Global Health Promotion

The power of health promotion to reduce poverty at the global level

Masamine Jimba[1] and Nancy Long Sieber[2]

Poverty is a complex and multifaceted problem, but it tends to be quantified in simple terms to facilitate global comparisons. The World Bank defines extreme poverty as an income of no more than US$2.15 a day at 2017 prices. By using this definition, 670 million people in the world were thought to live in extreme poverty by the end of 2022, and 575 million people are expected to be living in extreme poverty by 2030 (1).

Although these numbers sound high, poverty rates declined steadily from 1990 through the 2010s. In recent years, however, the speed of poverty reduction has slowed due to polycrisis,[1] including climate emergencies, conflicts, food insecurity, and COVID-19.

As poverty is a major threat to health and health equity, poverty reduction has been a high priority for health promotion. The first International Conference on Health Promotion, held in Ottawa, Canada in 1986, ended with the drafting of the Ottawa Charter, a plan of action to achieve Health for All by the year 2000 (2). While the term 'poverty' was not used in the first charter, the word often appeared in charters, declarations, statements, or calls to action generated after subsequent conferences. For example, in the Sundsvall statement after the 3rd International Conference on Health Promotion, which was held in 1991, the term 'poverty' appeared three times, in the discussion of supportive environments for health (2):

> *. . . the Conference points out that millions of people are living in extreme poverty and deprivation in an increasingly degraded environment that threatens their health, making the goal of Health for All by the Year 2000 extremely hard to achieve. . .*
>
> *Millions of people are living in extreme poverty and deprivation in an increasingly degraded environment in both urban and rural areas.*
>
> *Poverty frustrates people's ambitions and their dreams of building a better future, while limited access to political structures undermines the basis for self-determination.*

In 1997, in the Jakarta Declaration (the 4th conference), poverty was asserted to be 'the greatest threat to health' after articulating 13 prerequisites for health (2). 'Poverty' did not appear in the materials generated after the 1st, 2nd, 5th, and 6th conferences, but in the Nairobi (7th), Helsinki (8th), Shanghai (9th), and Geneva (10th) conferences, 'poverty' appeared once or twice for each call for action, statement, or charter. In the Geneva Charter for Well-being, which builds on the outcomes of the 10th Global Conference on Health Promotion held in 2021, poverty is identified as one of the threats that 'creates risks of future crises even more severe than those experienced today' (3). In most cases, however, when the term 'poverty' is used in post-conference documents, it is defined as an income-based measure.

A similar pattern is seen in documents related to the United Nations Sustainable Development Goals (SDGs) and articles discussing them. According to Kickbusch and Alakija (4), for example, the world is under global uncertainty and polycrisis, and the health improvement goal is particularly off track; therefore, the UN's newly proposed 'rescue operation' for the SDGs may not improve global health. They then suggested that SDGs should be deconstructed to rebuild collective goals prioritizing

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Global Health Promotion 1757-9759; Vol 30(4): 3–5; 1213198 DOI: 10.1177/17579759231213198 journals.sagepub.com/home/ghp

poverty, health, and climate (4). In their article, reducing income-based poverty was treated as an independent goal, distinct from health and climate.

Since 2010, however, another definition of poverty has emerged at the global level, focusing on nonmonetary deprivations. The United Nations Development Program (UNDP) and the University of Oxford developed a Multidimensional Poverty Index (MPI) in 2010 (5). It consists of two health indicators (nutrition and child mortality), two education indicators (years of schooling and school attendance), and six living standard indicators (cooking fuel, sanitation, drinking water, electricity, housing, and assets). In this definition, health indicators are not separated from poverty; rather, health is considered to be one of three dimensions of poverty. Using these parameters, MPI values are calculated. Results range from 0 to 1, with higher values implying greater poverty.

If health promotion researchers and practitioners define poverty only as a state of monetary deprivation, they may fail to account for the benefits of actions that relieve its burden. The nonmonetary definition of poverty can allow them to address aspects of poverty directly. For nutrition, the first health indicator, the positive deviance approach, which is an asset-based, problem-solving, community-driven approach, is also a well-regarded strategy for health promotion (6,7), which successfully improved nutrition among the poor in Vietnam. In 1990, Vietnam was one of the poorest countries in the world, with a gross national income per capita of US$130 per year (8). Applying the positive deviance approach, Save the Children USA found well-nourished children amongst even the poorest families. They then identified three healthy behaviors that could be promoted for families with undernourished children. This practice was scaled across 250 communities, and an estimated 50,000 children recovered from undernutrition in 7 years (9). This approach has been used in many parts of the world, and one systematic review concluded that 'interventions with the positive deviance approach can be used as an alternative strategy to improve the nutritional status of under-five children' (10).

For child mortality, the second health indicator in the MPI, health promotion activities, have contributed to reducing deaths among children. For example, the national health promotion policy was implemented in South Africa from 2015 to 2017. It consisted of home visits by community health promoters, education programs for pregnant women, and various media marketing efforts to promote preventive services. It successfully reduced stillbirths by 8.36% in urban areas and 2.84% in rural areas (11).

By attending to equity, health promotion can improve the health indicators of the MPI, demonstrating that money is not a necessary prerequisite for improving health. Even in a state of monetary insufficiency and deprivation, health promotion can improve the health of financially poor people.

Beyond health indicators, health promotion can also play a role in improving education indicators and living standard indicators of the MPI. For education indicators, poor health is well-known as a cause of losing 'years of schooling' and 'school attendance'. WHO and UNESCO jointly published a booklet about Health Promoting Schools (HPS), showing that some school-based programs can improve school attendance (12). However, in many HPS-related evaluation studies, 'years of schooling' and 'school attendance' have not been part of the criteria for assessing the success of HPS interventions. If HPS aims to contribute to poverty reduction, they should include these poverty-related indicators systematically, so that health promotion can contribute to reducing poverty through education.

For the living standard indicators, health promotion particularly contributes to improving sanitation and drinking water through health education. Rwanda, for example, initiated a community-based environmental health promotion program for obtaining safe drinking water at home through household water treatment and safe storage interventions. In 2014, water purifiers (water filters) were given to 100,000 households. Promotional activities were conducted to show how to correctly use the filter, including community education, community health workers' regular household visits, and others. These health promotion activities improved water quality and child health (13). Health promotion can help reduce poverty by focusing on these indicators, particularly in low- and middle-income countries.

By using the comprehensive measures of poverty used in the MPI, health promotion can help reduce poverty in this way. This will demonstrate the utility of health promotion as a strategy to reduce poverty at the global level.

Even with the broader definition of poverty used in the MPI, many other measurable and unmeasurable parameters contribute to the deprivation associated with poverty. *Global Health Promotion* has focused on 'equitable intersectoral policy and program solutions to address issues like mental health' (14). This approach is also relevant to addressing poverty. Beyond the MPI, health promotion has a long history of addressing socio-economic determinants of health. The Ottawa Charter shows that healthy public policy and supportive environments can be more impactful in addressing poverty. While showing that health promotion strategies can help to improve poverty at the global level by using MPI, the health promotion community should also consider the invisible and less easily quantified facets of poverty to help make Health for All not just rhetoric but a reality.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Note

1. *Polycrisis*: This term was first introduced by the French philosopher Edgar Morin and his colleague Anne Brigitte Kern. They defined polycrisis as 'the complex intersolidarity of problems, antagonisms, crises, uncontrollable processes, and the general crisis of the planet' (15). In the Global Risks Report 2023, the following definition is used: 'a cluster of related global risks with compounding effects, such that the overall impact exceeds the sum of each part'. (16)

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Perceptions of vaccine trust and conspiracy among those with COVID-19 vaccine hesitancy and resistance: a cross-sectional study

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Abstract:
Background: Individuals' beliefs in conspiracy theories and anti-vaccination defense play a role in the rates of COVID-19 spread.
Purpose: This study aims to determine the perception of trust in, and the perception of conspiracy theories regarding vaccines among those with COVID-19 vaccine hesitancy and resistance in a province in Turkey.
Methods: This study was conducted with 1244 individuals who agreed to participate in the study in the province with the lowest vaccination rate in Turkey. The 'Personal Information Form' and the 'COVID-19 Vaccine Perception and Attitude Scale' were used to collect data.
Findings: Those who were resistant to vaccines had a low mean score on the Perception of Trust and a high mean score on the Perception of Conspiracy. The variable of conspiracy perception had a significantly negative and high effect on the perception of trust.
Conclusion: The participants were highly resistant to COVID-19 vaccines. Their perception level of trust in COVID-19 vaccines was moderate and their perception level of conspiracy was high.

Keywords: COVID-19 vaccines, vaccine hesitancy, vaccine refusal, Turkey

Introduction

Despite scientific and historical evidence on the safety and efficacy of vaccines and vaccination, some groups are still hesitant and reluctant to receive vaccines and vaccination. The World Health Organization (WHO) Strategic Advisory Group of Experts (SAGE) Working Group on Vaccine Hesitancy has recognized the concept of vaccine hesitancy as 'delay in acceptance or refusal of vaccines despite availability of vaccine services.' These hesitant behaviors include rejection, delay, or reluctant acceptance despite active concerns (1–3). People who are hesitant about vaccination stand in the center of a continuum that ranges from those fully accepting to those totally rejecting it (4).

Today, many countries consider the development of an effective and safe COVID-19 vaccine as a long-term remedy to the COVID-19 pandemic. Widespread misinformation, vaccine hesitancy, and a loss of trust in science pose a major obstacle to eliminating the pandemic (5). It has been indicated that vaccination has contributed to the decrease in COVID-19 spread as well as the number of deaths and serious illnesses induced by COVID-19. Within this scope, it is important to vaccinate as many people as possible and increase vaccination activities to reduce the spread of disease (6).

There are several reasons why anti-vaccination has resurfaced during the COVID-19 pandemic. These include conspiracy theories, the production process of the vaccine, doubts about its efficacy, and

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(This manuscript was submitted on 23 July 2022. Following blind peer review, it was accepted for publication on 20 April 2023.)

Global Health Promotion 1757-9759; Vol 30(4): 6–15; 1174750 DOI: 10.1177/17579759231174750 journals.sagepub.com/home/ghp

the feeling of distrust in the produced vaccines (7). It has been found in the studies that the possible causes of vaccine hesitancy were concerns about the side effects of the vaccine, distrust in the contents of the vaccine, being affected by the statements of anti-vaccinationists, single or multiple doses of vaccines, and the approach of medical staff to vaccination (4,8). Also, the claims and statements like 'humans would be injected with genes from monkeys and pigs with COVID-19 vaccine,' 'vaccine would not work since the coronavirus is constantly mutating,' 'manufacturers of vaccines are barred from vaccination,' and 'vaccines will bring about infertility' appear as the causes of anti-vaccination (9).

In a study conducted worldwide, the three most prevalent reasons for not getting the COVID-19 vaccine were 'concern about side effects,' 'the vaccine is ineffective,' and 'they do not consider themselves as being at risk enough' (4). In a study conducted in 15 countries in cooperation with the World Economic Forum, the primary reasons for the hesitant attitude towards the COVID-19 vaccine around the world were found as concerns about side effects and the production rate of vaccines in clinical trials. Again, in that study, those who responded that they would not have the COVID-19 vaccine (66% in Japan and 25% in Brazil) stated that they were concerned about the side effects of the vaccine. The rate of those who believed that the vaccine was ineffective was 4% in China and South Korea, while this rate was 12% in the United Kingdom. The rate of anti-vaccination was 1% in China and 11% in the United States (10). According to a study conducted in Turkey, the rate of those who wanted to be vaccinated immediately was determined as 16.5%, and the rate of those who wanted to be vaccinated after the efficacy of the vaccine was proven was 26% (11). Because the rate of hesitancy in receiving vaccines is high in Turkey, it is considered that explaining some factors that may affect the decision of hesitancy in receiving the vaccine would be helpful. Therefore, gaining a deeper understanding of the underlying dynamics of COVID-19 vaccine hesitancy is critical for designing effective interventions for both the general public and healthcare providers. In this sense, it was aimed to determine the perception of trust in, and the perception of conspiracy theories regarding vaccines among those with COVID-19 vaccine hesitancy and resistance in Turkey.

Methods

Purpose and design

This research is a cross-sectional study. The data began to be collected via Google Forms (480 participants), but due to the problems with this practice, data collection was resumed using face-to-face questionnaires (764 participants) assisted by interviewers. These interviewers were volunteers who were previously trained in health-related fields and were informed about the subject and objective of the study by the researchers. A total of four interviewers took part in the study voluntarily.

Population and sample

Şanlıurfa is the most crowded city in the Southeastern Anatolia region with a population of more than 2 million and also the province with the most dynamic population in Turkey with a median age of approximately 20.4. Since Şanlıurfa is a border province with Syria, it is among the provinces with a high number of refugees.

The population consisted of people residing in Şanlıurfa, Turkey. Şanlıurfa is an important research location since it has the lowest vaccination rate (62.7%) in Turkey (12). According to the Address Based Population Registration System (2021), Şanlıurfa where the research was conducted had a population of 2,181,118 people aged 18 and over. The sample size was calculated with the sample calculation method with the known population, and the participants were reached using the simple random sampling method. With the known sampling method, the sample size was calculated as 1067 with a confidence interval of 95% and an error margin of 3%. The study was conducted with 1244 individuals who voluntarily participated in the study in order to increase the representation level of the population.

Data collection

The study was conducted with 1244 individuals who agreed to participate in the study between 21 May 2022 and 21 June 2022. It took approximately 10 minutes to fill out the questionnaire. The individuals, aged 18 and above, who refused the COVID-19 vaccines, had no cognitive or mental disorders that would impede them from

understanding and responding to the questions and volunteered to participate in the study, were included in the study. Those who lost a relative due to COVID-19 were excluded from the study.

Data collection tools

The 'Personal Information Form' and the 'COVID-19 Vaccine Perception and Attitude Scale' were used to collect data.

***Personal Information Form*:** The form was prepared by the researchers based on a literature review and consists of a total of 12 questions about the socio-demographic characteristics of the participants. The question of their willingness to receive a vaccine was analyzed with the response categories of 'probably,' 'probably not' and 'definitely not'. Those who responded to 'definitely not' for receiving a vaccine were categorized as resistant to the vaccine, those who responded to 'probably not' were categorized as highly hesitant, and those who responded to 'probably' were categorized as low hesitant (13).

***The COVID-19 Vaccine Perception and Attitude Scale*:** Eriş developed the scale to determine the perceptions and attitudes of individuals towards COVID-19 vaccines (2022). The scale is composed of 21 statements and 2 sub-dimensions ('Perception of Trust' and 'Perception of Conspiracy'). A 5-Likert scale was used in the study ('1 = Strongly Disagree' and '5 = Strongly Agree'). Since the statements for items 7, 8, 10, and 11 are negative compared to other statements, reverse coding was carried out. While the perception of trust sub-dimension consists of 11 statements (items 1–11), the perception of conspiracy sub-dimension consists of 10 statements (items 12–21). High scores of the perceptions of trust and conspiracy indicate high perceptions of trust and conspiracy. The Cronbach's alpha internal consistency coefficients were found as 0.90 for the perception of trust sub-dimension and 0.89 for the perception of conspiracy sub-dimension (14). The Cronbach's alpha internal consistency coefficients were calculated as 0.84 and 0.86 for the perception of trust and perception of conspiracy sub-dimensions, respectively in this study.

Data analysis

The SPSS 26.0 statistical software was used to analyze the data. The Kolmogorov–Smirnov tests were used to analyze the compliance of the data with the normal distribution and it was found that the data were normally distributed. In addition to descriptive statistics (percentage, frequency, mean, standard deviation, minimum, maximum), chi-square, independent samples t-test, one-way analysis of variance (ANOVA), and regression test were used in the data analyses. From post-hoc multiple comparison tests, the Bonferroni test was used to determine from which group the significance resulted from independent variables.

Results

It was found that 56.7% of the participants were male, 30.4% were 30–41 years old, 56.3% were employed, 50.3% had a primary school education or less, 54.8% were married, 63% resided in the city center, 49% had a middle-income level, 37.6% had COVID-19 disease in their families, 73.0% were resistant to vaccines, 20.6% had a high level of hesitancy, and 6.4% had a low level of hesitancy (Table 1).

A statistically significant correlation was found between the gender, employment, and willingness to get vaccinated of the participants, as well as their status of trusting or distrusting the COVID-19 vaccines ($p < 0.05$) (Table 2).

A statistically significant correlation was found between the participants' gender, age, employment status, education level, history of COVID-19 disease in their family and their willingness to receive vaccines and their mean scores of the sub-dimension of the perception of trust in COVID-19 vaccines ($p < 0.05$). A statistically significant correlation was found between the individuals' gender, age, employment status, income level, and willingness to receive vaccines and their mean scores of the sub-dimension of the perception of conspiracy toward COVID-19 vaccines ($p < 0.05$) (Table 3).

In Table 4, the effect of the perception of conspiracy towards COVID-19 on trust in the vaccine was analyzed using the demographic characteristics of the participants as the control variable. Examining the two regression models together allowed for the effect analysis. In the first model, only the effect of the demographic characteristics of the participants on the perception of trust in the vaccine was investigated. According to the findings, it was found that the model was

Table 1. Socio-demographic characteristics of the participants (n = 1244).

		n (%)
Gender	Female	539 (43.3)
	Male	705 (56.7)
Age	18-22 years	296 (23.8)
(Mean ± SD (year) 32.3±12.33, Min = 18, Max = 63)	23-29 years	323 (26.0)
	30-41 years	378 (30.4)
	⩾42 years	247 (19.8)
Employment status	Student	234 (18.8)
	Housewife	292 (23.5)
	Employee	700 (56.3)
	Healthcare worker	18 (1.4)
Education level	⩽Primary school graduate	626 (50.3)
	High school	252 (20.3)
	⩾University	366 (29.4)
Marital status	Single	562 (45.2)
	Married	682 (54.8)
Place of residence	City center	787 (63.3)
	District	457 (36.7)
Level of income	Very high	80 (6.4)
	High	295 (23.7)
	Middle	609 (49.0)
	Low	189 (15.2)
	Very low	71 (5.7)
Is there a family member infected with COVID-19?	Yes	468 (37.6)
	No	776 (62.4)
Willingness to get vaccinated*	Probably	80 (6.4)
	Probably not	256 (20.6)
	Definitely not	908 (73.0)
Total		1244 (100.0)

*Probably: low level of hesitancy; probably not: high level of hesitancy; definitely not: resistant to vaccine.

significant and the variables of gender, age, and education had effects on the trust in vaccines. Upon the examination of the coefficients, it was found that as the education level and age increased, the trust in the vaccine decreased. In the gender variable, the trust in the vaccine was higher among the men. In the first model in which the perception of conspiracy variable was excluded, the coefficient of determination was calculated as 0.036. In other words, 3.6% of the variance in the trust in the vaccine may be explained by the demographic characteristics of the individuals (Table 4).

The model was again found statistically significant in the second model in which the perception of conspiracy variable was included. As seen in Table 4, the perception of the conspiracy variable had a significantly negative and high effect on the perception of trust. The scatter graph in Figure 1 shows the negative effect of the perception of conspiracy. This result can also be seen from the increase in the coefficient of determination. In the second model, the coefficient of determination increased by 0.259 to a value of 0.295. In other words, the perception of conspiracy variable alone explained the 25.9% of the variability in the perception of trust in the COVID-19 vaccine according to the second model. When the status of control variables is examined, the effects of gender, age, and education variables on the perception of trust were found to

Table 2. Comparison of participants' trust in COVID-19 vaccines based on their socio-demographical characteristics ($n = 1244$).

		COVID-19 vaccines				
		I do not trust		*I do trust*		
		n	%	*n*	%	**χ^2 *test / p*
Gender	Female	409	45.3	130	38.1	5.183/ **0.023**
	Male	494	54.7	211	61.9	
Age	18-22 years	200	22.1	96	28.2	6.627 / 0.085
	23-29 years	242	26.8	81	23.8	
	30-41 years	272	30.1	106	31.1	
	⩾42 years	189	20.9	58	17.0	
Employment status	Student	153	16.9	81	23.8	4.549 / **0.033**
	Housewife	218	24.1	74	21.7	
	Employee	519	57.5	181	53.1	
	Healthcare worker	13	1.4	5	1.5	
Education level	⩽Primary school	453	50.2	173	50.7	1.052 / 0.591
	High school	189	20.9	63	18.5	
	⩾University	261	28.9	105	30.8	
Marital status	Single	408	45.2	154	45.2	0.012 / 0.914
	Married	495	54.8	187	54.8	
Place of residence	City center	568	62.9	219	64.2	0.186 7 0.666
	District	335	37.1	122	35.8	
Level of income	Very high	54	6.0	26	7.6	5.364 / 0.252
	High	204	22.6	91	26.7	
	Middle	459	50.8	150	44.0	
	Low	136	15.1	53	15.5	
	Very low	50	5.5	21	6.2	
Is there a family member infected with COVID-19?	Yes	333	36.9	135	39.6	0.776 / 0.378
	No	570	63.1	206	60.4	
Willingness to get vaccinated*	Probably	50	5.5	30	8.8	11.309 / **0.004**
	Probably not	171	18.9	85	24.9	
	Definitely not	682	75.5	226	66.3	
Total		**703**	**100.0**	**341**	**100.0**	

*Probably: low level of hesitancy; probably not: high level of hesitancy; definitely not: resistant to vaccine.

