction. We obtained parity from the birth certificate record, and all other clinical variables were reported in the PRAMS questionnaire.

Analysis

To describe characteristics of respondents who reported experiencing physical violence, we present survey-weighted proportions with 95% confidence intervals (CIs) using PRAMS weights, which account for the complex stratified survey design, and tested for distributional differences across characteristics by using the Rao-Scott x2 test.

Among respondents who reported physical violence, we used multivariate logistic regression to calculate adjusted predicted probabilities and percentage point risk differences (RDs). We calculated RDs using postestimation techniques available in Stata's margins command standardized to the distribution of covariates in the data. We calculated predicted probabilities and RDs of not attending a health care visit before, during, or after pregnancy-and thus not having an opportunity to be screened for IPV in the health care setting. Among those attending visits, we also calculated adjusted predicted probabilities and percentage point RDs for the lack of screening in each pregnancy period.

For each pregnancy period and each reason for not being screened, we calculated RDs across the core sociodemographic variables of rural versus urban residence, race and ethnicity, and health insurance status, comparing each to its reference category (i.e., urban, non-Hispanic White, and privately insured, respectively). We conducted several sensitivity analyses examining differences between respondents who did and those who did not report experiencing physical violence, predictors of not being screened among all birthing people, and predictors of not being screened prenatally across Kotelchuck Index levels of prenatal care adequacy to examine whether the number of prenatal visits could be associated with screening probability.26

We used Stata version 17.0 (StataCorp LLC, College Station, TX) and Stata's gins in conducting analyses.

RESULTS

Physical violence before or during pregnancy was reported by 3.5% of this sample of US residents who gave birth between 2016 and 2019 (unweighted n 5 6259/158 338; Table A, available as a supplement to the online version of this article at http://www.ajph.org). Compared with respondents who did not report physical violence, higher proportions of those who experienced physical violence were rural residents, identified as non-Hispanic Black or American Indian/Alaska Native, were younger, were less educated, were unmarried, were insured by Medicaid at childbirth, had a pregnancy that was unintended, and had higher proportions of clinical comorbidities (P <.05 for all

comparisons described; Table A).

Table 1 shows the proportion of respondents with health care visits and IPV screening at visits for each pregnancy period among those who reported physical violence. During the 12 months before pregnancy, more than half of individuals who reported violence were not screened for IPV (58.7%; n = 3555/ 6259), either because they did not have a health care visit (32.9%; n = 2103/ 6259) or because they attended a visit but were not asked about abuse (38.4% of those experiencing physical violence who attended any visit; n = 1452/4156).

During pregnancy, almost all (98.2%; n 5 6124) respondents who experienced physical violence reported having a prenatal care visit, so very few were not screened because of no prenatal care. However, 25.5% (n 5 1326/ 6124) of those reporting prenatal care visits were not screened for IPV during any prenatal visit. As a result, 26.9% (n 5 1461/6259) of those who experienced violence did not get screened at all during pregnancy.

Of respondents who experienced physical violence, 17% (n 5 1196/6259) did not attend a postpartum health care visit. Of those who did, 62.4% (n 5 3349/5063) were screened for IPV. As a result, 48.3% (n 5 2910/6259) of postpartum people with a history of experiencing physical violence had no IPV screening after childbirth.

Among all birthing people, 65.7% were not screened for IPV before pregnancy, 29.7% were not screened during pregnancy, and 48.0% did not get screened during the postpartum period (Table B, available as a supplement to the online version of this article at http://www.ajph.org).

We examined associations between sociodemographic characteristics and IPV screening among respondents who reported physical violence, distinguishing between those who were not screened because they did not have a health care visit and those who were not screened at the visits they attended. Adjusted RDs for core characteristics (rural vs urban residency, race and ethnicity, and health insurance coverage at childbirth) are shown in Figures 1,2, and 3, with specific percentage point differences reported in Table C (available as a supplement to the online version of this article at http://www.ajph.org). Table D (available as a supplement to the online version of this article at http://www.ajph.org) shows adjusted predicted probabilities of not receiving IPV screening by reason (i.e., no visit or not screened) overall and for each period (i.e., preconception, prenatal, and postpartum) among individuals who experienced physical violence with different sociodemographic characteristics.

Figure 1 shows adjusted differences in characteristics of those not screened for IPV in the preconception period by reason (i.e., no visit or not screened) among respondents who experienced physical violence. There were statistically significant differences by race and ethnicity, with a greater predicted proportion of Spanish-speaking Hispanic people who experienced physical violence (56.5%; Table D) not being screened because they lacked a health care visit in the 12 months before pregnancy compared with non-Hispanic White people (30.8%; Table D), with an adjusted difference of 25.7 percentage points (95% CI 5 16.0, 35.3; Table C). By contrast, non-Hispanic White people reporting physical violence who were not screened at the preconception visits they attended (40.9%; Table D) constituted a higher predicted proportion compared with English-speaking Hispanic people (32.3%; an 8.5 percentage point difference; 95% CI 5 0.8,16.3; Tables C and D). People insured by Medicaid at childbirth and those without health insurance at childbirth, respectively, had a 9.6 (95% CI 5 5.1,14.2) and 22.6 (95% CI 5 9.3,35.9; Table C) percentage point higher probability of not having a health visit in the year before pregnancy compared with privately insured people (predicted proportions 5 34.7%, 47.7%, and 25.1%, respectively; Table D). However, people with private insurance at childbirth had a 6.9 percentage point (95% CI 5 0.7,13.1; Table C) higher probability of not being screened for IPV at the visits they attended compared with those with Medicaid coverage (43.0% and 36.1 %, respectively; Table D).

Figure 2 focuses on pregnancy and shows adjusted differences in characteristics of those who experienced physical violence and did not receive IPV screening, either because they did not have a prenatal care visit or because they were not screened at the visits they attended. More than 90% of respondents reporting physical violence attended at least 1 prenatal visit, so differences were concentrated among those who attended a visit but were not screened for abuse.

Groups at increased risk for not being screened included rural residents and privately insured people, with adjusted differences of 7.2 percentage points (rural vs urban; 95% CI 5 2.1, 12.4) and 7.8 percentage points (private

insurance vs Medicaid; 95% CI 5 3.1,12.6; Table C). Additionally, adjusted RDs for screening among non-Hispanic Black and American Indian/Alaska Native survivors were 6.1 percentage points (95% CI 5 1.0,11.3) and 10.0 percentage points (95% CI 5 2.0,18.0) higher, respectively, than rates for non-Hispanic White people who experienced physical violence (Table C). Among people experiencing physical violence who were rural residents, non-Hispanic White, or privately insured, the predicted proportions not screened during prenatal care were 31.0%, 27.4%, and 31.0%, respectively (Table D). Differences in screening by the adequacy of prenatal care were inconsistent across sociodemographic characteristics examined, as shown in Table E (available as a supplement to the online version of this article at http://www.ajph.org).

IPV screening in the postpartum period is the focus in Figure 3. Among those who experienced physical violence, there were large differences by race and ethnicity and by insurance status in lacking postpartum visits, with American Indian/Alaska Native people 14.2 percentage points (95% CI = 6.1, 22.3; Table C) more likely than nonHispanic White people to not have a postpartum visit where screening could occur (30.1% and 15.9%, respectively; Table D). Additionally, people with Medicaid coverage at childbirth (17.5%) and those without insurance at childbirth (28.1%) experiencing physical violence were at elevated risk for not having postpartum care compared with those with private insurance (12.3%; percentage point differences = 5.1; 95% CI 5 1.5, 8.8 and 15.8; 95% CI = 5.0, 26.6; Table C).

Among those reporting physical violence who did have a visit postpartum, non-Hispanic White people and privately insured people had elevated predicted proportions not screened for IPV at postpartum visits (41.5% and 42.4%, respectively; Table D). Although a higher proportion of American Indian/Alaska Native (vs non-Hispanic White) people did not have a postpartum visit, those that did receive care after childbirth had a 17.0 percentage point (95% CI 5 25.4, 8.5; Table C) higher probability than did nonHispanic White people of being screened for abuse at the visit they attended.

DISCUSSION

IPV is a risk factor for maternal morbidity and mortality, and homicide is a leading cause of death during pregnancy and postpartum.10 Our analysis indicated that 3.5% of birthing people in this study reported physical violence in the context of IPV. This equates to approximately 280 000 people who gave birth between 2016 and 2019 in 42 states and 2 US jurisdictions who reported being pushed, hit, slapped, kicked, choked, or otherwise physically hurt by current or former intimate partners. Of these, we found that more than half (58.7%) were not screened for IPV before pregnancy, more than a quarter (26.9%) lacked screening during pregnancy, and nearly half (48.3%) were not screened postpartum, either because they did not have a health care visit during these periods or because they attended a visit but were not asked whether someone had hurt them physically or emotionally. These individuals are a critically at-risk population for whom targeted clinical and policy interventions may be important and impactful.

Our analysis revealed 2 distinct reasons that people experiencing IPV around the time of pregnancy were not screened. The first reason is lack of perinatal health care visits. Spanishspeaking Hispanic people, American Indian/Alaska Native people, those with Medicaid at childbirth, and people without insurance at childbirth were less likely than were non-Hispanic White and privately insured people to attend preconception and postpartum visits at which IPV screening could occur. Focusing on access to care in these populations may increase opportunities for IPV screening.

The second reason is lack of screening at health care visits attended by respondents. Among those experiencing physical violence and attending health care visits, rural (vs urban) residents, non-Hispanic White (vs racialized) people, and those with private insurance (vs Medicaid or no insurance) were less likely to be screened during their encounters with the health care system. Those overlooked for screening may reflect clinicians' perceptions about who is at risk for physical, emotional, or sexual violence. Additionally, health care systems and practices caring for more advantaged individuals (e.g., non-Hispanic White, privately insured) are less likely to include IPV screening in routinized care.27

Non-Hispanic Black and American Indian/Alaska Native individuals experience the highest rates of IPV-associated homicide compared with other racial groups,4 and pregnancy exacerbates this racialized pattern of harm.28 Our

analysis indicated risks of potential underdetection among Spanish-speaking Hispanic people (before pregnancy) and American Indian/Alaska Native people (during the postpartum period) who reported physical violence by a current or former intimate partner.

Clinical and Policy implications

Clinical and policy organizations recommend universal IPVscreening and referral to support services to increase the safety of survivors and their families and to address health risks.29 These findings indicate that the US health care system falls short on universal IPV screening during a critical period in the life course. Efforts to improve screening rates could include changes to reimbursement or financing for IPV screening, such as requiring managed care organizations or hospitals that contract with state Medicaid programs or that receive matching federal funds to implement routine screening as a condition of payment. Similar financial policy interventions have been successful in reducing rates of early elective delivery at the time of childbirth and improving maternity care quality generally.30,31 Improving access to perinatal health care visits, including assessing how visit attendance may be affected by IPV, is an important area for research and policy intervention. We found that people experiencing physical abuse who had Medicaid coverage at childbirth as well as those who were uninsured when they gave birth had higher risks than did privately insured people of not receiving a health care visit in the year before pregnancy or having a postpartum follow-up visit. Access to care influences service use and screening in the perinatal period, and efforts to improve access to care through Medicaid expansion and postpartum insurance eligibility extensions could improve IPV screening in the perinatal period.32,33

Improving the frequency and efficacy of screening may require investment in trauma-informed, evidence-based training for clinicians who interact with patients around the time of pregnancy. These include a variety of health professions-obstetricians, family physicians, midwives, psychologists, psychiatrists, licensed family and marriage therapists, social workers, substance abuse and addiction specialists, nurses, nurse practitioners, physician assistants, pediatricians, maternal-fetal medicine specialists, neonatologists, and emergency physicians-as well as nonclinical staff. IPV takes many forms and is not limited to physical violence, yet clinician training and understanding of the multiple complex facets of IPV are often limited.34 Our findings highlight the importance of ensuring universal screening among those attending health care visits and addressing potential clinician bias about who is at risk for experiencing IPV.

Additionally, efforts to ensure the availability of referral and treatment of patients who screen positive for IPV, as well as providing support to both clinicians and patients who interact with systems outside health care in the context of IPV, are essential to promote patient safety and well-being.

