Addressing the commercial determinants of health begins with clearer definition and measurement

Kelley Lee[1] and Nicholas Freudenberg[2]

The challenge of non-communicable diseases (NCDs) continues to grow worldwide, increasing from 43% to 54% the global burden of disease between 1990 and 2016 (1). In 2018, NCDs accounted for 71% of total deaths globally, with 81% of those deaths caused by four disease types – cardiovascular diseases, diabetes, cancers and chronic respiratory diseases (2). By 2025, the World Health Organization estimates, 85% of NCD annual deaths will occur in low- and middle-income countries (3).

The costs of treating NCDs have become enormous in all countries. For cardiovascular diseases alone, in the European Union, healthcare costs totalled €110 billion in 2015 (4). Adult (>20 years) cases of diabetes worldwide have risen, from ~171 million to 463 million people between 2000 and 2019, accounting for 10% of healthcare expenditure (5,6). Moreover, given that this economic burden is likely to be especially heavy for disadvantaged and marginalised people and communities than in groups with higher socioeconomic status across all countries (7), NCDs are now a key driver of rising health inequities (8). Finally, as the COVID-19 pandemic shows, high rates of NCDs put millions of people at higher risk of other threats to health.

Given the substantial and rising costs, as Buse *et al.* note, 'we cannot treat our way out of the NCD epidemic (9)'. Instead, more effective prevention strategies focused on reducing the risk factors associated with these diseases are urgently needed (10). A risk factor is 'any attribute, characteristic or exposure of an individual that increases the likelihood of developing a disease or injury (11)'. However, public health action to prevent NCDs has to date primarily focused on metabolic (e.g. hypertension, hyperlipidaemia) and modifiable behavioural risk factors – tobacco use, harmful alcohol use, unhealthy diets and physical inactivity (2,12). As a result, as Horton describes, 'progress has been inadequate and disappointingly slow. . ..An advocacy strategy based on four diseases and four risk factors seems increasingly out of touch. . ..Many political leaders believe that NCDs are just too big and too complex a challenge. And so they are paralysed. We need a different approach (13)'.

A profoundly different approach is the emerging concept of the *commercial determinants of health* (CDoH). It has long been recognised that NCD prevention strategies must address the 'circumstances in which people are born, grow, live, work, and age, and the systems put in place to deal with illness (14)'. Since the late 20th century, it is arguable that the commercial (for-profit) sector has figured most heavily in shaping such social circumstances (15–18). West and Marteau define CDoH as 'factors that influence health which stem from the profit motive (19)'. Similarly, Kickbusch *et al.* write that CDoH are 'strategies and approaches used by the private sector to promote products and choices that are detrimental to health (20)'. Buse *et al.* focus on 'risks inherent from consumption of, or exposure to, commercial products – such as ultra-processed foods and beverages, tobacco and alcohol (21)'. These definitions contrast with recent WHO documents that consider nongovernmental organizations, philanthropic foundations, academic institutions and for-profit businesses all as 'non-state actors' and potential partners in NCD prevention and control

1. Canada Research Chair Tier I. Faculty of Health Sciences, Simon Fraser University, Burnaby, BC, Canada
2. CUNY Graduate School of Public Health & CUNY Urban Food Policy Institute. City University of New York, NYC, USA

Correspondence to: Kelley Lee, Simon Fraser University, Blusson Hall, 8888 University Drive, Burnaby, B.C.V5A 1S6, Canada. Email: kelley_lee@sfu.ca

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(22), a framing that masks potential conflicts of interest for commercial actors.

While this shift in attention to commercial factors is welcome, current definitions offer limited understanding of the complex pathways between CDoH and NCDs; do not take account of the variable and dynamic nature of CDoH over time and space; and do not consider the potential for positive and/or negative impacts on specific populations. As such, the concept of CDoH has not yet been operationalised to inform public health action effectively (9,21). Indeed, mainstream public health approaches remain focused on metabolic and behavioural risk factors such as screening for hypertension, healthy eating, smoking cessation and improved food-labelling strategies (23). However, interventions aimed at metabolic and behavioural risk factors, without taking account of 'the inter-relationships of social structure, context and agency in their impact on health and well being (24)', have limited impact. The CDoH concept potentially integrates metabolic, behavioural and structural risk factors but, to do so, clearer definition beyond a focus on specific health-harming products and industries, along with analytical tools to measure CDoH as a composite of risk factors, are urgently needed.

Understanding the CDoH as a composite of risk factors, and how these risk factors interact with each other, is critical to the development of effective public health interventions to prevent and control NCDs worldwide. First, this approach shifts the dominant emphasis in research and policy on clinical management and behavioural change, which are costly and limited in effect, to prevention based on both societal- and individual-level change. Second, a composite CDoH approach bridges research and policy silos dividing different disease areas, population groups and types of interventions. Instead, these holistic approaches can amplify change through integrated strategies for NCD prevention. Finally, measuring the CDoH as a composite of risk factors allows clearer identification of relative vulnerabilities by specific populations over time and place, and across other variables (e.g. age, gender, socioeconomic status). This could provide a powerful dataset to develop targeted interventions and resources to reduce such risks to health and health equity.

A practical interdisciplinary CDoH framework can also incorporate new insights from systems science, political economy and political science, creating new bodies of knowledge that can inform public health practice. Systems science can help to create more coherent and grounded understanding of how dynamic systems of power and governance shape the pathways through which CDoH influence health (25). Political economy can help to trace the impact of the rise in neoliberalism on the role of commercial actors while political science can help to identify the social actors who have the power to modify CDoH (26).

Overall, despite clear evidence of the alarming rise in NCDs globally, and high-level political commitment to address this leading public health challenge, the public health community (including health promotion professionals) has achieved only limited consensus on effective preventive action (13,27). The CDoH concept promises a more holistic, integrated and targeted approach.

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Challenges of developing a district child welfare plan in South Africa: lessons from a community-engaged HIV/AIDS research project

Jennifer Beard[1], Anne Skalicky[1], Busisiwe Nkosi[2], Tom Zhuwau[3], Mandisa Cakwe[3], Jonathon Simon[1,4] and Mary Bachman DeSilva[1,5]

Abstract: The Amajuba Child Health and Wellbeing Research Project measured the impact of orphaning due to HIV/AIDS on South African households between 2004 and 2007. Community engagement was a central component of the project and extended through 2010. We describe researcher engagement with the community to recruit participants, build local buy-in, stimulate interest in study findings, and promote integration of government social welfare services for families and children affected by HIV/AIDS. This narrative documents the experience of researchers, drawing also on project reports, public documents, and published articles, with the objective of documenting lessons learned in this collaboration between researchers from two universities and a community in South Africa during a period that spanned seven years. This experience is then analyzed within the context of an applied research, community-engagement framework. (Global Health Promotion, 2020; 27(2): 6–16)

Keywords: HIV/AIDS, orphans, community engagement, child welfare policy, South Africa, global health

Introduction

The community-engaged research approach, also known as 'community-based participatory research' or 'collaborative partnership', has gained acceptance and advocacy among global health researchers as an ethical requirement for working in vulnerable communities (1–5). Community engagement is central to applied public health research, as research questions and evidence generated must, by definition, be of practical value. Stakeholders include local, regional and national government officials and policy makers; donors; program staff from non-governmental, community, and faith-based organizations; community leaders; and the media. Such expectations are also generated by ethics review committees as criteria for approval of study protocols, citing the principles of 'do no harm' and 'empowerment' of research subjects (6). National and local governments may provide access to a study site contingent on researchers agreeing to report findings to the community quickly and in a format readily understandable to the general public.

The academic literature recommends guidelines for handling ethical, social and cultural challenges

1. Department of Global Health, Boston University School of Public Health, Boston, MA, USA.
2. School of Public Health, University of Western Cape, Cape Town, South Africa.
3. Health Economics and AIDS Research Division (HEARD), University of KwaZulu-Natal, South Africa.
4. World Health Organization, Geneva, Switzerland.
5. Westbrook College of Health Professions, University of New England, Portland, ME, USA.

Correspondence to: Jennifer Beard, Department of Global Health, Boston University School of Public Health, 801 Massachusetts Ave, Crosstown Center, Boston, MA 02118, USA. Email: jenbeard@bu.edu

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while working with community partners to achieve common objectives (1,4,7–10). These guidelines emphasize the need for examples documenting community-engaged research projects, and several researchers have published lessons learned from past or ongoing attempts at community engagement (5,9–11). One key message from these examples is that community-engaged research is a messy, often serendipitous process dependent on opportunity and the shifting priorities of various actors. It also faces administrative, logistical, and ethical challenges.

We offer an analytical narrative of the Amajuba Child Health and Wellbeing Research Project (ACHWRP). ACHWRP was a longitudinal study of the impact of HIV/AIDS and orphaning on household welfare in South Africa that also set out to work closely with the community at each stage of the research and dissemination process between 2003 and 2010. This seven-year period included all stages of the project during which study staff were resident in the community: one year of study preparation; three of data collection; and three of community service and advocacy toward the goal of facilitating a district child welfare policy.

Research and policy objectives of ACHWRP

In 2003, our team set out to document the consequences of parental deaths from AIDS on orphans and other children in foster households in Amajuba District, KwaZulu-Natal, South Africa. The study was undertaken by Boston University School of Public Health (BU) and University of KwaZulu Natal Health Economics and HIV/AIDS Research Division (HEARD) with support from the US National Institutes of Health (NIH) Africa Partnership program, and had both research and policy objectives. The *research objective* was to measure the impact of high levels of orphaning and foster care on households, and to compare the welfare of orphans and non-orphans in foster households vs. that of non-orphans living in non-orphan households. Detailed study methods and findings have been described elsewhere (11–18).

The *policy objective* was to facilitate development of a district-level child welfare management plan by embedding the research within a community-engagement framework. This entailed engaging with government departments, non-governmental and community-based organizations (NGOs and CBOs) from the start, with the goal of developing detailed knowledge of the community, sharing study findings at multiple time points, and catalyzing community partners to advance child welfare. The project encountered administrative, logistical, and ethical challenges throughout the process. The ethical challenges resulted in the greatest concrete community impact (an improved referral system and child welfare plan process), yet the nature of externally funded research and funding limitations ultimately defined and, arguably, undermined our attempts to place equal priority on community engagement.

Amajuba District, KwaZulu-Natal: profile of the study site and population

Situated in northern KwaZulu-Natal, Amajuba District represents a broad cross-section of urban, peri-urban, and rural areas. Its population is just under 500,000 (20). Newcastle is the commercial hub where housing, health, education, and road infrastructure are well-developed in the central business district, but poorly developed in peripheral areas. When ACHWRP began in 2003, the district was confronting an all-time high unemployment rate of 47% (21). Since then, the economic situation has improved somewhat, with unemployment dropping to 41% in 2011 (20), and those living on less than one US dollar per day falling from 12.9% in 2002 to 4.1 in 2011 (22). Poverty is unevenly distributed across the municipalities with extreme poverty ranging from 2.6% in Newcastle to 8.6% in eMadlangeni and 7.5% in Dannhauser (22). HIV prevalence among pregnant women attending antenatal clinics has remained high in KwaZulu-Natal for the last decade, at 37.5% in 2011 (22). Prevalence at antenatal clinics in Amajuba was the highest in the province in 2006 at 46%, but by 2011 had decreased to 35.3%.

Official orphan prevalence data for Amajuba District are not available. South Africa has about 3.1 million orphans due to all causes, with half orphaned by HIV/AIDS. In KwaZulu-Natal, 22% of children are orphans due to all causes, compared to 17% in South Africa as a whole (23). According to unpublished ACHWRP sampling data, annual orphan incidence in Amajuba was 10% among school children aged 9–15 years.

ACHWRP's quantitative study documented the longitudinal household and child-level impacts of parental death on a cohort of school-going youth aged 9–15. The study consisted of a case-control design, embedded within a prospective longitudinal cohort. Three annual rounds of demographic, economic, health, and psychosocial data were collected from 637 households between 2004 and 2006. Caretakers and children were interviewed in their homes by local research assistants (RAs) trained in field research methodology. The BU and HEARD institutional review boards (IRBs) approved the study.

ACHWRP'S multi-layered engagement with the community

As the project was starting in 2003, an initial review of civil society organizations, government departments, and other stakeholders identified numerous organizations and government departments providing services to orphans and families affected by HIV/AIDS. These services were largely uncoordinated, with only half of the 15 civil society organizations identified reporting interacting with other organizations or being aware of what others were doing for vulnerable children and families (24). By the end of ACHWRP's seven years, collaboration and coordination among local social service organizations had increased substantially. To some extent, ACHWRP facilitated this by creating a community board to advise the study and conducting a number of outreach activities and public events. Table 1 presents an inventory of key community partners engaged over the life of the project.

Developing a deep understanding of the context of the study site and building relationships within the community were central to the ACHWRP community-engagement framework. HEARD researchers had previous experience working in Amajuba District collaborating with the KwaZulu-Natal Department of Education (DoE) to pilot the District Education Management Information System, which collected monthly enrollment, absenteeism, and staffing information and numbers of newly orphaned children from schools (25). HEARD's knowledge of the district and relationship with the local DoE and school administrators were chief rationales for locating the study in Amajuba District.

ACHWRP maintained an office in Newcastle from 2003 to 2010, with BU and HEARD research staff living in the district during their tenure with the project. In their role as newcomers, the senior members of the research team had the simultaneous benefit of outside objectivity and challenge of gaining acceptance as researchers and new community members. All RAs and office staff were recent high school or college graduates and district residents. While data collection ended in July 2007, the team remained through March 2010 working with local stakeholders to link study findings with district policy responses as a first step toward devising and implementing collaborative, evidence-based interventions. Through formal and informal relationships with stakeholders, the team initiated and facilitated collaborations between government child welfare agencies, CBOs, and other stakeholders to improve child welfare services.

Unlike the data collection portion of the project, ACHWRP's community engagement framework did not have a clear agenda for reaching its goal. Activities were driven by interaction, opportunity, and changing circumstances, which drove ongoing development and modification of plans. The list of activities and partnerships outlined in Table 2 is illustrative rather than comprehensive, as further details have been reported elsewhere (26–28). Moreover, the partnerships, specific activities, and objectives were not discrete events that took place at single points in time. Rather, they built upon one another toward the common goal of improving integration of child welfare services through establishing partnerships, reducing barriers, and creating administrative efficiencies.

As noted, the RAs who conducted the household interviews were district residents trained in interview techniques and research protocols that stressed objectivity. Despite this training, they often felt an acute tension between their role as researchers and their sense of community obligation and desire to provide assistance to the study participants who had just spent an hour or more explaining their struggles. In some cases, respondents made direct requests to the RAs for assistance. The purpose of the research had been explained to the participants, and they had provided informed consent, which included an explicit statement that they understood they would receive no monetary assistance for their participation

Table 1. Community partners involved with ACHWRP, 2003–2010.

Government partners	*Non-government partners*
Department of Education (District and Regional) • Psychological Guidance and Special Education Services • Principals • Teachers	Newcastle Community Radio Amajuba District Youth Council Newcastle & District Child and Family Welfare Christelike Maatskap Dienst (Welfare)
Department of Social Welfare (District and Regional)	Khulisa Newcastle (Crime Prevention)
Department of Health (District and Regional)	Osizweni Drop-In Centre
Department of Agriculture (District)	Kwa Hilda Drop-In Centre
Department of Home Affairs (District)	Thembelihle Children's Shelter (Orphanage)
Amajuba District Municipality • Community Services Department • Planning and Development Department • Poverty Alleviation Task Team • Integrated Development Planning Group • Forum for Local Economic Development	Saint Anthony's Home (Orphanage) Lutheran Church Partnership Program (Education Scholarships) Madadeni Catholic Church (Home-Based Care Program) Rosary Clinic
Newcastle District Municipality	
Amajuba District AIDS Council	
Municipal AIDS Councils (Dannhauser, Newcastle, eMadlangeni)	
National Integrated Plan Forum	

in the study. The RAs reminded the respondents about this agreement, and maintained objectivity during interviews and interactions with household members. Nonetheless, they frequently felt disturbed after interviews as they walked away from impoverished families and, in many cases, hungry children.

Senior researchers and other project personnel attending community meetings with service providers occasionally received a similar message: 'You're in these homes and have the resources to gather data; so why can't you do more?' The ethical obligation that researchers must make clinical referrals was something the ACHWRP staff thought about frequently. As one senior researcher explained: 'We were always struggling with the question: where does our role as researcher end and the role of citizen begin?'

During interviews, families frequently explained that they were not able to receive government grants due to missing birth records or other paperwork, and some were simply not aware of available grants. The research team ultimately created and implemented a referral system to help study families obtain services to which they were legally entitled but unable to access due to incomplete paperwork or lack of knowledge about their eligibility.

Development and implementation of child/household referral system

ACHWRP collaborated with the Department of Social Development (DoSD) and DoE to implement the referral scheme in 2004 (during baseline data collection) and ultimately handed it over to these government partners. Study participants were referred for services in two categories: 1) those eligible for childcare, foster, disability and old age grants but unable to access assistance; and 2) those reporting difficulty accessing education for children in their care due to financial constraints, mental or physical illness, or behavioral problems. Cases meeting referral criterion #1 were referred to local DoSD offices; those meeting criterion #2 were referred to the local DoE. Each department designated a focal person to process the referrals, ensure accountability, and facilitate continuity and follow-up. Each also agreed to respond to ACHWRP within two weeks of a referral application being filed. By the time data collection ended in 2007, several dozen cases had been successfully processed.

Table 2. Chronology of ACHWRP community engagement.

Timing	*Objective*	*Activities/outcome*
2002 **ACHWRP startup**	Establish community presence	• Field office opened in Newcastle central business district • Community members hired as research assistants and office administrators
	Engage with local schools to explain study objectives and seek assistance in identifying current and potential orphans	• Principals and teachers assist with identification of orphans and children at-risk of being orphaned • Orphans and children at risk of becoming orphans in the near future identified • Caretakers of the identified children invited to participate in study
	Establish community advisory committee	• Advice solicited on how best to build a relationship between the community and research project • Advisory Committee made up of District Departments of Education (DoE), Health (DoH), and Social Development (DoSD); NGOs; CBOs; local businesses; other private sector stakeholders
2003–2007 **Data collection &** **ongoing community engagement**	Engage community in ongoing discussion about study purpose and procedures	• ACHWRP attended meetings convened by District AIDS Council and other civil society organizations to promote project visibility and cultivate local ownership • Community leaders and other key players informed about study purpose, survey procedures, the need for informed consent, steps taken to ensure confidentiality of data • Input elicited on survey instruments prior to initial piloting and between rounds of data collection • Advice gathered on how to minimize inconvenience and avoid emotional distress during interviews • Activities of ACHWRP team and research findings published in *isiZulu* and reader-friendly format for general audience • Letter to the editor by ACHWRP senior researcher published in the Newcastle Advertiser on World AIDS Day 2005 to draw awareness to HIV's impact on the community • Rumors and misinformation about study purposes and methods responded to, and to the extent possible, dispelled • ACHWRP invited to attend Newcastle Municipality AIDS Council meetings • ACHWRP invited to present at Dannhauser Municipality AIDS Council meeting • ACHWRP invited by DoH to moderate student debate during Sexually Transmitted Infection and Pregnancy Awareness week • DoE, DoH, and DoSD identified as main government agencies needed to support work toward integrating child welfare services
	Develop and implement referral system to assist study participants in accessing government entitlements and services	• Children and families referred to social workers within DoE and DoSD for direct assistance accessing government services (e.g., vaccination, birth registration, social welfare grants, school enrollment) • School and Psychological Guidance and Special Education Services (PGSES) conversations lead to further development of referral scheme • Memorandum of understanding signed with District Department of Social Development

(Continued)

Table 2. (Continued)

Timing	*Objective*	*Activities/outcome*
2003–2007 Data collection & ongoing community engagement (continued)	Convene Amajuba Family and Child Welfare Conference (November 2005, Monte Vista Casino)	• Conference Advisory Council initiated • Findings from first round of data collection presented • Over 500 community participants attend including: regional and district government agencies, NGOs, CBOs, three municipal AIDS councils (Newcastle, Dannhauser, eMadlangeni) • Funded jointly by HEARD, DoH, and Amajuba District Municipality; additional support from Department of Agriculture, DoE, and Newcastle Municipality • Breakout sessions held for participants to discuss opportunities for and challenges to improving child welfare • Media attend; article is published in *Newcastle Advertiser* • Advocacy plan and associated activities developed • HEARD newsletter highlighting conference activities published in *isiZulu* and English
	Seek feedback on conference effectiveness from Conference Advisory Committee, DoE staff, primary school teachers, 23 child and family welfare organizations, and local municipal AIDS councils	• ACHWRP staff invited to primary schools to participate in discussion of common problems faced by learners at home and in the classroom. • ACHWRP offered office space in DoE offices to provide research support in developing child welfare plan • Many respondents praise conference as an important opportunity to meet and to improve relationships with others working with orphans and vulnerable children • HEARD management invited to meet with District Director of Community Services to discuss ACHWRP's objectives and promote district ownership of project
	Improve networking and funding potential between CBOs and NGOs focused on vulnerable children	• Database of 400 local CBOs providing services to vulnerable children developed and integrated with government geographic imaging system mapping (documenting location, capacity, needs, funding sources)
	Pilot formal referral service in three wards with goal of inclusion in District 2011 Integrated Development Plan and district-wide implementation	• Comprehensive referral card developed documenting child demographic and socio-economic details, services required (birth registration, vaccinations, grants) with space to record case history • Card developed in conjunction with district and municipal government and non-government partners • Referral card piloted in 4 wards • 10 CBOs in pilot wards trained to implement referral system • Referral system training manual developed for CBOs • Referral card database developed to capture baseline child needs to monitor implementation and evaluate effectiveness of program • Geographic information system mapping of CBOs, saturation, and reach within pilot districts
	Communicate preliminary research findings from three rounds of data collection to general community	• Closing ceremony for research phase of ACHWRP

Table 2. (Continued)

Timing	*Objective*	*Activities/outcome*
2007–2010 Shift from research to advocacy and social marketing	Produce and distribute advocacy communications to facilitate behavior change at the district level	• ‘Keeping the Promises’ film highlights challenges faced by community members when attempting to access health and government services • Three local newspaper articles and two radio programs feature the film and the need for an integrated child welfare management plan • ACHWRP team participates in ‘Community Voices’ Newcastle Community Radio call-in show twice a month • Six monthly newsletters produced and distributed • Training workshops provided for local government stakeholders to reduce defensiveness when working with advocacy groups
	Propose district child welfare management plan to integrated development planning forum	• ACHWRP team presents child welfare management proposal to district policy makers

Acronyms: ACHWRP: Amajuba Child Health and Wellbeing Research Project; CBOs: community-based organizations; DoE: Department of Education; DoH: Department of Health; DoSD: Department of Social Development; NGOs: non-governmental organizations; PGSES: Psychological Guidance and Special Education Services.

Shift from research to social marketing

In 2008, the ACHWRP team shifted from research to advocacy. In this phase, the team stepped back from the referral system and focused on strengthening the capacity of CBOs to link households in need with government service providers. ACHWRP staff worked with organizations to improve their ability to conduct an accurate and thorough needs assessment of vulnerable children and document relevant information on the referral card to share with government service providers. Ten CBOs in three wards piloted the referral system and, by April 2010, had connected 1850 children with government services.

Designed as a small pilot study, this second phase of the referral system created an opportunity for the district to scale up the program incrementally as resources and CBO training allowed. The referral cards also provided a means for collecting baseline data on vulnerable children. The referral system was a primary component of the District Child Welfare Management Plan submitted for inclusion in Amajuba’s 2010–2011 Integrated Development Plan. The proposal was submitted to the district in January 2010 and was scheduled for ratification in June of the same year.

Challenges of turning evidence into policy and policy into improved services

While the relationship researchers developed with the community had many positive features, the ACHWRP objective to work with local stakeholders to develop and implement an integrated child welfare plan faced a number of challenges.

Tensions posed by university-community partnership

BU and HEARD were equal intellectual partners in the study design; however, the community was not a third, equal partner in determining study questions or methods. Rather, the research portion of the project more readily fit the definition of ‘community-placed research’, which involves the community in recruitment and on advisory boards (3). Study staff did, however, actively engage with the community to define advocacy objectives and strategies.

While staff were increasingly seen as community insiders, their role and that of the project became blurred as they began receiving requests for support and advice on a variety of problems, a challenge noted frequently in the literature on community-engaged research (2,3,5). ACHWRP was seen by some as an intervention project, a development that both demonstrated the trust the Newcastle Field Office (NFO) staff had built and complicated the job of staff who had to respond to requests for assistance in a way that was compassionate but clear about the limitations of research (26). The referral system is one example of the researchers' attempt to address this difference in perception by creating an assistance program that would not jeopardize the study and could eventually be taken over by local government and service providers. As Tindana *et al.* note in their case study on the Navrongo Health Research Center in northern Ghana (9), gaining trust through demonstrated community benefit is critical (4). Yet trust takes many years to develop. The social marketing phase of ACHWRP ended and the field office closed just as the child welfare plan began wending its way through the ratification process, making continued facilitation and advocacy difficult.

Communicating study results in a timely and audience-appropriate manner

Sharing study findings with local stakeholders and promoting evidence-based policy and programming were key ACHWRP objectives. Research findings, however, can be complex and difficult to distill into readily understandable language and action points. Early in 2005, cross-sectional baseline findings presented at a community conference indicated that orphans were generally doing no worse than other children and that effort should focus on addressing vulnerable children more holistically. Longitudinal findings suggesting the picture was more complicated over time were later presented during a 2007 community meeting marking the end of data collection. Presenting findings to community stakeholders representing a variety of backgrounds, educational levels, and advocacy objectives created confusion among staff about which and how much data to present, and how to do so in a way that was meaningful.

HEARD historically has approached this challenge of timely dissemination of results by doing secondary data analysis and publishing data through reports and white papers. BU, on the other hand, has focused on sharing evidence with the broader public health community by publishing in peer-reviewed journals, and its researchers are also quickly pulled into other studies after their official time on a given project ends. The long process of analyzing the longitudinal data, writing and submitting articles to journals, revision, and publication came to fruition five years after data collection ended with eight articles published in peer-reviewed journals (11–18). While ACHWRP presented immediate preliminary findings to the community, direct communication of findings to the community over time has been limited by the lack of continued funding and local presence.

Discussion

There is a question mark at the end of the ACHWRP community engagement story. HEARD researchers maintained their connection with the district, but staff who were based in Newcastle have moved to other projects. They are no longer community members able to conduct direct advocacy and follow-up with their neighbors. This unsatisfying lacuna illustrates the gap between the best intentions of researchers-cum-activists and measurable outcomes. Once research funding is expended, organizations planning to continue advocacy must find additional resources or stop, regardless of the intensity of their commitment to and integration with the community. BU project staff left in 2007 after the end of data collection. HEARD closed the Newcastle office in 2010 after securing supplementary funding for two years of social marketing to publicize the need for an integrated child welfare system. Without a continued community presence, the ratification and implementation of the District Child Welfare Management Plan has been difficult to track.

Challenges of measuring success in community-engaged health research

We cannot declare success in the project's initial policy objective to facilitate the implementation of a child welfare plan in Amajuba, unlike Nakibinge *et al.* (5), who documented the community engagement experience of their decades-long HIV epidemiology research in rural southwest Uganda. One of the key differences between the Uganda and Amajuba narratives is continuity. The Uganda team has been in the community for 20 years. The seven years spent by

BU and HEARD in Amajuba District allowed us to begin to build relationships and mobilize stakeholders to fight for policy change and service implementation, but were insufficient to continue to push processes that often take years to unfold.

As noted by the Uganda team and others, there is no accepted methodology for measuring success of community-engaged research projects (1,4,5,7,8). In the absence of standard measures, Nakibinge *et al.* chart their accomplishments loosely by criteria of longevity, acceptance, scientific output, and community involvement in the project (5). By this yardstick, we argue that the ACHWRP project was strong in terms of scientific output and developing community acceptance and involvement. Despite HEARD's best efforts to remain in the community—and success in doing so for three years after the NIH grant ended—the eventual closure due to inadequate funding limited our ability to continue engagement after 2010.

Likewise, our experiences and insights align with the framework for effective community engagement in health research outlined by Lavery *et al.* (10), including early initiation of engagement activities; careful characterization of the community and its changing needs; establishment of trust with stakeholders; and development of community assets (10). Throughout the process, the ACHWRP team was transparent about study goals and communicated frequently with community collaborators to understand local concerns about the research and engaged in ongoing review and modification of engagement strategies. The project was less successful in maximizing opportunities for stewardship and shared control by the community.

Suggestions for future community-engaged research endeavors

We offer the following suggestions based on experiences of the Amajuba Project and guidance from the scholarly literature:

Communicate, align, and manage expectations for all partners throughout the process (29,30). In hindsight, it is easy to see that both academic partners entered into the research project with great passion but different goals. First, the NIH Africa Partnership grant funding the research had a primary objective of strengthening research capacity of African institutions. The NIH proposal was planned and written collaboratively by both academic partners, but each had different expectations for the capacity-strengthening goals. BU was focused on transferring longitudinal research skills to junior investigators from HEARD. HEARD was focused on transferring data, knowledge, and skills to community partners who would use the research findings to create a child welfare policy. Both objectives were important and to varying degrees successful, but the difference caused a tension we struggled to identify and navigate at the time.

Communicate and collaborate with community from start of planning to articulate short and long-term research and policy goals (10,29,31). Amajuba District was chosen as the research site in part because HEARD had already built relationships there. This early identification of the research community and collaborative intention did not, however, translate into engaging the community in developing the funding proposal, the IRB protocol, or the instruments. Early planning between academic and community partners would have improved our ability to prioritize communication of study findings to various community stakeholders with emphasis on utility. These community presentations and publications could have been organized in a way that contributed to planning for longer, more time-consuming academic manuscripts for dissemination to a global public health audience.

Plan from the start to raise additional funds to support community initiatives and staff positions for community members tasked with carrying-out action plans (10,31). HEARD was able to raise *ad hoc* funds to continue pursuing community capacity-strengthening and policy change goals after data collection ended. Clear articulation up-front of these intentions between both academic partners and the community may have allowed all partners to buy into planning, contribute to fund-raising efforts, and communicate goals and activities.

Conclusion

The ACHWRP experience confirms some of the promising practices outlined by other researchers as well as the tensions and limitations of community-engaged global health research. Seven years is a relatively short time period in which to enter a community as outsiders, engage local stakeholders in a complex research agenda, gradually gain acceptance as community members, and implement policy change. Even within this short period, the community-engagement approach stimulated a referral system that assisted multiple families. As with most investments of this kind, our team did not have the opportunity to measure long-term consequences of these efforts. Yet anecdotal reports suggest the social welfare and educational benefits were useful to those families and children at the time. Although imperfectly implemented in Amajuba, the long-term benefits of citizens effectively demanding and accessing their legal rights is a model researchers and community partners should strive to replicate elsewhere.

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Declaration of conflicting interests

The authors declare that there are no conflicts of interest.

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Development of a national conceptual framework and measuring tool for Organisational Social Responsibility and Accountability for Health (OSRAH)

Nastaran Keshavarz Mohammadi[1], Fereshteh Taheri[2], Masoud Motallebi[2], Ali Yazdanpanah[3], Yahya Khosravi[4], Maryam Borhani Jebeli[2], Hope J. Corbin[5] and Ali Asghar Farshad[2]

Abstract: Organisations can have a significant impact (positive or negative) on society through their actions and decisions. Given this reality, it is important that they are held responsible and accountable for the consequences of their actions. This concept is often referred to as 'social responsibility'. However, 'social responsibility', as currently conceived in the literature, neglects a specific focus on health as a social goal. Additionally, there are no practical tools to capture this concept in a holistic way to facilitate implementation and monitoring of organisational improvement. This paper reports on the process of developing a more holistic conceptual framework and tool for assessing organisational social responsibility and accountability for health (OSRAH). We conducted a review of the published and grey literature and engaged in expert consultation and focus group discussions. The initial OSRAH framework and the self-assessment tool were finalised for implementation and used by 95 organisations at a national event in Iran in February 2017. The results of the assessment data collected at the event showed organisations scored lowest in the domain of community health and highest in the domain of employee health. The OSRAH framework and assessment tool represents a new understanding of health and its determinants in organisations outside the health sector. It integrates health within the existing Corporate Social Responsibility (CSR) culture of organisations. The process of creating the tool and implementing it at the national festival of OSRAH in Iran created momentum for intersectoral action. This experience can inspire researchers and practitioners in other countries, especially in developing countries, to develop their own local definition and practical assessment framework for responsibility and accountability. (Global Health Promotion, 2020; 27(2): 17–25)

Keywords: responsibility, accountability, workplace health promotion, corporate social responsibility, accountability for health, responsibility for health, CSR, health impact

Introduction

Leaders of organisations have long been interested in the simultaneous pursuit of corporate performance and societal benefit. Although the modern concept of 'social responsibility' emerged as a formal field of study in the 1950s, the idea has much older religious, cultural, environmental and developmental roots

1. School of Public health and Safety, Shahid Beheshti University of Medical Sciences, Tehran, Iran.
2. Occupational Health Research Center, Iran University of Medical Sciences, Tehran, Iran.
3. Tehran Municipality, Iran.
4. Department of Occupational Health and Safety Engineering, School of Health, Alborz University of Medical Sciences, Karaj-Alborz,Iran.
5. Western Washington University, Bellingham, WA, USA.

Correspondence to: Ali Asghar Farshad, School of Public Health, Iran University of Medical Sciences, Shahid Hemmat Highway, Tehran, Postal code 1449614535, Iran. Tel :+98 (21) 86704638 Email: fdgir@yahoo.com

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(1). The world's religions have been encouraging ways for humankind to do good, minimise harm, and live in harmony with the natural world (2). Islamic culture has promoted concepts such as endowments, grants and charity in doing business to benefit the poorer ranks of society. Throughout the history of Christianity, the concept of 'responsible investment' is illustrated in the banning of investments dealing with the industries of guilt and sin, which would harm their employees or neighbors, such as the slave trade, chemicals, weapons, alcohol, cigarettes, gambling and pornography (2).

In the 20th century, especially from 1950 onwards, many enterprises sought to expand their understanding of social responsibility (1). According to contemporary scholars, the publication of the book The Social Responsibility of Economic Enterprises in 1953 attracted much attention to this issue (3). The environmental movements of the 1960s also played an important role in promoting the concept of corporate social responsibility (1). By the mid-1990s, given the urgent need for environmental protection, many countries decided to change national policies to better protect the environment and to reduce pollutant emissions (4). This led companies around the world to develop and adopt voluntary measures to reduce environmental impacts (5). The Rio Conference on Sustainable Development in 2012, organised by the United Nations and attended by many world leaders, also emphasised the social responsibility of governments in protecting the environment and in promoting sustainable development (6).

'Social responsibility' is a ubiquitous term, but there is no consensus on its definition (7). In a classic volume from 1953 (3), corporate social responsibility (CSR) is defined as 'the obligations of businessmen to pursue those politics, to make those decisions, or to follow those lines of actions that are desirable in terms of the objectives and values of society (p.6)'. Sixty-five years later, this definition still summarises many of the core features of CSR. Dahlsrud (7) analysed 37 definitions of CSR and identified five common dimensions of the concept: environmental, social, economic, stakeholder and voluntariness. These dimensions refers to action based on ethical values extending beyond legal obligations.

Organisations of all kinds, public and private, including for-profit companies, service providers, policy-making organisations, governments and non-governmental organisations, have significant impact (positive or negative) on multiple aspects of society through their actions and decisions. Therefore, they should be considered responsible and liable for the impacts of their actions (8). Social responsibility is a prerequisite for social accountability (9). Currently, social responsibility is recognized as an important element of effective management in addition to organisational responsibility (10). As described above, the scope of social responsibility is widely seen as covering diverse domains, including economic, ethical, social and environmental dimensions (7,11,12). However, not all these dimensions have been pursued with equal fervor. Although much attention has been paid to CSR regarding environmental action, other domains, such as health as a social responsibility, have been relatively neglected.

Social responsibility and accountability for health

Our collective view of health and its determinants has undergone significant evolution as science and technology have advanced (13). Contemporary understandings of health assert that many factors beyond the will and control of individuals and even of the health sector – for example, the performance of organisations – affect the health status of people and the environment. The impact of these factors, known as the social determinants of health, has been reported to account for 75% of the risk of experiencing ill health (14). Organisations can, through their policies, practices and decisions, either endanger the health of local people and the environment, or, on the contrary, help to promote health and wellbeing. There is growing awareness that it is not only the physical and chemical environment of the workplace, but also psycho-social factors such as stress, job dissatisfaction, lack of organisational justice, conflict between occupational roles such as family and social roles or individual capabilities that pose a threat to individual health (15).

Today, ensuring health for all is an important social goal that requires coordinated action by social and economic sectors, in addition to the health sector (15–20). In the past decade, the World Health Organisation (WHO), as well as influential country leaders, have been advocating for a coordinated social approach to health, arguing that the provision of public health is not feasible without social and health-centred measures by all organisations, including those within the economic sector (17).

The concept of 'responsibility and accountability for health' has been explicitly emphasised in health promotion documents including the Adelaide Declaration (21) for healthy public policy as well as the Jakarta Statement (20), which call for actions to prevent harming individuals, protect the environment, and use resources in sustainable ways, while also considering the health and equity impacts of their actions. The Bangkok Charter of Health Promotion calls for four necessary commitments to promote health including CSR for health (16).

Social responsibility is widely advocated for based on its added value to organisations (22,23). These arguments purport benefits in several areas, such as the creation and improvement of the positive image and reputation of the organisation, the legitimacy of the organisation and its actions, profitability and competitive advantage, the success of the organisation in securing long-term interests (22), the reduction of government interference and the reduction of conflicts between the organisation and public institutions (23). Thus, value is added as both institutions and society enjoy the benefits of sharing responsibility and accountability for health.

The health system in Iran, through a slow and gradual process, is shifting its medical approach to health to a social approach and trying to foster a culture of shared social responsibility and accountability for health, especially outside the health sector (24). As a part of these efforts, an initiative was developed by the Ministry of Health called the annual National Festival of Responsibility and Accountability for Public and Environmental Health. The purpose of the festival was to bring together organisations to collectively identify and acknowledge existing experiences in the area of social responsibility and particularly to promote health as a part of those efforts. In preparation for the festival, a committee was established to develop a context-appropriate definition of social responsibility and accountability for health and to create a tool to measure and evaluate social responsibility and accountability for health within organisations.

This paper reports on the process of defining organisational social responsibility and accountability for health (OSRAH), drawing on the literature and expert opinion, designing a local assessment tool, and the feedback received from its use at the Annual National Festival of Responsibility and Accountability for Public and Environmental Health in February 2017.

Methods

Qualitative methods including content analysis, an expert panel, and focus group discussions (FGDs) were utilised in this research. A conceptual exploration and analysis of academic literature was undertaken with the aim of identifying the scope of OSRAH and characteristics of organisations that are responsible and accountable for health. The review and analysis consisted of four steps: identification of the relevant research, development of the database for identified documents, thematic analysis and development of the conceptual model. The search terms used included 'social responsibility', 'social accountability', 'organisational responsibility', 'organisational accountability', 'corporate responsibility', 'corporate accountability', 'corporate ethics', 'corporate citizenship' or 'responsible entrepreneurship', both alone and also combined with 'health' and 'assessment tools'.

Search engines such as Google Scholar and databases such as Medline and PubMed were used. The websites of the International Standards Organisation, International Labour Organisation, and the WHO were also explored. We viewed all major WHO documents related to health promotion since 1986. We also consulted experts in CSR and in the health field to identify additional documents. Finally, we created a database of 33 documents including quality management systems and standards (25–27), CSR standards (28–31), CSR reports from big companies (32), CSR guidelines, reviews, and books (12,33–43), WHO health promotion documents (14–18,20–21,44), health and safety systems and standards (45–47), and documents on health and CSR (48–50). The content of these documents formed the raw data. These data were analysed using conventional content analysis to extract descriptive and conceptual data.

The text of each document was reviewed several times, reduced down to the smallest constitutive units, and then coded and categorised by themes. The data analysis was carried out with a constant comparison simultaneously as data were collected until reaching full saturation, meaning that no new themes emerged (50). Finally, a draft of a preliminary conceptual framework was developed. It defined the scope of OSRAH in five domains (the main themes emerging from the data analysis) including employees and their families; customers and contractors; community; society; and environment. Within each domain, a set of associated characteristics were extracted from the data during the content analysis.

The two expert panels consisted of 17 specialists from the disciplines of health promotion, occupational health, environmental health, organisational management, law, medicine, social studies and engineering who all had either administrative, executive, or research experience in evaluating organisational performance. The initial draft of the OSRAH framework was discussed and examined in more detail. Some of the experts were quite familiar with popular quality management standards. The first expert panel discussed the scope of the responsibility and accountability in organisations. Some participants had more limited perspectives. For example, some experts were focused mainly on the health of employees and the environment. However, after the discussions, a shared understanding was reached regarding the wide scope of organisational responsibility and accountability, which extends beyond the mere physical health of employees and surrounding environment.

Next, we used the characteristics of organisations which are responsible and accountable for health associated with each domain and formulated these as questions (with potential answers) to create a self-assessment measurement tool. The questionnaire was sent for feedback to all members of the expert panel (who by then had been invited to join the scientfic committee of the first National Festival of Social Responsibility and Accountability for Health) as well as to other members of the committee. Their responses were synthesised by the chair of the committee (first author) and a new draft was presented to a second expert panel as well as in subsequent scientific committee meetings (held as FGDs). A total of five FGDs were conducted, each lasting three hours. Once consensus was reached through these discussions, the questions in the assessment tool were modified. The final draft was piloted in three organisations for content validity. Some questions needed more clarification or modifications. Adjustments were made accordingly. Eventually, the tool was adopted as the official assessment tool for the National Festival of Social Responsibility and Accountability for Health.

Ninety-five organisations voluntarily participated in the festival in February 2017 held by Iran's Ministry of Health. The participating organisations conducted self-assessments of their policies and practices using the tool, providing documentation to support their responses. The questionnaire used at the first festival contained 98 questions. As the different organisations used the tool to assess their activities, we received important feedback that some questions did not make sense for all types of organisations and that some questions were hard to understand, or that documents did not exist to verify their positive activities. In some cases, there were duplications. Based on this input, the questionnaire was modified and reduced to 71 questions.

Since the tool was purposefully developed as a general tool applicable to all kinds of organisations, the scientific committee grouped organisations that participated in the festival into one of four categories: policy-making organisations; service organisations; manufacturing organisations; and non-governmental organisations. Thus, each organisation was compared to similar organisations for eventual ranking.

To advertise the festival, a website was developed. It provided access to the tool, a guide on its utilisation, PowerPoint presentations, a print book, and informational booklets. In addition, three national workshops and more than 10 state-level workshops were conducted to introduce the idea and the tool and to educate representatives from more than 100 organisations on how to conduct a self-assessment using the tool.

Findings

The comprehensive literature review did not identify a tool specifically designed for the assessment of social responsibility and accountability of organisations for health. Existing CSR tools mention health, but it is typically limited to measures of occupational health and safety standards to protect employees and environmental health. Hence, the scope of responsibility and accountability for health has basically been narrowly framed as pertaining to the physical health of employees and, to a certain

Table 1. OSRAH conceptual framework.

Domains of organisational social responsibility and accountability for health (OSRAH)	*Aspects of organisations (Axes of evaluation)*
1. Employees and their families	1. Knowledge
2. Clients and contractors	2. Structure and resources
3. Local community	3. Strategy, policies and values
4. Society	4. Programmes and plans
5. Environment	5. Executive actions
	6. Assessment and evaluation

extent, the environment. The concept of health in the CSR literature is similarly limited to a discussion on health care and employee safety or on the imperative to compensate for health damages in cases of illness and injury. In sharp contrast with these limited notions, the health promotion literature conceives health in a holistic way, accounting for the diverse dimensions of physical, mental, spiritual, social and environmental wellbeing (18). Moreover, the scope of responsibility not only impacts the present experience of people and the environment, but also future generations (20,21).

During the expert panel and FGDs, the scope of responsibility and accountability of organisations for health was as categorised within five overarching domains: employees and their families, clients and contractors, local community, society and environment.

Characteristics of responsible and accountable organisations were identified by combining the attributes extracted from content analysis of the CSR literature, quality management standards and the health promotion literature with the themes that emerged from the FGDs. Examples include having knowledge of the impact of the organisation on health; naming health as an organisational value; explicit concern for health in organisational policies and strategies; having health promotion programs; involvement of key stakeholders in health-related policy decisions; allocation of resources to health; and the existence of a health-focused organisational structure. As these characteristics were referring to different aspects of organisations, they were grouped along six axes of assessment. Combining the domains identified above with these axes of implementation provides a framework that serves to define and conceptualise OSRAH (see Table 1).

As described above, a list of characteristics derived from the data was formulated as closed-ended questions with potential answers that might apply to each organisation. Fourteen questions were developed for four of the five domains of responsibility and one domain had 15 questions. To answer each question, organisations had the opportunity to select all attributes from the listed answers that applied to their organisation and provide documentation to support their assessment.

Providing a range of possible answers also served as suggestions for other actions that they could take to improve their operations. Most participants reported in their evaluation sheet that their perspective toward health and their organisation's role and responsibility had changed through this process.

Figure 1 shows the average percentage of the score earned within each domain as reported by the 95 participating organisations. As illustrated, the lowest score was related to the health of the community, whereas the highest score related to the health of employees.

Discussion

The need for organisations outside the health sector to prioritise health has long been recognized in the field of health promotion (19). However, these ideas have not been adequately mainstreamed. The lack of clear and context-appropriate definitions (7), a dearth of practical implementation tools and a lack of organisational capacity have contributed to this problem. The field of health promotion can help to clarify this ambiguity and contribute to mainstreaming by highlighting the added value such initiatives hold for organisations (22,23). To tackle these challenges, access to implementation

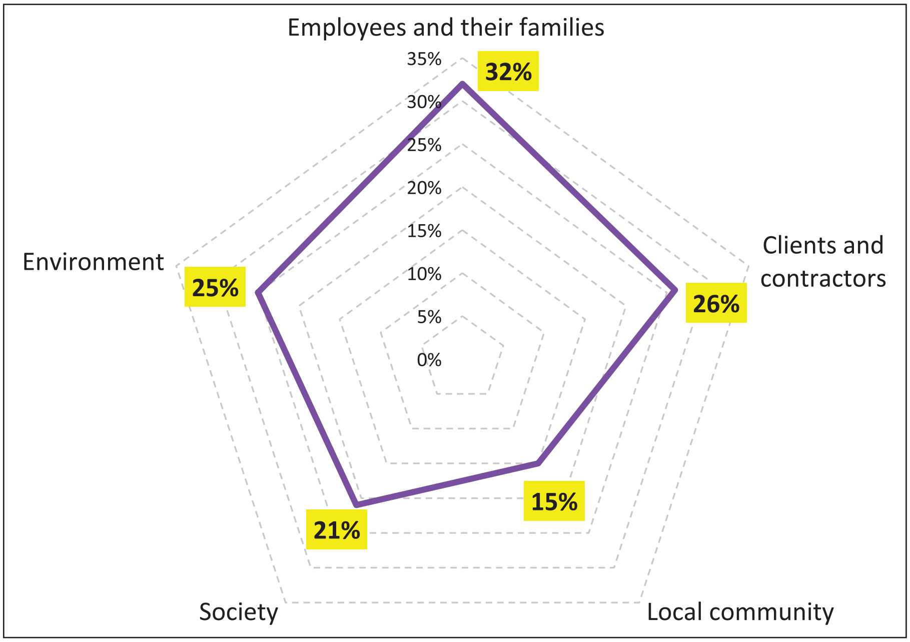

Figure 1. Average score earned by 95 participating organisations.

frameworks and tools, along with training on how to utilise them, are some key action areas. The framework presented here contributes to these goals by providing a context-based instrument that offers both a conceptual model for thinking about social responsibility and accountability for health as well as a tool to assess progress toward organisational goals in these areas.

This tool is unique as it was developed using international literature and expert input. By eliciting the participation of people with backgrounds in organisational studies and management practice as well as health experts, we captured broad-based perspectives, and were able to arrive at an expansive definition and a useful framework for understanding social responsibility and accountability for health.

The process was not without its challenges. As with many intersectoral collaborations, there were difficulties in communication as the terminology used by some groups was unfamiliar to the experts in other groups (19). However, these different perspectives also enriched the discussion and led to a broader understanding of the links between organisations and health. For instance, the health-related criteria of different standards and international standards organisations were questioned in terms of their impact on the social determinants of health and equity.

As a result, the OSRAH tool broadens the scope of social responsibility and accountability to connect it to health promotion concepts. It pushes organisations to think and act on issues at levels not previously considered, such as establishing processes to involve diverse stakeholders in making health-related decisions, and to gather feedback from them regarding the impact of the organisation on their health and on the environment. It also provides guidance on how organisations can protect the health of diverse stakeholders and the environment through purposeful planning, implementation, evaluation and research.

In addition to the contribution of the definition and the assessment tool, the festival itself was a unique opportunity for furthering the agenda of greater intersectoral collaboration in the field of social responsibility and accountability for health. It provided an opportunity for education, reflection, and positive publicity, creating strong motivation for participation. At the first festival in 2017, 450 organisations registered, with 95 organisations submitting their documents for the assessment. The proportion of participating organisations is expected to grow in the future.

Additionally, since that first festival, specific workshops have been held in several ministries including those of Energy, Agriculture, Justice, Sport, and Industry. This can be considered a successful step toward the goal of opening up the dialogue on responsibility for health as well as an exciting step toward intersectoral collaboration and the promotion of health as a shared responsibility with non-health organisations.

Although the OSRAH model was developed in Iran as a national model for local implementation, it might serve as a preliminary document which may be adapted to other countries. The research team could not identify any models in the existing literature that were as comprehensive as OSRAH. This tool, like any other, is not perfect and has limitations. One shortcoming might be the sheer number of questions (71 in total). Also, it is not specific to any one type of organisation, so some questions may be less relevant to some organisations. When the tool is used again for the festival in 2019, it will be revised to be shorter and more user-friendly. Going forward, the festival will be held annually at both the state and national levels in Iran.

Conclusion

The OSRAH model is still evolving; however, the framework and tool represent a new understanding of health and its determinants in non-health sectors. It integrates health within the CSR culture of organisations. In Iran, the national festival of OSRAH and the development of the framework and tool created a momentum inside and outside the health sector regarding shared responsibility of all for health. It also created valuable new opportunities, even in organisations such as the Ministry of Justice. For the first time, a dialogue about the breadth and depth of social responsibility and accountability for health is taking place at a national level. The authors hope that it has also established a platform for transformational changes in favour of health promotion. This experience can inspire researchers in other countries, especially in developing countries, to take action in developing their own local definition and practical assessment framework of responsibility and accountability for health according to their national context and interests. This will help mainstream shared responsibility and 'all for health' in all settings within the health and development sectors.

Conflict of interest

The authors declare that there is no conflict of interest.

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ORCID iD

Nastaran Keshavarz Mohammadi, https://orcid.org/0000-0001-6475-3587.

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Impact of the Nutrition-Friendly School Initiative: analysis of anthropometric and biochemical data among school-aged children in Ouagadougou

Christelle Elkhouri Edde[1], Helene Delisle[2], Charles Dabone[1,3] and Malek Batal[2]

Abstract: The Nutrition-Friendly School Initiative was developed in 2006 to counter the double burden of malnutrition and implemented on a pilot basis in primary schools in Ouagadougou (Burkina Faso) in 2009. A baseline study was conducted in intervention and control schools and repeated in 2014 to assess the impact. This paper reports on anthropometric and biochemical data in the final and baseline surveys. Both studies were conducted in the fifth grade classes of the same primary schools in Ouagadougou. Six intervention schools had been selected and matched at baseline with six control schools. The total sample consisted of 699 and 651 pupils in 2009 and 2014, respectively. Anthropometric and hemoglobin measurements were performed on all children, whereas serum retinol was measured in a random subsample to assess Vitamin A Deficiency (VAD). Independent *t*-tests and chi-squared tests were used for comparison of means and proportions, respectively, and multiple logistic regressions were conducted to examine associations between nutritional parameters and school characteristics. Final rates of anaemia and VAD were 32.6% and 26.1%, respectively, down from 40.4% and 38.7% at baseline. The final prevalence rate of stunting was 8.1%, thinness was 8.7% and overweight/obesity was 4.4%. Thinness declined significantly in 2014 compared to 2009, but there was no change in the rate of stunting even though the rate of overweight/obesity showed an upward trend. When comparing intervention with control schoolchildren, the only significant differences found in the final survey were less thinness and less anaemia in the intervention children. However, the prevalence of anaemia was also significantly lower in the intervention group at baseline. Our results point to a significant improvement in the nutritional status of schoolchildren in Ouagadougou and suggest a positive, although modest, role for the Nutrition-Friendly School Initiative in reducing thinness, but not overweight. (Global Health Promotion, 2020; 27(2): 26–34)

Keywords: Africa, Burkina Faso, malnutrition, obesity/overweight, micronutrient deficiency, school-aged children, nutritional status, anthropometry

Background

For some years now, the double burden of malnutrition (DBM) has been growing in developing countries, even in low-income countries of Latin America, Asia and Africa (1). The DBM is the co-occurrence of two distinct but related aspects of malnutrition. It is defined as the coexistence of under-nutrition – wasting, stunting or micronutrient malnutrition – with obesity or

1. University of Montreal, Montreal, Quebec, Canada.
2. University of Montreal, Montreal, Quebec, Canada.
3. University of Ottawa, Ottawa, Ontario, Canada.

Correspondence to: Malek Batal, Department of Nutrition, University of Montreal, Pavillon Liliane-Stewart, 2405, Chemin Côte Ste-Catherine, Room 2250-4, Montréal, Québec H3T 1A8, Canada. Email: malek.batal@umontreal.ca

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other chronic disease risk factors, such as hyperglycemia or hypertension, within the same country, community or household (1). Rapid onset and establishment of the nutrition transition in developing countries have explained this DBM, with a shift from a 'traditional' diet to a 'Western' diet (2). The latter is characterized by a higher consumption of fat, sugar, salt and processed foods, at the expense of the consumption of fiber, vegetables, fruits and unrefined foods (3). It is closely related to the globalisation process (4) wherein industrialisation and urbanisation in developing countries have been the main drivers of these changes in both children and adults (5). A study in urban areas of Nigeria in 2012 with 1599 students aged 5–18 years (6) confirmed the presence of the DBM with a prevalence of 8.3% of thinness in addition to 15.6% of overweight/obesity.

The Nutrition-Friendly School Initiative (NFSI) aimed to slow down the spread of the DBM among school-aged children. It was developed by the World Health Organisation (WHO) with partner organisations in 2006 following the meeting of health experts on childhood obesity in Japan (7). It shares some principles with the 'Baby-Friendly Hospital Initiative' (8), with an accreditation system so that schools get the label 'nutrition-friendly' when they meet the following five required conditions (7):

1. Existence of a school-written Nutrition-Friendly Schools policy.
2. Enhancement of awareness and capacity-building within the school community.
3. Development of a school curriculum aiming to promote nutrition and health.
4. Creation of a supportive school environment.
5. Provision of supportive school nutrition and health services.

The NFSI was implemented on a pilot basis, using a quasi-experimental approach in Ouagadougou (Burkina Faso) in order to assess its effectiveness (9,10). Each intervention school formed a NSFI committee including parents, students, a health worker, a representative of the community and teachers (11). This committee undertook an initial self-assessment directed at the five conditions of the NFSI to define the priority actions to meet these conditions (9,12,13). Therefore, the intervention schools did not all implement the same activities. For instance, a nutrition day was organized in some schools with the involvement of the whole community. Other actions undertaken in the various intervention schools are described elsewhere (9). In all the intervention schools, training workshops on nutrition education were offered to teachers, and food vendors operating in the school precincts were trained in hygiene and nutrition. Similarly, teachers of all the intervention schools were trained in nutrition surveillance by learning how to measure children's height and weight on a yearly basis and interpret the individual Body Mass Index (BMI) charts.

It was hypothesized that the nutritional status of the intervention schoolchildren would be better than that of the control schoolchildren even if not all the intervention schools had entirely fulfilled the conditions to become 'nutrition-friendly schools' by the end of the project. A baseline study was conducted in 2009 in selected Ouagadougou schools (14). The objective was to evaluate nutritional status and its determinants in 5th grade schoolchildren in order to inform the intervention, as well as to allow for the assessment of the NFSI impact a few years later. The selected urban and suburban schools included six intervention and six control schools matched for size, neighborhood and status. The methods and findings of the baseline survey are available elsewhere (14–17).

The main objective of this study was to assess the impact of the NSFI on schoolchildren's nutritional status by analysing the new data collected in 2014 in the same schools and comparing the results with those collected in 2009.

Methods

School and child samples

The post-intervention cross-sectional study was conducted in February 2014 in Ouagadougou, with the same survey team as for the baseline study.

Six intervention schools had been chosen in 2009 in consultation with the Ministry of Primary Education, and six control schools were matched according to school size, type (private/public) and location (urban/suburban) for the baseline study (12). Of the 12 schools, there were eight public and four private schools. Six of the eight public schools were located in urban areas, and two were in suburban areas. All private schools were located in an urban environment. In 2014, the same schools, but not the same students, were targeted for the follow-up study.

As explained elsewhere, (14) based on the prevalence of 40% of anaemia in this population of school-aged children, a sample size of 770 pupils was needed for the baseline and follow-up study in order to detect significant differences between intervention and control schoolchildren. A total of 735 pupils were included in the impact study, and 653 were retained for the analysis after exclusion of those with incomplete data (primarily date of birth). A subsample of 184 pupils (50% boys) was randomly selected for blood sampling for the analysis of Vitamin A status.

Anthropometric and biochemical measures

As described elsewhere (14,15,18), weight and height were measured in accordance with WHO guidelines (19). A subsample of pupils was randomly selected for analysis of serum retinol, alternating boys and girls. A note was sent to the parents so that they would send their children on an empty stomach the next day, because the blood sample had to be collected after a 12-h fast (20). The same technicians collected about 5 mL of venous blood from the antecubital vein in the subsample of pupils. Blood samples were kept protected from light at 4°C and rapidly brought to the laboratory at the University of Ouagadougou for analysis of serum retinol using High Performance Liquid Chromatography (21).

Blood was collected by the biological technicians at the tip of the middle finger of all schoolchildren to test for hemoglobin (Hb). After eliminating the first two drops, the third was used to fill the microcuvette, which was placed on the HemoCue device (HemoCue America). The Hb value was read on the screen (18).

Anaemic children were identified according to the following reference values by age categories: Hb < 11.5 g/dL for children aged 5–11 years, and Hb < 12 g/dL for those aged 12–14 years (22). Serum retinol concentrations less than 0.7 µmol/L indicated VAD (23).

Using the software Anthro+ (WHO, 2007), BMI was computed as weight divided by height squared. Based on the WHO reference values for boys and girls aged 5–19 years (24), the Z-scores for BMI-for-age (BMIAZ) were calculated to assess thinness, which was defined as a $BMIAZ < -2.0$, overweight, defined as $BMIAZ > +1.0$, and obesity defined as $BMIAZ > +2.0$, and Z-scores for height-for-age (HAZ) to assess stunting, defined as $HAZ < -2.0$.

Statistical analysis

Field data were entered in duplicates on Excel files (Microsoft, Redmond, WA), and then transferred. Statistical analyses were performed using Statistical Package for the Social Sciences (SPSS) 21.0 software (IBM, Armonk, NY). Comparisons of means used t-tests for independent samples whereas proportions were compared with chi-squared tests. Logistic regression tests were used to identify independent associations between nutritional parameters (overweight/obesity, thinness, stunting, VAD and anaemia) as dependent variables and school characteristics (intervention/control, public/private, urban/suburban), year of study (2009/2014) and the interaction between the year of study, school category (intervention vs. control), school type and school location as independent variables. The statistical tests were considered significant at $p < 0.05$.

Ethical considerations

The study was approved by both the committees of ethics of the University of Montreal (CERES, Canada) and of the Ministry of Health of Burkina Faso. Parental signed consent was collected before enrolment, and children had to assent orally to participate in the study.

Results

The study sample included 698 schoolchildren in 2014 and 799 five years earlier. Thirty-one pupils older than 168 months (14 years) and 14 children with incomplete data were excluded from the 2014 study, whereas 150 pupils were excluded from the 2009 study (14). A total sample of 653 subjects for the impact study and 649 for the baseline study with complete data were included in the analyses. The subsamples included 184 subjects in 2014 and 173 in 2009.

The pupil sample characteristics for both studies are shown in Table 1. The 2014 study sample included more girls (54.7%) than boys. About 89%

Table 1. Pupil characteristics in the 2009 and the 2014 total samples.

	2009	*2014*
	Total (%)	
Sex		
Boys	309 (47.6)	296 (45.3)
Girls	340 (52.4)	357 (54.7)
P[a]	*0.409*	
Type of school		
Public (*n* = 8)	457 (70.4)	476 (72.9)
Private (*n* = 4)	192 (29.6)	177 (27.1)
P[a]	*0.321*	
Location of school		
Urban area (*n* = 10)	543 (83.7)	540 (82.7)
Suburban (*n* = 2)	106 (16.3)	113 (17.3)
P[a]	*0.639*	
Category of school		
Intervention (*n* = 6)	304 (46.8)	314 (48.1)
Control (*n* = 6)	345 (53.2)	339 (51.9)
P[a]	*0.653*	
Age category		
8–11 years	454 (70.0)	454 (69.5)
12–14 years	195 (30.0)	199 (30.5)
P[a]	*0.866*	
Total	**649 (100)**	**653 (100)**

P[a]: *p*-value for the χ^2 test.

of students were 8–12 years old, and the average age was 11.4 ± 1.1 years. In 2014, 82.7% of pupils were in urban schools. There were 314 (48.1%) children in the six intervention schools and 339 (51.9%) in the six control schools. Overall, there were no significant differences in the characteristics of the pupils according to school category.

The prevalence of general and micronutrient malnutrition, in the total samples and in the subsamples of both studies, is shown in Figure 1. Micronutrient deficiencies were less prevalent in schools in 2014 than in 2009: anaemia affected 32.6% of children in 2014 compared to 40.4% in 2009 ($p = 0.004$), and VAD was also significantly more prevalent in 2009 (38.7%) than in 2014 (26.1%) ($p = 0.011$). Moreover, there were statistically significantly fewer students ($p = 0.004$) who were thin in 2014 (8.7%) compared to 2009 (13.7%). Regarding stunting, there was a decreasing trend in its prevalence from 2009 to 2014. The rate of overweight rose from 1.7% to 3.4% over the five-year period, but the difference was not significant. Finally, the rate of obesity did not change.

The results of the multiple logistic regression models of nutritional status variables on school characteristics are presented in Table 2.

Considering first the general (anthropometric) nutritional status of children, the NFSI intervention in itself (school category) showed a significant effect on thinness ($p < 0.01$) and anaemia ($p < 0.001$). The interaction between year of study and school category was significant for thinness ($p < 0.05$), with an odds ratio (OR) = 0.47, meaning that the intervention significantly reduced the likelihood of thinness beyond the observed trend between 2009 and 2014.

Another significant and independent school feature associated with child anthropometric status was its location (urban/suburban), which was associated with both overweight/obesity and stunting. Pupils attending a suburban school were approximately eight times less likely than pupils attending an urban school to be overweight or obese ($p < 0.05$). Conversely, children were 1.7 times more likely to be stunted in suburban schools than in urban schools ($p < 0.05$).

Concerning VAD, the logistic regression model with interactions (model 2) significantly explained 22.3% of the variability ($p < 0.001$). The analysis showed that the year of study was a significant predictor for improved VAD status with an odds ratio of 0.52 ($p < 0.01$), meaning that children were 1.9 times more likely to have an adequate Vitamin A status in 2014 compared to 2009, independent of the school category, as there was no interaction between school category and the study year. The type of school (public/private) was the most significant predictor, with eight times the odds of VAD in public compared to private schools. In addition, children in intervention and public schools were 10 times more likely to be deficient in vitamin A than those in control and private schools.