**χ^2 = Chi-square test. $p < 0.05$.

be statistically significant in the second model (Table 4).

Discussion

Vaccines effective against COVID-19 are now available; however, vaccine hesitancy, also known as anti-vaccine attitudes which are not based on scientific data, results in vaccine refusal (15). Vaccine hesitancy is on the rise globally and poses significant threats to public health. Even though the rate of double-dose vaccination across Turkey is high (85.4%), the vaccination rate in the province in which the study was conducted was very low (62.7%) (16). This study, which was conducted in the province with the lowest vaccination rate in Turkey, revealed that the majority of individuals (73.0%) were resistant to vaccination. Similarly,

Table 3. Comparison of the participants' socio-demographic characteristics with their mean scores on the perceptions of trust and conspiracy towards COVID-19 vaccines (n = 1244).

		Perception of trust		*Perception of conspiracy*	
		Mean±SD	*Statistics / significance between groups*	*Mean±SD*	*Statistics / significance between groups*
Gender	Female	2.54±0.81	t = -2.736	3.34±0.87	t = 2.733
	Male	2.66±0.77	**p = 0.006**	3.20±0.82	**p = 0.006**
Age	18-22 years (A1)	2.74±0.78	F = 4.470	3.15±0.85	F = 3.104
	23-29 years (A2)	2.59±0.75	**P = 0.004**	3.28±0.78	**p = 0.026**
	30-41 years (A3)	2.52±0.80	A1-A3 / 0.002	3.26±0.94	A1-A4 / 0.016
	⩾42 year (A4)	2.60±0.82		3.37±0.77	
Employment status	Student (A1)	2.77±0.80	F = 4.671	3.13±0.80	F = 2.167
	Housewife (A2)	2.62±0.79	**p = 0.003**	3.25±0.85	**p = 0.029**
	Employee (A3)	2.55±0.78	A1-A3 / 0.001	3.31±0.85	A1-A3 / 0.022
	Healthcare worker (A4)	2.51±0.61		3.13±1.01	
Education level	⩽Primary school (A1)	2.67±0.73	F = 4.526	3.20±0.85	F = 2.033
	High school (A2)	2.57±0.79	**p = 0.001**	3.29±0.79	p = 0.060
	⩾University (A3)	2.52±0.87	A1-A3 / 0.011	3.33±0.88	
Marital status	Single	2.59±0.81	t = -0.502	3.25±0.87	t = -0.419
	Married	2.62±0.77	p = 0.616	3.27±0.83	p = 0.676
Place of residence	City center	2.61±0.79	t = 0.240	3.29±0.86	t = 1.475
	District	2.60±0.79	p = 0.811	3.21±0.82	p = 0.140
Level of income	Very high(A1)	2.66±0.78	F = 1.318	3.24±0.82	F = 2.458
	High(A2)	2.68±0.78	p = 0.261	3.18±0.78	**p = 0.044**
	Middle (A3)	2.56±0.82		3.26±0.87	A2-A5 / 0.018
	Low(A4)	2.58±0.73		3.27±0.87	
	Very low(A5)	2.62±0.72		3.53±0.87	
Is there a family member infected with COVID-19?	Yes	2.54±0.91	t = -2.212	3.30±0.84	t = 1.533
	No	2.64±0.70	**p = 0.027**	3.23±0.85	p = 0.126
Willingness to get vaccinated*	Probably (A1)	3.02±0.59	F = 64.823	2.90±0.81	F = 22.729
	Probably not (A2)	3.00±0.57	**p < 0.001**	3.03±0.70	**p < 0.001**
	Definitely not (A3)	2.46±0.81	A1-A3 / < 0.001 A2-A3 / < 0.001	3.36±0.87	A1-A3 / < 0.001 A2-A3 / < 0.001
Total		2.60±0.79		3.26±0.85	

Mean: mean; SD: standard deviation; t: independent samples t-test; ANOVA: one-way analysis of variance.
*Probably: low level of hesitancy; probably not: high level of hesitancy; definitely not: resistant to vaccine.
$p < 0.05$.

vaccine refusal was reported as high in other developing countries such as Bosnia and Herzegovina (74.3%), Slovakia (41.0%), Romania (44.0%), and the Czech Republic (49%) (17,18). The high rates of vaccine acceptance in developed countries such as China (83.3%) and the United States (67.0%) are notable (19,20). The relatively higher rate of vaccine hesitancy and refusal in developing countries, such as Turkey, compared to developed countries may be correlated to the rapid production of the vaccine and the unknown long-term side effects, as well as the failure of these countries to produce their

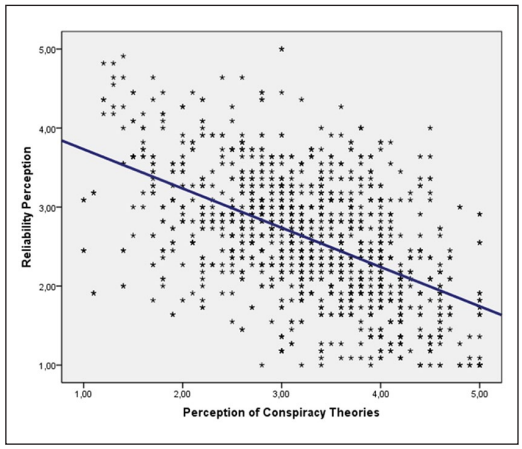

Figure 1. The relationship between perception of conspiracy and perception of trust towards COVID-19 vaccines.

vaccines. The low level of education may also be an effective factor in addition to the factors such as low health literacy and socio-economic and cultural factors among the reasons for the high rate of vaccine refusal in the province where the study was conducted.

In this study, it was found that individuals who were resistant to vaccines did not trust COVID-19 vaccines. In a qualitative study conducted in Canada, the main reasons for vaccine hesitancy were determined to be safety concerns, conspiracy theories, misinformation, and doubts about the reliability of pharmaceutical companies (21). A study conducted in Turkey found that participants believed that 'humans would be injected with genes from monkeys and pigs with COVID-19 vaccination,' 'vaccine would not work since the coronavirus is constantly mutating,' 'manufacturers of vaccines are barred from vaccination,' and 'vaccines will bring about infertility' (9). Misinformation regarding vaccines spread rapidly on social networks and people accept social media as a source of information. In addition, people believe in other people who pulled through the disease or do not have even health training and they have lack of trust in healthcare professionals. All these can be accepted as the main reasons for why these beliefs maintain to exist among people despite all the information and activities for raising awareness.

Whatever the underlying reasons for vaccine hesitancy and refusal, they have emerged as new pandemic challenges that must be addressed (22). In this study, individuals who were resistant to the vaccine had lower 'perceptions of trust' in COVID-19 vaccines than individuals with low and high levels of hesitancy. Those who consider receiving a COVID-19 vaccine and believe the vaccine would be a remedy for the pandemic, those who rely on companies that manufacture vaccines, and those who encourage their family members to receive the vaccine all have a positive attitude towards the vaccine (23). It is noted that the most important factor leading to vaccine refusal is fear of the side effects of the vaccine and believing that the vaccine is not protective (22,23). As a result of the reasons such as negative feedback from vaccinated people about the vaccine, non-vaccinated people claiming that they were not infected despite taking no precautions, and discourses in social media and interpersonal relationships that the vaccine does not protect, individuals' perceptions of trust in the vaccine have decreased, and vaccine refusal has emerged.

Conspiracy theories such as the belief that vaccines would alter our DNA structure, the belief that a microchip would be implanted in our body with the vaccine, and the claim that fetal tissue is used in vaccine production have all been effective in the resurgence of anti-vaccination during the COVID-19 pandemic (7). According to the study, individuals who were resistant to vaccines had higher perceptions of conspiracy in COVID-19 vaccines than individuals with low and high levels of hesitancy. A study conducted to determine the attitude of the society towards COVID-19 vaccines in Jordan put forward that those who believed that the COVID-19 disease was a conspiracy and did not trust the vaccine had a low level of vaccine acceptability (24). In the study, conducted by Muhajarine *et al.* (25), in which a limited number of clinical studies were included, reasons for not receiving vaccines such as lack of trust in the vaccine approval process, misunderstandings/conspiracy theories/suspicion about vaccine safety, medical reasons, and religious justifications were found. In the studies conducted in Turkey, it was reported that the participants had such perceptions of conspiracy that the vaccine was the experimental fluid that caused the death or disability of healthy individuals, it was used as a biological weapon, it was produced to stop population growth, it was thought as a

Table 4. The effect of the perception of conspiracy on the perception of trust in COVID-19 vaccines and some sociodemographic characteristics.

		Model 1			*Model 2*		
		Beta	*t*	*Sig.*	*Beta*	*t*	*Sig.*
Perception of trust	Gender	0.157	3.470	**0.001**	0.084	2.169	**0.030**
	Age	–0.122	–4.514	**<0.001**	–0.073	-3.149	**0.002**
	Education	–0.068	–4.524	**<0.001**	–0.040	-3.122	**0.002**
	Marital status	0.102	1.740	0.082	0.079	1.566	0.118
	Place of residence	0.032	0.689	0.491	0.056	1.419	0.156
	Level of income	–0.033	–1.346	0.179	–0.002	-0.116	0.908
	Perception of conspiracy				–0.481	-21.239	**< 0.001**
	F	7.588 ($p < 0.05$)			73.332 ($p < 0.05$)		
	R^2	0.036			0.295		
	ΔR^2	0.036			0.259		

*Regression analysis.

conspiracy of great powers, and Turkey was seen as a market for this conspiracy because the vaccine was not in demand in developed countries (26,27). This may relate to the worldview of individuals living in Turkey, the differences in their cultural traits, and Turkey's political relations with the developed and vaccine-producing countries of the world.

In this study, individuals' perceptions of conspiracy had a negative and high effect on their perception of trust in COVID-19 vaccines. The study conducted by Islam *et al.* (28) put forward that numerous rumors and conspiracy theories could potentially adversely affect the trust of the population in the COVID-19 vaccines. Many people avoid getting vaccinated and constrain their own families from getting vaccinated, especially due to conspiracy theories propounded by the anti-vaccinationists (29). The study conducted by Narmanlı (30) revealed that arguments about the vaccine were often based on conspiracy theories, side effects of the vaccine, and misinformation that the vaccine provided no protection against the virus and the phase studies of vaccines had not been completed. Furthermore, it has been noted that if the authorities focus on campaigns that may eliminate misinformation about the COVID-19 vaccines and conspiracy theories, this may be effective in reducing conspiracy theories (31). In Turkey, the perception of trust of people in the COVID-19 vaccine is affected negatively by the conspiracy theories. This can be explained with their negative ideas that a chip would be implanted in individuals with vaccines, it would tamper with their genes and deteriorate their reproductive health, they would never be able to have children again, and they would have to cope with many side effects of vaccination in the future.

Limitations of the research

Although this study has its strengths, it also has certain limitations. One of these limitations is that the research was conducted in a certain period. In addition, although the fact that the study was conducted in the province with the lowest COVID-19 vaccination rate seems notable and a strong aspect of the study, it is among the limitations of the study that the views of other provinces of the country were not included in the study.

Conclusion

In Turkey, the majority of individuals do not trust vaccines and resist them. Individuals with vaccine resistance have low perceptions of trust and high perceptions of conspiracy. In Turkey, perceptions of conspiracy against the vaccine negatively affect and diminish people's perceptions of trust. It is an undeniable fact that the nurses who actively participated in vaccination campaigns throughout the COVID-19 treatment during the peak of the pandemic were members of professions who had the closest contact with the public

throughout the entire period. In this context, it can be said that nurses would play a key role in providing the public with accurate scientific information concerning vaccines. In collaboration with other multidisciplinary healthcare professions, it can be said that we, as nurses, can give the public accurate information in a variety of ways such as information campaigns, online and face-to-face vaccine discussions, question-and-answer activities, and the active use of mass media to disseminate information and play an active role in making the desired changes regarding the perception of trust and conspiracy theories.

Author's note

All authors approved the final version for submission.

Acknowledgements

We thank all the participants who contributed to this study.

Author contributions

Study conception and design: HE, FK, DA.
Data collection: HE, DA.
Data analysis and interpretation: HE, FK.
Drafting of the article: HE, FK.
Critical revision of the article: HE, DA, FK.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Ethical considerations

The approval of the Ethics Committee (Ethics No: 2022/78) was obtained to conduct the study. Participants were informed of the objective of the study and that their participation in the study was voluntary. Consent was obtained from the participants of the study.

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Data sharing and data availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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Original Article

Sicilians' knowledge, perceptions, prevention and practices during the pandemic in relation to vaccination: A questionnaire-based survey

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Abstract:
Background: COVID-19 has influenced Sicily, Italy as any other part of the world, and people had various types of reactions to this global epidemic. This study aimed to assess the behavior, perception, and willingness of the Sicilian population to accept vaccination, as well as their attitudes toward conspiracy theories, which have been a concern for governments around the globe.
Methods: Study design: cross sectional-descriptive study. The data were collected through a survey developed based on a protocol from the World Health Organization's regional office in Europe, which was distributed in two waves. The first wave took place in April and May 2020, and a modified survey was distributed during June and July.
Results: Sicilians showed a very good knowledge of the virus, while their positive attitude has changed toward vaccination in the second wave. Furthermore, Sicilians showed an average trust in the governmental institutions, which allow the doubts of conspiracy to exist in the population.
Conclusions: Although the results indicate a good level of knowledge and positive attitude toward vaccination, we believe that further studies should be conducted in the Mediterranean to better understand how to face future epidemics with limited resources in the healthcare system, as compared with other countries.

Keywords: Sicily, Mediterranean, COVID-19, pandemic, vaccination, behaviors

Introduction

The unprecedented global pandemic that has affected the globe rapidly has put humankind in front of serious challenges that need to be considered and brought to the attention of all political leaders. A worldwide health system revaluation is needed to face future pandemics (1). Based on world pandemic data, millions of people die every year and are at high risk due to other pandemics (2), which in some ways has been neglected in the last year of the Corona pandemic. This pandemic created a high level of stress among Italians in general as soon as the undetected virus started to spread rapidly in a quick transmission chain, and Italy had the second average mortality in the very first months of the epidemic (3). Nevertheless, control taken by the government has decreased the degree of transmission (4).

Sicily's eruption of COVID was late, after other Italian regions; the decision of the government in March to close the territories including the island despite the low number of positive cases resulted in Sicily facing big challenges. The average age in Sicily is 44.4, with a population of almost 5 million, which ranks fourth among other regions. Accordingly, the

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(This manuscript was submitted on 6 September 2021. Following blind peer review, it was accepted for publication on 21 March 2023).

Global Health Promotion 1757-9759; Vol 30(4): 16–24; 1168652 DOI: 10.1177/17579759231168652 journals.sagepub.com/home/ghp

Sicilian population is not a young population, which represents a sanitary burden and high costs of medicine and hospitals (5).

According to the official records of the Ministry of Health (MOH) and the Italian National Institutes of Statistics, the first peak in Italy was on 20 March 2020 (6), and the absolute number and percentage of deaths were reported based on the three waves that characterized the pandemic from the beginning of 2020 up to 16 December 2020.

The number of deceased patients in Sicily from March to May was 300 and during June to September, there were 57, while between October and December the number rose to reach 1654. The total number of deaths was 2011, accounting for the death of 3.2% of the total population by the end of the year (7). The number changed drastically during 2021, reaching 3260 deaths and 130,637 total cases, with 48,001 active cases, and 79,367 recovered individuals (8).

A 2021 MOH report confirms that vaccination started on 31 December 2020. A total of 1,449,170 shots were given out of 1,843,725 distributed for all the regions of Italy, while in Sicily 108,567 were given out of 169,525 received by the region (9). A study conducted by STATISTA found that in Italy, it took 208 days to double the number of deaths during the first wave, compared with Germany, which took only 39 days, and 139 days in the United States (6).

The importance of such research is the fact that it is implemented in an area described as European and at the same time Mediterranean. Accordingly, target groups represent an understanding of the individual's perceptions and attitudes in a microzone that includes both the European and Mediterranean perspectives, which can be helpful to many who are interested in any future comparative research, especially into the type of attitude that can provide a schema for a better understanding of new information (10). Timing for publication is crucial to inform population choices and attitudes. Far-Right groups instrumentalized the population's uncertainty and fear of being vaccinated, to spread suspicion of immigrants, especially in Sicily, an entry point for immigration; immigrants were accused of bringing the virus with them (11). This created confusion about their position among Sicilians and may have a negative impact on people's decisions on how to deal with the vaccination. This would have been different if early detection happened on time, as in the case of the outbreak of bluetongue in 2017 in Sicily (12,13), the measles cases that were under control for more than five years in Sicily, (14) and, in 2013, the emerging rabbit hemorrhagic disease (15).

This study aims to look at COVID-19 outbreak response measures, including policies, interventions and communications, and monitor variables that are critical for behavior change in the population to avoid transmission of COVID-19, including risk perceptions, trust, use of information sources, knowledge, as well as barriers and drivers to recommended behaviors – allowing adjustment of measures aiming to change behaviors in Sicily. Furthermore, the study aimed to assess the Sicilian population's perception and attitude toward vaccination offered by their government. The possibility to look at this issue in two different periods during the epidemic is a way to formulate a more credible attitude, especially in relation to vaccination and its implementation.

Research questions

The emphasis of this paper is to highlight the outbreak responses of the Sicilian population and find out the level of knowledge and understanding related to COVID-19, while taking into consideration some important social variables. Most importantly, the study aims to explore the perception of vaccination among the population.

The research will deal with the following main questions:

1. What are the risk perceptions, knowledge, used and trusted sources of information, confidence in crisis management, correct knowledge about and uptake of preparedness and protective behaviors, at each data collection point?
2. What is Sicilians' attitude to vaccination against COVID-19 during the first and the second wave?

Method

Early closure and preventive measures taken by the governments obliged us to collect data through an adapted survey (10–15 min) based on WHO

protocol, which was published at PsychoArvhive (16) and distributed in the nine provinces of Sicily. A cross-sectional design was used to conduct the study during April and May of 2020, and a second modified survey was distributed during June and July of 2020. In the first survey, a total of 1021 answers were collected from persons who were over 18 years old, answered all the questions, and submitted the final survey via Google Form. In the second wave, a total of 1001 answers were collected following the same regulations as in the first survey.

It is important to continually update studies and research on COVID-19 to reflect the changing situation and provide accurate and relevant information. This ensures that outbreak response measures are effective and appropriate for the current situation. This is why we modified the first survey into a second one which had fewer questions and reflected the updates given by the WHO committee.

Data collection tool

The tool, which was approved by the WHO regional office in Europe (17), has been translated into Italian. The questions were tested by 10 persons, from various areas, to ensure national validation, and modifications were done accordingly. The same validation took into consideration the length of time required to complete the survey. The persons who agreed to participate completed a self-report questionnaire that covered the four areas of study: (1) demographic characteristics, (2) knowledge, (3) perceptions, and (4) prevention practices.

Data analysis

A Statistical Package for Social Sciences (SPSS) software V21.0 was used to analyze the data collected, with basic descriptive statistics (averages and frequencies) and bar charts. Differences in frequencies between levels of categorical variables (e.g. gender, region, and type of locality) were tested using Fisher Exact Test. For variables measured using the Likert scale (e.g. 1 = not severe to 6 = very severe), differences were tested using an independent-sample *t*-test. Paired *t*-tests were used to compare between and within groups. Significance was declared when the *p*-value was less than 0.05 ($p < 0.05$).

Table 1. Demographic characteristics.

What is your age?			
	Percent Wave 1		*Percent Wave 2*
18–30	18.6	>	17.3
31–45	30.7	>	31.0
46–60	38.7	<	39.0
60 and above	12.0	<	12.8
Gender?			
	Percent Wave 1		*Percent Wave 2*
Male	34.1	>	29.2
Female	65.9	<	70.8

1 = first wave; 2 = second wave

Ethical considerations

Having the patronage of both the Sicilian region and the Istituto di Ricovero e Cura a Carattere Scientifico (IRCCS), Oasi Maria SS gave us a more official support in distributing the survey among Sicilians. The ethical approval was approved on 16 June 2020 by the ethical committee IRCCS Oasi Maria SS number 2020/06/16/CE-IRCCS-OASI/33. All participants took part in the survey voluntarily and they had the right to withdraw at any time without any penalties.

Results

Table 1 presents the participants' gender and age with a special focus on the fact that 46–60 is the median of participants' age. Participants represented various social categories with 79.3%[1], ($n = 810$) in wave 1 (W1) and 66.9% in wave 2 (W2) ($n = 670$) reporting no chronic disease.