Limitations

This study has several important limitations. Respondents were not asked about experiences of emotional or sexual violence, likely resulting in an underestimate of the true prevalence of IPV, as study respondents were asked only about experiences of physical violence. Similarly, the question about screening for IPV did not encompass sexual violence. Survey questions in the PRAMS data and other surveillance efforts could be improved to better measure IPV. Self-reported physical violence and IPV screening are both subject to potential biases. Physical violence is underdetected and underreported, generally because of social desirability bias, and may be differentially underreported by characteristics of interest, including race and ethnicity, rural versus urban residency, and health insurance status.21 Additionally, in the PRAMS data, experiences ofviolence are not asked about during the postpartum period. Self-reports of screening may be affected by recall bias (i.e., whether a respondent remembers being screened), which could be related to the results of the screening.15

The generalizability of this study is limited, as results do not represent the experiences of people who gave birth in 7 US states (i.e., Arizona, California, Idaho, Nevada, Ohio, South Carolina, and Texas). The postpartum visit rate of PRAMS respondents is higher than the national average, and response rates are higher among non-Hispanic White and socioeconomically advantaged groups, so estimates of physical violence and IPVscreening may be differentially conservative based on patient characteristics.24,35

Conclusions

As rates of US maternal morbidity and mortality increase, the role of IPV has become increasingly clear. Approximately half of birthing people who reported physical violence before or during pregnancy were not screened because they did not have a health care visit in the year before pregnancy or postpartum or because they were not screened for IPV at the visits they attended. Among those who experienced IPV, we found that Spanishspeaking Hispanic and American Indian/Alaska Native people and those with Medicaid coverage or no health insurance at childbirth were at greater risk for being unscreened than were non-Hispanic White and privately insured people because of lack of visits.

Additionally, some birthing people experiencing physical violence-including those who were non-Hispanic White rural residents and those who were privately insured at childbirth-were at higher risk for not being screened at the visits they attended than were racialized, urban, or uninsured people or those with Medicaid who experienced violence and attended visits. These findings imply a critical need for increased health care access and better screening to identify and support people experiencing violence by an intimate partner. More broadly, clinical and policy efforts to improve maternal health in the United States should address IPV as a public health policy issue. ÂfPH

ABOUT THE AUTHORS

Katy B. Kozhimannil, Julia D. Interrante, and Phoebe L. Chastain are with the University of Minnesota Schoolof Public Health, Minneapolis. Valerie A. Lewis is with the University of North Carolina at Chapel Hill. Lindsay Admon is with the University of Michigan Institute for Healthcare Policy and Innovation, Ann Arbor.

CORRESPONDENCE

Correspondence should be sent to Katy Backes Kozhimannil, PhD, MPA, University of Minnesota Schoolof Public Health, Division of Health Policy and Management, 420 Delaware St SE, MMC 729, Minneapolis, MN 55455 (e-mail: kbk@umn.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

FullCitation: KozhimannilKB, Lewis VA, Interrante JD, Chastain PL, Admon L. Screening for and experiences of intimate partner violence in the United States before, during, and after pregnancy, 2016-2019. Am J Public Health. 2023;113(3): 297-305.

Acceptance Date: December 5, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307195

CONTRIBUTORS

K.B. Kozhimannilled data interpretation and oversaw the study. K. B. Kozhimanniland V. A. Lewis conceptualized and designed the study. K. B. Kozhimannil, V.A. Lewis, and J. D. Interrante drafted portions of the article. J.D. Interrante led the statisticalanalysis. V.A. Lewis,J. D. Interrante, P.L. Chastain, and L. Admon contributed to study design and data interpretation and revised the article. L. Admon acquired the study data.

ACKNOWLEDGMENTS

This research was supported in part by the NationalInstitutes of Health (NIH), NationalCenter for Advancing Translational Sciences (grant UL1TR002494). L. Admon is supported by the Agency for Healthcare Research and Quality (grant K08HS027640) and the NIH (grants R01MH120124 and R01MD014958).

The authors gratefully acknowledge allPregnancy Risk Surveillance and Monitoring System (PRAMS) study participants and members of the PRAMS Working Group at the Centers for Disease Control and Prevention. The authors also thank Alyssa H. Fritz, MPH, RD, for helpful input on the article.

Note. The content is solely the responsibility of the authors and does not necessarily represent the officialviews of the Agency for Healthcare Research and Quality or the NIH.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to disclose.

HUMAN PARTICIPANT PROTECTION

Data were de-identified, and this study was designated exempt from review by the University of Michigan's and the University of Minnesota's institutional review boards.

References

REFERENCES

1. Joseph KS, Boutin A, Lisonkova S, et al. Maternal mortality in the United States: recent trends, current status, and future considerations. Obstet Gynecol. 2021;137(5):763-771. https://doi.org/10. 1097/AOG.0000000000004361
2. Hoyert DL. Maternal mortality rates in the United States, 2020. February 2022. Available at: https:// www.cdc.gov/nchs/data/hestat/maternal-mortality/ 2020/E-stat-Maternal-Mortality-Rates-2022.pdf. Accessed October 7, 2022.
3. Taylor J, Novoa C, Hamm K, Phadke S. Eliminating racial disparities in maternal and infant mortality. May 2, 2019. Available at: https://www.american progress.org/article/eliminating-racial-disparitiesmaternal-infant-mortallty. Accessed October 7, 2022.
4. Centers for Disease Control and Prevention. Racial and ethnic differences in homicides of adult women and the role of intimate partner violence-United States, 2003-2014. MMWR Morb Mortal Wkly Rep. 2017;66(28):741 -746. https://doi.org/10.15585/mmwr.mm6628a1
5. Wang E, Glazer KB, Howell EA, JanevicTM. Social determinants of pregnancy-related mortality and morbidity in the United States: a systematic review. Obstet Gynecol. 2020;135(4):896-915. https://doi. org/1 0.1097/AOG.0000000000003762
6. Crear-PerryJ, Correa-de-Araujo R, Lewis Johnson T, McLemore MR, Neilson E, Wallace M. Social and structural determinants of health inequities in maternal health. J Womens Health (Larchmt). 2021;30(2):230-235. https://doi.org/10.1089/jwh. 2020.8882
7. Wallace ME, Friar N, Herwehe J, Theall KP. Violence as a direct cause of and indirect contributor to maternal death. J Womens Health (Larchmt). 2020;29(8):ЮЗ2-ЮЗ8. https://doi.org/10.1089/ jwh.2019.8072
8. Campbell J, Matoff-Stepp S, Velez ML, Cox HH, Laughon K. Pregnancy-associated deaths from homicide, suicide, and drug overdose: review of research and the intersection with intimate partner violence. J Womens Health (Larchmt). 2021; 30(2):236-244. https://doi.org/10.1089/jwh.2020. 8875
9. Alhusen JL, Ray E, Sharps P, Bullock L. Intimate partner violence during pregnancy: maternal and neonatal outcomes. J Womens Health (Larchmt). 2015;24(1):100-106. https://doi.org/10.1089/jwh. 2014.4872
10. Wallace M, Gillispie-Bell V, Cruz K, Davis K, Vilda D. Homicide during pregnancy and the postpartum period in the United States, 2018-2019. Obstet Gynecol. 2021;138(5):762-769. [Erratum in: Obstet Gynecol. 2022;139(2):347]. https://doi. org/10.1097/AOG.0000000000004567
11. Gartland D, Hemphill SA, Hegarty K, Brown SJ. Intimate partner violence during pregnancy and the first year postpartum in an Australian pregnancy cohort study. Matern Child Health J. 2011; 15(5):570-578. https://doi.org/10.1007/s10995010-0638-z
12. United Nations. Domestic abuse: how to respond? Available at: https://www.un.org/en/ coronavirus/domestic-abuse. Accessed October 7, 2022.
13. Pence E, Paymar M. Education Groups for Men Who Batter: The Duluth Model. New York, NY: Springer; 1993.
14. Havard TE, Lefevre M. Beyond the power and control wheel: how abusive men manipulate mobile phone technologies to facilitate coercive control. J Gend Based Violence. 2020;4(2):223-239. https:// doi.org/10.1332/239868020X15850131608789
15. Chaves K, Eastwood J, Ogbo FA, et al. Intimate partner violence identified through routine antenatal screening and maternal and perinatal health outcomes. BMC Pregnancy Childbirth. 2019;19(1): 357. https://doi.org/10.1186/s12884-019-2527-9
16. Wallace ME, Crear-Perry J, Mehta PK, Theall KP. Homicide during pregnancy and the postpartum period in Louisiana, 2016-2017. JAMA Pediatr. 2020;174(4):387-388. [Erratum in: JAMA Pediatr. 2020;174(4):393]. https://doi.org/10.1001/ jamapediatrics.2019.5853.
17. Miller J M, Rensing S. Integrating national violent death reporting system data into maternal mortality review committees. J Womens Health (Larchmt). 2021;30(11):1573-1579. https://doi. org/10.1089/jwh.2021.0058
18. Strand SJM, Storey JE. Intimate partner violence in urban, rural, and remote areas: an investigation of offense severity and risk factors. Violence Against Women. 2019;25(2):188-207. https://doi. org/10.1177/1077801218766611

19. ACOG Committee opinion no. 518: intimate partner violence. Obstet Gynecol. 2012;119(2, pt 1): 412-417. https://doi.org/10.1097/AOG.0b013 e318249ff74
20. US Preventive Services Task Force. Screening for intimate partner violence, elder abuse, and abuse of vulnerable adults: US Preventive Services Task Force final recommendation statement. JAMA. 2018;320(16):1678-1687. https://doi. org/10.1001/jama.2018.14741
21. O'Doherty L, Hegarty K, Ramsay J, Davidson LL, Feder G, Taft A. Screening women for intimate partner violence in healthcare settings. Cochrane Database Syst Rev. 2015;2015(7):CD007007. https://doi.org/10.1002/14651858.CD007007. pub3
22. Kapaya M, Boulet SL, Warner L, Harrison L, Fowler D. Intimate partner violence before and during pregnancy, and prenatal counseling among women with a recent live birth, United States, 2009-2015. J Womens Health (Larchmt). 2019;28(11):1476-1486. https://doi.org/10.1089/ jwh.2018.7545
23. Kalra N, Hooker L, Reisenhofer S, Di Tanna GL, García-Moreno C. Training healthcare providers to respond to intimate partner violence against women. Cochrane Database Syst Rev. 2021;5(5): CD012423. https://doi.org/10.1002/14651858. CD012423.pub2
24. Shulman HB, D'Angelo DV, Harrison L, Smith RA, Warner L. The Pregnancy Risk Assessment Monitoring System (PRAMS): overview of design and methodology. Am J Public Health. 2018;108(10): 1305-1313. https://doi.org/10.2105/AJPH.2018. 304563
25. Centers for Disease Control and Prevention. NCHS urban-rural classification scheme for counties. December 2, 2019. Available at: https:// www.cdc.gov/nchs/data_access/urban_rural.htm. Accessed October 7, 2022.
26. Kotelchuck M. The adequacy of prenatal care utilization index: its US distribution and association with low birthweight. Am J Public Health. 1994; 84(9):1486-1489. https://doi.org/10.2105/ajph. 84.9.1486
27. Fraze TK, Brewster AL, Lewis VA, Beidler LB, Murray GF, Colla CH. Prevalence of screening for food insecurity, housing instability, utility needs, transportation needs, and interpersonal violence by US physician practices and hospitals. JAMA Netw Open. 2019;2(9):e1911514. https://doi.org/ 10.1001/jamanetworkopen.2019.11514
28. Kivisto AJ, Mills S, Elwood LS. Racial disparities in pregnancy-associated intimate partner homicide. J interpers Violence. 2022;37(13-14): NP10938-NP10961. https://doi.org/10.1177/ 0886260521990831
29. Koch AR, Geller SE. Addressing maternal deaths due to violence: the Illinois experience. Am J Obstet Gynecol. 2017;217(5):556.e1-556.e6. https://doi.org/10.1016/j.ajog.2017.08.005
30. Washio Y, Atreyapurapu S, Hayashi Y, et al. Systematic review on use of health incentives in U.S. to change maternal health behavior. Prev Med. 2021;145:106442. https://doi.org/10.1016/j. ypmed.2021.106442
31. Fowler TT, SchiffJ, Applegate MS, Griffith K, Fairbrother GL. Early elective deliveries accounted for nearly 9 percent of births paid for by Medicaid. Health Aff (Millwood). 2014;33(12):2170-2178. https://doi.org/10.1377/hlthaff.2014.0534
32. Bellerose M, Collin L, Daw JR. The ACA Medicaid expansion and perinatal insurance, health care use, and health outcomes: a systematic review. Health Aff (Millwood). 2022;41(1):60-68. https:// doi.org/10.1377/hlthaff.2021.01150
33. Admon LK, DawJR, Winkelman TNA, et al. Insurance coverage and perinatal health care use among low-income women in the US, 2015-2017. JAMA Netw Open. 2021;4(1):e2034549. https://doi. org/10.1001/jamanetworkopen.2020.34549
34. Bonomi AE. Preventing violence-related maternal death: a call to action. J Womens Health (Larchmt). 2020;29(8):1021 -1022. https://doi.org/10.1089/ jwh.2020.8415
35. Hebert LE, Sarche MC. Pre-pregnancy and prenatal alcohol use among American Indian and Alaska Native and Non-Hispanic White women: findings from PRAMS in five states. Matern Child Health J. 2021;25(9):1392-1401. https://doi.org/ 10.1007/s10995-021-03159-7