Regarding anaemia, both the year 2014 and the intervention school category were independently associated with significantly lower odds (OR = 0.70; 95% confidence interval (CI) = 0.56–0.89; and OR = 0.60 95% CI = 0.48–0.76, respectively), but there was no interaction. The type of school was also a significant predictor of anaemia, with a 52% higher likelihood in public compared to private schools, in

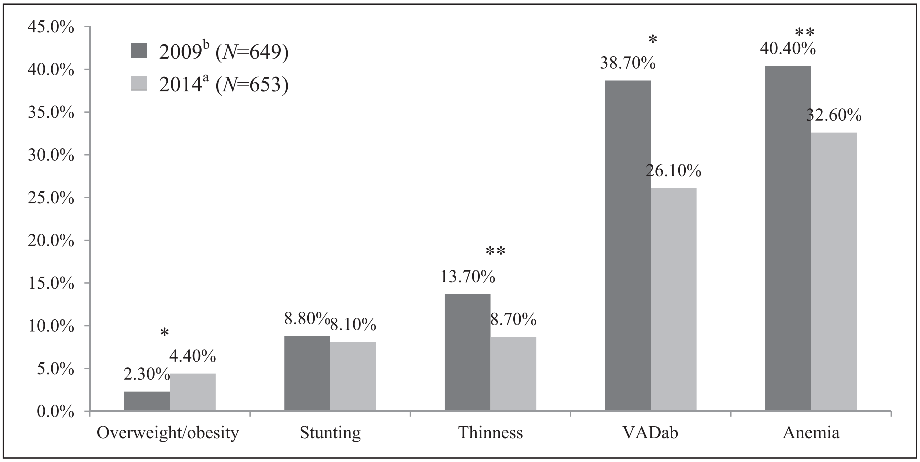

Figure 1. Nutritional status parameters in schoolchildren in Ouagadougou, Burkina Faso in 2009 and 2014 (whole sample).
a: $N = 184$; b: $N = 173$.
p-values for the χ^2 test: $^*p \leq 0.05$; $^{**}p \leq 0.01$.

addition to a significant interaction depending on the effect of school category ($p < 0.05$).

Discussion

The objective of this study was to analyse the anthropometric and biological data of school-aged children in Ouagadougou, Burkina Faso in 2014, as part of the evaluation of the NFSI that was implemented in six primary schools in 2009 (14).

As the multivariable analysis showed, the NFSI had a positive effect over five years on the prevalence of thinness and anaemia, with a decline in both conditions. Other changes between intervention and control schoolchildren were modest and non-significant, but school characteristics such as school location (urban/suburban) and school type (public/private) were significantly associated with nutritional parameters.

The general and micronutrient nutritional status was better in private compared with public schoolchildren. As for the school location, suburban schoolchildren were at higher odds of undernutrition (stunting) but lower odds of ‘overnutrition’ (overweight).

Considering the whole sample, there was a significant decrease in the prevalence of anaemia and VAD between the baseline and the follow-up study. Despite this decline, the prevalence of these nutritional problems was still high and can still be considered a public health problem (19). These results are consistent with studies in Nigeria (25), Ghana (26) and other African countries (27). Indeed, micronutrient malnutrition may affect not only the physical health of children but also their mental development. For example, iron deficiency was associated with poor performance in infant development scores, lower IQ and poor learning among preschoolers, and lower school achievement in school-aged children (28).

Regarding general malnutrition, the total prevalence of stunting in 2014 was 8.1% and thinness affected 8.7% of the pupils compared to 8.8% and 13.7%, respectively, in 2009. These results are at variance with a meta-analysis of studies published from 2002 to 2009, which reported much higher rates of stunting and thinness in children aged 6–12 years in the African region, at 22% and 36%, respectively (29). However, the review included data from both urban and rural areas (29), while our study was mainly conducted in an urban environment, where stunting and thinness are known to be less common. Additionally, we observed a significant decrease in the prevalence of anaemia in the urban schools of the study, dropping from 40.7% in 2009 to 29.1% in 2014 ($p = 0.0031$). The overall decrease in the prevalence of thinness and anaemia in our

Table 2. Multiple logistic regression analysis of nutritional status indicators in schoolchildren in 2009 and 2014 on school characteristics.

	Overweight/obesity		*Thinness*		*Stunting*		*Vitamin A Deficiency*		*Anaemia*	
	Model 1	*Model 2*	*Model 1*	*Model 2*	*Model 1*	*Model 2*	*Model 1*	*Model 2*	*Model 1*	*Model 2*
	OR (95% CI)	*OR (95% CI)*	*OR (95% CI)*	*OR (95% CI)*	*OR (95% CI)*	*OR (95% CI)*	*OR (95% CI)*	*OR (95% CI)*	*OR (95% CI)*	*OR (95% CI)*
Independent variables										
School category										
Control	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Intervention	0.73 (0.39–1.34)	0.63 (0.19–2.11)	0.62** (0.43–0.88)	0.79 (0.44–1.42)	0.91 (0.61–1.34)	0.70 (0.36–1.37)	1.09 (0.67–1.75)	0.65 (0.31–1.38)	0.60*** (0.48–0.76)	0.44*** (0.30–0.65)
Year of study										
2009	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2014	2.01* (1.07–3.80)	1.68 (0.75–3.78)	0.61** (0.43–0.86)	0.80 (0.51–1.24)	0.91 (0.61–1.34)	0.97 (0.57–1.65)	0.52** (0.32–0.83)	0.36** (0.18–0.72)	0.70** (0.56–0.89)	0.64** (0.47–0.88)
School type										
Public	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Private	1.33 (0.71–2.50)	1.69 (0.76–3.76)	1.23 (0.82–1.84)	1.18 (0.70–2.00)	0.76 (0.46–1.25)	0.45* (0.20–0.99)	0.12*** (0.06–0.26)	0.02*** (0.01–0.18)	0.65** (0.50–0.86)	0.48*** (0.33–0.71)
School location										
Urban	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Suburban	0.12* (0.02–0.89)	0.00 (0.00–0.00).	1.41 (0.89–2.23)	1.41 (0.80–2.48)	1.73* (1.07–2.77)	1.42 (0.76–2.66)	1.03 (0.58–1.85)	1.09 (0.49–2.41)	1.28 (0.94–1.75)	1.13 (0.75–1.70)
Interactions										
School category/ year		1.58 (0.42–5.91)		0.47* (0.22–0.99)		0.85 (0.38–1.87)		1.98 (0.75–5.18)		1.21 (0.76–1.93)
School category/ school type		0.56 (0.15–2.03)		1.10 (0.49–2.50)		2.74 (0.96–7.78)		10.42* (1.15–94.73)		1.89* (1.09–3.27)
School category/ school location		1.83x10^7 (0.00– .)		1.05 (0.40–2.75)		1.61 (0.61–4.22)		0.87 (0.27–2.82)		1.34 (0.71–2.50)
R^2 of model	0.050**	0.059**	0.027**	0.033**	0.015	0.022	0.195***	0.223***	0.047***	0.052***

Note: All nutritional statuses are coded as 1 for ‘yes’ and 0 for ‘no’. ‘Control schools’, ‘2009’, ‘public schools’, and ‘urban schools’ are the reference categories.
Model 1 includes logistic regression tests for independent variables independently.
Model 2 includes, in addition to Model 1, logistic regression tests for interactions between independents variables and school category.
OR: odds ratio; 95% CI: 95% confidence interval.
$*p \leqslant 0.05$; $**p \leqslant 0.01$; $***p \leqslant 0.001$.

study shows that the nutritional status of school-aged children improved between 2009 and 2014, which contrasts with the findings of other reports (29,30). This improvement can be explained by the fact that, in 2008, Burkina Faso was hit by an economic crisis that left the country in deeper poverty and food insecurity. Food price increases were correlated with a decrease in the consumption of fruits and vegetables, dairy products, and meat and poultry (31). Because the baseline study data were collected during the first months of the following year, the relatively higher rates of malnutrition could have been associated with this economic crisis.

In the total samples, only the rate of overweight/obesity increased between 2009 and 2014, from 2.3 to 4.4% ($p = 0.033$). This significant difference may be interpreted as reflecting the ongoing nutrition transition, with dietary shifts toward Western eating patterns combined with more sedentary lifestyles, both in children and in adults (15–17). In adults, the diet consumed in urban areas of Benin, for instance, was found to be conducive to cardiometabolic risk factors, such as lower concentrations of HDL-cholesterol and higher rates of hypertension and obesity (32–34).

In the intervention schools, 32.6% of schoolchildren were anaemic in 2009 compared to 27.7% in 2014. Also, 36.1% had VAD in 2009 compared to 28.4% in 2014. These are positive trends, although similar trends were also observed in the control school children. Among the latter, 47.2% were anaemic in the baseline study and 37.2% in the impact study ($p = 0.008$), and VAD decreased from 41.1% to 24.0% ($p = 0.012$). In the intervention schools, pupils had a higher rate of overweight in 2014 than their counterparts in 2009, increasing from 1.0% to 2.9%. This increase, although not significant, is a cause of concern even if the overall rate is still relatively low.

Undernutrition and micronutrient malnutrition are still strongly predominant. The nutrition transition is at its early stages, but efforts are needed to prevent its progression. This is the overall goal of the NFSI.

As stated above, only modest changes were noticed when comparing the nutritional parameters in intervention and control schools, other than a significant reduction in the rate of thinness and anaemia in intervention schools. That is also true for other school characteristics, such as school category and school location. It is possible that some contamination of control groups occurred, as nutrition and food safety actions in the intervention school may have also spread to the control school that was matched for location, type and size (14). Also, after the 2008 economic crisis in Burkina Faso (31), improvement measures were implemented in the country. As mentioned in the Strategic Plan for Nutrition (2010–2015) by the Ministry of Health in Burkina Faso, the Government adopted a national nutrition policy in 2007, which is a framework to organize, strengthen, unite synergies of actions and enhance interventions in favour of nutrition in the health sector (35). The nutritional improvements noted in both intervention and control schools may reflect the beneficial effects of such a policy. Had the intervention been more intensive and more homogeneous across the exposed schools, its nutritional impact might have been enhanced. However, not all the schools undertook the same nutrition-related activities. According to the principles of the NFSI, the schools themselves decide on the changes to be made and they have to use their own resources as much as possible, for the sake of sustainability. As we mentioned in a previous paper on this NFSI pilot testing in Burkina Faso and Benin (9), successful implementation of this intervention is indeed challenging. Nevertheless, the positive nutritional trends reported in this paper have to be regarded as a sign of an encouragement to pursue the deployment of the NFSI.

Strengths and limitations of the study

This study is, to our knowledge, the first to assess the impact of the NFSI on the nutritional status of schoolchildren. The sample size was large enough to detect small effects (14). However, this study also has some limitations. First, a high number of children were excluded because of missing data. Second, the results may not be extrapolated to all school-aged children of Burkina Faso because only about 52% of them attend primary school (36) and because only urban and suburban schools were included in the study and the intervention. Also, there was no way of defining the intensity level of the implementation of the NFSI in the intervention schools and, therefore, it is not possible to confirm that the NFSI is an effective framework for the prevention of the DBM and nutrition-related non-communicable diseases. Finally, although this study was only carried out among 5th graders, the intervention involved all pupils in the schools, which means that it is possible that the intervention may have had an impact on younger pupils as well.

Conclusion

The double burden of malnutrition is now an issue in several low- and middle-income countries, in children as much as in adults. Although it does not yet appear to be a major problem in school-aged children in the capital city of Burkina Faso, the persistence of high levels of micronutrient malnutrition coupled with an increasing rate of overweight should be a matter for concern. Prevention plans targeting undernutrition and overnutrition together, not separately, are needed.

Our results show a significant improvement in the nutritional status of the schoolchildren studied in Ouagadougou, with an additional positive impact of the NSFI on the prevalence of thinness and anaemia five years later. Although the NFSI did not reverse the trend of increasing overweight, it may have improved pupils' nutrition-related practices, as well as the schools' nutrition and food safety environment, with a possible longer-term impact on nutritional status.

Preventing and slowing the development of the double burden of malnutrition and chronic diseases in children must remain a priority for public health and nutrition experts in order to foster healthy lifestyles among future adults.

Authors' contributions

HD designed the study and supervised field methods. CD collected the field data. CEE analysed and compared the anthropometric and biological data under the supervision of MB. CEE drafted and wrote the paper, and all coauthors reviewed and commented on the draft.

ORCID iD

Christelle Elkhouri Edde, https://orcid.org/0000-0001-6211-1767.

Conflict of interest

The authors declare that there is no conflict of interest.

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Original Article

A stakeholder analysis of community-led collaboration to reduce health inequity in a deprived neighbourhood in South Korea

Hyun-Hee Heo[1], Woojin Jeong[2], Xian Hua Che[3] and Haejoo Chung[3,4]

Abstract: Intersectoral collaboration amongst health and other sectors, as well as between government and non-governmental organisations, has been highlighted as a way to improve health equity. We used a mixed-methods approach to assess collaborative relationships between multiple government sectors and civil society and to suggest possible health promotion interventions and policy alternatives for the urban poor in deprived neighborhoods. A total of 18 participants involved in health promotion interventions and policy processes related to the inner-city area of Seoul were recruited using purposive sampling methods. Participants included stakeholders working for or engaging in governments (3), public health care institutions (5), social service providers (3), community-based organisations (CBOs) (4) and faith-based organisations (3). We conducted semi-structured, one-on-one interviews and then collected survey data. Quantitative data were analysed using social network analysis, and qualitative data were analysed through iterative and consensus processes. The social network analysis indicated that a CBO plays the most substantial role in sharing and controlling informational resources to promote health. A stakeholder analysis showed that the CBO neutrally and negatively viewed the possibility of collaboration with other stakeholders. Three themes related to challenges to intersectoral collaboration emerged: (1) lack of trust and communication, (2) need of a coalition with a committed leading actor for future collaboration and (3) organisational and political silos within and across public sectors. Increased understanding of the current status of and challenges to collaboration can inform the planning and implementation of complex intervening strategies and policies tailored to vulnerable people in deprived neighborhoods. Community-led collaborative actions empower people in marginalised communities to envision a healthier community. (Global Health Promotion, 2020; 27(2): 35–44)

Keywords: intersectoral collaboration, health inequity, community-based organisation, capacity building (including competencies), collaboration, partnerships, community action

Introduction

Health inequity has no simple causes or solutions. People experience health inequity in their lives under systemic inequalities, and these disparities rarely stem from only one source of vulnerability (1). Comprehensive approaches to improving health equity address social determinants of health (SDH) (2). Inequalities in health are particularly prevalent amongst vulnerable populations because they are more severely influenced by the combined detrimental impacts of SDH. Health inequities cannot be resolved merely by improving downstream determinants such as better medical care or

1. Seoul Health Foundation, Department of Community Health, Seoul, South Korea
2. Korea Health Promotion Institute, Office of Strategy & Planning Support, Seoul, South Korea
3. BK21PLUS Program in Embodiment: Health-Society Interaction, Department of Public Health Sciences, Graduate School, Korea University, Seoul, South Korea
4. School of Health Policy and Management, College of Health Science, Korea University, Seoul, South Korea

Correspondence to: Haejoo Chung, B-365, Hana Science Building, 145 Anam-ro, Seongbuk-gu, Seoul 02841, South Korea. Email: hpolicy@korea.ac.kr

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education related to changing health behaviors at an individual level (1,3). Instead, they must be addressed at multiple levels, especially focusing on improving upstream determinants including the fair distribution of social and economic resources in the community. The ecological approach to health promotion is important for reduction of health inequity because it is a comprehensive multi-level framework to understand and address contextual determinants blocking opportunities for vulnerable people to achieve their full health potential (4,5).

No one person, organisation or sector can work alone to address SDH (6). Health inequity challenges tend to drive new approaches to governance for health based on collaborative actions related to SDH (7). Since various actors including government sectors, the private sector and civil society are highly interdependent when working to resolve health inequity issues, intersectoral collaboration could be employed to create healthier communities (8). A myriad of organisations in many countries have been working together to engage people in communities and organisations from different sectors in addressing the underlying nature of health inequity and integrating health and social services at the local level (9,10). Vulnerable groups can especially benefit from comprehensive services encompassing a continuum of community health, including prevention, treatment and rehabilitation (11). Key players in community health can utilize their limited resources more efficiently through collaborative efforts.

Socioeconomic inequalities in health outcomes and health-related behaviors are prevalent, and their magnitude has become increasingly severe in South Korea (12,13). Multiple stakeholders in communities have collaborated to reduce health inequity amongst socioeconomically vulnerable populations (14). However, there is limited literature to assess the dynamics of community collaboration from the stakeholders' perspective in South Korea.

The study of collaboration in community health has developed in terms of definition and categorisation of working relationships based on intensity and level (15). Butterfoss identified four stages of working relationships: networking, cooperating, coordinating and collaborating. Networking represents intermittent information sharing for mutual benefit through dialogue, common awareness and understanding, and creating a base of support, whereas collaboration is the highest level of working relationship. As the intensity and level of working relationships progress, the purpose of these relationships can become more complex: information sharing should link to joint problem solving, and agreements become more formal to solidify the operating procedures and policies of health programmes. Alter and Hage (16) suggested two main concepts of community collaboration: perceived need and willingness to collaborate. Potential dependencies amongst organisations relate to the perceived need for collaboration and its consequent influence on organisational attitudes toward future collaboration. Bazzoli *et al.* (17) added ability: the capabilities of organisations to respond to changes in their environment and to engage in collaborative relations with other actors. The concept of community collaboration highlights which key actors are likely to have better access to, and utilisation of important information that flows through the network. It also identifies which key actors have the willingness to collaborate, what needs for collaboration are perceived and what challenges inhibit stakeholders from collaborating with others.

This study investigated three research questions based on the conceptual framework of community collaboration: How does each actor currently interact and collaborate with others in sharing information to promote health in the community? What attitudes do actors have toward future collaboration? What barriers have actors perceived when collaborating with others? Therefore, this study aims to contribute to an understanding of the structure and nature of relationships amongst actors in the community and provides a practical health governance model based on intersectoral collaboration for reducing health inequity.

The research setting

Single room occupancy (SRO) housing, known as *Jjokbang* in South Korea, provides shelter for approximately 6000 people in South Korea, more than half of whom live in Seoul (18). According to the city government survey in 2014, the majority of residents in SROs in Seoul are male, aged 50 and above, and live in single households (19). Forty percent of respondents to the same survey had experienced homelessness in the past. Residents have been struggling with overwhelming deprivation, isolation, community fragmentation, deterioration of mental health and alcohol abuse (20).

The city government and civil and private organisations have implemented several interventions to reduce health inequalities in SROs on either a regular or an irregular basis (14). Community health centres have provided nurse-led home visitation for the elderly and the disabled. Mental health social workers from the community mental health centre have counseled alcohol abuse patients through one-to-one counseling, peer group sessions and testimonies. The city government has attempted to improve living conditions by providing public housing and subsidizing renovations of shabby SRO buildings. With respect to civil society's actions to improve health, groups have attempted to tailor interventions in the cultural and historical contexts of the SRO area. For instance, the community-based organisation (CBO) in the area of 'SRO-Z' (a pseudonym for the research area) was founded by inhabitants and volunteers in 2009. The CBO has organised various self-support groups to promote health through measures such as controlling diabetes and hypertension, microfinancing, cleaning streets, safeguarding against and preventing crime, and gardening at the community level. Since SRO-Z has a CBO that actively participates in health promotion activities unlike others, we can access this hard-to-reach population and identify key actors to study intersectoral collaboration.

Methods

Study design

This study used a concurrent embedded strategy of mixed methods to analyse dynamics of community collaboration (21,22). This design combines a stakeholder analysis using qualitative data with a network analysis of quantitative data. A stakeholder analysis aims to understand key actors or to identify their relevance to a project or policy by asking about their position, influence, interrelations and other stakeholder characteristics (23). In this study, we used it to investigate each stakeholder's willingness to collaborate. Stakeholders' attitudes toward future collaboration and challenges to collaboration were analysed based on interviews. The perceived need for and barriers to collaboration were analysed through iterative and consensus processes.

At the same time, network analysis based on the survey data was used to assess the current status of working relationships and ability to collaborate amongst stakeholders. Network analysis is a research technique for assessing the development of inter-organisational relations and collaborations in community health promotion and health care systems (24). We integrated network analysis to assess current efforts at developing working relationships and identifying key actors playing critical roles in collaboration. We combined both qualitative and quantitative data to better understand the structure and nature of the intersectoral collaboration dynamics by converging the analysis of both detailed narratives and survey responses. This study was approved by the Institutional Review Board at Korea University.

Data collection

This study was conducted from June to September 2015 in a small community in Seoul, SRO-Z, where the largest number of people with precarious housing conditions reside. We used purposive sampling to build the sample population. To begin, groups of key actors for health promotion activities and decision-making were identified by a key CBO informant who had resided in the area and had been involved in health promotion activities for inhabitants for a long time. Three public sector groups and two groups in non-governmental sectors were identified. Lists of the group members' names were provided by three people from two different CBOs. Based on the lists, we began to identify and contact the key drivers who were most frequently mentioned in each group related to health promotion activities and decision-making in this SRO community. Finally, 18 stakeholders from 17 organisations were recruited. Participants worked for governments (3), public health care institutions (5), social service providers (3), CBOs (4) and faith-based organisations (FBOs) (3) (Table 1).

We conducted face-to-face, semi-structured interviews with the 18 stakeholders at a quiet meeting place or café; interview times varied, but our sessions generally lasted for about 1.5 hours. The interview guide is available upon request. After offering a complete description of the study to participants, written informed consent was obtained. Participants were asked whether their organisations were willing to collaborate with other actors on health promotion activities in the near future. They

Table 1. Characteristics of participants ($n = 18$).

Category	*Subcategory*	*Level*	*Organisation*	*Acronym*
Public sector	Government (3)	Dong	Community centre	CC
		Gu	*Gu* office	GO
		City	City Hall	CH
	Social service provider (3)	Gu	Community welfare centre	CWC
		City	*Jjokbang* counseling office	JCO
		Central	Community rehabilitation centre	CRC
	Public health care institution (5)	Gu	Community health centre	CHC
		Gu	Community mental health centre	CMHC
		City	Red Cross hospital	RCH
		City	Public hospital A	PHA
		Central	Public hospital B	PHB
Civil society	Community-based organisation (4)	Dong	Community-based organisation A	CBOA
		Central	Community-based organisation B	CBOB
		Central	Community-based organisation C	CBOC
	Faith-based organisation (3)	Dong	Faith-based organisation A	FBOA
		Dong	Faith-based organisation B	FBOB
		Dong	Faith-based organisation C	FBOC

[a] *Gu* is the largest administrative district unit and *Dong* is the smallest in South Korean urban cities.

were also asked to address current needs and problems related to promoting collaboration. Interviews were audio-recorded, with notes taken by the research team. All interview sessions were transcribed.

For network analysis, all those interviewed were shown the full list of 17 organisations with the survey and asked, ‘In the past year, did your organisation have a working relationship or engage in information sharing with other organisations about health promotion activities?’ Since there has been no formal health promotion initiative based on collaborative work in this community, the working relationship amongst actors was based on the definition of ‘networking’.

Data analysis

Interview transcripts were uploaded to NVivo 10, a qualitative data analysis programme (QSR International Pty Ltd) for the stakeholder analysis. Specifically, we coded for ‘attitudes toward future collaboration’ with three positions: positive, neutral and negative. Consecutively, we produced a position map presenting which actors were willing or unwilling to collaborate and where they were by sector. The rows were labeled with the sector categories (e.g. government, civil society) and the columns were labeled with the positions of the stakeholders. Then, each stakeholder’s position was indicated using grey (positive) or black (negative or neutral) nodes in the network analysis. Current needs or challenges related to collaboration were analysed with open coding followed by inductive refinement of themes. Two coders independently identified codes or categories. Then, we discussed and agreed on these through a consensus process.

Survey data were analysed for exploring working relationships in the community network using UCINET and NetDraw, a companion program for the visual depiction of networks. Several network-level measures of structure were assessed, including total number of ties, density and centralisation (25). ‘Network density’ is the number of reported links divided by the maximum number of possible links. The closer the density score is to zero, the less the network is fully connected. A fully connected network has a density score of 1.0. ‘Centralisation’ refers to the extent to which network links are focused on one or a few actors in the network. In a perfectly centralised network (value of 1.0), one actor controls all of the activity, whereas in a decentralised network, every actor is equally in control and has equal access to all others. To assess status and interconnectivity within the network, we also examined the most frequently used measures in network analysis including ‘in-degree’ and ‘betweenness’ centrality. ‘In-degree’ centrality assesses the relative status of a given node (actor), and is useful for identifying key actors that embody the informational resources in a network. A higher in-degree score indicates higher popularity. ‘Out-degree’ centrality captures the actors’ sociality, referring to expansiveness. ‘Betweenness’ centrality identifies which actors in a network lie on the shortest paths between other units. Actors with high betweenness centrality control the flow of information amongst other nodes.

Results

The results of network analysis based on quantitative data found which actor was the key actor in disseminating and connecting informational resources (i.e. networking) in the community during the past year. Within the findings of stakeholder analysis, results of network analysis were embedded to explain which actors have the ability to collaborate. The stakeholder analysis based on qualitative data indicated which actors have the willingness to collaborate. The results of qualitative data analysis further explored the existing barriers to collaboration.

Structure and function of the network

The findings revealed several characteristics of the network (Figure 1). Overall, the network was connected at the intermediate level (network density = 0.415). The network was centralised at the medium level, having a centralisation score of 0.45. The number of ties was 113. Detailed characteristics of key actors based on degree and betweenness centrality in the network can be provided on request. Results of in-degree centrality indicated that CBO-A was the most popular actor, followed by the community centre, the community health centre and the *gu* office. Out-degree centrality showed that the community centre was the most social actor, followed by CBO-A, the *Jjokbang* counseling office, the community health centre and the community rehabilitation centre. CBO-A had the highest betweenness centrality in the network. The community centre also appeared to play a substantial bridging role between actors in the network. Three FBOs had particularly low linkage with other actors in the network map.

Attitudes, perceived needs and challenges to collaboration

Figure 1 includes a representation of the results of stakeholder analysis based on qualitative data. All public sector actors (grey nodes) had positive attitudes towards future collaboration, whereas civil society (black nodes) indicated mixed attitudes combining neutral and negative attitudes, except for FBO-C (grey nodes). The majority of health care institutions and social service providers understood the importance of intersectoral collaboration to build a healthy community and to provide integrated services combining health care with social services to reduce health inequity amongst vulnerable people:

> Interorganisational collaboration for health promotion is mandatory. One organisation has its limitations. The whole community should support the urban poor. (Director, Community rehabilitation centre)

> We should work with other organisations. Every actor has a different role in the community. Public hospitals, FBOs, and CBOs should share their responsibilities and collaborate. (Coordinator, Red Cross hospital)

In contrast, civil society had neutral or negative attitudes, except for FBO-C. Unenthusiastic attitudes amongst civil society groups were mainly associated with the lack of trust and communication. Respondents reported that they had experienced a lack of credibility in ‘outside agencies’ including government entities and the private sector. Stakeholders perceived that outsiders tend to objectify people in health promotion activities and policy decision-making processes. Stakeholders working for CBOs responded that the government tends to be indifferent towards the needs of the community, and is rather more interested in achieving health programme success. Some respondents mentioned that institutional rivalry hinders efforts to foster future collaboration between government and non-governmental sectors.

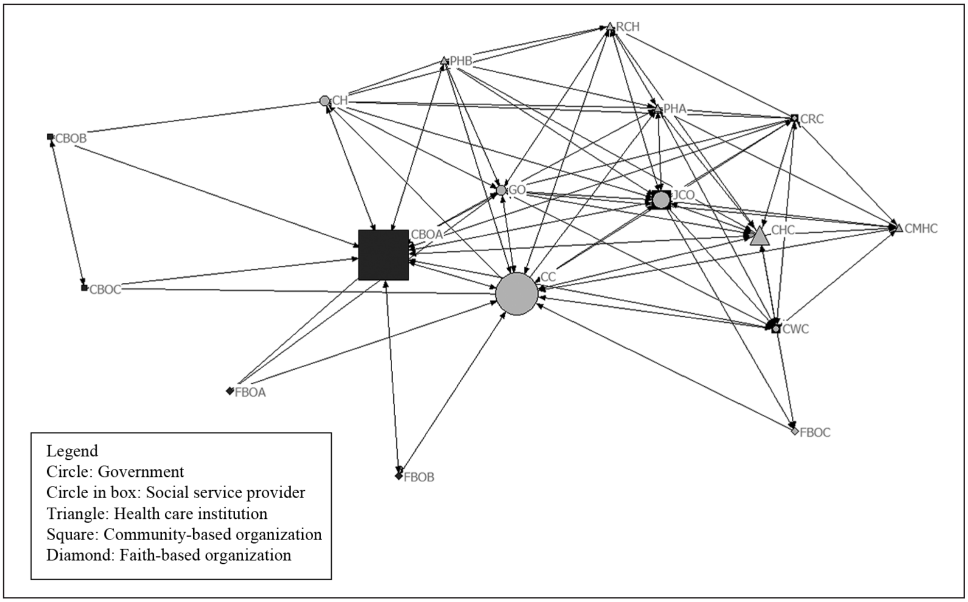

Figure 1. Network map of information exchange in the deprived neighborhood of Seoul.
Node size reflects an actor's 'betweenness' centrality. Grey nodes represent positive attitudes toward future collaboration, whereas black nodes indicate negative or neutral attitudes.
Legend. Circle: Government; circle in box: Social service provider; triangle: Health care institution; square: Community-based organisation; diamond: Faith-based organisation.
CC: Community centre; GO: *Gu* office; CH: City Hall; CWC: Community welfare centre; JCO: *Jjokbang* counseling office; CRC: Community rehabilitation centre; CHC: Community health centre; CMHC: Community mental health centre; RCH: Red Cross hospital; PHA: Public hospital A; PHB: Public hospital B; CBOA: Community-based organisation A; CBOB: Community-based organisation B; CBOC: Community-based organisation C; FBOA: Faith-based organisation A; FBOB: Faith-based organisation B; FBOC: Faith-based organisation C.

> I am a bit worried about collaboration between government and non-governmental sectors. Residents want to have a sense of "we-ness" when we get involved in any community health programmes. When we were requested to participate in government- and/or private sector-led activities, we were likely to be subjects of the programmes. (Coordinator, CBO-A)

> I think a social service provider (funded by the local government [added by authors]) has a low level of working relationship with a CBO in the community. Both of them want to greatly influence residents with their own goals and ways, respectively. So, there are sometimes conflicts amongst actors, which hinder their ability to communicate. We need to consider how we can change a competing relationship into a collaborative one. (Pastor, FBO-B)

Another theme of challenges to collaboration was the need for a coalition with a committed leading actor. Many stakeholders saw creating a coalition with a leading agency or group as critical for future collaboration. Even though qualitative data indicated that CBO-A played an important role in sharing information, engaging people, and advocating policy, respondents' perceptions about who should lead the future coalition were mixed. A majority of stakeholders thought CBO-A could be a leading agency owing to its local knowledge, skills and familiarity related to the community. A few stakeholders in government sectors thought CBO-A had limited resources and ability to work together:

> If the government would be a leading agency, it is not likely to run the community network in an effective way because of their bureaucratic and

> complex procedures. Instead, civil society groups could be leading actors. (Counselor, Community mental health centre)

> I think the leading organisation should be the one that knows the community's context and residents' culture well and have capacity to manage the community network. The representative agency of residents [CBO] is able to know the residents' living conditions and their needs. (Coordinator, Red Cross hospital)

> When I worked with CBO-A, I felt its expert knowledge was lower than that of government-funded organisations. I thought the staff were unskilled in collaborating. (Programme manager, Public hospital A)

Lastly, one more theme emerged: organisational and political silos within the public sector. Even though public sector stakeholders showed optimistic perceptions of future collaboration, they experienced that interactive working relationships across government-run or publicly-funded agencies were often impeded by outcome-oriented evaluation systems. Respondents mentioned that the public sector workforce was generally asked to implement programmes with limited human and funding resources and to demonstrate the success of health programmes with quantitative data after interventions. Additionally, a lack of permanent staff prohibited stakeholders from solidifying working relationships across sectors. These barriers resulted in fragmented delivery of health care and social services. The scarcity of resources caused some stakeholders to have jurisdictional disputes within the different levels of government:

> I haven't recently collaborated with the community health centre. When I sent the pamphlet to the community health centre to publicize free health screening programmes targeting poor people, the staff asked me not to send it. (Coordinator, Red Cross hospital)

> Intergovernmental relations are not good. The gu office asked the city government to take care of people in the inner-city area. They insisted that they are members of the city. However, I think they are residents of the *gu*, too. My department is also struggling with collaboration with other departments. (Programme developer, City Hall)

Discussion

This study aimed to examine dynamic community collaborations amongst stakeholders and their intentions toward future collaboration to reduce health inequity in an inner city in South Korea. Current status of community collaboration and ability to collaborate were assessed based on the lowest level of working relationships amongst actors. Stakeholders' willingness to collaborate, perceived need and challenges to collaboration were also examined. The results of network analysis embedded within those of stakeholder analysis can be applicable to organising community networks and boosting collaborations since a comprehensive view of all community assets revealed potentially relevant and powerful actors. In this study, both CBO-A and the community centre can be responsible entities that influence other stakeholders as leading organisations. In light of the concept of ability to collaborate in community collaboration, CBO-A, with the highest in-degree centrality, can be a leading actor with the highest level of prestige and status. Thus, CBO-A can be an opinion leader to build community capacity (26). It can also play an important role in facilitating community participation as a mediator with high betweenness centrality; it can bridge community health actors by distributing informational resources.

In the context of community health, collaboration has been addressed as a critical domain of community capacity (27). Community capacity can be developed through participatory collaborative processes, so the role of civil society is important for facilitating community participation. Previous research has shown that civil society groups can catalyze community participation in various ways: nurturing a base through community organising, encouraging the community to apply community experiences in health, and regularly communicating and linking local actors for health (28). Health promotion interventions led by CBOs were also considered effective in this inner city in South Korea (14).

However, in this study, civil society appeared to be unenthusiastic about collaborating with local government and government-run or publicly funded health care and social service providers. Civil society stakeholders perceived that citizens' broader ecological concerns would be ignored, even though they are major factors in their health, because those topics were outside the scope of the public sector's mandate. They thought that the public sector's response was too often determined by its philosophy and funding resources, not the needs of citizens. If civil society continues to have this unwelcoming perception of future collaboration with the public sector, collaborative efforts will not be stimulated because the CBO is a bridge that can either link actors or obstruct connections.

Even though both quantitative and qualitative results revealed that the CBO could be a leading actor in community collaboration, a few public sector actors showed concern about their lack of expert knowledge and resources. These perspectives tend to create a bias against CBOs' capacity because they focus on expert-driven solutions to health problems, that is, the problem-based approach (29). In contrast, the asset-based approach, which stresses the importance of lived experience and local skills, has gained international attention as a guiding principle in health promotion (30). In this tradition, lay knowledge and cultural sensitivity are critical for the reduction of health inequity.

Responding to international efforts, several local governments in Seoul have attempted to create public-private partnerships between community health centres and existing CBOs in the community (31). Since government and professional groups tend to have more power and ownership than do grassroots organisations, public sector stakeholders should consider the community-led coalition model to advance this initiative in the South Korean context. Furthermore, as the present study delineated, public sector stakeholders tend to devalue community assets; thus, mistrust and disagreements between public sector and civil society actors would remain. In the community-driven coalition model, community ownership is higher, but the public sector is more likely to provide administrative and material resources (15).

Finally, organisational and political silos within and across the public sector have become a huge challenge to collaborative governance and practices in the community. The results of this study identified critical variables that create silos: low motivation to participate, power and resource imbalance and ambiguity in regulation and guidelines. These results are consistent with the results of a meta-analysis of 137 cases of collaborative governance (32). To build and sustain successful collaboration and break down silos, there should be incentives for stakeholders to participate, a balance of power and resources, and good leadership and institutional design. In the current study, the outcome-oriented evaluation system was also identified as creating public administrative problems that hamper collaborative governance (33). The public sector needs to develop a new evaluation system to boost collaborative governance and practices to reduce health inequity.

Despite the strengths of this study, there are several limitations. First, the network analysis study only provides an examination of a single network related to health promotion in one community. Thus, attempts to generalize to other settings cannot be reasonably made. Second, interviewees' qualitative responses could be influenced by their perceptions of what the researcher wants to hear. Third, the research only describes a cross-sectional examination of the community network, so its interpretations have limited ability to detect changes in the evolution processes of the network. In future research, investigating the network structure at multiple time points would be useful.

Conclusion

Poor health amongst the urban poor can be resolved through collaboration amongst actors and connection to broader community concerns. Stakeholders in communities need to establish working relationships that extend beyond their own immediate networks. Creating a healthier community for vulnerable people in deprived neighborhoods requires allocating resources in ways that will improve community conditions that shape health, as these are upstream contributors to health. Community-driven, multisectoral collaborations play a key role in redirecting and expanding effective upstream interventions. Moreover, to repair the fragmented social safety net that inhibits integration of health care and social services, intersectoral collaboration needs to be established between stakeholders who are currently polarised and skeptical of each other's motivations. Indeed, intersectoral collaboration should be further investigated and supported to obtain the full range of knowledge, skills and resources that the community needs.

Authors' note

The preliminary results were presented at the 13th East Asia Social Policy Network Annual Conference in July 2016.

Conflict of interest

The authors declare that there is no conflict of interest.

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ORCID iD

Haejoo Chung https://orcid.org/0000-0002-2661-4161

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Original Article

Building the capacity – examining the impact of evidence-based public health trainings in Europe: a mixed methods approach

Natalicio Serrano[1], Gunter Diem[2], Vilius Grabauskas[3], Aushra Shatchkute[4], Sylvie Stachenko[5], Anjali Deshpande[6], Kathleen N. Gillespie[7], Elizabeth A. Baker[7], Erkki Vartinaien[8] and Ross C. Brownson[1,8]

Abstract

Objective: Since 2002, a course entitled 'Evidence-Based Public Health (EBPH): A Course in Noncommunicable Disease (NCD) Prevention' has been taught annually in Europe as a collaboration between the Prevention Research Center in St Louis and other international organizations. The core purpose of this training is to strengthen the capacity of public health professionals, in order to apply and adapt evidence-based programmes in NCD prevention. The purpose of the present study is to assess the effectiveness of this EBPH course, in order to inform and improve future EBPH trainings.

Methods: A total of 208 individuals participated in the European EBPH course between 2007 and 2016. Of these, 86 (41%) completed an online survey. Outcomes measured include frequency of use of EBPH skills/materials/resources, benefits of using EBPH and barriers to using EBPH. Analysis was performed to see if time since taking the course affected EBPH effectiveness. Participants were then stratified by frequency of EBPH use (low v. high) and asked to participate in in-depth telephone interviews to further examine the long-term impact of the course ($n = 11$ (6 low use, 5 high use)).

Findings: The most commonly reported benefits among participants included: acquiring knowledge about a new subject (95%), seeing applications for this knowledge in their own work (84%), and becoming a better leader to promote evidence-based decision-making (82%). Additionally, not having enough funding for continued training in EBPH (44%), co-workers not having EBPH training (33%) and not having enough time to implement EBPH approaches (30%) were the most commonly reported barriers to using EBPH. Interviews indicated that work-place and leadership support were important in facilitating the use of EBPH.

Conclusion: Although the EBPH course effectively benefits participants, barriers remain towards widely implementing evidence-based approaches. Reaching and communicating with those in leadership roles may facilitate the growth of EBPH across countries. (Global Health Promotion, 2020; 27(2): 45–53)

1. Prevention Research Center in St Louis, Brown School, Washington University in St Louis, St Louis, MO, USA.
2. Vorarlberg Public Health Society, Vorarlberg, Austria.
3. Department of Preventive Medicine, Lithuanian Health Sciences University, Kaunas, Lithuania.
4. Former Regional Adviser, Chronic Diseases, CINDI Coordinator, WHO Regional Office for Europe, Copenhagen, Denmark.
5. School of Public Health, University of Alberta, Edmonton, Canada.
6. University of Iowa College of Public Health, Iowa City, IA, USA.
7. College for Public Health & Social Justice, St Louis University, St Louis, MO, USA.
8. National Institute for Health and Welfare, Helsinki, Finland.
9. Division of Public Health Sciences and Alvin J. Siteman Cancer Center, Washington University School of Medicine, Washington University in St Louis, St Louis, MO, USA.

Correspondence to: Natalicio Serrano, Washington University in St Louis. Campus Box 1196, 1 Brookings Drive, St Louis, Missouri 63130, USA. Email: nserrano@wustl.edu

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Keywords: Capacity building (including competencies), chronic disease/non-communicable disease, collaboration/partnerships, public health, health promotion

Introduction

Evidence-based public health (EBPH) has been concisely defined as 'the process of integrating science-based interventions with community preferences to improve the health of populations' (1). Other descriptions appear to come to a consensus that evidence-based decision-making processes should include 'a combination of scientific evidence, as well as values, resources, and context' (2). Successfully using these EBPH processes could help alleviate negative health outcomes (e.g. noncommunicable diseases (NCDs)), as well as improve the public's health (3). However, decisions in the realm of public health are usually based on more short-term opportunities, or hot topics that garner the public's or other interest group's attention.

Benefits to using a more evidence-based decision-making process include utilization of higher-quality information on what works, higher likelihood of evidence-based programmes being implemented, greater productivity in the workforce, more efficient use of public health resources, and an overall improvement in public health (3). These benefits of EBPH will not only help in promoting health, but in carrying out the WHO's Global NCD Action Plan 2013–2020 (hereafter called 2020 Action Plan) (4). The burden of NCDs (e.g. cardiovascular diseases, cancers, chronic respiratory diseases and diabetes) is devastating as more people die from NCDs worldwide than any other cause (5). The 2020 Action Plan requires increasing public health capacities at both national and international levels in order to combat NCDs (4). This will help ensure the implementation of recommended NCD interventions, as well as the evaluation of 25 indicators at the country level.

Still, barriers remain towards the use of EBPH in any decision-making process, including the implementation of the 2020 Action Plan. The most significant barrier that exists is the lack of knowledge of EBPH. Most public health workers have no formal training in any of the public health disciplines (e.g. epidemiology, health promotion) (6). Public health structures reflect this lack of knowledge of evidence-based decision-making. Building the capacity to support and sustain EBPH is crucial towards any successful health promotion efforts (7).

An EBPH course was designed to help strengthen the capacity of public health professionals in Europe and internationally to apply and adapt evidence-based programmes in NCD prevention and health promotion. Since 2002, this course entitled 'Evidence-Based Public Health (EBPH): A Course in Noncommunicable Disease Prevention' has been taught annually in Europe as a collaboration between the Prevention Research Center in St Louis, the WHO Regional Office for Europe, the Collaboration for Integrated Noncommunicable Diseases (CINDI) and the Centers for Disease Control and Prevention (CDC). Participants of the course are nominated by NCD experts belonging to CINDI, which covers countries in the WHO European Region. The course involves nine interrelated modules that enhance knowledge and skills including: (a) introduction to key concepts; (b) community assessment; (c) quantifying the issue; (d) developing a concise statement of the issue; (e) searching and summarizing the scientific literature; (f) developing and prioritizing programme and policy options; (g) economic evaluation; (h) developing an action plan and implementing integrated prevention interventions; and (i) evaluating the programme or policy. Greater details on the modules and the course are available elsewhere (8,9).

The present study uses a mixed methods approach to assess (a) the utilization and effectiveness of materials/knowledge/skills gained from the EBPH course, as well as (b) general issues faced by public health professionals when using EBPH. The purpose of this study is to assess the effectiveness of the EBPH course over time, while understanding barriers faced in order to inform and improve future EBPH trainings. Though previous studies have performed similar evaluations (10,11), no study has assessed this over as great a period of time, or

Table 1. Characteristics of participants in online survey of international evidence-based public health course, by years since course (n = 86 participants), 2007–2016.

Agency	*Total*	*> 4 years since EBPH*	*≤ 4 years since EBPH*
No. of respondents	84	41	43
Local/Regional/Provincial/City Health Department	15 (17.9)	8 (19.5)	7 (16.3)
Federal or Government Health Department	28 (33.3)	12 (29.3)	16 (37.2)
University	22 (26.2)	11 (26.8)	11 (25.6)
Community-Based Organization	1 (1.2)	-	1 (2.3)
Other	18 (21.4)	10 (24.4)	8 (18.6)
Degrees held (all that apply)			
No. of respondents	86	42	44
MD, Dr.med, MBBS, or DO	32 (37.2)	18 (42.9)	14 (31.8)
PhD, DrPH, DPhil, or ScD	28 (32.6)	23 (54.8)	5 (11.4)
MPH or MSPH	23 (26.7)	11 (26.2)	12 (27.3)
MS, MSc, MA, or other Masters	23 (26.7)	8 (19.0)	15 (34.1)
RN	2 (2.3)	1 (2.4)	1 (2.3)
RD	1 (1.2)	1 (2.4)	-
BA or BS	10 (11.6)	3 (7.1)	7 (15.9)
Job Type			
No. of respondents	84	41	43
Specialist[a]	21 (25.0)	11 (26.8)	10 (23.3)
Manager[b]	35 (41.7)	16 (39.0)	19 (44.2)
Academic[c]	19 (22.6)	8 (19.5)	11 (25.6)
Other	9 (10.7)	6 (14.6)	3 (7.0)
Years in public health, mean (SD)			
No. of respondents	82	40	42
	11.0 (8.6)	12.9 (9.3)	9.3 (7.7)

[a] Specialist includes health educator, epidemiologist, statistician, programme planner, programme evaluator and physician.
[b] Manager includes programme manager, administrator, or coordinator, division or bureau head, division deputy director and department head.
[c] Academic includes academic researcher or academic educator.

combined a qualitative assessment to better understand the quantitative findings.

Methods

The present analysis evaluated public health professionals who participated in 'Evidence-Based Public Health (EBPH): A Course in Noncommunicable Disease Prevention', during the past 10 years (2007–2016). In total, 208 past participants were contacted via email and asked to take a brief (15 minute average) survey in Qualtrics (12). For increased response rates, participants received four reminder emails, including a final reminder email. Twenty participants were deemed unreachable due to invalid emails, and no other form of communication to contact them. The final response rate was 45.7% from a possible 188 respondents (86 of a possible 188).

In addition to background characteristics, the online survey included questions on the frequency of use of materials, knowledge and skills from the course, reasons for not using course materials and resources as much as intended, benefits from attending the course, leadership support for using EBPH and perception of the role the course has in building capacity for the 2020 NCD Action Plan. A five-point Likert scale was used for the frequency of use of materials/knowledge/skills (seldom/never, annually, quarterly, monthly and weekly). Reasons for not using the course materials and benefits from attending the course used a five-point Likert scale of strongly disagree to strongly agree. Participants were also asked how supportive leaders were of EBPH in their organizations. Responses ranged from 'Not at all supportive' to 'Extremely Supportive' on a five-point Likert scale. Finally, they were asked whether or not they felt the course contributed to the capacity of implementing the NCD strategies per the 2020 Action Plan.

To explore participant characteristics and responses, we calculated frequencies and descriptive characteristics. In order to evaluate the effect of the course across time, we compared data across two groups – participants during the years 2013 through 2016 ($n = 44$), and participants during the years 2007 through 2012 ($n = 42$). Independent samples *t*-tests were used with statistical significance set at $p < 0.05$. All quantitative analysis was conducted using SPSS (13). For the qualitative analysis of the interviews, direct quotes were selected to represent the main categories that emerged. The present study was approved by the Institutional Review Board of [de-identified information]

From the survey, 20 participants agreed to be contacted for in-depth telephone interviews in order to further examine the long-term impact of the course. Participants were stratified by mean frequency of use of materials/skills into 'low-use' and 'high-use' groups, in order to see if there were any differences in responses with regards to use of EBPH. A trained Research Assistant (RA) conducted six interviews with 'high-use' participants, and five interviews with 'low-use' participants for a total of 11 interviews. The interviews lasted an average of 27 minutes and included questions to expand on how EBPH should be defined, usefulness of course material/knowledge/skills, value placed on EBPH and barriers toward using EBPH. Interviewees were also asked to remark on the utility of specific modules within the EBPH course.

All interviews were recorded with the participant's permission and professionally transcribed. Authors created a codebook with anticipated themes that would arise. During the process of coding interviews, authors then used deductive focused coding techniques to better represent themes present in the transcriptions. Themes were summarized for all interviews and then labelled into categories. All transcriptions were coded and summarized in NVIVO 11 (14).

Results

Participant characteristics

Among respondents, the majority came from federa/government/local/regional/provincial health departments (51%), with an additional 26% from university settings and 1% from community-based organizations (Table 1). Around 37% held some form of medical doctor degree (MD, Dr.med, MBBS, or DO), while almost 33% held another form of doctorate (PhD, DrPH, DPhil, or ScD). Over a quarter of respondents held a master's degree in public health (27%), and 27% held other master's degrees. Other degrees held included a RN (2%), RD (1%) and a bachelor's degree (12%). When describing job type, 42% identified themselves as managers, 25% specialists and 23% academics. Participants reported a mean of 11 years working in public health (SD = 8.6 years).

Use of course materials, knowledge, and skills

There was variation in the monthly of use of materials, knowledge and skills from the EBPH course (Table 2). The most commonly used skill was searching the scientific literature for information on programmes and interventions (39%), followed by using EBPH materials, resources and skills monthly in planning a new programme/intervention (25%), modifying an existing programme/intervention (25%), referring to the EBPH readings that were provided (22%), and in evaluating a programme/intervention (21%). Few respondents used the EBPH materials, skills and resources monthly to write up the results of a programme/intervention (evaluation) (11%), and for grant applications (6%). There were no significant differences by years since the participant had last taken the EBPH course (> 4 years since v. ≤ 4 years since).

Similarly, during the interviews participants were able to describe EBPH as a process of using evidence (e.g. scientific literature, data, reviews) to inform decision-making processes. Participants understood the importance of using reliable sources for programme planning, while also understanding the need for adaptation of initiatives based on 'local data' sound evaluation:

Table 2. Percentage of respondents indicating agreement with use of, benefits of and barriers to using international evidence-based public health course materials, by years since course taken (n = 86 participants), 2007–2016.

Survey Item	*All Participants, % (n^a)*			
	Total (n = 86)	*> 4 years since EBPH (n = 42)*	*≤ 4 years since EBPH (n = 44)*	*P^b*
On average, every month since the EBPH I have				
Referred to the EBPH readings that were provided	22 (19)	17 (7)	27 (12)	0.43
Used the EBPH materials/skills in planning a new programme/intervention	25 (21)	22 (9)	27 (12)	0.46
Used the EBPH materials/skills in modifying an existing programme/intervention	25 (21)	17 (7)	32 (14)	0.16
Used the EBPH materials/skills for grant applications	6 (5)	2 (1)	9 (4)	0.91
Used the EBPH materials/skills in searching the scientific literature for information on programmes/interventions	39 (33)	32 (13)	46 (20)	0.43
Used the EBPH materials/skills in evaluating a programme/intervention	21 (18)	22 (9)	21 (9)	0.58
Used the EBPH materials/skills to write up the results of a programme/intervention	11 (9)	10 (4)	11 (5)	0.65
The EBPH course content helped me to				
Acquire knowledge about a new subject	95 (81)	93 (38)	98 (43)	0.58
See applications for this knowledge in my work	84 (71)	80 (33)	86 (38)	0.55
Make scientifically informed decisions at work	81 (69)	83 (34)	80 (35)	0.98
Communicate better with co-workers who use EBPH skills	79 (67)	78 (32)	80 (35)	0.58
Read scientific reports and articles	76 (64)	70 (28)	82 (36)	0.50
Obtain funding for programmes at work	32 (27)	33 (13)	32 (14)	0.49
Develop a rationale for a policy change	65 (55)	61 (25)	68 (30)	0.70
Identify and compare the costs and benefits of a programme or policy	56 (48)	61 (25)	52 (23)	0.50
Prepare reports for policymakers	60 (51)	63 (26)	57 (25)	0.62
Adapt an intervention to a community's needs while keeping it evidence based	71 (60)	61 (25)	80 (35)	0.18
Teach others how to use/apply the information in the EBPH course	73 (62)	76 (31)	70 (31)	0.92
Become a better leader who promotes evidence-based decision-making	82 (70)	78 (32)	86 (38)	0.53
I have not used the EBPH course content as much as I would like because				
I do not have enough time to implement EBPH approaches	30 (25)	35 (14)	25 (11)	0.35
The information was too complex	7 (6)	5 (2)	9 (4)	0.89
The information lacked relevance	4 (3)	3 (1)	5 (2)	0.18
There was too much information and not enough time to process it	7 (6)	10 (4)	5 (2)	0.77
My organization does not have a culture that supports the use of EBPH approaches	25 (21)	28 (11)	23 (10)	0.20
Within my agency, there are no incentives to use EBPH	23 (19)	30 (12)	16 (7)	0.23
There is not enough funding for continued training in EBPH	44 (37)	53 (21)	36 (16)	0.09
The people I work with do not have EBPH training	33 (28)	43 (17)	25 (11)	0.22
Use of Sum Score^c, mean (SD)				
No. of respondents	85	41	44	0.48
	1.4 (0.9)	1.4 (0.8)	1.5 (0.9)	

[a] Not all survey respondents answered all questions. The n's in parentheses indicate the number of respondents who answered the question. Percentages were calculated by using the number who answered the question.

[b] Determined by independent samples t-test.

[c] Averaged responses from use of EBPH section, ranged from 0 'Seldom/Never' to 4 'weekly'.

> I would say that evidence is not just what the scientific literature says, but then also evaluation of existing programs and local data that can account the local values, basically, the local circumstances ... So evidence-based public health is not just thinking of how they're going to fix the issue, but how do you go about it. So basically going through all the steps of gathering the evidence, talking to your stakeholders, planning the program, and so on and so forth.

Participants discussed instances in their own work where an evidence-based approach was used, and they were able to make sound decisions. One of the major benefits stated by participants was the ability to correctly evaluate a programme, in this case conducting an economic evaluation:

> For me, economic evaluation, because actually that's one of the things that actually I'm doing in my PhD research. I'm actually economically and clinically evaluating different kind of intervention, anti-smoke intervention, among different type of people. So actually for me, economic evaluation was really, a really good model and actually I was really interested in.

Barriers toward using EBPH

When examining the barriers toward using EBPH course content (Table 2), 44% of respondents reported not having enough funding for continued training in EBPH, followed by co-workers not being trained in EBPH (33%), and not having enough time to implement EBPH approaches (30%). A quarter of respondents reported not having the culture that supports the use of EBPH approaches (25%), though 72% of respondents reported having moderately supportive leadership with regards to EBPH use in their organization. Additionally, 23% reported no incentives towards using EBPH. The least reported barriers included that the information is too complex (7%), too much information and not enough time to process it (7%), and that the information lacked relevance (4%). There were no significant differences in reported barriers by years since the participant had last taken the EBPH course, though more recent participants generally reported fewer barriers.

Though survey respondents reported moderately supportive leadership, interview participants who worked in hospital settings and were considered low EBPH use respondents, reported unsupportive leadership as a barrier. Here a participant was discussing value placed on EBPH:

> But the rest of the organization, which I mean the administration, the higher administration, or the CEO, doesn't value the same things which I value. So when you talk about public health and prevention, and the preventive medicine in general, you have to make a team with your colleagues or with the clinicians. And you have to make them understand that if they do prevention, then they can avoid complications in patients and among also the health care workers.

However, most interview participants who worked in more public health-oriented settings and were considered high EBPH use respondents, reported having supportive leadership:

> I think that … I think that it's quite high, because our organization is the research and policy organization. So in all the departments, we are very much like depending on the data for all our policy decisions and shaping the progress.

Mirroring the survey results, interview participants expanded on lack of funding, time, and knowledge as barriers towards using EBPH:

> One of course, is the lack of resources, the fact that you don't have enough people or money to commission say a review of the literature. And so even though you know that that would be the most appropriate first or next step, wherever you are in the process, you don't do it because of a lack of resources. So this is one of the barriers.

> So mainly the barriers as approach, the first is timing, because, sometimes our decisions are not really well thought out because of the immediate decision making. And the other thing is, as I said,

> like not exactly understanding and not having enough capacity of understanding.

Course benefits

Participants reported numerous benefits from taking the EBPH course (Table 2). The most commonly reported benefits included acquiring knowledge about a new subject (95%), seeing applications for this knowledge in my work (84%), becoming a better leader who promotes evidence-based decision-making (82%), and making scientifically informed decisions at work (81%). The majority of respondents also reported communicating better with co-workers who use EBPH skills (79%), reading scientific reports and articles (76%), teaching others how to use/apply the information in the EBPH course (73%), adapting an intervention to a community's needs while keeping it evidence-based (71%), developing a rationale for a policy change (65%), preparing reports for policymakers (60%), and identifying and comparing the costs and benefits of a programme or policy (56%). Additionally, 41% of respondents felt that the EBPH course has contributed to the capacity of implementing the NCD strategies per the 2020 Action Plan. There were no significant differences in reported benefits by years since the participant had last taken the EBPH course.

In addition to this, interview participants expanded on the application of this knowledge in their own work:

> So it really helps me to not go around the issues, but be a bit more effective in, first, identifying what is the question, then looking for the approaches to the question, which is already known and proved by good evidence, supported by the good evidence, and then, how to translate it into the policy options and how to prioritize according to that.

Discussion

This evaluation provides support for the effectiveness of a course designed to increase skills and knowledge in EBPH among public health professionals in Europe. Though previous studies have shown positive results when examining the use of materials, knowledge, and skills from the EBPH course along with the benefits of the course content (10,11), the present study highlights the effectiveness of the course over time and triangulates quantitative and qualitative methods. A similar study examining differences between this course and a US-based course (10), found almost identical rates of use as this Europe-based EBPH course. However, the use of EBPH was not examined over time. The data presented here are from a sample of participants who took the course during the past 10 years (2007–2016) and provides a long-term perspective on the use of information from the course along with the benefits of this information. The majority of respondents agreed with almost every benefit of the course content, and there was no significant difference over time. However, barriers still remain towards the use of evidence-based decision-making.

The three most commonly reported barriers included not having enough funding for continued training in EBPH, followed by co-workers not being trained in EBPH, and not having enough time to implement EBPH approaches. These barriers also emerged from the interviews, as participants expanded on the lack of funding needed to support evidence-based decision-making, the lack of knowledge within an organization and the lack of time to conduct sound decision-making as important to consider in an environment that is unsupportive of EBPH. Previous studies have also identified these as barriers (10,11), as they are essential towards building capacity for evidence-based decision-making (7). Lack of support from the organization or leadership also emerged as an important barrier in participants who identified as 'low-use' EBPH users. However, this could be the result of the work setting. Most participants who shared a lack of support worked in a hospital setting where administration decision-making processes may be more centralized and top-down. In these settings, priority setting processes may be seen as less participatory due to the lack of input coming from middle-level managers and clinicians (15). Furthermore, leadership support represents one of the five domains of capacity building and is essential in promoting EBPH (7).

These barriers suggest the need to expand this EBPH course and create others like it. Building the capacity (e.g. knowledge, funding, support) for the use and sustainability of EBPH is crucial towards future public health efforts, including the implementation of the NCD strategy. Modest investments in building capacity are essential in moving science to practice (7). As several participants felt that this EBPH course has contributed to the implementation of the NCD strategy, it is important to produce public health professionals, including leaders, who are adept in evidence-based decision-making processes. Creating a culture that is supportive of evidence-based decision-making is critical in promoting EBPH (16).

Future courses in EBPH should target those in leadership roles in order to promote changes to the culture of public health work settings. Targeting these decision makers may increase investments in building capacity, which has continuously been highlighted as a necessary step in promoting EBPH. In addition, future courses could involve more distance learning approaches to enhance the reach and efficiency of capacity building.

Limitations

The use of cross-sectional data limits our ability to determine causality. Additionally, the significant time gap since participants had last taken the course (up to 10 years) resulted in a proportion of participants who were unreachable or may have been in a different (non-public health) role since taking the course. There is potential bias in who was interviewed: the sample of participants who agreed to interview may not accurately reflect the range of other participants and we may be missing information from them. Since participants hail from countries across the WHO Europe region, there is unlikely to be homogeneity in education, training and experience. This high variation in prior training is a potential limitation, as it may moderate the impact of training in EBPH. However, this diversity in backgrounds, including this mix of local, regional, and national public health practitioners highlight the overarching impact of this EBPH course. Lastly, increasing knowledge of, and providing resources for EBPH indirectly, rather than directly, impacts population health as there are other factors involved (e.g. politics, ideology, civil society). However, this is an important step in building the capacity to make informed decisions to address public health issues, specifically, NCDs.

Conclusion

'Evidence-Based Public Health (EBPH): A Course in Noncommunicable Disease Prevention', is an effective strategy to increase the use of, as well as capacity for evidence-based decision-making internationally. Continuing to build the capacity for EBPH can help alleviate barriers to the use of EBPH, support the implementation of the NCD strategy and address health equity. Support of EBPH, including targeting those in leadership roles, may help facilitate the growth of evidence-based decision-making across different countries. This in turn will lead to improvements in population health and reductions in NCD.

ORCID iD

Natalicio Serrano https://orcid.org/0000-0001-8163-2656

Conflict of interest

The authors declare that there is no conflict of interest.

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'When you are a data collector you must expect anything'. Barriers, boundaries and breakthroughs: insights from the South African data-collection experience

Kathryn Roberts[1], Sarah Gordon[2], Lorraine Sherr[1], Jackie Stewart[2], Sarah Skeen[2,3], Ana Macedo[1] and Mark Tomlinson[2]

Abstract: The impact of the research process on the researcher is an emerging topic of interest. Data collection in most low- and middle-income countries (LMICs) is often the responsibility of community members who are identified and trained specifically for data collection. When research involves data on mental health and social well-being, data collectors may have specific competency needs and the task of data gathering may impact data collectors. This study aims to explore the experiences and needs of data collectors within South Africa using qualitative methods to examine the impact of data collection on data collectors. Nineteen data collectors, involved in face-to-face data collection, completed semi-structured interviews exploring their insights, attitudes and experiences. Thematic analysis revealed barriers and challenges associated with research, complexities regarding boundaries within the participant-data collector relationship and the benefits of being involved with research for the individual and the community. Numerous challenges and opportunities are outlined. Findings expose the beneficial and often overlooked contribution of data collectors and warrants key considerations in the planning and implementation of future research to ensure adequate support and standardization of practice. (Global Health Promotion, 2020; 27(2): 54–62)

Keywords: data collectors, attitudes and experience, LMIC, South Africa, research process, qualitative

Introduction

Data collection is the foundation of research, and while the impact of conducting research on participants has been extensively documented (1,2), only recently has literature emerged regarding the effects of undertaking research on the researcher. Physical as well as emotional risks to the well-being of researchers have been identified. These risks include disease and injury (3,4), psychological strain (3–7) and role conflict, as well as the expectation to fulfill the requirements of incompatible status roles (i.e. role of researcher and community member), often caused by quasi-therapeutic relationships with participants (3,4). Yet most studies are restricted to the experience of principal investigators. Only a few studies have highlighted the experience of data collectors and those involved in participatory research (8,9). Within low- and middle-income countries (LMICs), the use of data collectors is increasingly common. Expertise in LMICs is often limited, resulting in a constrained capacity to undertake research (10,11), and local community members are often upskilled to undertake data collection (12). Data collectors are essential to

1. Institute for Global Health, University College London, London, UK.
2. Department of Psychology, Stellenbosch University, Stellenbosch, South Africa.
3. Department of Psychiatry and Mental Health, University of Cape Town, Cape Town, South Africa.

Correspondence to: Kathryn Roberts, Institute for Global Health, University College London, Rowland Hill Street, London, NW3 2PF, UK. Email: k.roberts@ucl.ac.uk

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community-based research. Yet they are also often detached from the larger research team (13), as their experience and engagement with the research process may fundamentally differ from senior researchers. Research detailing the experiences of data collectors is critical to inform practice.