Figure 1 shows that the most symptoms considered by Sicilians are fever (95.1%[1], $n = 972$ – 87.6%[2], $n = 877$), cough (97.8%[1], $n = 1000$ – 83.5%[2], $n = 836$), shortness of breath (96.3%[1], $n = 984$ – 96.6%[2], $n = 967$), and fatigue (79%[1], $n = 807$ – 77.9%[2], $n = 780$).

As seen in Figure 2, (15.7%[1], $n = 160$ – 66.9%[2], $n = 670$) said yes to vaccination while (69.3%[1], $n = 708$ – 27.5%[2], $n = 275$) said no, and (15.0%[1], $n = 153$ – 5.6%[2], $n = 56$) kept the position of

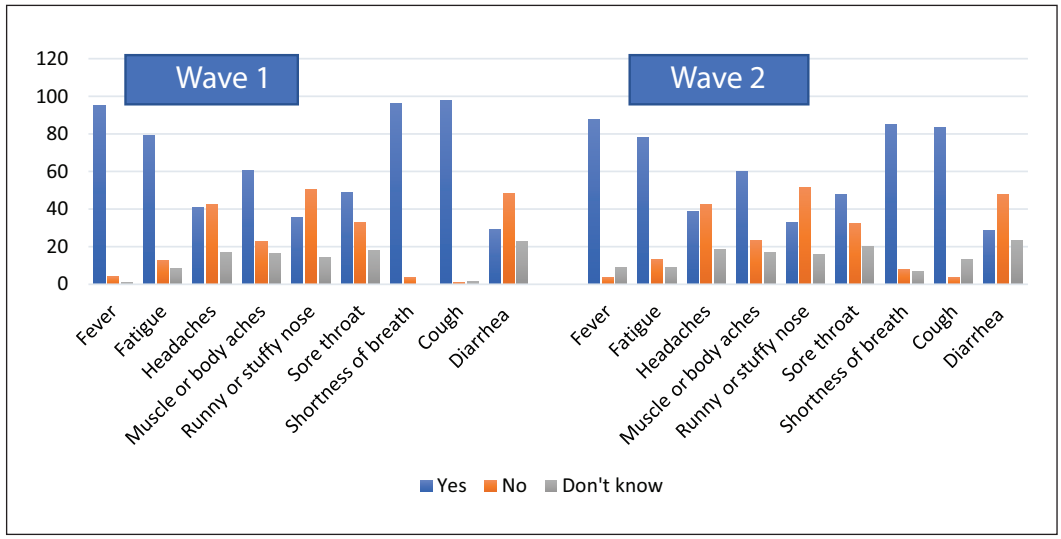

Figure 1. Percentage of survey respondents by knowledge of symptoms of COVID-19.

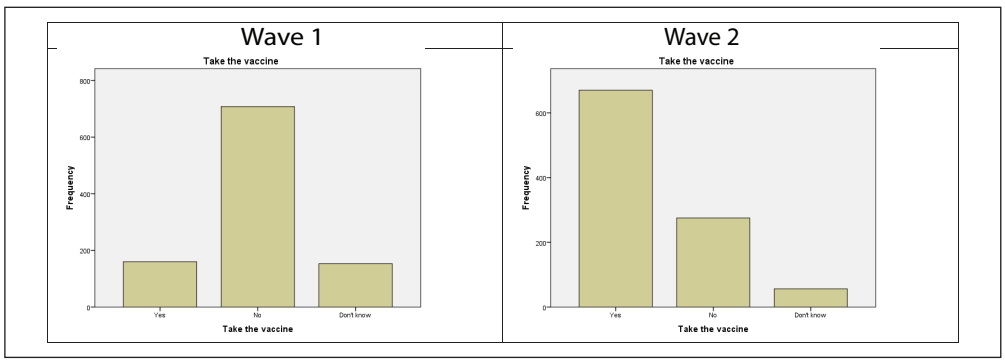

Figure 2. Prevention action/take the vaccine (Yes/No/I don't know).

supporting the 'don't know' statement. There was a statistically significant difference between the first and the second wave with a p-value < 0.001.

As seen in Figure 3, (58.3%[1], $n = 595$ – 97.3%[2], $n = 974$) said yes to mask use, while (40.1%[1], $n = 409$ – 1.6%[2], $n = 16$) said no, and (1.7%[1], $n = 17$ – 1.1%[2], $n = 11$) said don't know. Figure 3 shows clearly that Sicilians have moved toward wearing masks at large.

Populations showed average trust in public TV channels (36%[1], $n = 368$ – 32.6%[2], $n = 326$), newspaper (36%[1], $n = 368$ – 32.6%[2], $n = 326$), INPS (33.7%[1], $n = 344$ – 31.1%[2], $n = 311$), Ministry of Health (36%[1], $n = 368$ – 32.6%[2], $n = 326$), while the same populations showed poor trust in social media (39.7%[1], $n = 406$ – 36.3%[2], $n = 363$), and below average trust shown in hospitals (31.2%[1], $n = 319$ – 42.7%[2], $n = 427$), unions (20.8%[1], $n = 213$ – 28.5%[2], $n = 285$), schools (23.9%[1], $n = 244$ – 32%[2], $n = 320$), and universities (23%[1], $n = 235$ – 31.3%[2], $n = 313$).

While participants showed below-average trust in taking the vaccine in the first wave (41.4%, $n = 414$), above-average trust was shown on the contrary in the second wave (52.2%, $n = 522$). In Figure 4 the

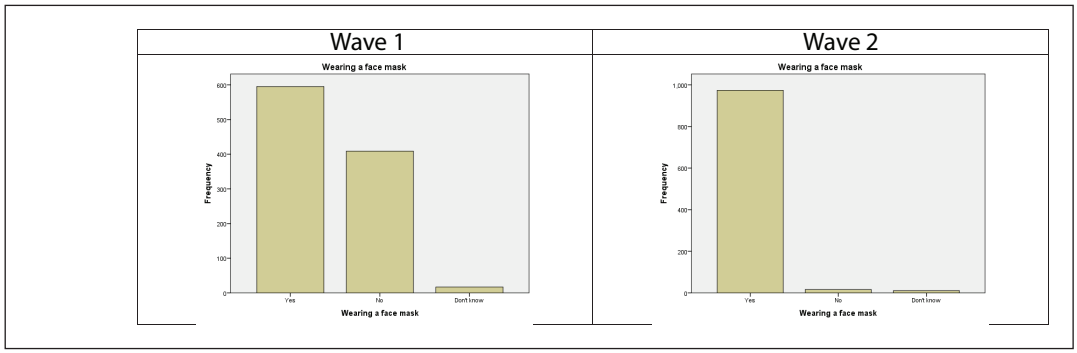

Figure 3. Wearing a face mask (Yes/No/I don't know).

same change of position is shown, where participants said no in the first wave and this has changed rapidly to reach almost the maximum to say yes to the vaccine. The average mean score in the first wave was 3.87, and in the second wave was 5.01, and the difference was statistically significant with p value < 0.001.

In Figure 4, a high percentage moved from strongly agreeing in the first wave to agreeing in the second wave. One example is the first question: strongly disagree (2%[1], $n = 20$ – 1.9%[2], $n = 19$), disagree (1%[1], $n = 10$ – 1%[2], $n = 10$), somewhat disagree (10.1%[1], $n = 103$ – 10.1%[2], $n = 101$), somewhat agree (16.6%[1], $n = 170$ – 16.2%[2], $n = 162$), agree (23%[1], $n = 235$ – 23.4%[2], $n = 234$), strongly agree (47.3%[1], $n = 1021$ – 47.5%[2], $n = 475$).

Discussion

Considering the island is the least affected among Italian cities, it has shown a moderate capacity to face the challenge despite the pressure of a fragile health system. The data collected in the first wave were crucial for us to understand the characteristic of Sicilians and their defense mechanism and capacity when faced with a new epidemic that is hitting the island. The difficult economic situation and lack of jobs has worsened the situation and left Sicily without a pioneer role despite its geopolitical status, but remained adherent to the government centralization. What remains is the attitude facing something that is not connected to any of the generation's memory; accordingly, the attitude is not a judgment or belief but rather just a reaction to such a new phenomenon. With the idea that attitude is considered to be a temporary state of consciousness and should be dynamic (10), we have decided to take the risk and evaluate both waves to determine whether there has been certain stability, or rather shifting of the Sicilian attitudes toward the epidemic. It is also important to highlight the fact that the research was not sponsored and we believe that the answers collected were sincere and honest.

In both waves, a good knowledge and perception of COVID-19's symptoms have been shown. Similar results were found in studies implemented in Palestine by Salameh *et al.* (18), in Jordan by Khasawneh *et al.* (19), and in Pakistan by Saqlain *et al.* (20).

A high percentage of participants confirmed that fever, fatigue, muscle aches, shortness of breath, and cough are for sure the main symptoms that they can note when people are infected (Figure 1). It does not look like there is a big difference between males and females in their answers on whether they have chronic diseases, seeing that the number of female participants is double that of the males. The level of knowledge in both waves seems to be equal and there are no differences to be considered. Figure 3 gives us a quick understanding of the change of position people show in the second wave, while some groups are still working on an anti-vax campaign, previously promoting demonstrations against masks and lockdowns (11).

In our data collection, a shift was made by Sicilian populations a couple of months after the epidemic started moving toward vaccines and masks (Table 2 and Figure 3). Similar willingness to get vaccinated was reported in studies conducted by Salameh *et al.* (18), Kumari *et al.* (21), and Seale *et al.* (22).

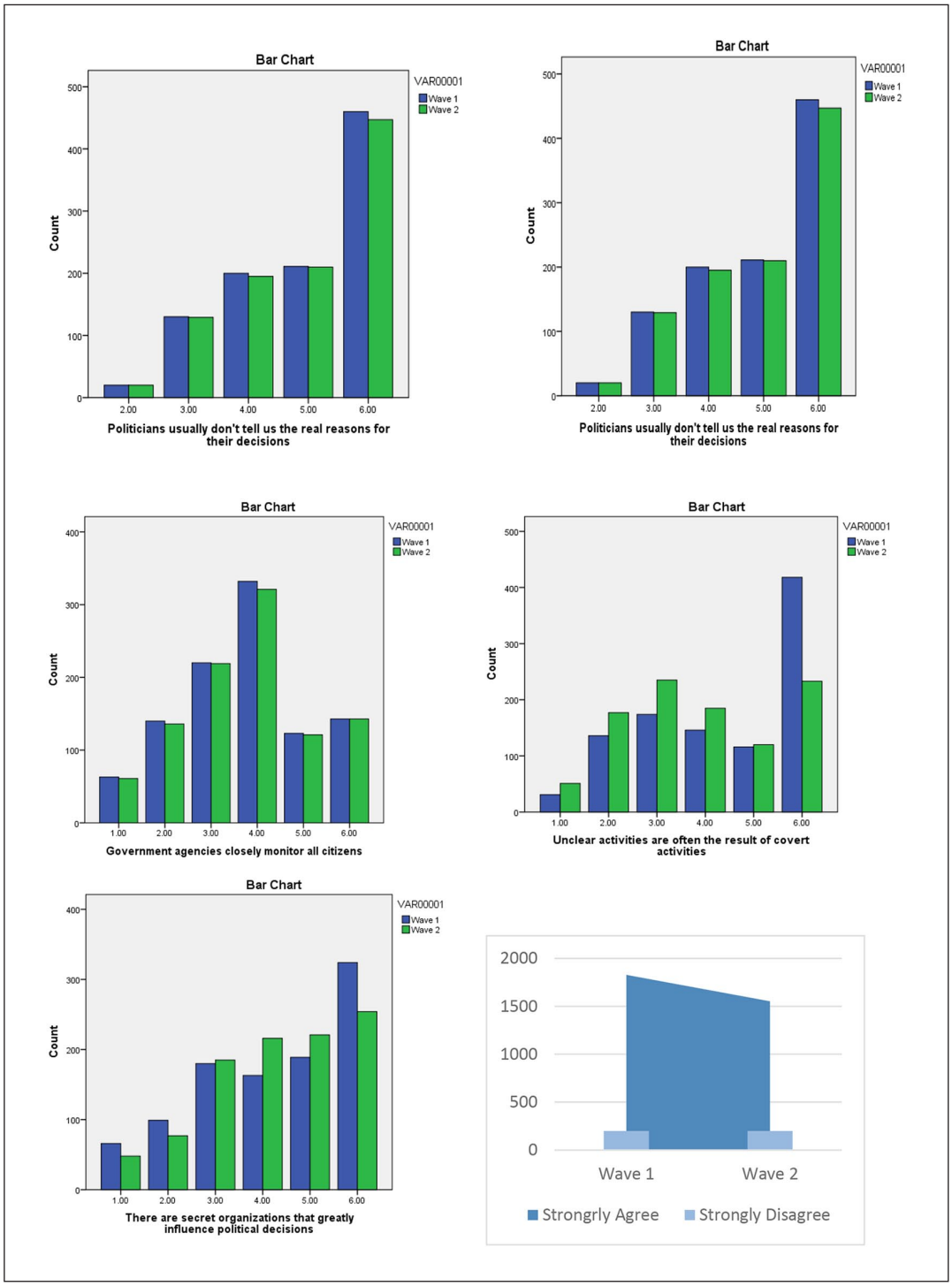

Figure 4. Conspiracy theory during COVID-19 pandemic.

Table 2. Respondents' trust in taking the vaccine.

If a vaccine becomes available and is recommended for me, I would get it							
	Very little trust	*Poor trust*	*Below average trust*	*Average trust*	*Above average trust*	*A great deal of trust*	*Total*
Wave 1	40 4	92 9.2	414 41.4	121 12.1	120 12	234 23.4	**1021**
Wave 2	10 1	75 7.5	10 1	42 4.2	522 52.2	342 34.2	**1001**
Total	50	167	424	163	642	576	**2022**

Sicilians showed little trust in the public institution, and average trust in the MOH. However, they tend to place more trust in the INPS, the institution that guarantees pensions and provides some economic support. In addition, newspapers with in-depth analysis of the situation and the TV channels that provide live coverages and have a greater impact on people and their attitude are also more trusted.

The theory of conspiracy has been strongly seen in the answers given by participants in Figure 4. Conspiracy has been very strong in the minds of people, and while 1828 said to be strongly convinced about the presence of conspiracy, this number has slightly decreased to reach 1552 persons in the second wave. Similar conclusions generally found a high level of belief in different variations of conspiracy implemented by Sallam *et al*. (23), Al-Sanafi and Sallam (24), and Yang *et al*. (25).

The correlation indicates that people who believe in conspiracy theories tend to have reduced confidence in powerful groups or institutions involved in ambiguous political activities in the past that have led to conspiratorial events (26). Individuals who endorse conspiracy theories may be less likely to accept the vaccination, as shown in Figure 2, which has changed in the second wave in accordance with the conspiracy theory belief on vaccine hesitancy.

A change of position toward trust in the vaccination has to be seen clearly in the second wave, in order to overcome this epidemic.

Conclusion

Despite the hard time the island is still facing, we believe that Sicilians were able to face the challenge and take an active part in responding with a balanced position, showing a very good knowledge and understanding of the virus situation and any future impact this can have on their daily life. Furthermore, the results are giving us a clear and positive attitude of Sicilians toward the vaccination despite the presence of 41.4% who showed below-average trust. The second wave has shown a more positive tendency toward the acceptance of vaccination; still, a deeper study should be conducted during the coming months to enlarge the perspective on this specific aspect of the epidemic.

Limits

The initial measurements taken by the government in the first wave reduced the number of cases, and still living under less-than-ideal conditions has influenced people's attitudes and their general psychological conditions.

Throughout the pandemic, illegal immigration persisted on the island, which was already grappling with various challenges. The issue was seen as crucial, with a description by Goethe (27) as a "key to everything."

The lockdown was one of the biggest challenges due to the low use of technology in Sicily (5). The homogeneity of participants as shown in Table 1 was a limitation in this study. We also would consider the lack of direct and quick access to data as a limit for this study and the delay in updating such details on the official websites of the local governments.

Acknowledgements

We acknowledge the people who participated in this research voluntarily and those who gave us their time to

discuss various steps and answer our questions, especially colleagues from the WHO Regional Office for Europe, who provided us with survey tools and guidance in each stage. A great appreciation goes to the IRCCS Oasi Maria SS and the Sicilian region offices who patronized the research. This research is dedicated to the memory of Dr. Sami Basha for his invaluable contribution, who died unexpectedly on 21 October 2021 from complications of COVID-19.

Declaration of conflicting interests

The authors have no conflicts of interest to declare.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

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Hands-on-ground in a new country: a community-based participatory evaluation with immigrant communities in Southern Alberta

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Abstract:
Immigrants experience a high risk of mental health deterioration following settlement in Canada. Immigrant communities benefit from health-promoting interventions that stimulate social inclusion and belonging as protective factors. In this context, community gardens have been recognized as interventions that promote healthy behaviours, place attachment and belonging.

This article summarizes our experience conducting a community-based participatory evaluation (CBPE), engaging community stakeholders in planning, implementing and evaluating a community garden for immigrants. We conducted a CBPE to provide relevant and timely feedback to inform programme adaptation and development. Participants, interpreters and organizers were engaged through surveys, focus groups and semi-structured interviews. Participants expressed a range of motivations, benefits, challenges and recommendations. The garden was a place that fostered learning and promoted healthy behaviours, including physical activity and socialization. However, there were challenges in organization and communication with participants. Findings were used to adapt the activities to immigrants' needs and expand the programming of collaborating organizations. Stakeholder engagement facilitated capacity building and direct use of findings. This approach may catalyse sustainable community action with immigrant communities.

Keywords: immigrants, refugees, health promotion, community gardens, participatory evaluation, community-based research/participatory research

Introduction

Evidence suggests a five-fold increase in emotional and mental health problems among newcomers after six months of arrival in Canada (1). Moreover, refugees and immigrants with settlement problems present a higher risk of mental health deterioration (2). In Canada, migration is considered a social determinant of health (3) and a central focus of health promotion practice (4). As the world enters a new era of demographic flow, receiving societies must implement interventions that facilitate settlement (5,6).

Based on the strengthening community action strategy of the Ottawa Charter for Health Promotion, it is crucial to collaborate with immigrant service providers, grassroots organizations and leaders to maximize stakeholder engagement in sometimes hard-to-reach communities, such as newcomers, refugees and ethnic minorities (4,7).

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(This manuscript was submitted on 18 August 2022. Following blind peer review, it was accepted for publication on 30 April 2023).

Global Health Promotion 1757-9759; Vol 30(4): 25–34; 1176293 DOI: 10.1177/17577592311762 93 journals.sagepub.com/home/ghp

Additionally, collaborating with communities can strengthen health research's relevance, quality and use (8). This article summarizes our experience conducting a community-based participatory evaluation (CBPE), engaging community stakeholders in planning, implementing and evaluating a community garden for immigrants in the city of Lethbridge, Alberta.

Previous research suggests that natural environments, including community gardens, can promote immigrants' integration, well-being and physical activity (9). Immigrants who participate in community gardens have shown greater place attachment to their host country (10) and a greater sense of belonging (11–14). Some suggest that this is due to embedded socialization (12,15,16), while others propose that embodied experiences contribute to connecting memories (17), which help to establish meaningful connections with their new country (11,18). Regardless of the pathway, previous experiences suggest that community gardening can facilitate settlement (19), particularly among refugees (10).

Community gardens have been suggested approaches to promote healthy behaviours (15,20), particularly in those with agricultural backgrounds (11,16). Active gardeners have shown increases in vegetable and fruit intake (21–24) and better control of their diabetes (22). Baker (20) identified that immigrants tend to plant culturally relevant species, often not available in grocery stores, which speaks to their increased capacity to develop culturally appropriate food security. Participation in gardening can also be a protective factor against dietary acculturation (25).

Other studies suggest that gardening can be a source of physical activity (15,21,22,24), particularly among older immigrants (26). In immigrant populations, gardening can be a meaningful occupation (12) and an activity that enables self-actualization (18), and improves general well-being (15) and quality of life (19). Newcomers with agricultural backgrounds can practise previous knowledge and skills (17,27), which can translate to confidence that can permeate to other areas of life (13).

However, immigrant communities may experience multiple barriers when establishing community gardens, including access to resources (13,21,23), land (14–16) and the knowledge or connections required to navigate local rules and regulations. Previous studies have suggested that transportation (20,24,25), language (15,18,20) and opportunities for socialization (18) affect the level and quality of participation. Furthermore, engagement of immigrants in the design, implementation and evaluation of nature-based interventions has been minimal (9). Meaningful engagement with immigrant communities can help develop initiatives that address their specific needs and preferences.