DETAILS

Subject:	Medicaid; Intimate partner violence; Domestic violence; Mortality; Pregnancy; Health care; Violence; Risk assessment; Birth certificates; Monitoring systems; Rural populations; American Indians; Native North Americans; Tests; Public health; Health insurance; Prenatal care; Health services; Childbirth &labor; Medical diagnosis; Ethnicity; Government programs; Aggression; Medical screening; Residents; Health care access; Indigenous peoples; Sociodemographics; Respondents; Variables; Hispanic people; Secondary schools
Business indexing term:	Subject: Medicaid Risk assessment Health insurance; Industry: 61111 : Elementary and Secondary Schools
Location:	Alaska; United States--US
Classification:	61111: Elementary and Secondary Schools
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	297-305
Publication year:	2023
Publication date:	Mar 2023
Section:	RESEARCH &ANALYSIS
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal
Language of publication:	English
Document type:	Journal Article
DOI:	https://doi.org/10.2105/AJPH.2022.307195
ProQuest document ID:	2781297752
Document URL:	https://www.proquest.com/scholarly-journals/screening-experiences-intimate-partner-violence/docview/2781297752/se-2?accountid=211160

Economic Empowerment, HIV Risk Behavior, and Mental Health Among School-Going Adolescent Girls in Uganda: Longitudinal Cluster- Randomized Controlled Trial, 2017–2022

Ssewamala, Fred M, PhD; Brathwaite, Rachel, PhD; Neilands, Torsten B, PhD

ABSTRACT (ENGLISH)

Objectives. To investigate the long-term (12- and 24-month) impact of an economic empowerment intervention on HIV risk behaviors and mental health among school-going adolescent girls in Uganda. Methods. A total of 1260 girls aged 14 to 17 years were randomized at the school level to (1) standard health and sex education (controls; n = 408 students; n = 16 schools), (2) 1-to-1 matched savings youth development account (YDA; n = 471 students; n = 16 schools), or (3) combination intervention (YDA and multiple family group [YDA+MFG]; n = 15 schools; n = 381 students). Mixed-effects models were fitted. Results. YDA and YDA+MFG girls had significantly lower depressive symptoms and better self-concept than controls at 24 months. Only YDA+MFG girls had significantly lower hopelessness levels than controls. There were no significant study group differences at 12 and 24 months for sexual risk-taking behavior and attitudes. There was no significant difference between YDA and YDA+MFG groups for all outcomes. Conclusions. Providing YDA and MFG can positively improve adolescent girls' mental health, but our analyses showed no significant differences across groups on sexual risk-taking behaviors. Future studies may consider replicating these interventions and analyses in older populations, including those transitioning into young adults.

FULL TEXT

Headnote

Objectives. To investigate the long-term (12- and 24-month) impact of an economic empowerment intervention on HIV risk behaviors and mental health among school-going adolescent girls in Uganda.

Methods. A total of 1260 girls aged 14 to 17 years were randomized at the school level to (1) standard health and sex education (controls; n = 408 students; n = 16 schools), (2) 1-to-1 matched savings youth development account (YDA; n = 471 students; n = 16 schools), or (3) combination intervention (YDA and multiple family group [YDA+MFG]; n = 15 schools; n = 381 students). Mixed-effects models were fitted.

Results. YDA and YDA+MFG girls had significantly lower depressive symptoms and better self-concept than controls at 24 months. Only YDA+MFG girls had significantly lower hopelessness levels than controls. There were no significant study group differences at 12 and 24 months for sexual risk-taking behavior and attitudes. There was no significant difference between YDA and YDA+MFG groups for all outcomes.

Conclusions. Providing YDA and MFG can positively improve adolescent girls' mental health, but our analyses showed no significant differences across groups on sexual risk-taking behaviors. Future studies may consider replicating these interventions and analyses in older populations, including those transitioning into young adults. Trial Registration. ClinicalTrials.gov Identifier: NCT03307226. (AmJ Public Health. 2023;113(3):306-315. https://doi.org/10.2105/AJPH.2022.307169)

Approximately 90% of all adolescents living with HIV worldwide reside in the resource-limited region of sub-Saharan Africa (SSA).1 However, the majority (70%) of new HIV infections among youths aged 15 to 19 years occur among adolescent girls.2 The SSA region also has a substantial burden of mental health problems among adolescents,3 and research shows that girls have a disproportionately higher burden of mental health problems than boys.4,5 Girls often report significantly worse internalizing disorders (reflective ofthe child's psychological and emotional state) than boys, and this gender gap increases with age.6 As a consequence, adolescent girls represent an important vulnerable population at increased risk of HIV infection7 and poor mental health in SSA. Therefore, interventions designed for adolescent girls in SSA should innovatively address both HIV riskk reduction and adolescent mental health because they can contribute to curbingthe spread ofthe HIV epidemic8 and preventing progression of poor health and social problems in adulthood.

In Uganda, a resource-limited SSA country extensively affected by the HIV epidemic, approximately 800 000 girls and women are living with HIV.9 Poverty is a major factor that increases adolescent girls' risk for HIV infection and transmission. More than half (56%) of adolescents in Uganda are exposed to multidimensional poverty and low living standards.10

Sociocultural norms and beliefs present in Ugandan communities often influence decision-making, and in scenarios where there are limited financial resources, female children are often excluded from educational opportunities, favoring male children instead.11 Financial insecurity drastically reduces families' ability to send girls to school where vital education on HIV/AIDS prevention and access to psychosocial support and health and medical services is received.12

Indeed, out-of-school girls have increased vulnerability to HIV infection13 as they are forced to engage in risktaking activities to improve their financial security. In Uganda, out-of-school girls are particularly vulnerable to transactional sex with older men, unprotected sex, early sexual initiation, early marriage, and adolescent pregnancy, which all heighten their risk of infection with HIV and other sexually transmitted infections(STIs).14,15 Forthose reasons, it is important to intervene with adolescent girls while they are still in school, to keep them in school.

Poverty is also a significant risk factor for the development and persistence of poor mental health. In the resourcelimited region of SSA, there are inadequate numbers of qualified mental health professionals to diagnose and treat mental health conditions and disproportionate distribution of human resources between urban and rural areas. For example, for every 100 000 people that may need a mental health professional, there are 0.08 qualified psychiatrists.16 Moreover, only 1% of Uganda's gross domestic product is allocated to mental health care, which is inclusive of services for children, adolescents, and adults.16 Povertyimpacted communities significantly perpetuate poor mental health because there are often high levels of environmental stressors, lack of social support, violence against children, high unemployment, food insecurity, and other social and health problems that are all risk factors for children's and adolescents' poor mental health.17,18

Adolescence is a period marked by increased vulnerability to mental and substance-use disorders,19 and there are concerns that early sexual debut often results in sexual risk-taking (i.e. inconsistent condom use, unsafe sex, multiple sexual partners), making one vulnerable to acquiring HIV.20-22 Furthermore, living with HIV as a chronic, highly stigmatized, and transmittable illness can increase one's risk of poor mental health.23 Hence, extra attention should be placed on adolescent girls in low-resource SSA communities who are already vulnerable given their economic disadvantage.

Research on effective evidencebased interventions to prevent poor mental health and reduce HIV risk among adolescent girls residing in Uganda and other resource-limited SSA countries are lacking.24 The Suubi4Her study was designed to help fill this gap while simultaneously addressingthe main underlying risk factors for HIV risk and

poor mental health among adolescent girls in Uganda.25 Suubi4Her is a 3-arm cluster-randomized controlled trial designed to reduce HIV risk behaviors and improve mental health among adolescent girls across 47 public secondary schools in Uganda.

Given the economic factors driving HIV risk and poor mental health among adolescents in low-resource communities, the interventions implemented in the Suubi4Her study are guided by asset theory.26,27 Asset theory posits that individuals with financial assets have improved economic security and report psychological benefits such as futureoriented thinking, feelings of selfefficacy, and security. Thus, girls in the intervention arms of the Suubi4Her study received youth development accounts (YDAs), 1-to-1 matched savings accounts. The matched funds can be used to pay for girls' education and skills training fees (up to 70%) or familybased income-generating activities (up to 30% of matched savings). All participants received training on principles of financial management, which covered saving, asset-building, using financial institutions, and income generation.

Furthermore, because families residing in deprived communities are likely to experience high stress, lack of social support, and social isolation, which all negatively influence parenting and family relationships,28 the Suubi4Her study also incorporated multiple family groups (MFGs) as an intervention. MFGs aim to strengthen family communication and reduce stigma by providing a safe space for parents and children to communicate with themselves and other families.29 Research showed that good parent-child relationships and frequent and open communication (including about sex) between children and their caregivers (especially mothers) is associated with later sexual debut and less engagement in risk behaviors.30-32 As such, adolescent girls in the second intervention arm received a combination intervention comprising YDAs plus MFGs (YDA1MFG).

In this study, we investigated the long-term impact of the Suubi4Her intervention on HIV risk behaviors (i.e., sexual risk-taking) and mental health (depressive symptoms, hopelessness, self-esteem, and self-concept) among school-going adolescent girls. We hypothesized that (1) girls in the YDA group would have better mental health outcomes and less sexual risktaking behaviors than those in the control condition, (2) girls in the YDA+MFG group will show better mental health and less sexual risk-taking behaviors than counterparts in the control condition, and (3) girls in the YDA+MFG group would have better outcomes than their counterparts in the YDA group alone.

METHODS

The Suubi4her study is a longitudinal 3-arm cluster-randomized controlled trial conducted in 47 public secondary schools in the central region of Uganda (Rakai, Kyotera, Masaka, Lwengo, and Kalungu districts; 201 7-2 0 22).25 This region has a heavy burden of HIV (prevalence of 10.6% vs 7.4% in Uganda).33 This is also a geographically stable region with infrequent migration, enabling easy tracking of participants over the study period.

A total of 1260 adolescent girls aged 14 to 17 years were enrolled and followed up at 12 and 24 months (Appendix, Figure A, available as a supplement to the online version of this article at https://ajph.org). To reduce contamination, randomization was done at the school level to 1 of 3 study conditions. The first condition was a usual care or control arm that received standard health and sex education (n = 16 schools; n = 408 students). All girls in each study group received this standard health and sex education component. In Uganda, this is a mandatory curriculum authorized by the Ministry of Education, which covers adolescent sexual and reproductive health. Topics included delaying sex, using condoms and contraception, preventing forced sex, preventing substance use, gender equality, and importance of delaying marriage.

The second condition was treatment arm 1: YDA. Each participant was enrolled in a 1-to-1 match rate savings program (n = 16 schools; n = 471 students). The third condition was treatment arm 2: participants received a combination intervention composed of YDA and an evidence-based family strengthening intervention designed to enhance youth behavioral health delivered using an MFG format (YDA+MFG; n 5 15 schools; n = 381 students; Appendix, pages 1 -3 and Table A).