Participatory research involving members of the local community is often seen as a mechanism for empowerment for both individuals and communities (14). Individuals have reported a growth in skills and confidence from being involved in research, as well as indirect benefits for the community including social action and advocacy (9,14). Additionally, the involvement of such individuals has been found to have benefits for the facilitation of research, as community members are seen to be culturally and linguistically more appropriate (14,15–17). Sharing a similar background to participants may allow for data collectors to build trusting relationships and navigate access to potentially hard to reach participants, which in turn may have implications for data quality and data utility (18).

Data collectors face practical, emotional and ethical risks. In LMICs, data collectors often work within contexts of poverty, health inequality and violence. They are frequently based within communities, meeting at participant homes (19,20) or within geographically isolated areas (11,21–23), making personal safety an issue. Those working with sensitive data may experience distress associated with the emotional demands of their role (8,19,24). Within such contexts, data collectors have reported feeling a moral obligation to assist participants in need (25–27), often beyond their role. Associations with the community (28) may result in the emotional risks related to data collection being compounded (14). As such, emotional proximity and the potential for role conflict bring about considerations regarding the objectivity of data and possible ethical considerations regarding professionalism and confidentiality (14,21,28,29). Such issues necessitate specialized skills, for which some may feel ill-prepared if there is no appropriate training or infrastructure.

Much of the literature on this topic explores the implications of undertaking qualitative research for the researcher. However, little attention has been given to the implications of undertaking quantitative research. Within LMICs, for practical and logistical reasons, quantitative data collection (questionnaires) often takes the form of interviews. Therefore, these data collectors may share similar experiences to those collecting qualitative data. While certain types of data collection (e.g. height) may not have an emotional impact, more probing questionnaire data within the social sciences exploring topics such as mental health, social well-being or trauma can be emotive (30). Understanding the impact of data collection is vital to ensuring the well-being of this group, the veracity of the data and the integrity of the research process. This study aims to explore the experiences of data collectors working within community-based settings in South Africa.

Drawing on the above, previous literature focused on community-based research and notions of participatory research, scientific objectivity, empowerment and social action (14,31–33), frame the interest in the experience of data collectors within this study. Being a data collector within an LMIC is a unique role that is essential for the research process, data integrity and any subsequent repercussions of research findings. A lack of research in this area is problematic as higher-level researchers may not be aware of the context or potential challenges of data collection for this group. It is important to understand the experience of data collectors to ensure that any support or training needs are adequately addressed, to understand the impact on research and data quality, and to inform future practice (14,17).

Methods

This exploratory study is nested within a wider project within South Africa with both quantitative and qualitative components. In this study, semi-structured interviews with 19/125 data collectors involved in the wider project were undertaken and transcripts were analysed using thematic analysis.

Ethical approval was granted by Stellenbosch University (HS1172/2015). Written informed consent was obtained from all participants, with the understanding that data would remain anonymized. Limited demographic information has been used in the presentation of data to protect participant identity.

Sample

A list of 36 prominent researchers in South Africa was compiled by the principal investigators of the larger project. These researchers were contacted and asked if they worked with trained community data collectors who could be invited to contribute to the wider project. They identified 125 collectors from four provinces within South Africa (Western Cape, Eastern Cape, Gauteng, KwaZulu-Natal), with a history of employment in face-to-face data collection. Those participants who gave consent were contacted to provide information regarding the wider study and to be screened for eligibility. The inclusion criteria for the wider project required participants to have experience conducting community-based data collection in the previous 12-months and be above age 18 years of age.

Opportunity sampling from the 125 participants in the wider study was used until qualitative analysis reached saturation. In total, 19 participants from the Western and Eastern Cape provinces were invited to complete semi-structured interviews. No participants refused to participate.

Data collection

Participants were given a choice as to whether interviews were conducted in English or Xhosa: all participants chose Xhosa. Interviews were conducted by trained data collectors in neutral locations (e.g. community centres). Interviews were audio-recorded to ensure validity and reliability of the data (34) and were transcribed and translated to English for analysis. Randomly selected transcripts were checked for accuracy (both content and translation) by an independent bilingual researcher to ensure reliability. An interview guide of open-ended questions developed to explore personal understanding and experiences of data collection was used to guide the interviews and to ensure consistency and coverage across interviews. The schedule was used to provoke discussion regarding the data-collection experience, attitudes and wider impacts. The guide was drawn from topics within previous literature focusing on data collectors and principal investigators, that is, challenges and difficulties associated with data collection, positive experiences, and perceptions of the role of the data collector. An independent bilingual researcher checked the fidelity of interviews to the topic guide to assess quality of protocol implementation. Interviews lasted between 1–2 hours (mean duration = 1:23:44).

Interviews were conducted by experienced, Xhosa speaking fieldworkers who had extensive experience of data collection. All fieldworkers were female and had worked in similar environments to participants. Fieldworkers were unknown to participants but having had shared experiences, may have had similar world views. This shared background was considered to have a positive impact on the data-collection process as participants were forthcoming with their experiences. It was also seen as more appropriate than senior researchers conducting the interviews, with reference to the power dynamic within interviews.

Data analysis

All interviews were coded and analysed by trained qualitative researchers using a thematic approach (35). Themes were developed based on concepts of perceived challenges and positive experiences from the literature (3–7,14) and were informed by concepts of empowerment and issues regarding scientific neutrality drawn from the field of participatory research (31–33). Themes were identified at a sematic level and were closely linked to the data (35). ATLAS.Ti (36) was used to aid data management. Transcripts were subjected to a line-by-line examination and manually coded using an iterative process to inform wider themes. Initial codes for each manuscript were developed independently by two researchers and compared. A team composed of seven members, including principal investigators, met to interrogate and elaborate on themes and higher-order themes. Differences were resolved through discussion. Themes represent repeated patterns of meaning across the data (35). Through the examination of all coded extracts, themes were reviewed for consistency and whether they accurately mirrored the meanings evident within the dataset (35). The relationship between themes was examined using conceptual maps. Final key themes, made up of amalgamated clusters of similar themes, were selected based on prevalence, richness and the importance placed upon them by participants. Following formulation, themes were subjected to respondent validation by two participants. Themes are supported in the write-up with illustrative extract examples. Results are indexed using participant age and location (WC; Western Cape, EC; Eastern Cape).

Data analyses were undertaken by researchers at differing stages within their career with experience of both quantitative and qualitative research. All had prior experience of working within LMICs with data collectors.

Results

Qualitative data were collected from 19 participants (100% female) with a mean age of 41.8 years (SD = 10.72; range 25–65 years). The sample originated from South Africa and the majority (94.7%; 18/19) described themselves as Black African. Xhosa was identified as the prominent primary language (89.5%; 17/19), followed by English (10.5%; 2/19). Almost 70% reported living in formal housing structures as opposed to settlements or informal dwellings. Data collection was a full-time occupation for 42.1% (8/19) of the sample. Almost all had experience of working on two or more research projects. All had undertaken training, the majority (94.7%; 18/19) receiving training for one month or less.

Themes

Focusing on the challenges and impact of data collection on data collectors within community settings, nine themes emerged from the data. These first-order themes were subjected to higher-order analysis from which three global themes arose: *barriers, boundaries* and *breakthroughs*. Barriers refer to the difficulties and challenges that data collectors encountered that may have infringed on the data-collection process. Boundaries highlight the data collector–participant relationship and the somewhat antagonistic role of data collectors as impartial researchers and members of the community. Lastly, breakthroughs refer to the progressive impacts of the research process upon individuals and the wider-community.

Barriers

Respondents reported that they found their role challenging based on logistical, physical and emotional hurdles. The resultant three themes which emerged related to a lack of *safety, problems accessing the community* and a *lack of well-being.*

Lack of safety

Data collectors stated that they felt unsafe while working, which was often found to hinder the research process. Many reported feeling unsafe within specific geographical locations, stating they had experienced dangerous situations and violence. Being a target for violence while working as a data collector was a concern for some: 'People are robbed and they are raped as well…researchers are targets for thugs' (36, WC).

Practical issues within particular contexts, such as a lack of transport or difficult terrian, left many data collectors feeling fearful of their working enviornment. As such, many would not work alone because of potential risks. The practicalities of ensuring safety were framed as a fundamental challenge in the data collector role.

Problems accessing the community

For some, accessing communities to undertake data collection posed a significant challenge and was a hinderance to timely project completion. Permission from chiefs or street committees is often required within an LMIC and this was often reported as leading to delays during data collection: 'We experienced that we would not start because we were waiting for the street committee…. We would have a problem with time' (57, WC).

Lack of well-being

High and variable workloads were commonly reported as a barrier for data collectors. Many highlighted the physical and emotional challenges arising from their work. Some found the work to be tiring and emotionally taxing. Many commented on how they often thought about their role outside of work, finding the demands and deadlines somewhat stressful: 'sometimes I just feel tired and drained especially if I had to do more than the other person.' (38, WC); 'I would be sitting at home and feel that the work is stressful' (57, WC).

Despite such challenges, many described effective coping mechanisms including religious beliefs, relationships and supervision with higher-level researchers. Debriefing with other data collectors on the project, regarding difficult experiences with participants, was found to be helpful: 'Normally [we] have meetings, it's where a person share[s] an experience that was tough and with team it helped. Like after work we stay and share the way you felt…' (38, WC).

Boundaries

Most commented on the development of empathetic relationships with the participant. The notion of 'boundaries' as a global theme illustrates the complexities that emerge within the data collector-participant relationship. It focuses on the distance between data collector and participant, highlighting challenges associated with striking a balance between being an impartial researcher and a community member. Three concepts emerged: *feelings of helplessness, role conflict* and *carrying the burden*. Together, these concepts highlight the challenges associated with balancing differing social roles and the emotional burden associated with difficult experiences within the data-collection process.

Feelings of helplessness

Data collection often took place within participants' homes and data collectors were exposed to the realities of living in extreme poverty. Many reported that they felt economic disparities between themselves and the participants, with most describing those experiencing the hardships of poverty as 'suffering': 'the challenges that we have are to see people suffering and telling [us] their problems' (45, WC).

Some expressed the desire to help participants outside of their role as a data collector; 'I would wish I could take this person to come and stay with me' (40, WC).

However, data collectors felt they were unable to act due to a requirement to remain professional. For some, this was challenging. Through the interviews, it was inferred that not acting on a desire to help, was seemingly different to how they would respond if they had come across such instances in their personal lives: 'there is nothing else that you can do…you must accept the situation at that moment, you tell yourself that you cannot do anything now because it's about data collection' (36, WC). This was found to have a negative emotional impact. Feelings of worry, and a desire to further help participants, but being unable to do so personally in the moment, implied concerns regarding role conflict and framed an emerging *feeling of helplessness*.

Role conflict

Despite training around role conflict, many reported developing relationships and supporting participants beyond the requirements of their role, often through giving in-kind. They also described contacting participants in need following data collection or staying with participants longer than necessary. One data collector described how she repeatedly visited and supported a participant following their initial meeting to provide assistance:

> Oh yes, there is this participant…who told [me] it has been six weeks since their son died and you could see that they were in pain…I told her to call me when she felt she was ready and I would come and check up on her (38, WC).

For many, a feeling of responsibility towards participants emerged resulting in difficulties regarding the maintenance of professional relationships. Participants felt strongly that data collectors should implement change. This feeling was often exacerbated by the difficult circumstances of participants and many reported difficulties striking a balance between being a member of the local community and being an empathetic objective researcher. Yet, most data collectors reported that they were able to maintain confidentiality in their dealings with participants:

> In the next yard I do what I have to do. Yes, it's going to bother me but I will not discuss with the next house what I saw there… after work you can pick up a phone and find out how she is doing (35, WC).

Carrying the burden

It was common for data collectors to be emotionally affected by the problems they encountered during data collection. The emotional impact of experiencing participants' disclosure of difficulties was challenging for many. These experiences often led to a sense of concern that infiltrated the data collectors' personal lives and prompted many to evaluate their personal circumstances:

> Like I mentioned that as a data collector…it becomes hard for me also to stand when they cry, I feel like I should be able to tough and stand those hardships, I tried my best and when you got home you have all those talks you had in your mind (28, WC).

Some reported accessing further support to aid with the emotional impact, seeking formal support through employers such as counselling and supervision, and informal support through personal relationships.

Breakthroughs

'Breakthroughs' refers to the positive aspects associated with the experience of data collection. This global theme focuses on the personal development of data collectors and the wider community impact. This section aims to comment on the expected outcomes associated with engaging individuals within data collection but also the positive consequences of data collection within LMICs for both the individual data collector and the wider community.

Data collection: a professional stepping stone

For many, data collection enabled professional growth, skill development and for some altered future career plans. Some commented on their desire to continue within their role and the enjoyment they obtained from their work: 'If it could be a career Sis… I would pursue it and carry on with it ' (40 WC); 'I am on a learning journey at the moment' (38, WC).

For some, data collection had led them to want to return to education to further train or develop their skill set. For others, gaining employment as a data collector gave them experience necessary to obtain their career goals: 'To be data collector changed me a lot and I don't see myself doing another thing. I only wish that I could study further' (36, WC).

Personal growth: taking lessons home

In addition to developing professionally, many also developed personally and described the personal benefits of undertaking employment as a data collector: 'I don't want to lie, research has given me more knowledge and changed me to another person' (35, WC).

Data collectors who had been involved with the implementation of interventions also developed their knowledge through the acquisition of information from the research project itself. Emphasis was placed on those projects providing parenting interventions, and the application of this information to their personal lives:

> I have learnt that when I speak to a child, not to shout or speak louder, but speak nicely to them because when you shout or beat them they become worse… I must take care of them and give them my love (36, WC).

In addition to knowledge gain, data collectors were often empowered by a growth in confidence and pride in their accomplishments with many gaining skills and knowledge from their work. For some, data collection enabled a sense of awareness and reflection. As one data collector states:

> I'm very happy that I have grown to understand that life is round and its rotating, you learn until you get old no matter you may think you know everything, you find new things on the field that you had no idea of (45, EC).

Developing the community

Most reported that they felt that research was valued by participants. The undertaking of research within community settings was found to have beneficial effects. The upskilling of data collectors seemingly led to this group becoming key figures within the community and aided their ability to assist their community outside of their role in their day-to day lives: 'It has change[d] my way of thinking and made me helpful to others in my community. Now it's easy to solve my problems and others…now I can go outside and give advice to people of my community…' (44, EC).

Research also acted as a source of support for communities. Many often listened to the concerns of participants outside of the topic of research. For some, this led to participant disclosure and thus the identification of need, allowing for referral to adequate support services: 'Sometimes you find out that someone says for example, I was raped [and] I never told anyone and it's the first time I told someone' (38, WC). In this sense, data collection was viewed as a source of support for communities.

Discussion

This study sought to highlight the experiences of data collectors working within contexts of extreme poverty and violence. This is the first study examining data collector experiences within South Africa using qualitative methods. Thematic analysis identified three global themes of interest, namely, barriers, boundaries and breakthroughs. These prominent experiences highlight challenges for data collectors which are seemingly balanced by numerous individual and community benefits. This study feeds into the growing body of literature regarding the impact of research on the research team and on community members involved within the research process. Results confirm and extend the findings of previous research describing risks to personal safety (11,19–23), logistical obstacles (20,22), emotional distress (19), role conflict (14,21) and highlight potential implications for the objectivity of data, as well as upskilling and empowerment, both at an individual level (31,37,38) and a community level (39,40).

These data highlight key issues that need to be considered when community data collectors are involved in crucial evidence-based studies. *Barriers* as a theme, highlights the realities of community-based research which bring dangers to the individual including a lack of safety and well-being. As such, training safety protocols and logistical issues should be accounted for within study planning, implementation and evaluation to ensure the safety and well-being of data collectors.

The theme of *boundaries* highlights the challenges for data collectors in managing the tension between objectivity and subjectivity within the research process. Many data collectors are drawn to working within their own communities, which brings about a complexity regarding the relationship between being both a researcher and a community member. These data highlight emotional stressors brought about by interactions with community members and as such, the potential subjectivity associated with researcher compassion. However, this is paired with an awareness and need to maintain professionalism, distance and scientific objectivity within the data-collection process. This contrast placed some data collectors in the situation of a dilemma in the management of their differing roles. This phenomenon invokes an interesting contradiction where, to get representative data, data collectors must build trust and relationships with participants, but an overly established relationship brings about issues regarding role conflict and this in turn may have implications for data integrity.

The issue and debate regarding subjectivity and objectivity within research is often focused on qualitative research (28). However, these data highlight the topic in the context of both qualitative and quantitative data collection, as this study included participants who had been involved in both. The interview format for quantitative data collection often used within LMIC contexts requires distance and objectivity. Data collectors are, however, often exposed to subjective environments which may have an emotional impact and implications for the research process. As such, this interaction between subjectivity and objectivity should be a consideration within the planning and development of research projects.

Clarity of referral pathways and boundary setting are important in limiting the personal impact and potential for emotional harm. Previous research has highlighted the benefit of debriefing, teamwork and support pathways as part of good practice standards (41) and such support provision would seemingly be appropriate across both quantitative and qualitative research studies. The emotional anguish experienced by data collectors should also be highlighted as a risk factor for participants when collecting data (19). Such challenges may be alleviated by being balanced with some of the benefits of being involved within participatory research. These benefits could include involvement in the dissemination process or seeing the widespread implications of research data, that is, data being used for advocacy in the community or informing policy. Data collector well-being remains essential to high-quality research practice and data integrity. Thus, it is important to develop an understanding of the unique role of this group and that their requirements are identified and addressed.

Data collectors cannot be wholly distanced from the research process and any associated data. While the theme of *boundaries* highlights the potential challenges and considerations brought about by this interaction, *breakthroughs* highlights the positive implications of data-collection and research for both the individual data collector and the wider community. The training and undertaking of data collection itself as well as being exposed to the topic of the research (i.e. parenting) may have implications for personal growth, professionalism and skill building and there is a strong desire for professional and educational development. As such, research may be contributing to the development of transferrable skills that may aid in bridging the skills gap within contexts such as South Africa, where employment opportunities are often limited without tertiary education or a specialized skill. Ostensibly, data collectors are providing a key service in the absence of high-level researchers and are gaining skills that will feed the cycle of information gathering and quality provision. Training and experience are required to increase the robustness of the research process and may catalyse the growth of a professional group that may need to be formalized by experience, certification and standard setting.

The individual experience of the research process may also have a community impact. These results identified data collectors as a source of support within communities, working beyond their role to listen to the needs of the community. Previous studies identified data collectors as gatekeepers within the community (8) or sources of knowledge (42). Thus, formalized training and professional development may have further implications for community development and this should be a consideration within both research and training.

These results need to be viewed in the presence of several potential limitations. Data are country specific; thus, experiences may be specific to the South African context and thus may lack wider generalizability to other LMIC contexts. Nevertheless, research interviews contained a broad range of information regarding data-collection experiences across a broad range of settings and contexts, including both urban and rural locations and quantitative and qualitative data collection. The data are also gender specific which may restrict generalizability of findings. However, it should be noted that a higher number of females were identified as eligible for the wider research study and, based on anecdotal evidence, data collection is often a role predominantly undertaken by females within LMICs.

Data collectors provide a fundamental service and help bridge a crucial gap in capacity within the field of health research. Their contribution to the research process should therefore not be overlooked. Considerations of their needs and realities are required within research planning and implementation to ensure adequate support, standardization and data quality. This study has highlighted some of the experiences of data collectors, exposing both challenges and opportunities for this group and considerations regarding the research process. The increasing use of data collectors within health research necessitates a greater understanding of the impact of such experiences on the well-being of individuals, the wider community and on the wider research context. An improved understanding of such phenomena is vital to inform the planning and practice of future research endeavours, develop training and support provisions, and to aid in the formulation of standardized practice within such environments.

Conflict of interest

The authors declare that there is no conflict of interest.

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¡Activate Ya! Co-learning about school-based tobacco prevention and physical activity promotion in secondary school students in Uruguay

Andrew E. Springer[1], Melissa B. Harrell[1], Lucía Martínez Gomensoro[2], María Traversa Fresco[2], Shannon Rogers[1], Martina Florines[2], Viviana Moreno[2], Joowon Lee[1], Cheryl L. Perry[1], Eduardo Bianco[2] and Diego Estol[2]

Abstract

Purpose: ¡Activate Ya! was a group-randomized controlled intervention trial aimed at developing and evaluating the impact of a school-based intervention on preventing cigarette smoking and promoting physical activity (PA) in secondary school students in Uruguay. Secondary aims were to evaluate the program's impact on students' smoking- and PA-related psychosocial risk and protective factors.

Methods: Sixteen schools and $n = 654$ students participated in the study. The one-year intervention included a classroom-based curriculum, an afterschool program, activity breaks, and final showcase event. A self-administered questionnaire measured outcomes at three time points. Fixed effects regression models tested for differences in outcomes by study condition.

Results: While positive intervention effects were found for selected psychosocial-related smoking outcomes, no impact on past-year smoking or smoking susceptibility was detected. Past 7-day PA, measured by the PAQ-C, was significantly higher among intervention school students overall ($p = .048$) and for girls ($p = .03$) at posttest, and intervention girls reported significantly higher athletic identity PA competence, friend and teacher PA support at posttest, and PA enjoyment at follow-up ($p < .05$).

Conclusion: The positive short-term effects of ¡Activate Ya! on PA and related outcomes for girls support the utility of school-based health promotion in Uruguay. Additional research is needed to determine the most effective strategies to prevent tobacco use among students and promote PA among boys in this setting. (Global Health Promotion, 2020; 27(2): 63–73)

Keywords: Adolescents, tobacco, physical activity, Latin America, school, after school

Introduction

In Latin America and the Caribbean, non-communicable diseases (NCDs) represent a major threat to public health (1). In Uruguay, NCDs account for 85% of total deaths (2), and Uruguay currently ranks among the countries with the highest burden of cancer incidence and mortality in Latin America (3). Two key risk behaviors that contribute to the burden of NCDs that warrant continued intervention are cigarette smoking and physical inactivity (1,2).

1. Michael & Susan Dell Center for Healthy Living, University of Texas Health Science Center at Houston School of Public Health, Austin, USA.
2. Centro de Investigación para la Epidemia del Tabaquismo (CIET), Montevideo, Uruguay.

Correspondence to: Andrew E Springer, Michael & Susan Dell Center for Healthy Living, University of Texas Health Science Center at Houston School of Public Health, Austin Campus, 1616 Guadalupe Street, Suite 6.300, Austin, TX 78701, USA. Email: Andrew.E.Springer@uth.tmc.edu

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In recent years, Uruguay has received worldwide recognition for its leadership in implementing tobacco regulation, which includes prohibition of smoking in public places and all forms of tobacco advertising and promotion, resulting in impressive declines in cigarette smoking for adults and adolescents (4,5). Despite these important declines, in 2014 15.5% of Uruguayan adolescents between 13 and 17 years smoked cigarettes in the past year, and between 8.2% (13–15 years old) and 9.2% (13–17 years old) of young people smoked cigarettes in the past month according to the latest available data (6,7), underscoring continued need for adolescent tobacco prevention efforts. While notable progress has also been made with the promotion of physical activity (PA) in Uruguay—including legislation for compulsory school physical education, the creation of outdoor gyms, and expansion of the world famous *rambla* (*esplanade*) for walking and biking, less than a third of adolescents (28.8%) met recommendations of 60 minutes of daily PA in 2012, with lower PA among girls (8).

School-based health promotion programs have been found to be effective in preventing tobacco use and promoting PA in young people (9,10), yet few programs have targeted these behaviors within a single program framework, and research on school-based health education in Uruguay is limited. Although research on the association between PA and cigarette smoking in young people is mixed (11), several longitudinal studies have found youth PA engagement results in lower cigarette smoking later in life (e.g. 12–14). Addressing PA and cigarette smoking under a single program framework in Uruguay holds the potential to enhance an understanding of the relationship between these behaviors as well as further contribute to collective learning about school-based health promotion in Uruguayan secondary schools.

¡Activate Ya! is a group-randomized controlled trial aimed at developing and evaluating the impact of a school-based intervention on preventing cigarette smoking and promoting PA engagement in secondary school students in Uruguay. Secondary aims were to evaluate the program's impact on students' smoking- and PA-related psychosocial factors, and to examine the mediating role of these factors in preventing cigarette smoking and promoting PA.

Methods

Study design

¡Activate Ya! was a group-randomized controlled trial conducted via a partnership among [removed for review]. Sixteen secondary schools in Uruguay were matched in pairs on geographic location (urban/periphery and coast), school type (public or private), and school socio-economic status (SES); randomly assigned to intervention (n = 8 schools) or comparison conditions (n = 8 schools); and assessed at three time points.

Eligibility and recruitment

Eligibility for school inclusion in the study included: classification as a public or private secondary school with *1º básico* (first year) students; proximity to a large urban area of Uruguay; and willingness to accept random assignment to study conditions. Sixteen schools were purposively selected based on school classification, location, and school SES from a roster from the Consejo de Educación Secundaria (CES) (school authority) and invited to participate, resulting in n = 12 public and n = 4 private schools participating in the study.

Active parental consent and student assent were obtained for study participation. The study was reviewed and approved by the Committee for the Protection of Human Subjects at the University of Texas Health Science Center in Houston in the USA, and the Comité de Ética de la Facultad de Medicina (UDELAR) and CES in Uruguay.

¡Activate Ya! intervention

The ¡Activate Ya! intervention was informed by Social Cognitive Theory, the Theory of Planned Behavior and socio-ecological models of health behavior (15). The intervention aimed to: (a) increase *knowledge* about the negative health effects of smoking and decrease *outcome expectations (reasons to smoke)* and *normative beliefs* supportive of cigarette smoking; (b) increase *self-efficacy, outcome expectations (perceived enjoyment)*, and *perceived social support* for PA; (c) foster *a supportive school environment* including student-school connectedness (9); and (d) promote *a healthy*

PA self-concept, as adolescents with a stronger PA self-concept engage in more PA (16) and less cigarette smoking (17). Intervention development was led by a planning group comprised of Uruguayan teachers and public health practitioners and researchers, with key activities that included student focus groups to better understand the targeted behaviors and context (18,19), a pilot test of the afterschool program in 2014, and a pilot test of the entire program in 2015. Core program components included the following:

- *¡Activate Ya! classroom curriculum*, which incorporated themes of an inner and outer journey of discovery through which students *activate* themselves and their community for PA and tobacco prevention. The curriculum included 12, 40-minute lessons divided into two learning blocks: *El Libro Secreto de Decisiones [The Secret Book of Decisions]*, focused on enhancing psychosocial factors to resist cigarette smoking via peer-led small group activities and a comic book adventure; and *El Viaje*, which focused on fostering students' PA self-concept through social skill-building and PA dynamics, self-reflection via the student *Guía de Viaje* journal, and the *Bitácora* (captain's log)—a PA tracking/goal-setting log. The curriculum was taught during a free-time period by teachers who received training from ¡Activate Ya! staff. Teacher interviews, based on a 15-item semi-structured interview guide that assessed curriculum implementation, indicated five of eight schools taught all 12 lessons; the remaining schools implemented 3–10 lessons each.
- *Espacio Adolescente* (EA), an afterschool component designed to provide increased opportunities for PA, and positive social bonding and social skill development outside of school time. EA included PA games and dynamics, team-building activities, and planning of the *Evento Final*. Physical education university students trained by ¡Activate Ya! staff led EA. EA was designed to take place over 12-weeks, with one 1.5-hour session per week. Process evaluation indicated 12–14 sessions were implemented across all eight schools (average of 21 student participants per school).
- *Classroom activity breaks*, consisting of a group training at each school of all *1º básico* teachers and the provision of an activity break guide to support teachers in incorporating brief (~5 minute) activity dynamics in the classroom 1 or more times/day. End-of-year focus groups with students indicated that all intervention schools implemented activity breaks.
- *Final showcase event ('Evento Final')*, which aimed to 'activate the community' and further reinforce social norms against tobacco use and in support of PA. The Evento Final was a half-day event that included a showcase of students' work (e.g. anti-tobacco posters) and fun activities and games to promote PA. All intervention schools participated.

Measurement

Measures

A self-administered questionnaire measured student cigarette smoking, PA, related psychosocial factors, and socio-demographic characteristics (see *Table A: Description of Psychosocial Measures* -supplemental files). Cognitive testing was conducted prior to the main trial to assess questionnaire readability and comprehension with same-aged students ($n = 22$).

Cigarette smoking: primary tobacco-related outcome measures included *past-year cigarette smoking* and *cigarette smoking susceptibility*. Past-year cigarette smoking use was a single-item question adapted from the Global Youth Tobacco Survey (20). Cigarette smoking susceptibility, a measure shown to predict future smoking, was a composite variable based on responses to three questions that asked students if they were ever curious about smoking cigarettes, think they will smoke cigarettes in the next 12 months, and would like to smoke a cigarette if a close friend offered them one, with students responding 'definitely no' to all three questions considered not susceptible (21).

Physical activity: three self-reported measures assessed PA. A comprehensive *past 7-day PA score* was created based on responses to eight items from the Physical Activity Questionnaire for Older Children (PAQ-C) (22). Past 7-day MVPA comprised a single-item measure that assessed the number of days in past 7 days students were physically active for ⩾ 60 minutes (7). Past week PA during school was a composite variable based on two items from the PAQ-C on PA during school and recess, and a measure created for this study on PA during class.

Tobacco and Physical Activity-related Psychosocial Factors (23–27) are presented in Table A (supplemental file) and in the results section.

Socio-Demographic Characteristics: age, gender, and socio-economic status (SES) (perceived family income and maternal education) were self-reported by students using a closed-ended response format.

Data collection

Measurements were taken at three time points: pretest (April–June 2016); posttest (November–December 2016); and 4–6 month follow-up (April–June, 2017). Data were collected by four staff members who underwent training on measurement protocols and protection of human subjects.

Analysis

Basic descriptive statistics were calculated to describe socio-demographic characteristics of the sample. Fixed effects regression models were run to test for differences between study conditions for primary and secondary outcomes at pretest, posttest and follow-up. The models were run for the total sample and then stratified by gender, adjusting for perceived family income, gender (total analyses only), and pretest (posttest and follow-up analyses only). These types of regression models were chosen over mixed-effects models to preserve the Type II error rate and increase statistical power, given the smaller than anticipated sample size for the trial and lack of related research in this context. Mediation analyses were conducted to test whether positive impacts on secondary outcomes were directly related to positive effects on primary outcomes (28). All data were analyzed using Stata v. 15.0. Statistical significance was set at $p < .05$.

Results

Study sample

Sixteen public and private secondary schools from urban and semi-urban areas of Uruguay participated in the study (Table 1) (see *Figure 1: Sample selection* in supplemental files). Of the 1483 eligible *1° básico* (first year) students, 654 students (mean age 12 years; ~50% female) and their parents consented to participate in the evaluation of the intervention, representing a 44.1% participation rate. Intervention and comparison students were comparable by gender, age, school type, and geographic location (Table 1). However, intervention students reported significantly lower levels of perceived family income and mother's education (Table 1).

Tobacco and physical activity: main outcomes

No significant differences in past-year cigarette smoking or smoking susceptibility were found between intervention and comparison students at posttest or follow-up for total sample (Table 2) or by gender (results not shown in tables). With regard to PA, intervention students reported higher mean scores for the global PAQ-C measure for total sample at pretest ($p = .01$) and posttest ($p = .048$) (adjusting for pretest) (Table 2), and for girls at posttest (a mean score of 2.23 vs. 2.10 for intervention vs. comparison girls, respectively; $p = .03$) (results not shown in tables). No differences in PAQ-C scores by study condition were found at follow-up. In addition, no differences by study condition were found for the single past 7-day PA measure or the composite measure of school PA for the total sample (Table 2).

Tobacco and physical activity: secondary outcomes

For the total sample, a higher percentage of intervention students reported fewer reasons to smoke compared with comparison students at posttest (15.20 vs. 14.70 for intervention and comparison, respectively, $p = .04$); no differences were noted at follow-up (Table 3). No significant differences in tobacco knowledge, normative beliefs, or student-school connectedness were found by study condition for the total sample. In gender-stratified analyses, no significant differences were found for the three primary tobacco-related psychosocial outcomes with the exception of normative beliefs, in which a significantly higher percentage of boys reported normative beliefs against smoking at follow-up (i.e. less likely to report that their friends or parents would approve of them smoking) (5.42 vs. 5.14 for intervention and comparison, respectively, $p = .02$) (results not shown in tables).

Table 1. Descriptive characteristics of the sample (pretest) (n = 654). *¡Activate Ya! Study*, Uruguay, 2016–2017.

	Intervention	*Comparison*	*p*-value
	N (%)	*N (%)*	
Total	274 (100%)	380 (100%)	
Schools (n)			
Public	216 (78.8%)	299 (78.7%)	0.96
Private	58 (21.2%)	81 (21.3%)	
Gender			
Male	134 (49.3%)	188 (49.5%)	0.96
Female	138 (50.7%)	192 (50.5%)	
Age (mean)	12.33+/-0.03	12.39+/-0.04	0.88
*(range: 11–15 years)			
Perceived family income			
Not poor, not rich	95 (36.1%)	92 (25.1%)	0.01*
Live comfortably	115 (43.7%)	180 (49.0%)	
Live very well	53 (20.1%)	95(25.9%)	
Mother's Education[a]			
Primary	23 (11.9%)	19 (7.0%)	0.048*
Secondary - Ciclo Basico	65 (33.5%)	80 (29.5%)	
Technical Studies	15 (7.7%)	19 (7.0%)	
Secondary - Bachillerato	46 (23.7%)	53 (19.6%)	
University and Post-graduate	28 (14.4%)	97 (35.8%)	
Geographic Location			
Coast	138 (50.4%)	192 (50.5%)	0.97
Periphery/Downtown	136 (49.6%)	188 (49.5%)	

[a] Mother's education status does not include those who report not having a mother.

Regarding PA psychosocial outcomes, intervention students reported significantly higher mean scores for perceived PA enjoyment at follow-up (p = .01), but not at posttest; and perceived teacher PA support at posttest (p = .01), but not at follow-up (Table 3). No significant differences by study condition were found for athletic identity appearance, athletic identity PA competence, or barrier PA self-efficacy for the total sample. In gender-stratified analyses, girls in intervention schools reported significantly higher mean scores for athletic identity PA competence at posttest (18.05 vs. 17.03, p = .01, for intervention vs. comparison, respectively), but not follow-up; and PA enjoyment at follow-up (11.47 vs. 10.32 for intervention vs. comparison, respectively, p = .01), but not posttest (results not shown in tables). In addition, intervention girls reported higher friend PA social support (6.77 vs. 5.76, p = .02) and higher teacher PA social support (4.70 vs. 3.28, p = .01) at posttest versus comparison girls, respectively; no differences in PA support were noted at follow-up. Lastly, no significant differences were found for boys or girls by study condition for athletic identity appearance or barrier PA self-efficacy, and no differences were found for boys for athletic identity competence or friend or teacher PA support.

Tobacco and physical activity: mediation analyses

Additional analyses were conducted to elucidate the mediating mechanisms (28) of this intervention—that is, whether changes in secondary outcomes were responsible for ¡Activate Ya!'s impact on primary outcomes (results not shown in tables). Among girls, friend PA support, teacher PA support, and athletic identity PA competency were evaluated as potential mediators of the intervention's impact on the global PAQ-C measure of PA at posttest. Of these, friend PA support was the only statistically

Table 2. Smoking and physical activity outcomes by study condition at pretest, posttest, and follow-up (total sample): 1º *básico* students (n = 654). *¡Activate Ya! Study*, Uruguay, 2016–2017.

Smoking	*Intervention*		*Comparison*		*p-value*
	%[a]	*SE*	%[a]	*SE*	
Past year[b]					
Pretest	2.70	1.00	3.60	1.00	0.54
Posttest	3.80	1.20	5.30	1.20	0.40
Follow-up	4.60	1.40	4.60	1.20	0.97
Susceptibility[c]					
Pretest	27.30	6.20	29.10	5.20	0.83
Posttest	38.70	2.70	35.90	2.30	0.43
Follow-Up	40.60	2.80	36.00	2.40	0.22
Physical activity (PA)	*Mean*[a]	*SE*	*Mean*[a]	*SE*	*p-value*
Past-7 day MVPA[d]					
Pretest	3.39	0.13	3.43	0.11	0.84
Posttest	3.34	0.13	3.41	0.10	0.65
Follow-up	3.22	0.14	3.40	0.11	0.31
PAQ-C[e]					
Pretest	2.44	0.04	2.31	0.03	0.01*
Posttest	2.29	0.03	2.20	0.03	0.048*
Follow-up	2.20	0.04	2.20	0.03	0.90
Past-week PA during school[f]					
Pretest	6.19	0.20	6.20	0.16	0.98
Posttest	5.87	0.18	5.42	0.15	0.05
Follow-up	5.24	0.19	5.29	0.16	0.82

Pretest: April–June 2016; Posttest: November–December 2016; Follow-up: April–June 2017.

[a] Adjusted for pretest score, gender and SES (fixed effect models); * $p < .05$.

[b] % of students reporting having smoked cigarettes 1 or more times in the past year.

[c] % of students who did not respond 'definitely no' when asked: if they ever felt curious about smoking cigarettes, think they will smoke in the next 12 months, and would like to smoke if a friend offered them a cigarette.

[d] Mean days in the past 7 days that students engaged in PA (with increased heart for some of the time) for 60 minutes or more.

[e] Physical Activity Questionnaire for Children: Mean score of number of times in past 7 days students participated in different recreational physical activities (range: 1–5, 5 = highest).

[f] Mean score of number of times in the past week students participated in PA during school (sports, dance, or active games; PA during recess; activity breaks/movement during class time).

[g] Mean number of times students report having participated in movement/activity breaks during class time.

significant mediator (B = 0.071, p = .002), accounting for 64% of the intervention's impact on the global PAQ-C measure of PA. No mediation analyses were conducted for smoking outcomes given the lack of effects on those outcomes.

Discussion

Findings were mixed regarding the impact of ¡Activate Ya! on cigarette smoking and PA outcomes. Stronger, more consistent effects on PA and related outcomes than cigarette smoking were observed, especially for girls. While positive effects of the intervention were found for selected psychosocial-related smoking outcomes (reasons to smoke for total sample and lower normative beliefs for boys), no impact on past-year smoking or susceptibility to smoking was detected at posttest or follow-up. Past 7-day PA, as measured by the PAQ-C, on the other hand, was significantly higher among students in the

Table 3. Smoking and physical activity psychosocial-related outcomes by study condition at pretest, posttest, and follow-up (total sample): *1º básico* students ($n = 654$). *¡Activate Ya! Study, Uruguay*, 2016–2017.

Smoking	*Intervention*		*Comparison*		*p-value*
	Mean[a]	*SE*	*Mean*[a]	*SE*	
Tobacco knowledge[b]					
Pretest	7.46	0.10	7.56	0.08	0.40
Posttest	7.52	0.10	7.47	0.09	0.74
Follow-up	7.31	0.11	7.52	0.10	0.16
Normative beliefs[c]					
Pretest	5.31	0.6	5.38	0.50	0.39
Posttest	5.17	0.07	5.13	0.06	0.67
Follow-up	5.14	0.07	5.13	0.06	0.94
Reasons to smoke[d]					
Pretest	14.70	0.20	14.60	0.17	0.86
Posttest	15.20	0.17	14.70	0.14	0.04*
Follow-up	15.15	0.17	14.96	0.15	0.42
Student-school connectedness[e]					
Pretest	11.28	0.18	11.17	0.15	0.64
Posttest	11.07	0.19	10.65	0.16	0.08
Follow-up	10.80	0.21	11.00	0.18	0.47
Physical activity (PA)					
Athletic identity appearance[f]					
Pretest	11.79	0.23	11.67	0.19	0.69
Posttest	11.62	0.21	11.40	0.17	0.41
Follow-up	11.20	0.21	11.59	0.18	0.17
Athletic identity competence[g]					
Pretest	18.29	0.26	18.07	0.22	0.52
Posttest	18.46	0.26	17.80	0.22	0.10
Follow-up	18.12	0.27	18.23	0.23	0.76
Barrier PA self-efficacy[h]					
Pretest	19.90	0.38	18.98	0.32	0.07
Posttest	19.53	0.40	19.07	0.33	0.37
Follow-up	19.24	0.43	18.70	0.37	0.34
Perceived PA enjoyment[i]					
Pretest	11.90	0.18	11.64	0.15	0.29
Posttest	11.58	0.19	11.46	0.15	0.63
Follow-up	11.77	0.21	11.05	0.18	0.01*
Perceived friend PA support[j]					
Pretest	7.27	0.26	6.51	0.22	0.02*
Posttest	7.39	0.24	6.95	0.20	0.16
Follow-up	6.59	0.27	6.41	0.22	0.61
Perceived teacher PA support[k]					
Pretest	4.89	0.30	4.81	0.25	0.07
Posttest	4.40	0.31	3.84	0.26	0.01*
Follow-up	4.04	0.30	3.39	0.25	0.10

(Continued)

Table 3. (Continued)

Pretest: April–June 2016; Posttest: November–December 2016; Follow-up: April–June 2017.

[a] Adjusted for pretest, gender, SES (fixed effects); *$p < .05$.

[b] *Tobacco knowledge* scale ranges from 0–10 (0 = lowest knowledge).

[c] *Normative beliefs* scale ranges from 0–6 (0 = highest norm. beliefs).

[d] *Reasons to smoke* scale ranges from 0–18 (0 = highest reasons).

[e] Student-school connectedness scale ranges from 0–16 (0 =lowest).

[f] *PA Self-concept* scale ranges from 0–16 (0 = lowest self-concept).

[g] *PA competence* scale ranges from 0–24 (0 = lowest competence).

[h] *PA Self-efficacy* scale ranges from 0–28 (0 = lowest self-efficacy).

[i] *Perceived PA enjoyment* scale ranges from 0–20 (0 = lowest enjoyment).

[j] Friend PA social support scale ranges from 0–16 (0 = worst outcome).

[k] Teacher PA social support scale ranges from 0–20 (0 = worst outcome).

intervention condition and for girls at posttest, and girls reported a significantly higher prevalence of several psychosocial factors related to PA engagement.

Some reasons for our null results with the primary smoking outcomes may include the short time frame for the intervention as well as the challenges of combining two distinct health behaviors into a single program framework. As the school schedule for public secondary school students in Uruguay is tight, we were intentional in developing a manageable 12-session approach that could be replicated at the end of the trial. However, given our dual behavioral focus, this resulted in only five classroom sessions focused specifically on smoking prevention. As prior reviews have found that school-based tobacco prevention programs that have more sessions (⩾ 15) and that are implemented over multiple years are more effective (9, p.787), the null findings on smoking outcomes in this study may have resulted from the limited exposure of students to the tobacco prevention facet of the program. Our non-significant findings mirror recent research on drug use prevention in Brazil with similarly aged students that also found no effects on tobacco use or other drugs after implementation of a 12-session program (29). Future school-based smoking prevention research in Uruguay should consider interventions with more sessions and a multi-year approach.

Related to the need for longer timeframes, other explanations for our lack of effects on smoking-related outcomes may include the need for expanded opportunities to build student social competence and resistance skills. In a 2013 meta-analysis of 49 RCTs of school-based smoking prevention programs, no overall effect was found on smoking outcomes at follow-up periods of ⩽ 1 year; however, subgroup analyses found that programs that combined social competence and social influence interventions showed significant effects at follow-up periods of ⩾ 1 year (30). While the ¡Activate Ya! intervention was intentional in incorporating a range of social learning dynamics and activities (e.g. small groups, role plays, active games and journaling) aimed at fostering social competence and social influence-related factors, including social norms against smoking, student-school connectedness, and skills for resisting social influences for smoking, the short time frame of the intervention as well as the limited exposure of students to these activities during a given week (e.g. 1–2 classes per week) may not have been sufficient to show effects on smoking outcomes.

We also found that combining distinct health behaviors into a single framework presents unique challenges as each behavior merits specific intervention strategies, and greater attention to some components may detract from others, despite efforts to seamlessly incorporate them under a common themed program. As time constraints have been found to be a key barrier for implementation of school-based interventions (31), further exploration of opportunities to incorporate social competence-building and PA promotion activities outside the classroom are warranted, following principles of system science (e.g. extensiveness of interventions across systems) (32) and 'whole-of-school approaches' to child health that include community-school partnerships (33). Although this study made initial steps toward a whole-of-school approach by complementing our classroom curriculum with an afterschool program as well as activity breaks across class subject areas, we recognize the need and opportunity to more fully explore the incorporation of social competency and tobacco prevention strategies across the school and community settings. As a positive step in support of whole-of-school approaches, some secondary schools in Uruguay have begun implementing a Saturday morning workshop-style curricular period aimed at providing additional opportunities for healthy adolescent development and social skill-building.

Despite limited or null effects on smoking-related outcomes, girls in the ¡Activate Ya! intervention reported significantly higher PA based on the PAQ-C instrument, and higher athletic identity PA competence, PA enjoyment, and PA friend and teacher social support. These positive yet modest effects of the intervention on self-reported PA in girls and lack of effects for boys are in line with findings from recent reviews that indicate mixed effects of school-based interventions on PA (34) and modest effects on increasing PA in girls (35). While recognizing the need for continued efforts to increase the efficacy of school-based interventions on adolescent PA, our positive short-term effects of ¡Activate Ya! on PA-related outcomes in girls provide encouraging support for incorporating PA promotion activities (e.g. journaling, goal setting/tracking and PA dynamics/games) within the classroom and afterschool settings in Uruguay that can contribute to a whole-of-school approach to PA, complementing other evidence-based strategies such as PE (36). Given lower PA engagement for adolescent girls in Uruguay (8), our findings provide support for interweaving PA promoting strategies in the school setting beyond the PE class setting that can further support girls' PA self-concept, perceived support, and perceived PA enjoyment, factors associated with adolescent PA engagement (16, p.25–27). Our mediation analyses provide further support for the importance of friend PA support in mediating PA engagement among girls. These factors merit further consideration for future PA promotion research and intervention among adolescents in Uruguay.

Limitations

Despite our efforts to increase participation in the evaluation, under half of the students from study schools participated in the evaluation of the intervention. This meant that we could not account for the clustering of students within schools in our analyses, and that our overall study had limited power to detect intervention effects. While we support the importance of active parental consent and implemented it in this study, active parental consent has been found to result in lower participation rates in adolescent health behavior research compared to passive parental consent (37). As just under half of eligible students participated in this study and data on nonparticipants were not available, caution is needed in interpreting the generalizability of our findings across students from participating schools. We also recognize limitations with our self-reported PA measures given advances with objective measures of PA. Although efforts were made to incorporate accelerometers with a subsample of students, our resulting sample was too small owing to implementation issues in this setting and not representative of our overall study sample.

Conclusion

Though not without challenges, school-based health promotion is feasible and potentially effective in Uruguay. Our findings on the positive short-term effects of ¡Activate Ya! on PA and related psychosocial outcomes for girls are especially important, given that girls are at higher risk than boys for physical inactivity and cigarette smoking across many countries in Latin America. Additional research is needed to determine the most effective strategies to prevent tobacco use among students and promote PA among boys in this setting.

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Conflict of interest

The authors declare that there is no conflict of interest.

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Reaching marginalized young women for HIV prevention in Botswana: a pilot social network analysis

David Loutfi[1], Neil Andersson[1,2], Susan Law[1,5], Leagajang Kgakole[3], Jon Salsberg[4], Jeannie Haggerty[1] and Anne Cockcroft[1,3]

Abstract: Almost one-fifth of Botswana's population is infected with HIV. The Inter-Ministerial National Structural Intervention Trial is a trial to test the impact on HIV rates of a structural intervention that refocuses government structural support programs in favor of young women. Ensuring that the intervention reaches all vulnerable young women in any given community is a challenge. Door-to-door recruitment was inefficient in previous work, so we explored innovative ways to reach this population. We sought to understand the support networks of marginalized young women, and to test the possibility of using social networks to support universal recruitment in this population. Ego-centric and sociometric analyses were used to describe the support networks of marginalized young women. Marginalized young women go to other women and relatives for support, and they communicate face to face rather than using social media. Network maps show how young women were connected to each other. Lessons from the pilot include a better understanding of how to use social networks as a recruitment method, such as the time required and the types of community members that can help. Social networks could help reach other hard-to-reach populations. (Global Health Promotion, 2020; 27(2): 74–81)

Keywords: HIV/AIDS, social networks, adolescents and youth

Introduction

Almost one-fifth of Botswana's population is infected with HIV (1), and young women are at particularly high risk of contracting HIV largely due to transactional and intergenerational sex. Many young women who face structural disadvantages such as extreme poverty, poor education, and gender-based violence are unable to act on choices to protect themselves against HIV (2). There is a need to target young women in prevention efforts to achieve control of the HIV epidemic (3). The Inter-Ministerial National Structural Intervention Trial (INSTRUCT) is a cluster randomized controlled trial of a structural intervention for HIV prevention in Botswana (trial registration: ISRCTN54878784). INSTRUCT aims to re-focus existing government structural support programs towards young women (support programs include help to set up small enterprises, support to improve education, and others), and help them to access support programs by providing workshops where young women learn about support programs, meet program officers, and gain skills to improve their communication and self-esteem.

1. Department of Family Medicine, McGill University, Montreal, Quebec, Canada.
2. Centro de Investigación de Enfermedades Tropicales (CIET), Universidad Autónoma de Guerrero, Acapulco, México.
3. CIET Trust Botswana, Gaborone, Botswana.
4. Graduate Entry Medical School, University of Limerick, Limerick, Ireland.
5. Institute for Better Health, Trillium Health Partners, Mississauga, Ontario, Canada.

Correspondence to: David Loutfi, Department of Family Medicine, McGill University, 5858, chemin de la Côte-des-Neiges, 3rd floor, Montreal, Quebec, H3S 1Z1, Canada. Tel: +1 514-398-7375, Email: david.loutfi@mail.mcgill.ca

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Structural interventions

Structural interventions aim to change contextual or environmental factors that influence people's health, including laws, policies, social and cultural norms, and economics (4,5). The Joint United Nations Programme on HIV/AIDS (UNAIDS) recommends combining structural interventions with bio-medical (e.g. providing medication) and behavioral (e.g. changing the individual's action and attitudes) interventions as an effective HIV prevention strategy (6). Solutions for these issues tend to be enacted at a population level, which carries the risk of ignoring marginalized populations. Frolich and Potvin argue that a population approach can increase inequality for vulnerable populations since the least vulnerable may be better able to take advantage of services in comparison with those at higher risk, and the net benefit to the population comes at the expense of shifting the burden of risk onto the most vulnerable. They suggest targeting vulnerable populations deliberately in addition to a broader population approach (7).

A hard-to-reach population

Engaging young women who are not in education and not in work—who are at high risk of contracting HIV, largely through transactional and intergenerational sex (8)—involves considerable challenges. The INSTRUCT intervention seeks to increase access of these marginalized young women to existing government support programs. Young women rarely access these programs (9), but access to these programs could reduce their reliance on transactional sex and therefore prevent HIV. There is intrinsic value in empowering young women globally; in Botswana, this empowerment provides the additional possibility of tackling the HIV epidemic. Success will depend on the ability to reach as many as possible of the most marginalized young women, but door-to-door recruitment is inefficient. Neighbors told INSTRUCT field workers that potential participants (for workshops as part of the trial intervention) lived in certain households, but these were empty, despite repeated visits. Efficient and effective recruitment would ensure inclusion of marginalized young women.

Others have used social networks to work with and understand marginalized populations such as men who have sex with men (10–12), injecting drug users (13,14), and women (15,16), though little has been done to target young women in southern Africa. Although these methods (e.g. respondent-driven sampling) often aim to ensure representativeness of hard-to-reach populations in situations where a sampling frame is not available (17), we attempted to reach all or most of the young women in an area rather than collecting a sample. Our goals in this pilot project were to develop a preliminary understanding of the support networks of marginalized young women, and to test the feasibility of using social support networks as a recruitment method within this population.

Methods

Recruitment

The aim was to identify and interview all the eligible young women in a given community, rather than seeking a sample. As with snowball sampling and respondent-driven sampling (which involves using peers to recruit each other) (17,18), our method used peers and other community members, such as the village chief, to identify marginalized young women. In addition to this, we recruited participants by going door to door. Field workers (trained local young women) spoke first with community members (e.g. village chief) to identify initial participants. Field workers invited these initial participants to participate in a survey. During the survey, field workers asked consenting participants to describe their social support networks (see data collection below). The survey itself provided two additional opportunities to recruit participants through 'snowball' recruitment. First, anytime the participant listed a woman aged 16–29 that was not working or enrolled in education, the tablet prompted the interviewer to ask the participants how to best reach this person (phone number, description of the dwelling, accompaniment to the household). Second, field workers asked participants if they wanted to name people that were not listed in their support networks but that could be eligible for the survey. Our recruitment method therefore used networks in an informal manner to identify participants. However, in future recruitment, we also aim to use networks more formally by analyzing them in detail. Lastly, our field teams consisted of young women from the district, and their knowledge was important in identifying eligible participants.

Eligible young women for this study were aged 16–29 years, not currently enrolled in education and not in paid work. We focused on this group because HIV incidence is highest in young women in Botswana (1) and because they would benefit from increased access to government support programs that offer education, apprenticeships, and income-generation opportunities. The INSTRUCT trial aims to prevent HIV by providing young women with access to these already available programs. The field teams identified and interviewed 192 eligible young women over seven days in two urban and two rural locations within one district close to the national capital.

Context

The two urban locations were neighborhoods of different levels of development in a village of 20,000 people. The rural locations were two smaller villages of a few thousand and a few hundred people. We selected these locations to provide a range of population size and development. Health facilities and schools are present in each of the communities. Boys and girls have similar enrolment rates in primary education (~90%) (19). Enrolment in secondary education in Botswana is generally high (81% among 16-year-olds), but female dropouts are higher, often due to pregnancy (20). Transport in the smaller villages is not readily available, and so these populations are less mobile.

Data collection

In each location, interviewers administered a questionnaire to all identified eligible young women, covering demographic characteristics and enquiring about who the young women go to for social support of different kinds. While the data collection served primarily to help us understand the support networks of our participants, it also allowed us to identify and recruit additional participants as described above. The interviewers used Open Data Kit (ODK) Collect (21) on Android tablets to record responses. Team leaders checked the data on the tablets and uploaded the records to ODK Aggregate hosted on a server in Botswana.

The questionnaire had three sections. Part 1 covered demographic information about the respondent. Part 2 asked the respondent to list up to five people they go to for each of three types of social support (informational, emotional, and socializing). The specific questions were: (1) Sometimes people ask other people for information or advice about important decisions in their life, for example education or employment opportunities. Who do you usually ask for advice in these types of situations? (2) Who do you usually socialize with? (3) Sometimes, people discuss important personal matters with other people such as problems with boyfriends, friends, or with family. Who do you discuss such personal matters with? Part 3 asked for demographic information about the people named in part 2, including age, gender, relationship type (friend, family, other), frequency of contact, role in the community, level of education, marital status, and method of communication. We asked them to name up to five people for each type of support because participants generally responded with fewer than five names when we field tested the questionnaire.

All three networks included people that could potentially be used to reach the young women if we can identify central types of individuals for future recruitment. The information network provided an understanding of who the young women went to when looking for information about work or school and this could be a potential network through which to spread information about government support programs. The socializing and emotional support networks provided information about people the young women trusted or engaged with frequently and are another potential means to spread information about support programs.

We also collected data about the recruitment process, including the time required to reach our participants and the types of key informants that identified participants.

Data analysis

We used ego-centric analysis to describe the types of people that participants sought for support. Ego-centric analysis is a type of network analysis that focuses on the network of each individual and could be carried out with a random sample of participants (22). It can be used to describe the types of people in the 'average' network or could describe the proportions

Table 1. Description of the people that marginalized young women go to for support.

Characteristics of people sought for support n = 192	*Information*	*Socializing*	*Emotional support*
Female	80.2%	81.6%	82.4%
Similar age (<30)	61.2%	84%	61.6%
Relationship with support person			
Relative	61.8%	42.4%	53.9%
Friend	37.0%	57.4%	45.6%
Professional	1.2%	0.2%	0.6%
How often do you see the support person?			
Weekly or more often	77.7%	88.2%	85.7%
Monthly or less often	22.3%	11.8%	14.3%
How do you communicate with the support person?			
Face to face	92.9%	91.0%	93.5%
Phone	56%	54.4%	47.9%
SMS	42%	39.2%	37.2%
Facebook	19.7%	29.3%	16.4%
WhatsApp	6.2%	4.5%	4.5%
Email	1.2%	1.1%	1%
Other	< 1%	< 1%	< 1%

of network members that engage in a behavior (e.g. smoking) to help understand whether the ego (study participant) engages in the same behavior. The analysis is equivalent to analyzing a cross-sectional survey on the topic of social support. Respondents provided information about themselves and the people they went to for support and this generated descriptive statistics, outlining who they went to for support.

Second, we used sociometric analysis to study the connections between our participants. Sociometric or *whole network* analysis examines the links between the members of a defined group, who in this case, were marginalized young women. In a sociometric network diagram, the nodes represent individual participants and the lines between them (edges) indicate connections between participants. Sociometric analysis can reveal who is central in a network, and therefore who might be useful for spreading information (22). Visual inspection of network graphs and network metrics helped us to understand the network. In-degree centrality measures how many incoming links there are to a given node (23), in this case, for social support. Graph centralization measures how much or how little centrality is focused on few individuals or is spread out more evenly across the network. It ranges from 0 to 1, where 0 indicates a graph with the maximal number of possible connections, where all nodes are sought for support equally, and 1 indicates a graph in a 'star' shape, where only one person is sought for support by all others (23). We used R for the descriptive statistics, and the igraph package in R for the sociometric analysis (24,25).

Findings

Social networks of marginalized young women

Ego-centric analysis

We examined three support networks (information, socializing, and emotional support) as potential means to reach marginalized young women. A general description of these networks is provided in Table 1.

Table 1 shows a preference for female support, across all types of support, and a general preference for support from people of a similar age (younger than 30), especially for socializing. Except for socializing, relatives were the more common source of support; nearly two-thirds of the support people mentioned for information support were relatives. Overall, of the women listed for support, 55% (623) were listed as relatives, and of these female relatives, 37% (233) were more than 10 years older, and 11% (71) were more than 30 years older than the young

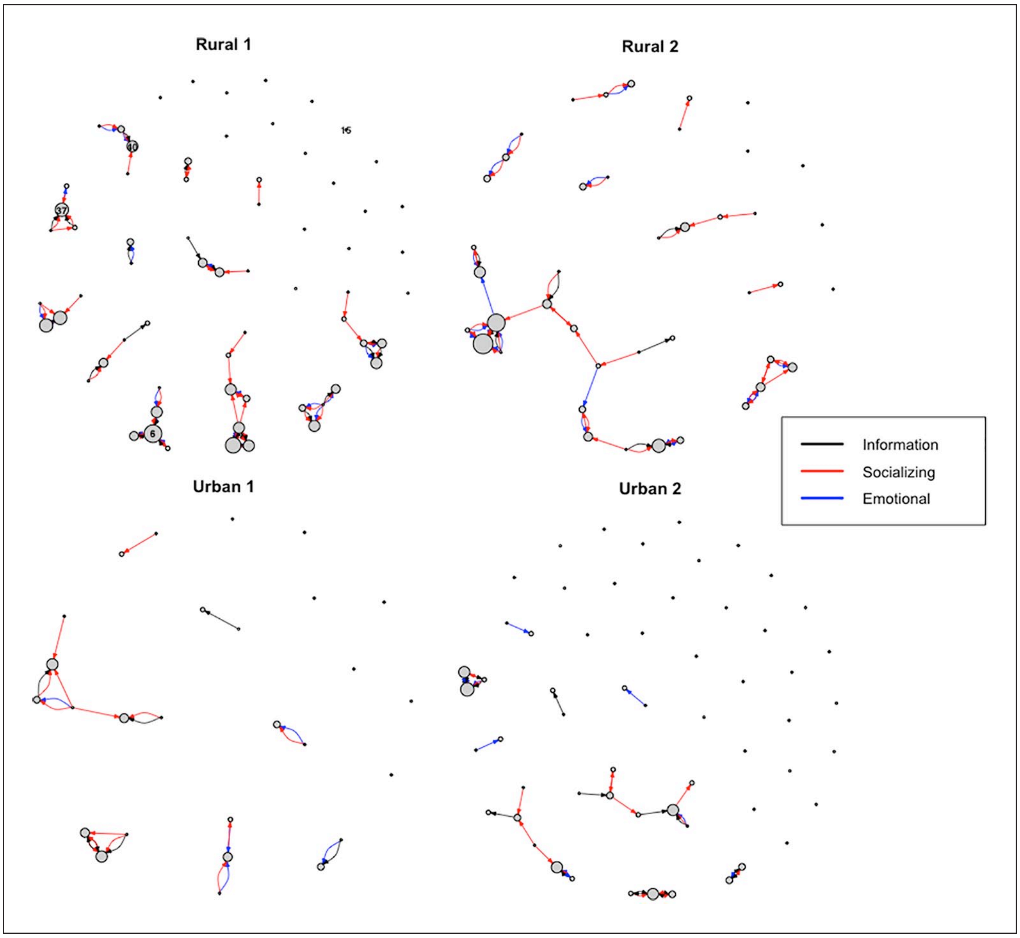

Figure 1. Network maps of marginalized young women in four communities.

woman responding. Some of these supporting women would have been mothers, grandmothers, or aunts. Communication mostly occurred face to face with limited use of technology. Where technology was used, this was done mostly via mobile phone/text, with limited use of social media.

Sociometric analysis

Sociometric analysis helped us understand how our population is connected. As an example, the diagram labeled Rural 1 in Figure 1 maps the three support networks of 65 marginalized young women in a rural community of about 700 people. The size of the node shows how often that person was sought for support. Rural 1 shows many small groups of participants connected to each other and 18 participants not connected to others (e.g. node 15). The in-degree centrality of individual nodes in this graph ranges from 0 to 7 (Table 2). Node 6 has the highest in-degree score, while node 15 has an in-degree score of 0. This network has a graph centralization score of 0.09 (on a scale of 0 to 1), which indicates a decentralized network of relatively evenly distributed centrality across nodes. By examining the graph, we see that many nodes are roughly the same size, indicating that there was not one person in that community that was notably more central than the rest. Of participants that were sought for support, 40% of participants were sought

Table 2. Distribution of in-degree centrality.

In-degree score	*Zero*	*One*	*Two*	*Three*	*Four*	*Five*	*Six*	*Seven*
Count	33	8	6	6	7	3	1	1

In-degree refers to the number of incoming ties to a node, which, in this case, means the number of people that went to a particular young woman for support. For example, eight young women were sought for support by only one other young woman.

for only one type of support (information, emotional or socializing) but 60% were sought for multiple types of support. For example, the young woman represented by node 37 was sought for information (black lines) and socializing (red lines) by two participants and was sought only for socializing by one person. Node 40 was sought for all three types of support from one person and for socializing by one other participant. The graph shows that 40% of participants did not turn to any other participants for support of any of the kinds we measured. This does not imply that they are completely isolated. Figure 1 shows only how marginalized young women were connected to *each other*; it does not show their connections with people other than young women. The ego-centric analysis (Table 1) describes the types of people they were connected to more broadly. In Figure 1, diagrams Rural 2, Urban 1, and Urban 2 show the network graphs for the other three communities. While the rural communities were slightly more connected than the urban communities, we urge caution in the interpretation as this was a pilot study. Since the recruitment had limited time, nodes could be missing from the graph that would change the interpretation. We show these maps here as an indication of the sort of picture that emerges from the analysis, rather than for interpretation of specific patterns.

Recruitment process practicalities and implementation

During this pilot, we allocated 1–2 days for recruitment in each community where the total populations ranged from a few hundred to a few thousand. This was insufficient time to permit follow-up with all those that were identified as potential participants; we estimate that 4–5 days would be sufficient.

We recruited 192 participants, and most of these were identified through a mixture of going door to door and by referrals from participants. The first participants were often identified by key community members such as the village chief and their staff, and chance encounters with other community members. We spoke with physicians and nurses, but they were generally too busy to help. We also returned to key community members during recruitment for additional suggestions. In rural sites, key community members were better able to identify eligible participants than those in urban areas. This is possibly because, in urban areas, they were responsible for larger populations, or because jurisdictions were less clear when there were multiple clinics, and multiple social workers or health education assistants in one town.