Evaluations of immigrant community gardens have measured different health outcomes (21,23,28). Although these types of evaluations can be valuable to corroborate the effectiveness of interventions, other types of evaluations can be more instrumental in programme development. According to Patton (29), developmental evaluation is ideal for studying grassroots initiatives that start from local contexts and needs. Evaluators engage in collaborative experiments and community development, adapting initiatives to changing realities and regional specificities. The evaluation design focused on the potential use of findings, providing feedback for development. We decided to conduct a CBPE engaging immigrants in all project stages to strengthen the community and build capacity for sustainable action (30).

Methods

Setting and context

The city of Lethbridge is located in Alberta, east of the Canadian Rocky Mountains and about 100 km north of the US border. The 2021 census calculated a population of 98,406, with an immigrant population of 14,485 (31). International migration to the city has increased, from a rate of 1,100–1,200 per decade in the 1980s and 1990s, to nearly 6,000 in the 2010s (31), making migration a major driver of Lethbridge's demographic growth.

During the last 10 years, the city of Lethbridge has been the setting of two community gardens for newcomers. Anecdotal accounts of both initiatives indicate that participants were highly receptive. Despite this, communities faced significant challenges leading, organizing, maintaining, adapting and sustaining their projects. Most importantly, they have depended on organizations that do not prioritize their interests. When these

organizations decided to stop lending their land or when grants and funding to support community gardening initiatives ran out, immigrant communities could not find new places for gardening. Accessing land and creating a community garden requires both financial and social capital, which is in early development in the case of newcomers.

Initial steps in developing partnerships

In the fall of 2020, the lead author mapped the city's immigrant community ecosystem (7) and contacted stakeholders from different sectors, including a settlement programme, a local food bank, grassroots associations, a local church and local immigrant leaders. The network held a series of meetings where stakeholders discussed previous community garden experiences and possible solutions that could grant gardening space to newcomers and immigrant communities.

Action

The local food bank offered its community garden as a location for immigrant groups to collaborate in planting and maintaining activities for the 2021 gardening season. Agencies and community leaders organized volunteer groups in compliance with the maximum outdoor gathering capacity allowed during the COVID-19 pandemic. More than 20 immigrants participated either independently or as part of a group. Participants from the settlement programme were provided with interpretation services.

Evaluation methods

Two guiding questions set the direction of the evaluation: how was the experience of immigrants participating in the volunteer programme at the Interfaith Learning Garden? And what was the best possible direction for the following gardening season? The evaluation included five focus groups and three individual semi-structured interviews with key informants. Both interviews and focus groups were semi-structured, using probing questions focusing on participants' experiences and recommendations for future programming. Participants completed a questionnaire about their demographic information, previous gardening experience and satisfaction levels with the programme and garden operations. Interviews of 20–60 min and focus groups were conducted in participants' native languages with interpretation services. The research assistant, research collaborators and lead author transcribed audio-recorded interviews, focus groups and notes to Microsoft Word documents and translated them to English. Focus groups, interviews and questionnaires were triangulated to detect inconsistencies and strengthen the analysis. The principal investigator and the research assistant performed qualitative content analysis (32) using an initial coding frame based on probing questions. They independently performed a trial coding using the NVivo 1.6.1 software, then evaluated and modified the coding frame until consensus was reached in a data matrix.

We used Chouinard and Cousins's (33) three dimensions of participatory practice to maximize participation in every stage of the evaluation:

Diversity among stakeholders: Three members of the settlement programme and two members from the local food bank collaborated on the evaluation. One undergraduate student was hired as a research assistant, and two graduate students participated as collaborators in the implementation and evaluation of the project – all are from local immigrant communities. The team included an evaluation specialist, a public health researcher, and the lead author – an immigrant.

Ownership of the evaluation process: Stakeholders from the settlement programme, the local food bank and student collaborators were part of the decision-making processes for the design, implementation and evaluation of the intervention.

Extent of participation: The depth of participation resulted from stakeholders' interest and capacity. The evaluation specialist, the senior researcher, the lead author, one research collaborator and representatives from the settlement programme and the food bank participated in selecting the study design, methods and probing questions. One member of the settlement programme, the research assistant, the lead author and the two research collaborators collected the data. The lead author and the research assistant performed the data analysis.

Findings

Fourteen participants engaged in focus groups, and five key informants were interviewed, including one participant, two interpreters and two organizers. Most focus groups and interviews were conducted at the food bank, except one focus group conducted at an ethnic organization and one interview conducted at a participant's chosen location. Participation was voluntary and not remunerated. Most focus groups took place before cooking sessions, where food and beverages were provided. Six participants were settled immigrants (with more than one year in Canada, fluent in English and working) and eight were newcomers (participating in the settlement programme). Participants were from seven different nationalities, namely Bhutan, Mexico, Sudan, India, Congo, Eritrea and Pakistan. The average age was 45 years old and nearly three-quarters self-identified as females. Seventy-five percent of participants had gardened in their country of origin, 58% in Canada and 27% in transition countries. One author participated in the garden as a volunteer but was not involved in any type of data collection. Five main themes emerged from the data and are discussed in the following sections along with the participants' recommendations.

Themes

We structured our findings in five themes and two subthemes: 1) motivation, with learning and health benefits as subthemes; 2) positive outcomes; 3) challenges; 4) other experiences; and 5) participants' recommendations.

1 Motivation

a) Learning

Learning was the most common motivation for both newcomers and settled immigrants. Many expressed their interest in learning from seed to harvest, including soil enrichment, appropriate care, and seeding and harvest times. Some were encouraged to participate because gardening was an activity they missed from home. One participant shared:

> Even some of the names, we don't know them. We knew them back home when we were doing gardening in our house, but when we came here, we didn't know [the names] or where to get the seeds. So, when I came here to the garden, I learned a lot from it: how to do it [gardening], where I can find seeds, and a lot of information for us. (MS)

In addition, many participants expressed their interest in getting to know Canadian gardening conditions, including weather, soil conditions, local practices and techniques, and native plants. A few participants stated that their interest was to apply what they learned at home so they could create or improve their gardens. Some participants were interested in teaching their children to garden. For those with agricultural backgrounds, it was a way to preserve traditions and transmit skills and knowledge. Only one participant expressed interest in learning large-scale techniques that could lead to entrepreneurial activities.

b) Health benefits

Different health benefits were mentioned as motivators during the focus groups, particularly socialization, having access to fresh vegetables for their own consumption, and physical activity. For participants from the Bhutanese community, exercise was one of their primary motivations; they contrasted sedentary lifestyles with being active and supporting the community. One of them noted:

> We go to exercise. It is boring to stay at home. When we go [to the community garden], it is beneficial for our body; at the same time, we get to help and support the community. (BM)

For some participants who did not belong to any previously established community, meeting people was a motivation for participating. Unfortunately, there were minimal opportunities for out-of-group socialization, primarily due to the COVID-19 public health restrictions. The lack of socialization was associated with a loss of motivation and early withdrawal.

2. Positive outcomes

The average satisfaction with participating in the garden and specific activities performed was 6.5 on a 7-point scale. Gardening kept participants active

and gave them 'a break' from daily activities and life demands. Participants with little or no gardening experience mentioned being excited when seeing plants grow, as one of them stated:

> This thing that we only see them [strawberries] in the grocery store, and you see them in a package. So, seeing them there [in the garden] was like 'so, that's how they grow, that's how they actually look like, wow!' (AT)

Many participants expressed their satisfaction with having a space to socialize in the garden. One organizer stated that the feeling that the other people around 'may be in the same boat as you' probably facilitated socialization. One participant reflected on why a garden could be an ideal setting to meet people:

> I truly think that [the garden] is a place where, if there are other people with the same disposition, conversations can happen because you are not doing a lot [laughs]. You are doing very monotonous activities so it's very easy to start a conversation. (AT)

In the garden, participants engaged in various forms of communication, including hand gestures. One organizer mentioned that participants drifted to similar group languages, facilitating socialization even when struggling with English. The other organizer witnessed, by the end of the season, how participants with limited English did their best to communicate to express their gratitude.

Participants from the settlement group reportedly enjoyed the company of other women and learning from each other and their respective cultures, such as medicinal use of plants and recipes. For some participants, getting to know community resources was vital. Most participants mentioned having learned valuable tips about gardening in Canada. Others stressed that having exposure to Canadian gardening techniques made them aware that they preferred their traditional ways of farming. An African participant shared:

> Back home in Africa, we don't have those kinds of gardening, in pots. They have a bigger farm and you go farming . . . So, it gives me an idea of saying 'even though I don't have a farm, I can garden in a small place'. (EC)

3. Challenges

Newcomers experienced a significant number of challenges. The most frequently mentioned were language limitations and the need for interpretation services. Some participants and one organizer mentioned that relying on interpretation was very complicated. When a volunteer interpreter who also provided transportation stopped participating, it caused premature withdrawal of those who depended on him.

Most participants were willing to visit the garden more often. However, work and life schedules were mentioned as a barrier to increasing participation, especially when exploring the possibility of gardening more often. Some explained the difficulty of having to work most of the week or having busy parenting schedules. Others mentioned transportation as an essential barrier, particularly not knowing bus routes, not having a driver's licence or a car, or not having someone to drive them (most often among seniors).

COVID-19 was a challenge for socialization. The gardening seasons started during strict public health restrictions, including the number of people in outdoor gatherings. As such, small-group visits and inter-group interaction was minimal. A participant expressed:

> In that sense, I do feel that the objective was not fulfilled, in the sense of creating networks and meeting other people. (CA)

Outdoor gathering restrictions also prevented the settlement programme from referring other newcomers to the garden. The agency was forced to select participants using subjective assessments about who would benefit most and who would actually participate. In their experience, refugee women experience greater family caring obligations and barriers to socialization, therefore, the agency selected women who attended one of their life-skills enhancement groups. According to them, the process of elimination left out many who could have benefited from the programme.

Other participants expressed not having received sufficient information about the programme, particularly its food donation policy. Although participants were informed at the start that the garden's main purpose was to contribute to the food

donation programme of the food bank with fresh produce, their inability to access significant amounts of produce they have grown was a source of dissatisfaction.

The organizer from the settlement programme stated that having consistency in their groups tends to be difficult. The garden was an exception with high attendance rates. The organizer from the food bank had difficulties preparing group activities and scheduling equally engaging activities throughout the week. Both organizers shared the same concern but agreed that this was an excellent start. Participants with farming experience stressed that the space offered by the community garden was too small for the number of volunteers.

4. Other experiences

Both organizers stressed that the volunteers were on a spectrum of gardening knowledge and experience, which made it difficult to meet diverse expectations. Participants stated that they received clear instructions about the day-to-day activities, but they complained about not having well-rounded explanations about gardening processes (from seed to harvest). For experienced participants, this was ideal, but new gardeners would have preferred more explanations. A participant narrated:

> We started to understand as time passed. The following week it was clear; we moved the soil. The week after, there were holes on the ground that we measured. So, we started to understand that it was a process but not because it was explained to us. (CA).

Volunteering in the food bank garden triggered different feelings about commitment and ownership. The lack of gardening independence (e.g. no participation in deciding what or when to plant and harvest) was experienced as a lack of ownership by some. However, others appreciated that the maintenance of the garden did not rely on them, but on the organizers. Many stressed that the garden was not theirs – neither the space nor its produce. The level of satisfaction with donating most of the vegetables to the food bank was one of the lowest graded items in the survey. Settled immigrants were satisfied with taking home symbolic amounts, whereas newcomers wanted to take greater amounts, as they were concerned about their food security.

5. Participants' recommendations

The most common recommendation among participants was to expand gardening space, mostly by creating a new community garden for them. When exploring the possibility of creating a new garden, some participants recommended gardening alternatives, such as on-ground intensive farming or ethnic-specific spaces. Others highlighted the importance of keeping specific plots for food donation or stressed their concern regarding access to resources such as property and tools. Most participants acknowledged that having an independent garden would entail more work and organization. Many stated that they would be willing to increase their commitment if they had their own garden. However, most participants agreed that they needed guidance, ideally an expert who could teach them how to maintain the garden during and after the season. Several participants, particularly newcomers, expressed their need to have an organizer that would 'keep them together'. Various participants expressed their desire to foster social relationships in the garden, including friends and family. A participant stated:

> I understand the community part of it as an activity where we all 'get our hands dirty', we can all plant, and we can all harvest, but I think that it's also important to reinstall the social interaction part of being in the community. (AT)

A frequent recommendation for the existing garden was to loosen the food bank take-home policies. One organizer stressed that some newcomers face food insecurity, and connecting them with the food donation programme or allowing them to take some produce would be meaningful for them. New gardeners suggested taking symbolic amounts that could reinforce their learning experience. Finally, a couple of newcomers mentioned they would greatly benefit from getting formal recognition for volunteering at the garden, which could facilitate their entry into the Canadian labour market.

Continuing action

The research team submitted an evaluation report to collaborating agencies in April 2022, including recommendations. The lead author discussed with collaborating agencies to adapt programmes and activities to better suit participants' needs and preferences. The food bank's garden made significant modifications to its programme, focusing on the educational component, improving communication, and expanding events promoting socialization and community building. Other members of the community who were not active gardeners were also engaged – for example, a group of women participated in yoga sessions at the garden.

Additionally, the settlement programme and a local church have plans to create their community gardens, one serving newcomers and the other food-insecure refugee families. These projects will enable immigrants to enjoy gardening independence and food security outcomes while minimizing transportation and interpretation services. However, the lack of direction from municipal authorities enabled friction and disputes over available resources (e.g. land). As a result, the settlement agency, which offers more intensive services and has often limited capacity, was left out of promising opportunities. Despite this, the settlement programme decided to build a smaller garden in their facility – depending mostly on donations and internal labour – and to expand their collaboration with the food bank, promoting participation across their programmes, including cooking classes, gardening and enrolling food-insecure newcomers in the food donation programme. These actions are exemplary of not-for-profits, which with limited resources and capacity aim to improve services through referrals and collaboration.

Discussion

This article summarizes our experience conducting a CBPE project with immigrant communities in Southern Alberta. Our research focused on evaluating the 2021 gardening season to inform programme development. The evaluation explored participants' motivations, benefits, challenges, needs and recommendations. Immigrants were motivated by a range of interests, including meeting people, socializing, learning about gardening in Canada, re-engaging in traditional activities, having access to fresh food and being physically active. COVID-19 protocols limited opportunities for socialization, keeping those engaged without a group relatively isolated. Newcomers and older adults experienced many barriers, including family care, language limitations and demanding schedules. Exploring participants' motivations, expectations, needs and barriers was instrumental in adapting the programme and expanding collective action beyond the food bank garden.

As previous evidence suggests, community gardens can promote community belonging and social integration (11), where immigrants from agricultural backgrounds can reconnect with traditional practices (11,14). At the same time, gardens offer opportunities to continue learning about their host country (18). Gardens can be 'places of attunement' (27) where newcomers adapt to the host country's weather, soil and biodiversity. Such conditions can assist in addressing some immigrants' needs related to social integration and belonging. Community gardens can be places of restoration, food production and belonging, forming 'connected ecologies' (27) for health promotion.

Strategic collaboration with immigrant communities aligns with previous action-oriented research with minorities (4,34) and the Ottawa Charter for Health Promotion (7). Throughout the project, we engaged multiple stakeholders, including service providers, grassroots immigrant organizations and community leaders, all pivotal when engaging with immigrant communities (35). Partnering organizations could learn about integrating research and action and its potential for programme development and adaptation. Research collaborators gained experience being agents of change, promoting leadership that can translate to further community action. As a network, leaders and organizations developed a sense of solidarity, which has been suggested to be crucial when advocating for resources (36). Lastly, shared decision making over every stage of the project reinforced democratic values (37), and stakeholder engagement strengthened the quality (30) and local usefulness of our research findings (29).

We identify several limitations of the project. Firstly, the engagement in the food bank's community garden represented a rapid solution, but the context of the programme, along with COVID-19 outdoor

capacity restrictions, limited immigrants' ownership of the garden and the capacity to advocate for their food security. Creating a new community garden was a challenge without financial, social and cultural capital. Instead, we prioritized taking action with the available resources. Secondly, in 2021, recruitment and coordination relied heavily on the lead author, and establishing relationships with local organizations was challenging. However, as the network developed, the community action expanded more sustainably. In addition, we did not perform an extensive evaluation that included the measurement of socialization, belonging and other health outcomes. The findings of the evaluation are project-specific, and the size and diversity of the sample limits transferability to similar projects in other contexts. Despite this, our evaluation enabled valuable and timely information for decision making. As continuing actions demonstrated, collaborating agencies have adapted and expanded their programmes incorporating immigrants' needs, preferences and recommendations.

Collaborating agencies have requested access to the manuscript as evidence to support their advocacy for grants and space, mainly at the municipality level. In their vision, the participation of municipalities as community partners could reduce numerous barriers. Hosting a community garden requires ongoing support and collaboration from municipal parties in issues such as supply of water, property rental, subsidies/grants and regulations. Local organizations tend to have stronger networks and ties with municipal parties. Therefore, immigrant communities may face greater challenges sustaining a community garden when organizations are no longer able to provide support. Having a continuous collaboration with municipal parties could overcome some of these challenges and facilitate long-term sustainability.

Conclusions

The immigrant volunteering programme at the food bank garden represented a healthy, enjoyable and safe activity. Group visits facilitated community building and learning, but socialization was not experienced equally among all participants due to COVID-19 restrictions. Socialization is essential for newcomers, immigrants with limited social networks, and older adults. Maximizing socialization and community building is an important opportunity for future programming.

Our experience supports the idea that community gardens are assets that can build community resilience and promote well-being during challenging times, including pandemics (38), hurricanes (39) and earthquakes (40). Conducting a CBPE enabled us to engage immigrant communities and local organizations in meaningful ways, building capacity and collaborating toward common goals. As a network, we prioritized action. In doing so, we provided relevant and timely feedback needed to inform programme adaptation and future developments. This feedback was used by partner organizations to extend gardening activities. This approach has the potential to catalyse sustainable community action with immigrant communities.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This study was supported by research assistantship funds from the Agility programme of the University of Lethbridge. All authors certify that they do not enjoy any financial or non-financial benefits from the community project, evaluation or manuscript.

Ethics

This research was approved by the Health Research Ethics Board from the Research Ethics Office of the University of Alberta (ID 2021-113).

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Refugee child health: a systematic review of health conditions in children aged 0–6 years living in high-income countries

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Abstract:
This study describes the extent, quality and cultural appropriateness of current research on the health conditions of refugee children aged 0–6 years settled in high-income countries. A systematic review was conducted, including original articles published on the health conditions experienced by refugee children. A total of 71 papers were included. The studies varied considerably in their research design, population characteristics and health conditions. Studies included information on 37 different health conditions, with the majority non-communicable diseases, in particular growth, malnutrition and bone density. Although the studies identified a wide range of health issues, a coordinated effort to prioritise research on particular health topics was lacking, and health conditions studied do not align with the global burden of disease for this population. Additionally, despite being rated medium–high quality, most studies did not describe measures taken to ensure cultural competency and community involvement in their research. We suggest a coordinated research effort for this cohort, with greater emphasis on community engagement to improve the evidence-base of the health needs of refugee children after settlement.

Keywords: refugee, children, health

Introduction

By mid-2022, over 100 million people were forcibly displaced worldwide (1), with approximately half the refugee population being children under the age of 18 years (2). Forced migration occurs for various reasons, including war, conflict and persecution, all of which can lead to physical and psychological trauma (2–4).

Forced migration creates many challenges, and frequently occurs in settings where there is inadequate access to nutrition, sanitation, and healthcare – in countries of origin, transit and destination (5,6). Around three-quarters of displaced populations are hosted by neighbouring countries, predominantly in low–middle income countries with small numbers offered permanent settlement in high-income countries. While high-income countries are resourced to provide safety, education and employment (7), refugees face challenges, including learning the language, integrating into the culture, isolation from social supports, and financial

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(This manuscript was submitted on 2 December 2020. Following blind peer review, it was accepted for publication on 3 March 2023).

Global Health Promotion 1757-9759; Vol 30(4): 45–55; 1165309 DOI: 10.1177/17577592311653O9 journals.sagepub.com/home/ghp

hardships, which are often compounded in families with young children (3,8–10). Recognising these difficulties, and the health conditions experienced by refugees, is essential to optimise their integration into their new communities (7).

Young refugee children are vulnerable within the settlement context because of the potential for poor health, and the health of their family, to affect their development (3,4) and their subsequent participation in early childhood education (11). Health and education in the early formative years are critical foundations for children to attain healthy development, integrate into society and participate as active members of the community, improving their long-term quality of life (3,9–11). It is therefore essential to understand the health of refugee children and how countries of settlement can maximise their health and wellbeing through interventions such as public policy, changes in healthcare practice and allocation of resources(5,8).

Given their vulnerability, the way in which research is being conducted is as important as the topic of research. Cultural competence offers both a conceptual and practical approach to research and practice. Cultural competence is 'much more than awareness of cultural differences, as it focuses on the capacity of the health system to improve health and well-being by integrating culture into the delivery of health services' (12). A culturally competent approach to research supports the use of participatory methods that privileges lived experience to ensure the design and conduct of the study is meaningful and appropriate to those affected, and supports study participation and uptake of research findings.