Within each school, adolescent girls were included if they were (1) enrolled in first year of secondary school and (2) not living in an institution or orphanage but within a family (as orphanages would have different characteristics than families). Girls were excluded if they (1) showed severe cognitive or psychiatric impairment that prohibited their ability to provide informed consent or comprehension of study requirements, (2) were unable or unwilling to

complete the study, or (3) were not enrolled in school. Written informed consent from caregivers and assent from adolescents were obtained separately to prevent coercion.

Outcome Measures

We examined the impact of the intervention on 2 broad outcomes: (1) sexual risk-taking and (2) mental health among school-going adolescent girls. We evaluated study group differences in biomarker-based measures and selfreported sexual risk-taking behaviors and attitudes toward sexual risk-taking behaviors at postbaseline time points (i.e., 12 and 24 months).

Biomarker-based sexual risk. Adolescent girls who tested positive for HIV, gonorrhea, trichomoniasis, chlamydia, genital warts, or pregnancy were categorized as having a positive biomarker test for sexual risk-taking behavior (binary outcome). Because of the COVID-19 pandemic and the resulting school closures and social distancing requirements, study investigators adjusted the data collection protocol to minimize COVID-19 transmission. Hence, biomarker tests for HIV, STIs, and pregnancy were not conducted at 24 months but only at baseline and 12 months.

Self-reported sexual risk. Adolescent girls were asked the following questions:

1. Have you ever had sexual intercourse? (Yes or no)
2. The last time you had sexual intercourse (willingly or unwillingly), did you or your partner use a condom? (Yes or no)
3. Have you ever been diagnosed with any sexually transmitted disease (STDs)? (Yes or no) If yes, what disease? Chlamydia, herpes, trichomoniasis, syphilis, gonorrhea, genital warts, nonspecific disease, other (check all that apply).

If adolescent girls responded "yes" to "ever had sexual intercourse," indicated a diagnosis of STI, or did not use a condom during last sexual intercourse, they were categorized as engaging in sexual risk-taking based on self-reports (binary outcome).

Intentions and attitudes toward sexual risk-taking behaviors. We utilized 2 measures to assess intentions and attitudes toward sexual risk-taking. The first measure, "sexual risk-taking intentions" was evaluated by a continuous summed score of 5 items (Cronbach a 5 0.72 at 12 and 24 months).34 Participants were asked to rate their agreement with the following 5 statements:

1. I believe it's OK for people my age to have sex with someone they've just met.
2. I believe it's OK for people my age to have sex with someone they love.
3. I believe it's OK for people to have sex before marriage.
4. I agree it's OK to force a girlfriend/boyfriend to have sex even when they don't want to.
5. I believe it's OK to have sex without protection with someone you know.

Response options for each statement were never = 1; sometimes = 2; about half the time = 3; most of the time = 4; or always = 5. These 5 statements were summed and analyzed as a continuous variable, with higher scores indicative of greater agreement with sexual risk-taking.

The second measure assessed "Attitudes toward condom use" and comprised the following 3 items:

1. I think all people my age who have sex should use condoms.
2. Even if you know your partner very well you should use a condom.
3. I think it is very important to use condoms every time one has sex.

Response options were agree a great deal 5 5; agree a lot = 4; moderately agree 5 3; agree a little 5 2; or not at all agree 5 1. The 3 items had Cronbach a 5 0.69 (12 months) and 0.72 (24 months) and were summed and analyzed as a continuous score, with higher scores suggesting favorable attitudes toward condom use.

For mental health, we examined whether there were significant differences between groups only at 24 months after the intervention because findings on group differences at 12 months are reported in other papers published35 and currently in press.36 To get a comprehensive view of adolescents' overall mental well-being, we assessed 4 measures of mental health among adolescent girls: hopelessness, depressive symptoms, self-concept, and self-esteem. The psychological construct of hopelessness (whether girls have negative attitudes about the future) was measured using the 20-item Beck Hopelessness Scale (Cronbach a 5 0.73).37 Girls were required to endorse

pessimistic or deny optimistic statements. Hopelessness is common among depressed individuals and is associated with increased suicide risk.39 Depressive symptoms were assessed using the 21-item Beck Depression Inventory (Cronbach a 5 0.80).39 Depression is associated with sexual risktaking behavior and other negative outcomes including suicidal ideation.40 Self-concept (how girls think and feel about themselves) was evaluated using the 20-item Tennessee Self-Concept Scale (Cronbach a 5 0.85).41 For this, girls self-reported ratings on their perception of identity and self-satisfaction. We used the 10-item Rosenberg SelfEsteem Scale to assess participants' self-esteem (Cronbach a 5 0.71).42 This scale measures girls' self-worth by assessing both positive and negative feelings about the self. All items were reverse coded where required, and all items were summed and analyzed as continuous variables. Lower scores on the Beck Hopelessness Scale and the Beck Depressive Inventory are indicative of better mental health because these indicate less hopelessness and depressive symptoms. By contrast, higher scores on the Tennessee SelfConcept and Rosenberg Self-Esteem scales are better because these reflect higher levels of self-concept and selfesteem.

Statistical Analysis

All analyses were conducted in Stata version 17.0.43 Characteristics of study participants at baseline are described in Table 1. We examined if there were any significant differences across study groups on baseline covariates listed in Table 1 (while adjusting for clustering by schools) and conducted sensitivity analyses to adjust for covariates that were significantly different across study groups.

We summarized the outcomes by study group and time point using means and standard deviations for continuous outcomes and numbers and percentages for categorical outcomes (Table 2). For continuous outcomes, we fitted 3-level mixed-effects models. Each model contained a fixed categorical effect for study group and time, the group-by-time interaction, and a random intercept at the school level. An unstructured residual-error covariance matrix of the residuals from the repeated assessments taken on the same participants was fitted, and the assumption of equal variances and covariances across groups was relaxed. For binary outcomes, each model contained fixed effects for study group and time, a group-by-time interaction term, and random intercepts at the school and participant levels, yielding a multilevel logistic regression model.

In both linear and logistic models, we estimated the variance-covariance matrices of parameter estimates by using robust Huber-White standard errors. We estimated the omnibus effects for study group, time, and the group-bytime interaction. We computed groupwithin-time effects regardless of the significance ofthe group-by-time interaction effect. To further elucidate time effects, we followed the statistically significant main effects for time with timewithin-group simple effects comparisons. Because ofthe multiple pairwise comparisons, we performed adjustments to the P values using Sidak's method.

RESULTS

At baseline, 1260 school-going adolescent girls of mean age 15.4 years were enrolled. A total of 408 girls received usual care, 471 received YDA, and 381 received the combination intervention (YDA+MFG). There were no significant differences across study groups at baseline, except for participants' age (P = .031) with YDA group 0.31 years older than controls and no difference between other groups. Overall, most girls were nonorphans (82.9%) and being cared for by biological parents (76.6%; Table 1). Approximately 77% of primary caregivers were not formally employed, and approximately 11 % completed a technical diploma or university degree. On average, girls resided in households with 7 people. At baseline, 7.3% (n = 92) of adolescent girls had a positive biological test for HIV, STIs, or pregnancy (Appendix, Table B). The most common STI diagnosis was for trichomoniasis (5.2%; n 5 65). While only 8 girls (0.6%) were positive for HIV at baseline, 14(1.1 %) had a positive pregnancy test. At 24 months, the retention rate was 92.4%. The distribution of sexual risk-taking outcomes by study group and time point are presented in Table 2 and in the Appendix, Tables B and C.

Sexual Risk-Taking Behavior and Attitudes

For biomarker-based sexual risk, selfreported sexual risk, sexual risk-taking intentions, and attitudes toward condom use outcomes, we observed no significant differences between study groups at 12 and 24 months (Table 3).

Effects on Mental Health

There were significant group-by-time interaction effects for all mental health outcomes (Appendix, Table D). At 24 months, we observed adolescent girls in both YDA and YDA+MFG intervention groups had significantly lower levels of depressive symptoms and significantly better self-concept than controls. For hopelessness, only girls in the combination intervention arm (YDA+MFG) had significantly lower levels of hopelessness than controls (Table 4). However, there were no study group differences for self-esteem. For all the sexual risk-taking and mental health outcomes, there were no significant differences between the YDA and YDA+MFG intervention groups. Simple effects comparing follow-ups to baseline within the significant time main effect appear in the Appendix, Table E. Sensitivity analysis results were substantively unchanged after we adjusted for age (Appendix, Tables F-I).

DISCUSSION

School-going adolescent girls in SSA require special attention to reduce their vulnerability to HIV infection and poor mental health. Economic empowerment and family strengthening interventions can play an important role in improving financial resources44,45 while equipping families to deal with the stressors of living in poverty-impacted environments.46 In this population of secondary school-going adolescent girls, we observed no significant differences between study groups at postbaseline time points for objective biomarker-based and self-reported sexual risk-taking behaviors and attitudes. This finding aligns with a previous study among adolescents living with HIV in which no differences in sexual risk-taking attitudes were observed between the intervention and control group.34 Research conducted among adolescents in the Rakai district of Uganda over a 17-year period consistently showed the highest prevalence of sexual experience was among adolescents aged 19 years and the lowest among adolescents aged 15 years.47 The prevalence was significantly lower among adolescents enrolled in school versus adolescents out of school across all ages. Hence, the lack of significant findings could be attributable to the young age of participants and because all ticipants were school and residing within families. Given these reasons, it is not surprising only a small proportion of adolescent girls had a positive selfreport of engaging in sexual risk-taking behavior (4.5% at baseline, 9.4% at 12 months, and 14.9% at 24 months) or had a positive biomarker test for HIV, other STIs, or pregnancy (7.3% at baseline and 4.8% at 12 months). Furthermore, only 3.3% were sexually active at baseline and, as expected, this increased to 9.4% at 24 months.

Similarly, for sexual risk-taking intentions and attitudes toward condom use, we observed no significant differences by study group. However, for girls in the YDA group, our time-withingroup analyses located a slight increase in sexual risk-taking intentions at 12 months but more favorable attitudes to condom use at 24 months compared with baseline. Girls in the YDA+MFG group had more favorable attitudes toward condom use at 24 months compared with baseline (Appendix, Table E). This highlights the urgent need for better refined sexual risk-reduction interventions for adolescent girls in the transition period. Over time, the YDA and family strengthening activities appeared to improve attitudes toward condom use, although sexual risk-taking intentions appear to have increased.

At 24-month follow-up, we observed differential effects by study group for all mental health outcomes except self-esteem. The YDA and YDA+MFG interventions were more efficacious in reducing girls' depressive symptoms and improving self-concept than usual care. This meant that both YDA and YDA+MFG interventions had sustained effects on reducing depressive symptoms and improving self-concept among adolescent girls at 24 months. Moreover, only the YDA+MFG intervention was effective in reducing feelings of hopelessness among girls compared with usual care at 24 months. These are important findings that reinforce the need for economic empowerment interventions that improve families' financial resources as important for improving adolescents' mental health.

Our findings align with previous studies that found economic empowerment interventions positively improved mental health ofvulnerable populations in SSA.44 They also speak to the wide applicability and effectiveness of MFG interventions. Previous studies observed the beneficial impact of MFG interventions on reducing depressive symptoms, improving self-concept, and reducing oppositional defiant disorder and impaired functioning among children with disruptive behavior disorders in Uganda.45 Similarly, MFG interventions have been adapted and implemented among youth living with HIV in the United States and South Africa, with positive results.48,49 The open communication, shared experiences, and social support networks built during Suubi4Her MFG sessions are likely to have contributed to better mental health even among adolescent girls. Given that MFG is sensitive to cultural norms

and tailored to the local environment, incorporating MFG components into future interventions designed to prevent sexual risk-taking and prevent poor mental health may have tremendous potential.

Limitations

Despite numerous strengths in the study design, there were a few limitations worth highlighting. First, self-reported findings (specifically, self-reported sexual risk and intentions and attitudes toward sexual risk-taking behaviors) may be subject to underreporting with adolescents providing socially desirable responses. Sexual behavior and mental health are topics that are heavily stigmatized in conservative African communities.50,51 Although we did conduct biological tests for other STIs, this was done once per year, and so it is likely that we could have missed some infection windows if participants became infected and then received STI treatment and the illness resolved between the assessment intervals-although STI treatment among poor school-going adolescents like the ones included in the study is rare.