Discussion

This pilot project helped us understand facilitators and barriers to reaching marginalized young women with an intervention. It also allowed us to explore possibilities for using networks in a more deliberate way to reach this group.

Acceptability of recruitment method

The recruitment method seemed acceptable to the participants. Since young women from the study district received training as interviewers and conducted the recruitment exercise, participants felt at ease during the interviews and when suggesting peers to interview. Community leaders approved the recruitment in each community before we began, suggesting the method was acceptable to them as well. Since physicians and nurses were too occupied to help, different community members that work with marginalized populations could be included in future recruitment. This collaboration with community members was possible because of the participatory approach of the INSTRUCT research team, which has been working in these communities for years, offering workshops, sharing research results, and building relationships (26).

Support networks of marginalized young women

This pilot provides preliminary insight into what kinds of people marginalized young women are turning to for support. The analysis suggests that focusing on women and family members, sharing information face to face, and reaching out through multiple nodes will improve outreach. A review has shown the important role that family members can play in preventing HIV through good communication, role modeling, and a number of other processes (27). Although discussions with parents and grandparents related to sexuality are often still taboo for adolescents (28), the information that we aim to share is about government support programs, so it is not particularly sensitive. Perhaps female relatives (grandmothers, mothers, aunts, etc.) could also be invited to workshops to learn about available support programs in addition to the workshops for young women themselves.

The current process for identifying support persons could potentially be carried out more quickly if participants were prompted to consider multiple networks when suggesting new participants, without asking detailed questions about participants in those networks. While our goal was to describe the networks of marginalized young women, others wanting to quickly identify participants could add these prompts to their snowball sampling method (29) to quickly identify new participants.

Limitations

Sociometric analysis is challenging when the total population is not known in advance (30). A lack of connections, as in Figure 1, could indicate isolation or could point to a lack of data. This is one reason why we verified our list of participants with key community members and why it will be important to do so in future work. This step provided more confidence in the sociometric analysis. However, this study uses pilot data and the sociometric analysis should be interpreted with caution.

Conclusion

This pilot provided information about the types of people that could be targeted, the timing of the recruitment, and the importance of the participatory approach. This approach allowed us to tap into the knowledge of community members and helped participants feel comfortable to point us to other eligible participants. The network analysis suggests that we may have to target a broad range of community members to reach all eligible young women, rather than one central person.

Recruitment is an important first step, but behavior change, leading to a reduction in HIV, is the ultimate goal. Encouragingly, peers within social networks have been shown to influence one's perception of risk (31) and have been used to reduce risky behavior (10–15), and we hope to build on these networks to prevent HIV. In carrying out an intervention that aims to prevent HIV in this marginalized population, a crucial hurdle to overcome is knowing if all eligible participants have been identified. The ones in the population who are missed could well be those with a higher risk of contracting HIV. In this context, there is no list of all young women not in work or school, so there is no way to know definitively that all have been reached. However, this work suggests that combining traditional door-to-door recruitment with respondent-driven approaches and involving key community members in a participatory way can offer more confidence than any one method used alone.

Declaration of conflicting interest

The authors declare that there is no conflict of interest.

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ORCID iD

David Loutfi https://orcid.org/0000-0001-6315-198X

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Integrative settings approach to workplace health promotion to address contemporary challenges for worker health in the Asia-Pacific

Cong Tuan Pham[1], Chiachi Bonnie Lee[2], Thi Lien Huong Nguyen[3], Jin-Ding Lin[4,5], Shahmir Ali[1] and Cordia Chu[1]

Abstract: Workplaces in the rapidly industrializing Asia-Pacific region face growing pressures from high-speed development driven by global competition, migration and the aging of the workforce. Apart from addressing work-related injuries, workplaces in the region also have to deal with increasing occupational stress, chronic diseases and their associated socio-economic burden. Meanwhile, interventions in workplace health are still dominated by a narrow behavioral change model. To this end, the integrative workplace health promotion model, initiated by the World Health Organization from successful post-1990 pilot projects, emerges as a timely, comprehensive and appropriate means to manage contemporary workplace health and safety issues in the region. In this paper, we highlight the key workplace health challenges in the Asia-Pacific region and the utility of the integrative workplace health promotion model in addressing them. We provide a brief overview of the pressing challenges confronting workplaces in the region, then explain the why, what and how of integrative workplace health promotion. We illustrate this model by reviewing successful examples of good practice and evidence of their achievements from workplace health promotion programs in Asia-Pacific from 2002 to date, with specific attention to government-led workplace health promotion programs in Shanghai, Singapore and Taiwan. Drawing from these successful examples, we recommend government policies and facilitating strategies needed to guide, support and sustain industries in implementing integrative workplace health promotion. We conclude that consistent supportive government policies, coupled with facilitation by international bodies towards capacity and professional network building, are crucial to developing and sustaining healthy workplaces in the region. (Global Health Promotion, 2020; 27(2): 82–90)

Keywords: workplace health promotion, integrative settings approach, model of good practice, Asia-Pacific region

Introduction

Globally, workers are increasingly confronted with health and safety risks associated with globalization, technological change, economic competition and increased workplace pressures (1–3). As a newly industrialized region with a very fast growing economy, the Asia-Pacific is faced with

1. Centre for Environment and Population Health, Griffith University, Brisbane, Australia
2. Department of Health Services Administration, College of Public Health, China Medical University, Taichung, Taiwan
3. Health Environment Management Agency, Ministry of Health, Hanoi, Vietnam
4. School of Public Health, National Defense Medical Center, Taipei, Taiwan
5. School of Gerontology and Health Management, College of Nursing, Taipei Medical University, Taipei, Taiwan

Correspondence to: Cong Tuan Pham, Centre for Environment and Population Health, Griffith University, 170 Kessels Road, Nathan, Brisbane, Queensland 4111, Australia. Tel: +61 07 37357455 Email: congtuan.pham@griffithuni.edu.au

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both traditional risks such as physical and chemical hazards, amplified by industrialization, and emerging threats from new technologies and the changing nature of work, such as psychological stressors (4,5). It has been estimated that the Asia-Pacific region suffered nearly half a million deaths and 16 million disability adjusted life years, approximately two-thirds of the global total, due to occupational hazards in 2000 (6). Moreover, studies have found a significant rise in health care costs associated with work-related stress, occupational injuries and chronic illnesses, in addition to the associated socioeconomic costs, including productivity losses (1,5,7). Thus, it is important for nations and enterprises in the region to develop appropriate workplace health programs to protect and promote worker health (8).

Workplace health promotion (WHP) has developed historically in line with changes in the health promotion field and is shifting away from a narrow focus on health education and individual responsibility to a broader, more comprehensive, integrative approach to health and health determinants (9–11). The most recent World Health Organization (WHO) guideline (2010) for healthy workplaces (12) as well as other recent literatures (13,14) continue to endorse a comprehensive and integrative approach to WHP.

To guide the regional development of healthy workplaces in the Asia-Pacific, in 1993 the WHO Western Pacific Regional Office offered training workshops and sponsored pilot projects (10). A WHO workshop in 2002 found that 11 countries were in various stages of implementing healthy workplace programs (10,15). However, little is known about their subsequent development. In addition, few contemporary publications have reviewed the implementation strategies for best-practice WHP programs to guide its development in the region.

To fill this gap, we will discuss contemporary workplace challenges in the Asia-Pacific region and provide a brief overview of the development of WHP concepts and approaches. To do this, we reviewed literature drawing on a previous review (10) and literature searches on relevant issues. In addition, we reviewed and summarized the peer-reviewed and grey literature on the facilitation and development of 18 WHP programs in the Asian and Western Pacific region from 2002 to the present using the search terms ‘workplace health promotion,’ ‘program or strategy,’ and the names of countries in the region from Google Scholar, Medline, and government websites (see the supplementary file). Three case examples, namely government-led WHP programs in Shanghai, Singapore and Taiwan, were selected based on three criteria.

1. Consistent support from the government, i.e. leadership commitment, resource allocation and encouraging enterprise participation;
2. Application of integrative WHP principles—a comprehensive and needs-based approach, a cyclical assessment and improvement process, leadership commitment, and employee involvement; and
3. Evidence of expansion and sustainability of the WHP programs.

Contemporary challenges for workplace health in the Asia-Pacific

The contemporary challenges for workplace health, namely globalization, labor migration, an aging workforce, and emerging challenges from new technologies, such as replacing workers with robots, are expected to cause significant increases in burden of work-related health problems and health care costs and economic loss for employers and governments in the Asia-Pacific Region.

Globalization and employment conditions

Globalization has fundamentally changed the nature of work and employment practices, bringing new challenges to workplace health and safety (2,16). Increased global competition intensifies workplace pressures, driving enterprises to restructure and cut costs, including by lowering health and safety standards (16). High levels of unemployment, and a sharp rise in informal employment that were witnessed in Indonesia, the Philippines and Thailand after the global financial crisis in 1997, demonstrate the vulnerability of workplaces in Asia-Pacific in a globalizing world (17). The competition for lower labor costs has forced countries in the region to revise their labor laws and weaken trade union rights (17). In addition, for the rapidly industrializing countries in the Asia-Pacific, globalization and trade liberalization have also brought a transfer of hazardous industries, and relocation of occupational hazards such as hazardous chemicals from developed countries, usually without the necessary protective measures (4).

Furthermore, recent advancements in the use of online services, artificial intelligence, robotics and related technologies pose significant threats to employment conditions, changing the arrangement of place and time of work, and triggering job insecurity due to a reduction in the number of jobs available (18,19). Those threats are visible in the Asia-Pacific areas, especially among export-oriented, labor-intensive industries. In 2013, Foxconn, one of the largest contract smartphone manufacturers in China, and Nike shoe-making factories in Indonesia, both announced plans to introduce robots to replace workers in their production lines (18). These changes put pressure on workers to accept poorer conditions to find employment.

Thus, countries in the Asia-Pacific region are faced with the double burden of both new and traditional occupational health and safety risks (4). Many countries in the region still struggle with the burden of traditional workplace risks such as injuries, respiratory diseases, dermatitis and muscular-skeletal disorders that were magnified in the process of industrialization (5,8). For instance, the risk of fatal accidents could be more than 10 times higher in newly industrialized than in long-industrialized countries (5). Additionally, new workplace risks have emerged in newly industrialized countries: exposure to new technologies and production processes, the consequences for human health of which are still not well understood; and higher pressure on working conditions and employment practices (4,7). Psychological workplace risks, such as work-related stress, workplace bullying and violence, and work-life imbalance, are increasingly recognized as challenges in low- and middle-income countries (2,20).

As a consequence, workplaces in the Asia-Pacific region have experienced increased costs due to workplace sickness and loss in productivity as well as the increase in musculoskeletal disorders, work stress and mental health problems and their associated medical, psychosocial and behavioral outcomes (20).

Labor migration and the double burden faced by migrant workers

In many emerging Asia-Pacific economies, relying on large-scale internal migration of labor has become necessary in order to meet labor force needs and sustain development (21,22). It is estimated that there were 282.1 million internal migrants in the Asia-Pacific region in 2005 (21,22). However, migrant workers face a double burden of health and safety issues both from their workplaces and their social circumstances (22). Migrant workers tend to work in high risk sectors, receive little work-related training and information, face language and cultural barriers, lack protection under labor laws, and experience difficulties in accessing health services (23). Additionally, the poor living environment of many migrant laborers can greatly increase their vulnerability to illness, infections and other health problems (24). As a result, the large-scale increase in the number of migrant workers brings a significant burden to the workplace health system in the receiving areas (21,22).

Population aging

According to WHO, the Asia-Pacific region is experiencing population aging more rapidly than any region in history and on an unprecedented scale, leading to the aging of its workforces (25). The number of people aged 65 and older in this region is expected to grow by about 22% every five years between 2015 and 2034 (25). To cope with the threat of a shrinking workforce, Asia-Pacific economies such as Japan, Korea, and Singapore have introduced a range of financial incentives for employers to promote longer working lives (26). In Singapore the number of employees 50 and over is projected to increase by 55% and constitute 40% of the workforce over the next 50 years (27). Meanwhile, other countries such as China and Vietnam are planning to raise their retirement age (28,29).

Many chronic and degenerative health problems are associated with longer lifespan. With lifestyle changes and the aging of the workforce, enterprises are confronted with increases in chronic illnesses such as cancer and heart disease, as well as tobacco-related non-communicable diseases, mental health, diabetes and injuries, increasing the economic burden on these societies (25).

In summary faced with the immense challenges mentioned above, the Asia-Pacific workplaces need to deal with increasing occupational stress, work-related injuries and chronic diseases that significantly increase the burden of health and safety problems, and the associated health care costs. Thus, it is important for them to adopt timely, comprehensive and appropriate measures to address workplace health and safety issues.

The development and key features of integrative workplace health promotion

Workplace health promotion has evolved over four generations, starting with health promoting activities which were initiated for various reasons that were not necessarily related to health such as no-smoking policies for reason of fire prevention (9,30). The second generation began in the 1970s when WHP activities tended to focus on single illnesses or risk factors or on changing particularly risky work practices (10,30,31).

The third generation evolved in the early 1980s, when 'wellness' programs became popular, with most programs focussed on changing individual behaviours by incorporating many single health-habit interventions into integrated programs (30,32,33), for example, health screening, stress management courses, healthy canteen food, exercise and health information seminars (31). However, these interventions mainly narrowly focussed on the health behaviour of employees rather than making workplaces safer (30,32,33). As a consequence, these approaches had limitations in dealing with the social and economic determinants of workers' health and the environmental or organizational factors influencing health (10).

Moreover, WHP interventions and occupational health activities during this period were commonly managed in a fragmented way by organizational actors (e.g. human resource staff and safety committees) operating independently or even in competition for limited resources (14,31,34). An example of resource competition between occupational health and safety and WHP could be found in the expansion of WHP in Queensland, Australia in the 1970s and 1980s (31). Having a WHP program separate from an occupational health and safety system often leads to a waste of resources and poses a significant burden for enterprises, especially smaller ones (14,34). This WHP approach has also been criticised for increasing the inequality in health care for workers, as the programs are mostly found in rich industrialised countries with low morbidity and mortality and are limited to larger companies (33). For these reasons, several reviews underline the need for a comprehensive approach to WHP that includes both individual-directed and organizational-directed measures (3,33,35).

This new understanding has led to the development of a fourth generation of WHP in the early 1990s as part of the emergence of the settings approach to health promotion. This approach gives increased recognition to the multi-causal nature of employee health and the influence of organizational measures (9,10). Adopted by many international organizations and health agencies, it is variously known as 'the integrative setting approach to WHP,' 'integrated WHP,' 'health promoting workplace,' and 'healthy workplace' (1,12,36,37).

A fundamental principle for the integrative model is an understanding of the holistic and multi-causal nature of workers' health (9). Thus, integrative WHP programs and policies employ a comprehensive approach to WHP, concerning all aspects related to workers' health, safety and wellbeing (12). WHO has identified four main aspects to be addressed in the integrated model, namely the physical work environment, the psychological work environment, personal health resources and community involvement of the enterprise (12). Integrative WHP interventions have been praised as the most successful workplace health interventions because they have focused on broad strategies to promote health while also paying attention to special interventions targeted at specific risk groups, tailoring the program to suit specific workplace conditions to avoid an over-simplistic, one-size-fits-all approach (13,14,38).

The operation principle of the integrative WHP is the 'participatory needs-based problem-solving cycle' (10,35). Involving both employee and employer participation, this process is a systematic continuum constituting needs assessment followed by program development and implementation according to the prioritized needs of the workplace (10,34,35,37). The model applies a more interdisciplinary approach combining the efforts of employers and employees with contributions from health promotion and occupational health practitioners (12,39). Above all, leadership commitment and the involvement of workers are key to the success of WHP programs (13,14,38).

The integrative approach has been shown empirically to effectively address complex issues affecting workers' health (11,12,37,39). There have been successful examples of WHP in the Asia-Pacific Region, demonstrating its positive outcomes (10,39).

Case examples from the Asia-Pacific

In the Asia-Pacific Region, healthy workplace initiatives have developed thanks to the active facilitation of the WHO Western Pacific Regional Office through training courses, dissemination of regional guidelines, and the sponsorship of demonstration projects in the mid-1990s (39). By 2002, there were 11 countries in various stages of implementing healthy workplace programs in the region (15). However, due to the lack of international funding support and consistent leadership commitment, many once successful, integrative WHP programs, even those with cost-effective and measurable outcomes, have either lost their momentum, returned to second- or third-generation WHP practices, or simply ceased to operate.

WHP programs in Vietnam, for example, initiated in 1998 in 30 small enterprises and 15 family foundry businesses, demonstrated impressive improvements in work conditions and environmental hygiene, lifestyle, health information and productivity (10,15,39). These successes led to the formation of a national WHP plan and three training course modules to extend the program to 60 additional enterprises (10). Although a 2002 WHO report lauded the program's success, the project ended when funding ceased (10). Workplace health programs in Vietnam have since gone in different directions, following the program emphasis and approaches favored by different funders (40). Many other countries in the region also followed different pathways to WHP, adopting a variety of models. However, they mostly had a narrow focus on reducing the risks of non-communicable diseases through health behavior change (for details, see the supplementary file).

Nevertheless, there have been three shining examples in the Asia–Pacific Region – the Shanghai, Singapore, and Taiwan WHP programs, all of which have demonstrated good practices in both application of integrative WHP principles and in expansion and sustainability by effective facilitation strategies.

Shanghai's WHP program

A well-documented success story is the WHO China collaborative healthy workplace project coordinated by the Shanghai Health Education Institute, involving 44,000 employees in four enterprises from 1993 to 1995 (10). Based on the results of a needs assessment, the Shanghai WHP program adopted comprehensive and integrative health promotion and occupational health strategies. The program addressed environment hazards (i.e. noise and dust) reduction, health education and safety training, promoting health services, creation of health-supporting environments such as better housing and living conditions and transport arrangements, and better lifestyle initiatives such as smoking cessation, salt-reduction training for canteen cooks and creating traditional Chinese exercise clubs (10,41). The project achieved measurable improvements in key areas including a 10-plus% reduction in the incidence of work-related injuries, a 50% reduction in the levels of sick leave, reduction of disease and related health costs (e.g. the prevalence of pharyngitis dropping from 16% to 10%), improvement of health and safety knowledge and practices, and reductions of risky behavior (e.g. tobacco and salt consumption) (10,41).

With the continuing support of the Shanghai Health Education Institute, the program expanded through the introduction of workplace health projects to a further 26 industries in 2001 (10,42). The program has nurtured a well-trained health promotion workforce with two masters and 13 bachelors degree holders, 11 tertiary and technical degree holders, two medical deputy directors, 16 chief medical doctors, and 16 medical doctors, and has supported capacity building and developing training workshops (41). Through forming health promotion networks and consultancy, the workplace program experts have continued to introduce integrative WHP programs into many industries and companies. According to the Shanghai Municipal Patriotic Campaign Committee report (2015), workplace programs and healthy offices programs have merged as a component of a city-wide healthy city project adopted by all 19 districts (10,42).

Singapore's WHP program

Singapore's WHP system has evolved from a simple occupational health and safety approach in

1970, to a program focused on health education activities in 1984, and into a holistic, integrated program involving all aspects of a worker's life from 2000 onwards (10,43). Since its establishment in 2001, the Singapore Health Promotion Board (SHPB) has provided consistent leadership promoting WHP programs by employing a wide range of strategies to create a supportive environment for enterprises to initiate and implement WHP programs (44). The SHPB provides a variety of grants for individuals and organizations interested in running WHP programs (44). The program supports a range of issues-based intervention strategies that meet the needs of Singaporean workers. These include smoking cessation, healthy diet, mental health, ergonomic/back care, HIV/AIDs prevention and women's health (44). Moreover, it offers a comprehensive support infrastructure to implement the programs, including a directory of service providers, peer support programs, case studies on best practices, consultation and training, and resources references (43). The SHPB also supports capacity building strategies by providing training courses and educational seminars, a WHP toolbox and relevant resources (43).

In addition, to promoting and sustaining WHP momentum, SHPB organizes formal HEALTH award ceremonies with a list of award winners published in the national newspapers. As evidence of increased workplace participation, the award recipient list has grown from 132 in 1999 to 667 in 2014 (44). Moreover, the Award Assessment Criteria effectively guide industries to the basic principles and methodological approach of the integrative WHP model by promoting the participation of all stakeholders with strong leadership at all levels, and a concern for integrating employee health into the organizational culture, referenced within the organization's policy documents (43,44).

These comprehensive facilitating strategies have yielded significant outcomes for the WHP program in Singapore. According to the WHP Program Survey in 2006 and 2010, the percentage of private sector medium and large workplaces implementing WHP programs has increased from 45% in 2003 to nearly 60% in 2010 (43,45). In particular, the proportion of small workplaces having a WHP program reached 27.5% in 2010 (43,45). In addition, from 2004 to 2010, the percentage of adults exercising regularly increased from 17% to 19%, while the proportion of smokers in the workforce decreased from 17.6% to 15.1% and the proportion of adults consuming alcohol regularly declined from 3.2% to 2.6% (46). The proportions of adults with high blood pressure and high total blood cholesterol also decreased in the period (46).

Taiwan's WHP program

The consistent leadership commitment of the Taiwan Health Promotion Administration (HPA) to WHP projects shifted Taiwan's workplace health programs from those mostly concerned with safety and hygiene in the 1990s to a smoke-free health promotion program in 2003 and an integrative WHP program based on the WHO Healthy Workplace Model in 2010 (47,48). This commitment has led to the recognition of employers' responsibilities in protecting and promoting employees' health and well-being and to revisions to the Occupational Safety and Health Act in 2013 (47).

Supported by the Taiwan Ministry of Labor, the HPA established three coaching centers in 2003 to provide consultations for health promotion programs, conduct training-for-trainer courses for local health agencies and enterprises, develop educational tools, and organize annual self-management certification activities (47,48). The HPA coaching centers set up multidisciplinary consultation teams to provide enterprises with comprehensive support across the fields of public health, occupational health, nutrition, tobacco hazard prevention, physical activity and healthy behavior (47,48). With the support from HPA, WHP programs in Taiwan have implemented comprehensive health promotion activities that integrate health, safety, environmental and organizational improvements, and incorporate smoking reduction, mental health, breastfeeding programs, physical fitness, and employee diet and nutrition into their WHP activities (47,48).

Since 2007, to encourage enterprises to participate in the WHP program, the HPA has initiated a healthy workplace certificate scheme and announced a list of assessment items and accreditation requirements to guide workplace health initiatives (47,49). HPA has organized annual activities to present healthy workplace awards, including being named as a 'Comprehensive Healthy Workplace' for those that have adopted the WHO Model with measurable outcomes (49).

Taiwan's extensive WHP program has witnessed various measurable results. From 2007 to 2015, a total of 3046 workplaces have been accredited as Smoke-free and Comprehensive Health Promotion workplaces (48). Up to 432 companies have been evaluated and commended for their active efforts and have become learning models for other enterprises (47). According to the 2013 National Healthy Working Environment survey, the percentage of workplaces implementing a healthy workplace program with at least one health promotion activity gradually increased to approximately 60% (47). In terms of safety outcomes, the number of occupational accidents dropped by 29.5%, from 4.898 to 2.953 per thousand workers, between 2001 and 2016 (50).

A summary of successful facilitating strategies from the case studies

The three case examples demonstrate the importance of leadership commitment and a supportive policy environment for facilitating and sustaining WHP programs. In fact, these confirmed the key success factors identified by a study based on extensive research among 800 European companies (36). To facilitate the adoption of the integrative model of WHP, both Singapore and Taiwan Health authorities have created a supportive environment by providing education materials, training courses, methodological tools, guiding policy, funding, and well-designed websites with rich content, useful tools, and good practice examples. To encourage enterprises to participate and to honor outstanding workplaces, both Singapore and Taiwan have introduced healthy workplace certificate schemes and award systems to not only recognize good practices, but also to provide assessment criteria to guide companies to develop their own integrative WHP programs. The large number of workplaces entering the award competition also encourages other enterprises to participate in the movement and increases the level of social recognition of the program. The successes of these cases should inform other countries in the region about the benefits of, and facilitating strategies for, implementing an integrative WHP.

Discussion

The successful WHP examples from the Asia-Pacific in fact confirm empirical evidence from international experience, uniformly pointing to the need for an integrative approach to address workplace health. However, there are two major challenges to adopting WHP. On the one hand, pressured by global competition and political changes, governments and enterprises often are preoccupied with economic concerns, overlooking the importance of WHP in the interest of company competitiveness and viability in the modern, globalized world (11,12,37,39).

Conversely, facing global competition, economic turbulence and increased work-related health costs, some governments and industries are beginning to recognize the importance of promoting worker health with funding commitments (13). However, they may not have access to reliable information about how to promote health in the workforce. A proliferation of commercialized 'wellness' industries with uneven quality present conflicting information about WHP best-practices, more often than not emphasizing only on a few individual behavioral change measures. Funding bodies, unaware of WHP development history and the settings-based health promotion approaches and principles, may set simplistic, one-size-fits-all grant objectives that focus on a few individual life-style related risk factors such as weight reduction or vegetable and fruit consumption, disregarding specific workplace issues and health needs. Further, as mentioned above from the history of WHP in Queensland, Australia, the competing demand from the behavioral change programs had resulted in a reduction of essential resources for occupational health and safety activities, which were the priority and legal responsibilities of the enterprises (31). Key characteristics of WHP including engagement and commitment of leaders from all levels, encouraging the involvement of employees, integrating health, safety and wellbeing of workers into an organization's policies, and employing systematic and continual assessment and improvement are all necessary for the development of WHP programs.

Finally, this review also finds that there are few countries in the Asia-Pacific region that provide consistent policy direction, funding opportunities or capacity building activities with supportive professional networks for WHP (see supplementary file for more detail). To this end, apart from offering policy direction and guidelines, it is important for WHO and ILO to jointly advocate and facilitate integrative workplace health and safety programs by (a) working with member governments to develop an action plan to develop healthy workplaces, (b) providing "train-the-trainer" courses and relevant material to member countries, and (c) facilitating the development of a supportive and trend-setting network, similar to the Alliance for Healthy Cities, to guide professional practices of WHP.

Conclusion

As elsewhere, Asia-Pacific workplaces face pressures associated with global changes, intensified competition, aging work force and labor migration. The workplaces in the region also bear the burden of the imported hazardous industries from high income countries. A successful integrative WHP program can help industries to protect and promote health of their workforce, increase productivity and reduce healthcare costs. Thus, more than ever, integrative WHP programs are essential for the sustainable development of the economies in the region. Key features and facilitating strategies for successful WHP include consistent policy support and leadership commitment, integrating health, safety and wellbeing of workers into organizational policy, employing needs-based, systematic and continual assessments and improvement and participation of both employers and employees. Finally, to develop and sustain healthy workplaces in the region, facilitation by international bodies towards capacity and professional network building are crucial.

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Conflict of interest

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ORCID iD

Shahmir Ali, https://orcid.org/0000-0002-0360-3507.

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Gendered perceptions of osteoporosis: implications for youth prevention programs

Alyson Holland and Tina Moffat

Abstract: The presentation of osteoporosis as a woman's disease in prevention information influences how osteoporosis is perceived and how prevention information is internalized and applied. Using the Health Belief Model as a framework, gendered perceptions of osteoporosis were investigated in Canadian young adults to inform the design of prevention programs. A combination of the Osteoporosis Health Belief Scale (OHBS) and semi-structured interviews were used to explore participants' perceptions of osteoporosis severity, susceptibility, and motivation to engage in prevention activities. Sixty multiethnic men and women aged 17–30 years living in Hamilton, Ontario, Canada participated in the study. While the findings from the OHBS indicated that both genders scored high for self-efficacy, the results from the qualitative interviews showed ambivalent attitudes toward prevention behaviors, indicating a disconnect between quantitative and qualitative findings. Perceptions related to severity and susceptibility revealed that while osteoporosis was generally viewed as a woman's disease, perceived individual risk of disease was a negotiation between larger gender constructs of osteoporosis and a variety of risk factors. This study indicates that osteoporosis prevention programs should consider actively acknowledging gendered and youth-based conceptions of osteoporosis in order to increase prevention behaviors in the whole population to reduce future disease. (Global Health Promotion, 2020; 27(2): 91–99)

Keywords: osteoporosis, young adults, health promotion, gender

Introduction

Osteoporosis is recognized as a significant public health problem that affects almost 2 million people in Canada and close to 200 million worldwide (1). Osteoporosis is more prevalent in higher income countries, but is present globally as a disease of aging (2–4). Osteoporosis disproportionately affects women, with one in three women and one in five men developing the disease (5). The high economic cost of treatment combined with the appearance of osteoporosis later in life (fifth or sixth decade) has led to an emphasis on prevention (1).

In general, osteoporosis prevention education has been heavily gendered and skewed toward older age categories (6). Thus, research is focused on older women, though recently studies that include men are growing (7–9). Prevention programs are designed for high-risk older adults, excluding young adults (10). Young adults are at a life stage where they are still building bone, so their food decisions have the potential to affect the attainment of peak bone mass and their future food behaviors (11). Increasing targeted education toward younger adult men and women represents an important avenue for reducing the future prevalence of osteoporosis.

Research on osteoporosis prevention has often used the Health Belief Model (HBM), as it provides a framework for exploring osteoporosis health beliefs. The HBM, outlined by Rosenstock (12), is

Department of Anthropology, McMaster University, Hamilton, Ontario, Canada.

Correspondence to: Alyson Holland, Department of Anthropology, McMaster University, 1280 Main Street West, Hamilton, Ontario L8S 4L8, Canada, Tel:(905)525-9140 ext24423 Email: jaagumae@mcmaster.ca

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premised on the idea that health behaviors are the result of certain health beliefs (7,8,13). The goal of the HBM is to predict engagement in prevention activities by considering the influence of beliefs about disease severity and individual susceptibility in relation to existing cues-to-action (e.g., personal experience or education) and modifying factors (e.g., age, gender, family history of disease). The basic premise behind the HBM is that if people consider a disease to be severe and themselves to be susceptible, then they are more likely to want to engage in prevention behaviors (12). In the case of osteoporosis, the degree to which the disease is viewed as severe and individuals perceive themselves as susceptible is thought to be influenced by the presence of cues-to-action and modifying factors in their environment.

The HBM, as it pertains to osteoporosis, has been used to develop a quantitative survey tool, the Osteoporosis Health Belief Scale (OHBS), that contains seven key factors that are considered to predict engagement in disease prevention: perceptions of disease severity, susceptibility, benefits and barriers to calcium intake, benefits and barriers to physical activity, and self-efficacy (ability and willingness to engage in prevention on their own) (14). Previous research using the OHBS tool found that one of the modifying factors, gender, influences engagement in prevention, where men and women exhibit variation in perceived severity, susceptibility, and self-efficacy in relation to osteoporosis (7,15,16). Previous studies which have used the OHBS have focused heavily on American, college-aged women (17–22 years) (15,17), with older and younger male and female adults being included in only one study (7). These studies indicated that women are more likely than men to recognize the severity of and their susceptibility to osteoporosis, but yielded equivalent results regarding their motivation to engage in prevention (15,17), indicating that the relationship between health beliefs and health behaviors is not necessarily a straightforward one.

While these quantitative studies have shown the degree to which gender differences exist, they do not reveal how they are expressed or how men and women conceive of osteoporosis differently. While qualitative studies of osteoporosis prevention exist, they are focused on older adults (18,19). In this mixed methods study, the quantitative OHBS tool is combined with qualitative, semi-structured interviews with young male and female adults to explore how their knowledge and beliefs about osteoporosis (as measured in the OHBS) relate to their underlying ideas about risk for and prevention of osteoporosis (as expressed in the interviews). Specifically, we focus on the domains of severity, susceptibility, and self-efficacy within the HBM to critically examine how they are modulated by gender and age. In comparing the quantitative and qualitative results within a sample of male and female young adults, we find that quantitative surveys without the contextual and meaning-centered findings of qualitative research are insufficient to understand perceptions of susceptibility to osteoporosis and motivation to engage in prevention among young adults. Also, gender differences in perceived disease severity, as expressed in the OHBS, are shown to be more complex and nuanced thanks to qualitative interview data. The goal of this research is to provide more insight into youth-based gender differences in osteoporosis risk perceptions to design tailored youth prevention programs.

Methods

Male and female participants were recruited from the city of Hamilton, Ontario, Canada and included university and applied college students, post-secondary graduates, and individuals who had not pursued any post-secondary education. All participants were young adults, defined as being between 17 and 30 years old. The age range of 17–30 years was chosen as it encompasses the age ranges used in the large variety of studies focusing on young adults and aligns with previously employed definitions of youth (20,21). Study inclusion criteria included being within the age range of 17–30 years, a resident in Hamilton, Ontario, and capable of providing informed consent.

Participation involved completing the OHBS and an individual interview with the researcher. The sample size was determined by the interviews using the qualitative research principle of saturation; participants were added to the sample until saturation of themes was reached (22). As this was a true mixed methods approach, a separate sampling strategy was not employed for the quantitative survey portion as all participants had to complete both the interview and the survey. No participants who expressed interest in the study were refused and none withdrew from the study.

Ethics clearance was granted by the McMaster University and Mohawk College Research Ethics Boards and written consent was obtained from all participants prior to participation in the study. Recruitment occurred on the campuses and in the community through the response of participants to study posters and a social media page (Facebook). Sixty men ($n = 30$) and women ($n = 30$) participated in the study.

Data collection

A mixed methods approach was employed that used a quantitative survey, the OHBS, followed by qualitative interviews to investigate attitudes toward osteoporosis prevention. The OHBS is based on the seven key factors of the HBM, and was developed by Kim *et al.* to evaluate the potential for health-related behavioral change in individuals (14). The OHBS consists of 42 Likert scale questions divided into seven subscales. The questions are designed to be self-administered and to produce a numerical measure of the likelihood of engagement in prevention. For detailed information on the use of the OHBS please see Kim *et al.* (14).

All qualitative interviews with participants were semi-structured and lasted 60–120 minutes. Interviews were audio-recorded and transcribed verbatim. The first author conducted all interviews, transcription, and analysis. The use of a single interviewer and coder allows for a deeper, more nuanced understanding of the data. The participants were first given the OHBS before qualitative interviews were conducted in order to ensure the OHBS answers were not influenced by the qualitative interviews. The interview guide followed the HBM framework using the same broad categories as the HBM to provide context for and comparison with the OHBS results. Interview questions asked participants to describe their beliefs about osteoporosis and their motivation in relation to prevention. Questions such as 'How often do you think about your bones?' and 'What can you tell me about osteoporosis?' were used to initiate discussion about osteoporosis prevention behaviors.

Analysis

All seven subsections of the OHBS were analyzed to create a total prediction for engagement. While all seven subscales were initially analyzed for gender differences, only three are reported here – severity, susceptibility, and self-efficacy – since they are the most relevant in terms of comparing them with the interview findings. Gender differences were analyzed in SPSS 20 using an unpaired t-test ($p = 0.05$). Cronbach's alpha was used to examine internal consistency within the subscales of the OHBS, with consistency obtained at 0.70 or higher.

Interviews were transcribed and analyzed using NVivo 10 to organize codes and facilitate the identification of relationships between themes. Thematic content analysis was used to identify explicit and latent themes within the data that reflected the beliefs and experiences of participants (23). Identification of themes followed a two-stage approach and used the process for qualitative content analysis outlined by Bernard (22). The interview guide followed the three subscales analyzed in the OHBS results. To this end, the first round of coding used a priori codes of susceptibility, severity, and self-efficacy to identify where these themes were represented in the data. The second round of coding involved a close reading of the interview data to generate new themes within these three broad categories of susceptibility, severity, and self-efficacy. NVivo 10 software was used to assign, visualize, and arrange codes into hierarchies and related themes in order to conceptualize the relationships among themes.

Mixed methods analysis

The purpose of the mixed methods approach is to provide qualitative context for the quantitative survey results. The results from the OHBS are designed to indicate an individual's perceptions of the severity of osteoporosis, as well as their own susceptibility and self-efficacy. The survey yields a score in each category that reflects their beliefs. The mean responses were then compared with the interview responses for each category of susceptibility, severity, and self-efficacy to explain and provide context for the survey findings. For example, if the survey yielded a low score for susceptibility, indicating some participants did not consider themselves susceptible to osteoporosis, then the interview data on susceptibility were consulted to understand why they felt they were not susceptible. Themes were distilled from the qualitative interviews that represented those that were

Table 1. OHBS results for both total sample and by gender.

Subscales of OHBS	*Women*	*Men*	*Total*	*Cronbach alpha*
Severity (30 points)	19±5	18±4	18±5	0.816
Susceptibility (30 points)	16±6	12±4	14±5	0.919
Self-efficacy (30 points)	22±4	21±4	22±4	0.745
Total (210 points)	154±13	147±11	151±12	0.770

most commonly expressed by the sample as a whole or within subgroups of participants. When applicable, dissenting views were also considered. The goal of this mixed methods analysis was to not just identify what participants' beliefs about osteoporosis were, but to explore the underlying concepts and explanatory ideas behind these beliefs. In order to do this effectively, the quantitative data from the survey and the qualitative data from the interviews had to be collected from the same individuals.

Results

Quantitative OHBS findings

There was good internal consistency for the susceptibility, severity, and self-efficacy subscales of the OHBS (Table 1), which indicates that the subscales are measuring the same concepts. Overall the entire 42-item scale for assessing health beliefs was consistent according to Cronbach's alpha, which was over 0.7 for each scale (Table 1). According to the OHBS results for this sample, young adults showed a moderate likelihood of engaging in prevention behaviors when all seven subscales were included. As a group, these participants considered osteoporosis to be a moderately severe disease and identified themselves as moderately susceptible; their self-efficacy in contrast, was perceived to be high, meaning that they perceived themselves as able and motivated to engage in prevention. In terms of gender differences, women had a significantly higher mean score overall compared to men ($p = 0.027$), indicating that they were slightly more likely to engage in prevention. When each of the subscales were analyzed by gender, however, the only significant difference between men and women was for susceptibility, where women viewed themselves as more susceptible than men ($p = 0.019$).

Qualitative interview findings

While the qualitative interview data are similar to the OHBS results – in that they confirm that participants viewed osteoporosis as a moderately severe disease to which they are moderately susceptible – qualitative findings went further by placing participants' perceptions of severity in a context relative to other diseases. In their discussions of osteoporosis risk, participants revealed the ways in which they mediated and downplayed their self-perceived susceptibility to osteoporosis. Furthermore, compared with the quantitative OHBS results, qualitative interviews revealed more gender variation in perceptions of both disease severity and susceptibility. Finally, whereas the quantitative OHBS findings indicated high self-efficacy for osteoporosis prevention, qualitative findings, in contrast, indicated that most participants were not motivated to engage in osteoporosis prevention.

Severity

Participants of both genders generally judged severity by both the effects a disease could have on daily life and the potential for mortality. Osteoporosis was viewed as a non-fatal disease of older adults that could have varying effects on quality of life.

> 'I wouldn't say you had a timeline on your life, like two years left to live. But I think you have to think about it on a daily basis and be very conscious of what you're eating and your physical activity' (Female, 23, university, P#15).

While all young adults indicated that osteoporosis was severe when asked directly, the perceived severity was reduced when compared with other diseases commonly discussed in the media, such as cancer, heart disease, diabetes or Alzheimer's.

> 'I think some aspects of it are pretty serious. But when it comes to serious diseases, like life-threatening ones, I think osteoporosis is pretty

> low on the list of life-threatening diseases. Like you can die from it probably, but I don't think it's as dangerous as say multiple sclerosis or other stuff like that' (Male, 19, college, P#47).

While men and women generally expressed similar perceptions of osteoporosis severity, there were some differences related to their assessment of quality of life. Women were more concerned about deformity and pain in the daily lived experience of osteoporosis, whereas men rarely mentioned deformity, but did make reference to pain.

> 'Well a tell-tale sign is they have a bit of a hump. I think it's called a dowager hump' (Female, 22, graduated, P#43).

When identifying factors that contributed to the severity of osteoporosis, men were more focused on the physical limitations posed by weakened bones. Osteoporosis was considered serious because it was perceived as restricting mobility and participation in physical activities.

> I would say it would suck. I couldn't do half of the things that I enjoy or want to do. I would be more afraid of things and more cautious. Something as simple as going down a set of stairs would scare me. I would not want to go camping as much. I certainly couldn't train as much as I do. I would worry about bumping into things. I would be freaked out and almost live in a bubble. (Male, 20, college, P#69)

Young adult men were overwhelmingly concerned with the inability to engage in an active lifestyle, which was of primary importance to their lives.

> 'Being limited actively, that's like 25% of my life gone. That's like a big chunk, just being able to walk from one place to another for hours. If I knew that I wasn't able to do that because my bones were too weak then my explorative nature would be compromised' (Male, 26, college, P#49).

They drew heavily on their own life experiences and the activities on which they placed primacy when envisioning the experience of older adults living with osteoporosis.

Susceptibility

Gender differences in the perception of susceptibility to osteoporosis were more complex than indicated by the OHBS findings. Men showed a more consistent pattern in their beliefs about their susceptibility, with only two of thirty men interviewed identifying themselves as possibly at risk of osteoporosis. Women were more equally divided into those who felt they were at risk, those who felt they were not at risk, and those who were unsure.

Both men and women saw gender as an important determinant of risk. Women identified osteoporosis primarily as a disease of women, which they attributed to biological differences between the sexes.

> 'I think estrogen and like going through menopause and like having childbearing has a bigger impact on female bones. And males obviously don't have to deal with that' (Female, 19, university, P#20).

Participants' opinions were also influenced by media depictions of osteoporosis as a disease of women. They indicated that commercials for supplements, medications, and overall bone health preferentially showed women rather than men.

> 'Again, it's one of those things where I've always heard more cases of osteoporosis with women. You see more of the commercials with osteoporosis with women' (Female, 23, graduated, P#55).

As a result, female participants felt that women had increased susceptibility to osteoporosis relative to men.

The majority of men felt that women were at greater risk of osteoporosis and offered similar biological and media-based explanations. However, seven of the thirty men interviewed felt that men were actually more at risk for osteoporosis than women and six men believed that there was no difference in risk related to gender. Those respondents who deemed men at higher risk linked osteoporosis to greater physical activity as men were seen as more active.

> 'I think men probably get it more than women. Because men are usually more associated with labor and the workforce and eventually just wears down on them' (Male, 19, college, P#47).

In contrast, the male respondents who perceived no gender difference in osteoporosis risk saw susceptibility as due to poor physical activity, poor diet, and a family history of the disease.

Self-efficacy

While young adults perceived themselves as able to make lifestyle changes, as reflected in the quantitative OHBS scores, qualitative interview discussions revealed that they were not motivated to do so. This was not related to barriers associated with prevention tools, but rather was due to a lack of perceived need for intervention. While they acknowledged osteoporosis as a serious issue, they did not actively attempt to mediate their own risk.

> 'Like I want to have healthy bones. But I don't actively do anything to have healthy bones' (Male, 29, university, P#08).

Osteoporosis was viewed as undesirable, but was not perceived as severe enough to enact a change in health behaviors.

> 'No. I mean I can honestly say that I wouldn't want osteoporosis, but I've taken no steps to guard myself from it' (Male, 24, graduated, P#79).

No clear gender differences emerged from the qualitative data regarding motivation to participate in prevention. Participants attributed their lack of motivation to the perceived moderate-to-low severity of osteoporosis and to an overall low awareness of the disease. Most had received very little, if any, direct information about osteoporosis. In addition, the time constraints present in their daily lives meant they placed a low priority on future disease risk, especially diseases that were not perceived as severe.

> 'I think it's just in the back of our minds, there are so many other things in our daily life, just life in general, just you know caring about this person, caring about this person, typhoons, there is just so much stuff going on, we don't think about ourselves, sometimes we think about other people first' (Male, 19, college, P#45).

Four of the sixty participants did indicate that they made conscious choices to avoid osteoporosis, usually related to diet. This minority was almost entirely composed of women ($n = 3$) who had family members with osteoporosis or who had experienced previous health problems related to bone.

> 'Yes because I fear osteoporosis. Not fear, but I know that it's out there and I know that one in four women get osteoporosis and I know it's a very painful disease. If I can prevent it, of course I'll do what it takes to prevent it' (Female, 22, graduated, P#43).

For these participants, osteoporosis was considered to be a serious impediment to their future quality of life and they perceived themselves as highly susceptible, and therefore they were highly motivated to practice prevention.

Discussion

This mixed method study revealed some disagreement between the OHBS results and the interview results. The OHBS results indicated that participants viewed osteoporosis as moderately severe, which was consistent with the qualitative findings, where osteoporosis was seen as non-fatal but limiting to quality of life. The OHBS also indicated that participants felt they were moderately susceptible; this, however, was in contrast to the perceptions of low susceptibility reported in the interviews, where participants felt that age, gender (in the case of some of the men), and especially lifestyle were protective. In contrast to the quantitative results from the OHBS that indicated that participants had high self-efficacy in regards to osteoporosis and were likely to engage in prevention, the data from the qualitative interviews indicated that most of the young adults in the sample did not participate in osteoporosis prevention behaviors and expressed little motivation to do so.

The differences in gauging motivation to engage in prevention between the OHBS tool and the interviews are significant because they demonstrate a need to integrate qualitative methods with quantitative surveys to attain more detailed and nuanced results. While the OHBS has been used to investigate osteoporosis beliefs in similar populations, most of these populations consisted of college-aged women (18–22 years), leading to a paucity of data that include men. While the results obtained through the OHBS in this study were similar to findings from other studies using the OHBS for mostly female, young adults (7,17,24), the actual practices and perceptions of young adults in regards to their true motivation and participation in prevention were revealed through the qualitative interviews and were overestimated by the quantitative survey. The use of this qualitative method meant that a smaller sample population was used, which can be viewed as a limitation for the generalizability of the results of the study beyond this population, as using a quantitative sampling strategy alone would have allowed for a larger number of survey participants.

Most of the young adults in this sample clearly stated they were not motivated to engage in prevention of osteoporosis, as osteoporosis was not part of their disease awareness. As mentioned above, this contradicts studies that used quantitative surveys which sampled young adult women and predicted fairly high engagement in prevention (25,26), but is in agreement with Ziccardi *et al.* (17) whose results indicated that college-aged women do not participate in prevention. Osteoporosis is an invisible disease, though the physical manifestations of it were mentioned by some participants (e.g., dowagers hump, frailty). This invisibility places it at odds with the focus on appearance that captures the attention of young adults, and there is little media awareness of osteoporosis (27,28).

Overall, the qualitative findings revealed that participants considered osteoporosis to be moderately severe with low perceived susceptibility, particularly in the case of men. Though young adults reported they were capable of engaging in prevention, as indicated by high self-efficacy scores on the OHBS survey, the majority expressed in the interviews that they did not believe they needed to practice preventative behaviors at this time in their lives. Those who had previous history of medical problems or a family history of osteoporosis placed greater importance on both its severity and their susceptibility. This speaks to the importance of actual lived experience as a cue-to-action (29).

Gender differences in perceived susceptibility were found in the OHBS data and supported by the interview data through the emergence of different themes surrounding susceptibility and its varying conceptualization by men and women. This could speak to differences in gendered values among young adults: whereas women were concerned with physical deformity and pain, men were concerned with the degree to which osteoporosis would impede their ability to participate in activities. Men understood osteoporosis as a degenerative condition, but in interpreting how osteoporosis would affect their lives if they had it, they drew on what was important to them currently. The gendered differences in the perceived consequences of osteoporosis related to their varied sources of knowledge. Women tended to have greater awareness of osteoporosis and drew from the lived experiences of those around them, whereas men attempted to construct the experiences within their own lives.

Gender differences were also seen in perceptions of disease severity in the interview data, but not in the OHBS. The interviews revealed a more nuanced understanding of the gender differences than observed in the susceptibility subscale of the OHBS. A small percentage of men saw osteoporosis as a man's disease. This is an interesting departure from the literature, where it has been generally reported that men identify osteoporosis as a woman's disease (8,9,30). For the most part, however, participants of both genders viewed osteoporosis primarily as a woman's disease, reflecting the gendered nature of osteoporosis promotion.

Though these larger gender constructs shaped general beliefs about susceptibility, they were not applied by individuals in constructing perceptions of their own risk. Women did not necessarily perceive themselves as personally at risk of osteoporosis, even when they considered osteoporosis to be a woman's disease These responses draw attention to the complexity that underlies the broad category of gender and suggests that increased perceived susceptibility as measured by the OHBS does not necessarily translate into greater participation in prevention, because the larger gender constructs are not always directly translated into perceived individual risk. The creation of tailored gender- and youth-based education programs should focus on how beliefs about personal risk are constructed and mediated, as well as breaking down gendered conceptions of disease.

Conclusions

Ultimately, further qualitative research is needed to investigate perceptions of osteoporosis in multiple settings in order to generate population-specific results. This study expands on previous work concerning gendered perceptions of osteoporosis (7,15,16) and argues that gendered differences in disease perceptions are primarily influenced by constructions of severity and susceptibility that contribute to engagement in prevention behaviors. This study highlights the difficulty in capturing detailed results to explain behavior through the exclusive use of quantitative tools and advocates for a mixed methods approach that includes a qualitative component. Effective prevention programs require tailored approaches that target gender- and age-based understandings of osteoporosis. Young men and women in this study approached the issue of osteoporosis differently and these constructions affected the importance they placed on disease risk. Rather than just delivering information, reducing the future prevalence of osteoporosis requires programs that aid young adults in assessing their own risk of osteoporosis by modifying their beliefs about severity and susceptibility.

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Declaration of conflicting interest

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ORCID iD

Alyson Holland https://orcid.org/0000-0002-0746-0750

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Smokefree leadership among the Yolŋu peoples of East Arnhem Land, Northern Territory: a qualitative study

Moana Pera Tane, Marita Hefler and David P. Thomas

Abstract: This qualitative study examined smokefree leadership among the Yolŋu people, Indigenous landowners of East Arnhem Land. Despite disproportionately high smoking prevalence, the study found that most people enacted smokefree leadership within families and communities. While there was broad concern about not impinging on the autonomy of others, Indigenous health workers regularly advised clients, family and community members to quit smoking. This followed a general belief that the issue of smoking was best raised by health workers, rather than traditional leaders. Protecting children from second-hand smoke and preventing smoking initiation was important to all participants irrespective of their smoking status. An enduring and highly valued cultural connection to *ŋarali'* (tobacco) remains an essential part of the sacred practices of the funeral ceremony, an important and unique social utility. The study found consensus among participants that this would not change. Navigating traditional connections to ŋarali' in a context where most people are still addicted to commercial tobacco is challenging and requires respectful and culturally compelling approaches. Tobacco control initiatives with the Yolŋu should therefore utilise existing smokefree leaders within the social context in which ŋarali' is valued and used, an approach that may resonate with other Indigenous Australian nations and communities. (Global Health Promotion, 2020; 27(2): 100–108)

Keywords: communities, culture/ethnicity, Indigenous health, family, social networks, tobacco

Introduction

Tobacco use is the single largest preventable cause of death and chronic disease in the world today, causing millions of deaths every year and is a risk factor for six of the eight leading causes of death, including heart and lung diseases and several cancers (1).

The proportion of Indigenous Australians who are current daily smokers has declined by six percentage points from 45% in 2008 to 39% in 2014 (2). However, there has been no significant change in prevalence or successful cessation in remote areas (3). In some remote Northern Territory communities in East Arnhem Land, smoking prevalence between 68% and 83% in men and between 65% and 73% in women has been reported with little change since the mid-1980s (4). Smoking represents a barrier and a challenge to Indigenous peoples reaching their full potential in terms of their social and emotional health and wellbeing (5), prematurely divesting communities of Elders and loved ones due to smoking-related diseases.

The Indigenous daily smoking prevalence is 2.8 times that of non-Indigenous Australians and, as such, is responsible for 23% of the health gap in the burden of disease, as measured by the difference in disability-adjusted life years (6). This is greater than the estimates for the contributions of other risk factors to the health gap, such as high body mass (14%), high blood glucose (9%), physical inactivity (8%), alcohol consumption (8%), high blood pressure (8%).

Menzies School of Health Research, Charles Darwin University, Casuarina, NT, Australia.

Correspondence to: Moana Pera Tane, Warakurna Community, Menzies School of Health Research, Charles Darwin University, PMB 62, Alice Springs, NT 0872, Australia. Email: moana-bella@gmail.com

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The study was undertaken in East Arnhem, a land area of 3,337,993 hectares with Aboriginal and Torres Strait Islander individuals comprising 91.2% of a population of 10,000 people (7). The Indigenous owners of this area are the Yolŋu peoples. The region includes bauxite plateau country, sparse grasslands, and coastlines of sandy beaches, rocky headlands, sand islands and tidal inlets of mangroves (8). People live in widely dispersed remote communities, only accessible by four-wheel-drive vehicles or light aircrafts.

The study sought to address a notable gap in the literature of the role of Indigenous smokefree leadership. While capacity-building to mobilise community stakeholders and to facilitate culturally sanctioned change and prevention strategies has been highlighted (9), the involvement of Elders and leaders in Indigenous communities as a culturally relevant resource for health is currently underused and under-examined (10).

Background

Indigenous peoples, their society, traditional values and cultural beliefs and practices have been significantly affected since the colonisation of Australia begun by the British in 1788. Government-led policies removed children from families and communities and Indigenous peoples were separated from or lost their traditional lands during this period, contributing to the creation of unhealthy living and social conditions and to a higher level of tobacco use (11).

Introduced to Arnhem Land as a trade item by the Macassans in the 1700s (12), ŋarali' or tobacco became a highly-prized commodity among the Yolŋu and was restricted to senior and initiated men (13). Common or profane use of tobacco by both men and women has developed over time. However, the meaning of ŋarali' remains sacred. It is a part of culture and ceremony (14) and is often described as *mulwatj* (precious) or culturally important, (13) as it is associated with the funeral ceremony. However, this ceremonial role of tobacco does not generally involve its smoking.

Methodology

The study sought to set an Indigenous agenda that is broad in its scope, prioritising notions of self-determination, participation, empowerment and decolonisation (15). The approach resists and opposes Western research practices and preferences that are rooted in a deeply colonial institution (16) which has marginalised Indigenous communities, silenced their voices and favoured the representation and interpretation of 'expert' others. The aim of the study was to privilege Indigenous knowledges, experiences, reflections and analyses of their social, material and spiritual conditions (17), giving voice to those who have not spoken or been heard (18).

The research methodology sought to demonstrate and value respectful and culturally appropriate communication with participants, acknowledging that, within Yolŋu society, there are complex roles and specific kinship relations that may dictate, for example, who is responsible for different places and ceremonies and who must be avoided out of respect (19).

Two cultural mentors (CMs), one male and one female, were recommended to the researcher (MT) by the local health services and were approached separately to ascertain their interest in advising the research project. They guided the researcher during interviews and helped her to navigate the cultural sensitivities related to avoidance relationships, kinship dynamics and interviewing participants who spoke English as a second, third or fourth language. The CMs were senior, respected community members known to all interview participants. The CMs appraised the interview guide, gave feedback to improve clarity and were present during interviews, translating questions and answers into a Yolŋu Matha language. The CMs added further insight and valuable analysis during face-to-face meetings and later by phone when MT was reviewing data and coding.

The study adapted Bronfenbrenner's social ecological model (SEM) (20) of human development to explore leadership in these communities, using four nested, hierarchical levels (see Figure 1) to conceptualise a Yolŋu worldview. Everything in the Yolŋu universe – Spirit Beings, plant and animal species, clan groups, areas of land and water are either Dhuwa or Yirritja and within each moiety, people belong to smaller groups called clans, each having its own language (21). Children belong to their father's clan (and moiety), while their mother belongs to another clan (of the other moiety). The

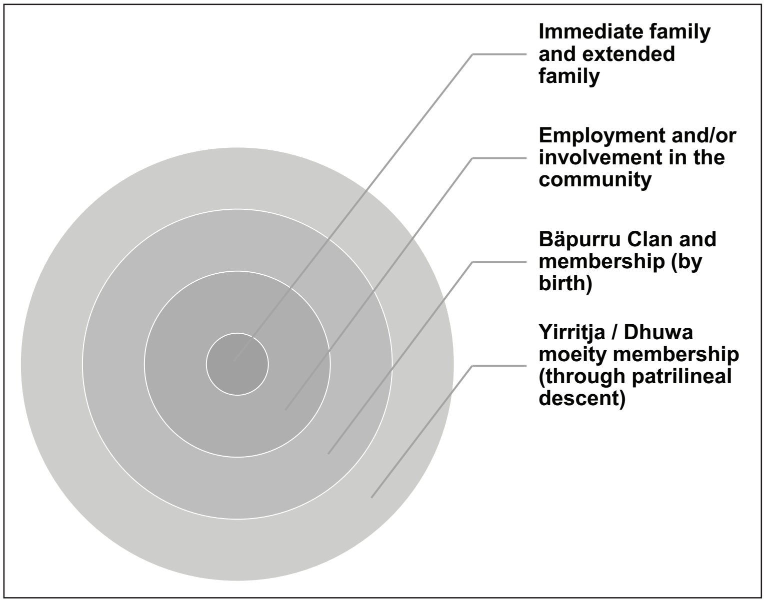

Figure 1. Adapted from Bronfenbrenner's social ecological model (SEM) of human development to explore Yolŋu leadership, using four nested, hierarchical levels (20).

first level represents the individual and their family and extended family, the second level denotes their employment and/or their involvement within their community, the third level is their identity in their *Bäpurru* or clan, and the fourth level is their moiety membership (Dhuwa or Yirritja), which is determined by patrilineal descent.

The definition of leadership used to analyse participant interviews is located within Ivory's analysis of Indigenous Australian modalities of governance, founded on social constructs and culturally based institutions and systems (22), which conceptualises leadership as a network that extends across communities and regions. Aboriginal leadership is also strongly associated with a purposeful and active sense of identity and self-determination (23).

Participant selection

Initial contact with communities was made through local health services and meetings held with Elders and leaders to discuss the project aims and to request permission for interviews. Following approval, the researcher (MT) returned to the communities with a CM to recruit information-rich key informants, progressing to snowball enlistment wherein existing participants recruited family members.

Interview setting and approach

Interviews with key informants were conducted on the veranda and in consult rooms at remote community health clinics (n = 15), a participant's home (n = 1) and the home of the researcher (n=6) and were audio-recorded with permission for later transcribing. Information sheets were distributed to all informants who signed informed consent forms before the interview began. A CM was present during interviews for translation and interpretation.

Field notes were written immediately after the interviews; however, these were very brief. A review of the field notes was performed during data analysis and informed coding and memo writing. Interviews lasted between 20 minutes and 1 hour.

Sample size and description

Interviews took place with 22 Yolŋu key informants. Of these, 13 were employed with local health services as Aboriginal health workers, Aboriginal health practitioners, tobacco action workers (TAWs) and administration staff and the rest were community members. There were 9 female and 13 male participants.

Data analysis

Data were analysed using the framework method, which involved seven stages (24). In the first and second stages, interview recordings were transcribed by MT who became familiar with the content and immersed in the data through playback of recordings, working alongside the CMs who offered insight and comments. These sessions were also recorded and later analysed. Memo writing was used during coding to explore and analyse the data and the relationships between codes.

In stage three, line-by-line coding of small blocks of text was undertaken using NVivo 10. In stage four, an analytical framework was developed from a priori themes associated with tobacco control strategies in the region (25). These included smokefree environments, television and media advertising, access to smoking cessation support, and Indigenous leadership. The framework also included emergent themes derived from open (unrestricted) coding.

In stages five and six, transcripts were reviewed again in their entirety to check indexing and coding decisions made and participant attributes (such as smoking status, position in the community, gender, age) were also analysed. During the seventh and final stage of analysis, a spreadsheet was used to index codes and categories and to summarise and chart the themes. Indicators of smokefree leadership actions within the individual participant's sphere of influence across the different levels of the SEM were then developed.

Results

Smokefree leaders and advocates

Despite living in communities where smoking is the norm, there were many examples of Indigenous smokefree leadership or advocacy reported by participants. These included promoting or encouraging smokefree spaces in and around homes, encouraging others in their immediate or extended family to quit smoking, being aware of and actively preventing children from being affected by second-hand smoke and educating and warning family members and children about smoking initiation.

Participants reported varying levels of confidence to raise the issue of smoking with family, clients or colleagues. Those who were ex- and never-smokers, and were employed by a health service reported the most confidence. Among all participants, irrespective of smoking status, there was an acknowledgement of personal agency in choosing to smoke, or to quit smoking. An aversion to forcing others or 'telling' people what to do was expressed:

> We can't force them to quit, it's their own feeling if they want to come in and quit, they need to come in themselves and by their own consent … better for them and we can't force them, but they have to think for themselves (health service employee, female, ex-smoker).

Thus, among those participants who enacted leadership across all levels, advocacy and education about the harms of smoking was often presented to smokers as 'reminders' or 'encouragement', a socially acceptable way to raise the issue for everyone:

> And when they have a sports carnival in Galiwin'ku or anywhere, and there are women and men who play football, then we have to go and encourage them not to smoke (health service employee, male, never-smoker).

Family and children

Participants at all levels of the SEM, irrespective of age, gender, smoking status, employment, clan and moiety membership, considered that children need to be protected from the harms of second-hand smoke and believed that adults could influence them to prevent smoking initiation. All participants showed smokefree leadership had been enacted in some measure within the immediate and extended family (the smallest circle in the centre of the Figure 1 diagram). Within this context, participants acknowledged the role of parents in preventing (or allowing) smoking initiation by children: 'I say to them [my children] you know ŋarali' is no good for you for your whole body, lungs, no good for you' (community member, female, never-smoker). Some parents also protected their children and other family members from second-hand smoke. For example, a mother had established smokefree zones around her home and her yard using smokefree signs, and requested visitors to move away from the house to smoke: 'Yes [she] doesn't like people sitting in front of her, when the wind is blowing from here … and she doesn't like people smoking in front of her and the kids (CM translating for community member, female, never-smoker).

Employment and/or involvement in the community

Within the workplace, participants who were employed by a health service used many opportunities to raise the issue of smoking, irrespective of their smoking status. An Aboriginal health practitioner reported her efforts in giving advice to quit smoking to her clients as an integral part of her role: 'Yes, they know because I always tell my families [to quit smoking] when I sit down cause I'm a registered health practitioner' (health service employee, female, ex-smoker). Another health worker described how he supported the smokefree workplace policy, influencing others to abstain from smoking while at work or purchasing tobacco while in uniform:

> Ŋarali' is the policy inside the building, or workplace, you don't smoke. And if it's outside, that's good eh? 'Hey, we are health workers, look we got our shirts here, we can't get cigarettes while using the red shirt' (health service employee, male, never-smoker).

Describing her misgivings about giving advice to quit while being a smoker, a health worker continued to offer encouragement to her clients: 'Yes, I do [encourage others to quit] but how can that person stop or quit smoking, if they like smoking?' (health service employee, female, current smoker). Another participant believed that she should not give education about ŋarali' to her clients because she was a smoker, preferring non-smokers to undertake this work; she observed:

> The [ŋarali'] program has been going but one day I said to him, 'You'll do an education on ŋarali', yaka ŋarali' [don't smoke] program. I'm not doing that because I'm a smoker. Only people can do that, that are non-smoker. But we can sit and listen' (health service employee, female, current smoker).

Two health workers explained that because of their professional roles, they had refused to purchase tobacco for family members, a common practice among the Yolŋu where sharing is expected and highly valued:

> My mum used to do that, she was a heavy smoker; she still smokes. Sometimes she asks me to buy cigarettes and I say, 'I can't, I can't buy cigarettes, I'm not allowed to kill you!' (health service employee, male, ex-smoker).

> Like for me I'm a registered health practitioner and I don't want to buy ŋarali' and giving it to a person, that means I'm killing them! (health service employee, female, ex-smoker).