The aim of this systematic review was to summarise research over the period of 2014–2020 on the physical, developmental and mental health conditions of refugee children aged 0–6 years settled in high-income countries. A secondary aim was to evaluate whether the research has been conducted in a culturally competent manner.

Materials and methods

This review, including the development of its aims and dissemination of research findings, was conducted in partnership between researchers, a community-based refugee organisation and refugee health specialists.

Search strategy

The following databases were searched: CINAHL, Cochrane, Embase, ERIC, Medline, PsychINFO and PubMed.

Search terms were developed with the support of a research librarian and included: (refugee* OR asylum seeker*) AND (child OR paediatric*) AND (Developed countries), also with country specific search terms. For full search terms, see Supplementary material Table 1 online. The search included original research published between January 2014 and August 2020 and was limited to studies published in English, due to lack of resources for translation.

Eligibility criteria – inclusion and exclusion criteria

1. *Original peer-reviewed journal articles*. Case reports, letters, guidelines, reviews and non-peer reviewed papers were excluded.
2. *Research performed in a developed country defined according to the United Nations (11)*. Studies performed in refugee camps, detention centres, reception centres or at sea were excluded.
3. *Study participants were refugees*. The term 'Refugee' in this study was used to describe any person who has been forcibly displaced from their home country as a result of 'persecution, conflict, violence, or human rights violations' (2), including asylum seekers. Second generation children born to refugee parents (i.e. children who had not experienced forced migration themselves) were excluded, as we consider these children to be a separate population, warranting specific research.
4. *Children between the ages of 0 and 6 years old*. Studies could include broader age ranges but only outcomes relevant to the 0–6-year-old populations were included. Studies that did not provide adequate information to delineate this cohort were excluded.
5. *Research regarding a physical (communicable or non-communicable), developmental or mental health condition*. Articles regarding access to healthcare and neonatal health outcomes were beyond the scope of this review and therefore excluded.

Study selection

The titles and abstracts of all the articles identified by implementing the search strategy were screened for inclusion or exclusion. Where there was a lack of detail to decide, full texts were obtained and screened to determine inclusion or exclusion based on the above-described criteria. CH was the primary reviewer and screened all titles and abstracts for inclusion/exclusion and then sourced the full text paper to conduct another iteration of applying the inclusion/exclusion criteria. ER screened 50% of all the titles and abstracts, and subsequently screened all the identified papers as included, to confirm study inclusion.

Data extraction

Data extracted from included studies included:

- Study characteristics: author, year of publication, country of study, study setting, and study design;
- Population characteristics: including mean age, gender, refugee country of origin and sample size;
- Data sources: the data collection methods for each study were categorised as 'Medical records' for studies that used the health records for their population of interest; 'Clinical assessment' for studies in which children underwent a clinical interaction and/or examination; 'Survey/ interview' for studies that interviewed or surveyed children, parents, service providers, educators or community leaders; 'Population data' for studies using existing databases; and 'Health screening' for studies that reported on population-wide health screening that included but were not limited to, refugee cohorts;
- Health conditions: diagnoses were categorised according to physical (communicable and non-communicable), development and mental health conditions.

Critical appraisal

Assessment of study quality was performed using the Joanna Briggs Institute Critical Appraisal tools (13). The relevant tools were applied to the different types of study design identified in this systematic review: cross-sectional, cohort, and case–control studies, and each study was then rated as high, medium or low quality. Two reviewers (CH, ER) applied the criteria independently; there were no disagreements between reviewers.

Cultural competence appraisal

The 'cultural competence continuum' was developed by Cross *et al.* (14) in the United States in the context of mental health. The model identifies the stages of cultural competence, ranging from cultural destructiveness, to cultural proficiency, each progressing to a higher level of cultural awareness and involvement. In recognition of the challenges associated with implementing a conceptual framework practically, Gibbs *et al.* (15) proposed research strategies based on principles of community-based participatory research (16) for the four stages of cultural blindness, cultural pre-competence, cultural competence and cultural proficiency in the context of designing and implementing public health research. The framework considers nine stages of the research process from informing study design, recruitment, analysis and dissemination of findings.

Each term is defined as follows (14):

- 'Culturally blind' – the assumption that people are all alike and what works for one cultural group should also work for the other;
- 'Culturally pre-competent' – an approach whereby learning about each other in terms of barriers and solutions is encouraged;
- 'Culturally competent' – incorporating learning from the pre-competencies to develop policies and best practice;
- 'Culturally proficient' – exceeding cultural competence by also promoting and seeking to improve relations and networks among diverse groups, by recognising the complexity of cultural influences and acknowledging the importance of a partnership approach. This involves knowledge exchanges between researchers and participants.

To determine the extent to which cultural competence was addressed in each study in terms of design, implementation and reporting, Riggs *et al.* (17) developed a set of criteria based upon these to appraise applied research. (Note: the Gibbs *et al.* framework does not include cultural 'destructiveness'

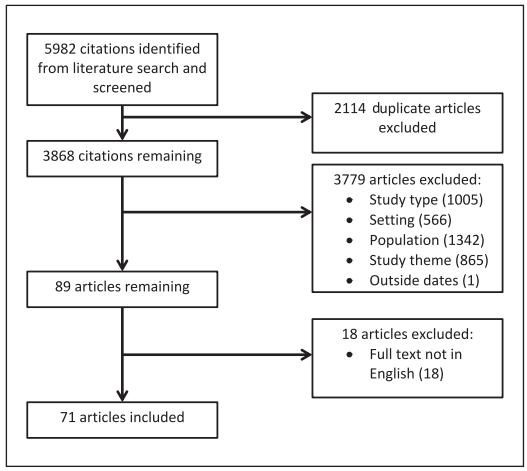

Figure 1. PRISMA flow chart depicting studies reviewed: 71 studies were included in the final review.

and 'incapacity' from the Cross *et al.* continuum and, thus, the criteria developed do not include these categories.) In this systematic review, each study was assessed for reported use of various strategies (or an 'equivalent' activity). If there was no description available, it was classified as 'not mentioned'. Two reviewers (CH, ER) applied the criteria independently; there were no disagreements between reviewers. Each stage of the research process was then classified as culturally blind, pre-competent, competent, or proficient and presented graphically.

Results

Included studies

The search identified a total of 5982 citations, with 2114 duplicates, leaving 3868 articles for analysis. After the inclusion and exclusion criteria were applied, a total of 71 articles were included in the final study (Figure 1).

Study design

Supplementary Table 2 summarises included studies, their design, population characteristics and data sources. Of the 71 included studies, there was one case–control study, 16 cohort studies and 54 cross sectional studies. There were 19 prospective and 52 retrospective studies.

Study settings and samples

The studies included data from a variety of sources such as: the community ($n = 30$), hospitals ($n = 12$), outpatient clinics ($n = 27$), government health data ($n = 2$) and a public health institute ($n = 1$). Gender of refugee participants was available in 53 studies (76%) and ranged from 41% to 67% male (mean = 53%, SD = 5.8). Of the 57 studies (80%) in which an overall sample age range was reported, the majority ($n = 48$) also included participants older than six years of age. Authors of 70 studies reported the number of refugee participants, but only 45 studies included sufficient information to identify the number of refugee children aged 0–6 (Supplementary Table 2), ranging from 14 children (18) to 28,814 children (19).

Data sources included medical records ($n = 35$), clinical assessments ($n = 13$), parent or teacher interviews and surveys ($n = 12$), population or government databases ($n = 14$) or health screening ($n = 10$) (Supplementary Table 2). Eleven studies used two data collection methods and one study used three (Supplementary Table 2). Publications were from 10 high-income countries of settlement, most commonly from the United States of America (USA, $n = 23$), Canada ($n = 13$) and Germany ($n = 11$) (Supplementary Table 2). The refugees in the included studies were from diverse source countries (Supplementary Table 2). Of the 59 studies in which source continents or countries were reported, refugees originated from 96 different countries, with the majority of studies including refugees from the Middle East, Asia and the Horn of Africa countries. Twelve studies did not include a country or region of origin.

Health conditions

A total of 37 different health conditions were identified across the 71 studies. The conditions were categorised as physical health (communicable and non-communicable diseases), mental health, and development. These are listed in Supplementary Tables 2 and 3.

Physical health

Studies focusing on physical health are reported in two main categories: communicable and non-

communicable conditions. A total of 14 communicable diseases were identified in these studies, which were categorised into different body systems or specific infectious agents. The three most investigated communicable conditions were hepatitis (13 studies, 19%), tuberculosis (10, 14%) and parasites (10, 14%). On the other hand, 19 non-communicable diseases were reported, with the most common including growth (22 studies, 31%), haematological conditions including anaemia (20, 29%) and immunisation status (14, 20%).

Mental health

Eleven studies (20%) included assessment of the mental health of refugee children aged 0–6 years, all using parent and teacher report via interviews and screening tools (Supplementary Table 2). The authors reported on symptoms of post-traumatic stress disorder, anxiety and depression and the effects of these issues on children's ability to interact with early education.

Development

Eight studies (11%) included an investigation of the development of refugee children. These studies focused on many aspects, including global developmental delay, learning and behavioural difficulties as well as attention problems (20–27).

The various health conditions in the reviewed literature are visually depicted in Figure 2.

Critical appraisal

Of the 71 studies, 41 (58%) were assessed as high quality, 29 (41%) were medium quality and one (1%) was found to be low quality (Supplementary Table 2).

Cultural competence appraisal

The results of the cultural competency appraisal are presented in Figure 3. Of note, none of the details provided in the studies demonstrated cultural competence. Only 15 authors reported enough detail to demonstrate achieving cultural pre-competence in data collection, with lower numbers achieving cultural pre-competence in other domains. No authors reported on partnerships with local communities or how they disseminated their findings to relevant communities, five commented on the appointment of culturally appropriate staff and three commented on community involvement in their analysis and evaluation. For studies where there were no active participants, the cultural appropriateness of participant recruitment, data collection and interventions was not applicable.

We assessed the reporting of 61 studies as 'culturally blind' because of the way the research question/s were developed. The researchers of these studies did not consult with community members or representatives to gauge priorities for research, but instead used the researchers' areas of interest or gaps in the literature to determine their research questions. The authors of the remaining 10 studies did not provide sufficient information to determine cultural sensitivity. Additionally, the researchers of 51 studies were assessed as 'culturally blind' in identifying target populations through use of convenience sampling. Overall, seven research groups demonstrated cultural pre-competence by considering the population's profile in terms of linguistic, religious and cultural differences, and exploring the cultural values attributed to the research issues considered (27–32).

Discussion

This study provides an overview of the current literature on the health conditions experienced by refugee children settled in high-income countries. From a total of 71 research papers, 37 different health issues were identified.

Areas of study and the burden of disease

A visual depiction of the spread of health conditions studied in the existing literature (Figure 2) shows that physical diseases, specifically non-communicable ones, were the predominant area of study; in particular, growth malnutrition and bone density, haematological disorders including anaemia and immunisation status were most observed. Conversely, the most common communicable conditions studied were hepatitis, tuberculosis and parasites. Few researchers reported child mental health or child development issues, highlighting major gaps in research.

Despite the above health conditions appearing more frequently in the published literature, whether

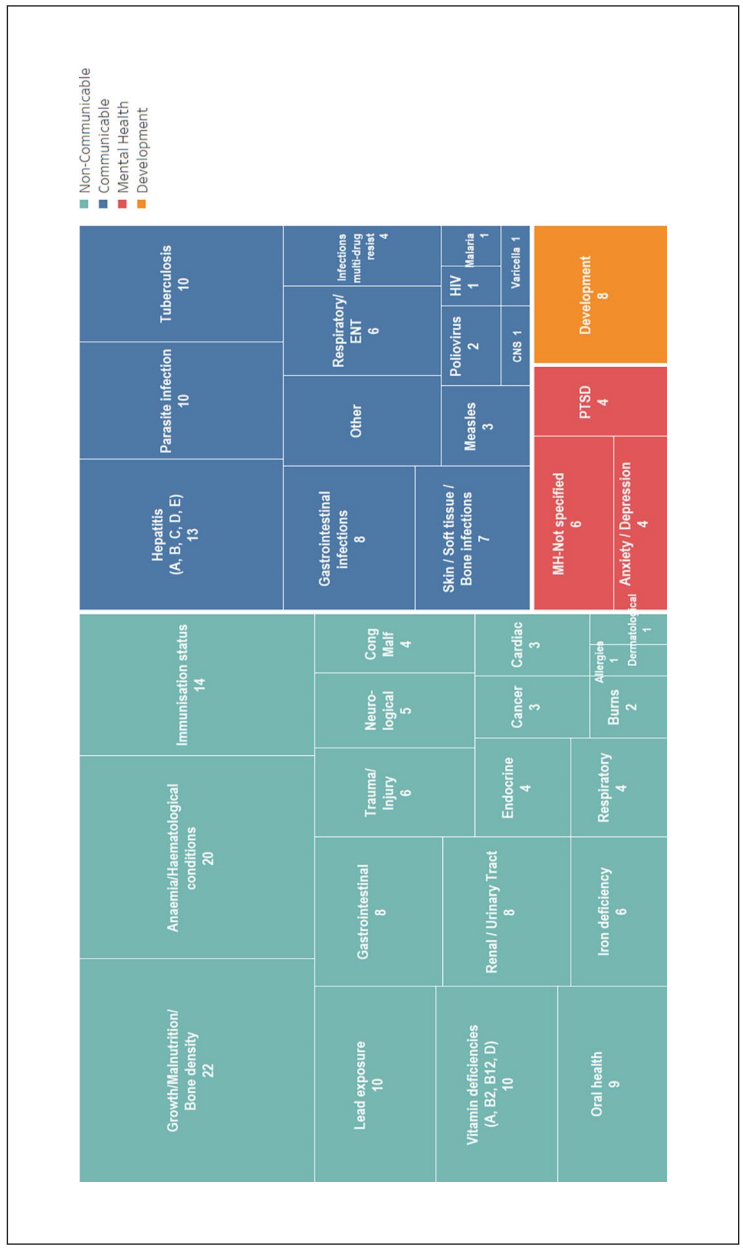

Figure 2. Tree map plot of the health conditions studied in 71 papers.[a]
[a]Tableau (2020) (tree map of health conditions) was created using Tableau. Oct. 2020.
Cong. malform: congenital malformation; Anx/dep: anxiety/depression; MH: mental health; GIT/ENT: gastrointestinal/ear nose throat; PTSD: post-traumatic stress disorder; Com-other: Other communicable diseases; HIV: human immunodeficiency virus; Var: varicella; Mal: malaria; Men: meningitis; ENT: ear nose throat

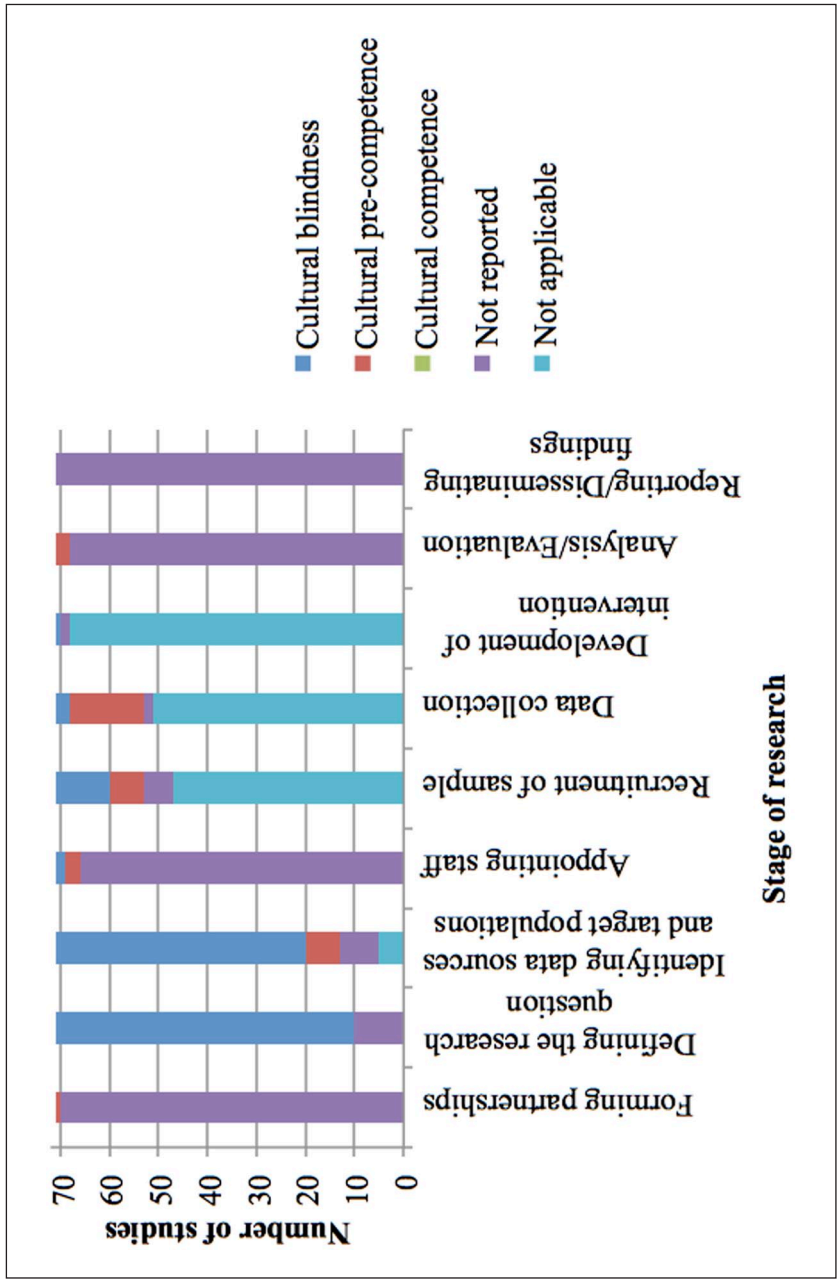

Figure 3. Cultural appraisal.

they represent the burden of disease for refugee children remains in question. There is no single source that clearly reports on the burden of disease among refugee children settled in developed countries worldwide. The Lancet global burden of disease report of 2017 described the most significant conditions affecting children up to six years old as being neonatal disorders (which were beyond the scope of this review), followed by lower respiratory infections, diarrhoeal illnesses, congenital birth defects and malaria; however, it does not provide data about the health conditions affecting refugee children (33). The United Nations High Commissioner for Refugees has published a report on abuse and malnutrition as some of the most pressing issues for forcibly displaced children; however, it is not specific to refugee children in high-income countries (34). An Australian government report explored the issues faced specifically by refugee children in Australia (35). The major focus of the report was nutrition, along with exposure to toxins, communicable conditions, oral health, immunisations and mental health (35). The existing literature appears to align with the burden of disease as per the UNHCR and Australian refugee status report in its emphasis on malnutrition, with 31% of researchers of the included studies assessing this condition (34,35). However, other issues identified by the Lancet (33) are lacking (excluding neonatal conditions which were not within scope of this review). Only 9% of researchers of the included studies investigated respiratory infections, 11% assessed gastrointestinal infections including diarrhoeal illnesses, 6% included congenital malformations and only one paper (1.4%) covered malaria.

The paucity of studies in mental health was surprising given that there is evidence that traumatic effects are cumulative and associated with poorer lifetime health (36). The unique stressors experienced by refugee children, including detention, violence and lack of security (23,26,27), therefore highlight the lack of research on the mental health of refugee children with only 14 papers on this topic (37), although some may argue this is difficult to study in such a young population.

Finally, we note that despite being an important part of child health, development is understudied both in the above reports on the burden of disease and in the existing child refugee literature, with only eight papers identified in this study. Although refugee children in developed countries are a unique population that may not share the conditions of children globally, this identifies possible gaps as the literature does not align with the most significant conditions in this age group worldwide. This could partly be explained by the cross-sectional nature of many of the included studies, which often focus on the health of refugees on arrival, hence leading to a focus on physical health conditions, whereas mental health and development may be better studied longitudinally (38).

Cultural appraisal

Despite most studies being medium-high quality based on the scientific critical appraisal performed, the cultural appraisal identified a lack of appropriate steps taken to demonstrate cultural competency. Cultural factors do not seem to be a focus in the existing research in population groups vulnerable to poor health outcomes. In the early stages of research, including 'defining the research question' and 'identifying target populations', substantial cultural blindness was observed. This highlights the urgency of placing a greater emphasis on the co-development and co-design of research to facilitate cultural competence at each stage of the research process. Community engagement and participatory methods should be inherent in designing studies to ensure inclusive, strengths-based strategies are incorporated when working with refugee communities, therefore privileging lived experience to obtain accurate, ethical and useful results resulting in better community-uptake of research findings. One example of a toolkit that aims to support researchers to be mindful of incorporating participation at each stage of the research process is the Ethical Action in Global Research: A Toolkit (39). The toolkit promotes an approach that considers ethical challenges in the 'research journey' and provides researchers with key questions and considerations to guide them from the outset (39).