Second, our findings are not generalizable to out-of-school adolescent girls, at the time of study recruitment, who may be at higher risk of sexual risktaking and poor mental health. Third, this analysis was done on the entire sample of all adolescent girls, including investigating sexual risk-taking intentions among those who were not sexually active. Analyses may show different trends and a different impact of the intervention on sexual risk-taking attitudes and behaviors ifthe sample comprised only girls who were sexually active.

Conclusions

On one hand, we found that providing YDA in addition to family strengthening activities to adolescent girls in secondary schools in poverty-impacted communities in Uganda has the potential to positively improve their mental health. However, our analyses show no significant differences across groups on sexual risk-taking behaviors, something that could be explained by the relatively young age of the participants enrolled in the study. Future studies may consider replicating these interventions and analyses in an older population of adolescent girls, including those transitioning into young adults who are likely to be more sexually active. Âfpu

ABOUT THE AUTHORS

Fred M. Ssewamala and Rachel Brathwaite are with the International Center for Child Health and Development, Brown School, Washington University in St Louis, MO. Torsten B. Neilands is with the Division of Prevention Science, University of California, San Francisco.

CORRESPONDENCE

Correspondence should be sent to Fred M. Ssewamala, William E. Gordon Distinguished Professor, Brown School, Washington University in St Louis, St Louis, MO 63130 (e-mail: fms1@ wustl.edu). Reprints can be ordered at https:// ajph.org by clicking the "Reprints" link.

PUBLICATION INFORMATION

Full Citation: Ssewamala FM, Brathwaite R, Neilands TB. Economic empowerment, HIV risk behavior, and mental health among school-going adolescent girls in Uganda: longitudinal clusterrandomized controlled trial, 2017-2022. Am J Public Health. 2023;113(3):306-315.

Acceptance Date: November 3, 2022.

DOI: https://doi.org/10.2105/AJPH.2022.307169

CONTRIBUTORS

F.M. Ssewamala conceptualized and designed the Suubi4Her Study on which this article is based, acquired funding for the Suubi4Her study, supervised the work, and reviewed and edited the article. R. Brathwaite performed the data analysis and wrote the initial draft of the article. T. B. Neilands provided statistical guidance on the analysis and reviewed and edited the article. All authors provided critical inputs and edits to the article and its revisions and approved the final article for submission.

ACKNOWLEDGMENTS

The study outlined in this protocol is supported by the National Institute of Mental Health (NIMH) under award 1R01MH113486-01 (PI: Fred M. Ssewamala, PhD).

We are grateful to Abel Mwebembezi at Reach the Youth-Uganda, Joseph Kato Bakulu at Masaka Catholic Diocese,

Gertrude Nakigozi and Godfrey Kigozi at Rakai Health Sciences Program in Uganda, and Phionah Namatovu and Sarah Namutebi at the International Center for Child Health and Development for their respective contributions to the study design and implementation. In addition, we are grateful to the financial institutions that agreed to workwith the adolescent girls in opening savings accounts and the extension workers who have committed time to train the adolescent girls in conducting income-generating activities. Our thanks also go to the Ugandan Government Ministry of Education and the 47 secondary schools that have agreed to participate in the Suubi4Her study.
Note. The content is solely the responsibility of the authors and does not necessarily represent the official views of NIMH or the National Institutes of Health.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

HUMAN PARTICIPANT PROTECTION

The Suubi4Her study was conducted in accordance with the Declaration of Helsinki and approved by the Washington University in St Louis institutional review board (IRB no. 201703102), the Uganda Virus Research Institute (GC/127/17/ 07/619), and the Uganda National Council of Science and Technology (SS4406). The study is also registered in the ClinicalTrials.gov database (Identifier: NCT03307226).

References

REFERENCES

1. UNICEF. Adolescent HIV prevention: HIV in adolescents. 2020. Available at: https://data.unicef.org/topic/hivaids/adolescents-young-people. Accessed June 22, 2021.
2. UNICEF. Turning the tide against AIDS will require more concentrated focus on adolescents and young people. UNICEF Data. 2017. Available at: https://data.unicef.org/topic/hiv-aids. Accessed April 28, 2022.
3. Cortina MA, Sodha A, Fazel M, Ramchandani PG. Prevalence of child mental health problems in sub-Saharan Africa: a systematic review. Arch Pediatr Adolesc Med. 2012;166(3):276-281. https://doi.org/10.1001/archpediatrics.2011.592
4. Campbell OLK, Bann D, Patalay P. The gender gap in adolescent mental health: a cross-national investigation of 566,829 adolescents across 73 countries. SSM Popul Health. 2021;13:100742. https://doi.org/10.1016/j.ssmph.2021.100742
5. Abbo C, Kinyanda E, Kizza RB, Levin J, Ndyanabangi S, Stein DJ. Prevalence, comorbidity and predictors of anxiety disorders in children and adolescents in rural north-eastern Uganda. Child Adolesc Psychiatry Ment Health. 2013;7(1):21. https://doi.org/10.1186/1753-2000-7-21
6. Rescorla L, Achenbach T, Ivanova MY, et al. Behavioral and emotional problems reported by 19. parents of children ages 6 to 16 in 31 societies. J Emot Behav Disord. 2007;15(3):130-142. https://doi.org/10.1177/10634266070150030101
7. Glynn JR, Carael M, Auvert B, et al. Why do young women have a much higher prevalence of HIV than young men? A study in Kisumu, Kenya and Ndola, Zambia. AIDS. 2001;15(suppl 4):S51 -S60. https://doi.org/10.1097/00002030-20010800400006
8. Barhafumwa B, Dietrich J, Closson K, et al. High prevalence of depression symptomology among adolescents in Soweto, South Africa associated with being female and cofactors relating to HIV transmission. Vulnerable Child Youth Stud. 2016; 11(3):263-273. https://doi.org/10.1080/1745012 8.2016.1198854 22.
9. UNAIDS. Women and HIV. A spotlight on adolescent girls and young women. 2019. Available at: https://www.unaids.org/sites/default/files/media_ asset/2019_women-and-hiv_en.pdf. Accessed April 29, 2022.
10. UNICEF Uganda Country Office. Multidimensional child poverty and deprivation in Uganda: Volume 1.2019. Available at: https://www.unicef.org/ uganda/reports/multidimensional-child-povertyand-deprivation-uganda-report-volume-1. Accessed May 1, 2022.
11. African Development Bank Group. Uganda Country Gender Profile. February 2016. Available at: https://www.afdb.org/fileadmin/uploads/afdb/ Documents/Project-and-Operations/UGANDA_COUNTRY_GENDER_PROFILE-2016.pdf. Accessed May 4, 2022.

12. African Development Bank Group. HIV &AIDS and supportive learning environments. Good policy and practice in HIV &AIDS in education (booklet series). Paris, France: UNESCO; 2008.
13. Pettifor AE, Levandowski BA, MacPhail C, Padian NS, Cohen MS, Rees HV. Keep them in school: the importance of education as a protective factor against HIV infection among young South African women. Int J Epidemiol. 2008;37(6):1266-1273. https://doi.org/10.1093/ije/dyn131
14. Nobelius A-M, Kalina B, Pool R, Whitworth J, Chesters J, Power R. Sexual partner types and related sexual health risk among out-of-school adolescents in rural south-west Uganda. AIDS Care. 2011;23(2):252-259. https://doi.org/10. 1080/09540121.2010.507736
15. Green C, Mukuria A, Rubin D. Addressing early marriage in Uganda. Washington, DC: USAID, Futures Group, Health Policy Initiative, Task Order I; 2009.
16. Kigozi F, Ssebunnya J, Kizza D, Cooper S, Ndyanabangi S. An overview of Uganda's mental health care system: results from an assessment using the World Health Organization's Assessment Instrument for Mental Health Systems (WHOAIMS). Int J Ment Health Syst 2010;4(1):1 -9. https://doi.org/10.1186/1752-4458-4-1
17. Cooper K, Stewart K. Does money affect children's outcomes? A systematic review. Joseph Rowntree Foundation. 2013. Available at: https://www.jrf.org. uk/sites/default/files/jrf/migrated/files/moneychildren-outcomes-full.pdf. Accessed May 2, 2022.
18. Cooper K, Stewart K. Does money affect children's outcomes? An update. Centre for Analysis of Social Exclusion. 2017. Available at: https:// sticerd.lse.ac.uk/dps/case/cp/casepaper203.pdf. Accessed May 2, 2022.
19. Whiteford HA, Degenhardt L, Rehm J, et al. Global burden of disease attributable to mental and substance use disorders: findings from the Global Burden of Disease Study 2010. Lancet 2013; 382(9904):1575-1586. https://doi.org/10.1016/ S0140-6736(13)61611-6
20. O'Donnell L, O'Donnell CR, Stueve A. Early sexual initiation and subsequent sex-related risks among urban minority youth: the Reach for Health Study. Fam Plann Perspect 2001;33(6): 268-275. https://doi.org/10.2307/3030194
21. Brookmeyer KA, Henrich CC. Disentangling adolescent pathways ofsexual risk taking. J Prim Prev. 2009;30(6):677-696. https://doi.org/10. 1007/s10935-009-0196-6
22. Armistead L, Kotchick B, Forehand R. Teenage pregnancy, sexually transmitted diseases, and HIV/AIDS. Handbook of Preventive Interventions for Children and Adolescents. Hoboken, NJ: John Wiley and Sons; 2004:227-254.
23. Remien RH, Stirratt MJ, Nguyen N, Robbins RN, Pala AN, Mellins CA. Mental health and HIV/AIDS: the need for an integrated response. AIDS. 2019; 33(9):1411 -1420. https://doi.org/10.1097/QAD. 0000000000002227
24. Patel V, Araya R, Chatterjee S, et al. Treatment and prevention of mental disorders in lowincome and middle-income countries. Lancet. 2007;370(9591):991 -1005. https://doi.org/10. 1016/S0140-6736(07)61240-9
25. Ssewamala FM, Bermudez LG, Neilands TB, et al. Suubi4Her: a study protocol to examine the impact and cost associated with a combination intervention to prevent HIV risk behavior and improve mental health functioning among adolescent girls in Uganda. BMC Public Health. 2018;18(1):693. https://doi.org/10.1186/s12889018-5604-5
26. Sherraden M. Assets and the Poor: A New American Welfare Policy. New York, NY: ME Sharpe; 1991:344.
27. Sherraden M. Stakeholding: notes on a theory of welfare based on assets. Soc Serv Rev. 1990; 64(4):580-601. https://doi.org/10.1086/603797
28. Ghandour RM, Kogan MD, Blumberg SJ, Jones JR, Perrin JM. Mental health conditions among school-aged children: geographic and sociodemographic patterns in prevalence and treatment. J Dev Behav Pediatr. 2012;33(1):42-54. https://doi. org/10.1097/DBP.0b013e31823e18fd
29. McKay MM, Gonzales JJ, Stone S, Ryland D, Kohner K. Multiple family therapy groups. Soc Work Groups. 1995;18(4):41-56. https://doi.org/10. 1300/J009v18n04_04
30. McNeely C, Shew ML, Beuhring T, Sieving R, Miller BC, Blum RWM. Mothers' influence on the timing of first sex among 14-and 15-year-olds. J Adolesc Health. 2002;31(3):256-265. https://doi.org/10. 1016/S1054-139X(02)00350-6