Traditional leadership roles – related to moiety (Yirrtja/Dhuwa) and clan (Bäpurru)

Many of the key informants reflected on the deep connection to ŋarali' over hundreds of years, a relationship that affects Yolŋu across all levels of the SEM, with one informant describing its arrival in Arnhem Land:

> The Macassan people brought it and before when the missionaries came here, they brought all the ŋarali'. Long, long, time ago, old people, a long time ago, they found ŋarali' and they started smoking … ŋarali' was spread everywhere (Elder, male, ex-smoker).

A senior informant also described the importance of ŋarali' during the funeral ceremony being a commemoration of culture and a tribute to farewell the deceased:

> The times when we celebrate in the funeral time to remember [the deceased] when he was alive,

> when he was a smoker, that's why we have singing songs and smoking [ceremony]. In other words, saying goodbye. That is how we form part of our story, our songline (Elder, male, ex-smoker).

Two TAWs had additional responsibilities in their traditional roles, one as a clan leader and the other as a performer of the ŋarali' *manikay* (tobacco songlines), but both spoke to others about the harms of smoking and the benefits of being smokefree: 'I'm a leader as my Clan too. As a leader, I have to educate people not to smoke around the houses, don't smoke in front of kids, keep your cigarette secret (health service employee, male, never-smoker). An Aboriginal Health Worker, when asked about the role of clan leaders in warning others about smoking, replied:

> The Clan leaders? Half of the Clan leaders they smoke cigarettes! The best is [referring to TAWs] because they've got tight [united] voice … Yolŋu to Yolŋu. And the message, what [they] tell people, is strong. Because that's the job, what they [are] working for (health service employee, male, never-smoker).

This informant also described how he performed the ŋarali' manikay during funeral ceremonies, while never compromising his smokefree stance, having the confidence to raise the issue of smoking within the traditional context:

> I've got that message, I've got this ŋarali', it's only for my singing, but I don't smoke, but I'll keep for my singing … It's good to encourage or educate – we are the people, talk about stopping smoking cigarettes (health service employee, male, never-smoker).

Discussion

The study found that, among the Yolŋu participants, there was broad concern about not impinging on the autonomy of others. However, a notable exception was reported by health workers who regularly advised their clients and family to quit, without offending or attracting criticism. Although some of these health workers reported feeling uncomfortable if they smoked, they continued to offer advice, believing that they were the right individuals to do so, being employees of a health service.

The finding that Yolŋu participants perceived the issue of smoking to be best raised by health workers rather than traditional clan and moiety leaders is an important one. Health workers and employees who held cultural knowledge and were active in clan and moiety roles acknowledged that their efforts to advocate and exert influence began with their families and then at work and extended to the traditional contexts in which they were active.

Importantly, our study found that, in relation to protecting children from second-hand smoke and smoking initiation, all participants expressed concern for the health and wellbeing of children, irrespective of smoking status. This result supports previous research in Arnhem Land that found that actions to protect children from smoking can lead to smoking cessation among parents and are the most common reason given by adults to quit smoking (26).

Navigating the cultural sensitivities associated with tobacco use is important in working with Indigenous Australians. In Arnhem Land, we found tobacco remains an important part of traditional ceremonial practices. In Central Australia, other researchers have found that chewing tobacco (wild Nicotiana spp, also known as *pituri* or *mingkulpa*) has an ongoing important role in the connectedness of family, friends and community (27).

Understanding the reasons why and how people smoke (28), acceptance that smoking is a 'genuinely social practice' (29) and recognition that ŋarali' has a permanent and important social utility among the Yolŋu may challenge those who promote denormalisation strategies geared towards Indigenous Australians (30,31). However, more Indigenous-led approaches are needed, as research suggests that failure to acknowledge and value the diverse cultural beliefs within Indigenous Australia may have led to attitudes of mistrust and scepticism towards anti-smoking messages and the healthcare system (29).

Indigenous populations of Australia, Canada and the United States share a common experience of colonisation and traditional tobacco use (27,32–34). In New Zealand, despite the Maoris having not used tobacco before its introduction as 'the gift from a distant land' during colonisation (35), the effects of smoking have proven to be devastating and harmful (36). Addressing the high prevalence of commercial tobacco use as a major cause of illness and death among Indigenous peoples remains a priority in tobacco control (37), but navigating the dichotomy of sacred and profane use of tobacco, while many are still addicted to smoking, is complex and challenging (38). The notion that the world will one day be tobacco-free is unrealistic for many Indigenous nations and may even be considered offensive, given that traditional tobacco use is often associated with healing, respect for others and spiritual practices (39).

As our study has shown, there are already Indigenous smokefree leaders and role models among the health and tobacco control workforce who exert influence at work and within their traditional and cultural contexts. Ensuring that these Yolŋu and other Indigenous smokefree leaders are involved with and lead health promotion, advocacy and policy at community and regional levels will ensure culturally appropriate and culturally compelling interventions (40).

Strengths and limitations

Working and living in the remote Yolŋu communities of East Arnhem Land, MT worked collaboratively with two CMs to ensure a community-centred and culturally appropriate model of inquiry, which is a significant strength of the study. It seemed more likely that participants' respect for the CMs may have constrained some answers, it seemed more likely that this respect enabled participants to be more open.

The number of study participants was small (*n* = 22), with a large proportion of the sample (*n* = 13) employed locally by health services. Being role models in communities and clinics, these health workers spoke freely and confidently about the topic of ŋarali' without reserve, which is likely a result of daily encounters with clients and family who smoked or had been affected by smoking. The rest of the participants may have been less familiar with this topic and therefore did not contribute as fully as the former group.

Respect for and acknowledgement of the cultural and traditional use of tobacco remains important to the Yolŋu peoples of the Northern Territory and may also be relevant in other remote areas such as Central Australia, since there is widespread use of pituri or mingkulpa (chewing tobacco) in this region (27). These cultural differences highlight a lack of generalisability of our study beyond the Yolŋu peoples. However, they remain important for ongoing work with Indigenous Australians to address smoking.

Implications for policy and practice

There are important implications for policy and future practices. Identifying smokefree Indigenous leadership in communities and involving them in planning and coordinating community-based activities is essential for buy-in. TAWs or regional tobacco coordinators with the national Tackling Indigenous Smoking program (41) are an obvious choice, as are health workers (41). The combined workforce, given the right support and resources, could therefore develop initiatives based on their traditional and shared values, enabling communities to define, express and represent themselves in ways that are empowering, and that may ultimately lead to better health outcomes for Indigenous Australians (42).

Conflict of interest

The authors declare that there is no conflict of interest.

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An Internet for *Some* threatens health for *All*: What effects could the repeal of net neutrality in the USA have on individual and population health?

Jody Early and Dan Bustillos

Abstract: In the United States of America, the Federal Communications Commission's repeal of the popular Open Internet Order (a.k.a 'net neutrality') has yielded pointed criticism from many different sectors, but it has yet to be examined for its potential effect on the public's health. In this commentary, we focus on the health implications of this policy change, considering expert opinion on the subject, past history, and global perspectives. We argue that the repeal of net neutrality has the potential to compromise health education and promotion efforts by widening the 'digital divide', thereby impairing health literacy and exacerbating health inequities. By negatively affecting people's ability to access, understand, and use unbiased, evidence-based health information to improve and maintain their health, the repeal of net neutrality may hinder the World Health Organization's vision of '*Health for All*' by dismantling public protections in the name of corporate profit. (Global Health Promotion, 2020; 27(2): 109–113)

Keywords: health literacy, digital equity, Internet, health equity, population health, net neutrality, health promotion

Background

The U.S. Federal Communications Commission (FCC) recently voted 3-2 to repeal its 2010 Open Internet Order set of regulations ('net neutrality') and enact the Restoring Internet Freedom Initiative. While this may not seem like major health news, what comes next could have significant ill effects on health literacy and health equity in the USA, and possibly threaten global public health. This is because the ability to affordably access quality health-related information on the Internet has become essential to ensuring the public's health (1). Consequently, the FCC's repeal of net neutrality effectively erases the bipartisan safeguards to digital health equity. While no one knows what the future will hold, we can look to countries without net neutrality as well as past Internet provider practices to make some logical predictions about what may come next.

What is net neutrality, and why should we care?

The principles upon which this US communications policy rests are at least as old as the country itself. Civil rights to freedoms of speech and the press were enshrined as part of the first amendment to the US Constitution in 1791. These principles protect a right to communicate through media such as the Internet free from governmental interference (2). This right not only places a duty of non-interference on the government, but it also places the positive requirement to protect and preserve these rights through regulatory and legal means.

More specifically, net neutrality is the equity principle calling for Internet service providers (ISPs) to treat all data on the Internet the same, and restricts their ability to discriminate based on user, content, website, platform, type of access, or

School of Nursing and Health Studies. University of Washington Bothell, Bothell, Washington, USA.

Correspondence to: Jody Early, School of Nursing and Health Studies, University of Washington Bothell, 18115 Campus Way NE, Bothell, Washington 98011-8246, USA. Email: Jearly3@uw.edu

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equipment (3). A concept with widespread, bipartisan support, net neutrality was first espoused by the FCC under the George W Bush administration in 2005 and promulgated in part as the FCC Open Internet Order in 2010 (4). In 2015, further protections for consumers were added such as classifying Internet service as ‘telecommunication’ and a public utility, instead of less-regulated information services (5). The 2015 net neutrality rules were championed by former President Barack Obama for encouraging a ‘free and open Internet’ (6).

Under the Obama administration’s net neutrality order, ISPs were prohibited from blocking, delaying, or artificially slowing down the transmission of information unequally (“throttling”), and limited their ability to manipulate the flow and consumption of information by subscribers (6). Net neutrality rules also forbade prioritizing the transmission of content by sites that pay for the privilege—which in effect relegates content from sources who pay less the ‘slow lane’, making consumption of the slower content much less likely (7).

Net neutrality rules also help to uphold freedoms of speech and the press by discouraging information gatekeeping and censorship that result from ‘paid prioritization’. For example, under net neutrality regulations, ISPs like telecom giant Comcast were forbidden from blocking or hindering news from a foreign, state-owned news network like Al Jazeera in favor of their company-owned Fox News. While ISPs regularly claim that they are against this sort of meddling with customer’s access to data, there remain large financial incentives for telecoms such as Comcast, AT&T, and Verizon to block or throttle data unfairly, all of which have been caught meddling with consumers’ Internet access by, for example, blocking a competitor’s content or service in favor of their own (8). And what if the person buying the priority access is a wealthy foreign enemy, seeking to degrade Internet access in certain areas?

In the past, under net neutrality, if an ISP was caught blocking or throttling data unfairly (i.e.: in a non-neutral fashion), the FCC could impose hefty fines or even revoke an ISP’s license to operate. As a result of the recent repeal of net neutrality, telecoms will now commit to voluntary principles that must be disclosed to subscribers, but enforcement of these principles will now be left to the Federal Trade Commission—a smaller agency with little experience policing telecommunications, and no rule-making authority (unlike the FCC) (7).

Lack of digital equity increases inequities of access to information

In the wake of the public outcry over the repeal of net neutrality, one of the most troubling possible outcomes is chronically overlooked: the potential for exacerbating existing health inequities. This is because past history shows a troubling tendency for powerful telecoms to act in all of the ways that net neutrality forbade, belying their promises to the contrary, and sometimes even after such behaviors became illegal (9). Without the threat of enforcement and sanctions provided by net neutrality regulations, it is likely that industry giants will renew their assault on the rights and privileges the public once enjoyed, and likely do so in ways that disparately impact the most vulnerable (10).

For example, in many places, and particularly in rural areas, those who already have limited access to reliable and high-speed broadband Internet access may be further ostracized, as there are no incentives for ISPs to expand far beyond the urban areas where there are residences (11,12). This is why, in 2017, 43% of rural California residents had no broadband access (12). These locations are the most likely to have no real choice in ISP. In fact, according to the FCC, roughly 40% of US households only have access to ISPs that have already violated net neutrality principles (11,12). In the likely event that these ISPs renew unfair business practices by limiting data and censoring content, more than 100 million Americans will have only two choices, accepting the only available biased Internet providers or no Internet at all at home.

Unfortunately, this is the case for many around the world for whom accessing the Internet without restriction remains prohibitively expensive and also not truly ‘open’, as industry giants such as Google and Facebook dominate information channels and largely determine what content is consumed. In Kenya, for example, the top four websites in 2017 were Google, Facebook, YouTube (owned by Google), and the Kenyan version of Google (13). This pattern is common in other low and middle-income countries where most people cannot pay extra to access sites and apps that require additional fees. Thus, for many people around the world, social media sites like Facebook 'curate' the only data to which consumers will have unlimited access. These corporate giants offer such low-cost options, not for the purpose of supporting a more expansive, 'open Internet', but to maximize their profits by pushing paid-for content and collecting user data to sell to others. Imagine if the only news one had access to via their mobile telephone in the USA was filtered by Facebook and paid for by Russia? Or if most of the freely accessible health information consisted of paid advertisements by pharmaceutical companies or special interest groups?

The debate about net neutrality also underscores the need to consider affordable and accessible Internet service as both a civic right, and as an important social determinant of health (14). Affordable Internet increases digital equity and allows information flow to reach most people wherever they are, bringing rural and underserved urban populations on a closer level with their wealthier urban colleagues. Thus, digital equity and health literacy are intertwined: access to and quality of Internet affect the speed by which individuals can find and download information, the mobile applications they can use, and (in this new net reality), the type and content of information available to them.

An 'Internet for all' supports health for all

We acknowledge that net neutrality alone will not solve the issue of information access for all. Issues of access and cost existed prior to the repeal of net neutrality. However, repeal of government regulations will likely exacerbate these issues in the USA. Our reliance on mobile and high-speed Internet across all facets of society is increasing (14). In 2017, the number of smartphones doubled from 1.5 billion in 2016 to over 3 billion worldwide (14). In the 20 years since the Telecommunications Act of 1996, the Internet has gone from optional to obligatory. Therefore, many argue that it only makes sense to change the way it is delivered, away from 'nice to have' to a public utility (12). Parallel examples include the regulation of electricity, sewage, and water (12).

The Internet and many aspects of public health are intertwined, from use of social media for disease surveillance (15) to deployment of public alerts about natural weather or terrorist events. Why should we entrust big ISPs to act in our best interest when historical events, such as what led us to treat electricity and water as 'natural monopolies', or the recent Facebook user data breech, give us compelling evidence to do otherwise? According to Catherine Sandoval, an antitrust expert who formerly served on the California Public Utilities Commission:

> Paid Internet priority can harm public safety, electrical reliability, and the environment, while increasing energy and other costs. The antitrust and unfair competition laws that the FCC says are sufficient only provide remedies for injuries to competition. They offer no remedies for harms to electric reliability, safety, the environment, national security, and other values the FCC's 2015 Open Internet Order protects (16 para 10).

Digital equity and access to information can affect the public's health literacy, and health literacy in the USA is already problematic. According to the Centers for Disease Control and Prevention, only 1-in-9 Americans can read and interpret basic health information (17). This has community, national, and global implications. As the World Health Organization reminds us:

> Health literacy is also not just a personal resource; higher levels of health literacy within populations yield social benefits, too, for example by mobilizing communities to address the social, economic and environmental determinants of health. This understanding, in part, fuels the growing calls to ensure that health literacy not be framed as the sole responsibility of individuals, but that equal attention be given to ensure that governments and health systems present clear, accurate, appropriate and accessible information for diverse audiences (18 para 4).

While just increasing Internet access alone does not automatically result in improved health literacy for all, rolling back net neutrality threatens the quality of health information available to consumers. Considering the difficulty many people have in discerning reliable health information, along with the potential for trusted information to be drowned out by bias, repealing net neutrality only widens the health information access gap and digital divide, undermining health literacy goals even further.

Conclusion

Most Americans were not in favor of repealing the Open Internet Order. During the comment period, Congress received more than a million telephone calls, tens of thousands of emails, and results from wide reaching polls showed that the majority of Americans opposed the deregulation (19–21). There remains room for debating what value society should place on an ‘open and free’ Internet and the role the government should play. However, we should not make the mistake of thinking that the repeal of net neutrality and deregulation by the government results in greater freedom or affordability as some would have us believe (21, 22). Instead, the US government’s 2017 FCC repeal of the Open Internet Order has granted the telecommunications industry license to dictate these terms for the rest of us, and has placed commercial interests over we, the people.

Having reliable, affordable, and high-speed Internet access is more vital to supporting economic development, health, education, public safety, and civil liberties than ever before. It should not be a privilege reserved for those who can pay the most, or for those who live in areas where more choices are available. A robust and open Internet strengthens people’s ability to find important information, locate health resources and services, and become more informed health consumers and self-advocates. The ‘right to connect’ is part of global health promotion. While access is only one part of the equation, connection is a critical starting point for promoting health.

Conflicts of interest

The authors declare that there is no conflict of interest.

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ORCID iD

Jody Early https://orcid.org/0000-0001-6468-8033

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A role for traditional doctors in health promotion: experience from a trial of HIV prevention in Botswana

Anne Cockcroft[1,2], Leagajang Kgakole[1], Nobantu Marokoane[1] and Neil Andersson[1,2,3]

Abstract: Traditional doctors have been largely ignored in HIV prevention, particularly primary prevention. As part of a structural intervention programme to reduce HIV risk among young women in Botswana, we trained 147 traditional doctors in four districts as well as government health education assistants (HEAs) and teachers to run discussion groups in the community and schools, using an evidence-based eight-episode audio-drama, covering gender roles, gender violence, and how these are related to HIV risk. One year later, we contacted 43 of the 87 trained traditional doctors in two districts. Most (32) were running discussion groups with men and women, with links to the local HEAs and teachers. They were adept at recruiting men to their groups, often a challenge with community interventions, and reported positive changes in attitudes and behaviour of group participants. Traditional doctors can play an important role in primary prevention of gender violence and HIV. (Global Health Promotion, 2020; 27(2): 114–116)

Keywords: traditional doctors, health promotion, HIV prevention, Botswana, traditional healers, edutainment

Introduction

Traditional medicine in Africa had never dealt with HIV infection before the 1980s but, in response to frantic demand not addressed by Western medicine, traditional practitioners rapidly introduced an array of neo-traditional supportive therapies (1). Highly publicised perverse practices promoted by some traditional healers, including the infamous virgin myth (2), positioned traditional doctors as a liability in HIV prevention. This was not helped by the folkloric musings of poorly advised South African national leaders (3). The subsequent negative focus on traditional medicine alongside dramatic pharmaceutical advances means traditional doctors have been largely ignored in HIV prevention, especially in primary HIV prevention, although some authors have suggested they could be trained to encourage their clients to use condoms and be faithful to reduce HIV risks (4–6). Others have focused on the possibility of involving traditional doctors in the provision of anti-retroviral therapy for people with HIV (7).

Despite prevention efforts, there are still some 12,000 new infections every year among the 2 million residents of Botswana, mostly among young women. For these young women, knowledge is not the problem so much as the disabling interpersonal power gradient between them and the older men with whom they trade sexual favours for survival and modern material goods. They are not able to implement choices to protect themselves against HIV (8,9). They need a change in their structural position – their self-confidence and voice – next to those who will infect them. The Inter-Ministerial National Structural Intervention Trial (INSTRUCT) (ISRCTN54878784) tries to incline government structural support programmes towards the most vulnerable young women to reduce their choice

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1. CIET Trust Botswana, Gaborone, Botswana.
2. Department of Family Medicine, McGill University, Montreal, Quebec Canada.
3. Centro de Investigación de Enfermedades Tropicales, Universidad Autónoma de Guerrero, Acapulco, Mexico.

Correspondence to: Anne Cockcroft, McGill University, Family Medicine, 5858 Cote des Neiges, Montreal, Quebec H3S 1Z1, Canada. Email: anne.cockcroft@mcgill.ca

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disability and thus their HIV risk. Part of the INSTRUCT intervention is the creation of an enabling environment for young women as they start to make prevention choices, using an audio-drama called *Beyond Victims and Villains* (BVV).

The audio-drama shares the findings from a large survey of school pupils in South Africa, updated with survey evidence from adults and children in Botswana, to spur discussions about gender, gender violence, and HIV risk. In each episode, the actors (playing a radio show host, a fieldworker, and a senior researcher) discuss evidence about one of eight topics: understanding sexual violence; culture of sexual violence; not all men rape; when victims become villains; cool teens and cold reality; sexual violence and HIV risk; transactional sex; choice disability. The episodes cover gender roles, gender violence and how this is all linked to HIV risk.

In each session with a BVV group, the group listens to the episode and then the facilitator leads a semi-structured discussion where participants consider the evidence and look for local solutions. In order to hold discussions about the BVV audio-drama widely within communities, we trained several categories of BVV facilitators: health education assistants (HEAs) from each government clinic in the trial districts, guidance teachers in government primary and secondary schools, and men in the communities interested in reducing gender violence and HIV. A chance meeting in one district between the coordinator of the district traditional doctors' association and an INSTRUCT researcher led to a new initiative involving traditional doctors in HIV prevention as part of the trial intervention. The coordinator pointed out that traditional doctors are ideally placed to convene men's groups, a major target of the BVV audio-drama and, with training, they could extend the community exposure to the BVV materials.

Methods

In 2016, we trained 147 traditional doctors (100 of them men) in four districts in the use of the BVV audio-drama. The traditional doctors' associations in the districts, together with the government health promotion departments, identified and invited traditional doctors they believed would be interested in taking part in the BVV initiative. The training covered the same knowledge and skills as we earlier provided to HEAs and teachers. In their training, traditional doctors identified strongly with the BVV topics. They mentioned, for example, that some young women offered them sex in payment for treatment. They confirmed that many people come to them to seek help for family violence. Some of them revealed their own experiences of abuse.

The training provided an opportunity for sometimes heated self-reflection about gender roles and gender violence. Some male participants initially rejected the idea that a woman has the right to refuse sex, especially with a long-standing partner. Some initially said that hitting a woman was justifiable if she had done something to deserve it. Discussion among the participating traditional doctors helped to generate a positive consensus about these issues.

All the trained traditional doctors agreed to run BVV sessions in their communities. We provided them with MP3 players, the eight BVV episodes on micro-SD cards, and facilitators' manuals.

In 2017, we attempted to contact the trained traditional doctors in two of the four districts where we had run training sessions. We contacted 43 (29 men) of the 87 trained traditional doctors (56 men) and asked them about their experience with running BVV sessions.

The work reported here is part of the Inter-ministerial National Structural Intervention (INSTRUCT) trial, approved by the Health Research and Development Committee, Ministry of Health, Botswana, 8 August 2013, HRDC protocol number 00724, PPME 13/18/1.

Results

The majority (32/43) of the traditional doctors had established and were running up to four BVV groups. On their own initiative, many of them had built professional linkages with other HIV prevention players in their communities. Many were working with the local BVV-trained health education assistant to run BVV groups. Sometimes the groups took place in the government clinic; the clinic staff and traditional doctors were quite comfortable with this. Some worked in concert with the guidance teachers: the teachers covered BVV with the pupils in the school, while the traditional doctor covered BVV with their parents in the community.

The traditional doctors reported running a variety of groups, including men-only groups and groups with mixed sexes and different ages. Many had opted to run mixed sex and mixed age groups, an unusual approach in HIV prevention education. They argued the mixed groups ensured common understanding between the men and women in the community. Some mentioned that openly discussing the sensitive topics included in the BVV sessions was helping to solve other problems in their communities; people became more open to talk about difficult issues.

Running the groups was not without challenges. Although the traditional doctors could easily recruit men, some men were impatient and would leave sessions early, claiming they needed to go and 'look after their cattle'. The traditional doctors, as private practitioners running small businesses, sometimes struggled to find time for the sessions. Some needed to travel for their work, reducing their availability for running BVV groups.

The overall experience of the traditional doctors was positive. They reported some male participants of the groups had told them they now realised the way they treated their partners amounted to abuse. Some noticed young women participants were taking control of their own lives, no longer frequenting local bars to meet older men. They felt that discussion to arrive at solutions was a better way to achieve change than simply telling people what to do. Discussion, they said, is the traditional way to solve problems in Botswana.

Discussion

Our experience in Botswana confirms that rural residents hold traditional doctors in high esteem, and this can be valuable in integrated HIV prevention programmes.

Perhaps because of their local standing, some traditional doctors pushed boundaries that other programmes might steer shy of. Men have always been extremely difficult to recruit and to retain for sit-down education sessions; the traditional doctors seem to have had few problems recruiting and maintaining their groups. As opinion leaders in their communities, traditional doctors talking about gender violence made it easier for others to do so. On their own initiative, traditional doctors devised ways to work together with HEAs – a rare point of contact between western and traditional medicine.

Our follow-up only reached 43 of the 87 trained traditional doctors in the two districts on which we followed up. None of the traditional doctors declined follow-up, but it was difficult to reach some of them, especially in rural communities, as they are quite mobile and not always present in their villages.

We believe this is the first report of involving traditional doctors in primary prevention of gender violence and HIV. Perhaps for the first time since the HIV epidemic took hold in Botswana, traditional doctors feel engaged and positive about their role in HIV prevention. In the words of one traditional doctor who runs several BVV groups, 'If we had had these BVV materials in the 1980s, we would not have had the HIV epidemic we have now'.

Conflicts of interest

The authors declare that there is no conflict of interest.

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What are the roles of community health workers? Looking back at the philosophies of primary health care

Marietou Niang

Abstract: This commentary discusses the different roles of community health workers (CHWs), their challenges and limitations in a historical perspective of primary health care (PHC). We first try to show that the comprehensive philosophy of PHC promulgated in Alma-Ata proposed the role of CHWs as actors who work in community development. On the other hand, in the 1980s, with the emergence of the selective philosophy of PHC, CHWs' role was more affiliated with the health system. We conclude our pitch about the balance that can exist between these different roles by suggesting that CHWs can work in continuity with the health system, but they should not be considered as affordable labor. Also, they must be supported in their activities to develop their communities, allowing them to participate effectively in programs and policies that concern them and their community. (Global Health Promotion, 2020; 27(2): 117–120)

Keywords: Community health workers, selective primary health care, comprehensive primary health care

Introduction

Community health workers (CHWs) are an essential component of the strategy proposed during the Alma-Ata Declaration on Primary Health Care (PHC). Defining these actors is a challenge because each country has created its own model. Their role is also ambiguous since CHWs have functions related to the health system, but also work with communities to identify needs and improve the participation and accessibility of health services (1). Moreover, the work of CHWs is more complex than it may appear. Their status as liaisons between the community and the health services raises ethical, pragmatic and political issues. Through examining the historical evolution of PHC, this paper discusses these two complementary—but sometimes conflicting—orientations of the roles of CHWs: first, as actors who promote social change in their community; and second, as actors who work in the continuity of health services.

The comprehensive philosophy of PHC: CHWs as actors of social change

The comprehensive PHC model proposed at the Alma-Ata conference on PHC was a response to the dominance of the biomedical approach characterized by the use of sophisticated and expensive technology, hospital-centrism and non-recognition of the social determinants of health (2).

In this perspective, by facilitating people's participation in their health and well-being, the CHW is seen as an actor working in community development. They were positioned as vectors of social change in their communities and should lead health promotion and prevention activities. Their tasks may be diverse. The Alma-Ata's statement called for CHWs to be trained and retrained to perform specific or general tasks that align with people's needs (2). In view of this, CHWs are required to collaborate with professionals working in the health system as well as local leaders, families and traditional 'experts' in the field. In short, the work of CHWs needs to be

Faculty of Nursing, Université Laval, Québec, QC, Canada.

Correspondence to: Marietou Niang, Faculty of Nursing, 1050, Avenue de la Médecine, Pavillon Ferdinand-Vandry, local 3698, Université Laval, Québec (Qc), G1V 0A6 Canada. Email: Marietou.niang.1@ulaval.ca

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integrated into that of the multidisciplinary peripheral PHC team. They must also be rooted in the values and realities of the community so as to facilitate social change at the community level (3).

As vectors of social change, CHWs work upstream with communities with the aim of sharing knowledge rather than providing care or advice (4). Their framework of action aims to promote the empowerment of individuals and communities through the principles of awareness and the appropriation of fundamental rights (3,4).

Challenges and limitations of the role of the CHW as a vector of social change

From the outset, CHWs' roles that are part of a bottom-up process aimed at facilitating social change were not sustainable because of economic, political and ideological barriers. Firstly, because they are local initiatives, they do not always benefit from the effective support of national and local institutions.

Secondly, after the Alma-Ata declaration, many developing countries tried to adopt a unique CHW model based on certain successful experiences, and to expand initiatives from the local to the national level (5). However, the vision of a unique CHW model, regardless of socio-political contexts, has led to failures in several countries (1,5). In this regard, Walt notes that the failure of CHW programs during the 1980s was due to the fact that they were conducted in a hasty fashion without the effective engagement of communities (3), they lacked flexibility, and they led to a narrow definition of the CHWs' roles. In addition, the evaluation methods used by administrators focused on performance results rather than processes (6).

Finally, in the early 1980s the comprehensive PHC philosophy was criticized as idealistic and its holistic actions were considered unrealistic (7). So, the role of CHWs as vectors of social change was considered idealistic and laborious to implement at the national level, and the multiplicity of their tasks was considered difficult to evaluate in terms of efficiency and performance (4).

The selective philosophy of PHC: the CHWs working in the continuity of health services

In the early 1980s, under the auspices of some international organizations, selective PHC was proposed as the most cost-effective way to improve the health and well-being of the population in developing countries (7). Selective PHC emphasizes setting achievable goals and developing cost-effective programs.

In this new context, CHWs received renewed interest among governments and donors, especially with the emergence of Childhood Illness Management and PHC reforms (5). As PHC was focused on the treatment of diseases, the roles and functions of CHWs were oriented towards community mobilization and the provision of certain health services (5). Thus, the role of the CHW as a promoter of social change in their community in Alma-Ata was replaced by a more pragmatic responsibility oriented towards the technical management of the community (1,8), such as the control of certain pathologies considered as priorities in developing countries (7). Furthermore, CHWs were increasingly involved in curative activities (9). In fact, they are considered as the gateway to the health system in many developing countries that face shortages of health professionals and the low utilization of health services (10).

In this context, several studies have shown that the use of CHWs in specific programs has an impact on reducing infant mortality and improving the effective management of infectious diseases such as malaria or HIV (1,11). Consequently, more specialized training in intervention areas, such as maternal and child health, malaria or nutrition, is valued by governments and donors in CHW programs (5,8). In this regard, the specialization of CHWs is advantageous because it facilitates the training, monitoring and evaluation of their work concerning specific tasks and is easy to execute (5).

Challenges and limitations of the role of the CHW related to health education and curative activities

While working in the continuity of health services, CHWs encounter innumerable challenges and limitations in carrying out prevention and health promotion activities that are able to bring about change in the socio-environmental determinants of health and are aligned with the real needs of communities. In fact, it seems increasingly difficult for CHWs to assert their preventative and health promotion functions because curative care is more essential for, and prioritized by, communities (5).

On the other hand, as they are oriented towards disease control, CHWs generally serve the interests of health services and especially health professionals. This state of affairs can be explained by the fact that the health system, through health professionals, supports the training, logistics and supervision of CHWs (5). Indeed, the literature suggests that health professionals do not generally understand the preventative and health promotion functions that CHWs can play in communities and tend to view them as a threat and additional burden in their work (12) or as mere 'clinical aids' (1). The misunderstanding of the role and functions of CHWs in PHC by health professionals could be explained by their lack of involvement in the development, planning, implementation and evaluation of CHW programs (1,3). At the same time, CHWs tend to view health professionals as 'role models' (3). Thus, to gain legitimacy in the health system, they tend to focus on curative activities or work in health centers (9,12). However, the curative responsibilities conferred to CHWs are not usually accompanied by particular supervision standards and adequate training, which often leads to poor quality of care (6).

Conclusion: a possible equilibrium in the roles of CHWs

The literature indicates that the orientation of the roles and functions of the CHW to the values and principles underlying PHC is a major challenge for both the health system and communities. Regardless of the different philosophies of PHC, CHWs remain a liaison between the community and the health system. As a result, they have a twofold ambiguous role, which is to serve the interests of the health system, and to work in tune with the needs of communities. Hence, the big question, in line with Werner (4), is: are CHWs 'lackeys' for the health system or 'liberators' for their community?

If the answer seems to be easy when we treat the two philosophies of PHC separately, as in this commentary, it is clear that the complexity of the current context requires a reflexive look at the question. For instance, a study of the role of CHWs in the field of HIV/AIDS in South Africa (9) reveals that although CHWs' work is oriented towards curative activities and the continuity of health services, they continue to ensure their empowerment role in communities through their liaison functions between the population and the health system, especially by representing and being the voice of people living with HIV. On the other hand, CHWs in selective PHC become just another 'pair of hands' of the health system and are considered a semi-formal or semi-integrated 'labor force' (9). As a result, the WHO (13) advocates for CHWs to be integrated into health systems.

Building on this momentum, evidence suggests that CHW programs are more effective and efficient when they facilitate change at the community level and work best with the respect and support of governments, health professionals and communities (6). Therefore, to promote social change at the community level, in collaboration with CHWs, it is important to maintain their role in prevention and health promotion in the democratic and comprehensive vision of PHC while considering the current contexts of our societies. However, without the effective participation of communities, including CHWs, from concept to program evaluation, CHWs' potential as 'liberators' of their communities will unfortunately be nothing but rhetoric, and their role and functions will be limited to supporting existing health services.

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Using laws to further public health causes: the Healthy Prisons Agenda

Nasrul Ismail[1], James Woodall[2] and Nick de Viggiani[1]

Abstract: In this commentary, we propose using laws in implementing the Healthy Prisons Agenda. We evaluate the efficacy of laws in tackling health inequalities in prisons, provide recommendations on how states can uphold their international commitments that safeguard prisoners' right to healthcare, and frame prisons as health-promoting settings. We also assess the challenges that can thwart this proposal, such as the non-binding nature of international obligations, global prison overcrowding and the dependency on prison governors and staff for implementation of the Agenda. The commentary concludes by recommending further evaluation of our proposal and testing its potential generalisability to other health-promotion agendas. (Global Health Promotion, 2020; 27(2): 121–124)

Keywords: Healthy prisons agenda, health-promoting prisons, law, prisons, healthy setting

Introduction

In this commentary, we advocate for the use of laws in implementing the Healthy Prisons Agenda. The Agenda, which adopts the whole-prison approach, is proposed by the World Health Organization (WHO). It aims to reduce health risks among prisoners, recognise prisoners' human rights while maintaining a security regime, ensure the equivalence of prison health services to community health services, and promote health and welfare in prisons (1).

The remainder of this paper is structured as follows: After providing background information about the ever-growing interest in the factors determining prisoner health, along with a discussion of the utility of legal structures in addressing health inequalities in prisons, we explore how states, building upon the international concordats they have signed, can safeguard prisoners' rights to health care. We then articulate how laws can be used to recognise and strengthen the role of prisons as health-promoting institutions. We conclude by suggesting further evaluation of the proposed framework as part of an iterative, transnational response to address the health needs of prisoners across the world.

Background

Prisoners are among the most vulnerable and marginalised members of the population worldwide. Globally, about 10.4 million people are held in penal institutions (2). In addition to the overwhelming evidence regarding their physical and mental ailments (3), the female prison population has increased by 50%, which is almost three times higher than the corresponding increase of the male prison population (2). Similarly, older prisoners comprise 13% of the global prison population, and incarceration both accelerates the ageing process and increases the elderly prison population's risk of chronic health problems (4).

There are opportunities to address the needs of various groups within the global prison population. Laws represent one such mechanism, and can be an

1. Centre for Public Health & Wellbeing, University of the West of England (UWE Bristol), Bristol, UK
2. School of Health and Community Studies, Leeds Beckett University, Leeds, UK

Correspondence to: Nasrul Ismail, Centre for Public Health & Wellbeing, University of the West of England (UWE Bristol), Frenchay Campus, Coldharbour Lane, Bristol BS16 1QY, UK. Email: Nasrul.Ismail@uwe.ac.uk

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ideal tool to support public health agendas. In this respect, evidence is available demonstrating that laws can be meaningfully used to establish a framework to drive behavioural change within a supportive environment (5). Similarly, a statutory foundation can set minimum standards for health services to be recognised and adhered to by the state, its actors and the population as a whole.

In what follows, using the Healthy Prisons Agenda as a lens, we explore how the alignment of laws with the Healthy Prisons Agenda can help address the burgeoning healthcare inequalities within penal institutions. We will explore the possibility of such alignment in the context of legislation at the state level to argue that, within the 194 WHO member states that subscribed to the Healthy Prisons Agenda (1), appropriate legislation can create a uniform level of protection for prisoner health worldwide.

Using legislation to safeguard prisoners' rights to health

A legislative structure ensures that states fulfil their international obligations with respect to prison rehabilitation. These commitments include Article 12 of the International Covenant on Economic, Social and Cultural Rights, Principle 9 of the Basic Principles for the Treatment of Prisoners, and the Standard Minimum Rules for the Treatment of Prisoners (the Nelson Mandela Rules). Collectively, they create a duty of care for states to ensure acceptable conditions in prisons, particularly given that prisoners have no alternative but to rely on the authorities to support their health while in detention. Taken together, these obligations provide the prerequisite lever for the obligations under the Healthy Prisons Agenda to be recognised via legislation that reflects the government's commitment to honouring its international obligations regarding prison rehabilitation.

Despite the permanency of legislative measures, however, the unstable nature of the international principles underlying them may jeopardise the effectiveness of those measures. The Convention principles are, at best, a vague articulation of state obligations and, at worst, merely equivocal (6). Similarly, there is no direct link to population health; accordingly, this justification to protect prisoner health is frequently applied in an incremental manner (6). Opponents of this view have argued, however, that these principles are already entrenched in international obligations and are, at the very least, authoritative interpretations that states cannot set aside without good reason (7). In order to consolidate and realise the rights that emanate from international provisions in a more enduring fashion, a permanent measure, such as legislation, would be urgently needed.

Another factor that can sub-optimise the implementation of the Healthy Prisons Agenda is the inconsistent political interest in ensuring protection for detainees' health. Political debates that pivot around neoliberalism have frequently overplayed the rhetoric of individualism, while underplaying the role of societal and environmental forces that drive patterns of re-offending (8). This perspective reduces the interventionist role of the state, perpetuates a reductionist and myopic mentality, and reduces the role of health and wellbeing in reducing recidivism (9). Ironically, within the context of the penal environment, this view also requires prisoners to rely solely upon the state for their health and social care needs. To amend the situation, the introduction of legislation concordant with the Healthy Prisons Agenda would make it possible to acknowledge the role of health in reducing re-offending, frame re-offending as a derivative of wider social and environmental factors, and protect prisoner health from political volatility.

Another hurdle is that, in most countries, health in prisons is overseen by a Ministry of Justice or the Interior (10). In these countries, the implementation of health services in prisons is often undertaken without input from the national health services (10), which creates an unsustainable conflict of interest that endangers prisoner health, and this risk has started to be recognised by some states. Accordingly, the United Kingdom, France and Norway have pioneered shifting of the healthcare responsibility to a Ministry of Health, and this change is reported to have improved access to healthcare interventions in prisons and better guaranteed continuity of care provided by the national health service before, during and after detention (10). The use of a statutory foundation, along with helping the Agenda survive any potential political volatility threatening its efficacy, can robustly address the potential policy challenges in implementing the Agenda.

Using legislation to strengthen the status of prisons as health-promoting settings

Statutory support for the Healthy Prisons Agenda should recognise the role of prisons as health-promoting institutions. In line with the Ottawa Charter (11) and the Sundsvall Statement (12), which emphasise the role of supportive settings in promoting health, prisons are a modifiable determinant of health. This makes it possible, using an upstream approach, to frame the prison health discourse within a salutogenic, holistic and inclusive model of health (13). We propose that, upon forging connections with the wider justice sector, legislation can promote the integration of rehabilitation culture into the core mission of penal institutions without endangering security or public safety.

Despite this promise, overcrowding, which afflicts almost a fifth of prisons worldwide (2), may hinder the efficacy of prisons as health-promotion settings. To enhance the effectiveness of the Healthy Prisons Agenda, we propose that statutory instruments should be used to prioritise alternatives to imprisonment, such as community sentences or early release (14). Beyond overcrowding, implementation of the Healthy Prisons Agenda relies on prison governors and prison staff. Involving these gatekeepers may seem precarious, as prisons operate under a philosophy of security and public protection (8) which contradicts the essential health-promotion principles of personal and collective empowerment. In this respect, legislation may motivate the enlightened leadership of prison governors to engage with a rehabilitation programme – an attitude that may inspire the prison staff to appreciate the value of the Healthy Prisons Agenda. Echoing Ottawa (11) and Sundsvall (12), the education of prison governors and staff should underscore the message that health-promotion initiatives can coexist with the current security and discipline regime in prisons.

Conclusion

In this commentary, we have proposed that legislation can play a key role in implementing the Healthy Prisons Agenda. Institutionalising the Healthy Prisons Agenda through legislation can address the precariousness of international treaties and strengthen the recognition of prisons as health-promoting institutions. Additionally, such movement will align the states in supporting the recent introduction of Goal 10 of the United Nations Sustainable Development Goals 2030, which seeks to fulfil the health and social care needs of people in contact with the criminal justice system, including prisons (15).

Despite the nuances required by legislation in support of the Healthy Prisons Agenda, legislation should be further re-evaluated (14). Specifically, a multi-scalar implementation across 194 WHO member states will lay the foundation for meaningful transnational comparisons of the success of legislation in implementation of the Healthy Prisons Agenda across countries and continents, while simultaneously establishing a feedback loop from these countries back to the WHO as the custodian of the Agenda.

Finally, due to its inherent flexibility regarding the nature of the programme, political climate and target population, the proposed legal framework can be implemented in other health-promotion agendas. Therefore, we urge a wider research community to examine whether legal theories can be applied to support practical public health initiatives. Doing so will promote the integration of public health and law, strengthen public health programmes and safeguard public health programmes against future political, economic and social challenges.

Authorship statement

NI and NV conceptualised the study. All authors subsequently contributed towards the design, analysis and interpretation of the data. NI prepared the first draft of the article, while NV and JW provided the initial feedback. All authors contributed equally to subsequent revisions of the article. All authors approved the final version of the article.

Conflict of interest

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ORCID iD

Nasrul Ismail https://orcid.org/0000-0001-8747-6383

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Abstracts

Challenges of participatory public planning of a regional health promotion plan in the Belgian institutional context

Y. Coppieters and B. Scheen

Defining a prevention and health promotion framework is a major challenge for the Walloon Region, which inherited this jurisdiction in 2014. The first part of a Health Prevention and Promotion Plan was created in 2017, allowing regional health priorities to be defined. The objective of this article is to present the process of developing its operational components and to discuss the challenges of implementing such a framework within a political and participatory context. Based on the first part of the Plan, the regional administration identified 11 thematic working groups, which brought together more than 150 partners. A methodological guide develops the desired 'health objectives–specific objectives–actions' chains, with the framework for prioritizing actions being based on the criteria of relevance, consistency and feasibility, as well as taking into account more transversal objectives. The Operational Plan uses the values and principles that constitute the foundations of the actors' practices. The proposed program is structured on six axes, which include a complement to the diagnosis of the situation, intervention principles and operational programming. A framework for implementing, managing and monitoring, evaluating and updating the Plan has also been developed.

Political time is not the same as the time required for quality planning. This programming work, based on participatory dimensions, was incomplete due to the limits of the process that influenced the contents. Although most of the proposals stem from existing actions, it should be noted that the participants saw in the plan the opportunity to innovate and to remedy certain shortcomings currently felt in Wallonia in terms of prevention and health promotion. (Global Health Promotion, 2020; 27(2): 131–138)

Development of learning and research health zones in the Democratic Republic of Congo: useful lessons from a qualitative assessment of previous experiences in Sub-Saharan Africa

G. Michaux, A. Mwembo-Tambwe, Z. Belrhiti, F. Monet and B. Criel

Three Learning and Research Zones (LRZ) are developed by the RIPSEC program in the Democratic Republic of the Congo (DRC). This strategy consists of using one health district as a substrate to train managers of other health districts and to conduct research on health systems. The purpose of this article is to explore the principles, effects and conditions for the success of this strategy through a qualitative assessment of previous LRZ experiences in Sub-Saharan Africa. It is based on four experiences: two carried out in Niger, one in the DRC and one in Congo-Brazzaville. The data come from the testimonies of those responsible for developing the experiences, presented in a seminar in 2014 and deepened by interviews in 2015, and from publications dealing with these experiences. The commonalities of the four experiences are the national and often international dissemination of good practices and organizational models, their long-term development and the involvement of LRZ managers in all aspects of their transformation. The focus of research on the problems of the LRZ and the promotion of reflexivity in managerial decisions are important for this transformation. The use of the results by the RIPSEC program, the logic embedded in the LRZ concept and the potential contribution of the involvement of national public health schools in their development are then discussed. The validity of the study is limited, but strengthening the leadership of health district managers is a frequent challenge for health systems with limited resources. This article may help develop a strategy to strengthen it. (Global Health Promotion, 2020; 27(2): 139–148)

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Better understanding the challenges of medicalization of HIV prevention in France: prophylaxis pre-exposure through the prism of the social sciences

S. Carillon and G. Girard

The use of anti-retroviral therapy for HIV prevention is profoundly transforming the context for interventions in this area. One of the most popular facets is pre-exposure prophylaxis (Prep). However, the use of Prep in France is limited. The tool is struggling to find its audience among the target populations. How does one explain the under-use of a prevention approach whose high effectiveness has already been demonstrated? The answers to this question could be enriched by the human and social sciences, both to think about the conditions necessary for the buy-in of the tool by the target audiences, and to identify the overlooked elements and the logics that underlie its deployment. Far from being limited to HIV, critical reflection on the use of drugs as prevention tools opens up questions relevant to the field of health promotion. (Global Health Promotion, 2020; 27(2): 149–153)

Empowerment and care-seeking in health: an overlooked factor of maternal mortality in an Indigenous Mexican community

C. I. Amaya-Castellanos, T. Shamah-Levy, E. I. Escalante-Izeta, B. Turnbull Plazas and R. M. Nuñez Urquiza

Objective: to investigate the link between expressions of empowerment (autonomy and decision-making power) and practices of self-care and care-seeking during pregnancy and postpartum in relation to maternal mortality in indigenous women in the municipality of Santa María Temaxcaltepec, Oaxaca, Mexico. **Methods:** six focus groups were held: two with pregnant women, two with mothers of children under three years of age, and two with men who have become fathers in the past three years. **Results:** male hegemony in the family context and in health institutions makes it difficult for women to have autonomy and decision-making power over their reproductive health. This directly impacts care-seeking during pregnancy and birth. **Conclusions:** women's lack of autonomy and decision-making power are indirectly related, with adverse effects for pregnancy. These findings are useful for guiding the design of strategies that could promote women's empowerment and gender equity in the context of community services and programs. They also call decision-makers' attention to the presence of non-medical factors in maternal death in indigenous communities. (Global Health Promotion, 2020; 27(2): 166–174)

Challenges for health promotion: the case of the infant formula market in Mexico

P. Torre, M. Salas and C. I. Silva

Breastfeeding is recognized as the ideal feeding method for optimal infant development and growth. In Mexico, the national rate of exclusive breastfeeding for infants under six months old is 30.8 percent, a figure that presents a challenge for health promotion. Infant formula has become a product that is considered socially acceptable, convenient and equivalent to breast milk, whether because of maternal employment conditions, the difficulties of nursing, the routine use of formula and bottles during the birthing process, medical disinformation, the social prestige of formula, the role of the state, or marketing by manufacturers. This article demonstrates the commercial availability of formula in Mexico. It uses a study conducted in 2016 in 35 establishments in Mexico City (brand, manufacturer, price, quantity, recommendations for consumption and country of origin), and another retrospective study of the volume (in thousands of tons) and the value (in millions of dollars) of national sales from 2012 to 2016. The study identified 79 products made by 13 manufacturers, with different prices. Nestlé® offers 25 percent of the products. The volume of the national market in 2016, 78 thousand tons, is equal to 600 million liters of prepared formula, or 743 mL per live birth each day, which would feed all infants born alive in that year. The value, US$596 million, represents a cost of US$0.74 per live birth each day. Considering international commitments such as Health in All Policies and the Declaration on Sustainable Development, this availability represents a challenge for the promotion of breastfeeding in the face of the complexity of mothers' and families' decisions in diverse social contexts. (Global Health Promotion, 2020; 27(2): 175–183)

Aborder les déterminants commerciaux de la santé commence par une définition et une mesure de ces déterminants plus claires

Kelley Lee[1] et Nicholas Freudenberg[2]

Le défi des maladies non transmissibles (MNT) continue de croître à l'échelle mondiale, passant de 43% à 54% du fardeau mondial des maladies entre 1990 et 2016 (1). En 2018, les MNT représentaient 71% du nombre total de décès dans le monde, 81% des décès étant causés par quatre types de maladies – maladies cardiovasculaires, diabète, cancers et maladies respiratoires chroniques (2). D'ici 2025, selon les estimations de l'Organisation mondiale de la Santé, 85% des décès annuels liés aux MNT se produiront dans les pays à revenu faible ou intermédiaire (3).

Les coûts de traitement des MNT sont devenus exorbitants dans tous les pays. Pour les seules maladies cardiovasculaires, dans l'Union européenne, le coût des soins de santé s'élevait à 110 milliards d'euros en 2015 (4). Les cas de diabète chez les adultes (>20 ans) ont augmenté dans le monde, passant de ~171 millions à 463 millions de personnes entre 2000 et 2019, représentant 10% des dépenses de santé (5,6). En outre, étant donné que ce fardeau économique est susceptible d'être particulièrement lourd pour les personnes et les communautés défavorisées et marginalisées par rapport aux groupes ayant un statut socioéconomique plus élevé dans tous les pays (7), les MNT sont maintenant un facteur clé de l'augmentation des inégalités en matière de santé (8). Enfin, comme le montre la pandémie de COVID-19, les taux élevés de MNT exposent des millions de personnes à un risque plus élevé d'autres menaces pour la santé.

Compte tenu de ces coûts substantiels et croissants, comme le font remarquer Buse et al., « nous ne pouvons pas nous sortir de l'épidémie de MNT par des traitements (9) ». En revanche, des stratégies de prévention plus efficaces axées sur la réduction des facteurs de risque associés à ces maladies sont de toute urgence nécessaires (10). Un facteur de risque est « tout attribut, caractéristique ou exposition d'un sujet qui augmente la probabilité de développer une maladie ou de souffrir d'un traumatisme (11) ». Toutefois jusqu'à maintenant, les mesures de santé publique pour prévenir les MNT se sont essentiellement focalisées sur les facteurs de risque métaboliques (ex : l'hypertension, l'hyperlipidémie) et comportementaux modifiables – tabagisme, abus d'alcool, mauvaise alimentation et inactivité physique (2,12). Par conséquent, comme le décrit Horton, « les progrès ont été insuffisants et regrettablement lents. . . Une stratégie de plaidoyer fondée sur quatre maladies et quatre facteurs de risque semble de plus en plus déconnectée. . . De nombreux dirigeants politiques estiment que les MNT sont tout simplement trop énormes et trop complexes. Cela les paralyse. Nous avons besoin d'une approche différente (13) ».

Le concept émergent *des déterminants commerciaux de la santé* (DcS) peut être une approche profondément différente. Il est reconnu depuis longtemps que les stratégies de prévention des MNT doivent tenir compte des « circonstances dans lesquelles les gens naissent, grandissent, vivent, travaillent et vieillissent, et des systèmes mis en place pour faire face à la maladie (14) ». Depuis la fin du 20ème siècle, on ne peut pas nier que le secteur commercial (à but lucratif) a joué un rôle prépondérant dans la formation de ces circonstances sociales (15–18). West et Marteau définissent les DcS comme des « facteurs qui influent sur la santé et qui découlent de la recherche du profit (19) ». De même, Kickbusch et al. écrivent que les DcS sont « des stratégies et des approches utilisées par le secteur privé pour promouvoir des produits et des choix préjudiciables à la santé (20) ». Buse et al. se

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1. Canada Research Chair Tier I, Faculty of Health Sciences, Simon Fraser University, Burnaby, BC, Canada
2. CUNY Graduate School of Public Health & CUNY Urban Food Policy Institute, City University of New York, NYC, Etats-Unis d'Amérique

Correspondence à : Kelley Lee, Simon Fraser University, Blusson Hall, 8888 University Drive, Burnaby, BC, V5A 1S6, Canada. Email : kelley_lee@sfu.ca

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concentrent sur les « risques inhérents à la consommation ou à l'exposition à des produits commerciaux - comme les aliments et les boissons ultra-transformés, le tabac et l'alcool (21) ». Ces définitions contrastent avec de récents documents de l'OMS qui considèrent les organisations non gouvernementales, les fondations philanthropiques, les institutions universitaires et les entreprises à but lucratif comme étant tous des « acteurs non étatiques » et des partenaires potentiels dans la prévention et le contrôle des MNT (22), un cadrage qui dissimule les conflits d'intérêts potentiels pour les acteurs commerciaux.

Bien que cette évolution dans l'attention portée aux facteurs commerciaux soit la bienvenue, les définitions actuelles de ces facteurs offrent une compréhension limitée des voies complexes qui lient les DsC et les MNT. Elles ne tiennent pas compte de la nature variable et dynamique des DsC dans le temps et l'espace. Elles ne tiennent pas non plus compte de la possibilité d'effets positifs et/ou négatifs sur certaines populations. De ce fait, le concept de DsC n'a pas encore été opérationnalisé pour éclairer efficacement les mesures de santé publique (9,21). Effectivement les approches de santé publique demeurent en général axées sur les facteurs de risque métaboliques et comportementaux tels que le dépistage de l'hypertension, une alimentation saine, l'abandon du tabac et l'amélioration des stratégies d'étiquetage des aliments (23). Toutefois, les interventions visant les facteurs de risque métaboliques et comportementaux, qui ne vont pas tenir compte des « relations entre la structure sociale, le contexte et l'action et l'impact qu'elles peuvent avoir sur la santé et le bien-être (24) », auront un effet limité. Le concept des DcS intègre potentiellement des facteurs de risque métaboliques, comportementaux et structurels, mais, pour pouvoir statuer, il faut que nous ayons de toute urgence une définition plus claire au-delà de l'accent mis sur des produits et des industries nuisibles à la santé spécifiques, et des outils analytiques pour mesurer les DcS comme un ensemble de facteurs de risque.

Il est essentiel de comprendre les DcS comme un ensemble de facteurs de risque et comment ces facteurs de risque interagissent les uns avec les autres pour élaborer des interventions efficaces en santé publique pour prévenir et contrôler les MNT à l'échelle mondiale. Tout d'abord, cette approche fait passer l'accent prédominant que l'on constate dans la recherche et les politiques sur la gestion clinique et le changement de comportement, qui sont coûteux et dont les effets sont limités, à la prévention fondée sur le changement sociétal et individuel. Deuxièmement, une approche composite des DcS permet d'établir un pont entre les silos de la recherche et de la politique qui divisent différents domaines de maladies, groupes de population et types d'interventions. En revanche, ces approches holistiques peuvent amplifier le changement grâce à des stratégies intégrées de prévention des MNT. Enfin, pouvoir mesurer les DcS en tant que combinaison de facteurs de risque permet de mieux cerner les vulnérabilités relatives de populations particulières au fil du temps et des lieux, ainsi que d'autres variables (ex : l'âge, le sexe, la situation socioéconomique). Cela pourrait fournir un ensemble de données puissant pour élaborer des interventions et des ressources ciblées afin de réduire ces risques pour la santé et l'équité en santé.

Un cadre pratique interdisciplinaire des DcS peut également inclure de nouvelles perspectives issues de la science des systèmes, de l'économie politique et des sciences politiques, en créant des nouveaux corpus de connaissances qui peuvent éclairer la pratique en santé publique. La science des systèmes peut aider à mieux faire comprendre, de façon plus cohérente et fondée, la manière dont les systèmes dynamiques de pouvoir et de gouvernance façonnent les voies par lesquelles les DcS influencent la santé (25). L'économie politique peut aider à retracer l'impact de la montée du néolibéralisme sur le rôle des acteurs commerciaux tandis que les sciences politiques peuvent aider à identifier les acteurs sociaux qui ont le pouvoir de modifier les DcS (26).

Dans l'ensemble, malgré les preuves évidentes de la hausse alarmante des MNT à l'échelle mondiale et l'engagement politique de haut niveau à relever ce défi de santé publique de premier plan, la communauté de la santé publique (y compris les professionnels de la promotion de la santé) n'a pas réussi à se mettre complètement d'accord sur une action préventive efficace (13,27). Le concept des DcS promet une approche plus holistique, intégrée et ciblée.

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Enjeux de la planification publique participative d'un Plan régional de promotion de la santé dans le contexte institutionnel belge

Yves Coppieters et Bénédicte Scheen

Résumé :
Définir un cadre de prévention et de promotion de la santé est un enjeu majeur par la Région wallonne qui a hérité depuis 2014 de ces compétences. Une première partie d'un Plan Prévention et Promotion de la Santé a été élaborée en 2017, permettant de définir les priorités régionales en santé. L'objectif de cet article est de présenter le processus de construction pour ses composantes opérationnelles et de discuter des enjeux de l'implémentation d'un tel cadre d'action sur un plan politique et de démarche participative. En prenant appui sur la première partie du Plan, l'administration régionale a identifié 11 groupes de travail thématiques qui ont rassemblé plus de 150 partenaires. Un guide méthodologique développe les chaines « objectifs de santé-objectifs spécifiques-actions » désirées, le cadre de priorisation des actions basé sur des critères de pertinence, de cohérence et de faisabilité ainsi que sur la prise en compte d'objectifs plus transversaux. Le Plan opérationnel repose sur des valeurs et des principes qui constituent les fondements des pratiques des acteurs. La proposition de programmation est structurée en 6 axes qui comportent un complément au diagnostic de situation, des principes d'intervention et une programmation opérationnelle. Il a aussi été élaboré un cadre d'implémentation, de gestion et de suivi, d'évaluation et de mise à jour du Plan.
Le temps politique n'est pas le même que le temps nécessaire à une planification de qualité. Ce travail de programmation, basé sur des dimensions participatives, a été incomplet de par les limites du processus qui ont influencé les contenus. Bien que les propositions soient en majorité issues d'actions existantes, il faut souligner que les participants ont vu dans le Plan l'opportunité d'innover et de pallier certains manques ressentis actuellement en Wallonie en termes de prévention et de promotion de la santé. (Global Health Promotion, 2020; 27(2): 131–138)

Mots clés : planification participative, plan opérationnel, enjeux institutionnels, Région wallonne

Introduction

Depuis son intégration dans la législation belge, la promotion de la santé est une compétence décentralisée. Pour la partie francophone du pays, la Communauté française (actuelle Fédération Wallonie Bruxelles) se pourvoit en 1997 d'un Décret portant sur l'organisation du secteur de la promotion de la santé et la mise en place de programmes quinquennaux. Suite à la sixième réforme de l'Etat belge en 2014 et des accords intra-francophones, la compétence « promotion de la santé » s'est vue régionalisée. En Wallonie, l'Agence pour une Vie de Qualité (AViQ), créée en 2016, est devenue l'administration compétente pour traiter de cette matière. Cette réorganisation implique la rédaction d'un nouveau Décret applicable à la Région ainsi que l'élaboration d'un

Centre de recherche Politiques et systèmes de Santé, Ecole de Santé Publique, Université Libre de Bruxelles (ULB), Bruxelles, Belgique.

Correspondance à : Yves Coppieters, Ecole de Santé Publique, Université libre de Bruxelles (ULB), Route de Lennik 808, CP 596, 1070 Bruxelles, Belgique. Email : yves.coppieters@ulb.ac.be

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nouveau programme appelé « Plan de promotion de la santé ».

En février 2017, le Ministre wallon en charge de la santé a présenté au Gouvernement la première partie du Plan Prévention et Promotion de la Santé (1), à savoir la définition des priorités en santé. Cette première partie a procédé à une analyse épidémiologique, des indicateurs de santé et des principaux déterminants de la santé pour la Région. Sur cette base, le Plan identifie des axes thématiques prioritaires en termes de santé publique basés entre autres sur leur importance ou leurs possibilités de réduction des inégalités par le biais de stratégies de prévention et de promotion de la santé. Ces axes sont : 1. La promotion des modes de vie et des milieux favorables à la santé ; 2. La promotion d'une bonne santé mentale et du bien-être global ; 3. La prévention des maladies chroniques ; 4. La prévention des maladies infectieuses y compris la politique de vaccination ; 5. La prévention des traumatismes non intentionnels et la promotion de la sécurité.

Ce Plan wallon de prévention et de promotion de la santé a pour ambition d'étendre son dispositif jusqu'à l'horizon 2030 afin d'améliorer l'état de santé, le bien-être et la qualité de vie de la population wallonne. Les axes thématiques prioritaires doivent ensuite être transposés en mesures opérationnelles concrètes.

Pour y arriver, il existe différentes approches de planification publique : la vision rationaliste, celle pragmatique, et plus récemment, la perspective communicationnelle (2). L'approche pragmatique de la planification se définit autour de ce que font les acteurs, les actions qu'ils entreprennent et les discours qu'ils tiennent, plutôt mais sans exclure l'objectivité scientifique. En effet, la vision stratégique des programmes de prévention et leurs orientations doivent être alimentées par des informations de différentes sources issues tant de cadres structurés et documentés que de l'expérience des parties prenantes. Tous les acteurs sont au même niveau, des « spécialistes » qui discutent ensemble. La démarche de planification participative est donc étroitement liée à la définition des priorités. Elle a besoin pour cela d'approches méthodologiques pour faire des choix de stratégies ou définir des priorités et assurer une répartition des ressources correspondantes à ces choix (3).

Souvent la notion de participation, difficile à définir dans un processus qui mobilise une telle diversité d'acteurs, n'est que réduite à la participation des professionnels et des associations concernés par les thématiques (4). Les professionnels de santé publique peuvent cependant jouer un rôle d'aide à la décision. Ce ne sont pas eux qui définissent les politiques ou planifient les programmes sur bases de leurs expertises, mais ils sont là pour faciliter une collaboration interactive entre les décideurs (autorité politique, responsable administratif, responsable d'organisme, etc.) et les experts. Il s'agit d'une collaboration dans laquelle chacun doit pouvoir amener ses compétences propres et respecter le champ des autres.

La population doit être mobilisée à travers les associations ou représentants de la société civile. Cela est documenté comme une des conditions d'accroissement de l'efficacité des programmes (5). La planification et l'élaboration de « programmes » au sens large est a priori une activité multidisciplinaire qui est menée avec tous les acteurs concernés.

L'objectif de cet article est de présenter le processus de construction de ce Plan opérationnel de prévention et de promotion de la santé en Wallonie, d'analyser le cadre de planification et d'approche participative et de discuter les enjeux de l'implémentation d'un tel cadre d'action dans le contexte institutionnel belge.

Méthodes

Afin de déterminer les stratégies opérationnelles du Plan, les décideurs politiques et l'administration ont enclenché un processus participatif cherchant à mobiliser de nombreux acteurs du secteur de la prévention et de la promotion de la santé actifs en Région wallonne.

Des groupes de travail comme base du processus participatif

En prenant appui sur la première partie du Plan, l'administration régionale a identifié 11 groupes de travail (GT) thématiques et en a assuré la composition (Tableau 1).

Ces GT ont rassemblé plus de 150 partenaires : acteurs des différents secteurs concernés, professionnels de la promotion de santé et de la première ligne de soins, acteurs issus du monde associatif, représentants des pouvoirs locaux, bénéficiaires et acteurs des milieux de vie, membres de l'AViQ ainsi que d'autres parties prenantes provenant du milieu universitaire, des observatoires et des services communautaires de promotion de la santé.

Tableau 1. Groupes de travail thématiques.