We recognise the vast array of terminology and associated definitions in this field, for example, cultural awareness; cultural sensitivity; cultural humility; cultural security; cultural respect; cultural adaptation; and cultural safety (40). However, given there is no other critical appraisal instrument (to the knowledge of the authors) available to assess the application of the principles of cultural safety, this

instrument was considered satisfactory for this purpose. Newly developed instruments such as the Aboriginal and Torres Strait Islander Quality Appraisal Tool (41) are leading this field and further collaborative research is required to progress similarly inclusive measures for refugee research.

Strengths and limitations

There were limitations in the application of the cultural competence appraisal instrument as it was designed for applied studies, where there are clear interactions with study participants. Some criteria focused on the recruitment of participants, data collection and development of an intervention, which are not always relevant to researchers employing retrospective data (73% of the studies in this review). Although they do not have direct contact with study participants, researchers undertaking retrospective studies still have an important role in demonstrating that their research is culturally sensitive. For example, even if the studies do not directly involve participants, there are many opportunities to involve the communities being studied. This can include: forming partnerships with local communities to gauge priorities for research, allowing the research question/s to be guided by the community group, recognising the potential for researchers' own cultural biases to affect the research, the involvement of community representatives in the interpretation of the data, and ensuring that research findings are shared directly with the community. This also suggests that the cultural appraisal instrument could be expanded to encourage cultural evaluation and consideration in all study types.

This review aimed to be culturally competent by partnering with refugee health specialists and a community refugee organisation in the study design, interpretation and dissemination of the study findings. We were not able to involve community members in the performance of the research due to funding constraints. Studies such as this also need to be mindful of the burden placed on community members to advise on activities that may seem purely academic.

This systematic review is the first to explore the existing research about refugee children aged 0–6 years old living in high-income countries and published in the last five years. Its strengths lie in the breadth of the literature search. Numerous databases were included, with many papers screened for inclusion. This minimised the inadvertent omissions of relevant articles.

A limitation of this review is the exclusion of neonatal health conditions. The literature on this topic is extensive and would require a specific review to do it justice. Additionally, publications in languages other than English were excluded due to financial constraints, excluding several relevant papers published in non-Anglophone developed countries. Also, the information extracted from the studies themselves was incomplete due to inconsistencies in reporting key population characteristics including age, gender and country of origin. Further, the focus on studies completed in high-income countries meant that studies conducted in low-and-middle-income countries were omitted; again, this would require a specific comprehensive review. Finally, there was often insufficient information to validate refugee or asylum seeker status. This review included studies about both refugees and asylum seekers using these terms at face value; however, there is a risk of inaccurate identification of the study populations, including rejected asylum seeker claims. Standardised and comprehensive data reporting to support the accurate ascertainment of refugee status remains vitally important but is not always done well (42).

Conclusion

Refugee children experience a large variety of health conditions, namely physical health conditions, and existing research in this area is broad. In this review we identified potential gaps in the existing research compared with the burden of disease for children worldwide in areas including gastrointestinal infections, diarrhoeal illness, congenital malformations, infectious diseases such as malaria, mental health, and development. The cultural appraisal also demonstrated that cultural sensitivity does not seem to be a focus in the existing research in groups vulnerable to poor health outcomes, which highlights the need to prioritise this in future research, even in retrospective studies.

Implications for practice and future research

The gaps identified highlight an evidence gap in the health conditions faced by refugee children.

Provision of effective and responsive healthcare requires a greater investment in research and understanding of the health and development needs of refugee background communities. Future research would benefit from more coordinated efforts that are guided by the existing research and evidence gaps, underpinned by collaboration and engagement with relevant communities.

Author contribution

All authors have made a substantial contribution to the concept and design, acquisition of data or analysis and interpretation of data, drafted the article or revised it critically, and approved the version to be published.

Acknowledgements

The authors would like to thank Poh Chua from the Royal Children's Hospital Library for her assistance with searching the literature.

Declaration of conflicting interests

The authors have no conflicts of interest to declare.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

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Abstracts

For a public health in favor of epistemic justice

Amandine Fillol, Leslie Fonquerne, Linda Cambon and Valéry Ridde

Public health is increasingly moving towards the study of oppressive structures (such as racism, sexism, or ableism), and their influence on the labour market, education and justice systems, and the access to quality health systems. This commentary offers a reflection on how these structures also influence the ways of doing public health. Through the concept of epistemic injustice, which describes the fact that social organization influences the possibility of knowing and asserting one's knowledge in a society, we show that, as public health actors, we can reproduce and reinforce social injustices. Epistemic injustices are most often the result of structures and everyday life practices. It is necessary to develop the use of tools promoting reflexivity to facilitate the understanding of injustices and privileges.
Keywords: health knowledge, equity / social justice, public health, epistemic injustice. (Global Health Promotion, 2023; 30(4): 62–66)

Synergistic health model: an integration of salutogenesis and the Health asset model

Patricia Pérez-Wilson, Jorge Marcos-Marcos, Antony Morgan, Monica Eriksson, Bengt Lindström and Carlos Alvarez-Dardet

We propose a 'synergistic model' to advance the integration of key elements of salutogenesis and the health asset model, using Bronfenbrenner's bioecological theory as a framework. A sense of coherence is key to facilitating transformation of potential resources into available assets, producing positive health development. The synergistic model can contribute to the contextualization of ideas in public health policies and practices, strengthening the health-wellbeing dimension and contributing to the development of more integrated and collective healthcare models.
Keywords: salutogenesis, health assets, protective factors, health promotion, sense of coherence. (Global Health Promotion, 2023; 30(4): 75–82)

Influence of eating habits and knowledge on overweight according to residential environment: a cross-sectional study

Alejandro Alvarez Alvarez, Mara van Leeuwen Sierra, Emma Alvarez Faedo and José Antonio Cernuda Martínez

Objective: to verify the influence of knowledge and eating habits on overweight according to residential environment (urban or rural).
Method: a questionnaire was administered to 451 people, residents in the basic health zone of Villaviciosa (Asturias, Spain), between 35 and 65 years old, distributed in rural and urban areas. The questionnaire form was composed of questions about sociodemographic data, habits, and nutritional knowledge. Relative frequencies (%) were calculated for the qualitative variables, and arithmetic means (standard deviations) for quantitative variables. Pearson's correlation was used to verify or rule out the relationship between the score on the nutrition knowledge questionnaire and body mass index (BMI). To study the relationship between each question of the habits questionnaire and the area of residence, the chi-square test was used. To compare the BMI means by area, the t test for independent samples was applied. Logistic regressions were performed to calculate the odds ratio (OR) between the dependent variable (overweight) and the sociodemographic variables.
Results: the average age of the respondents was 49.96 years and the average BMI was 26.87 kg/m^2, with 57.6% of the respondents being overweight. Not reading nutritional labels increases the risk of being

  DOI: 10.1177/17579759231216061 journals.sagepub.com/home/ghp

overweight (OR = 2.2; $p = 0.001$); those who consider themselves to be overeating tend to be more likely to be overweight (OR = 8.6; $p < 0.001$); eating out several times a week (OR = 11.6; $p = 0.019$), as well as the consumption of soft drinks or processed juices (OR = 3.3; $p = 0.013$) and low alcohol beverages (OR = 2.8; $p = 0.003$) during meals increase the probability of being overweight.
Conclusions: eating habits and physical activity patterns are mainly responsible for overweight. Adequate knowledge in the population can help to develop a preventive plan that will stop the growth of overweight and obesity.
Keywords: basic health knowledge, obesity/overweight, nutrition. (Global Health Promotion, 2023; 30(4): 83–92)

Le pouvoir de la promotion de la santé de réduire la pauvreté à l'échelle mondiale

Masamine Jimba[1] et Nancy Long Sieber[2]

La pauvreté est un problème complexe et multiforme, même si on l'a souvent quantifié en termes simples pour faciliter les comparaisons mondiales. La Banque mondiale fixe le seuil de l'extrême pauvreté, basé sur les prix de 2017, à 2,15 USD par jour. Selon cette définition, 670 millions de personnes dans le monde se trouvaient dans cette situation à la fin de 2022, et on pourrait s'attendre à ce que 575 millions de personnes vivent dans l'extrême pauvreté d'ici 2030 (1).

Même si ces chiffres paraissent élevés, les taux de pauvreté ont diminué de façon constante entre 1990 et 2010. Ces dernières années, cependant, la vitesse de réduction de la pauvreté a ralenti en raison de la polycrise[1], notamment les urgences climatiques, les conflits, l'insécurité alimentaire et l'épidémie de COVID-19.

La pauvreté étant une menace majeure pour la santé et l'équité en santé, il n'est pas étonnant que la réduction de la pauvreté ait été une priorité pour la promotion de la santé. La première Conférence internationale sur la promotion de la santé, tenue à Ottawa, au Canada, en 1986, s'est achevée par la rédaction de la Charte d'Ottawa, un plan d'action pour atteindre la Santé pour Tous d'ici l'an 2000 (2). Bien que le terme « pauvreté » n'ait pas été explicitement utilisé dans la première charte, le mot est souvent apparu dans les chartes, les déclarations, ou les appels à l'action produits à l'issue des Conférences qui ont suivi. Par exemple, dans la déclaration de Sundsvall après la 3ème Conférence internationale sur la promotion de la santé, qui s'est déroulée en 1991, le terme « pauvreté » est apparu trois fois, dans la discussion sur les environnements favorables à la santé (2) :

> *. . . les participants à la Conférence ont noté que des millions d'individus vivent dans une pauvreté extrême et dans un environnement de plus en plus dégradé qui menace leur santé, et rend difficile à atteindre l'objectif de l'instauration de la Santé, pour Tous d'ici l'an 2000.*
>
> *Des millions d'individus vivent dans une pauvreté extrême et dans un environnement de plus en plus dégradé, tant dans le milieu urbain que celui rural.*
>
> *La pauvreté frustre les gens de leurs ambitions et de leurs aspirations à un avenir meilleur, tandis que les limites de l'accès aux structures politiques nuisent à l'auto-détermination.*

En 1997, dans la Déclaration de Jakarta (4ème Conférence), la pauvreté est considérée comme étant « la plus grave menace pour la santé » et 13 conditions préalables à l'instauration de la santé sont énoncées (2). Aucune mention n'est faite de la « pauvreté » dans les documents produits après les 1ère, 2ème, 5ème et 6ème conférences, mais le terme de nouveau apparaît une ou deux fois dans les appels à l'action, les déclarations ou les chartes des conférences de Nairobi (7ème), d'Helsinki (8ème), de Shanghai (9ème) et de Genève (10ème). Dans la Charte de Genève pour le bien-être, qui s'appuie sur les résultats de la 10è Conférence mondiale sur la promotion de la santé tenue en 2021, la pauvreté est identifiée comme un « facteur de risque pour de futures crises encore plus graves que celles que nous connaissons aujourd'hui » (3). Dans la plupart des cas, cependant, lorsque le terme « pauvreté » est utilisé dans les documents post-conférence, il est défini comme une mesure fondée sur le revenu.

Une tendance similaire est observée dans les documents qui ont trait aux Objectifs de développement durable des Nations Unies (ODD) et les articles qui en parlent. Selon Kickbush et Alakija, par exemple, le monde est plongé dans l'incertitude et une polycrise, et l'objectif d'amélioration de la

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Global Health Promotion 1757-9759; Vol 30(4): 58–61; 1216059 DOI: 10.1177/17579759231216059 journals.sagepub.com/home/ghp

santé fait fausse route ; par conséquent, « l'opération de sauvetage » nouvellement proposée par l'ONU pour les ODD pourrait ne pas améliorer la santé mondiale (4). Elles suggèrent que les ODD soient déconstruits pour reconstruire des objectifs collectifs priorisant la pauvreté, la santé et le climat (4). Dans leur article, la réduction de la pauvreté basée sur le revenu a été traitée comme un objectif indépendant, distinct de la santé et du climat.

Depuis 2010, cependant, une autre définition de la pauvreté a émergé au niveau mondial, axée sur d'autres privations, non monétaires. Le Programme des Nations Unies pour le Développement (PNUD) et l'Université d'Oxford ont élaboré un indice de pauvreté multidimensionnelle (IPM) en 2010 (5). Il comprend 2 indicateurs de santé (la nutrition et la mortalité infantile), 2 indicateurs d'éducation (les années de scolarité et la fréquentation scolaire) et 6 indicateurs de niveau de vie (le combustible de cuisine, l'assainissement, l'eau potable, l'électricité, le logement et les biens mobiliers). Dans cette définition, les indicateurs de santé ne sont pas séparés de la pauvreté ; en fait, la santé est considérée comme l'une des trois dimensions de la pauvreté. Les valeurs de l'IPM sont calculées en utilisant ces paramètres. Les résultats vont de 0 à 1, les valeurs plus élevées correspondant à une plus grande pauvreté.

Si les chercheurs en promotion de la santé et les praticiens dans ce domaine définissent la pauvreté uniquement comme un état de privation monétaire, ils risquent de ne pas prendre en compte les avantages de certaines actions qui allègent son poids. La définition non monétaire de la pauvreté peut leur permettre d'aborder directement certains aspects de la pauvreté. Pour la nutrition, le premier indicateur de santé, l'approche de la déviance positive, qui est une approche fondée sur les atouts et la résolution de problèmes à l'échelle communautaire, est également une stratégie satisfaisante pour la promotion de la santé (6,7) qui a réussi à améliorer la nutrition parmi la population pauvre au Vietnam. En 1990, le Vietnam était l'un des pays les plus pauvres du monde, avec un revenu national de croissance par habitant de 130 USD par an (8). En appliquant l'approche de la déviance positive, Save the Children USA a trouvé des enfants bien nourris parmi les familles les plus pauvres. Ils ont ensuite identifié trois comportements favorables à la santé qui pourraient être valorisés auprès des familles ayant des enfants sous-alimentés. Cette pratique a été étendue à 250 communautés, et on estime que 50 000 enfants ont récupéré de la malnutrition en sept ans (9). Cette approche a été utilisée dans de nombreuses régions du monde, et une revue systématique a conclu que les interventions qui utilisent l'approche de la déviance positive peuvent être utilisées comme une stratégie alternative pour améliorer l'état nutritionnel des enfants de moins de cinq ans (10).

En ce qui concerne la mortalité infantile, le deuxième indicateur de santé de l'IPM, les activités de promotion de la santé, ont contribué à réduire les décès chez les enfants. Par exemple, une politique nationale de promotion de la santé a été mise en œuvre en Afrique du Sud de 2015 à 2017. Il s'agissait de visites à domicile par des promoteurs de santé communautaire, de programmes d'éducation pour les femmes enceintes et de divers efforts de marketing des médias pour promouvoir les services de prévention. Cette stratégie a permis de réduire le taux des mortinaissances de 8,36 % dans les zones urbaines et de 2,84 % dans les zones rurales (11).

En veillant à l'équité, la promotion de la santé peut améliorer les indicateurs de santé de l'IPM, démontrant que l'argent n'est pas une condition préalable nécessaire pour améliorer la santé. Même dans un état d'insuffisance monétaire et de privation, la promotion de la santé peut améliorer la santé des personnes financièrement pauvres.

Au-delà des indicateurs de santé, la promotion de la santé peut également jouer un rôle dans l'amélioration des indicateurs de l'éducation et des indicateurs du niveau de vie de l'IPM. En ce qui concerne les indicateurs de l'éducation, la mauvaise santé est bien connue comme étant une cause de perte d'« années de scolarité » et de « fréquentation scolaire ». L'OMS et l'UNESCO ont publié conjointement une brochure sur les écoles promotrices de santé (EPS), montrant que certains programmes scolaires peuvent améliorer la fréquentation scolaire (12). Cependant, dans de nombreuses études d'évaluation liées aux EPS, les « années de scolarité » et la « fréquentation scolaire » n'ont pas fait partie des critères d'évaluation du succès des interventions menées par des EPS. Si les EPS visent à contribuer à la réduction de la pauvreté, elles devraient inclure systématiquement ces indicateurs liés à la pauvreté, afin que la promotion de la santé puisse contribuer à réduire la pauvreté par l'éducation.

En ce qui concerne les indicateurs du niveau de vie, la promotion de la santé contribue particulièrement à l'amélioration de l'assainissement et au traitement de l'eau potable par l'éducation pour la santé. Le Rwanda, par exemple, a lancé un programme communautaire de promotion de la santé environnementale pour obtenir de l'eau potable à domicile grâce à des interventions de traitement de l'eau domestique et de stockage sûr. En 2014, des purificateurs d'eau (filtres à eau) ont été donnés à 100 000 foyers. Des activités ont été menées pour montrer comment utiliser correctement le filtre, de même que des actions d'éducation communautaire et des visites régulières d'agents de santé communautaires et d'autres. Ces activités de promotion de la santé ont amélioré la qualité de l'eau et la santé des enfants (13). La promotion de la santé peut contribuer à réduire la pauvreté en se concentrant sur ces indicateurs, en particulier dans les pays à revenu faible et intermédiaire.

En utilisant l'ensemble des mesures de la pauvreté utilisées dans l'IPM, la promotion de la santé peut contribuer à réduire la pauvreté de cette manière. Cela démontrera l'utilité de la promotion de la santé comme stratégie de réduction de la pauvreté au niveau mondial.

Même si l'IPM offre une définition plus large de la pauvreté, il existe de nombreux autres paramètres mesurables et non mesurables qui contribuent aux privations associées à la pauvreté. *Global Health Promotion* a mis l'accent sur « des solutions intersectorielles équitables en matière de politiques et de programmes pour aborder des questions comme la santé mentale » (14). Cette approche est également pertinente pour lutter contre la pauvreté. Au-delà de l'IPM, la promotion de la santé s'intéresse depuis longtemps aux déterminants socioéconomiques de la santé. La Charte d'Ottawa montre que des politiques publiques saines et des environnements favorables peuvent avoir plus d'impact sur la lutte contre la pauvreté. Tout en montrant que les stratégies de la promotion de la santé peuvent aider à améliorer la pauvreté au niveau mondial en utilisant l'IPM, la communauté de la promotion de la santé devrait également prendre en compte les facettes invisibles et moins facilement quantifiables de la pauvreté pour aider à faire de la santé pour tous, non pas juste une rhétorique, mais une réalité.

Note

1. *Polycrise* : Ce terme a été introduit pour la première fois par le philosophe français Edgar Morin et sa collègue Anne Brigitte Kern. Ils ont défini la polycrise comme « l'intersolidarité complexe des problèmes, antagonismes, crises, processus incontrôlables et de la crise générale de la planète » (15). Dans le Rapport sur les risques mondiaux 2023, la définition suivante est utilisée : « des crises disparates qui interagissent, de sorte que l'impact global excède largement la somme de chaque part » (16).

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Pour une santé publique en faveur d'une justice épistémique

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Résumé:
La santé publique s'oriente de plus en plus vers l'étude des structures oppressives (telles que le racisme, le sexisme, ou le validisme) et de leur influence sur le marché de l'emploi, les systèmes éducatifs et judiciaires, et l'accès aux systèmes de santé de qualité. Ce commentaire vise à proposer une réflexion sur la manière dont ces structures influencent également la façon de faire de la santé publique. À travers le concept d'injustice épistémique, qui décrit le fait que l'organisation sociale influence la possibilité de connaître et de faire valoir sa connaissance dans une société donnée, nous montrons qu'en tant qu'acteur.rice de santé publique, nous pouvons reproduire et renforcer des injustices sociales. Les injustices épistémiques sont la plupart du temps le fruit de structures et de pratiques quotidiennes. Il est nécessaire de développer l'utilisation d'outils permettant de favoriser la réflexivité pour faciliter la mise en perspective des injustices et des privilèges.

Mots clés : connaissances en santé, équité / justice sociale, santé publique, injustice épistémique

Introduction

Le terme de déterminant social de la santé, développé dans les années 1990 (1), a marqué un tournant dans la recherche de justice sociale. La Commission des déterminants sociaux de l'Organisation mondiale de la Santé reconnaît la présence d'une « répartition inégale du pouvoir, des revenus, des biens et des services aux niveaux mondial et national et des injustices qui en découlent » (2), permettant ainsi de donner une nouvelle orientation aux actions en santé. Les écrits scientifiques tiennent désormais davantage compte de cette répartition inégale, mais aussi des structures oppressives, telles que le racisme, le sexisme, ou le validisme, et de leur influence sur le marché de l'emploi, les systèmes éducatifs et judiciaires, et l'accès aux systèmes de santé de qualité (3). À l'instar d'autres auteurs et autrices (4,5), nous considérons que les activités de santé publique, « malgré les meilleures intentions, peuvent être complices de la mauvaise santé des personnes socialement vulnérables » (4), particulièrement du fait d'injustices épistémiques. Au sein de la santé publique, comme

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(Ce manuscrit a été soumis le 20 octobre 2022. Après évaluation par des pairs, il a été accepté pour publication le 1 juin 2023).