31. Askelson NM, Campo S, Smith S. Mother-daughter communication about sex: the influence of authoritative parenting style. Health Commun. 2012;27(5):439-448. https://doi.org/10.1080/ 10410236.2011.606526
32. Widman L, Choukas-Bradley S, Noar SM, Nesi J, Garrett K. Parent-adolescent sexual communication and adolescent safer sex behavior: a metaanalysis. JAMA Pediatr. 2016;170(1):52-61. https:// doi.org/10.1001/jamapediatrics.2015.2731
33. The Republic of Uganda. The HIV and AIDS Uganda country progress report 2014. June 15, 2015. Available at: http://www.unaids.org/sites/default/ files/country/documents/UGA_narrative_report_ 2015.pdf. Accessed September 26, 2022.
34. Shato T, Nabunya P, Byansi W, et al. Family economic empowerment, family social support, and sexual risk-taking behaviors among adolescents living with HIV in Uganda: the Suubi+Adherence Study. J Adolesc Health. 2021;69(3):406-413. https://doi.org/10.1016/j.jadohealth.2021.02.005
35. Byansi W, Ssewamala FM, Neilands TB, et al. The short-term impact ofa combination intervention on depressive symptoms among school-going adolescent girls in southwestern Uganda: the Suubi4Her cluster randomized trial. J Adolesc Health. 2022;71(3):301-307. https://doi.org/10. 1016/j.jadohealth.2022.04.008
36. Filiatreau LM, Tutlam NT, Brathwaite R, et al. Effects of a combination economic empowerment and family strengthening intervention on psychosocial well-being among Ugandan adolescent girls and young women: analysis ofa cluster randomized controlled trial from the Suubi4Her study. J Adolesc Health. In press.
37. Beck AT, Weissman A, Lester D, Trexler L. The measurement of pessimism: the hopelessness scale. J Consult Clin Psychol. 1974;42(6):861 -865. https://doi.org/10.1037/h0037562
38. Brown GK, Beck AT, Steer RA, Grisham JR. Risk factors for suicide in psychiatric outpatients: a 20-year prospective study. J Consult Clin Psychol. 2000;68(3):371 -377. https://doi.org/10.1037/ 0022-006X.68.3.371
39. Beck AT, Ward CH, Mendelson M, Mock J, Erbaugh J. An inventory for measuring depression. Arch Gen Psychiatry. 1961;4(6):561-571. https://doi.org/10.1001/archpsyc.1961. 01710120031004
40. Uddin R, Burton NW, Maple M, Khan SR, Khan A. Suicidal ideation, suicide planning, and suicide attempts among adolescents in 59 low-income and middle-income countries: a populationbased study. Lancet Child Adolesc Health. 2019; 3(4):223-233. https://doi.org/10.1016/S23524642(18)30403-6
41. Fitts WH, Warren WL. Tennessee Self-Concept Scale, TSCS 2. Manual. 2nd ed. Los Angeles, CA: Western Psychological Services; 1997.
42. Rosenberg M. The measurement of self-esteem. In: Society and the Adolescent Self-Image. Princeton, NJ: Princeton University Press; 1965. https:// doi.org/10.1515/9781400876136
43. Stata Statistical Software: Release 17. College Station, TX: StataCorp LLC; 2021.
44. Ssewamala FM, Shu-Huah Wang J, Brathwaite R, et al. Impact of a family economic intervention (Bridges) on health functioning ofadolescents orphaned by HIV/AIDS: a 5-year (2012-2017) cluster randomized controlled trial in Uganda. Am J Public Health. 2021;111(3):504-513. https://doi. org/10.2105/AJPH.2020.306044
45. Brathwaite R, Ssewamala FM, Mutumba M, et al. The long-term (5-year) impact of a family economic empowerment intervention on adolescents living with HIV in Uganda: analysis of longitudinal data from a cluster randomized controlled trial from the Suubi+Adherence Study (2012-2018). AIDS Behav. 2022;26(10):33373344. https://doi.org/10.1007/s10461-02203637-1
46. Brathwaite R, Ssewamala FM, Sensoy Bahar O, et al. The longitudinal impact of an evidencebased multiple family group intervention (Amaka Amasanyufu) on oppositional defiant disorder and impaired functioning among children in Uganda: analysis of a cluster randomized trial from the SMART Africa-Uganda scale-up study (2016-2022). J Child Psychol Psychiatry. 2022; 63(11):1252-1260. https://doi.org/10.1111/jcpp. 13566
47. Santelli JS, Song X, Holden IK, et al. Prevalence of sexual experience and initiation of sexual intercourse among adolescents, Rakai District, Uganda, 1994-2011. J Adolesc Health. 2015;57(5): 496-505. https://doi.org/10.1016/j.jadohealth. 2015.07.018
48. McKay MM, Chasse KT, Paikoff R, et al. Family-level impact of the CHAMP Family Program: a community collaborative effort to support urban families and reduce youth HIV risk exposure. Fam Process. 2004;43(1):79-93.

https://doi.org/ 10.1111/j.1545-5300.2004.04301007.x
49. Mellins CA, Nestadt D, Bhana A, et al. Adapting evidence-based interventions to meet the needs of adolescents growing up with HIV in South Africa: the VUKA case example. Glob Soc Welf. 2014;1(3):97-110. https://doi.org/10.1007/ s40609-014-0023-8
50. Abdallah AK, Magata RJ, Sylvester JN. Barriers to parent-child communication on sexual and reproductive health issues in East Africa: a review of qualitative research in four countries. J Afr Stud Dev. 2017;9(4):45-50. https://doi.org/10. 5897/JASD2016.0410
51. SsebunnyaJ, Kigozi F, Lund C, Kizza D, Okello E. Stakeholder perceptions of mental health stigma and poverty in Uganda. BMC Int Health Hum Rights. 2009;9(1):5. https://doi.org/10.1186/1472698X-9-5

DETAILS

Subject:	Behavior; Students; Mental health; Adolescents; Intervention; Mental disorders; Human immunodeficiency virus--HIV; Sex education; Young adults; Girls; Empowerment; Families &family life; Risk; Schools; Risk taking; Poverty; Risk behavior; Impact analysis; Children &youth; Acquired immune deficiency syndrome--AIDS; Teenagers; Health risks; Sexually transmitted diseases--STD; Sexual behavior; Health education; Clinical trials; Pessimism; Gross Domestic Product--GDP; Public health
Business indexing term:	Subject: Gross Domestic Product--GDP
Location:	Uganda
Publication title:	American Journal of Public Health; Washington
Volume:	113
Issue:	3
Pages:	306-315
Publication year:	2023
Publication date:	Mar 2023
Section:	RESEARCH &ANALYSIS
Publisher:	American Public Health Association
Place of publication:	Washington
Country of publication:	United States, Washington
Publication subject:	Public Health And Safety, Medical Sciences
ISSN:	00900036
Source type:	Scholarly Journal

Language of publication:	English
Document type:	Evidence Based Healthcare, Journal Article
DOI:	https://doi.org/10.2105/AJPH.2022.307169
ProQuest document ID:	2781297734
Document URL:	https://www.proquest.com/scholarly-journals/economic-empowerment-hiv-risk-behavior-mental/docview/2781297734/se-2?accountid=211160
Copyright:	Copyright American Public Health Association Mar 2023
Last updated:	2023-08-31
Database:	Public Health Database

Bibliography

Citation style: APA 6th - Annotated with Abstracts - American Psychological Association, 6th Edition

Magnan, Sanne,M.D., PhD. (2023). The potential and challenges for common ground on abortion. American Journal of Public Health, 113(4), 380-381. Retrieved from https://www.proquest.com/scholarly-journals/potential-challenges-common-ground-on-abortion/docview/2792106637/se-2?accountid=211160

Discussing the recent US Supreme Court decision Dobbs vJackson Women's Health Organization (Dobbs), a colleague commented, "I am not in favor of abortion, but I don't want to see women in back-street, illegal clinics either." I feel the same way. I understand that women who want abortions advocate reproductive rights; however, who advocates reproductive rights for the unborn? Does it have to be "us" versus "them"? Can we build bridges of empathy for common ground? Can we be a better nation by the process of "listening, asking and understanding"?1To be empathetic2 is to be curious, get outside our bubbles, and interact with those who do not think as we do. Start with making others feel respected in conversations, even if we do not agree with their positions. Suspend judgments. Acknowledge and explore our privileges and biases. It may lead to shared experiences or understanding differing views on abortion. Is there a shared project, no matter how small, in reproductive rights that could provide a beginning common ground?Religion is not necessarily a stumbling block for common ground. For example, per the Pew Research Center, the African Methodist Episcopal Church, the Roman Catholic Church, the Southern Baptist Convention, and Hinduism generally oppose abortion rights. The groups on the opposite end of the spectrum (e.g., the Presbyterian Church (USA) and Conservative and Reform Judaism) support abortion rights with few or no limits. There are also religious groups with unclear positions on abortion (e.g., Buddhism, Islam, and OrthodoxJudaism).3 Additionally, individual members may have opinions that do not equate with the official position of their religious group.

Taylor, N. L., M.P.H., Porter, Jamila M,DrP.H., M.P.H., Bryan, Shenee,M.P.H., M.P.A., Harmon, K. J., PhD., & Sandt, L. S., PhD. (2023). Structural racism and pedestrian safety: Measuring the association between historical redlining and contemporary pedestrian fatalities across the united states, 2010–2019. American Journal of Public Health, 113(4), 420-428. doi:https://doi.org/10.2105/AJPH.2022.307192

Objectives. To examine the association between historical redlining and contemporary pedestrian fatalities across the United States. Methods. We analyzed 2010-2019 traffic fatality data, obtained from the Fatality Analysis Reporting System, for all US pedestrian fatalities linked by location of crash to 1930s Home Owners' Loan Corporation (HOLC) grades and current sociodemographic factors at the census tract level. We applied generalized estimating equation models to assess the relationship between the count of pedestrian fatalities and redlining. Results. In an adjusted multivariable analysis, tracts graded D ("Hazardous") had a 2.60 (95% confidence interval = 2.26, 2.99) incidence rate ratio (per residential population) of pedestrian fatalities compared with tracts graded A ("Best"). We found a significant dose-response relationship: as grades worsened from A to D, rates of pedestrian fatalities increased. Conclusions. Historical redlining policy, initiated in the 1930s, has an impact on present-day transportation inequities in the United States. Public Health Implications. To reduce transportation inequities, understanding how structurally racist policies, past and present, have an impact on community-level investments in transportation and health is crucial.

Goldenberg, Shira M,PhD., M.Sc, Buglioni, N., M.P.H., Krüsi, Andrea, PhD, MPH, Frost, E., M.S.W., Moreheart, S., M.P.H., Braschel, M., M.Sc, & Shannon, Kate,PhD., M.P.H. (2023). Housing instability and evictions linked to elevated intimate partner and workplace violence among women sex workers in vancouver, canada: Findings of a prospective, community-based cohort, 2010–2019. American Journal of Public Health, 113(4), 442-452. doi:https://doi.org/10.2105/AJPH.2022.307207

Objectives. To model the relationship of unstable housing and evictions with physical and sexual violence perpetrated against women sex workers in intimate and workplace settings. Methods. We used bivariate and multivariable logistic regression with generalized estimating equations to model the association of unstable housing exposure and evictions with intimate partner violence (IPV) and workplace violence among a community-based longitudinal cohort of cisgender and transgender women sex workers in Vancouver, Canada, from 2010 through

2019. Results. Of 946 women, 85.9% experienced unstable housing, 11.1% eviction, 26.2% IPV, and 31.8% workplace violence. In multivariable generalized estimating equation models, recent exposure to unstable housing (adjusted odds ratio AOR] = 2.04; 95% confidence interval CI] = 1.45, 2.87) and evictions (AOR = 2.45; 95% CI = 0.99, 6.07) were associated with IPV, and exposure to unstable housing was associated with workplace violence (AOR = 1.46; 95% CI = 1.06, 2.00). Conclusions. Women sex workers face a high burden of unstable housing and evictions, which are linked to increased odds of intimate partner and workplace violence. Increased access to safe, women-centered, and nondiscriminatory housing is urgently needed.