GT 1 : L'alimentation et activité physique
GT 2 : La lutte contre le tabagisme
GT 3 : La promotion du bien-être et d'une bonne santé mentale
GT 4 : La prévention de l'usage addictif d'alcool et d'autres substances psychoactives
GT 5 : La prévention du suicide
GT 6 : Le diabète de type II, les maladies cardiovasculaires et les maladies respiratoires
GT 7 : Les cancers
GT 8 : La vaccination et la prévention des maladies infectieuses
GT 9 : La santé sexuelle et reproductive et les IST
GT 10 : La prévention des traumatismes non intentionnels et la promotion de la sécurité
GT 11 : Les personnes âgées et la promotion et prévention pour le maintien à domicile

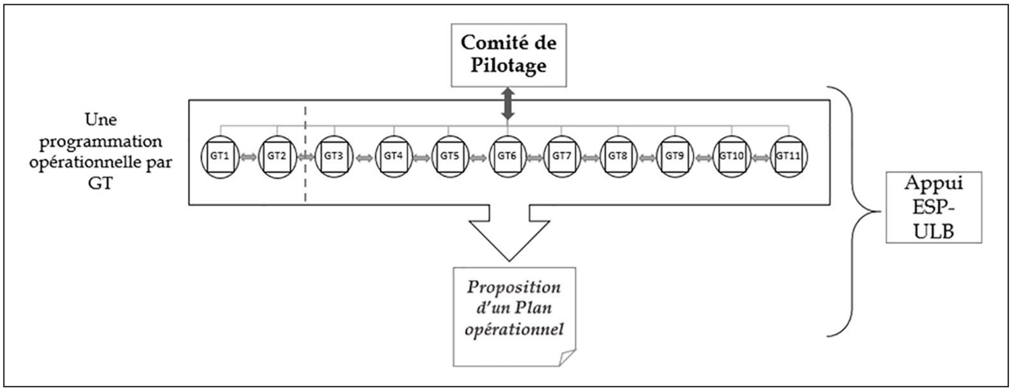

Figure 1. Interaction des parties prenantes pour l'élaboration de la proposition de Plan opérationnel.

Un cadre méthodologique commun

Un accompagnement méthodologique a été confié à l'Ecole de santé publique (ESP) de l'Université libre de Bruxelles (ULB) afin que les groupes de travail produisent une programmation détaillée propre à leur thématique. Le postulat de départ se calque sur la volonté que le planificateur travaille avec les acteurs à regrouper les possibilités d'action en scénarios dont il est possible d'analyser les tenants et les aboutissants et de proposer des solutions plus complètes (ou consensuelles). Le cadre d'analyse utilisé a été le modèle de catégorisation des résultats de la fondation Promotion Santé Suisse (6) qui avait déjà été utilisé antérieurement par ces groupes d'acteurs (7). Cet outil a permis de développer les chaines « objectifs de santé-objectifs spécifiques-actions » désirées et proposer un processus de priorisation des actions basé sur des critères de pertinence, de cohérence et de faisabilité ainsi que sur la prise en compte d'objectifs plus transversaux. Les objectifs de santé sont des finalités à long terme. Ils sont exprimés de façon globale (à la perspective 2030). Les objectifs de niveaux suivants ne portent plus sur les problèmes de santé mais sur leurs déterminants. Un objectif observable ou mesurable est dit « opérationnel » si le public final est identifié comme sujet de l'objectif et que l'activité énoncée par l'objectif est définie en termes de comportement observable et/ou mesurable (8).

Un Comité de pilotage s'est constitué afin d'assurer le bon déroulement de la phase d'opérationnalisation du Plan et de superviser de manière générale les productions des groupes (Figure 1). Parmi ses membres se trouvent des représentants des instances politiques régionales, de l'administration, de la Fédération wallonne de promotion de la santé, des observatoires provinciaux de la santé, des services communautaires de promotion de la santé ainsi que des représentants du Réseau belge francophone des Villes Santé de l'OMS.

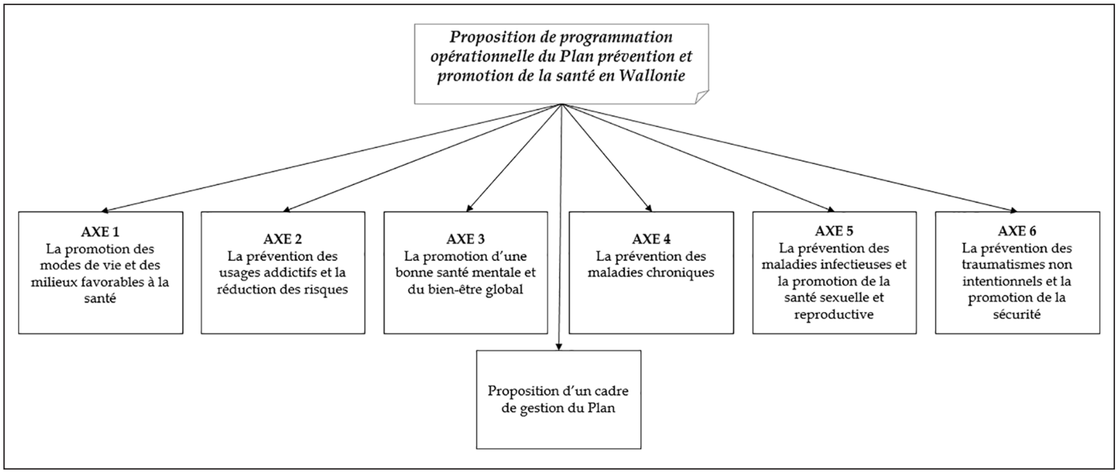

Figure 2. Structuration de la proposition de programmation opérationnelle.

Une programmation opérationnelle spécifique par groupe de travail

Les GT se sont réunis à trois reprises entre septembre et novembre 2017. Leur mission était de proposer pour la thématique concernée, un complément au diagnostic de situation exposé dans la première partie du Plan ainsi qu'une programmation opérationnelle définissant des objectifs de santé, des objectifs spécifiques et des actions pour améliorer la santé et le bien-être des Wallons à horizon 2030. Préalablement aux rencontres, chaque participant a reçu un portfolio contenant le guide détaillant la démarche méthodologique ainsi que des ressources propres à la thématique les concernant (Plans nationaux et étrangers existants, rapports de l'OMS, articles scientifiques pertinents …).

Résultats

Au bout des journées prévues dans le processus participatif, les GT sont parvenus à proposer une programmation plus ou moins aboutie selon les thématiques. La proposition de programmation opérationnelle du Plan prévention et promotion de la santé en Wallonie présente un programme général qui reprend chacune des productions des groupes (8).

La première partie du Plan fait référence aux définitions et concepts de base de la santé, de la prévention, de la promotion de la santé ainsi que des conditions préalables à la santé des individus. La programmation opérationnelle repose sur des valeurs et des principes qui constituent les fondements des pratiques des acteurs agissant en promotion de la santé et en prévention. Issus des discussions émanant des différents GT, les principes mis en avant sont : l'action sur les déterminants de la santé, le développement des environnements favorables à la santé, la participation des publics cibles et le renforcement communautaire, l'empowerment, la responsabilisation sociale plutôt que la responsabilisation individuelle, la santé dans toutes les politiques, la réduction des inégalités sociales de santé, une société inclusive, l'accessibilité à tous les niveaux, l'approche globale et positive de la santé, le continuum promotion, prévention, soutien, soins et réduction des risques, revalidation, soins palliatifs, le travail en réseau et l'intersectorialité, l'évaluation et le recueil de données.

La proposition de programmation globale est structurée en 6 axes ayant trait aux priorités identifiées dans la première partie du Plan. Les axes proposés ont cependant quelque peu évolué: la thématique des assuétudes a été isolée dans un axe et se situe au croisement des modes de vie et du bien-être et l'axe 5 traitant initialement des maladies infectieuses a vu s'élargir son champ pour aborder des questions relatives à la santé sexuelle et reproductive (Figure 2).

Contenu de la programmation

Chaque axe comporte des principes d'intervention et une programmation opérationnelle issue de la fusion des productions de GT. Les actions proposées sont en majorité issues d'actions déjà mises en œuvre sur le territoire wallon, mais il faut souligner que de nombreux acteurs ont vu dans le Plan l'opportunité d'innover, de renforcer ou de pallier certains manques ressentis actuellement en Wallonie en termes de prévention et de promotion de la santé. Nous pouvons citer en exemple l'indispensable mise en réseau des acteurs, le renforcement des compétences des professionnels et l'implication des bénéficiaires et de leurs aidants proches dans les actions. Le Plan se rapporte essentiellement aux compétences de santé régionales, cependant il s'inscrit d'emblée dans une vision intersectorielle, via la mobilisation de toutes les compétences concernées au niveau de la Région, mais aussi aux niveaux communautaire et fédéral.

Un cadre de gestion

Différents objectifs sont mis en évidence pour opérationnaliser et implémenter le Plan sur tout le territoire Wallon jusqu'en 2030. Il s'agit notamment de mettre en place un cadre d'implémentation, de gestion et de suivi, de récolter et d'analyser les données ainsi que d'évaluer et mettre à jour le Plan. L'accent est également mis sur la communication vers la population à propos du Plan et de son cadre de mise en œuvre.

Les rôles et fonctions des différentes parties prenantes dans l'organisation de la gestion du Plan sont bien définis. Il s'agit d'identifier une équipe gestionnaire sous la responsabilité de l'Administration et de mobiliser des structures d'appui et de gouvernance. Il est suggéré que la Ministre compétente fasse du Plan un point de discussion du Gouvernement et de débat au Parlement de manière à renforcer l'implication transversale des responsables politiques conformément aux recommandations de l'OMS et aux orientations stratégiques du Plan. Pour favoriser l'approche transversale et la recherche de synergies entre les politiques publiques, il est également conseillé de mettre en place une concertation structurée inter-cabinets et faciliter les cadres de concertation tant au niveau national qu'international. Tout cela s'inscrivant dans une vision de santé publique, c'est-à-dire le développement d'un Plan intégré, cohérent, coordonné, dans la continuité, qui agit simultanément sur différentes dimensions et favorise la pleine participation et l'implication des bénéficiaires.

La démarche de planification

Un intérêt de la démarche est la mobilisation d'acteurs dans l'organisation de cette programmation. Leur représentation n'était pas totalement assurée mais les personnes mobilisées constituaient une diversité d'intérêts et étaient potentiellement des acteurs requis par la réalisation des actions et la mise en œuvre de la future programmation.

Les pragmatistes soutiennent que la planification est un exercice politique où l'information est utilisée à des fins stratégiques, où les interprétations de la réalité sont socialement situées, et qu'elle est un processus de négociation visant un ajustement entre de nombreux intérêts (2). Ici il n'y a pas eu « manipulation » des acteurs malgré un échéancier très serré. Chaque acteur/institution participante a pu revoir l'analyse de situation, travailler en dehors des réunions (et avec leurs réseaux) pour enrichir les productions, exprimer clairement leurs avis sur le processus et les résultats attendus. L'analyse des comptes rendus des ateliers montre clairement une méfiance généralisée lors de la première rencontre où ont été présentés le cadre de travail et les attendus ; puis se sont engagées une motivation et une forte mobilisation pour participer aux groupes de travail et à chaque étape de la planification. Cependant, vu les délais fixés, il est ressortit à la fin (et après les rencontres) une vraie frustration concernant le temps imparti et la finalisation des productions. Certains présidents de GT ont formalisé ces critiques au comité de pilotage mais cela n'a pas permis de rallonger le processus participatif. Les acteurs voulaient de plus connaitre ce qui était politiquement possible et éventuellement négocier des arrangements pour faciliter tels ou tels aspects de la programmation.

Les suites du processus

En décembre 2017, la proposition de programmation opérationnelle pour le Plan prévention et promotion santé en Wallonie a été remise au Cabinet de la Ministre wallonne de la santé. Les prochains mois devraient être consacrés à la validation ou au remaniement de la proposition de programmation opérationnelle par les instances politiques wallonnes qui conservent en effet le pouvoir de décision quant aux actions retenues. L'année 2018 ou 2019 devrait également voir l'apparition du nouveau Décret de promotion de la santé et les modalités de son articulation avec le Plan.

Discussion

L'objectif de cet article est de présenter le processus et la méthodologie d'élaboration du Plan wallon de prévention et promotion de la santé, mais aussi de montrer les contraintes institutionnelles qui conditionnent l'élaboration et l'opérationnalisation de ce type de programmation.

Une planification participative

Pour la construction de leur Plan, les autorités wallonnes ont opté pour une démarche participative avec les acteurs des secteurs concernés. Cette volonté de planification participative et son processus démocratique ont été salués par les acteurs participants. En plus de la création d'un espace de dialogue entre les différentes parties prenantes, la participation se révèle être un outil indispensable notamment pour élaborer et proposer des programmes de manières efficace et efficiente, construire la confiance du public dans les décisions prises, s'assurer que les décisions et les politiques intègrent des connaissances et des compétences qui risqueraient d'être négligées et refléter un éventail plus large de valeurs et de préoccupations dans la prise de décision (9).

Les niveaux de participation peuvent être divers. Touzard décrit trois processus de prise de décision collective dont il dénonce la confusion fréquente dans le domaine politique : la consultation, la concertation et la négociation (10). La consultation s'apparente à une procédure de recueil d'avis en amont d'un projet. La spécificité de la consultation est que son résultat peut peser sur la prise de décision bien que les acteurs consultés ne soient pas conviés aux réunions de décisions. La concertation a pour but de « prendre ensemble une décision collective, ou de préparer une décision prise en final à un autre niveau » (10). Les acteurs concertés sont enjoints à se réunir autour de la table afin de parvenir à un accord. La négociation est quant à elle un processus de prise de décision émergeant d'un conflit qui oppose des acteurs manœuvrant avec pouvoir.

Dans le cas du Plan prévention et promotion de la santé en Wallonie, les acteurs invités aux différents groupes de travail se sont trouvés dans un processus participatif « n'ayant pas clairement dit son nom ». Un certain climat d'appréhension s'est installé parmi les acteurs invités, conduisant certains à s'interroger sur les objets du processus. S'agissait-il d'une simple consultation en vue de collecter des idées ou d'une concertation basée sur la co-construction incluant le politique autour de la table ? Il faut préciser qu'avant la dernière réforme institutionnelle, les financements et subsides alloués aux associations actives en prévention et promotion de la santé dépendaient des programmes et leurs modalités étaient inscrites dans le Décret. Dans la présente situation, le Décret n'est pas encore rédigé, les modalités de financement ne sont pas encore connues et nul ne sait à l'heure actuelle comment le Décret et le plan vont s'articuler. Face à ce manque de cohérence, il s'est alors posé différentes questions dont entre autres : les activités de chacun doivent-elles apparaitre dans la programmation sous peine de ne plus être financées par la suite ? Qu'en sera-t-il de l'appui aux actions des acteurs qui n'ont pas été sélectionnés pour participer à la concertation ?

Au terme de la phase de proposition d'opérationnalisation et au vu des définitions présentées ci-dessus, force est de constater que cette forme de participation s'apparentait à une concertation ponctuelle pour guider les décideurs dans l'étape de la planification du programme. Dans ce type de concertation où le projet est construit collectivement, Beuret explique que souvent la co-construction n'implique pas la co-décision : les élus se réservent le pouvoir de décider, mais le font à l'issue de séquences de co-construction auxquelles les parties sont réellement associées. (11). Toutefois, des auteurs comme Chambat et Fourniau estiment que « la concertation doit tendre à un partage de la décision […], ce qui implique la négociation pour rechercher l'accord entre des acteurs aux intérêts distincts (12) ». Le processus participatif peut donc être considéré comme un continuum entre consultation, concertation et négociation. Nous pouvons toutefois nous interroger sur le manque de transparence à cet égard en regarde des inconnues concernant le futur mode de financement des activités de la prévention et de la promotion de la santé en Wallonie. Selon les recommandations pour l'élaboration des plans de santé du Ministère français en charge de la santé (13), les procédures de production, de concertation, de validation et de diffusion doivent être bien définies au préalable, communiquées aux contributeurs du

Plan et peuvent être formalisées au travers d'un règlement intérieur. Cette étape, ainsi que la définition des rôles de chacun, semble avoir fait défaut dans le processus d'élaboration de la programmation opérationnelle du Plan prévention et promotion de la santé en Wallonie. À ce stade, l'équipe de recherche universitaire recommande la continuité de la dynamique participative engagée avec les parties prenantes du Plan ainsi que davantage de communication. Par ailleurs, nous pensons aussi à l'élargissement nécessaire de la participation aux acteurs concernés mais non concertés à ce jour.

La contrainte du temps politique et son impact sur le processus de planification

Près de trois ans se sont écoulés entre le transfert des compétences de prévention et de promotion de la santé et les prémisses de ce Plan. Lenteur habituelle d'un processus politique d'une telle envergure ou lenteur symptomatique de la place accordée à la promotion de la santé dans le système, les acteurs s'interrogent. La volonté politique d'accélérer considérablement le mouvement pour la promotion de la santé, si elle peut être saluée, ne sert pas nécessairement la démarche de planification et peut même entraver sa qualité. Les recommandations françaises en la matière évoquent la conciliation du temps « politique » et du temps « technique » de la programmation. En guise de perspective et dans un contexte similaire, deux années entières ont été consacrée à la construction d'une proposition de programme de promotion de la santé cardiovasculaire en Fédération Wallonie Bruxelles (7). En France, la durée de phase d'élaboration des Programmes régionaux de santé oscille entre une et deux années en fonction de l'intensité de la préparation qui y est consacrée (14).

Pour mener à bien des concertations entre des acteurs ayant des pratiques parfois très différentes, un temps d'acclimatation s'est avéré nécessaire dans certains groupes pour construire un langage commun et s'accorder sur les priorités opérationnelles. De plus, il faut rendre compte de l'inadéquation entre le haut degré d'opérationnalisation attendu et le temps alloué restant. Les groupes ne sont en effet par parvenus à définir par action les items opérationnels édictés par le guide méthodologique.

Le temps « technique » de la construction du plan et le temps dit « politique » ont donc été différents. En effet, comme dans toute planification stratégique de ce type, la démarche a été façonnée par les « contraintes » politiques. Certains événements survenus au cours du processus (changement du Ministre de tutelle et modification de son Cabinet, fin de la législature, faiblesse de l'administration) ont influencé le processus et des stratégies d'adaptation ont dû être trouvées pour potentialiser tout le travail déjà réalisé. Ceci a été renforcé par les réseaux d'intervenants qui influencent eux aussi les politiques et qui ont continué à s'investir dans les groupes de travail (15). Cette diversité des acteurs a été un plus pour faire entendre leur voix et intégrer leurs besoins dans le Plan en élaboration.

L'impact de la fragmentation des niveaux de pouvoir

Le découpage institutionnel belge traduit une réalité complexe de répartition des compétences entre les niveaux de pouvoir vs. la nécessité d'actions intersectorielles répondant aux différents déterminants de la santé, la volonté des acteurs de concevoir un plan plus global (16).

La grande difficulté de mettre en œuvre des stratégies intersectorielles provient essentiellement du fait que les acteurs, et mêmes les décideurs parfois, ne savent pas toujours quelles actions relèvent de quelles compétences. Certaines compétences sont d'ailleurs toujours en train d'être transférées du niveau fédéral au niveau régional. Cette répartition des responsabilités santé (et de leur financement) ne favorise non plus pas « La santé dans toutes les politiques » qui reste une vision assez théorique (17) et qui sera peu prise en compte dans les politiques publiques vu l'absence de responsabilisation commune.

Pour que la programmation soit le levier d'une politique solide, il faudrait que les responsables institutionnels aient, comme les acteurs, une connaissance approfondie des problématiques basée sur une approche systémique, qu'ils puissent définir ou informer sur des conditions préalables et des risques liés aux actions proposées et surtout qu'ils se projettent sur les ressources et capacités nécessaires à une bonne mise en œuvre.

Conclusion

Le temps politique n'est pas le même que le temps nécessaire à une planification de qualité. Ce travail de programmation, basé sur des dimensions participatives importantes, a été incomplet de par les limites du processus qui ont influencé sur les contenus.

Face à une certaine lenteur politique au départ, les étapes définissant le dispositif régional pour la promotion de la santé ont été conduites dans une certaine précipitation. Cependant la gestion du temps dans l'élaboration de la proposition a grandement perturbé le travail tant des opérateurs mobilisés que de l'équipe scientifique.

Bien que les propositions soient en majorité issues d'actions existantes, il faut souligner que les participants aux concertations ont vu dans le Plan l'opportunité d'innover, de renforcer et de pallier certains manques ressentis actuellement en Wallonie en termes de prévention et de promotion de la santé. Nous pouvons citer en exemple l'indispensable mise en réseau des acteurs, le renforcement des compétences des professionnels et l'implication des bénéficiaires et de leurs aidants proches dans les actions. Soulignons aussi que les actions reprises se veulent non-exhaustives et seront amenées à évoluer en suivant le caractère dynamique du Plan.

Conflit d'intérêts

Aucun conflit d'intérêt déclaré.

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Développement des Zones de Santé d'Apprentissage et de Recherche en République Démocratique du Congo : enseignements utiles d'une évaluation qualitative des expériences antérieures en Afrique Subsaharienne

Geneviève Michaux[1], Albert Mwembo-Tambwe[2], Zakaria Belrhiti[3], Francis Monet[1] et Bart Criel[4]

Résumé : Trois Zones d'Apprentissage et de Recherche (ZAR) sont développées par le programme RIPSEC en République Démocratique duCongo (RDC). Cette stratégie consiste à utiliser un district sanitaire comme substrat pour former des managers des districts de santé et mener des recherches sur les systèmes de santé. L'objet de cet article est d'explorer les principes, les effets et les conditions de succès de cette stratégie à travers une évaluation qualitative des expériences ZAR antérieures en Afrique Subsaharienne. Elle concerne quatre expériences, deux menées au Niger, une en RDC et une au Congo-Brazzaville. Les données proviennent des témoignages de responsables du développement des expériences, présentés dans un séminaire en 2014 et approfondis par des entretiens en 2015, et des publications traitant des expériences. Les faits communs aux quatre expériences sont la diffusion nationale et souvent internationale des bonnes pratiques et des modèles organisationnels, leur développement inscrit dans le long-terme et l'implication des managers des ZAR dans tous les volets de leur transformation. Le centrage de la recherche sur les problèmes de la ZAR et la promotion de la réflexivité dans les décisions managériales sont importants pour cette transformation. L'utilisation des résultats par le programme RIPSEC, les logiques imbriquées dans le concept ZAR et l'apport potentiel de l'implication d'écoles de santé publiques nationales dans leur développement sont ensuite discutés. La validité de l'étude est limitée mais renforcer le leadership des managers des districts sanitaires est un défi fréquent pour les systèmes de santé aux ressources limitées. Cet article peut aider à développer une stratégie pour le renforcer. (Global Health Promotion, 2020; 27(2): 139–148)

Mots clés : formation dans les services en action, recherche-action, renforcement du système de santé, formation des managers des districts sanitaires, Afrique subsaharienne

Introduction

Ces dernières années, la nécessité de renforcer les systèmes de santé émerge à nouveau. Les besoins en santé sont en constante évolution. Les systèmes de santé sont plus complexes, avec une diversité d'acteurs aux aspirations variées. Dans les pays à faibles revenus, l'insuffisance des ressources, la

1. Instituut voor Tropische Geneeskunde, Public Health, Antwerpen, Belgique.
2. Université de Lubumbashi, Département de Gynécologie et Obstétrique, Lubumbashi, République Démocratique du Congo.
3. École Nationale de Santé Publique, Rabat, Maroc.
4. Institut de Médecine Tropicale Prince Leopold, Santé Publique, Anvers, Flandre, Belgique.

Correspondance à : Geneviève Michaux, Instituut voor Tropische Geneeskunde, Public Health, Antwerpen, 2000, Belgique. Email : gmichaux@itg.be

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fragmentation du système de santé et la faible régulation du secteur sanitaire ont souvent entraîné une baisse de la qualité des soins et l'aggravation des inégalités. La robustesse des systèmes de santé est conditionnée par les capacités de leadership des administrations sanitaires. Mobiliser les ressources, interagir avec la population et les prestataires, organiser une offre de soins de qualité équitable sont des tâches complexes, à adapter en fonction du contexte sanitaire et social lui-même dynamique (1,2).

Une stratégie possible pour combler ce déficit dans la capacité de mise en œuvre locale est le développement de Districts Sanitaires (DS) de démonstration. En République Démocratique du Congo (RDC), la Stratégie de Renforcement du Système de Santé adoptée en 2006 prévoit l'utilisation de Zones de Santé (DS en RDC) de démonstration pour restaurer progressivement le système de santé (3). Mais sa mise en œuvre est lente et partielle. Le programme de Renforcement Institutionnel pour des Politiques de Santé basées sur l'Evidence en RDC (RIPSEC), constitué d'instituts académiques et financé par l'Union européenne[1], a donc intégré le développement de tels sites dans ses objectifs. Chaque école de santé publique congolaise du programme développe, avec le ministère de la santé, une Zone de Santé (ZS) de démonstration, appelée 'Zone d'Apprentissage et de Recherche' (ZAR). Une relation est développée entre un mentor, membre de l'école de santé publique, et l'équipe de management de la ZAR.

Le développement des DS, avec la constitution de réseaux des services de santé et l'affectation d'équipes de management à leur tête, est à l'origine du recours aux ZAR. Les équipes n'étaient pas formées en management. Le recours aux ZAR pour la formation repose sur deux hypothèses. La première est que la capacité de développer un DS s'acquiert à travers l'observation d'un exemple et la pratique du management. Cet ancrage sur la réalité renforce la capacité d'analogie, c'est-à-dire d'adapter le modèle construit sur la base du vécu à d'autres contextes. La deuxième est que le développement d'un DS impose une approche systémique, une approche globale des problèmes, prenant en compte les multiples interactions inhérentes à un système, et donc l'utilisation de l'ensemble du DS pour la formation des managers. Le développement d'une ZAR comprend trois composantes : l'amélioration de la fonctionnalité du DS en termes de qualité des soins et de pilotage du DS, l'utilisation de ce DS pour former des managers d'autres DS et la conduite de recherches pour améliorer le fonctionnement du systèmes de santé. Il est facilité par l'interaction entre les managers du DS et des professionnels expérimentés dans le management des systèmes de santé.

En 2014, l'Institut de Médecine Tropicale (IMT) a organisé un séminaire sur le développement des ZS de démonstration, basée sur des témoignages d'expériences du passé. Une analyse qualitative plus approfondie de ces témoignages et une revue systématique de la littérature étaient planifiées au démarrage du RIPSEC. Une exploration rapide de la littérature n'a pas trouvé d'articles sur les ZAR. Le sujet de la revue systématique a été réorienté sur l'efficacité d'autres stratégies de formation (mentorat, recherche-action et formation sur le lieu de travail) pour renforcer le leadership des managers en santé (4). L'analyse qualitative des expériences ZAR du passé devait contribuer au développement des ZAR du RIPSEC. Mais comme elle concerne un sujet peu documenté, elle peut aussi être pertinente pour des acteurs des systèmes de santé en général et des instituts de santé publique.

L'objectif de cet article est de clarifier le concept de district de santé de démonstration, de définir ses forces, ses limitations, ses conditions de succès et de dégager les critères à prendre en compte pour l'opérationnalisation de son volet formation .

Méthodes

Type d'étude

L'étude est une analyse qualitative des expériences antérieures de ZAR en Afrique subsaharienne.

Sources et collecte des données

Les données, constituées en plusieurs étapes, proviennent de quatre sources : (i) les fichiers électroniques des témoignages présentés au séminaire de 2014, (ii) les résultats des entretiens réalisés en 2015, (iii) les documents issus d'une revue de la littérature grise et scientifique à la recherche des revues systématiques sur les théories du leadership en santé et sur les stratégies pour le développer, et d'expériences additionnelles de sites

Tableau 1. Processus de recueil des données et de sélection des expériences de l'étude.

Collecte et sources des données

Source & données	*Contexte*	*Type de données*
Témoignages présentés au séminaire en 2014	• Organisé pour et avec une ONG belge • Choix de quelques expériences connues de l'IMT	• Sites de démonstration • Kasongo (RDC), Dogondoutchi (Niger), Ouallam (Niger), Ayuttayah (Thaïlande)
Transcription des entretiens réalisés en 2015	• Capitalisation des expériences pour RIPSEC • Toutes les expériences connues de l'IMT	• Sites de démonstration, formation de managers dans des services en action • Kasngo, Dogondoutchi, Dolisie (Congo Brazzaville), Ouallam, Ayuttayah, Thiès (Sénégal)
Documents identifiés par la revue exploratoire littérature grise et scientifique réalisée en 2016	• Recherche exploratoire effectuée pour notre étude : a. Exploration site WEB RESYST b. Revue RESYST utilisée comme base pour recherche expériences additionnelles ZAR c. Références bibliographiques des revues ou connues des auteurs	a. 2 revues systématiques : 1 pour les pays à faibles et moyens revenus et 1 pour les pays à hauts revenus b. 2 expériences d'utilisation de districts sanitaires pour la recherche : consortium RESYST (Kenya, Afrique du Sud) & Rakai (Ouganda)
Thèses & articles par recherche spécifique	• Recherche effectuée pour notre étude • Recherche sur base des références données lors des entretiens de 2015	• Sites de démonstration ou formation de managers dans des services en action • Kasongo, Dolisie, Ouallam, Thiès

Sélection des expériences pour l'évaluation qualitative

Critères d'inclusion :

(i) Présence des trois volets d'activités constitutifs des sites de démonstration (fonctionnalité du DS, formation de cadres venus d'ailleurs et recherche)
(ii) Utilisation de l'ensemble du district comme substrat pour la formation
(iii) Interaction entre les managers du DS et des professionnels expérimentés dans le management des DS
(iv) Localisation en Afrique subsaharienne

Expériences répondant aux critères : Kasongo, Dogondoutchi, Dolisie & Ouallam

Expériences ne répondant pas aux critères :
Ayuttayah : pas de volet de formation, service de première ligne
Thiès : formation dans des services innovants de plusieurs DS, pas de volet de fonctionnalité du DS
Rakai : recherche épidémiologique et opérationnelle sur la lutte contre la maladie, le partenariat avec le DS facilite le suivi de cohortes de population
Consortium RESYST : partenariats avec des DS pour coproduire de la recherche centrée sur les besoins du DS, pas de formation pour d'autres districts, pas d'approche globale d'amélioration de la fonctionnalité

de démonstration, et (iv) les productions sur les expériences identifiées dans les précédentes étapes, non détectées lors de la revue de la littérature (voir Tableau 1 pour plus de détails sur les sources et la collecte des données).

Pour le séminaire, les témoignages, un par expérience, ont été présentés selon un canevas standardisé avec des données factuelles : le contexte de l'intervention; sa genèse, son rationnel et ses objectifs; son contenu et son organisation pratique; ses résultats; et des données d'opinion : les leçons apprises, les conditions de succès, les pièges à éviter; les questions qui demeurent. Certains participants du séminaire ont par la suite été interviewés.

Pour les entretiens, un questionnaire (annexe 1) a été conçu et administré par un collaborateur de l'IMT en 2015. Il approfondissait les thèmes explorés à la conférence. Les entretiens ont été transcrits en Word. Les interviewés, un par expérience, étaient des assistants techniques pour la mise œuvre et souvent aussi les concepteurs de l'expérience.

Pour la revue exploratoire, le site WEB RESYST a d'abord été consulté. Deux revues systématiques sur le développement du leadership en santé ont été identifiées (5,6). La revue pour les pays à faibles et moyens revenus concernait la période de 1990 à 2012 (5). Ces résultats ont été utilisés et complétés jusqu'en fin avril 2016. Les sources explorées étaient Medline, Google, Google Scholar, les mots – clés 'health leadership development', 'health management development/ capacity strengthening', 'on the job training/leadership', 'action learning/ leadership', 'learning site/ leadership', combinés avec 'Africa'.

Les expériences d'utilisation de DS pour la recherche (7–9) étaient connues des auteurs du présent article. Les articles scientifiques, les thèses doctorales et autres documents relatifs aux expériences ont été recherchés spécifiquement sur internet ou auprès de leurs auteurs (10–15).

Sélection des expériences

Les critères d'inclusion des expériences, basés sur la définition de la ZAR, ont été appliqués aux expériences identifiées dans les quatre sources. Les critères de sélection et les résultats de leur application sont présentés dans le Tableau 1. Aucune expérience provenant de la revue exploratoire n'a été retenue.

Analyse qualitative des expériences

Les données factuelles des trois sources restantes ont été triangulées (16,17) et classées en quatre catégories : l'organisation générale du programme, la formation, la recherche et les résultats du programme. Les quatre expériences sont décrites brièvement et synthétisées selon cette structure. Pour les opinions, les sources sont le séminaire et les entretiens. Les données sont classées en six catégories : les messages importants, les conditions de succès, les pièges à éviter, les suggestions pour le RIPSEC, l'adéquation du terme de 'DS de démonstration' et autres. Les résultats ont été validés par les interviewés.

Les différents scénarios de formation des expériences retenues sont à l'origine d'une proposition de critères pour guider le choix du design des formations en management utilisant des services de santé en action. Les sources utilisées sont les expériences sélectionnées de notre étude, une autre initiative de renforcement des capacités de leadership appuyée par l'IMT (18) et trois sources théoriques (5,6,19).

Résultats

Description des expériences

- Zone de Santé de Kasongo en RDC

Le projet Kasongo a été appuyé par la coopération belgo-congolaise de 1971 à 1990. Son but était de développer un DS modèle et de dégager les principes généralisables à d'autres contextes à travers la recherche. Le dialogue avec les autorités sanitaires nationales était positif. Des stages en santé publique étaient organisés dès 1974. L'apprenant, immergé dans les services, observait puis réalisait les activités. En fin du stage, il endossait les responsabilités d'un manager de la ZS. La théorie qui partait du vécu du stagiaire dans la pratique consistait en lectures orientées et échanges avec un tuteur. Cinq médecins géraient localement le DS, encadraient les apprenants et opérationnalisaient la recherche. Ils étaient appuyés par deux chercheurs externes de l'IMT. Les résultats sanitaires et le coût adapté aux ressources mobilisables par le pays ont favorisé la généralisation du modèle développé au niveau national. L'utilisation de l'expérience dans l'enseignement à l'IMT et les formations organisées à Kasongo ont favorisé sa diffusion internationale. Des articles ont été publiés et une thèse doctorale a été consacrée au projet Kasongo.

- District sanitaire de Dolisie au Congo Brazzaville

La coopération allemande a appuyé le secteur santé à Dolisie de 1983 à 1998. Cet appui, qui concernait initialement les agents communautaires, est réorienté sur le développement du DS en 1986. Le modèle du DS fondé sur les soins de santé primaires guidait les décisions. Les premiers résultats ont engendré le soutien des autorités sanitaires nationales. Un volet de formation était organisé pour des managers et des prestataires des DS avec une approche pédagogique identique à celle de Kasongo. Cinq médecins géraient le DS et encadraient la formation. Il n'y avait pas de protocoles de recherche pour garder une approche globale du DS. Mais les décisions complexes, considérées comme des hypothèses à tester par l'action, étaient gérées avec une rigueur permettant leur évaluation (gestion scientifique dans le Tableau 2). Un plan de couverture

Tableau 2. Synthèse comparative des caractéristiques des expériences étudiées.

	Kasongo	*Dolisie*	*Dogondoutchi*	*Ouallam*
Inscription des initiatives dans le temps				
Appui externe au secteur santé	20 ans	15 ans	26 ans	8 ans
Appui au développement du DS*	20 ans	12 ans	12 ans	8 ans
Délai de démarrage de la formation	3 ans	4 ans	3 ans	5 ans
Domaines plus spécifiquement visés par l'intervention				
Créer un modèle fonctionnel	+++	+++	+	+++
Répondre aux besoins de formation	++	+	+++	+++
Adopter une approche de recherche	+++	-	-	++
Ancrage du programme				
Acteurs clés au niveau local	ECD*	ECD	Responsable ECD	ECD
Dialogue avec le niveau national	Structuré & positif	Positif mais après un délai	Structuré, ensuite échec	Dialogue Informel
Volet formation				
Cible	Un individu	Un individu	Des individus	Des ECD
Méthodes pédagogiques	Stage*	Stage	Théorie*/pratique	Théorie/pratique
Volet recherche				
Méthode	Recherche - action	Gestion scientifique	Gestion scientifique	Recherche – action
Acteurs externes	Chercheurs externes	Non applicable	Non applicable	Etudiants en appui

*DS : district de santé ; ECD : équipe cadre de district ; Stage : immersion dans un service ; Théorie : cours théoriques.

sanitaire incluant le privé, la rationalisation de l'hôpital, la participation de la population dans la gestion des services sont des exemples de résultats. Dolisie a contribué au développement du premier DS urbain à Brazzaville et a influencé, avec Kasongo, la politique sanitaire camerounaise.

- Circonscription Médicale de Formation et de Recherche de Dogondoutchi au Niger

Le secteur santé à Dogondoutchi a bénéficié de divers appuis de 1974 à 2000. En 1991, la circonscription médicale de Dogondoutchi devient un centre de formation et de recherche. Le développement des circonscriptions médicales, nom des DS au Niger à l'époque, justifiait cette initiative. La formation, constituée de cours théoriques et de pratiques dirigées, préparait les médecins à leur rôle de responsables de DS. Organisée pour des cohortes de neuf participants, elle ciblait les responsables des équipes de DS. Quatre médecins encadraient la formation, dont un seul de la circonscription de Dogondoutchi. Un comité de suivi, comprenant les autorités sanitaires, le monde académique et les bailleurs a été créé, mais il n'a pas fonctionné car la charge de travail était lourde et l'implication du niveau intermédiaire difficile à coordonner. L'encadrement de la recherche opérationnelle faisait partie de ce suivi. La circonscription médicale a influencé la politique sanitaire nationale. La qualité de la supervision et la gestion des ressources ont été améliorées sur le lieu de travail des apprenants. Certains outils pédagogiques ont été utilisés à Ouallam au Niger et au Burkina Faso pour la formation continue des responsables des DS.

- District de formation de Ouallam au Niger

La coopération allemande a appuyé ce DS de 1995 à 2003. L'idée de l' utiliser pour former des managers d'autres DS n'est venue qu'après. Au départ, les autorités sanitaires ne soutenaient pas le centre, le dialogue est devenu positif suite à l'intégration de cadres familiarisés avec l'approche systémique. L'approche pédagogique était similaire à celle de Dogondoutchi sauf qu'elle ciblait tous les membres de l'équipe de management des DS. Il y avait quatre formateurs mais des coachs supplémentaires étaient mobilisés pour la pratique. La recherche–action (RA) a été développée dès le démarrage de l'appui au DS avec les responsables du DS. Les sujets de RA étaient choisis au cours des réunions ordinaires de l'équipe. La performance du DS était bonne. L'équipe cadre discutait de ses problèmes avec sa hiérarchie et dialoguait avec la population, et le personnel du DS voyait l'utilité de son travail. Les pratiques de Ouallam ont été adoptées par d'autres DS et par le Ministère de la santé. Une thèse doctorale a été produite sur le système de référence et contre–référence comme élément intégrateur du district sanitaire.

Le Tableau 2 ci-dessus résume les caractéristiques des quatre expériences. Elles ont toutes bénéficié d'un appui de longue durée, avec quelques années de développement du DS avant le démarrage de la formation. Leur ancrage était l'équipe de management du DS et le dialogue avec le niveau national était systématiquement recherché. Partout les autorités ont diffusé les pratiques innovantes, alors que l'approche de formation dans un DS en action a été peu pérennisée. Des variations existent dans les méthodes d'apprentissage (en groupe ou individuelle, stages ou pratiques dirigées) et le profil des participants. Les activités de recherche ont été développées avec des intensités différentes. La RA était la principale méthode de recherche (8,9,20–22).

Données d'opinions

Les données d'opinion sont synthétisées dans l'annexe 2. Des extraits des témoignages des informateurs sont insérés dans le texte. Certaines opinions évoquent le contexte des expériences (bb)[2]. Les politiques de DS étaient nouvelles et l'aide internationale était disposée à les appuyer sur le long terme et avec flexibilité (b,e,f). « Créer une zone de santé fonctionnelle prend du temps. C'est un processus complexe, imprévisible ». « La GTZ [la coopération allemande] laissait beaucoup d'initiatives aux gens du terrain; elle était conçue pour appuyer les experts sur le terrain. ». D'autres opinions concernent les modalités opérationnelles. Les encadreurs de l'équipe de management avaient une vision claire des systèmes de santé, renforcée par la collaboration avec l'IMT (d,h). Le leadership des managers était préservé et encouragé. (k,l,v). « Il faut une émancipation des districts, une vraie délégation du pouvoir, du droit à la décision. Ce n'est politiquement pas neutre, il faut donner la voix aux exécuteurs ». L'équipe cadre participait aux activités de formation et de recherche, centrées sur les problèmes du DS (j,x,z,aa). Un bon fonctionnement de cette équipe était une condition préalable à l'accueil des apprenants (k). Une démarche de rigueur intellectuelle était adoptée, avec une analyse en équipe des solutions aux problèmes et des pratiques professionnelles (x,z). « Un district de démonstration n'est pas un district sans problèmes mais un district qui essaie de solutionner les problèmes en organisant la prise de décision, le suivi des décisions, l'action réflective ». La formation, ancrée dans la pratique, visait l'acquisition d'une façon de travailler et d'aborder les problèmes (g,j,x). Le nombre de stagiaires doit être adapté au nombre de formateurs et de services d'accueil (m,r). Enfin, d'autres données clarifient le concept de site de démonstration et les perceptions liées à leur désignation. Le terme 'de démonstration' fait craindre un investissement disproportionné et des résultats à long terme. Il est mal accepté car associé à l'idée de 'DS sans problèmes' (x, y,z). En fait, le niveau de financement d'un site de démonstration doit être similaire à celui des autres DS (n). Le but de la formation étant d'apprendre comment gérer le DS (aa), le contexte doit être similaire à celui des autres DS. Par contre le centre d'excellence, qui enseigne des techniques pointues, peut justifier un niveau inhabituel de ressources. Il n'a pas vocation à être reproduit. Les deux stratégies sont complémentaires (23). Le terme centre de formation prête aussi à confusion. La formation a une importance symbolique et politique et le risque de retomber dans une approche de formations théoriques délivrées par des formateurs externes est élevé (q,s,cc). « Les organismes internationaux et les

- Lieu de pratique : lieu de travail de l'apprenant, services avec des pratiques intéressantes ou innovantes, services préparés pour former les apprenants (stages), services isolés ou organisés en réseau.
- Posture de l'apprenant : contrôle total, partiel ou nul de l'apprenant sur les objectifs d'apprentissage.
- Statut du formateur : avec un lien hiérarchique avec les apprenants, en lien avec la hiérarchie des apprenants (mandat envers la hiérarchie) ou sans lien de pouvoir ou d'influence sur les apprenants.
- Cible de la formation : individu, équipe de travail sur leur lieu de travail, groupe d'individus de milieu professionnel différent, groupe d'individus et leur hiérarchie.
- Méthodes pédagogiques : mix plus ou moins important des composantes pratiques et théoriques, stages, actions ou mentoring sur le lieu de travail, observations ou pratiques dirigées, cours théoriques.
- Rôle des formateurs : formateur, superviseur, médiateur, collaborateur, inducteur d'initiatives et d'innovations, mentorat ou compagnonnage réflexif.
- Projet d'apprentissage : développement personnel des attitudes/ des compétences, développement de l'équipe, développement organisationnel du processus gestionnaire/ dans une approche systémique.

Encadré 1. Critères pour le design des formations ancrées sur la pratique des managers des districts de santé. Basés sur les réflexions théoriques sur l'accompagnement de la pratique réflexive de Donnay J & Charlier E (17).

programmes verticaux voulaient une main mise sur la formation, cela risquait de devenir une chaîne de petits séminaires ». La recherche a aussi du prestige et peut détourner l'équipe cadre de ses responsabilités de développement du DS (ff). Elle fait craindre aux autorités sanitaires une baisse de leur pouvoir sur le DS (gg). Comprendre les perceptions des acteurs, les enjeux d'influence et associer les autorités sanitaires nationales est important (dd,ee). L'accueil des apprenants est aussi bénéfique pour les formateurs (a). « Malgré la charge de travail, les questions des stagiaires nous obligeaient à réfléchir, à construire notre compréhension du système de santé. C'était gagnant-gagnant »

Critères pour le choix de scénario de la formation

Le leadership recourt à plusieurs processus mentaux pour répondre aux problèmes émergeant dans la réalité. L'utilisation de services en action semble une approche adaptée au développement du leadership (24). Les méthodes pédagogiques dans les services en action sont nombreuses (Encadré 1). Le modèle pédagogique 4C-ID ('four-components instructional design') propose quatre composantes pour les apprentissages complexes : tâches de difficulté croissante, apport théorique pertinent, information additionnelle au bon moment et exercices pour maitriser le savoir-faire (25). Les combinaisons possibles de ces éléments augmentent encore les scénarios de formation. Des critères sont proposés pour guider ce choix pour les formations en management dans des services sanitaires en action (Encadré 1). Quelques exemples illustrent l'influence des critères. A Kasongo, le stage favorisait la socialisation professionnelle. Individuel, il permettait d'adapter la formation aux besoins des apprenants mais limitait la capacité d'accueil des stagiaires. Les apports conceptuels en santé publique étaient réduits. A Ouallam, la théorie, aussi importante que la pratique, aidait à raisonner sur les pratiques et à appliquer cette compétence à d'autres contextes. L'accueil de cohortes permettait de répondre à une demande élevée, mais avec un poids important sur les services. En ciblant l'équipe de management, la capacité de travailler en équipe était renforcée. Une autre expérience montre que le contrôle total de l'apprenant sur les objectifs d'apprentissage favorise la créativité mais entraîne aussi une focalisation sur les besoins du personnel au détriment de ceux de la population (18). Les critères proposés guident le choix du scénario de formation, en structurant l'analyse des avantages et désavantages de chaque alternative.

Discussion

Le débat sur les sites de démonstration de 2014 a dégagé des principes qui ont été intégrés dans la conception des ZAR RIPSEC : la préservation et le renforcement du leadership des équipes cadre des ZAR, l'encadrement rapproché et la présence suffisante du mentor sur le terrain, l'adhésion des autorités sanitaires et l'intérêt de l'équipe cadre de la ZS comme critères essentiels pour choisir des ZAR, et la recherche de synergies avec d'autres services innovants.

Les leçons tirées de l'étude ont été utilisées dans la mise en place des ZAR. Le terme ZAR a été retenu pour mettre l'accent sur l'apprenant plutôt que sur le formateur. Un mémorandum d'entente a été signé avec la hiérarchie des équipes cadre des ZAR. Plusieurs activités ont été menées pour asseoir une stratégie commune pour l'amélioration de la fonctionnalité des ZAR. Le fondement de la stratégie est l'amélioration du leadership de l'équipe cadre de la ZAR, de sa capacité de prise de décision pour transformer la ZAR, renforcée par le mentorat et la documentation systématique des décisions complexes dans une démarche similaire à celle de la RA.

Plusieurs logiques d'action sont imbriquées dans le développement des ZAR : le mentorat, la RA, l'apprentissage par l'exemple et l'utilisation de l'ensemble du DS pour former des managers des DS. Le mentor encourage la réflexivité des managers de la ZAR, le questionnement des pratiques et de leurs contextes, l'ouverture à la critique et au changement, permettant des actions d'amélioration. La RA transforme la gestion des décisions par l'équipe, à travers des cycles itératifs de planification et d'exécution d'actions, d'évaluation et de réflexions sur leurs effets, dans une approche participative et de résolution des problèmes (8,9). Aujourd'hui les managers des DS sont souvent affectés dans des systèmes de santé fragilisés, sans avoir été en contact avec des DS fonctionnels. L'utilisation d'une ZAR pour la formation permet d'observer et d'exercer différentes tâches complexes du leadership : la supervision formative, la coordination des partenaires, l'interaction avec la communauté; etc. Mais c'est aussi le mode de fonctionnement de l'équipe cadre de la ZAR qui est source d'apprentissage et d'acquisition de compétences plus dynamiques (26) comme la flexibilité dans la planification, les capacités de s'adapter au changement, de développer des pratiques innovantes ou de résoudre des problèmes dans une perspective systémique (2).

L'implication des écoles de santé publique dans le développement de ZAR introduit une logique d'action nouvelle : leur engagement dans un ou plusieurs sites leur permet de rester ancrées dans les dynamiques de terrain du système de santé, ce qui peut contribuer à améliorer l'adéquation de leur formations diplômantes en santé publique et la pertinence de leur recherche pour les systèmes de santé. Elle crée ainsi un type de partenariat basé sur la confiance et un bénéfice mutuel, sans lien hiérarchique, qui pourrait favoriser la créativité et la durabilité de l'approche.

Les expériences analysées dans notre étude ne sont pas récentes. Un seul type d'informateurs a été interrogé et en nombre limité. Le biais de mémorisation a cependant été minimisé par la triangulation des données récentes avec celles produites pendant ou en post-intervention immédiate.

Conclusion

L'étude a été utile pour la conception et le début du développement des ZAR RIPSEC. Des principes et des modalités opérationnelles communes aux expériences passées de ZAR ont pu être dégagées. Le concept de ZAR et les logiques d'action qui le constituent ont été discutés. L'efficacité, les facteurs de succès et d'échec de la stratégie ZAR sont trop peu documentés Le développement de ZAR pourrait cependant servir à combler le déficit de mise en œuvre du renforcement des systèmes de santé. L'implication d'instituts académiques nationaux dans le développement de ZAR devrait favoriser l'appropriation de cette stratégie par les autorités sanitaires et la production de connaissances généralisables à d'autres contextes.

La réforme du niveau intermédiaire du système de santé en RDC a recentré ses missions sur l'appui technique aux ZS, conçu comme un coaching réalisé par des encadreurs polyvalents provinciaux. Il s'agit de transformer cette structure bureaucratique en organisation apprenante. Le nombre d'encadreurs fonctionnels reste limité et les modalités de l'encadrement sont encore à explorer. L'expérience de mentorat des ZAR peut enrichir les réflexions en cours en RDC, mais peut aussi être utile ailleurs, les réformes de décentralisation étant répandues dans plusieurs pays d'Afrique.

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Notes

1. Cette étude sera utilisée comme livrable du programme RIPSEC. Plus de détails sur ce programme sont disponibles sur le site suivant : http://www.ripsec.org
2. Les lettres entre parenthèses font référence à l'indexation dans le tableau de l'annexe 2.

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Mieux comprendre les défis de la médicalisation de la prévention du VIH en France : la prophylaxie préexposition au prisme des sciences sociales

Séverine Carillon[1] **et Gabriel Girard**[2]

Résumé : Le recours aux traitements antirétroviraux pour la prévention du VIH transforme en profondeur le contexte des interventions dans ce domaine. La prophylaxie pré-exposition (Prep) en constitue l'une des facettes les plus visibles. Pour autant, l'utilisation de la Prep en France s'avère limitée. L'outil peine à trouver son public parmi les populations ciblées. Comment expliquer la sous-utilisation d'une approche de prévention dont la haute efficacité est pourtant démontrée ? Les réponses à cette question gagneraient à s'enrichir des sciences humaines et sociales tant pour penser les conditions de l'appropriation de l'outil par les publics ciblés que pour identifier les impensés et les logiques qui sous-tendent son déploiement. Loin de se limiter au VIH, la réflexion critique sur le recours aux médicaments comme outils de prévention ouvre des questions pertinentes pour le champ de la promotion de la santé. (Global Health Promotion, 2020; 27(2): 149–153)

Mots clés : promotion de la santé, santé publique, VIH/SIDA, prévention , sciences sociales, Prophylaxie Pré-exposition

Introduction

Les avancées scientifiques et médicales récentes permettent d'esquisser l'horizon de la fin de l'épidémie de VIH/sida à quelques décennies. L'efficacité préventive des traitements antirétroviraux (ARV) est au cœur de ces projections optimistes : pour les personnes traitées et leurs partenaires, les risques de transmission ou d'acquisition du VIH sont négligeables. Cette approche biomédicale de la prévention fait aujourd'hui l'objet d'un large consensus. L'engouement mondial pour la prophylaxie pré-exposition (Prep) depuis 2010 en est l'illustration la plus remarquable. L'omniprésence des discussions autour de cette approche médicamenteuse dans les conférences internationales, les publications scientifiques et la presse généraliste en témoigne.

La Prep consiste en la prise d'un traitement antirétroviral pour prévenir la survenue de l'infection par le VIH chez une personne séronégative exposée au risque (1). Utilisée adéquatement, elle rend le risque d'infection pratiquement nul (2–4). En France, depuis janvier 2016, l'utilisation préventive du médicament est autorisée et gratuite (prise en charge à 100% par l'assurance maladie), pour tous (y compris pour les migrants en situation irrégulière résidant en France depuis plus de trois mois). Cet outil s'adresse spécifiquement aux communautés où l'incidence du VIH est élevée, en particulier les hommes ayant des relations sexuelles avec d'autres hommes (HSH) et les migrants d'Afrique subsaharienne (4). Dans un contexte où, en France, la transmission du VIH se maintient à un niveau élevé (près de 6000 diagnostics annuels), la Prep est

1. Centre Population et Développement (CEPED), Institut de Recherche pour le Développement (IRD), Université Paris Descartes, Paris, France.
2. École de santé publique de l'Université de Montréal, Montréal, QC, Canada.

Correspondance à : Séverine Carillon. Centre Population et Développement, (CEPED), Institut de Recherche pour le Développement (IRD), Université Paris Descartes, 45 rue des saints pères, Paris 75006, France. Tel : +33 661 84 34 11. Email : severine.carillon@ceped.org

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une option prometteuse pour la promotion de la santé. Outre son efficacité préventive, elle s'ajoute à une palette d'outils de prévention contre le VIH et s'inscrit dans une stratégie de santé sexuelle globale, qui s'appuie sur le dépistage régulier des Infections Sexuellement Transmissibles (IST), un accompagnement psychosocial communautaire et la mise à disposition de préservatifs. Cependant, plus de deux ans après l'homologation du traitement préventif, l'enthousiasme des débuts fait place à des interrogations nombreuses parmi les acteurs et les experts de la prévention du VIH.

Les prises de position lors des dernières Conférences internationales francophones sur le VIH (AFRAVIH) l'illustrent. Si en 2016, un appel pour « la PrEP pour tou.te.s et partout » était lancé par la communauté francophone scientifique, médicale et associative, deux ans plus tard, l'enthousiasme est plus modéré. Hors des essais randomisés, les défis du déploiement de la Prep dans la « vraie vie » sont au cœur des préoccupations en France mais aussi à l'international. La mesure de l'efficacité d'une telle intervention est délicate, à l'image des questionnements qui traversent le champ de la promotion de la santé (5).

En France, l'utilisation de la Prep s'avère limitée : près de 10 000 personnes ont initié une PrEP en France entre janvier 2016 et juin 2018, parmi lesquels 98% d'hommes, essentiellement des HSH, d'une moyenne d'âge de 38 ans, avec un niveau socio-économique élevé. Or le nombre de HSH à haut risque en France est estimé à 32 000. Seule 241 femmes avaient initié un traitement à cette date (6). Le recours à la Prep reste marginal parmi les jeunes HSH par exemple ou encore au sein des communautés migrantes. Et ce alors même qu'à la différence d'autres pays (États-Unis, Canada), le traitement est gratuit. L'outil peine donc à trouver son public parmi les populations ciblées, révélant notamment des inégalités d'accès à la Prep, conséquences d'inégalités sociales rarement prises en compte dans les essais cliniques.

En découle une interrogation partagée dans le milieu de la lutte contre le sida : comment expliquer la sous-utilisation d'une approche de prévention dont l'efficacité est pourtant démontrée ? Quels sont les obstacles à l'utilisation de la Prep ? Comme face à d'autres épidémies (7), nous avons la certitude que les réponses à ces questions s'enrichiraient du regard des sciences humaines et sociales (SHS).

Au-delà de l'efficacité de la Prep : penser les conditions sociales de son appropriation

Les SHS ont historiquement mis en lumière l'écueil d'approches focalisées sur l'efficacité mécanique des outils de prévention (préservatif ou médicament) qui feraient l'économie d'une réflexion sur les enjeux de leur inscription dans la vie sociale des individus et des communautés (8). Cette leçon épistémologique nous apparait toujours utile pour guider les réflexions contemporaines autour des défis soulevés par la Prep, son déploiement, son appropriation et les résistances qu'elle peut susciter.

La question des barrières d'accès au traitement réactive la nécessité de comprendre les mécanismes psychosociaux qui façonnent les comportements de prévention. À l'échelle individuelle, le recours au traitement préventif engage un processus complexe, qui met en jeu à la fois les pratiques sexuelles, la perception du risque, le rapport des individus à la prévention, aux soins et à l'institution hospitalière, au médicament ainsi que les représentations qui y sont associées, mais aussi évidemment la connaissance de l'outil, le fait de se sentir concerné par la Prep. Comme toute autre stratégie de prévention, la Prep mobilise la réflexivité des individus sur leurs propres pratiques et leur confiance dans la fiabilité de l'outil. Au niveau relationnel, le réseau social, le jugement moral des pairs, la qualité de la relation de soin, jouent également un rôle déterminant. Enfin, au niveau structurel, tant l'offre de soin, que les programmes et les interventions de promotion de la santé, influent sur les comportements individuels de prévention. Autrement dit, comprendre les obstacles au déploiement de la Prep nécessite de resituer cette approche à l'échelle des trajectoires individuelles et de les réinscrire dans les contextes politiques, sociaux, économiques, culturels et médicaux dans lesquels elle est proposée.

La promotion de la santé sexuelle est par ailleurs indissociable d'une analyse fine des inégalités sociales de santé auxquelles font face les populations ciblées. La diffusion de la Prep ne fait évidemment pas exception. La connaissance même de la Prep comme une option de prévention est influencée par des barrières sociales. Conçues initialement par et pour des hommes gais, blancs, de classes moyennes éduquées et urbaines, tant les campagnes de promotion de cet outil que l'offre d'accompagnement et de soins continuent de porter la marque de cet ancrage sociologique, propices à l'accroissement des inégalités sociales de santé (9,10). Il y a là un chantier de réflexion et de débat à ouvrir pour élargir l'information à des publics diversifiés, et rendre la Prep accessible aux personnes qui en ont besoin.

De plus, l'efficacité spectaculaire de la Prep découle directement de l'adhérence au traitement. Or, on sait que la prise régulière d'un médicament est fortement influencée par les conditions – psychosociales, économiques ou légales – d'existence des personnes. Cet état de fait explique sans doute les barrières d'accès à la Prep dans les populations les plus précaires, en particulier parmi les migrants originaires d'Afrique subsaharienne, les usagers de drogues injectables mais aussi certains gays.

Enfin, le traitement comme prévention renouvelle le débat autour de la « médicalisation » et de la « pharmaceuticalisation » des problèmes sociaux et de la prévention (11,12). La Prep apparait *a priori* comme une réponse pragmatique, mais parfois trop mécaniste, à un enjeu de santé publique : l'augmentation des pratiques sexuelles sans préservatif, et le maintien d'une forte incidence du VIH dans des populations spécifiques. Cependant, cet outil traduit aussi, indissociablement, un nouveau rôle des soignants dans le domaine de la prévention. Elle ne saurait bien entendu se réduire à l'imposition mécanique et unilatérale du pouvoir médical sur la sexualité. Pour autant, elle induit indéniablement une nouvelle régulation médicale et pharmaceutique de la prévention et des relations sexuelles. Saisir finement ce nouvel ordre préventif nécessite des travaux approfondis, autant sur la relation de soin, sur le rôle, les représentations et l'expérience des soignants, que sur la transformation des normes du *safer sex*, ou encore sur les nouvelles formes de négociation entre partenaires sexuels. Enfin, cette médicalisation de la prévention et les politiques d'élargissement dont la Prep fait l'objet intervient, pour les populations migrantes, dans un contexte marqué par le durcissement des politiques migratoires (13). Dès lors, si d'un côté, on propose d'inclure des migrants dans des files actives et de leur prescrire des médicaments préventifs de l'autre on les précarise en fragilisant leur accès aux droits fondamentaux (14).

A l'échelle de la société, la promotion de stratégies médicamenteuses se heurte par ailleurs régulièrement à la défiance spontanée que suscite l'industrie pharmaceutique, qui plus est dans le contexte actuel de mise en garde contre la surconsommation de médicaments et de scandales sanitaires. Comprendre ces réactions, sans les réduire au domaine de l'irrationnel, c'est aussi ce que permettent les travaux de SHS. Autant de pistes de réflexion et de recherche empirique à explorer pour les différentes disciplines des sciences sociales.

La Prep comme révélateur de nouveaux enjeux de promotion de la santé

Si la Prep actualise des questions anciennes, elle met aussi en lumière de nouvelles problématiques pour la santé publique et la promotion de la santé.

La Prep transforme en profondeur le paradigme de la prévention du VIH. Elle fait émerger de nouvelles normes : l'adhérence devient un enjeu d'auto-surveillance pour des individus séronégatifs, qui souligne l'enjeu d'efficacité, et celui d'anticipation du risque. Cette normativité thérapeutique, singulière pour des individus séronégatifs, a son corollaire de responsabilisation et donc de blâme possible pour les « échecs » éventuels. Elle incite à ré-interroger le vécu de la contamination par le VIH dans ce nouveau contexte.

Par ailleurs, dans le cadre des essais sur la Prep, se sont développées de nouvelles alliances entre scientifiques, soignants et associations. A l'activisme thérapeutique, qui a défini les relations souvent conflictuelles entre militants, chercheurs et laboratoires pharmaceutiques au cours des années 1990 et 2000, succède une intégration revendiquée des associations dans la recherche. Dans la communauté gaie, les essais de Prep sont ainsi devenus le creuset d'une convergence d'intérêts, qui a contribué à la configuration de l'outil lui-même et à son homologation ultérieure. De façon similaire bien qu'à une moindre échelle, la question de l'accès des migrants à la Prep a donné lieu à des partenariats entre associations communautaires et services hospitaliers. La reconfiguration de ces réseaux d'acteurs et les mobilisations autour de la Prep - des acteurs associatifs et médicaux se saisissent de l'outil pour développer des projets, innover et capter des financements - contribuent à une nouvelle dynamique de la lutte contre le sida qui reste à explorer.

Enfin, l'une des dimensions clés du déploiement de la Prep concerne son ciblage populationnel. Les essais les plus concluants ont été menés auprès de populations homosexuelles à risque pour le VIH (2–4). De ce fait, les HSH ont été identifiés d'emblée comme une population prioritaire, en terme d'incidence du VIH – et donc d'efficacité mesurable de la stratégie – mais aussi en terme d'homogénéité culturelle et sociale. Si la priorisation d'un groupe définit par ses comportements sexuels spécifiques apparait logique, elle comporte un certain nombre d'impensés. D'une part, les gais – comme les migrants – ne constituent pas un groupe homogène d'un point de vue social, géographique, identitaire, ou de rapport au risque VIH. Le fait d'être concerné objectivement par la Prep n'entraine pas mécaniquement une conscience subjective de l'intérêt de l'outil. D'autre part, la focalisation initiale sur les HSH a laissé durablement dans l'ombre les besoins de santé d'autres populations : les migrants d'Afrique subsaharienne ou les usagers de drogues injectables, rendant ainsi l'offre de soin et d'accompagnement à la Prep peu adaptée à ces populations (9). La très faible proportion d'utilisateurs de la Prep dans ce groupe l'illustre. Ainsi, s'interroger sur la diffusion inégale de la Prep parmi les populations les plus exposées implique une évaluation critique de sa construction sociale et culturelle.

Conclusion : la Prep, miroir et/ou prétexte ?

Alors que les obstacles à la diffusion de la Prep font l'objet d'intenses discussions parmi les acteurs de la lutte contre le sida, notre réflexion s'est attachée à faire le point sur plusieurs des enjeux sociaux et culturels qui y sont associées. Au cœur de nos préoccupations, se situe la tentation courante en santé publique de se centrer sur l'outil et d'en résumer les défis et les limites à l'incompréhension ou l'ignorance des populations cibles, quand une approche conséquente de promotion de la santé impliquerait à l'inverse d'envisager les conditions sociales, économiques, structurelles de son utilisation (15). Cela est d'autant plus vrai que le médicament jouit dans nos sociétés d'un statut symbolique fort et très particulier. Or, une compréhension de la diffusion et de l'appropriation de la Prep et des difficultés associées ne peut faire l'économie d'une analyse au prisme des sciences sociales. Non par fétichisme disciplinaire, mais parce que les sciences humaines et sociales offrent des clés de lecture éprouvées de la complexité du réel. Et parce que la Prep, comme d'autres approches de prévention, est enchâssée dans des contextes et des relations sociales qu'il est incontournable d'envisager.