Global Health Promotion 1757-9759; Vol 30(4): 62–66; 1183325 DOI: 10.1177/17579759231183325 journals.sagepub.com/home/ghp

dans l'ensemble de la société, les structures oppressives limitent la possibilité pour certaines personnes de faire entendre leur voix et de contribuer intellectuellement aux discours, aux connaissances, aux décisions et aux actions (4,6). Les actions de santé publique sont généralement créées et dirigées par une petite partie de la population, le plus souvent socialement ou financièrement privilégiée, amenée à résoudre les problèmes de vulnérabilité d'une autre partie de la population socialement vulnérable (7). Par ce biais, sans pratique réflexive systématique, la santé publique peut reproduire des injustices sociales en limitant la diversité des personnes, des discours et des idées dans la production des connaissances, des décisions et des actions. Les changements nécessaires, en faveur d'une plus grande justice épistémique en santé des populations, passent donc par la remise en question de certains privilèges (avantages sociaux en raison de l'appartenance à un groupe dominant) épistémiques. Alors, comment rendre ce concept de réflexivité opérationnel ? Ce commentaire a pour objectif de proposer des pistes de solution pour favoriser la représentation sociale, dans sa diversité, au sein de la santé publique, à partir du concept émergent d'« injustice épistémique ». Après l'avoir défini, nous montrerons de quelle manière cette injustice ainsi que le rôle des structures oppressives dans l'activité de santé publique peuvent mutuellement s'influencer. Dans un second temps, nous proposerons des pistes de solution favorables à une justice épistémique dans l'action en santé publique.

Quand la valorisation de ce que l'on « sait » dépend de notre position sociale : les injustices épistémiques

Le concept d'injustice épistémique permet de comprendre comment l'organisation sociale influence la possibilité de connaître et de faire valoir sa connaissance dans une société donnée (8). Deux types d'injustices épistémiques se distinguent.

D'une part, l'injustice de témoignage (testimonial injustice) consiste en la décrédibilisation des connaissances portées par une personne du fait de ses caractéristiques sociales. Cette injustice est étudiée dans le cadre des soins de santé. En consultation médicale, le jugement épistémique du personnel de santé peut amener à ignorer, nier, dévaloriser les récits d'expérience des patients et patientes ou au contraire à les reconnaître comme des connaissances légitimes. Dans le cadre de consultations gynécologiques, les femmes font régulièrement face à une négation de leurs souffrances liées à la contraception ou aux menstruations de la part des membres du corps médical. Par conséquent, l'ensemble du panel contraceptif est rarement présenté (9). Par ailleurs, aux États-Unis d'Amérique, à situation égale, les personnes latino ou noires-américaines recevraient moins de traitements pour la douleur que celles identifiées comme étant blanches (10). Il a également été montré que le stéréotype du syndrome méditerranéen[1] est un obstacle à la prise en charge des personnes racisées dans les hôpitaux en France. Ces injustices épistémiques trouvent leurs racines dans les divers systèmes d'oppression, ici le sexisme et le racisme.

D'autre part, l'injustice herméneutique ou d'interprétation (hermeneutical injustice) désigne l'impossibilité pour certaines personnes de faire valoir leurs expériences avec leurs mots car la société en légitime d'autres. Ainsi, les aspects essentiels de l'expérience d'une personne peuvent être occultés dans la compréhension d'un vécu reposant sur les témoignages de la population générale concernée. Ces témoignages sont souvent considérés comme crédibles, car issus de personnes dominantes. Pendant de nombreuses années, il a été impossible pour certaines femmes de nommer l'expérience de harcèlement qu'elles subissaient, et ainsi d'être reconnues comme victimes, car le concept n'était pas reconnu de façon collective (8). Dans le champ médical, sous couvert d'une supposée nature fragile ou hystérique des femmes, et donc d'une décrédibilisation du témoignage de leurs symptômes, l'endométriose peine à être reconnue comme une maladie, entrainant un délai de diagnostic de sept à dix ans en France (11). Les différents types d'injustices s'appréhendent au sein d'un même continuum : ici, l'endométriose peine à être reconnue à la fois du fait des caractéristiques sociales des personnes concernées (femmes) (injustice de témoignage), entrainant une difficulté à faire valoir leurs expériences (injustice herméneutique).

Si l'on observe des injustices épistémiques entre le personnel et les usagers. ères du système de santé, de telles injustices peuvent aussi se présenter dans le domaine de la santé publique. Par exemple, dans le cadre de projets de recherche ou d'interventions, les

opinions de chaque acteur. rice seront inégalement prises en compte, selon que ces connaissances soient ou non valorisées par les personnes dominantes du partenariat (12). Or, une absence de considération peut reproduire des effets délétères sur la santé, notamment en réduisant des comportements dits à risque à des choix individuels. En effet, les groupes sociaux minoritaires ou à faible pouvoir socio-économique adoptent des comportements plus néfastes pour la santé que les groupes sociaux plus privilégiés (13). Pourtant, ces comportements, tels que le tabagisme, la consommation d'alcool, les conduites à risque (sexuelles, sur la route) peuvent s'appréhender comme des stratégies de résistance sociale à une situation défavorable. L'adoption consciente ou non de telles stratégies favorise de nombreux problèmes de santé mentale et physique, dont la responsabilité reviendrait moins aux individus qu'à l'organisation de la société (14,15).

Comme il a déjà été montré par ailleurs (16), une oppression sociale va de pair avec une oppression épistémique, c'est-à-dire une impossibilité de reconnaître, conceptualiser ou partager une expérience de discrimination. Ces stratégies sont parfois interprétées en santé publique comme le résultat d'un manque d'information ou d'une certaine inconscience, voire d'une irresponsabilité individuelle, ce qui reproduit alors ces injustices épistémiques.

Lutter contre les injustices épistémiques en santé publique : opter pour une « objectivité forte » et donc située

Les travaux portant sur les injustices épistémiques traitent peu la présence de ces dernières dans la sphère scientifique. Pourtant, la production scientifique participe à légitimer un mode de vie épistémique défavorable à certains groupes sociaux. Les épistémologies féministes et décoloniales ont pourtant impulsé une réflexion sur la façon dont les dynamiques sociales conditionnent la production des connaissances (12). Pour Haraway (17) et Harding (18), pionnières des épistémologies du « parti pris féministe » (*feminist standpoint)*, des « savoirs situés » ou du « point de vue situé » (*standpoint*), tout savoir est subjectif. Selon ce point de vue, le savoir est produit à partir d'une position spécifique dans les rapports sociaux, laquelle a une influence sur la nature des savoirs produits. Les scientifiques et les acteurs, rices de santé publique pensent à partir d'un point de vue qui peut être considéré, à tort, comme étant neutre.

Pour pallier ce biais, Harding propose d'adopter une « objectivité forte » (*strong objectivity)* (18) en situant le point de vue depuis lequel les connaissances sont produites. Par exemple, admettre que la médecine de la reproduction est axée sur la gouvernance des corps des femmes permet de montrer qu'elle a tardé à reconnaitre que les hommes peuvent contribuer à l'infertilité du couple (19). Dans une même logique, la stratégie internationale des 1000 jours invisibilise la responsabilité des hommes dans la qualité de vie de leur progéniture (20). Vingt fois plus de recherches sont menées sur l'impact du mode de vie des femmes, plutôt que celui des hommes, sur le fœtus (21). Or, en responsabilisant fortement les femmes, ces recherches favorisent l'anxiété maternelle, qui elle-même se répercute sur le fœtus (22). En faisant l'impasse sur une « objectivité forte », la stratégie des 1000 jours devient contre-productive.

Remettre en question le point de vue scientifique dominant, trop souvent pensé comme neutre, permet de révéler les relations de pouvoir présentes dans la production des connaissances et de tendre vers davantage d'objectivité (23). Comment un système de production des connaissances scientifiques, majoritairement dominé par une partie de la population (privilégiée), pourrait-il prétendre à quelque neutralité que ce soit dans l'analyse des faits sociaux ?

Les parties prenantes de la santé publique sont concernées par ces enjeux pour au moins trois raisons. En premier lieu, il existe une faible culture de la réflexivité sur la manière dont les connaissances scientifiques sont liées à des enjeux sociaux, alors même que ces connaissances font partie intégrante des systèmes étudiés. Si davantage de personnes prennent conscience de la dimension orientée des activités scientifiques (selon qui y prend part et les mène, et par qui les idées sont véhiculées), il est rare de trouver des outils permettant de déconstruire les modalités de l'activité scientifique et les inégalités la conditionnant. En deuxième lieu, alors que les modalités « participatives » des recherches sont encouragées en santé publique, elles n'amènent pas toujours à une réelle prise en compte des points de vue de chacun.e. En effet, il ne suffit pas de rassembler des personnes « autour de la table » pour que chaque

voix soit entendue (24). L'injustice épistémique permet de comprendre que chacun.e d'entre nous est influencé.e par des biais implicites, qui conditionnent à la fois la prise de parole et la capacité d'écoute. Enfin, les stratégies de santé publique mises en place véhiculent des idées situées. En favorisant la transmission de certaines connaissances par rapport à d'autres dans les stratégies de transfert/mobilisation des connaissances, et en ne reconnaissant pas d'autres expériences épistémiques que la nôtre, nous pouvons reproduire ces injustices. Nous participons alors à perpétuer et renforcer un ordre social plus global, qui distingue les connaissances considérées comme légitimes de celles qui ne le seraient pas.

Ainsi, nous souhaitons partager deux outils propices au développement de pratiques en santé publique plus justes. Le premier est une grille d'analyse de la prise en compte des inégalités sociales dans les projets de recherche (25). Cette grille comprend un *continuum* de six types d'actions ciblés sur les causes des inégalités en santé publique allant de leur « discréditation » (*discredit*) à la « perturbation » (*disrupt*) des causes fondamentales des inégalités. Ce *continuum* permet de poser une base de dialogue pour envisager la portée des actions en regard de l'équité en santé. Le deuxième outil est un guide d'auto-évaluation permettant d'expliciter comment les parties prenantes à une recherche participative contribuent à la définition des objets des études (12). À ce jour, il n'existe pas de retour sur l'utilisation de tels outils ou même sur la prise en compte des injustices épistémiques en recherche en santé publique. Ces questions touchent à des structures établies, souvent implicites, que chacun et chacune peut plus ou moins reproduire. L'usage de ces outils permettrait alors de « perturber » les injustices au sein de la santé publique sans prétendre proposer de solutions idéales. Il s'agit de susciter un intérêt pour ces enjeux en favorisant l'utilisation de ces outils et les réflexions à ce sujet.

Conclusion

Il serait aisé d'imaginer que les injustices épistémiques soient le résultat d'actions malfaisantes volontaires. Or, elles sont la plupart du temps le fruit de structures et de pratiques quotidiennes qui méritent d'être analysées en développant une remise en question des injustices et des privilèges, y compris chez nous-mêmes, scientifiques. En ce sens, des sociologues mettent au jour des tabous méthodologiques tels que l'absence de réflexivité dans la relation d'enquête (26), et alertent sur les biais cognitifs que cela engendre. Il s'agit alors de systématiser l'exercice de réflexivité en interrogeant d'une part son positionnement social, le cadrage théorique choisi ou encore, son approche épistémologique, et leur influence sur les pratiques. D'autre part, il nous faut questionner les rôles endossés durant l'exercice de nos travaux, selon qu'ils soient de notre propre initiative ou qu'ils nous soient attribués par les autres.

Conflit d'intérêts

Aucun conflit d'intérêt déclaré.

Financement

Aucun financement déclaré.

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Note

1. Stéréotype raciste consistant à considérer que les personnes (nord-)africaines ou noires exagèrent leurs symptômes ou leurs douleurs (27).

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Résumés

Les perceptions de la confiance en la vaccination et du complot chez les personnes faisant preuve d'hésitation et de résistance à l'égard du vaccin contre la COVID-19 : une étude intersectorielle

Hüseyin Eriş, Fatma Karasu et Duygu Ayar

Contexte : Les croyances individuelles dans les théories du complot et l'opposition à la vaccination jouent un rôle dans les taux de propagation de la COVID-19.
Objectif : Cette étude visait à déterminer la perception de la confiance en la vaccination et la perception des théories du complot concernant les vaccins parmi les personnes faisant preuve d'hésitation et de résistance à l'égard du vaccin contre la COVID-19 dans une province de Turquie.
Méthodes : Cette étude a été menée dans la province de Turquie qui présente le taux de vaccination le plus faible, auprès de 1244 individus ayant accepté d'y participer. Une « fiche de renseignements personnels » et une « échelle de perception et d'attitude face au vaccin contre la COVID-19 » ont été utilisées pour recueillir les données.
Résultats : Les personnes qui étaient résistantes aux vaccins présentaient un score moyen faible pour la perception de la confiance et un score moyen élevé pour la perception du complot. La variable de la perception du complot avait un effet significativement négatif et élevé sur la perception de la confiance.
Conclusion : Les participants étaient fortement résistants aux vaccins contre la COVID-19. Leur niveau de perception de la confiance dans les vaccins contre la COVID-19 était modéré et leur niveau de perception du complot était élevé.
Mots clés : vaccins contre la COVID-19, hésitation vaccinale, refus vaccinal, Turquie. (Global Health Promotion, 2023; 30(4): 6–15)

Les connaissances, les perceptions, la prévention et les pratiques des Siciliens durant la pandémie par rapport à la vaccination : une enquête basée sur un questionnaire

Sami Basha et Basma Salameh

Contexte : La COVID-19 a eu des répercussions en Sicile et en Italie comme dans toutes les autres parties du monde, et les populations ont manifesté différents types de réactions face à cette épidémie planétaire. Cette étude visait à évaluer le comportement, la perception et la volonté de la population sicilienne à accepter la vaccination, de même que son attitude envers les théories complotistes, qui ont constitué une préoccupation pour les gouvernements à travers le monde.
Méthodes : Conception de l'étude : étude descriptive intersectorielle. Les données ont été recueillies au moyen d'une enquête développée d'après un protocole du Bureau régional de l'Organisation mondiale de la Santé pour l'Europe, et distribuée en deux phases. La première phase s'est déroulée en avril et en mai 2020, et une enquête modifiée a été distribuée durant les mois de juin et juillet.
Résultats : Les Siciliens ont montré une très bonne connaissance du virus, mais leur attitude positive envers la vaccination a changé au cours de la seconde phase. En outre, les Siciliens ont montré une confiance moyenne dans les institutions gouvernementales, ce qui permettait l'existence de doutes par rapport au complot parmi la population.
Conclusions : Bien que les résultats indiquent un bon niveau de connaissance et une attitude positive envers la vaccination, nous pensons que d'autres études devraient être menées en Méditerranée afin de mieux comprendre comment faire face à des épidémies à l'avenir avec un système de soins de santé aux ressources limitées, comparativement à d'autres pays.
Mots clés : Sicile, Méditerranée, COVID-19, pandémie, vaccination, comportements. (Global Health Promotion, 2023; 30(4): 16–24)

Global Health Promotion 1757-9759; Vol 30(4): 67–70; 1216060 DOI: 10.1177/17577592312160 60 journals.sagepub.com/home/ghp

Travailler la terre dans un nouveau pays : une évaluation participative communautaire auprès de communautés immigrantes en Alberta du Sud

Ulises Charles-Rodriguez, Aiat Aborawi, Kamal Khatiwada, Ashmita Shahi, Silvia Koso, Savanna Prociw, Christa Sanford et Richard Larouche

Les immigrants présentent un risque élevé de détérioration de leur santé mentale suite à leur installation au Canada. Les communautés immigrantes bénéficient d'interventions promotrices de santé qui stimulent l'inclusion sociale et le sentiment d'appartenance comme facteurs de protection. Dans ce contexte, les jardins communautaires ont été reconnus comme des interventions promouvant les comportements favorables à la santé, l'attachement au lieu et le sentiment d'appartenance.

Cet article synthétise notre expérience dans la conduite d'une évaluation participative communautaire (EPC) qui a impliqué les parties prenantes de la communauté dans la planification, la mise en œuvre et l'évaluation d'un jardin communautaire destiné aux immigrants. Nous avons mené une EPC pour fournir des données pertinentes et actuelles afin de documenter l'adaptation et le développement de programmes. Des participants, des interprètes et des organisateurs ont pris part à des enquêtes, des groupes de discussion et des entretiens semi-structurés. Les participants ont exprimé une série de motivations, de bénéfices, de difficultés et de recommandations. Le jardin était un lieu qui favorisait l'apprentissage et promouvait des comportements favorables à la santé, notamment en termes d'activité physique et de socialisation. Certaines difficultés existaient cependant dans l'organisation et la communication avec les participants. Les résultats ont été utilisés pour adapter les activités aux besoins des immigrants et étendre la programmation d'organisations collaboratrices.

L'engagement des parties prenantes a facilité le développement des capacités et l'utilisation directe des résultats. Cette approche pourrait catalyser une action communautaire durable auprès des communautés immigrantes.

Mots clés : immigrants, réfugiés, promotion de la santé, jardins communautaires, évaluation participative, recherche communautaire/recherche participative. (Global Health Promotion, 2023; 30(4): 25–34)

La relation entre les connaissances, les attitudes et les pratiques (CAP) des jeunes Indonésiens vis-à-vis de MyPlate, et les données sociodémographiques, la satisfaction corporelle, l'accessibilité et les sources d'information

Jeslin et Junaida Astina

MyPlate est une campagne menée en 2017 au sujet des lignes directrices indonésiennes pour une nutrition équilibrée. Les connaissances des jeunes en matière de nutrition jouent un rôle important, car leur statut nutritionnel affectera la santé de la génération suivante. De plus, ils sont plus susceptibles de devenir obèses plus tard dans la vie, en particulier dans les zones urbaines.

L'objectif principal de cette étude descriptive était d'évaluer la relation entre les connaissances, les attitudes et les pratiques (CAP) vis-à-vis de MyPlate, et les données sociodémographiques, la satisfaction corporelle (SC), l'accessibilité et les sources d'information. Les données ont été recueillies dans le cadre d'une étude intersectorielle impliquant 413 jeunes à Jakarta. Le questionnaire en ligne a été modifié à partir d'études précédentes ; il a été validé par trois experts, a été évalué au préalable, et sa fiabilité a été prouvée par un coefficient alpha de Cronbach de 0,714. Dans cette étude, la plupart des participants avaient de mauvaises connaissances (54 %), de bonnes attitudes (80 %), d'assez bonnes pratiques (72 %), une assez bonne SC (51 %) et une bonne accessibilité (70 %). Une analyse du khi carré a montré des relations significatives (valeur $p < 0{,}05$) entre les connaissances et la SC, le niveau d'études, la spécialisation ; les attitudes et l'accessibilité ; les pratiques et la SC ainsi que l'accessibilité ; la SC et le genre ; l'accessibilité et le statut socioéconomique ; les sources d'information et le niveau d'études/la spécialisation. De plus, la source

d'information la plus importante au sujet de MyPlate était ce questionnaire (45 %), ce qui signifie que les participants n'étaient pas familiers avec cette campagne auparavant. Cette étude vérifie la nécessité d'intensifier sa promotion et d'améliorer les connaissances et les pratiques des jeunes en matière de nutrition.
Mots clés : attitudes, connaissances, MyPlate, pratiques, jeunes. (Global Health Promotion, 2023; 30(4): 35–44)

La santé des enfants réfugiés : un examen systématique des problèmes de santé rencontrés par les enfants âgés de 0 à 6 ans vivant dans des pays à revenus élevés

Chloe Higgins, Deirdre Gartland, Jane Yelland, Stephanie Brown, Josef Szwarc, Ida Kaplan, Georgia Paxton et Elisha Riggs

Cette étude décrit l'étendue, la qualité et l'adéquation culturelle des recherches actuelles portant sur les problèmes de santé des enfants réfugiés âgés de 0 à 6 ans établis dans des pays à revenus élevés. Un examen systématique a été mené en incluant des articles originaux publiés sur les problèmes de santé rencontrés par les enfants réfugiés. Au total, 71 articles ont été retenus. Les études variaient considérablement pour ce qui était de leur conception, des caractéristiques de leur population et des problèmes de santé abordés. Elles contenaient des informations sur 37 problèmes de santé différents, avec une majorité de maladies non transmissibles, en particulier concernant la croissance, la malnutrition et la densité osseuse. Bien que ces études aient identifié une large gamme de problématiques de santé, il manquait un effort coordonné pour prioriser les recherches sur des sujets de santé particuliers, et les problèmes de santé étudiés ne concordaient pas avec le fardeau de maladies global pour cette population. En outre, même si elles étaient classées comme étant de qualité moyenne à élevée, la plupart des études ne décrivaient pas de mesures prises pour garantir les compétences culturelles et l'engagement communautaire dans leurs recherches. Nous suggérons un effort de recherche coordonné pour cette cohorte, en mettant un accent plus important sur l'engagement communautaire afin d'améliorer la base de données probantes des besoins de santé des enfants réfugiés après leur établissement.
Mots clés : réfugiés, enfants, santé. (Global Health Promotion, 2023; 30(4): 45–55)