Hoopsick, Rachel A, PhD, MS,M.P.H., M.C.H.E.S., & Yockey, R. A. (2023). Methamphetamine-related mortality in the united states: Co-involvement of heroin and fentanyl, 1999–2021. American Journal of Public Health, 113(4), 416-419. doi:https://doi.org/10.2105/AJPH.2022.307212

Objectives. To examine trends in methamphetamine-related mortality in the United States from 1999 to 2021 and the extent to which these deaths co-involved heroin or fentanyl. Methods. We obtained final and provisional data from the CDC WONDER (Centers for Disease Control and Prevention Wide-ranging ONline Data for Epidemiologic Research) multiple causes of death database for deaths that involved methamphetamine and deaths that involved both methamphetamine and heroin or fentanyl mong US residents aged 15 to 74 years. We plotted the age-adjusted methamphetamine-related mortality rate by year and quantified the proportion of deaths with heroin or fentanyl co-involvement. Finally, we used joinpoint regression to quantify trends in the methamphetamine mortality rate and proportion of deaths with heroin or fentanyl co-involvement. Results. From 1999 to 2021, there was a 50-fold increase in the methamphetamine mortality rate, which was accompanied by an increasing proportion of deaths that co-involved heroin or fentanyl, peaking at 61.2% in 2021. Conclusions. Unprecedented increases in methamphetamine-related mortality have occurred during the last decade, and an increasing proportion of these deaths co-involved heroin or fentanyl. Public Health Implications. Stark increases in methamphetamine-related mortality and heroin or fentanyl co-involvement warrant robust harm reduction efforts, especially for people who engage in polysubstance use.

Brandi, Kristýn,M.D., M.P.H., & Gill, P., B.A. (2023). Abortion restrictions threaten all reproductive health care clinicians. American Journal of Public Health, 113(4), 384-385. Retrieved from https://www.proquest.com/scholarly-journals/abortion-restrictions-threaten-all-reproductive/docview/2792106451/se-2?accountid=211160

The Supreme Court's decision on Dobbs vJackson will have an impact on reproductive health care provision for years to come, not only where abortion care is now restricted but across the country. As of January 2023,14 states have outlawed or severely restricted abortion.1 Morbidity and mortality around the time of labor is already on the rise nationally, from 658 in 2018 to 861 in 20202-particularly in places where abortion is restricted and labor care is increasingly sparse because of loss of the workforce after the COVID-19 pandemic.3 It is important to understand how the criminalization of abortion providers will affect all other forms of reproductive health care moving forward.In states where abortion care is currently severely limited, clinicians who provide abortion care face criminalization that can include insurmountable legal fees, loss of their medical license, and even imprisonment. Abortion restrictions create a duality in which providers feel they must serve as agents of the state-reporting any suspicious pregnancy-related issues-or have their license called into question, all while trying to best help their patients. Since these laws took effect, we are already seeing delays in health care services for patients needing early pregnancy care management-for abortion as well as miscarriage management and ectopic pregnancies.4 Health care providers may be called on to increase surveillance and report signs of abortion that can violate their protection of HIPAA (the Health Insurance Portability and Accountability Act) rights, while also facing malpractice claims if they, by delaying or denying early pregnancy care management, are providing what medical evidence shows to be substandard care.

Larsson, Laura S, RN,PhD., M.P.H., & Hodgson, Christine, RN, PhD,M.S.N., C.P.N.P.-P.C. (2023). Improving early childhood caries for american indian 3- to 5-year-old children through interprofessional outreach: 2018–2022. American Journal of Public Health, 113(4), 368-371. doi:https://doi.org/10.2105/AJPH.2022.307205

We sought to determine the effectiveness of an interprofessional health team in improving access to oral health care among American Indian children enrolled in Head Start. Our team provided preventive treatments and case management during 11 visits from 2018 to 2022. Case management reduced the time between referral and dental treatment from a median of 166 days to 58.3 days over four years. An interprofessional team is an effective way to improve access to oral health care among rural American Indian Head Start children.

Republicans die more from COVID-19: Why we care. (2023). American Journal of Public Health, 113(4), 349. doi:https://doi.org/10.2105/AJPH.2023.307237

Nelson, Kimberly M,PhD., M.P.H., Skinner, A., M.P.H., Stout, C. D., B.A., Raderman, W., M.Sc, Unger, E., PhD., Raifman, Julia,ScD., S.M., . . . Underhill, Kristen,D.Phil, J.D. (2023). Minor consent laws for sexually transmitted infection and human immunodeficiency virus services in the united states: A comprehensive, longitudinal survey of US state laws. American Journal of Public Health, 113(4), 397-407. doi:https://doi.org/10.2105/AJPH.2022.307199

Objectives. To assess changes in minor consent laws for sexually transmitted infection (STI) and HIV testing, treatment, and prevention services in all 50 US states and the District of Columbia from 1900 to 2021. Methods. We coded laws into minor consent for (1) health care generally; (2) STI testing, treatment, and prevention; (3) HIV testing, treatment, and prevention; and (4) pre- or postexposure prophylaxis for HIV prevention. We also coded confidentiality protections and required conditions (e.g., threshold clinician judgments). Results. The largest increase in states allowing minors to consent to STI services occurred during the 1960s and 1970s. By 2021, minors could consent independently to STI and HIV testing and treatment in all 50 states plus DC, STI prevention services in 32 jurisdictions, and HIV prevention services in 33 jurisdictions. Confidentiality protections for minors are rare. Prerequisites are common. Conclusions. Although the number of states allowing minors to consent independently to STI and HIV services has increased considerably, these laws have substantial limitations, including high complexity, prerequisites requiring clinician judgments, and neglect of confidentiality concerns.

Zablotsky, B., PhD., Lessem, S. E., PhD., Gindi, R. M., PhD., Maitland, A. K., PhD., Dahlhamer, J. M., PhD., & Blumberg, S. J., PhD. (2023). Overview of the 2019 national health interview survey questionnaire redesign. American Journal of Public Health, 113(4), 408-415. doi:https://doi.org/10.2105/AJPH.2022.307197

Data System. Federal health surveys, like the National Health Interview Survey (NHIS), represent important surveillance mechanisms for collecting timely, representative data that can be used to monitor the health and health care of the US population. Data Collection/Processing. Conducted by the National Center for Health Statistics (NCHS), NHIS uses an address-based, complex clustered sample of housing units, yielding data representative of the civilian noninstitutionalized US population. Survey redesigns that reduce survey length and eliminate proxy reporting may reduce respondent burden and increase participation. Such were goals in 2019, when NCHS implemented a redesigned NHIS questionnaire that also focused on topics most relevant and appropriate for surveillance of child and adult health. Data Analysis/Dissemination. Public-use microdata files and selected health estimates and detailed documentation are released online annually. Public Health Implications. Declining response rates may lead to biased estimates and weaken users' ability to make valid conclusions from the data, hindering public health efforts. The 2019 NHIS questionnaire redesign was associated with improvements in the survey's response rate, declines in respondent burden, and increases in data quality and survey relevancy. (Am J Public Health. 2023;113(4): 408-415. https://doi.org/10.2105/AJPH.2022.307197)

Palacio, Herminia,M.D., M.P.H. (2023). Implications of dobbs v jackson women's health organization. American Journal of Public Health, 113(4), 388-389. Retrieved from https://www.proquest.com/scholarly-journals/implications-dobbs-v-jackson-womens-health/docview/2792106068/se-2?accountid=211160

During its consideration of Dobbs v Jackson Women's Health Organization, the US Supreme Court received several scientifically, medically, and ethically sound amicus briefs in strong opposition to Mississippi's abortion ban. Among those briefs was one that stated clearly and succinctly that "abortion is a safe, common, and essential component of healthcare." This amicus brief was submitted jointly by the nation's leading medical professional membership organizations: the American College of Obstetricians and Gynecologists, the American Medical Association, the

American Association of Public Health Physicians, the American Academy of Family Physicians, the American Academy of Nursing, and the American Academy of Pediatrics.1 The abundance of compelling evidence notwithstanding, on June 24, 2022, the Supreme Court issued its ruling in Dobbs, overturning 50years of a federally protected right to abortion services while simultaneously telegraphing, through a concurring opinion written byJustice Clarence Thomas, that "all of this Court's substantive due process precedents" should be up for reconsideration.

Credits. (2023). American Journal of Public Health, 113(4), 346. Retrieved from https://www.proquest.com/scholarly-journals/credits/docview/2792106064/se-2?accountid=211160

Kapadia, Farzana,PhD., M.P.H. (2023). Bringing an equity lens to address the evolving overdose crisis: A public health of consequence, april 2023. American Journal of Public Health, 113(4), 359-360. Retrieved from https://www.proquest.com/scholarly-journals/bringing-equity-lens-address-evolving-overdose/docview/2792105965/se-2?accountid=211160

Beginning with the expansion of prescription opioid use in the mid1990s, the opioid crisis has unfolded in overlapping waves and the United States is now entering its fourth wave of the opioid epidemic (https://bit.ly/3XDsIIj). With the evolution of the epidemic, we have witnessed changes in the types of substances driving overdoses and overdose-related deaths, from prescription opioids to heroin and then to synthetic opioids such as fentanyl, to heroin, and now polysubstance use involving both opioids and psychostimulants such as methamphetamines. In this issue of the Journal, we present information on trends in methamphetamine-related deaths as well as efforts to reduce overdose-related deaths. These findings highlight the need for ongoing and timely tracking of trends in overdose to ensure an equitable approach to preventing overdose deaths.

Hill, B. J. (2023). Minors' rights to access sexual and reproductive health care. American Journal of Public Health, 113(4), 350-352. Retrieved from https://www.proquest.com/scholarly-journals/minors-rights-access-sexual-reproductive-health/docview/2792105884/se-2?accountid=211160

Young people face significant unaddressed health care needs in the United States. For example, as Nelson et al. explain in this issue of AJPH, adolescents-especially those who are already marginalized because of their racial, ethnic, sexual, or gender identity-are significantly affected by sexually transmitted infections (STIs) such as HIV(https://bit.ly/3jKUzYL). Yet, the law governing minors' access to sensitive health care services is a morass.1 A sensible policy response, recognizing the basic human and constitutional right of mature minors to access health care without parental involvement, is urgently needed.

Hodges, James C,M.S.W., L.C.S.W., Walker, Danielle T,M.S.N., P.M.H.N.P.-B.C., Baum, C. F., PhD., & Hawkins, Summer Sherburne,PhD., M.S. (2023). Impact of school shootings on adolescent school safety, 2009–2019. American Journal of Public Health, 113(4), 438-441. doi:https://doi.org/10.2105/AJPH.2022.307206

Objectives. To examine the impact of school shootings on indicators of adolescent school safety in the United States. Methods. We linked 2009-2019 Youth Risk Behavior Survey data on 211 236 adolescents aged 14 to 18 years from 24 school districts with data on high school shootings from the Center for Homeland Defense and Security. We conducted 2-way fixed-effects logistic regression models to assess the impact of shootings on self-report of 3 indicators of school safety: avoiding school because of feeling unsafe, carrying a weapon at school, and being threatened or injured with a weapon at school. Results. High school shootings were associated with adolescents having 20% greater odds of avoiding school because of feeling unsafe (adjusted odd ratio AOR] = 1.20; 95% confidence interval CI] 5 1.11,1.29) than those who had not. Findings were slightly attenuated in sensitivity analyses that tested exposure to shootings at any school in the district or state. High school shootings were associated with a statistically nonsignificant (P = .08) elevated risk of carrying a weapon at school (AOR = 1.11; 95% CI = 0.99,1.25). Conclusions. The negative ramifications of school shootings extend far beyond the event itself to adolescents' concerns about school safety.

Bowen, S., PhD., & Hardison-Moody, A. (2023). Improving unequal food access requires understanding and addressing the social inequalities that contribute to it. American Journal of Public Health, 113(4), 353-355. Retrieved

from https://www.proquest.com/scholarly-journals/improving-unequal-food-access-requires/docview/2792105675/se-2?accountid=211160

The food landscape in rural communities Is shifting. Dollar stores have moved in as grocery stores have closed. However, we still know little about whether and how this has altered people's food-shopping behaviors. In last month's issue of AJPH, Feng et al.1 used a national data set of food expenditures to chart changes in food spending at different types of retail outlets between 2008 and 2020. They found that, over this period, dollar stores grew faster than any other type of food retailer in terms of share of food spending and that rural households' share outpaced that of other households.The research by Feng et al. offers clear evidence of the need to consider dollar stores in conversations about improving food access, especially in rural areas. They also call for additional research on the implications for public health. We concur. Furthermore, we argue that improving unequal food access requires understanding and addressing the structural inequalities that contribute to it. We offer the following key considerations to ground this work.First, it is important to recognize that rural areas are not a monolith. Rurality shapes food access in important ways, but food access also varies widely in rural areas. As Feng et al. show, rural Black households spend, by far, the largest share (11.6%) of their food budget at dollar stores, and the share of food spending at dollar stores is higher for rural households in the South. Similarly, many of the counties with the highest rates of food insecurity are rural Southern counties with large shares of people of color.2 Structural racism, in the form of decades of disinvestment and discrimination, has shaped economic development and access to both social services and food in these communities.