Conflit d'intérêts

Aucun conflit d'intérêt déclaré.

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Aucun financement déclaré.

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Résumés

Difficultés posées par le développement d’un plan de protection de l’enfance à l’échelle d’un district en Afrique du Sud : les enseignements tirés d’un projet de recherche d’engagement communautaire autour du VIH/SIDA

J. Beard, A. Skalicky, B. Nkosi, T. Zhuwau, M. Cakwe, J. Simon et M. Bachman DeSilva

Le projet de recherche pour la santé et le bien-être des enfants du district Amajuba a mesuré l’impact de la perte d’un parent due au VIH/SIDA sur les foyers sud-africains entre 2004 et 2007. L’engagement communautaire était un élément essentiel de ce projet et s’est prolongé jusqu’en 2010. Nous décrivons l’engagement des chercheurs auprès de la communauté pour recruter des participants, développer l’adhésion locale, stimuler l’intérêt par rapport aux résultats de l’étude, et promouvoir l’intégration de services sociaux gouvernementaux au bénéfice des familles et des enfants affectés par le VIH/SIDA. Cette description documente l’expérience des chercheurs, en s’appuyant aussi sur les rapports du projet, les documents publics et les articles publiés, avec l’objectif de documenter les enseignements tirés de cette collaboration entre les chercheurs de deux universités et une communauté sud-africaine pendant une période qui s’est étalée sur sept ans. Cette expérience est ensuite analysée dans le contexte d’un cadre de référence de recherche appliquée pour l’engagement communautaire qui a commencé à émerger dans la littérature mondiale sur la santé. (Global Health Promotion, 2020; 27(2): 6–16)

Développement d’un cadre de référence conceptuel national et d’un outil de mesure pour la responsabilité sociale et la transparence des organisations en matière de santé (OSRAH)

N. Keshavarz Mohammadi, F. Taheri, M. Motallebi, A. Yazdanpanah, Y. Khosravi, M. Borhani Jebeli, H.J. Corbin et A.A. Farshad

Les organisations peuvent avoir un impact significatif (positif ou négatif) sur la société au travers de leurs actions et de leurs décisions. Du fait de cette réalité, il est important qu’elles soient tenues pour responsables des conséquences de leurs actions et qu’elles aient à en rendre compte. Ce concept est souvent désigné sous le terme de « responsabilité sociale ». Cependant, la « responsabilité sociale », telle qu’elle est conçue actuellement dans la littérature, néglige de mettre un accent spécifique sur la santé en tant qu’objectif social. En outre, il n’existe aucun outil pratique pour appréhender ce concept de manière holistique, et faciliter la mise en œuvre et la surveillance des améliorations organisationnelles. Cet article rapporte le processus de développement d’un cadre de référence conceptuel plus holistique et d’un outil destiné à évaluer la responsabilité sociale et la transparence des organisations en matière de santé (OSRAH, organisational social responsibility and accountability for health). Nous avons mené un examen de la littérature publiée et de la littérature grise, et avons entrepris une consultation d’experts et des discussions thématiques en groupes. Le cadre de référence OSRAH initial et l’outil d’auto-évaluation ont été finalisés pour être mis en œuvre et utilisés par 95 organisations lors d’un événement national qui s’est tenu en Iran en février 2017. Les résultats des données d’évaluation recueillies lors de cet événement ont montré que les organisations obtenaient des scores plus faibles dans le domaine de la santé communautaire et plus élevés dans le domaine de la santé au travail. Le cadre de référence OSRAH et l’outil d’évaluation représentent une nouvelle compréhension de la santé et de ses déterminants dans les organisations extérieures au secteur de la santé. Ils intègrent la santé dans la culture de responsabilité sociale en entreprise (RSE) déjà existante des organisations. Le processus de création de cet outil et sa mise en œuvre lors du festival national OSRAH en Iran ont donné lieu à une dynamique pour l’action intersectorielle. Cette expérience peut inspirer les chercheurs et les praticiens d’autres pays, en particulier dans les pays en développement, afin qu’ils élaborent leur propre définition locale et leur cadre de référence pour l’évaluation pratique en matière de responsabilité et de transparence. (Global Health Promotion, 2020; 27(2): 17–25)

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Impact de l'Initiative en faveur de la nutrition à l'école : analyse des données anthropométriques et biochimiques chez les enfants en âge d'être scolarisés à Ouagadougou

C. Elkhouri Edde, H. Delisle, C. Dabone et M. Batal

L'Initiative en faveur de la nutrition à l'école (Nutrition-Friendly School Initiative) a été développée en 2006 afin de lutter contre le double fardeau de la malnutrition ; elle a été mise en œuvre sous forme de projet pilote dans des écoles primaires de Ouagadougou (Burkina Faso) en 2009. Une étude de référence a été menée dans les écoles d'intervention et dans les écoles de contrôle, et a été répétée en 2014 afin d'évaluer l'impact. Cet article rend compte des données anthropométriques et biochimiques des enquêtes finales et de référence. Les deux études ont été menées dans des classes de cinquième année primaire, dans les mêmes écoles élémentaires de Ouagadougou. Six écoles d'intervention ont été sélectionnées et appariées à la référence avec six écoles de contrôle. L'échantillon total comprenait 699 et 651 élèves en 2009 et 2014, respectivement. Des mesures anthropométriques et de l'hémoglobine ont été réalisées sur tous les enfants, tandis que le rétinol sérique a été mesuré dans un sous-échantillon aléatoire pour évaluer la carence en vitamine A (CVA). Des tests t et du khi-carré indépendants ont été utilisés pour comparer les moyennes et les proportions, respectivement, et des régressions logistiques multiples ont été menées pour examiner les associations entre les paramètres nutritionnels et les caractéristiques des écoles. Les taux d'anémie et de CVA étaient de 32,6 % et 26,1 %, respectivement, à la fin du projet, donc inférieurs à ceux de la référence qui étaient de 40,4 % et 38,7 %. Les taux de prévalence finaux étaient de 8,1 % pour le retard de croissance, 8,7 % pour la maigreur, et 4,4 % pour le surpoids/l'obésité. La maigreur diminuait de manière significative en 2014, comparativement à 2009, mais aucun changement n'était observé pour les taux de retard de croissance, alors que les taux de surpoids/d'obésité indiquaient une tendance à la hausse. Lorsqu'on comparait les élèves des écoles d'intervention et ceux des écoles de contrôle, les seules différences significatives observées dans l'enquête finale étaient des diminutions des taux de maigreur et d'anémie chez les enfants des établissements d'intervention. Cependant, la prévalence de l'anémie présentait un niveau significativement plus faible dans le groupe d'intervention à la référence. Nos résultats indiquent une amélioration significative de l'état nutritionnel des élèves de Ouagadougou et suggère un rôle positif, bien que modeste, de l'Initiative en faveur de la nutrition à l'école pour réduire la maigreur, mais pas le surpoids. (Global Health Promotion, 2020; 27(2): 26–34)

L'analyse des parties prenantes d'une collaboration communautaire destinée à réduire les inégalités de santé dans un quartier défavorisé en Corée du Sud

H.H. Heo, W. Jeong, X.H. Che et H. Chung

La collaboration intersectorielle entre le secteur de la santé et les autres secteurs, de même qu'entre les organisations gouvernementales et non gouvernementales, a été mise en avant comme un moyen d'améliorer l'équité en santé. Nous avons utilisé une approche mixte pour évaluer la relation collaborative entre plusieurs secteurs gouvernementaux et de la société civile, et pour suggérer des interventions de promotion de la santé possibles et des alternatives politiques pour les populations urbaines pauvres des quartiers défavorisés. À l'aide de méthodes d'échantillonnage dirigé, nous avons recruté un total de 18 participants impliqués dans des interventions de promotion de la santé et des processus politiques en lien avec le centre-ville de Séoul. Les participants incluaient des parties prenantes travaillant pour ou engagées auprès d'administrations (3), d'institutions publiques de soins de santé (5), de prestataires de services sociaux (3), d'organisations communautaires (OC) (4) et d'organisations confessionnelles (3). Nous avons mené des entretiens individuels semi-structurés, puis recueilli les données de l'enquête. Les données quantitatives ont été examinées à l'aide d'une analyse des réseaux sociaux, et les données qualitatives ont été analysées au moyen de processus itératifs et consensuels. L'analyse des réseaux sociaux a indiqué qu'une OC jouait un rôle des plus importants en partageant et en contrôlant les ressources informatives pour promouvoir la santé. Une analyse des parties prenantes a montré que l'OC considérait la possibilité de collaborer avec d'autres parties prenantes de manière neutre et négative. Trois thèmes liés aux difficultés de la collaboration intersectorielle ont émergé : (1) le manque de confiance et de communication, (2) le besoin d'une coalition avec un acteur engagé et de premier plan pour la collaboration future, et (3) des regroupements organisationnels et politiques au sein des secteurs publics et entre eux. Une compréhension accrue de l'état actuel de la collaboration et des difficultés qu'elle pose est susceptible de documenter la planification et la mise en œuvre de stratégies et de politiques d'intervention complexes adaptées aux populations vulnérables des quartiers défavorisés. Des actions collaboratives communautaires permettent à la population des communautés marginalisées d'envisager une communauté en meilleure santé. (Global Health Promotion, 2020; 27(2): 35–44)

Développement des capacités – examiner l'impact de formations en santé publique basée sur les données probantes en Europe : une approche mixte

N. Serrano, G. Diem, V. Grabauskas, A. Shatchkute, S. Stachenko, A. Deshpande, K.N. Gillespie, E.A. Baker, E. Vartinaien et R.C. Brownson

Objectif : Depuis 2002, un cours intitulé « Evidence-Based Public Health (EBPH): A Course in Noncommunicable Disease (NCD) Prevention » [Santé publique basée sur les données probantes : un cours sur la prévention des maladies non transmissibles (MNT)] est dispensé chaque année en Europe; il s'agit d'une collaboration entre le Centre de recherche pour la prévention de Saint-Louis et d'autres organisations internationales. L'objectif principal de cette formation est de renforcer les capacités des professionnels de la santé publique de manière à appliquer et à adapter des programmes de prévention des MNT qui soient basés sur les données probantes. Le but de la présente étude est d'évaluer l'efficacité de ce cours d'EBPH afin de documenter et d'améliorer les futures formations en EBPH.
Méthodes : Au total, 208 personnes ont participé au cours d'EBPH en Europe entre 2007 et 2016. Sur ce total, 86 personnes (41 %) ont complété une enquête en ligne. Les éléments mesurés incluent la fréquence d'utilisation des compétences/matériels/ressources de l'EBPH, les bénéfices de l'utilisation de l'EBPH, et les obstacles à cette utilisation. Une analyse a été réalisée pour observer si le temps écoulé depuis la participation au cours affectait l'efficacité de l'EBPH. Les participants ont ensuite été stratifiés par fréquence d'utilisation de l'EBPH (faible contre élevée) et invités à participer à des entretiens téléphoniques en profondeur afin d'examiner de manière plus approfondie l'impact du cours à long terme [n = 11 (6 avec une utilisation faible ; 5 avec une utilisation élevée)].
Résultats : Les bénéfices les plus fréquemment rapportés parmi les participants incluaient : acquérir des connaissances sur un nouveau sujet (95 %), voir des applications pour ces connaissances dans leur propre travail (84 %), et devenir un meilleur dirigeant pour promouvoir une prise de décision basée sur les données probantes (82 %). Par ailleurs, les obstacles à l'utilisation de l'EBPH les plus fréquemment rapportés étaient le manque de financements suffisants pour une formation continue en EBPH (44 %), le fait que les collègues ne suivent pas la formation en EBPH (33 %), et le manque de temps pour mettre en œuvre les approches de l'EBPH. Les entretiens ont indiqué que le soutien reçu sur le lieu de travail et de la part de la direction était important pour faciliter l'utilisation de l'EBPH.
Conclusion : Bien que la formation en EBPH bénéficie effectivement aux participants, certains obstacles subsistent pour une large mise en œuvre des approches basées sur les données probantes. Le fait de communiquer avec ceux qui occupent des fonctions de direction pourrait faciliter la croissance de l'EBPH à travers les pays. (Global Health Promotion, 2020; 27(2): 45–53)

« Quand tu es un collecteur de données, tu dois t'attendre à tout ». Obstacles, limites et découvertes : éléments de compréhension issus de l'expérience sud-africaine de collecte des données

K. Roberts, S. Gordon, L. Sherr, J. Stewart, S. Skeen, A. Macedo et M. Tomlinson

L'impact du processus de recherche sur le chercheur est un sujet d'intérêt qui commence à émerger. Dans la plupart des pays à faibles et moyens revenus (PFMR), la collecte de données incombe souvent à des membres de la communauté qui sont spécifiquement sélectionnés et formés pour le faire. Lorsque la recherche implique des données sur la santé mentale et le bien-être social, les collecteurs de données peuvent avoir besoin de compétences spécifiques et peuvent être impactés par le processus de collecte. Cette étude vise à explorer les expériences et les besoins des collecteurs de données en Afrique du Sud à l'aide de méthodes qualitatives pour examiner l'impact de la collecte de données sur ceux qui les recueillent. Dix-neuf collecteurs de données impliqués dans la collecte directe de données ont complété des entretiens semi-structurés afin d'examiner leurs éléments de compréhension, leurs attitudes et leurs expériences. Une analyse thématique a révélé des obstacles et des difficultés associés à la recherche, des difficultés concernant les limites dans la relation participant-collecteur de données et les bénéfices de l'implication dans la recherche pour l'individu et la communauté. De nombreuses difficultés et opportunités ont été mises en avant. Les résultats montrent la contribution bénéfique et souvent oubliée des collecteurs de données, et garantissent des considérations clés dans la planification et la mise en œuvre de la recherche future pour garantir un soutien adéquat et une normalisation des pratiques. (Global Health Promotion, 2020; 27(2): 54–62)

¡Activate Ya! Co-apprentissage sur la prévention du tabagisme et la promotion de l'activité physique en milieu scolaire auprès de collégiens en Uruguay

A.E. Springer, M.B. Harrell, L. Martínez Gomensoro, M. Traversa Fresco, S. Rogers, M. Florines, V. Moreno, J. Lee, C.L. Perry, E. Bianco et D. Estol

Objectif : ¡Activate Ya! était un essai d'intervention contrôlé en groupes randomisés visant à développer et à évaluer l'impact d'une intervention en milieu scolaire pour la prévention du tabagisme et la promotion de l'activité physique (AP) auprès de collégiens uruguayens. Les objectifs secondaires étaient d'évaluer l'impact du programme sur les facteurs de risque et de protection psychosociaux liés au tabagisme et à l'AP des élèves.
Méthodes : Seize écoles et $n = 654$ élèves ont participé à l'étude. L'intervention, qui a duré une année, incluait un programme d'apprentissage en classe, un programme d'activités parascolaires, des pauses actives, et une manifestation finale de présentation. Un questionnaire à compléter soi-même a mesuré les résultats à trois moments différents. Des modèles de régression à effets fixes ont testé les différences de résultats en fonction des conditions de l'étude.
Résultats : Si des effets positifs de l'intervention ont été observés pour certains résultats liés aux facteurs psychosociaux en ce qui concerne le tabagisme, en revanche, aucun impact n'a été détecté sur le tabagisme au cours de l'année écoulée ou sur la propension à fumer. L'AP au cours des 7 jours écoulés, mesurée grâce au PAQ-C, était significativement plus élevée parmi les élèves des écoles d'intervention globalement ($p = 0{,}048$) et chez les filles ($p = 0{,}03$) lors du post-test, et les filles des groupes d'intervention rapportaient des taux significativement plus élevés pour leurs compétences d'identité athlétique, le soutien à l'AP reçu de leurs amis et enseignants lors du post-test, et la satisfaction par rapport à l'AP lors du suivi ($p < 0{,}05$).
Conclusion : Les effets positifs à court terme sur l'AP de l'intervention ¡Activate Ya! et les résultats qui y sont associés pour les filles soutiennent l'utilité de la promotion de la santé en milieu scolaire en Uruguay. Des recherches supplémentaires seraient nécessaires afin de déterminer les stratégies les plus efficaces pour prévenir l'usage du tabac chez les élèves et promouvoir l'AP auprès des garçons dans ces contextes. (Global Health Promotion, 2020; 27(2): 63–73)

Atteindre les jeunes femmes marginalisées pour la prévention du VIH au Botswana : une analyse pilote des réseaux sociaux

D. Loutfi, N. Andersson, S. Law, L. Kgakole, J. Salsberg, J. Haggerty et A. Cockcroft

Au Botswana, près d'un cinquième de la population est infectée par le VIH. L'Essai national interministériel d'intervention structurelle (Inter-Ministerial National Structural Intervention Trial) est un essai destiné à évaluer l'impact sur les taux de VIH d'une intervention structurelle qui recadre les programmes structurels de soutien du gouvernement en faveur des jeunes femmes. Le fait de garantir que l'intervention atteigne l'ensemble des jeunes femmes vulnérables dans une communauté donnée est un défi. Le recrutement porte-à-porte ayant été inefficace lors de travaux antérieurs, nous avons exploré des moyens novateurs pour atteindre cette population. Nous avons cherché à comprendre les réseaux de soutien des jeunes femmes marginalisées, et à évaluer la possibilité d'une utilisation des réseaux sociaux pour soutenir un recrutement universel dans cette population. Des analyses égocentriques et sociométriques ont été utilisées pour décrire les réseaux de soutien des jeunes femmes marginalisées. Celles-ci s'adressent à d'autres femmes et à des proches pour recevoir du soutien, et elles communiquent face à face plutôt que de recourir aux médias sociaux. Des cartographies de réseaux montrent de quelle manière les jeunes femmes étaient connectées entre elles. Les enseignements tirés de cet essai pilote comprennent une meilleure compréhension de la manière dont les réseaux sociaux peuvent être utilisés comme méthode de recrutement, comme par exemple, le temps nécessaire et les types de membres de la communauté qui peuvent aider. Les réseaux sociaux pourraient permettre d'atteindre d'autres populations qui sont difficiles d'accès. (Global Health Promotion, 2020; 27(2): 74–81)

Une approche intégrative de prise en compte des lieux de vie pour la promotion de la santé sur le lieu de travail afin d'aborder les défis contemporains de la santé des travailleurs en Asie-Pacifique

C.T. Pham, C.B. Lee, T.L.H. Nguyen, J-D. Lin, S. Ali et C. Chu

Dans la région Asie-Pacifique en rapide industrialisation les lieux de travail sont confrontés à des tensions de plus en plus importantes dues à un développement à grande vitesse motivé par la compétition mondiale, les migrations et le vieillissement de la main-d'œuvre. Dans cette région, outre les blessures liées au travail, les lieux de travail doivent aussi s'occuper du stress professionnel croissant, de maladies chroniques, et du fardeau socio-économique qui y est associé. En parallèle, les interventions en santé sur le lieu de travail restent dominées par un modèle étroit de changement comportemental. Pour cela, le modèle intégratif de promotion de la santé sur le lieu de travail, lancé par l'Organisation mondiale de la Santé à partir de projets pilotes qui ont porté leurs fruits après les années 1990, apparaît comme un moyen opportun, global et approprié de gérer la santé sur le lieu de travail, et les problématiques de sécurité telles qu'elles se posent dans cette région de nos jours. Dans cet article, nous mettons en avant les problématiques clés pour la santé sur le lieu de travail dans la région Asie-Pacifique et l'utilité du modèle intégratif de promotion de la santé sur le lieu de travail pour les aborder. Nous fournissons un bref aperçu des difficultés immédiates auxquelles sont confrontés les lieux de travail dans la région, puis nous expliquons les raisons, la nature et les modalités de la promotion de la santé intégrative sur le lieu de travail. Nous illustrons ce modèle en examinant des exemples de bonnes pratiques réussies et les données probantes de leurs réalisations à partir des programmes de promotion de la santé sur le lieu de travail en Asie-Pacifique entre 2002 et nos jours, avec une attention toute particulière portée aux programmes gouvernementaux de promotion de la santé sur le lieu de travail à Shanghai, Singapour et Taïwan. En nous appuyant sur ces exemples de réussite, nous recommandons les politiques gouvernementales et les stratégies de facilitation nécessaires pour orienter, soutenir et pérenniser la mise en œuvre de la promotion de la santé intégrative sur le lieu de travail par les entreprises. Nous concluons que des politiques gouvernementales de soutien cohérentes, associées à une facilitation du développement des capacités et des réseaux professionnels par les organismes internationaux sont essentiels pour développer et pérenniser des lieux de travail favorables à la santé dans cette région. (Global Health Promotion, 2020; 27(2): 82–90)

Perceptions sexospécifiques et ostéoporose : des implications pour les programmes de prévention destinés aux jeunes

A. Holland et T. Moffat

Le fait de présenter l'ostéoporose comme une maladie de femmes dans les informations de prévention influence la manière dont l'ostéoporose est perçue, et dont les informations de prévention sont assimilées et appliquées. En utilisant le Modèle de croyance en santé comme cadre de référence, on a examiné les perceptions sexospécifiques de l'ostéoporose chez les jeunes adultes canadiens afin de documenter la conception de programmes de prévention. On a utilisé une combinaison de l'Échelle de croyance en santé sur l'ostéoporose (Osteoporosis Health Belief Scale, OHBS) et d'entretiens semi-structurés pour examiner les perceptions qu'avaient les participants de la gravité de l'ostéoporose et de leur probabilité d'en être atteint, de même que leur motivation à s'engager dans des activités de prévention. Soixante hommes et femmes d'origines diverses âgés de 17 à 30 ans vivant à Hamilton, dans l'Ontario, au Canada, ont participé à l'étude. Tandis que les résultats de l'OHBS indiquaient que les deux sexes obtenaient des scores élevés pour l'auto-efficacité, les résultats issus des entretiens qualitatifs montraient des attitudes ambivalentes par rapport aux comportements de prévention, indiquant un décalage entre les résultats quantitatifs et qualitatifs. Les perceptions liées à la gravité et à la probabilité d'être atteint révélaient que si l'ostéoporose était généralement considérée comme une maladie de femme, le risque individuel perçu de la maladie était un compromis entre les concepts sexospécifiques plus larges de l'ostéoporose et divers facteurs de risque. Cette étude indique que les programmes de prévention de l'ostéoporose devraient envisager de reconnaître activement les conceptions sexospécifiques et liées aux tranches d'âge de l'ostéoporose afin d'accroître les comportements de prévention dans la population globale pour réduire la maladie à l'avenir. (Global Health Promotion, 2020; 27(2): 91–99)

Leadership antitabac parmi les populations Yolŋu de la Terre d'Arnhem, dans le Territoire du Nord : une étude qualitative

M. P. Tane, M. Hefler et D.P. Thomas

Cette étude qualitative a examiné le leadership antitabac parmi les Yolŋu, des populations de propriétaires terriens autochtones de la Terre d'Arnhem. Malgré une prévalence excessivement élevée du tabagisme, l'étude a trouvé que la plupart des gens mettaient en œuvre un leadership antitabac au sein de leurs familles et de leurs communautés. Tandis que le fait de ne pas empiéter sur l'autonomie des autres était une préoccupation importante, les agents de santé autochtones conseillaient régulièrement à leurs patients, aux membres de leur famille et de leur communauté d'arrêter de fumer. Cela suivait une croyance générale selon laquelle il valait mieux que ce soient les agents de santé qui soulèvent la question du tabagisme plutôt que les dirigeants traditionnels. Le fait de protéger les enfants du tabagisme passif et de les dissuader de commencer à fumer était important pour tous les participants, indépendamment de leur statut tabagique. Une connexion culturelle persistante et fortement valorisée au ŋarali' (tabac) continue à constituer une partie essentielle des pratiques sacrées de la cérémonie de funérailles, avec une utilité sociale importante et particulière. L'étude a trouvé qu'il y avait un consensus parmi les participants selon lequel cela ne changerait pas. Le fait de gérer les connexions traditionnelles au ŋarali' dans un contexte dans lequel la plupart des gens sont toujours dépendants au tabac commercial est une question délicate, et nécessite des approches respectueuses et culturellement convaincantes. Les initiatives de lutte antitabac auprès des populations Yolŋu devraient donc utiliser les leaders antitabac déjà présents au sein du contexte social dans lequel le

ŋarali' est valorisé et utilisé, une approche qui pourrait trouver un écho auprès des autres nations et communautés autochtones en Australie. (Global Health Promotion, 2020; 27(2): 100–108)

Une limitation d'Internet menace la Santé pour tous : quels effets l'abrogation de la neutralité du Net aux États-Unis peut-elle avoir sur la santé des individus et des populations ?

J. Early et D. Bustillos

Aux États-Unis d'Amérique, l'abrogation du populaire « Open Internet Order » (aussi appelé « neutralité du Net ») par la Commission fédérale des communications a suscité les critiques acerbes de nombreux secteurs différents, mais il reste encore à l'examiner en termes d'effets potentiels sur la santé publique. Dans ce commentaire, nous nous penchons sur les implications pour la santé de ce changement de politique, en considérant l'opinion d'experts sur le sujet, l'historique et les perspectives mondiales. Nous soutenons que l'abrogation de la neutralité du Net a le potentiel de compromettre les efforts d'éducation pour la santé et de promotion de la santé en accentuant la « fracture numérique », altérant ainsi la littératie en santé et exacerbant les inégalités de santé. En affectant de manière négative les capacités des gens à accéder à des informations de santé objectives, basées sur des données probantes, à les comprendre et à les utiliser pour améliorer et préserver leur santé, l'abrogation de la neutralité du Net peut entraver la notion de « Santé pour tous » de l'Organisation mondiale de la Santé en ruinant les protections publiques au nom du profit des entreprises. (Global Health Promotion, 2020; 27(2): 109–113)

Un rôle pour les médecins traditionnels en promotion de la santé : l'expérience d'un essai pour la prévention du VIH au Botswana

A. Cockcroft, L. Kgakole, N. Marokoane et N. Andersson

Les médecins traditionnels ont été largement ignorés dans la prévention du VIH, en particulier pour ce qui est de la prévention primaire. Dans le cadre d'un programme d'intervention structurelle destiné à réduire le risque de VIH chez les jeunes femmes au Botswana, nous avons formé 147 médecins traditionnels dans quatre districts ainsi que des assistants gouvernementaux d'éducation pour la santé (AES) et des enseignants, afin qu'ils mènent des groupes de discussion dans la communauté et les écoles à l'aide d'un feuilleton radiophonique en huit épisodes basé sur des données probantes et couvrant les rôles sexospécifiques, la violence sexospécifique, et la manière dont ils sont liés au risque de VIH. Un an plus tard, nous avons contacté 43 médecins traditionnels sur les 87 formés dans deux districts. La plupart d'entre eux (32) menaient des groupes de discussion avec des hommes et des femmes, en lien avec les EAS locaux et les enseignants. Ils étaient habiles à recruter des hommes pour leurs groupes, ce qui est souvent problématique pour les interventions communautaires, et rapportaient des changements positifs dans les attitudes et les comportements des participants aux groupes. Les médecins traditionnels peuvent jouer un rôle important dans la prévention primaire de la violence sexospécifique et du VIH. (Global Health Promotion, 2020; 27(2): 114–116)

Quels sont les rôles des agents de santé communautaires ? Réexaminer les philosophies des soins de santé primaires

M. Niang

Ce commentaire discute des différents rôles des agents de santé communautaires (ASC), leurs difficultés et leurs limites dans une perspective historique des soins de santé primaires (SSP). Nous avons d'abord essayé de montrer que la philosophie globale des SSP promulguée à Alma-Ata proposait que le rôle des ASC soit celui d'acteurs travaillant dans le développement communautaire. D'un autre côté, dans les années 1980, avec l'émergence de la philosophie sélective des SSP, le rôle des ASC s'est retrouvé davantage lié au système de santé. Nous concluons notre argumentaire au sujet de l'équilibre qui peut exister entre ces différents rôles en suggérant que les ASC puissent travailler en continuité avec le système de santé, mais qu'ils ne devraient pas être considérés comme une main d'œuvre abordable. De même, ils doivent être soutenus dans leurs activités pour développer leurs communautés, en leur permettant de participer de manière efficace à des programmes et des politiques qui les concernent ainsi que leurs communautés. (Global Health Promotion, 2020; 27(2): 117–120)

Utiliser la législation pour approfondir les causes de la santé publique : l'ordre du jour pour des prisons favorables à la santé

N. Ismail, J. Woodall et N. de Viggiani

Dans ce commentaire, nous proposons d'utiliser la législation dans la mise en œuvre de l'ordre du jour pour des prisons favorables à la santé (Healthy Prisons Agenda) Nous évaluons l'efficacité des lois pour lutter contre les inégalités de santé dans les prisons, fournissons des recommandations sur la manière dont les états peuvent tenir leurs engagements internationaux pour préserver les droits des prisonniers à des soins de santé et concevoir les prisons comme des lieux de vie promoteurs de santé. Nous évaluons également les difficultés susceptibles d'entraver cette proposition, telles que le caractère non contraignant des obligations internationales, la surpopulation globale des prisons, et la dépendance vis-à-vis des gouverneurs de prisons et de leur personnel pour la mise en œuvre de cet ordre du jour. Ce commentaire conclut en recommandant une évaluation plus approfondie de notre proposition ainsi qu'une évaluation de la possiblité de la généraliser à d'autres ordres du jour de promotion de la santé. (Global Health Promotion, 2020; 27(2): 121–124)

Autonomisation et recherche de soins de santé : un facteur ignoré de la mortalité maternelle dans une communauté autochtone mexicaine

C. I. Amaya-Castellanos, T. Shamah-Levy, E.I. Escalante-Izeta, B. Turnbull Plazas, et R.M. Nuñez Urquiza

Objectif : Étudier le lien entre les expressions d'autonomisation (comprise comme autonomie et pouvoir de décision) et les pratiques d'auto-prise en charge et de recherche de soins pendant la grossesse et après l'accouchement, en relation avec la mortalité maternelle chez des femmes autochtones de la municipalité de Santa Maria Temaxcaltepec, Oaxaca, au Mexique.
Méthodes : Six groupes de discussion ont été organisés : deux avec des femmes enceintes, deux avec des mères d'enfants de moins de trois ans et deux avec des hommes devenus pères au cours des trois dernières années.
Résultats : L'hégémonie masculine dans le contexte familial et dans les établissements de santé entrave l'autonomie et le pouvoir de décision des femmes en matière de santé génésique. Cela a un impact direct sur la recherche de soins pendant la grossesse et l'accouchement.
Conclusions : le manque d'autonomie et de pouvoir de décision des femmes est indirectement lié aux résultats indésirables de la grossesse. Ces constatations sont utiles pour orienter la conception de stratégies visant à promouvoir l'autonomisation des femmes et l'égalité des sexes dans le contexte des services et programmes communautaires et pour attirer l'attention des décideurs sur la présence de facteurs non médicaux de la mort maternelle dans les communautés autochtones. (Global Health Promotion, 2020; 27(2): 166–174)

Défis pour la promotion de la santé : Le cas du marché des laits maternisés au Mexique

P. Torre, M. Salas et C.I. Silva

L'allaitement maternel est reconnu comme le mode d'alimentation idéal pour une croissance et un développement optimum de l'enfant. Au Mexique, la prévalence nationale de l'allaitement maternel exclusif chez les enfants de moins de 6 mois est de 30,8 %, chiffre qui constitue un défi pour la promotion de la santé. Les préparations pour nourrissons sont devenues des produits socialement acceptables, pratiques et considérés comme équivalents, soit en raison des conditions du travail maternel, des difficultés propres à l'allaitement, de l'utilisation courante de lait maternisé et de biberons durant les soins autour de l'accouchement, de la désinformation médicale, du prestige social des préparations, du rôle de l'État et du marketing des fabricants.

Cet article montre l'offre et la disponibilité commerciale des laits maternisés au Mexique, par une étude transversale réalisée en 2016, dans 35 établissements de la ville de Mexico (marque, fabricant, prix, quantité, indications de consommation et pays d'origine); et une autre étude rétrospective, sur le volume en milliers de tonnes et la valeur en millions de dollars, des ventes nationales de 2012 à 2016. On a trouvé 79 produits fabriqués par 13 fabricants, avec des prix différents. Nestlé® offre 25% des produits. Le volume du marché national en 2016, à savoir 78000 tonnes, génère une disponibilité de 600 millions de litres de lait maternisé préparé, 743 ml de préparation par naissance vivante par jour, ce qui suffirait à nourrir toutes les naissances vivantes cette année-là. La valeur, 596 millions de dollars, représente une dépense par jour de 0,74 dollar par naissance vivante.

Face aux engagements internationaux tels que « la Santé dans toutes les Politiques » et la Déclaration sur le Développement durable, cette disponibilité constitue un défi pour la promotion de l'allaitement face à la complexité des décisions maternelles et familiales, dans les différents contextes sociaux. (Global Health Promotion, 2020; 27(2): 175–183)

Considerar los determinantes comerciales de la salud comienza por utilizar conceptos más precisos

Kelley Lee[1] y Nicholas Freudenberg[2]

El desafío que imponen las Enfermedades no Transmisibles (ENT) no cesa de aumentar en el mundo, al punto que ha incrementado de 43 a 54 por ciento la carga global de morbilidad entre 1990 y el 2016 (1). En el año 2018, las ENT representaron el 71 por ciento del total de fallecimientos, con un 81 por ciento de dichas muertes causado por cuatro tipos de enfermedades: cardiovasculares, diabetes, cáncer y enfermedades respiratorias crónicas (2). Para el 2025, la Organización Mundial de la Salud estima que el 85 por ciento de los decesos anuales por ENT ocurrirá en los países de bajos y medianos ingresos (3).

El costo de los tratamientos de las ENT se ha elevado considerablemente en todos los países. En la Unión Europea, solo la atención médica por enfermedades cardiovasculares facturó 110 mil millones de euros en el 2015 (4). Alrededor del mundo, los casos de diabetes registrados en adultos (mayores de 20 años) ascendieron de cerca de 171 millones a 463 millones de personas afectadas entre el 2000 y el 2019, lo que representa un aumento en el gasto en salud del 10 por ciento (5,6). Asimismo, dado que esta carga económica es probablemente más pesada de llevar para las comunidades y las personas desfavorecidas y marginadas que para los grupos con un estatus socioeconómico más alto (7), las ENT son ahora un factor clave en las crecientes inequidades en salud (8). Por último, como lo ha demostrado la pandemia de COVID-19, las altas tasas de las ENT hacen que millones de personas en el mundo sean mucho más vulnerables frente a otras amenazas para la salud.

Dados los crecientes y sustanciales costos, como Buse et al. señalan, “no podemos salir de la epidemia de las ENT por la vía del tratamiento (9)”. En su lugar, lo que se necesita es establecer con urgencia unas estrategias de prevención más efectivas, enfocadas en reducir los factores de riesgo asociados a dichas enfermedades (10). Un factor de riesgo es “cualquier rasgo, característica o exposición de un individuo que aumente su probabilidad de sufrir una enfermedad o lesión (11)”. Sin embargo, hasta ahora la acción de la salud pública para prevenir las ENT se ha centrado principalmente en los factores de riesgo metabólicos (como la hipertensión o la hiperlipidemia) y comportamentales modificables (consumo nocivo de tabaco y alcohol, dietas malsanas y la inactividad física) (2,12). Como resultado de esto, según Horton, “el progreso ha sido inadecuado y avanza tan lento que es decepcionante (. . .) Una estrategia de promoción basada en cuatro enfermedades y cuatro factores de riesgo parece cada vez más desconectada de la realidad (. . .) Muchos líderes políticos creen que las ENT son un desafío inmenso y complejo. Así que están paralizados. Necesitamos un enfoque diferente (13)”.

Enfoque completamente diferente el que ofrece el naciente concepto de los *determinantes comerciales de la salud* (CDoH por sus iniciales en inglés). Hace un buen tiempo se comenzó a reconocer que las estrategias de prevención de las ENT deben abordar las “circunstancias en las cuales las personas nacen, crecen, viven, trabajan y envejecen, así como los sistemas establecidos para hacer frente a una enfermedad (14)”. Se podría decir que desde finales del siglo XX el sector comercial (con fines lucrativos) ha participado fuertemente en moldear dichas circunstancias sociales (15–18). West y Marteau definen los CDoH como “factores que influyen en la salud y que se derivan de la motivación de los beneficios (19)”. Kickbusch et al. plantean un concepto similar al describirlos como “las estrategias y los enfoques que utiliza el sector privado para promover productos y opciones perjudiciales para la

1. Canada Research Chair Tier I. Facultad de Ciencias de la Salud, Universidad Simon Fraser, Burnaby, CB, Canadá
2. Escuela de Salud Pública de CUNY e Instituto de Política Alimentaria Urbana de CUNY. Universidad de la Ciudad de Nueva York. Nueva York, Estados Unidos de América

Correspondence to: Kelley Lee. Simon Fraser University, Blusson Hall, 8888 University Drive, Burnaby, BC, V5A 1S6, Canadá. Correo electrónico: kelley_lee@sfu.ca

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salud (20)”. Buse et al. se enfocan en los “riesgos inherentes al consumo o a la exposición a productos comerciales como alimentos y bebidas ultraprocesados, el cigarrillo y el alcohol (21)”. Estas definiciones contrastan con recientes documentos de la OMS que consideran las organizaciones no gubernamentales, las fundaciones filantrópicas, las instituciones académicas y las empresas con ánimo de lucro como “agentes no estatales” y socios potenciales en la prevención y control de las ENT (22), un marco que oculta los posibles conflictos de interés de los actores comerciales.

Si bien este cambio de atención hacia los factores comerciales es bienvenido, hay que subrayar que las actuales definiciones ofrecen una comprensión limitada de las complejas relaciones entre los CDoH y las ENT. Estos conceptos no tienen en cuenta la naturaleza variable y dinámica de los CDoH en el tiempo y el espacio, ni consideran el potencial de impactos positivos y/o negativos en poblaciones específicas. Como tal, la definición de dichos CDoH no se ha traducido todavía en una definición operativa capaz de informar de manera eficaz la acción de la salud pública (9,21). De hecho, los enfoques convencionales de la salud pública continúan centrados en los factores de riesgo metabólicos y de comportamiento, como la detección de la hipertensión, la promoción de una alimentación sana, campañas antitabaco y estrategias para mejorar el etiquetado de los alimentos (23). Sin embargo, las intervenciones encaminadas a eliminar los factores de riesgo sin hacer énfasis en la “interrelación que tienen la estructura social, el contexto y la agencia en su impacto en la salud y el bienestar (24)”, son poco efectivas. El concepto de CDoH podría integrar factores de riesgo metabólicos, comportamentales y estructurales, pero para esto se necesita con urgencia una definición más clara que no se enfoque solamente en industrias o productos específicos nocivos para la salud, así como implementar herramientas analíticas que ayuden a medir los CDoH como una amalgama de factores de riesgo.

Considerar los CDoH como una mezcla de factores de riesgo, y comprender cómo estos factores interactúan entre sí, es fundamental para desarrollar intervenciones efectivas en salud pública dirigidas a prevenir y controlar las ENT en el mundo. En primer lugar, este enfoque reemplaza el énfasis en el manejo clínico y cambio comportamental, dominante en investigación y política pública, que tienen un efecto muy limitado y costoso, por la prevención basada en un cambio societal e individual. En segunda instancia, observar los CDoH como un conjunto, ayuda a superar la falta de interrelación en investigación y política pública que divide las diferentes áreas de enfermedades, grupos poblacionales y tipos de intervención. Esta visión holística puede intensificar el cambio a través de estrategias integradas para la prevención de las ENT. Finalmente, considerar los CDoH como un compuesto de factores de riesgo permite identificar las vulnerabilidades relativas de acuerdo con poblaciones específicas en el tiempo y el espacio, y a través de otras variables (edad, género o estatus socioeconómico, por ejemplo). Así, se podría conformar una poderosa base de datos que permita desarrollar intervenciones particulares y disponer de recursos específicos para reducir dichos riesgos que atentan contra la salud y la equidad en la salud.

Un marco interdisciplinario de los CDoH puede incluir además nuevas perspectivas desde la ciencia de sistemas, la economía política y la ciencia política, creando un nuevo corpus de conocimiento que contenga información sobre las prácticas de salud pública. La ciencia de sistemas ayudaría a comprender, de una manera más coherente y fundamentada, cómo los sistemas dinámicos de poder y gobierno trazan la ruta a través de la cual los CDoH influyen en la salud (25). La economía política puede analizar el impacto del crecimiento del neoliberalismo en el papel de los actores comerciales, mientras que la ciencia política facilitaría la identificación de los actores sociales que tienen el poder de modificar los CDoH (26).

En general, a pesar de la evidencia clara del aumento alarmante de las ENT en el mundo y del compromiso de los altos niveles políticos para afrontar este importante desafío para la salud pública, la comunidad de la salud pública (incluidos los profesionales en promoción de la salud) solo ha logrado un consenso limitado sobre una acción preventiva efectiva (13,27). El concepto de CDoH promete un enfoque más holístico, integrado y específico.

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Empoderamiento y búsqueda de atención en salud: un factor ignorado de la mortalidad materna en una comunidad indígena mexicana

Claudia Isabel Amaya-Castellanos[1], Teresa Shamah-Levy[2], Ericka Ileana Escalante-Izeta[3], Bernardo Turnbull Plazas[4] y Rosa María Nuñez Urquiza[5]

Resumen: Objetivo: Indagar la vinculación entre expresiones del empoderamiento (autonomía y poder de decisión) y las prácticas de autocuidado y de búsqueda de atención durante el embarazo y posterior al parto, en relación con la mortalidad materna, en mujeres indígenas del municipio de Santa María Temaxcaltepec, Oaxaca, México. Métodos: se realizaron seis grupos focales: dos con mujeres embarazadas; dos con madres de niños <3 años de edad, y dos con hombres quienes en los últimos tres años fueron padres. Resultados: la hegemonía masculina en el contexto familiar y en las instituciones de salud, dificulta la autonomía y el poder de decisión de las mujeres sobre su salud reproductiva. Esto impacta directamente en la búsqueda de atención durante el embarazo y el parto. Conclusiones: la falta de autonomía y de poder de decisión femenino se relaciona indirectamente, con resultados adversos del embarazo. Estos hallazgos son útiles para orientar el diseño de estrategias que promuevan el empoderamiento de las mujeres y la equidad de género en el contexto de los servicios y programas comunitarios y llamar la atención de tomadores de decisiones hacia la presencia, de factores no-médicos de la muerte materna en comunidades indígenas. (Global Health Promotion, 2020; 27(2): 166–174)

Palabras clave: mortalidad materna, toma de decisiones, autonomía personal, poblaciones indígenas, México

Introducción

La muerte materna es aquella que ocurre durante el embarazo, el parto y hasta los 42 días siguientes al desenlace del embarazo, excluyendo accidentes, envenenamientos y homicidios (1) y sus complicaciones son causa importante de muerte en mujeres en edad fértil (2). Un alto porcentaje de las muertes maternas pueden evitarse mediante acciones de atención primaria a la salud (3). Aun cuando en las últimas décadas se ha documentado disminución en la mortalidad materna, estudios locales muestran incrementos, incluso en poblaciones de países desarrollados (4). En México en 2015 murieron 994 mujeres por causas relacionadas con la maternidad (5), y para el 2016 las causas obstétricas indirectas fueron la primera causa de muerte materna (29.7%), seguida por trastornos hipertensivos (21.2%), y complicaciones del trabajo y durante el parto (15.6%)(6). Esta problemática puede ser explicada

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1. Universidad Industrial de Santander, Escuela de Medicina, Departamento de Salud Pública, Bucaramanga, Colombia.
2. Instituto Nacional de Salud Pública, Centro de Investigación en Evaluación y Encuestas, Cuernavaca, Morelos, México.
3. Universidad Iberoamericana- Puebla, Ciencias de la Salud, Puebla, México.
4. Universidad Iberoamericana-Ciudad de México, Departamento de Psicología, Ciudad de México, México.
5. Médicos sin Fronteras, México.

Correspondencia a: Teresa Shamah-Levy. Instituto Nacional de Salud Pública - Centro de Investigación en Evaluación y Encuestas, Av. Universidad 655. Santa María Ahuacatitlán Cuernavaca, Morelos 62100, México. Tel: +527771012916, Email: tshamah@insp.mx

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por el modelo de las tres demoras de Thaddeus y Maine: demora en reconocer la necesidad de atención y tomar la decisión de buscar ayuda (en psicología social es un elemento fundamental del constructo de empoderamiento (7)); demora al llegar a los servicios de salud, y demora para recibir adecuado y oportuno tratamiento (8).

Asimismo, la incorporación femenina al mercado laboral y la presencia de movimientos feministas han favorecido cambios en los procesos de toma de decisiones de las mujeres, permitiéndoles tener mayor poder dentro de su familia y la sociedad (9). Sin embargo, en México estos logros solo ayudan a mujeres urbanas con alta escolaridad, pero no a mujeres pobres e indígenas de zonas rurales. En estados de alta marginación donde se registra una elevada mortalidad materna, se observa un menor empoderamiento de las mujeres, medido por indicadores como: autonomía de la mujer y poder de decisión en el hogar, enfocados a la crianza, temas reproductivos y gastos económicos (10). Existe una brecha de género en donde la desigualdad de oportunidades y poder de decisión de mujeres frente a hombres, les impide decidir libremente sobre su salud (9). Esta hegemonía masculina no se limita a la familia. En los servicios de salud, los médicos representan la figura del poder patriarcal, perpetuando la estructura de la clase social, donde la atención sanitaria no es controlada por las mujeres de acuerdo con sus propios intereses, sino por los hombres (11). A esta interacción desigual de género, se suman otras variables que pueden inhibir el uso de los servicios por las mujeres (12).

Este artículo describe información obtenida en una comunidad indígena rural de alta marginación en Oaxaca, México. Se documenta la percepción de las mujeres respecto a su capacidad y ejercicio de tomar decisiones sobre el cuidado de su salud. Específicamente sobre dos expresiones del empoderamiento: autonomía (la posibilidad de las mujeres de actuar libremente (sin coerciones familiares o sociales) y poder de decisión de las mujeres indígenas (la posibilidad de ser partícipe en los propios procesos de toma de decisiones sobre su salud y la de su hijo) (13), y de sus prácticas de autocuidado durante el embarazo y el postparto.

Al hablar de autocuidado, se hace referencia a elementos del modelo de Orem, el cual se refiere a las prácticas para mantener la vida, la salud y el bienestar, y se concibe como prerrequisito universal al considerarse que todo paciente (en este caso mujer embarazada), busca cuidarse a sí mismo (14).

Métodos

El estudio fue realizado en Santa María Temaxcaltepec, Oaxaca, México. Este municipio se encuentra entre los 100 con menor índice de desarrollo humano (medida comparativa de la esperanza de vida, compuesto de tres indicadores: salud, educación e ingreso) (15). Para el 2009 contaba con 2500 habitantes de lengua chatina, con analfabetismo del 41.53%, un 98.40% de la población sin acceso a servicios de salud y una elevada proporción de muertes maternas (1.219,5×100.000 nacidos vivos) (16).

Se utilizó una metodología cualitativa de corte fenomenológico para explorar la experiencia y describir las acciones de los actores sociales participantes en los procesos relativos al embarazo, su cuidado, y el problema de la mortalidad materna (tabla 1). Los participantes fueron hombres y mujeres de la comunidad con experiencias recientes de reproducción y crianza de infantes menores de 3 años de edad y fueron captados mediante invitación voluntaria, a través de una Organización No Gubernamental (ONG) mediante la técnica “bola de nieve”.

Se realizaron seis grupos focales, como herramienta de indagación y construcción de datos: dos con mujeres embarazadas, con 6 y 9 participantes cada uno; dos grupos de mujeres, madres de menores de tres años de edad (no embarazadas) con 4 y 6 participantes cada uno; y dos grupos de hombres, padres de infantes menores de tres años de edad, cada grupo integrado por 4 y 7 participantes, con los que se alcanzó saturación del tema.

Lideraron los grupos dos facilitadores y un observador (hombres y mujeres), todos ellos con formación en psicología y experiencia en grupos focales. En el proceso de construcción de información, fue crucial la participación de 3 traductores de lengua chatina de la comunidad, previamente capacitados y asignados a cada grupo según el sexo de los participantes. Las sesiones se desarrollaron durante una semana en la comunidad y se filmaron, cada una durante 120 minutos

Tabla 1. Descripción del proceso metodológico a partir de las etapas del enfoque fenomenológico.

ETAPA DESCRIPTIVA		
1. Elección de la Técnica de Grupos Focales		
2. Selección de la población (muestreo)		
3. Aplicación por Temáticas	- Cuidados durante el Embarazo, Parto y Puerperio - Percepción sobre los Servicios de Salud - Utilización de los Servicios de Salud durante Embarazo, Parto y Puerperio	
4. Descripción Protocolar de Unidades Temáticas Previas	- Autocuidado - Búsqueda de Atención	
ETAPA ESTRUCTURAL		
1. Lectura de seis (6) protocolos		
2. Delimitación de Unidades Temáticas Naturales	- Embarazo como Evento Femenino - Atención del Embarazo en los Servicios de Salud Tradicionales - Dificultad de Decisión para el Uso de los Servicios de Salud - Obstáculos de los Servicios de Salud - Participación Masculina durante el Parto y después del Parto	
3. Delimitación del Tema Central	- Autocuidado y Empoderamiento - Búsqueda de Atención en los Servicios de Salud - Obstáculos - Facilitadores	
		Aproximación teórica
4. Lenguaje Científico del Tema Central	Empoderamiento - Poder de Decisión - Autonomía	- Oxaal *et al.* (13)
5. Integración en Unidad Temática General	Empoderamiento y: - Autocuidado - Búsqueda de Atención en los Servicios de Salud	- Modelo de Orem (14) - Modelo de las 3 demoras Thaddeus y Maine (8)
ETAPA DE DISCUSIÓN		
Vinculación de contenidos (Ver Figura 1)		

aproximadamente, previo consentimiento escrito de las personas participantes. Algunos esposos o suegras de las mujeres fueron quienes autorizaron su participación, siguiendo las pautas de funcionamiento familiar en esta comunidad.

Los temas abordados fueron las experiencias de las personas participantes sobre los cuidados durante el embarazo, parto y puerperio, la percepción y utilización de los servicios de salud. Se construyeron guías temáticas para facilitar el desarrollo de los grupos focales. Los contenidos verbales obtenidos fueron transcritos para su análisis en un procesador de palabra y los videos sirvieron como apoyo a la transcripción.

Desde la perspectiva fenomenológica, el análisis buscó llegar a las estructuras esenciales para dar significado a las experiencias de las mujeres y hombres (17), partiendo de dos ejes temáticos: autocuidado durante el embarazo, parto y puerperio, y búsqueda de atención en los servicios de salud. Como categorías *a posteriori* surgieron las relacionadas con el empoderamiento en salud reproductiva (autonomía y poder de decisión), y las subcategorías de obstáculos y facilitadores frente al uso oportuno de los servicios de salud. El análisis fue realizado usando como apoyo el programa para manejo de datos cualitativos NVivo.

El proyecto fue aprobado por el Comité de Ética del Instituto Nacional de Salud Pública de México (código CI-274; referencia 770, Julio 2 de 2009).

Resultados

Las categorías de análisis partieron de categorías a posteriori considerando las dos temáticas eje que guiaron la indagación.

Autocuidado y empoderamiento (autonomía y poder de decisión)

Las mujeres reconocieron la importancia de seguir ciertos “cuidados” durante el embarazo, el parto y el puerperio, referidos como cuidados a su propio cuerpo. Por ejemplo, consumir ácido fólico, evitar labores del hogar que representan esfuerzo (lavar, moler o acarrear agua), guardar reposo, no tener relaciones sexuales durante el embarazo, acudir a consulta mensualmente, realizarse ultrasonidos y cuidar su alimentación. Los hombres también mostraron conocimientos respecto a los cuidados que las mujeres deben tener durante el embarazo, destacando la importancia de evitar esfuerzos al realizar labores domésticas. Sobre la alimentación mencionaron que las mujeres no deben consumir alimentos que contengan grasa en exceso.

A pesar de que se tenían recomendaciones médicas y estas eran claras, la cotidianidad sociocultural no le permitía llevarlas a cabo. Principalmente las que se refieren al descanso, esfuerzos físicos y cargar cosas pesadas durante el embarazo:

> “*… sí, me dio las indicaciones, pero no las llevé a cabo porque como yo solita, yo tenía que llegar a cocinar, hacer el oficio de la casa, tener que limpiar, lavar, cocinar, yo no me tocó la suerte de las que tienen acá a su mamá que les ayuda, pero yo solita, pero sí salí adelante sin ningún problema…*” (Mujer 1-G1. Hijos menores de 3 años. No embarazada).

Las visitas de las mujeres para el control prenatal al centro de salud, debió ser autorizada previamente por sus esposos o suegras, que dependía del grado de credibilidad y confianza que los esposos tenían hacia el medico:

> *“Si el médico dice…tu bebé necesita un ultrasonido…”* el hombre responde: *“…el Doctor está mal, el Doctor no sabe, pues…”* (Mujer 3-G2. Embarazada).

Son referidas pocas oportunidades donde las mujeres pueden elegir el recibir orientación médica acerca de los cuidados antes, durante o después del embarazo. Particularmente si en el sistema de salud formal (centros de salud) quien otorga el servicio es un varón, los esposos manifiestan resistencia a que “sus mujeres” sean “tocadas” por otro hombre, denotando falta de información sobre la importancia de la auscultación médica durante el embarazo:

> *“…a veces como hombre uno no quiere que…, aquí los señores no quieren que los doctores toquen a su mujer…”* (Hombre 5-G2. Hijos menores de 3 años).

Embarazo como evento exclusivamente femenino

Entre algunos hombres, el embarazo fue descrito como un evento exclusivamente femenino, donde ellos no tienen injerencia directa:

> *“…los hombres no saben mucho (ríen). Los hombres ni ponemos ni tomamos en cuenta si la mujer está embarazada. Ahí la dejamos… Es lo primero que hacemos, no hay tiempo, estamos dedicados al campo todo el día…”* (Hombre 3-G1. Hijos menores de 3 años).

Ello, refleja que los roles de género pueden llegar a ser utilizados por algunos hombres para evadir su responsabilidad durante el embarazo, restando control y poder de decisión a las mujeres sobre su propio cuerpo.

Búsqueda de atención en los servicios de salud: Autonomía y poder de decisión

Las mujeres viven su embarazo como un hecho del ámbito privado, ya que es frecuente que entre los familiares cercanos, algunos se den cuenta del embarazo en etapas avanzadas.

También expresan temor ante la posibilidad de enfermar o morir durante el embarazo y por eso procuran seguir los cuidados prenatales a través de la búsqueda de asistencia médica. Igualmente identifican señales de alarma -dolores musculares, de hueso o cabeza, fiebre, edema, hinchazón de pies, hemorragias, presión alta, preeclampsia, caídas o golpes- y aunque saben que, en el peor de los casos, estos signos pueden evolucionar a la muerte, no siempre mencionan acciones concretas.

Por el contrario, los hombres se ocupan del embarazo, solo cuando se presentan enfermedades graves o cuando perciben la necesidad de atención de emergencia. En esos casos permiten que "sus" mujeres busquen tratamiento. Dicha conducta fue identificada por un informante cercano a los servicios de salud, como ignorancia y machismo:

> "*… yo he visto, como yo trabajo aquí con la ambulancia, que muchas veces llevan a sus esposas cuando ya están graves, cuando es tarde. Yo creo que 'ora sí por ignorancia, por el machismo. Ese es el problema más grave que nosotros tenemos aquí, en esta comunidad…*" (Hombre 6- G2. Hijos menores de 3 años).

Son pocas las situaciones donde los hombres evalúan como imprescindible la búsqueda de atención médica, por ejemplo, el aborto espontaneo y la denominada "enfermedad del latido", la cual puede afectar a la madre y al recién nacido, y se caracteriza por un fuerte dolor en el estómago causado por cargar cosas pesadas o por hacer grandes esfuerzos.

Obstáculos y facilitadores para el uso oportuno de los servicios de salud

- Embarazo atendido en servicios de salud tradicionales.

Hombres y mujeres refirieron que no es prioritario acudir a los servicios de salud durante el embarazo, parto o puerperio. Por usos y costumbres, usan primero remedios caseros dados por sus madres o suegras; si éstos no funcionan, acuden con la partera, hechiceros o yerberos, y en el último de los casos acuden al centro de salud o al hospital público, generando gastos de traslado, puesto que éstos se encuentran fuera de la localidad, o solo si tienen dinero, se acude al médico particular.

> "*…a veces también hay muchos remedios caseros ¿no? digamos hierbas, todo eso, y a veces sí calman o les quita el dolor. Pero ya cuando de plano sí hay un dolor y ya no se calma, no le hace la hierba, hay que llevarla al doctor*" (Hombre 1-G1. Hijos menores de 3 años). "*…si se te complica un poco, hay que ir con un particular. Siempre sale un poquito más caro. En el centro de salud, si no se te complica, sale como en $1,000 pesos, y en un particular depende, hay algunos que cobran $4,000, otros $5,000…*" (Mujer 2-G1. Hijos menores de 3 años. No embarazada).

La atención por una partera tradicional es bien aceptada por hombres y mujeres. Los hombres las prefieren porque forman parte de la comunidad, resulta más barato y no requieren pagar traslado. Las mujeres expresan que, a diferencia de los médicos, las parteras no recomiendan ni practican la cesárea (aunque se desconoce si las parteras tienen claridad de cuándo y bajo qué circunstancias realizarla). Además, las prefieren por ser sus conocidas, tenerles confianza y ser del mismo sexo; ya que les avergüenza que las atiendan hombres en los servicios de salud, principalmente, por la exposición del cuerpo y ser tocadas por un hombre diferente a sus maridos. En este punto coinciden con la opinión masculina:

> "*…Ojalá se tuviera una persona que nada más se pudiera dedicar a eso ¿no?, una Doctora para que las mismas mujeres se sientan más en confianza. Ya con una Doctora, la encargada, la ginecóloga, lo que sea, le diría sus cosas de mujer ¿no?, y el hombre va a sentir confianza que su esposa vaya a revisión, que la toquen porque es una mujer…*" (Hombre 6- G2. Hijos menores de 3 años) "*…yo digo que no van por vergüenza, es que simplemente no se quieren quitar la ropa delante de un doctor. Porque en cambio otras dicen que con una doctora sí dejo que me revisen…*" (Mujer 2-G2. Hijos menores de 3 años. No embarazada).

- La mujer no puede decidir sobre la utilización de los servicios de salud.

Las mujeres dejan la decisión del tipo y momento de atención a sus maridos o sus suegras. Ellos permiten que las mujeres busquen atención médica, cuando el embarazo es diagnosticado de alto riesgo, cuando ha tenido problemas para embarazarse, o por complicaciones durante el parto. No obstante, en el discurso de algunas mujeres y unos pocos hombres, sobresale que, en ocasiones, suegras y esposos, ignoran y minimizan las señales de alarma, retrasando la atención médica.

> *"…muchas veces los mismos familiares ignoran a la paciente. Ya cuando dice ella ¡ya, ya no aguanto!, entonces ya dicen (los familiares) "vamos a pedir ayuda". Yo he visto esos casos ahí cuando trabajo, y a mí me da tristeza porque no se puede hacer nada por ellos."* (Hombre 7-G2. Hijos menores de 3 años).

- Obstáculos propios del sistema de salud.

Cuando las mujeres logran superar las barreras familiares para acudir con un médico deben enfrentarse a las barreras del sistema de salud, donde el poder y control nuevamente quedan fuera de sus manos. Resalta la carencia de intérpretes de lengua indígena, lo que obliga a la embarazada a ir acompañada de algún familiar bilingüe, preferiblemente su pareja, dado que es común que los hombres sean bilingües. También se refirió que los médicos no son amables ni respetuosos, que se desesperan fácilmente y no toleran sus costumbres, percepción que es igualmente referida por los hombres:

> *"… muchas veces el Doctor está desesperado y llega una de nuestras mujeres y le habla en chatino, le habla suave. Si él tiene muchos pacientes se encoleriza, igual las atienden, pero se siente que las mujeres embarazadas no están bien, es un ambiente muy de regaño e igual un poquito de falta de respeto. A veces le dicen báñense o en malas palabras que tiene que hacer, o vístete así, no debes usar esa ropa, está rota, está negra, está sucia… es ofensa pues…"* (Hombre 4-G2. Hijos menores de 3 años).

Otra limitación son los gastos que implica el desplazamiento a los servicios de salud, los cuales cuando logran ser solventados, no aseguran su atención inmediata. Algunos hombres refieren que cuando se puede pagar, es mejor ir a una institución privada que pública, dado que el pago posibilita una atención más oportuna.

> *"… bueno, pues si la persona ya viene enferma y se va al particular, probablemente le metan más rápido mano porque a veces en los hospitales las tienen formadas ahí y no las atienden bien, y ahí es donde la mujer sufre. Ya en la particular la lleva uno y las meten luego y las atienden. En el particular va a pagar uno, pero las atienden más rápido"* (Hombre 2-G1. Hijos menores de 3 años).

Participación masculina durante el embarazo y posterior al parto

Las mujeres consideran importante contar con el apoyo de sus esposos, para que las acompañen a consulta y durante la atención del parto:

> *"…acá la mujer tiene que estar sometida a lo que el hombre diga, si el hombre dice tu no vas, la mujer no va, ella hace lo que el hombre dice. Yo digo que sería bueno que se les diera a los hombres unas pláticas sobre eso, porque hay pláticas en los centros de salud explicando los cuidados que debe de tener una mujer embarazada y los cuidados con el niño, pero siempre a las mujeres, ¿por qué no van los hombres pues?"* (Mujer 3-G2. Embarazada).

Ello, reafirma la visión cultural, donde las mujeres mencionan la importancia que los hombres se involucren, informen y eduquen durante el cuidado del embarazo, como un factor para la toma de decisiones en situaciones de riesgo.

Dichos testimonios muestran la íntima relación entre los conceptos de autonomía y poder de decisión, en los cuidados y búsqueda de atención que realizan las mujeres en torno a su salud reproductiva. La figura 1 sintetiza cómo las mujeres a pesar de tener los conocimientos básicos de autocuidado enfrentan barreras que imponen figuras masculinas (esposos) que limitan sus acciones y solo les permiten actuar con mayor autonomía cuando la situación es más severa, ello, aunado a las barreras propias del contexto y de atención proporcionada por el personal de los servicios de salud.

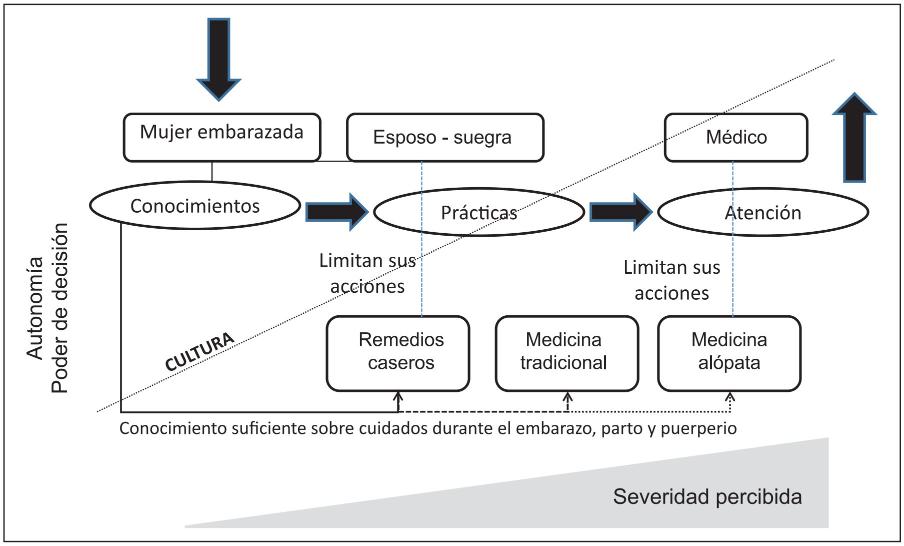

Figura 1. Influencia de los conocimientos sobre la autonomía y poder de decisión para recibir atención temprana.