Morabia, Alfredo,M.D., PhD. (2023). Building broad public health coalitions in the post-roe world. American Journal of Public Health, 113(4), 378-379. Retrieved from https://www.proquest.com/scholarly-journals/building-broad-public-health-coalitions-post-roe/docview/2792105606/se-2?accountid=211160

As in every year's April issue of the Journal, coinciding with National Public Health Week (#NPHW), we set up a dialogue between people of radically different political views who have in common a dedication to public health and an agreement that policy should be based as much as possible on scientific evidence. The dialogue has covered sensitive issues: racism and structural racism, gun violence prevention, single payer health insurance, public health advocacy, the Environmental Protection Agency, and more (e.g., https://ajph. aphapublications.org/toc/ajph/108/4). This issue is the first to address reproductive rights. It has proven to be the most difficult one to prepare.The authors of the opinion pieces were invited to comment on the public health consequences ofthe US Supreme Court's decision to overturn Roe v Wade and, in particular, which strategies, at the local and national levels, could best protect pregnant individuals and their children in the new context.

Moseson, Heidi,PhD., M.P.H., Smith, M. H., PhD., Chakraborty, Payal,PhD., M.S., Gyuras, H. J., M.A., Foster, A., B.S., Bessett, D., PhD., . . . Norris, Alison H,M.D., PhD. (2023). Abortion-related laws and concurrent patterns in abortion incidence in indiana, 2010–2019. American Journal of Public Health, 113(4), 429-437. doi:https://doi.org/10.2105/AJPH.2022.307196

Objectives. To analyze abortion incidence in Indiana concurrent with changes in abortion-related laws. Methods. Using publicly available data, we created a timeline of abortion-related laws in Indiana, calculated abortion rates by geography, and described changes in abortion occurrence coincident with changes in abortion-related laws between 2010 and 2019. Results. Between 2010 and 2019, Indiana's legislature passed 14 abortion-restricting laws, and 4 of 10 abortion-providing clinics closed. The Indiana abortion rate decreased from 7.8 abortions per 1000 women aged 15 to 44 years in 2010 to 5.9 in 2019. At all time points, the abortion rate was 58% to 71% of the Midwestern rate and 48% to 55% of the national rate. By 2019, nearly 1 in 3 (29%) Indiana residents who obtained abortion care did so outside the state. Conclusions. Access to abortion in Indiana over the past decade was low, required increases in interstate travel to obtain care, and co-occurred with the passage of numerous abortion restrictions. Public Health Implications. These findings preview unequal abortion access and increases in interstate travel as state-level restrictions and bans go into effect across the country. (Am J Public Health. 2023;113(4):429-437. https://doi.org/10.2105/AJPH.2022.307196)

Jacoby, S. F.,PhD.M.S.N.M.P.H. (2023). Home owners' loan corporation maps and place-based injury risks: A complex history. American Journal of Public Health, 113(4), 356-358. Retrieved from https://www.proquest.com/scholarly-journals/home-owners-loan-corporation-maps-place-based/docview/2792105530/se-2?accountid=211160

In a piece for Ebony magazine in 1965, James Baldwin made a statement now inscribed on a wall at the National Museum of African American History and Culture that "the great force of history comes from the fact that we carry it within us ... history is literally present in all that we do."1(p.47) Historical context shapes the ways in which individuals embody the circumstances to which they are born and in which they live.2 It is the backdrop for every public health problem and all that public health data can enumerate.The historical context of the United States is inseparable from its history of racism and ofthe institutions and policies that reify racialized economic segregation and social inequality.3 Let us consider the public health problem of physical injuries as a leading cause of death and disability across the life span.4 There are persistent populationlevel disparities in injury risks and outcomes associated with race, ethnicity, economic resources, and geography.4 Treating these disparities as ahistorical phenomena has some advantages for simple, structural public health interventions. However, viewing any health disparity through a solely contemporary lens may obscure critical opportunities for intervention that require appreciation for how injury risks and outcomes have been racialized and emplaced across US geography.

Table of contents. (2023). American Journal of Public Health, 113(4), 347. Retrieved from https://www.proquest.com/scholarly-journals/table-contents/docview/2792105302/se-2?accountid=211160

Galea, Sandro,M.D., DrP.H., & Erwin, Paul C,M.D., DrP.H. (2023). Improving the US and global pandemic response: Lessons from cuba. American Journal of Public Health, 113(4), 361-362. Retrieved from https://www.proquest.com/scholarly-journals/improving-us-global-pandemic-response-lessons/docview/2792105242/se-2?accountid=211160

At this point, it is abundantly clear that the global response to the COVID-19 pandemic has fallen far short of what we might have hoped. More than six million people have died globally from COVID-19, with more than a million of those deaths in the United States. The United States has had more deaths by far than any other country worldwide. Although there probably is no one country that can claim to have performed well in all dimensions of its COVID-19 response, there are some countries that did better than others on important dimensions of the response, and it behooves us to start the process of learning from these countries toward the end of improving both US and global responses in the inevitable event of future pandemics.Such lessons can be drawn from the recently published report "Cuba's COVID-19 Vaccine Enterprise: Report From a High-Level Fact-Finding Delegation to Cuba."1 This international delegation was organized by Medical Education Cooperation with Cuba (MEDICC), a US-based nonprofit that promotes health-related dialogue and collaboration, especially between the United States and Cuba.2 Cuba had substantially lower mortality during the COVID-19 pandemic, with about 750 deaths per million, comparable with New Zealand, a country that has often been spotlighted for its handling of the pandemic. The report is an efficient summary of Cuba's success in two particular dimensions during COVID-19 that contributed to its weathering the pandemic as well as it did: Cuba's ability to develop an effective vaccine rapidly, and its ability to subsequently vaccinate a large portion (>90%) of its population quickly. Although we leave it to the reader to read the MEDICC report, we suggest that there are three key observations that emerge from the report that are helpful to bear in mind as we consider how to improve the US national pandemic response.

Robinson, D., B.S.W., & Simmons, Megan,J.D., M.P.A. (2023). Codify abortion rights and access by way of state legislatures. American Journal of Public Health, 113(4), 386-387. Retrieved from https://www.proquest.com/scholarly-journals/codify-abortion-rights-access-way-state/docview/2792104153/se-2?accountid=211160

On June 24, 2022, the US Supreme Court overturned Roe v Wade. The ruling in Dobbs vJackson Women's Health Organization (Dobbs) essentially left decisions on the legality and accessibility of abortion care in the United States to state legislatures. Furthermore, the holding left to the discretion of states the permissibility ofterminating an

unintended pregnancy in instances of rape or incest.1Although Roe v Wade was often lauded as having legalized abortion, disparities based on race and socioeconomic status have been prevalent since it was passed in 1973. Shortly after the ruling, in 1977, antichoice senator HenryJ. Hyde (R, IL) proposed that no federal funds go toward supporting abortion access. The Hyde Amendment barred the use of federal Medicaid funds for abortion except when the life of the person would be endangered by carrying the pregnancy to term. This began the long fight to upend abortion access.Ironically, states that criminalize and surveil abortion the most stringently, primarily the most religious states, are among the worst states for maternal and infant health outcomes2; they often fail to implement adequate and sustainable Medicaid and children's health insurance programs to support the births that have been forced on the pregnant people of these states. People of color, especially Black women, have been disparately affected by this rollback of bodily autonomy couched in the notion of care and concern for the unborn.

Weintraub, R. L., M.D., Miller, Kate,PhD., M.P.H., Rader, B., M.P.H., Rosenberg, J., M.P.H., Srinath, S., M.S., Woodbury, S. R., B.A., . . . Brownstein, J. S., PhD. (2023). Identifying COVID-19 vaccine deserts and ways to reduce them: A digital tool to support public health decision-making. American Journal of Public Health, 113(4), 363-367. doi:https://doi.org/10.2105/AJPH.2022.307198

A private-academic partnership built the Vaccine Equity Planner (VEP) to help decision-makers improve geographic access to COVID-19 vaccinations across the United States by identifying vaccine deserts and facilities that could fill those deserts. The VEP presented complex, updated data in an intuitive form during a rapidly changing pandemic situation. The persistence of vaccine deserts in every state as COVID-19 booster recommendations develop suggests that vaccine delivery can be improved. Underresourced public health systems benefit from tools providing real-time, accurate, actionable data. (Am J Public Health. 2023; 113(4):363-367. https://doi.org/10.2105/AJPH.2022.307198)

Griffith, J., B.A., Yorlets, R. R., M.P.H., Chambers, Laura C,PhD., M.P.H., Davis, C. S., M.S.P.H., Wentz, Anna,PhD., M.P.H., Beaudoin, Francesca L,M.D., PhD., . . . Samuels, Elizabeth A, MD,M.P.H., M.H.S. (2023). Statewide policy to increase provision of take-home naloxone at emergency department visits for opioid overdose, rhode island, 2018–2019. American Journal of Public Health, 113(4), 372-377. doi:https://doi.org/10.2105/AJPH.2022.307213

In 2017, Rhode Island responded to rising overdose deaths by establishing statewide emergency department (ED) treatment standards for opioid overdose and opioid use disorder. One requirement of the policy is that providers prescribe or provide take-home naloxone to anyone presenting to EDs with opioid overdose. Among adults presenting to EDs with opioid overdose from 2018 to 2019, approximately half received take-home naloxone. Receipt of naloxone was associated with administration of naloxone before ED presentation, ED policy certification level, and regional overdose frequency. (Am J Public Health. 2023;113(4):372-377. https://doi.org/10.2105/AJPH.2022.307213)

Worrell, F. C., PhD. (2023). Denying abortions endangers women's mental and physical health. American Journal of Public Health, 113(4), 382-383. Retrieved from https://www.proquest.com/scholarly-journals/denying-abortions-endangers-womens-mental/docview/2792101882/se-2?accountid=211160

State restrictions or outright bans on abortions are putting women's psychological and medical health at risk. Fifty years of psychological research showcase the harmful effects of abortion denial and provide public health leaders with valuable insights on how to promote women ' s reproductive rights and foster maternal and child health. Key findings from research studies show that, despite claims to the contrary, having an abortion is not linked to mental health problems.

Jensen, R. E., PhD. (2023). The first publication on contraception in a US medical journal, 1928: Hannah mayer stone's case for contraceptive care before the pill. American Journal of Public Health, 113(4), 390-396. doi:https://doi.org/10.2105/AJPH.2022.307215

Today, as access to women's reproductive health care in the United States has proven less than ensured, it behooves scholars of public health to explore how US medical contraceptive care was successfully established and perpetuated initially in the early to mid-twentieth century. This article highlights the work of Hannah Mayer Stone, MD, in building and advocating such care. From the moment she accepted the position of medical director for the first contraceptive clinic in the country in 1925 until her untimely death in 1941, Stone campaigned relentlessly for women's access to the best contraceptive regimes available, all the while navigating extensive legal, social, and scientific challenges. In 1928, she published the first scientific report on contraception in a US medical journal, thereby legitimating the provision of contraception as a medical endeavor and providing empirical grounds for clinical contraceptive work in the years that followed. Her scientific publications and professional correspondence provide insight into the processes through which medical contraceptive care became increasingly available in US history and offer guidance for a contemporary era when reproductive health care hangs in the balance. (AmJ Public Health. 2023;113(4):390-396. https://doi.org/10.2105/AJPH.2022.307215)

Parmet, W. E., J.D., & Khalik, F., J.D. (2023). Judicial review of public health powers since the start of the COVID-19 pandemic: Trends and implications. American Journal of Public Health, 113(3), 280-287. doi:https://doi.org/10.2105/AJPH.2022.307181