Discusión

Los resultados de nuestro estudio muestran que el contexto sociocultural de las mujeres indígenas está caracterizado por la hegemonía masculina, el cual se considera uno de los principales obstáculos para utilizar los servicios de salud.

Ante dicho panorama, varias políticas y programas gubernamentales buscan fomentar el empoderamiento de las mujeres mediante el otorgamiento de mesadas de dinero, y otros beneficios (18); No obstante, algunas evaluaciones indican que, si bien estos incentivos incrementan la asistencia a los servicios de atención prenatal, no se aumenta la autonomía de las mujeres sobre su salud reproductiva (19). Estas manifestaciones de falta de empoderamiento en sus decisiones en salud son algunos elementos importantes en la cadena de eventos de morbilidad y falta de oportunidad en la búsqueda de atención (20). Esto se añade a los factores culturales asociados a la reproducción, y a las connotaciones propias de la sexualidad femenina.

De acuerdo con la percepción de las personas participantes, el sistema de salud formal ha sido poco sensible a las características socioculturales de la comunidad, referido como actos de intolerancia hacia sus costumbres. Los resultados concuerdan con la afirmación de la Organización de las Naciones Unidas (OMS): la mortalidad materna refleja tanto el estado de salud de las mujeres en edad reproductiva como la falta de acceso y la calidad deficiente de los servicios de salud (21).

En relación con el modelo de las tres demoras (7), los testimonios de las mujeres muestran que la primera demora es atribuible a su falta de empoderamiento para tomar decisiones sobre su sexualidad, fecundidad y su limitada autonomía para la búsqueda de atención. En este sentido, barreras como: el lenguaje, la cultura, y la actitud del personal médico, caracterizada por la baja tolerancia y respeto hacia las mujeres de la comunidad, pueden ser decisivo para buscar ayuda. La segunda está condicionada por los obstáculos económicos y la tercera, por demoras en el servicio de salud, reflejada en no ser atendidas por ginecólogas mujeres.

Un estudio reveló que las amenazas percibidas por las mujeres respecto a la maternidad, aunadas a la pobreza y la inequidad de género, constituyen uno de los factores en la cadena de eventos que desenlazan en la muerte materna (22). Organismos internacionales han recomendado poner atención a la sinergia perversa entre pobreza e inequidad de género, y sugieren que los servicios de salud sean sensibles a estas problemáticas, procurando una mayor equidad de género y sensibilidad intercultural en la provisión de los servicios (23).

De igual manera, se identifica el papel que juega la familia cercana durante el embarazo de las mujeres. Una mayor participación de ésta fortalecería la identificación de signos de alarma, factor esencial para la búsqueda oportuna de atención.

Las decisiones de autocuidado de las mujeres en las comunidades indígenas rurales son producto de una combinación de factores que giran en torno al diferencial de poder entre hombres y mujeres. Se limita la autonomía ya que requiere de una previa *decisión*, ajena a la mujer, que le es impuesta desde la tradición y rol sociocultural asignado. Además de a su baja influencia en las decisiones sobre su cuerpo y su persona, que sugieren un "déficit de autocuidado", al ser limitadas para realizar sus cuidados personales de la mejor manera posible, lo que retrasa su recuperación óptima (16), aunado a la poca accesibilidad y deficiencias en los servicios de salud.

Lo anterior debe tomarse en cuenta en el diseño de programas destinados a evitar muertes maternas durante el período peri-gestacional. Fomentar el apoyo de la familia y la comunidad y una participación activa de los hombres, que implica el acompañamiento a la mujer durante el embarazo y nacimiento de su hijo, así como promover la corresponsabilidad en la crianza, puede contribuir a disminuir la morbimortalidad materna (24).

También, es importante capacitar al personal de salud para proporcionar atención intercultural ya que la población indígena requiere de especial entendimiento, no solo por la lengua, sino por sus códigos culturales. El no considerarse, puede producir la deficiente oferta y uso de servicios, que pueden llevar a la mortalidad materna (25).

Los hallazgos de este estudio muestran como la mortalidad materna debe estudiarse desde una mirada más ecológica e integral, considerando los roles de género. El aporte del mismo es llamar la atención de los tomadores de decisiones hacia la presencia persistente, pero poco visible, de los factores no-médicos de la muerte materna. No podemos generalizar las causas específicas (que cambian con la región y las condiciones particulares) pero sí podemos generalizar la lección de que, si se ignora o subestima su importancia, los factores sociales y de género pueden arruinar cualquier intervención. En este sentido, los hallazgos presentados son un referente para los municipios de muy alta marginalidad y menor desarrollo humano de la República Mexicana, y para poblaciones similares en otros países de centro y Latinoamérica.

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Desafíos para la promoción de la salud: El caso del mercado de las Fórmulas Infantiles en México

Pilar Torre[1], Monserrat Salas[2] y Consuelo Ingrid Silva[1]

Resumen: se reconoce a la lactancia materna como la modalidad alimentaria ideal para el óptimo crecimiento y desarrollo infantil. En México, la prevalencia nacional de lactancia materna exclusiva entre los menores de 6 meses es de 30.8%, cifra que constituye un desafío a la promoción de la salud. Las fórmulas infantiles se han constituido en productos socialmente aceptables, convenientes y equivalentes, sea por las condiciones del trabajo materno, las dificultades propias de la lactancia, el uso rutinario de fórmulas y biberones durante la atención del parto, la desinformación médica, el prestigio social de las fórmulas, el papel del Estado y la mercadotecnia de fabricantes. Este artículo muestra la oferta y la disponibilidad comercial de fórmulas en México, mediante un estudio transversal realizado en 2016, en 35 establecimientos en la Ciudad de México (marca, fabricante, precio, cantidad, indicaciones de consumo y país de origen); y otro estudio retrospectivo, sobre el volumen en miles de toneladas y el valor en millones de dólares, de las ventas nacionales de 2012 a 2016. Se encontraron 79 productos elaborados por 13 fabricantes, con diferentes precios; Nestlé® ofrece el 25% de los productos. El volumen del mercado nacional en 2016, 78 mil toneladas, genera una disponibilidad de 600 millones de litros de fórmula preparada, 743 mL de preparación por nacido vivo por día, que alcanzaría para alimentar a todos los nacidos vivos en ese año; el valor, 596 millones de dólares representa un costo de 0.74 dólares por nacido vivo por día. Frente a los compromisos internacionales como Salud en Todas las Políticas y la Declaración sobre Desarrollo Sostenible, esta disponibilidad constituye un desafío para la promoción de la lactancia materna, ante la complejidad de las decisiones maternas y familiares, en los diversos contextos sociales. (Global Health Promotion, 2020; 27(2): 175–183)

Palabras clave: fórmulas infantiles (FAI), mercadeo, promoción de la salud, México

Introducción

La Organización Mundial de la Salud (OMS) recomienda la alimentación infantil (AI) con lactancia materna exclusiva (LME) durante los primeros 6 meses de vida, y con lactancia materna (LM) y alimentación complementaria (AC) hasta bien entrado el segundo año (1). La promoción de este modelo requiere conocer la compleja red de factores que intervienen en las decisiones alimentarias, tanto en el ámbito doméstico como público. Especial atención merece la disponibilidad comercial de fórmulas para la alimentación infantil (FAI o fórmulas) en el mercado global, y su capacidad de

1. Área Salud y Sociedad, Departamento de Atención a la Salud, Universidad Autónoma Metropolitana -Xochimilco (UAM-X), Mexico.
2. Departamento de Estudios Experimentales y Rurales. Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico.

Correspondencia a: Pilar Torre, Universidad Autónoma Metropolitana Xochimilco - Atención a la Salud. Calzada del Hueso 1100 Villa Quietud, Coyoacán Ciudad de México 04960, México. Tel: 52-55-5483-7244. Email: ptorre@correo.xoc.uam.mx

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sustituir una cantidad equivalente de leche materna. La AI contiene a la LM, pero no se reduce sólo a ésta; cuando el *estatus alimentario infantil* no es LME, las familias adquieren fórmulas y otros productos para alimentar a los bebés. El uso de FAI, agua, tés, sueros y otros alimentos, durante los primeros 2 años, no está suficientemente documentado ni se aborda correctamente en los servicios de salud.

Las FAI están definidas por el Código Internacional de Comercialización de Sucedáneos de la Leche Materna (Código) (2) como: "*«Sucedáneo de la leche materna»: todo alimento comercializado o de otro modo presentado como sustituto parcial o total de la leche materna, sea o no adecuado para ese fin.* El Código considera *«Preparación para lactantes»: todo sucedáneo de la leche materna preparado industrialmente, de conformidad con las normas aplicables del Codex Alimentarius, para satisfacer las necesidades nutricionales normales de los lactantes hasta la edad de 4 a 6 meses y adaptado a sus características fisiológicas; esos alimentos también pueden ser preparados en el hogar, en cuyo caso se designan como tales*".

En 1981 el *Codex Alimentarius* publicó el estándar internacional para la composición de las FAI, incluyendo todo el primer año de vida bajo la noción de Fórmula Infantil (*Infant Formula*) (3). Actualmente se identifican fórmulas para tres grupos de edad: 0 a 6 meses, 6 a 12, y 0 a 12 meses. Internacionalmente está en discusión el alcance de la noción Fórmula de Continuación (*Follow up Formula*), para incluir al grupo de 12 a 36 meses de edad (4,5).

En México las FAI están definidas en cuatro Normas Oficiales Mexicanas (NOM): 1. NOM-007-SSA2-2016, que utiliza tres denominaciones: *sucedáneos de la leche materna o humana; fórmula láctea;* y *fórmulas para lactantes o alimentos que sustituyan la leche materna*. 2. NOM-010-SSA-2010. Para la prevención y tratamiento del VIH, reconoce al calostro y a la leche materna como *Fluidos potencialmente infectantes*, y define a las FAI como *sustituto de leche materna (sucedáneos)*. 3. NOM-031-SSA2-1999, define como *Sucedáneo, a la sustancia que por tener propiedades parecidas a otra puede reemplazarla*. 4. NOM-131-SSA1-2012, que se refiere específicamente a la composición y preparación de fórmulas, define *Fórmula para lactantes (…) durante sus primeros meses de vida; Fórmula de continuación (…) a partir del sexto mes y para niños de corta edad*. Añade los productos *para necesidades especiales de nutrición*, para todo el primer año, y define como *Lactantes, a los niños hasta los doce meses de edad*.

El Cuadro Básico de Medicamentos (CBM) (6), instrumento que regula la compra de insumos para las instituciones gubernamentales de salud, sitúa las fórmulas en el *Grupo Nº 15 Nutriología*, y describe nueve tipos, utilizando la combinación de conceptos, *sucedáneo* para las destinadas a los menores de 6 meses, y *fórmula* para las del grupo de 6 a 12 meses.

Explorar la arista comercial de la AI presenta desafíos teóricos, éticos y políticos que merecen atención por parte de las autoridades sanitarias, la academia y la sociedad en su conjunto, donde los referentes de la promoción de la salud ofrecen fundamentos para la acción. Así, la dinámica del mercado de fórmulas en México constituye una pregunta de investigación pertinente.

Justificación

Indagar el mercado de FAI se fundamenta en el panorama de la lactancia materna en México, pues desde los años 70 se ha documentado su disminución, en todas sus modalidades y en todas las edades infantiles (7–9). Para los menores de 6 meses, a los que se recomienda LME, la información en encuestas nacionales inició en 2006, se repitió en 2012 y se le prestó especial atención en 2015. Encuestas anteriores incluían a este grupo entre los "menores de un año" o "menores de cinco años". Entre 2006 y 2012, a nivel nacional la LME pasó de 22.3% a 14.4% y de 36.9% a 18.5% en el medio rural (10,11) cifras, cuando menos, preocupantes. La encuesta ENIM 2015 (12), indica que 94.9% de los nacidos vivos fueron alguna vez amamantados, 30.8%[1] de los menores de 6 meses recibe LME, 38.6% están con lactancia predominante y, aunque la encuesta no lo señala, es razonable suponer que el tercio restante no recibe LM y son alimentados con fórmulas y otros productos; 66.4% de los menores de 2 años utilizó biberón el día anterior. Si en la actualidad más de dos tercios de los menores de 6 meses en México no reciben LME, la pregunta es ¿cómo se alimentan? En México ocurren cerca de 2.3 millones de nacimientos anuales y las modalidades de AI constituyen un campo prioritario de la promoción de la salud, ya que la LM como modelo alimentario hasta los dos años ha disminuido consistentemente.

Objetivo

Por lo tanto, el objetivo de este artículo es presentar la disponibilidad de productos y las diferencias de los precios al menudeo en la Ciudad de México, así como el volumen y valor del mercado nacional de FAI, para contribuir a dimensionar el fenómeno oferta/demanda comercial de fórmulas infantiles, frente a la compleja tarea de la promoción de la LM en todos los ámbitos sociales.

Metodología

Se ofrecen dos aproximaciones. La primera presenta un panorama transversal de la oferta al menudeo, mediante la observación directa en tiendas de diversos tipos en la Ciudad de México (CDMX); ciudad capital con la mayor cantidad y densidad de población del país y, se presume, toda la diversidad de productos y el rango de precios, aunque carecemos de datos para demostrarlo.

Para la selección de los establecimientos a observar, se dividió la CDMX en cuadrantes, se localizó una estación de transporte colectivo masiva, se caminó por la calle más transitada hasta encontrar un establecimiento formal que vendiera FAI y completar 7 u 8 establecimientos por cuadrante. Entre febrero y julio de 2016, se observaron 35 establecimientos, la mitad localizados en zonas con grado de marginación muy bajo, la otra mitad distribuidos en zonas con grado de marginación muy alto, alto, medio y bajo (13).

En cada establecimiento se identificaron las FAI y, conforme a lo señalado en las etiquetas, se registró el nombre del producto, el grupo de edad al que van destinados, el fabricante, la presentación, el contenido y el país de procedencia. El precio al consumidor se registró de lo mostrado en el anaquel, en el producto mismo o a pregunta expresa para el caso de las farmacias. Se integró una base de datos por establecimiento, con 719 registros.

La segunda aproximación establece, retrospectivamente, la magnitud del volumen, en miles de toneladas, y del valor, en millones de dólares, de las ventas nacionales entre 2012 y 2016, del producto identificado como: *leche en polvo para lactantes (Clase 311512, Familia 210, Producto 214)* (14). La información se obtuvo de las bases de datos electrónicas del Instituto Nacional de Estadística, Geografía e Informática (INEGI) y de la Secretaría de Economía (SE), consultados durante el primer trimestre de 2017.

Resultados

La disponibilidad comercial de FAI en la CDMX

Se encontraron 79 productos destinados a los menores de un año, distinguiendo tres grupos de edad: 25 para menores de 6 meses; 18 para los de 6 a 12 meses; y 36 para el grupo de 0 a 12 meses. Se identificaron 13 compañías fabricantes; Nestlé® fabrica el 25% de los productos encontrados. Nueve compañías tienen productos para los tres grupos de edad. Holanda es el país de origen del mayor número de productos, 24; seguido por México, 22; de Irlanda, EUA, España, Francia, Alemania y Argentina provienen entre 7 y 2 productos, y desde Polonia y Suiza solamente 1. En todos los establecimientos se encuentran productos fabricados en México, mientras que los importados se encuentran en zonas con grado de marginación bajo y medio.

La mayoría de FAI vienen en latas que contienen desde 375 hasta 1400 g de producto en polvo, 80% fueron latas con 400 g. Se encontraron dos productos líquidos, listos para usarse, con 237 mL (*Similac® Líquida* 1 y 2), y un producto en polvo, en sobres con 135 g (*Nidal*®), con los que puede prepararse un litro de fórmula.

El Cuadro 1 presenta un panorama de los precios para una selección de 28 productos, considerando latas de 400g; agrupados por edad; al menos un producto de cada fabricante; las de mayor y menor precio; con la mayor diferencia de precios para un mismo producto.

De las FAI destinadas a los menores de 6 meses, la diferencia de precios entre la más cara y la más barata fue de 4.4 veces, y para un mismo producto 2.35 veces (*Isomil1*®). Para el grupo de 6 a 12 meses, la diferencia de precios entre productos fue 3.75 veces, y para el mismo producto, 2.22 veces (*Similac2*®). Los productos de menor precio para ambos grupos rondaron los 5 dólares, los de mayor precio los 21. Las FAI para el grupo de 0 a 12 meses tuvieron tanto los precios más altos como el producto más costoso: 33.42 dólares (*Alfamino*®). El precio de todos los productos superó el valor del Salario Mínimo Nacional Diario (SMND) en 2016, de casi 4 dólares por día.

Cuadro 1. Precios Mínimos y Máximos en Dólares[a] y en Salarios Mínimos[b]. 28 FAI Seleccionadas, Según Grupos de Edad (0–6 Meses, 6–12 Meses, 0–12 Meses). Latas de 400 g. CDMX, 2016.

Productos	*Fabricante*	*País de origen*	*Precio mínimo*	*Precio máximo*	*Salarios mínimos*
FAI para 0–6 meses					
Good Start Optipro 1	Nestlé	México	18.22	21.48	5.45
Aptamil Premium 1	Danone nutricia	Polonia	9.16	9.52	2.41
Sma Gold 1	Wyeth	México	8.89	11.75	2.98
Novamil 1	Bayer	México	6.55	13.48	3.42
Isomil 1	Abbott	Holanda	6.49	15.19	3.85
Nan 1 LR	Nestlé	México	5.93	9.79	2.46
Nan Optipro 1	Nestlé	México	5.26	10.24	2.60
Formulac Simi 1	Farmacias Similares	México	4.80	4.80	1.20
Beu 1	Fraca	España	4.15	4.15	1.05
FAI para 6–12 meses					
Blemil Plus 2	Ordesa/Sanfer	España	15.58	17.14	4.35
Novamil AE 2	Bayer	Francia	10.16	10.19	2.58
Aptamil Premium 2	Danone nutricia	Holanda	9.16	9.52	2.41
Similac 2	Abbott	Irlanda	7.01	15.58	3.95
Formulac Simi 2	Farmacias Similares	México	4.80	15.58	1.21
Nan Optipro 2	Nestlé	México	4.77	5.28	1.34
Beu 2	Fraca	España	4.15	4.15	1.05
FAI para 0–12 meses					
Alfamino	Nestlé Health Science	Suiza	33.42	33.42	8.48
Puramino	Mead Johnson Nutrition	E.U.A.	28.62	28.62	7.26
Neocate lcp	Danone nutricia	Irlanda	24.42	28.46	7.22
Enfamil Soya Premium	Pisa	México	13.91	28.08	7.13
Aptamil HA	Nestlé	Holanda	13.69	14.93	3.79
Frisolac Gold sin Lactosa	Pisa	Holanda	12.40	12.40	3.14
Good Start Supreme Premature	Nestlé	Alemania	10.70	12.13	3.08
Nan Soya	Nestlé	E.U.A.	10.30	12.41	3.20
Sma AR Gold	Wyeth	Irlanda	8.95	9.11	2.31
Nan Prenan	Nestlé	Holanda	8.17	9.60	2.43
Nan sin Lactosa	Nestlé	Holanda	6.79	11.32	2.87
Nan Prebio AE	Nestlé	Alemania	5.82	7.83	1.98

[a] 18.55 pesos mexicanos/dólar. Fuente: SAT al 30 de junio 2016.
[b] SMND 2016: 73.04 pesos /día.

Suponiendo un consumo de 750 mL/día, una familia con un bebé menor de 6 meses, alimentado con la fórmula más barata (*Beu1*®) gastaría diariamente 26% del SMND, pero si comprara la más cara (*Gold Star Optipro*®), en el establecimiento más caro, gastaría 136%. Para un bebé de 6 a12 meses, alimentado con *Beu2*®, se gasta el mismo 26% del SMND, mientras que con *Blemil Plus 2*®, se gastaría 108%.

Atención especial merece *Nidal*®, ya que en la presentación de 135 g, que se vende en 0.54 dólares, el costo de alimentación diaria corresponde al 33% del SMND; mientras que en la presentación de 1100 g, corresponde al 21%. Así, las familias que no pueden comprar las presentaciones grandes adquieren más caro cada gramo del mismo producto.

Dimensiones macroeconómicas de las FAI en México

La Figura 1 muestra a 2014 como el año con el mayor volumen y valor de FAI vendidas en el país, casi 81 mil toneladas de producto en polvo, con un

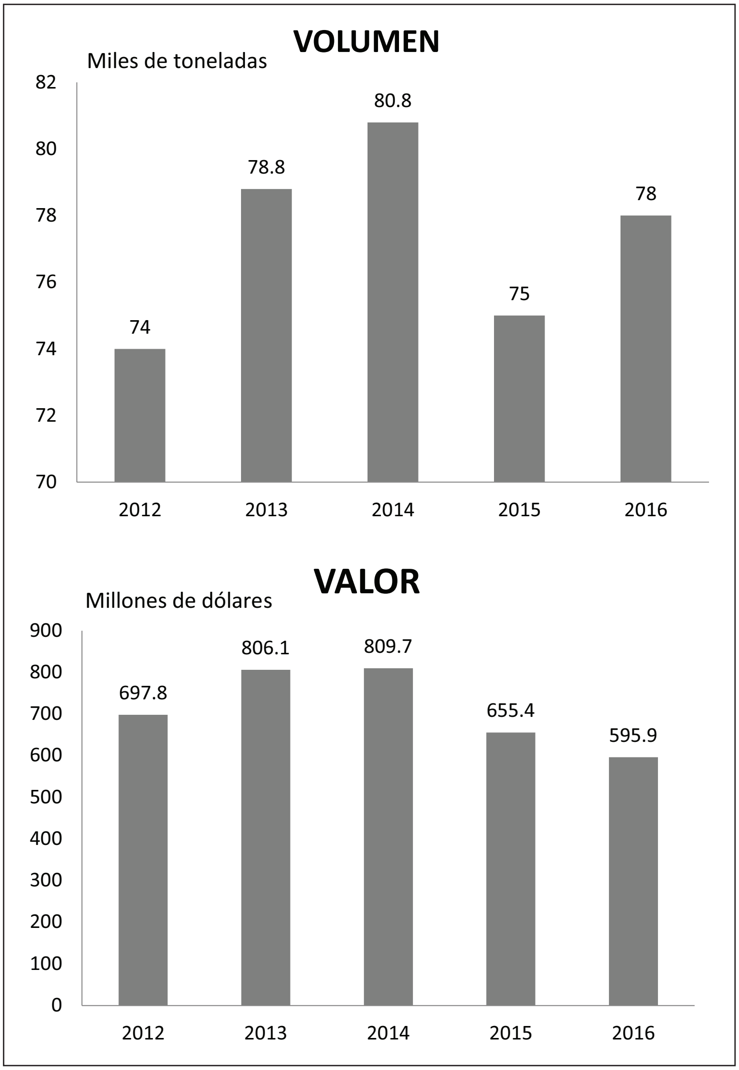

Figura 1. Volumen en Miles de Toneladas y Valor en Millones de Dólares.
de las Ventas Nacionales de Leche en Polvo para Lactantes (2012-2016).
Fuente: elaboración propia con base en INEGI y SE.

valor cercano a 810 millones de dólares (14,15). Estos datos reflejan la dinámica de los mercados de fórmulas en América Latina, que entre 2013 y 2014 crecieron un 37.3% (16).

Algunos elementos de la dinámica mercantil de las multinacionales que producen FAI, tienen relación con lo que se importa y exporta en México. En el periodo estudiado, la balanza comercial fue favorable a México, por cada mil toneladas que se importaron, se exportaron 6 mil 500. En 2015, el precio promedio de la tonelada de productos importados fue de 9815 dólares, mientras que el precio promedio de las exportaciones fue de 5888 dólares/tonelada (14,15). De acuerdo al origen y destino de importaciones/exportaciones, México compra productos caros desde Europa y vende productos baratos a Centro y Sudamérica.

Discusión

Es ampliamente reconocido que la lactancia materna ofrece enormes ventajas a la salud infantil y materna, frente a la alimentación con fórmulas. La LM es impulsada desde el marco de la promoción de la salud por asociaciones académicas, profesionales y gremiales (17), y está presente en enunciados constitucionales y jurídicos. Estrategias como *Salud en Todas las Políticas* (18) y *Ciudades Saludables* (19), requieren la inclusión de temas de salud en todos los espacios de la vida social y política, especialmente en lo referido al acceso a alimentación saludable y agua limpia, frente a las evidencias de la desigualdad social.

El volumen nacional de FAI en 2016, 78 mil toneladas de producto en polvo, a dilución normal[2], generó una disponibilidad de 600 millones de litros de preparación, cuyo valor alcanzó los 596 millones de dólares, a razón de 0.74 dólares por nacido vivo por día. La promoción de la LM con énfasis en la LME, se convierte en un desafío social alimentario que merece más oportunidades, frente al dinamismo del mercado. Bajo el supuesto de que un bebé consume en promedio 750 mL de leche materna por día, la *disponibilidad diaria* de fórmula preparada, generada por el volumen de las ventas nacionales en 2016, fue de 743 mL/nacido vivo/día, que alcanzaría para alimentar a todos los bebés que nacieron en México en ese año.

La disponibilidad de FAI permite deducir que los fabricantes han desarrollado estrategias mercadotécnicas basadas en el *marketing mix* (precio, producto, distribución y promoción) (20) que han resultado más efectivas que los instrumentos regulatorios del Estado, y que los discursos en favor de la lactancia. Los aspectos mostrados en este estudio (producto, precio y disponibilidad) se conjugan con la dinámica demográfica y con muchos aspectos de la vida cotidiana de las mujeres y sus familias, para formar la diversidad de modalidades de AI. Por diversas razones, insuficientemente exploradas, las mujeres dejaron de amamantar porque la alimentación con fórmulas y biberones les resultó más conveniente. Entre los elementos disuasivos de la lactancia en México, se encuentra la prestación laboral denominada "Ayuda en especie para la lactancia" contenida en la Ley General de Salud (art. 64 fr. II), que convirtió al Estado Mexicano en proveedor de FAI a través de los servicios de salud de las instituciones de seguridad social, desde hace décadas.

A 11 años de un estudio similar en la misma CDMX (21), se observó un incremento en el número de productos, de 27 en 2005 a 79 en 2016, también los tipos y las especificaciones de consumo, así como los fabricantes y países de origen. De este modo, la disponibilidad comercial va al alza, cuyo consumo sólo se modula mediante los precios al consumidor. Tanto en fórmulas de inicio como de continuación, la proporción del SMND para la alimentación diaria en 2016 fue similar a la observada en 2005 para los productos más baratos, pero la diferencia se amplió en los productos más caros. En 2005, la presentación más frecuente fueron latas con 454 g de producto en polvo; en 2016, son latas con 400 g, es decir, menos producto en envases que conservan la misma apariencia.

Para que la LM sea una modalidad alimentaria efectiva, desde el nacimiento hasta los 24 meses, es necesario generar las condiciones de posibilidad para que pueda llevarse a cabo. Existen plataformas de acción, con consensos internacionales que México ha firmado, que son instrumentos para la promoción de la salud infantil y materna. El Código mismo (2), la Declaración de Innocenti (22), la Cumbre Mundial en Favor de la Infancia (23), los 10 Pasos para la Lactancia Materna Exitosa (24), los Objetivos del Desarrollo del Milenio (25) y hoy, el Desarrollo Sostenible (26). Se cuenta con propuestas de capacitación de la OMS (27), de agencias como Wellstart® o La Leche League, que ofrecen alternativas más participativas, menos medicalizadas y menos subordinadas al mandato de la industria alimentaria. Se trata entonces de promover la LM mediante acciones prioritarias en los programas de salud que operan a nivel nacional, como los de Control del Niño Sano y Atención Materno Infantil, considerando que se observaron diversas denominaciones e indicaciones de uso de FAI en los documentos y programas gubernamentales, que reflejan la diversidad comercial impuesta por los fabricantes, lo que requiere acciones de revisión y uniformidad normativa por parte del Estado, para regular y contener el mercado a favor de la disminución de la demanda de fórmulas.

La falta de difusión, discusión, consenso, operación y verificación del cumplimiento de estos instrumentos, facilita que las empresas interpreten la normatividad a conveniencia, lo que permite procesos de intereses cruzados. Un ejemplo es la presencia de destacados investigadores nacionales como conferencistas (*speakers)*, en *cursos de actualización* organizados por empresas líderes (28), cuya participación no puede considerarse inocua; pues, aunque no están obligados a mencionar los productos, la marca es omnipresente en materiales promocionales, obsequios, constancias de asistencia y en la escenografía general, y está asociada a la nutrición infantil de calidad, basada en investigación científica y en la tradición. Son violaciones al Código de la OMS, tanto en lo referido a ofrecer incentivos a los profesionales de salud, como a la incompatibilidad de estas prácticas con los principios y objetivos del Código.

Conclusiones

Los resultados muestran que la oferta de FAI está asegurada en el mercado nacional. El reto social de desalentar la demanda de fórmulas, mediante acciones afirmativas en favor de la LM es enorme. Requiere convertirse en prioridad para todos los sectores de la sociedad (salud, educativo, cuerpos legislativos, sociedad civil), reorientando las acciones y recursos hacia políticas públicas que incorporen en sus agendas los principios de la promoción de la salud, mediante la construcción de decisiones informadas en el ámbito familiar y la capacitación de profesionales de la salud. La visión hegemónica de la promoción de la LM ha estado basada en modelos que subvaloran o excluyen los determinantes sociales de la salud, sin considerar las inequidades en las vidas de las mujeres y sus familias.

Una compleja combinación entre la dinámica familiar, las condiciones del trabajo materno, las dificultades propias de la lactancia, el uso rutinario de fórmulas y biberones durante la atención del parto, la desinformación médica, el prestigio social de las fórmulas, el papel del Estado y la mercadotecnia avasalladora de los fabricantes, tendrán que ser analizadas articulando estudios de casos y tendencias generales para obtener mejores respuestas.

Surgen interrogantes: ¿Será posible revertir el uso de fórmulas con los argumentos de la salud infantil y materna? Brasil, Colombia y Honduras han logrado avances (29), mientras que en México se ha hecho poco y desarticuladamente. La promoción de la LM tendría que alcanzar el estatus de programa prioritario y poner en práctica las directrices de la *Estrategia Nacional de Lactancia Materna 2014-2018* (30). Restablecer el Centro Nacional de Capacitación en Lactancia Materna, que operó en el Hospital General de México desde 1989 hasta 2000, y generar centros regionales basados en los enfoques más adecuados e incluyentes de promoción y capacitación. Instaurar un organismo intersectorial equivalente al Comité Nacional de Lactancia Materna, de entonces, encargado de la gestión difusión, seguimiento y verificación del Código, así como de la evaluación sistemática de las metas establecidas en los programas y estrategias nacionales, con facultades para sancionar y dirigir adecuadamente los incumplimientos e irregularidades.

El siglo XX desarrolló la alimentación con fórmulas, el desafío de hoy es la gestión política de la participación ciudadana en la toma de decisiones para una vida saludable, donde decidir por LM forma parte de los principios de la promoción de la salud. Sin embargo, para poner en práctica las decisiones favorables a la LM, se requiere generar la disponibilidad materna y brindar a las mujeres la opción real de amamantar, cuando así lo decidan, bajo el principio de ofrecer a los niños y las niñas, la mejor alimentación posible.

Es momento de considerar la AI en el marco de los determinantes sociales de la salud (31), con miras a reducir las desigualdades, a la cobertura universal, hacia el desarrollo sostenible (32), los derechos reproductivos y la justicia social. La discusión sobre la promoción de la LM constituye un imperativo de las políticas públicas del Siglo XXI, en la búsqueda del bienestar mayoritario y el desarrollo colectivo (33). Mientras la disponibilidad comercial de FAI continúe insuficientemente regulada, la promoción de la lactancia como modalidad alimentaria ideal para el óptimo crecimiento y desarrollo infantil, no será una realidad. La magnitud del desafío sólo podrá enfrentarse con entornos favorables a la LM, alianzas intersectoriales, equidad en salud y mayor participación de profesionales de la salud, autoridades locales y la comunidad.

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Conflicto de intereses

No se declara.

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Notas

1. Los datos de la prevalencia de LME en las encuestas de 2012 y 2015 no son comparables, por diferencias metodológicas (14.4% vs. 30.8%).
2. “Una medida por onza” = 4 g de producto en polvo en 29.6 mL de solución en agua = 13.5%.

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Resúmenes

Los desafíos de desarrollar un plan de bienestar infantil en Suráfrica: lecciones de una comunidad comprometida con el Proyecto de Investigación VIH/SIDA

J. Beard, A. Skalicky, B. Nkosi, T. Zhuwau, M. Cakwe, J. Simon y M. Bachman DeSilva

El proyecto de investigación para la salud y el bienestar infantil Amajuba midió el impacto de la orfandad causada por el VIH/Sida en hogares surafricanos entre el 2004 y el 2007. La comunidad fue el componente central del proyecto, y lo continuó hasta el 2010. Aquí describimos la interacción entre los investigadores y la comunidad para reclutar participantes, darse a conocer en el medio local y lograr su aceptación, estimular el interés en los resultados del estudio y promover la integración de los servicios de bienestar social del gobierno para las familias y la niñez afectadas por el VIH/SIDA. Este informe detalla la experiencia de los investigadores y se basa también en reportes de proyectos, documentos públicos y artículos publicados, con el objetivo de registrar las lecciones aprendidas durante dicha colaboración entre los investigadores de dos universidades y una comunidad en Suráfrica, en un periodo que abarcó siete años. La experiencia se analiza luego en el contexto de la investigación aplicada al compromiso comunitario que ha comenzado a surgir de la literatura sobre salud mundial. (Global Health Promotion, 2020; 27(2): 6–16)

Desarrollo de un marco conceptual nacional y de instrumentos de medición de la Responsabilidad Social Organizacional y rendición de cuentas para la salud (OSRAH, por sus iniciales en inglés)

N. Keshavarz Mohammadi, F. Taheri, M. Motallebi, A. Yazdanpanah, Y. Khosravi, M. Borhani Jebeli, H.J. Corbin y A.A. Farshad

Las organizaciones pueden tener un impacto (positivo o negativo) en la sociedad a través de sus acciones y decisiones. Dada esta realidad, es importante que dichas entidades se hagan responsables y rindan cuentas por las consecuencias de sus actos, lo que se ha llamado 'responsabilidad social'. Sin embargo, 'responsabilidad social', como se concibe en la literatura, deja de lado un enfoque específico en la salud como un objetivo social. Además, no hay herramientas para plasmar este concepto de una manera holística que facilite la implementación y el monitoreo del crecimiento organizacional. Este artículo presenta el proceso de desarrollo de un marco conceptual más integral y de los instrumentos que puedan evaluar y hacer un seguimiento a la responsabilidad social organizacional y la rendición de cuentas para la salud (OSRAH, por las iniciales en inglés). Hicimos una revisión tanto de la literatura publicada como de la gris y nos concentramos en las consultas de expertos y en las discusiones de grupos focales. El marco inicial de la OSRAH y de los instrumentos de autoevaluación estuvo listo para ser implementado y utilizado por 95 organizaciones en un certamen nacional que se llevó a cabo en Irán en febrero del 2017. Los datos recolectados durante este evento mostraron que las organizaciones obtuvieron el puntaje más bajo en el aspecto de la salud comunitaria y el más alto en el de la salud de sus empleados. La OSRAH y los instrumentos de evaluación representan una nueva forma de comprender la salud y sus determinantes en las organizaciones que no pertenecen al sector salud. Este concepto integra la salud a la ya existente cultura de Responsabilidad Social Corporativa (RSC). El proceso de creación de las herramientas de medición y de su implementación durante el festival nacional de OSRAH en Irán impulsó la acción intersectorial. Es una experiencia que puede inspirar a investigadores y profesionales en otros países, especialmente aquellos en desarrollo, para crear su propia definición y su propio marco para evaluar la responsabilidad y la rendición de cuentas. (Global Health Promotion, 2020; 27(2): 17–25)

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Impacto de la Iniciativa en favor de la nutrición en la escuela: análisis de los datos antropométricos y bioquímicos en niños en edad escolar en Uagadugú

C. Elkhouri Edde, H. Delisle, C. Dabone y M. Batal

La Iniciativa en favor de la nutrición en la escuela (Nutrition-Friendly School Initiative) fue desarrollada en el 2006 para disminuir la carga de malnutrición e implementar una base piloto en las escuelas primarias de Uagadugú (Burkina Faso) que se puso en marcha en el 2009, cuando se hizo un estudio de base que se repitió en el 2014 para evaluar su impacto. En este documento registramos los datos antropométricos y bioquímicos obtenidos tanto en el estudio de base como en la segunda muestra, ambos realizados a estudiantes de quinto grado en las mismas escuelas primarias de Uagadugú. Fueron seleccionadas seis escuelas para ser intervenidas y comparadas con seis instituciones testigo. En total se observaron 699 alumnos en el 2009 y 651 en el 2014. A todos los estudiantes se les hicieron mediciones antropométricas y de hemoglobina, mientras que el retinol sérico fue analizado en una muestra aleatoria para verificar los niveles de Deficiencia de Vitamina A (DVA). Se utilizaron pruebas-t y chi cuadrado para comparar medias y proporciones, y con la regresión logística múltiple se examinaron las asociaciones entre parámetros nutricionales y características escolares. La tasa final para anemia y DVA fue de 32,6% y de 26,1%, respectivamente, por debajo del 40% y del 38,7% de la línea de base. La tasa de prevalencia de retraso en el crecimiento fue de 8,1%, la de delgadez fue 8,7% y la de sobrepeso/obesidad 4,4%. En el 2014, la delgadez disminuyó significativamente comparada con la del 2009, pero no hubo cambios en las cifras de retraso en el crecimiento, incluso si las de sobrepeso/obesidad mostraron una tendencia ascendente. Al comparar las escuelas intervenidas con las escuelas de control, en el estudio final, las únicas diferencias significativas fueron dadas por una menor delgadez y una menor anemia en las escuelas intervenidas. Sin embargo, la prevalencia de anemia también había sido significativamente baja entre el grupo de intervención durante el estudio de base. Nuestros resultados resaltan la importante mejora del estatus nutricional de los escolares en Uagadugú y sugieren un positivo, aunque modesto, papel de la Iniciativa en favor de la nutrición en la escuela en la reducción de la delgadez, pero no del sobrepeso. (Global Health Promotion, 2020; 27(2): 26–34)

Análisis de partes interesadas sobre la colaboración comunitaria para reducir la inequidad en salud en un área desfavorecida de Corea del Sur

H.H. Heo, W. Jeong, X.H. Che y H. Chung

La colaboración intersectorial entre la salud y los otros sectores, así como entre el gobierno y las organizaciones no gubernamentales, se ha considerado como el camino hacia la equidad en salud. Utilizamos un enfoque de métodos mixtos para evaluar las relaciones colaborativas entre los diferentes sectores gubernamentales y la sociedad civil, y para sugerir intervenciones en promoción de la salud y posibles normativas para los habitantes pobres de las áreas urbanas más desfavorecidas. Un total de 18 participantes que estaban involucrados en intervenciones de promoción de la salud y en procesos normativos relacionados con una zona urbana de Seúl fueron reclutados utilizando métodos de muestreo intencionales. Entre los participantes hay partes interesadas que trabajan para el gobierno o que tienen un compromiso con él (3), instituciones públicas de salud (5), prestadores de servicios sociales (3), organizaciones de base comunitaria (OBC) (4) y organizaciones de inspiración religiosa (3). Realizamos entrevistas semiestructuradas individuales y luego recopilamos los datos. Los datos cuantitativos fueron analizados mediante un estudio de las redes sociales y los cualitativos a través de procesos iterativos y de consenso. La observación de las redes sociales indicó que las OBC juegan el papel más importante a la hora de compartir y controlar los recursos informativos para la promoción de la salud. Un análisis a las partes interesadas mostró que las OBC veían de manera neutral y negativa la posibilidad de colaborar con otras. Surgieron tres temas relacionados con los desafíos para la colaboración intersectorial: (1) Falta de confianza y comunicación,

(2) Necesidad de coalición con un líder comprometido para futuras colaboraciones y (3) Existencia de compartimentos organizacionales y políticos entre y a través de los sectores públicos. Una mayor comprensión de cómo se vive actualmente la colaboración y los desafíos que esta plantea puede ayudar a conformar la planeación y la implementación de estrategias de intervención complejas, así como de políticas adaptadas a las personas más vulnerables de los sectores deprimidos. La acción colaborativa liderada por la comunidad empodera a sus integrantes, sobre todo aquellos de sectores marginados, para concebir un entorno saludable. (Global Health Promotion, 2020; 27(2): 35–44)

Fortalecer la capacidad – análisis del impacto de la formación basada en evidencia en Europa: un enfoque de métodos mixtos

N. Serrano, G. Diem, V. Grabauskas, A. Shatchkute, S. Stachenko, A. Deshpande, K.N. Gillespie, E.A. Baker, E. Vartinaien y R.C. Brownson

Objetivo: desde el 2002, cada año se ofrece en Europa el curso 'Salud pública basada en evidencia: un curso en prevención de Enfermedades no Transmisibles (ENT)', como una colaboración entre el Centro de Investigación en Prevención de San Luis y otras organizaciones internacionales. El objetivo central es fortalecer la capacidad de los profesionales de la salud pública para que puedan poner en práctica y adaptar los programas basados en evidencia a la prevención de las ENT. El presente estudio busca evaluar la eficacia de la formación con el fin de mejorar y adaptar otras sobre la salud pública basada en evidencia (EBPH, por sus iniciales en inglés).
Métodos: un total de 208 individuos participaron en la edición europea de este curso entre el 2007 y el 2016. De ellos, 86 (41%) completaron una encuesta en línea. Los resultados medidos incluyen la frecuencia de uso de habilidades/materiales/recursos de la EBPH, los beneficios de utilizar la EBPH y las barreras que esto implica. El análisis se llevó a cabo para observar si el tiempo de toma del curso afecta la eficacia de la EBPH. Los participantes fueron luego estratificados por frecuencia de uso de EBPH (baja o alta) y se les pidió responder entrevistas telefónicas en profundidad para examinar el impacto a largo término del curso (n = 11 (6 bajo uso, 5 alto uso)).
Hallazgos: los beneficios más reportados entre los participantes incluyen: adquirir conocimientos sobre un nuevo tema (95%), analizar cómo se pueden aplicar estos conocimientos en su propio trabajo (84%) y convertirse en un mejor líder para promover la toma de decisiones basada en evidencia (82%). Entre los obstáculos para usar EBPH, los argumentos más recurrentes fueron: la carencia de fondos para continuar con la capacitación (44%), colegas de trabajo que no tienen una formación en EBPH (33%) y falta de tiempo para implementar los métodos de EBPH (30%). Las entrevistas indicaron que tanto el sitio de trabajo como el apoyo de los líderes son importantes para facilitar el uso de EBPH.
Conclusión: aunque el curso sobre EBPH efectivamente beneficia a los participantes, aún existen barreras para la aplicación extensa de métodos basados en evidencia. Tener acceso y poder comunicar con quienes ocupan un papel de liderazgo facilitaría el aumento de la EBPH entre los países. (Global Health Promotion, 2020; 27(2): 45–53)

'Cuando se es un recopilador de datos, uno se debe esperar cualquier cosa'. Obstáculos, límites y avances: percepciones de una experiencia de recolección de datos en Suráfrica

K. Roberts, S. Gordon, L. Sherr, J. Stewart, S. Skeen, A. Macedo y M. Tomlinson

El impacto del proceso de investigación en quien lo realiza es un naciente tema de interés. La recolección de datos en la mayoría de países de bajos y medianos ingresos es, con frecuencia, la responsabilidad de miembros

de la comunidad que están identificados y que han recibido una capacitación específica para desempeñar esta labor. Cuando la investigación implica datos en salud mental y en bienestar social, los recolectores deben tener las competencias específicas necesarias, pues la tarea de recopilar los datos puede afectarlos. Este estudio busca explorar las experiencias y las necesidades de los recolectores de datos en Suráfrica, utilizando métodos cualitativos para examinar el impacto de la recopilación de datos en estos investigadores. Diez y nueve personas, involucradas en la recolección cara a cara, respondieron entrevistas semiestructuradas que exploraban sus percepciones, sus actitudes y sus experiencias. Los análisis temáticos revelaron obstáculos y desafíos asociados con la investigación, complicaciones derivadas de los límites en la relación entre el recolector y el participante, y los beneficios de estar involucrados en una investigación para los individuos y la comunidad. Se describieron numerosos retos y oportunidades. Los hallazgos subrayan qué tan beneficiosa, y con frecuencia ignorada, es la contribución de los recolectores de datos y presentan unas consideraciones para tener en cuenta en el momento de planear e implementar una futura investigación, con el fin de garantizarles un apoyo adecuado y una estandarización de esta práctica. (Global Health Promotion, 2020; 27(2): 54–62)

¡Actívate Ya! Coaprendizaje sobre la prevención del tabaquismo escolar y promoción de la actividad física entre estudiantes de secundaria en Uruguay

A.E. Springer, M.B. Harrell, L. Martínez Gomensoro, M. Traversa Fresco, S. Rogers, M. Florines, V. -Moreno, J. Lee, C.L. Perry, E. Bianco y D. Estol

Objetivo: ¡Actívate Ya! fue un ensayo controlado aleatorizado en grupo que buscaba desarrollar y evaluar el impacto de una intervención en las escuelas para prevenir el consumo de cigarrillo y promover la actividad física en estudiantes de secundaria en Uruguay. En segunda medida, se buscaba evaluar el impacto del programa en los factores de riesgo psicosociales y de protección relacionados con el tabaquismo y la actividad física.

Métodos: diez y seis escuelas y $n = 654$ estudiantes participaron en la investigación. La intervención de un año incluyó un plan de estudios para desarrollar en el aula, un programa extraescolar, pausas activas y un certamen de clausura. Un cuestionario autoadministrado medía el proceso en tres momentos. A partir de modelos de regresión de efectos fijos se evaluaron las diferencias en los resultados por condición del estudio.

Resultados: mientras que se encontraron efectos positivos de la intervención en cuanto a determinados resultados psicosociales relacionados con el tabaquismo, no se detectó que hubiera un impacto en el consumo de cigarrillo después de un año o que hubiera una susceptibilidad a consumirlo. En cuanto a la actividad física, después de siete días de mediciones mediante el PAQ-C, esta fue significativamente más alta entre los estudiantes intervenidos en general ($p = .048$) y para las niñas ($p = .03$) en las pruebas posteriores. Las niñas del grupo intervenido reportaron una identidad atlética para la actividad física significativamente más alta, un apoyo a sus amigos y profesores en las pruebas posteriores y una visión de la actividad física como una forma de diversión durante el seguimiento ($p < .05$).

Conclusión: los efectos positivos a corto término de ¡Actívate Ya! en la actividad física y los resultados relacionados con las niñas apoyan la idea de la utilidad de la promoción de la salud en el ámbito escolar en Uruguay. Se necesita una investigación adicional para determinar cuáles son las estrategias más efectivas para prevenir el tabaquismo entre los estudiantes y promover la actividad física para los varones en este contexto (Global Health Promotion, 2020; 27(2): 63–73).

Llegar a las mujeres jóvenes marginadas para la prevención del VIH en Botsuana: análisis piloto de redes sociales

D. Loutfi, N. Andersson, S. Law, L. Kgakole, J. Salsberg, J. Haggerty y A. Cockcroft

Cerca de un quinto de la población de Botsuana está infectado por el VIH. El ensayo de intervención Interministerial Nacional es una prueba para evaluar el impacto de las tasas de VIH en una intervención estructural que reenfoca los programas de apoyo gubernamental estructural en favor de las mujeres jóvenes. Es todo un desafío asegurar que la intervención alcance a todas las mujeres jóvenes vulnerables en una comunidad determinada. Sabiendo que el reclutamiento puerta a puerta no había sido eficiente en un trabajo previo, decidimos explorar otras vías para llegar a esta población. Tratamos de entender cómo funcionan las redes de apoyo de las mujeres marginadas y ensayamos la posibilidad de usar las redes sociales para hacer una convocatoria universal en esta población. Se utilizaron análisis egocéntricos y sociométricos para describir sus redes de apoyo. Ellas tienen a otras mujeres y familiares como punto de ayuda y prefieren comunicarse personalmente que mediante las redes sociales. Los mapas de redes muestran cómo estas jóvenes mujeres se conectan entre ellas. Las lecciones que sacamos del programa piloto incluyen una mejor comprensión del uso de las redes sociales como un método de reclutamiento, el tiempo requerido y los tipos de miembros de la comunidad que se pueden ver beneficiados. Las redes sociales pueden ayudar a llegar a otras poblaciones de difícil acceso. (Global Health Promotion, 2020; 27(2): 74–81)

Enfoque integrador de entornos saludables de la promoción de la salud en el entorno laboral para abordar los desafíos de la salud de los trabajadores en Asia-Pacífico

C.T. Pham, C.B. Lee, T.L.H. Nguyen, J-D. Lin, S. Ali y C. Chu

Los entornos laborales en la cada vez más industrializada región de Asia-Pacífico enfrentan las crecientes presiones del desarrollo acelerado por cuenta de la competencia global, la migración y el envejecimiento de la fuerza laboral. Además de tratar lesiones relacionadas con el trabajo, los entornos laborales deben afrontar un incremento del estrés ocupacional, enfermedades crónicas y la carga socioeconómica que esto conlleva. Al mismo tiempo, las intervenciones en la salud laboral todavía están dominadas por un modelo estrecho de cambio de comportamiento. Por esto, el modelo integrador de la promoción de la salud en el área de trabajo que creó la OMS a partir de exitosos proyectos piloto desde 1990, surge como un método oportuno, completo y adecuado para resolver la inquietud de crear ambientes de trabajo contemporáneos, saludables y seguros en la región. En este artículo, resaltamos los retos clave de un entorno laboral saludable en la región Asia-Pacífico y la utilidad del enfoque integrador de entornos saludables para hacer frente a dichos desafíos. Presentamos un breve panorama de los desafíos a los que se enfrentan los sitios de trabajo en la región, luego explicamos el porqué, el qué y el cómo de la promoción de la salud en un medio de trabajo integrado. Ilustramos este modelo mediante ejemplos exitosos de buena práctica y evidencias de los logros de los programas de promoción de la salud en el trabajo en Asia-Pacífico desde el 2002 hasta la fecha, con una atención específica a los programas de promoción de la salud en el trabajo que ha liderado el gobierno en Shanghái, Singapur y Taiwán. Tomando ideas de estos exitosos ejemplos, recomendamos normas políticas y estrategias de facilitación y sostén a las industrias en la implementación de la promoción de la salud en un espacio de trabajo integrado. Concluimos que unas políticas gubernamentales congruentes, combinadas con un apoyo de organismos internacionales en el fomento de capacidad y redes profesionales, son importantes para desarrollar y mantener lugares de trabajo saludables en la región. (Global Health Promotion, 2020; 27(2): 82–90)

Percepciones de género sobre la osteoporosis: implicaciones de los programas de prevención en jóvenes

A. Holland y T. Moffat

La presentación de la osteoporosis como una enfermedad femenina afecta su percepción y la información en prevención que se interioriza y se aplica. Mediante el Modelo de Creencias de Salud utilizado como marco de referencia, se investigaron las percepciones de género sobre la osteoporosis en jóvenes adultos canadienses con el fin de diseñar programas de prevención. Una combinación de la Escala de Creencias de Salud sobre Osteoporosis (OHBS por sus iniciales en inglés) y entrevistas semiestructuradas fue el método elegido para explorar las percepciones de los participantes sobre la gravedad de la osteoporosis, la susceptibilidad y la motivación para involucrarse en actividades de prevención. En el estudio participaron sesenta hombres y mujeres multiétnicos, con edades entre 17 y 30 años, habitantes de Hamilton, Ontario (Canadá). Mientras que los hallazgos de la OHBS indicaron que los dos géneros tuvieron un puntaje alto para autoeficacia, los resultados de las entrevistas cualitativas mostraron actitudes ambivalentes hacia los comportamientos de prevención, dejando ver una desconexión entre los hallazgos cuantitativos y cualitativos. Las percepciones relacionadas con la gravedad y la susceptibilidad revelaron que mientras la osteoporosis fue generalmente vista como una enfermedad que afecta a las mujeres, la percepción del riesgo individual de sufrir la enfermedad fue una negociación entre construcciones de género más amplias y una variedad de factores de riesgo.

Este estudio indica que los programas de prevención de la osteoporosis deberían reconocer activamente las concepciones de la osteoporosis de género y edad (juveniles) con el fin de incrementar los comportamientos de prevención en toda la población para reducir la enfermedad en el futuro. (Global Health Promotion, 2020; 27(2): 91–99)

Liderazgo antitabaco en la comunidad Yolŋu (Yolngu) de la Tierra de Arnhem Oriental, Territorio del Norte: un estudio cualitativo

M. P. Tane, M. Hefler y D.P. Thomas

Este estudio cualitativo examina el liderazgo antitabaco en la comunidad Yolngu, indígenas propietarios de la Tierra de Arnhem Oriental (Australia). A pesar de la alta y desproporcionada prevalencia de fumadores, el estudio encontró que la mayoría de los habitantes promulgó el liderazgo libre de humo en las familias y las comunidades. Mientras hubo una preocupación generalizada por no afectar la autonomía de los otros, los trabajadores de la salud indígenas regularmente aconsejaban a sus pacientes, la familia y a los miembros de la comunidad para que dejaran de fumar. Esto conllevó a una creencia general de que el asunto era mejor tratado por los trabajadores de la salud que por los líderes tradicionales. Proteger a los niños del humo de segunda mano y prevenir el inicio del consumo fue importante para todos los participantes, independientemente de su estatuto de fumador. Una tradicional y altamente valorada conexión cultural al ŋarali’ (tabaco) permanece como parte esencial de las prácticas sagradas de las ceremonias fúnebres, una utilidad social única e importante. El estudio encontró un consenso entre los participantes para respetar esta costumbre. Orientar las conexiones tradicionales al ŋarali’ en un contexto en el que la mayoría de los individuos es adicta al tabaco comercial es un desafío y requiere una aproximación respetuosa y convincente desde el punto de vista cultural. Las iniciativas para el control del cigarrillo con la población Yolngu deberían, por lo tanto, utilizar los actuales líderes antitabaco en el contexto social en el cual el ŋarali’ es valorado y utilizado, como un método que podría resonar en otras naciones indígenas y comunidades de Australia. (Global Health Promotion, 2020; 27(2): 100–108)

Un Internet para Algunos amenaza la salud para Todos: ¿Qué efectos puede tener la revocación de la neutralidad de la red en E.U. sobre la salud individual y de la población?

J. Early y D. Bustillos

En Estados Unidos, la revocación de la popular Orden de Internet Abierto (más conocida como 'neutralidad de la red') por la Comisión Federal de Comunicaciones, ha recibido críticas puntuales de diferentes sectores, pero no ha sido examinada por su efecto potencial en la salud pública. En este comentario nos enfocamos en las implicaciones de este cambio de política en la salud, considerando la opinión de expertos sobre el tema, el contexto histórico y las perspectivas mundiales. Sostenemos que la revocación de la neutralidad de Internet, al ampliar la brecha digital, tiene el potencial de arriesgar la educación en salud y los esfuerzos de promoción, afectando el alfabetismo para salud y exacerbando las inequidades en salud. Al afectar negativamente la capacidad de los usuarios para acceder, comprender y utilizar informaciones sobre salud imparciales basadas en evidencia para mejorar y mantener su salud, la revocatoria de la neutralidad de la red puede entorpecer la visión de la Organización Mundial de la Salud de 'Salud para Todos', desmantelando las protecciones públicas en nombre de un beneficio corporativo. (Global Health Promotion, 2020; 27(2): 109–113)

Un papel para los médicos tradicionales en la promoción de la salud: experiencia de un ensayo de prevención del VIH en Botsuana

A. Cockcroft, L. Kgakole, N. Marokoane y N. Andersson

Los médicos tradicionales han sido ampliamente ignorados en la prevención del VIH, particularmente la prevención primaria. Como parte de un programa de intervención estructural para reducir el riesgo de contraer el VIH en las mujeres jóvenes de Botsuana, capacitamos 147 médicos tradicionales en cuatro distritos, así como asistentes gubernamentales de educación en salud y profesores para activar grupos de discusión en la comunidad y en las escuelas, utilizando un audio-drama de ocho episodios basado en evidencia, en el que se abordaban los roles de género, la violencia de género y cómo estos están relacionados con el riesgo de VIH. Un año después, contactamos 43 de los 87 médicos tradicionales capacitados en dos distritos. La mayoría (32) estaban desarrollando grupos de discusión con hombres y mujeres, en colaboración con los asistentes de educación en salud locales y los profesores. Reclutaron hombres para sus grupos, con frecuencia un reto en las intervenciones comunitarias, y reportaron cambios positivos en la actitud y el comportamiento de los participantes del grupo. Los médicos tradicionales pueden jugar un papel importante en la prevención primaria de la violencia de género y del VIH. (Global Health Promotion, 2020; 27(2): 114–116)

¿Cuáles son los papeles de los trabajadores comunitarios de la salud? Una mirada atrás hacia las filosofías de la atención médica primaria

M. Niang

Este comentario expone los diferentes papeles de los trabajadores comunitarios de la salud (TCS), sus desafíos y limitaciones en una perspectiva histórica de la atención médica primaria (AMP). Primero intentamos mostrar que la filosofía integral de la AMP promulgada en Alma-Ata proponía el papel de los TCS como actores que trabajan en el desarrollo de la comunidad. De otro lado, en los años 80, con el surgimiento de la filosofía selectiva de la AMP, el papel de los TCS se asoció más con el sistema de salud. Concluimos nuestro artículo con una reflexión sobre el balance que puede existir entre estos diferentes papeles sugiriendo que los TCS pueden trabajar en continuidad con el sistema de salud, pero no deberían ser considerados como mano de obra asequible. Además, deben ser apoyados en sus actividades para desarrollar sus comunidades, permitiéndoles participar efectivamente en programas y políticas que les conciernen a ellos y a su comunidad. (Global Health Promotion, 2020; 27(2): 117–120)

Utilizar las leyes para avanzar causas de salud pública: la Agenda de Prisiones Saludables

N. Ismail, J. Woodall y N. de Viggiani

En este comentario proponemos utilizar las leyes para implementar la Agenda de Prisiones Saludables. Evaluamos la eficacia de las leyes para enfrentar las inequidades en las cárceles, damos recomendaciones de cómo los estados pueden mantener sus compromisos internacionales de proteger los derechos de los detenidos a la atención médica y presentar las prisiones como escenarios que promueven la salud. Evaluamos igualmente los desafíos que podrían anular esta sugerencia, tales como el carácter no obligatorio de los compromisos internacionales, la sobrepoblación carcelaria en el mundo y la dependencia de los directores y el personal de las prisiones para implementar la Agenda. El texto concluye con la recomendación de una evaluación más extensa de nuestra propuesta y evalúa la posibilidad de generalizarla a otras agendas de promoción de la salud. (Global Health Promotion, 2020; 27(2): 121–124)

Desafíos de la planificación participativa pública de un Plan regional de promoción de la salud en el contexto institucional belga

Y. Coppieters y B. Scheen

Definir un marco de prevención y de promoción de la salud es un desafío importante para la región belga de Valonia que heredó esta competencia en el 2014. Tres años después, se redactó la primera parte de un Plan de Prevención y Promoción de la Salud, con el fin de definir las prioridades regionales en salud. Este artículo tiene como objetivo presentar el proceso de construcción por sus componentes operacionales y discutir sobre las variables de la implementación de un marco de acción como este a nivel político y con un enfoque participativo. Apoyándose sobre la primera parte del Plan, la administración regional identificó 11 grupos temáticos de trabajo que reunieron más de 150 integrantes. Una guía metodológica desarrolló las cadenas 'objetivos de salud-objetivos específicos-acciones' requeridas y el marco para establecer prioridades entre las acciones según criterios de pertinencia, de coherencia y de viabilidad, así como de planteamiento de objetivos más transversales. El Plan Operacional se basa en valores y en principios que constituyen los fundamentos de la práctica de los actores. La proposición de la programación está estructurada en seis ejes que complementan el diagnóstico de la situación, los principios de la intervención y una programación operacional. Asimismo, se realizó un marco de implementación, de administración y de seguimiento, de evaluación y de actualización del Plan.

El tiempo político no es el mismo que el tiempo necesario para una planificación de calidad. Este trabajo de programación, basado en dimensiones participativas, no se pudo completar debido a los límites del proceso que influenciaron en el contenido. A pesar de que las proposiciones se basan en su mayoría en acciones existentes, hay que subrayar que los participantes vieron en el Plan la oportunidad de innovar y de remediar ciertas carencias que se observan actualmente en Valonia en términos de prevención y de promoción de la salud. (Global Health Promotion, 2020; 27(2): 131-138)

Desarrollo de Zonas de Salud de Aprendizaje y de Investigación en la República Democrática del Congo: enseñanzas útiles de una evaluación cualitativa de experiencias anteriores en el África Subsahariana

G. Michaux, A. Mwembo-Tambwe, Z. Belrhiti, F. Monet y B. Criel

Tres Zonas de Aprendizaje y de Investigación (ZAR por sus iniciales en francés) están siendo desarrolladas por el programa RIPSEC en la República Democrática del Congo (RDC). Es una estrategia que busca utilizar un distrito sanitario como sustrato para crear directores de distritos de salud y adelantar investigaciones sobre los sistemas de salud. El objetivo de este artículo es el de explorar los principios, los efectos y las condiciones de éxito de esta estrategia mediante una evaluación cualitativa de otras experiencias ZAR realizadas con anterioridad en el África Subsahariana. Se trata de cuatro prácticas, de las cuales dos se llevaron a cabo en Níger, una en la misma RDC y una en la República del Congo (Congo Brazzaville). Los datos provienen de testimonios de responsables del desarrollo de las experiencias, presentados durante un seminario en el 2014 y complementados por entrevistas en el 2015, y de publicaciones relacionadas con dichos estudios. Los hechos comunes a las cuatro experiencias son la difusión nacional y, con frecuencia internacional, de las buenas prácticas y de los modelos organizacionales, su desarrollo planteado a largo plazo y la participación de los directores de las ZAR en todas las etapas de su transformación. El haber centrado la investigación en los problemas de la ZAR y la promoción de la reflexividad en las decisiones administrativas son dos hechos importantes de esta transformación. También se discuten temas como el uso de los resultados por parte del programa RIPSEC, las lógicas integradas en el concepto ZAR y el aporte potencial de la implicación de las escuelas nacionales de salud pública en su desarrollo. La validez del estudio es limitada, pero reforzar el liderazgo de los directores de los distritos sanitarios es un reto frecuente para los sistemas de salud que tienen recursos limitados. Este artículo puede ayudar a desarrollar una estrategia para remediar esta situación. (Global Health Promotion, 2020; 27(2): 139–148)

Comprender los desafíos de la medicalización de la prevención del VIH en Francia: la profilaxis preexposición bajo el prisma de las ciencias sociales

S. Carillon y G. Girard

Recurrir a los tratamientos antirretrovirales para la prevención del VIH hace que se transforme de manera profunda el contexto de las intervenciones en este aspecto. La profilaxis preexposición (Prep) constituye una de las facetas más visibles de estos tratamientos. Sin embargo, el uso de la Prep en Francia resulta ser limitado y entre las poblaciones afectadas no hay muchos pacientes que se sirvan de ella. ¿Cómo explicar esta subutilización si la alta efectividad de este método de prevención ya ha sido demostrada? Las respuestas a esta inquietud se beneficiarían de las ciencias humanas y sociales tanto para pensar en las condiciones de la apropiación de la herramienta por el público objetivo como para identificar lo impensado y la lógica que fundamentan su ejecución. Lejos de limitarse al VIH, la reflexión crítica sobre el recurso a los medicamentos como instrumentos de prevención conduce a cuestionamientos pertinentes para el sector de la promoción de la salud. (Global Health Promotion, 2020; 27(2): 149–158)