Modèle synergique de santé : une intégration de la salutogenèse et du modèle fondé sur les atouts pour améliorer la santé

Patricia Pérez-Wilson, Jorge Marcos-Marcos, Antony Morgan, Monica Eriksson, Bengt Lindström et Carlos Alvarez-Dardet

Un « modèle synergique » est proposé pour avancer dans l'intégration des éléments clés de la salutogenèse et du modèle fondé sur les atouts pour améliorer la santé, en utilisant comme cadre pour cette articulation la théorie bioécologique de Bronfenbrenner. Le sens de la cohérence est essentiel pour faciliter la transformation de ressources potentielles en atouts disponibles, produisant un développement positif de la santé. Le modèle synergique peut contribuer à la contextualisation des idées dans les politiques et pratiques de santé publique, en renforçant la dimension santé-bien-être et en contribuant à l'élaboration de modèles de santé plus intégrés et plus collectifs.
Mots clés : salutogenèse, atouts/facteurs protecteurs, promotion de la santé, sens de la cohérence. (Global Health Promotion, 2023; 30(4): 75–82)

Influence des habitudes et des connaissances en matière d'alimentation sur la surcharge pondérale selon le milieu de résidence : une étude transversale

Alejandro Alvarez Alvarez, Mara van Leeuwen Sierra, Emma Alvarez Faedo et José Antonio Cernuda Martínez

Objectif : Vérifier l'influence des connaissances et des habitudes alimentaires sur la surcharge pondérale selon le milieu de résidence (urbain ou rural).
Méthode : 451 personnes vivant dans la région de Villaviciosa dans les Asturies en Espagne, âgées de 35 à 65 ans et réparties entre zone urbaine et zone rurale ont reçu un formulaire composé de questions portant sur leurs données sociodémographiques, leurs habitudes et leurs connaissances nutritionnelles. Les fréquences relatives (%) pour les variables qualitatives, et les moyennes arithmétiques (écarts standards) pour les mesures quantitatives ont été calculées. La corrélation de Pearson a été utilisée pour vérifier ou exclure le rapport entre les résultats obtenus dans le questionnaire sur la nutrition et l'indice de masse corporelle (IMC). Pour étudier la relation entre chaque élément du questionnaire sur les habitudes et le milieu de résidence, le test du chi-carré a été utilisé. Le test de T pour les échantillons indépendants a été utilisé pour comparer les moyennes de l'IMC par milieu (urbain ou rural). Des régressions logistiques ont été effectuées pour calculer les odds ratio (OR) entre la variable dépendante (surcharge pondérale) et les variables sociodémographiques.
Résultats : L'âge moyen des répondants était de 49,96 ans et l'IMC moyen de 26,87 kg/m2, avec une surcharge pondérale totale de 57,6 %. Le fait de ne pas lire les étiquettes nutritionnelles augmente le risque de surcharge pondérale (OR = 2,2 ; $p = 0{,}001$) ; ceux qui considèrent qu'ils mangent trop plusieurs fois ont une plus grande probabilité de surcharge pondérale (OR = 8,6 ; $p < 0{,}001$) ; le fait de manger plusieurs fois par semaine hors de chez soi (OR = 11,6 ; $p = 0{,}019$), de même que la consommation de boissons gazeuses ou de jus transformés (OR = 3,3 ; $p = 0{,}013$) et de boissons faiblement alcoolisées (OR = 2,8 ; $p = 0{,}003$) pendant les repas augmentent la probabilité de surcharge pondérale.
Conclusions : Les habitudes en matière d'activité physique et d'alimentation sont les principaux responsables de la surcharge pondérale. Une bonne connaissance de la population peut aider à l'élaboration d'un plan de prévention permettant de freiner l'accroissement du surpoids et de l'obésité.
Mots-clés : connaissances de base en matière de santé, obésité/surpoids, nutrition. (Global Health Promotion, 2023; 30(4): 83–92)

La promoción de la salud tiene el poder de reducir la pobreza

Masamine Jimba[1] y Nancy Long Sieber[2]

La pobreza es un problema complejo y multifacético, pero tiende a ser cuantificado en términos simples para facilitar las comparaciones globales. El Banco Mundial define la pobreza extrema como un ingreso de menos de USD 2.15 diarios, según los precios del 2017. Utilizando esta definición, a finales del 2022 se estimó que había 670 millones de personas en el mundo viviendo en extrema pobreza, y que 575 millones vivirían en pobreza extrema en el 2030 (1).

Aunque estas cifras parezcan altas, las tasas de pobreza disminuyeron constantemente desde 1990 hasta los 2010. Sin embargo, en los años recientes, la velocidad de la reducción de la pobreza ha disminuido debido a una policrisis,[1] que incluye emergencias climáticas, conflictos, inseguridad alimentaria y la COVID-19.

Dado que la pobreza es una gran amenaza para la salud y la equidad en salud, la reducción de la pobreza representa una alta prioridad para la promoción de la salud. La primera Conferencia Internacional de Promoción de la Salud, que se realizó en Ottawa (Canadá) en 1986, finalizó con la redacción de la Carta de Ottawa, un plan de acción para lograr la Salud para Todos en el año 2000 (2). Mientras que el término 'pobreza' no se utilizó en la primera carta, la palabra apareció a menudo en otras cartas, declaraciones, tomas de posición o llamados a la acción que resultaron de las conferencias subsiguientes. Por ejemplo, en la declaración de posición de Sundsvall, después de la Tercera Conferencia Internacional de Promoción de la Salud que se realizó en 1991, el término 'pobreza' apareció tres veces, en el debate sobre entornos favorables para la salud (2):

> *. . . la Conferencia señala que millones de personas viven en condiciones de extrema pobreza y privación en un medio ambiente cada vez más deteriorado que amenaza su salud, haciendo que la meta de Salud para Todos en el año 2000 sea un objetivo muy difícil de alcanzar. . .*
>
> *Millones de personas viven en condiciones de extrema pobreza y privación en un medio ambiente cada vez más deteriorado tanto en las áreas urbanas como en las rurales.*
>
> *La pobreza debilita las ambiciones de la población y sus aspiraciones por un futuro mejor, mientras que el acceso limitado a las estructuras políticas socava la base de la autodeterminación.*

En 1997, en la Declaración de Yakarta (4ª Conferencia), se afirmaba que la pobreza era la 'mayor amenaza para la salud', después de articular 13 prerrequisitos para la salud (2). 'Pobreza' no apareció en los materiales generados después de la 1ª, la 2ª, la 5ª y la 6ª conferencias, pero en las de Nairobi (7ª), Helsinki (8ª), Shanghái (9ª) y Ginebra (10ª), la palabra 'pobreza' está escrita una o dos veces en cada llamado a la acción, declaración o carta. En la carta de Ginebra para el Bienestar, que se basa en los resultados de la 10ª Conferencia Mundial de Promoción de la Salud, realizada en el 2021, la pobreza está identificada como una de las amenazas que "crea riesgos de crisis futuras, aún más graves que las que estamos sufriendo en la actualidad" (3). En la mayoría de los casos, no obstante, cuando el término 'pobreza' es usado en los documentos posteriores a las conferencias, este se define como una medida basada en el ingreso.

Un patrón similar se observa en documentos relacionados con los Objetivos de Desarrollo Sostenible de la Organización de las Naciones Unidas (ODS) y en artículos que se refieren a estas metas. Por ejemplo, Kickbusch y Alakija (4) afirman que el mundo está bajo incertidumbre y policrisis globales y que el objetivo para mejorar la salud se

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Global Health Promotion 1757-9759; Vol 30(4): 71–74; 1213199 DOI: 10.1177/17579759231213199 journals.sagepub.com/home/ghp

encuentra especialmente mal encaminado; por lo tanto, la reciente 'operación rescate' propuesta para los ODS por las Naciones Unidas quizá no mejore la salud mundial. En consecuencia, las autoras sugieren que los ODS deberían ser deconstruidos para reformular colectivamente las metas dando prioridad a la pobreza, a la salud y al clima (4). En su artículo trataron la reducción de la pobreza basada en el ingreso como un objetivo independiente, diferente a la salud y al clima.

Sin embargo, desde el 2010 surgió otra definición de pobreza enfocada en las privaciones no monetarias. En ese año, el Programa de las Naciones Unidas para el Desarrollo (PNUD) y la Universidad de Oxford desarrollaron el Índice de Pobreza Multidimensional (IPM) (5). Este comprende dos indicadores de salud (nutrición y mortalidad infantil), dos indicadores de educación (años de escolaridad y asistencia a la escuela) y seis indicadores del nivel de vida (combustible para cocinar, saneamiento, agua potable, electricidad, vivienda y activos). En esta definición, los indicadores de salud no están separados de la pobreza. Es más, la salud se considera como una de las tres dimensiones de la pobreza. Con base en estos parámetros, se calculan los valores del IPM. Los resultados se miden en un rango de 0 a 1, donde los valores más altos implican mayor pobreza.

Si los investigadores y los promotores de la salud definen la pobreza únicamente como un estado de privación monetaria, pueden no tener en cuenta los beneficios de las acciones que alivian su carga. La definición no monetaria de la pobreza puede permitirles abordar otros aspectos directamente. Para la nutrición, primer indicador de salud, el enfoque de desviación positiva – basado en los activos, en la resolución de problemas e impulsado por la comunidad – también es una estrategia bien valorada en la promoción de la salud (6,7) que mejoró con éxito los niveles de nutrición en las comunidades pobres de Vietnam. En 1990, este país era uno de los más pobres del mundo con un crecimiento del ingreso nacional per cápita de USD 130 por año (8). Al aplicar el enfoque de desviación positiva, Save the Children USA encontró niños bien nutridos incluso entre las familias más pobres, e identificó tres comportamientos saludables que podrían ser adoptados en familiascon niños desnutridos. Esta práctica se extendió a 250 comunidades, donde unos 50 000 niños se recuperaron de la desnutrición en siete años (9). El modelo ha sido aplicado en muchas partes del mundo y una revisión sistemática concluyó que las "intervenciones con el enfoque de desviación positiva pueden ser empleadas como una estrategia alternativa para mejorar el estado nutricional de niños menores de 5 años" (10).

En el caso de la mortalidad infantil, el segundo indicador de salud del IPM, las actividades de promoción de la salud han contribuido a reducir las muertes de los menores de edad. Un ejemplo es la política nacional de promoción de la salud implementada en Suráfrica entre el 2015 y el 2017, que consistió en visitas domiciliarias de promotores comunitarios de la salud, programas de educación para mujeres embarazadas y una serie de esfuerzos de *marketing* en los medios con el objetivo de promover los servicios preventivos. Esta acción evitó la muerte fetal en un 8.36 % en las áreas urbanas y en un 2.84 % en las zonas rurales (11).

Al prestar atención a la equidad, la promoción de la salud puede mejorar los indicadores de salud del IPM y demostrar que el dinero no es un prerrequisito para mejorar la salud. Inclusive, en un estado de insuficiencia y de privación monetaria, la promoción de la salud puede beneficiar la salud de las personas financieramente pobres.

Más allá de los indicadores de salud, la promoción de la salud también puede desempeñar un papel importante en la mejora de los indicadores de educación y del nivel de vida del IPM. En el caso de los indicadores de educación, la salud precaria se reconoce como una de las causas de pérdida de 'años de escolaridad' y de 'asistencia a la escuela'. La OMS y la UNESCO publicaron conjuntamente las normas mundiales sobre las Escuelas Promotoras de Salud (EPS), en las que se demuestra que algunos programas escolares pueden mejorar la asistencia a la escuela (12). Sin embargo, en muchos estudios de evaluación relacionados con las EPS, los 'años de escolaridad' y la 'asistencia a la escuela' no han sido criterios para evaluar el éxito de las intervenciones de las EPS. Si las EPS quieren contribuir a la reducción de la pobreza, deben incluir sistemáticamente esos indicadores relacionados con la pobreza, de modo tal que la promoción de la salud ayude a disminuir la pobreza a través de la educación.

En cuanto a los indicadores del nivel de vida, la

promoción de la salud contribuye particularmente a mejorar el saneamiento y el agua potable por medio de la educación para la salud. Ruanda, por ejemplo, inició un programa comunitario de promoción de salud ambiental para obtener agua potable en el hogar a través del tratamiento doméstico del agua y de intervenciones seguras para su almacenamiento. En el 2014, se les entregaron purificadores de agua (filtros de agua) a 100 000 familias y se realizaron actividades promocionales para mostrar cómo usar correctamente el filtro, entre ellas, educación comunitaria y visitas regulares a los hogares por parte de los trabajadores de salud. Estas actividades de promoción de la salud permitieron la mejora de la calidad del agua y de la salud infantil (13). Enfocándose en estos indicadores, la promoción de la salud puede ayudar a reducir la pobreza, particularmente en los países de ingreso bajo y mediano.

De hecho, mediante la implementación de todas las medidas de pobreza utilizadas en el IPM, la promoción de la salud está en condiciones de contribuir a la reducción de la pobreza. Esto demostrará la utilidad de la promoción de la salud como una estrategia para disminuir la pobreza en el ámbito mundial.

Incluso con la más amplia definición de la pobreza contemplada en el IPM, muchos otros parámetros medibles y no medibles contribuyen a la privación asociada con la pobreza. *Global Health Promotion* centra su atención en "las políticas y programas intersectoriales equitativas que aporten soluciones para abordar temas como la salud mental" (14). Este enfoque también es importante para afrontar la pobreza. Más allá del IPM, la promoción de la salud tiene una larga trayectoria en abordar los determinantes socioeconómicos de la salud. La Carta de Ottawa establece que las políticas de salud pública y los entornos favorables pueden tener más impacto para hacer frente a la pobreza. Si bien evidencia que con el uso del IPM las estrategias de promoción de la salud pueden ayudar a mejorar la pobreza en el mundo, la comunidad de la promoción de la salud también debería considerar las facetas invisibles y menos fáciles de cuantificar la pobreza para ayudar que la Salud para Todos no solo sea retórica sino una realidad.

Declaración de conflicto de intereses

Ningún conflicto declarado.

Financiación

Ninguna financiación declarada.

Nota

1. *Policrisis*: Este término fue introducido por primera vez por el filósofo francés Edgar Morin y su colega Anne Brigitte Kern. Ellos definieron la policrisis como "una compleja interconexión de problemas, antagonismos, crisis, procesos incontrolables y la crisis general del planeta"(15). En el Informe sobre Riesgos Mundiales del 2023, se utiliza la siguiente definición: "Conjunto de riesgos globales relacionados con efectos compuestos, de tal forma que el impacto general supera la suma de cada parte"(16).

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Modelo sinérgico de salud: una integración de la salutogénesis y el modelo de activos para la salud

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Resumen:
Se propone un "modelo sinérgico" para avanzar en la integración de elementos clave de la salutogénesis y el modelo de activos para la salud, utilizando como marco para esta articulación la teoría bioecológica de Bronfenbrenner. El sentido de coherencia es clave para facilitar la transformación de recursos potenciales en activos disponibles, produciendo un desarrollo positivo de la salud. El modelo sinérgico puede aportar a la contextualización de las ideas en políticas y prácticas de salud pública, fortaleciendo la dimensión salud-bienestar y contribuyendo al desarrollo de modelos de salud más integrados y colectivos.

Palabras clave: salutogénesis, activos/factores protectores, promoción de la salud, sentido de coherencia

Introducción

Los principios planteados en la Carta de Ottawa (1), expresan la salud como una fuerza intrínsecamente positiva. Sin embargo, existen pocos marcos prácticos y teóricos disponibles para desarrollar esta visión. Dos de ellos son: (a) el modelo de activos desde el campo del desarrollo comunitario (2) y desde la salud pública (3), y (b) la teoría de la salutogénesis (4), desde la sociología médica. Ambos enfoques han despertado el interés de investigadores y profesionales de diferentes campos, mostrando su importancia y oportunidades derivadas de su aplicación (5,6).

Pese a las conexiones entre ambos, los avances en su desarrollo han sido, mayormente, en forma paralela. Este artículo plantea que su integración aportaría a la sinergia y al abordaje de algunos de sus respectivos desafíos. En el campo de la salutogénesis, fortalecería la incorporación de un componente de acción para desarrollar modelos de intervenciones salutogénicas, incluyendo elementos clave que trasciendan el estado de salud individual, aplicándolo a toda la gama de experiencias de salud humana (7). En el caso del modelo de activos, fortalecería un marco teórico que ayudaría a resolver algunos de los problemas conceptuales y de evaluación asociados con su aplicación (8).

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(Este manuscrito fue presentado el 4 de noviembre del 2022. Tras revisión por pares, fue aceptado para la publicación el 1 del febrero del 2023.)

Este artículo fue publicado originalmente en inglés, bajo el título 'A synergy model of health': an integration of salutogenesis and the health assets model, por los mismos autores, en la revista Health Promotion International, en septiembre del 2020 (versión en línea) y en agosto del 2021 (versión impresa en vol.36(3):884-894 doi: 10.1093/heapro/daaa084). GHP tiene la licencia que permite publicar la traducción en español.

Global Health Promotion 1757-9759; Vol 30(4): 75–82; 1160168 DOI: 10.1177/17577592311601 68 journals.sagepub.com/home/ghp

Antecedentes

Los discursos contemporáneos sobre la salud la describen como "un estado de bienestar completo y no solo la ausencia de enfermedad" (9). Sin embargo, el esfuerzo desplegado en medicina, salud pública y ciencias sociales ha tendido a enfocarse en los factores de riesgo, daño y enfermedad, enfoque conocido como "patogénico" (10).

Desde la Carta de Ottawa, la promoción de la salud ha adoptado un enfoque más basado en las fortalezas (1). Morgan y Ziglio (3) propusieron que las políticas y prácticas de salud pública deberían centrarse en un pensamiento salutogénico y basado en activos, como un medio para ampliar las oportunidades para mejorar la salud y reducir las desigualdades.

La integración de la salutogénesis y el modelo de activos facilitaría un conocimiento más profundo de ambos, impactando en la comprensión de la realidad social y el diseño de estrategias de acción a nivel individual, grupal y comunitario. El objetivo de este artículo es presentar un "modelo sinérgico de salud" que integra la salutogénesis y el modelo de activos, utilizando como apoyo la teoría bioecológica de Bronfenbrenner.

Las bases para esta propuesta

La salutogénesis como marco

Antonovsky estableció que la salutogénesis se orienta a los orígenes de la salud (11). Inicialmente se centró en los recursos para el afrontamiento del estrés, explicando por qué algunas personas se mantenían bien a pesar de las situaciones estresantes y las dificultades. Señaló que la salud es un proceso activo y dinámico de autorregulación, y que el caos y el estrés son condiciones naturales y forman parte de la vida.

La salutogénesis se centra en tres aspectos: (a) solución de problemas y búsqueda de respuestas, (b) identificación de recursos que ayudan a las personas a mantener o a mejorar su salud, y (c) identificación de una orientación global y generalizada de significado en las personas, grupos, comunidades o sistemas, que sirve como mecanismo general o capacidad para este proceso, denominada sentido de coherencia (SOC) (12).

Según Antonovsky (4), la salud es un proceso que se da en un continuo, con un extremo de facilidad para la salud (mayor salud) y uno de dificultad para la salud (menor salud). Por tanto, en lugar de centrarse en las enfermedades y diagnósticos asociados como resultados dicotómicos (sano-enfermo), la salud siempre está presente, en mayor o menor grado, en las diferentes etapas de la vida (7). La salutogénesis se define como el proceso de avanzar hacia el polo de mayor salud en este continuo (13). Los conceptos centrales para moverse en este continuo son, además del SOC, los recursos generalizados y específicos de resistencia (RGR/RER), y los déficits generalizados y específicos de resistencia (DGR/DER) (4).

Recursos generalizados y específicos de resistencia (RGR y RER): condiciones previas para el desarrollo de SOC

Los RGR se refieren a cualquier característica de una persona, grupo o entorno que pueda facilitar el manejo del estrés (14). De naturaleza diversa, actúan como apoyo para que las habilidades individuales y colectivas permitan enfrentar los factores estresantes y los desafíos de la vida, ayudando a las personas a construir experiencias de vida coherentes y significativas (15,16).

Los RER son recursos limitados por el contexto, que pueden actuar para hacer frente a un factor estresante determinado. Cuando los RGR se complementan con los RER se logra una mejor capacidad para enfrentar situaciones estresantes, y la tensión causada por el estrés no se vuelve debilitante (14,17).

La función de los RGR se complementa con los DGR/DER. Estos aparecen cuando no ha sido posible afrontar situaciones estresantes, o se sucumbe a la tensión que ellas generan, llevando al polo de menor salud. Antonovsky planteó que los RGR y RER proporcionan experiencias de vida que promueven el desarrollo y mantenimiento de un SOC fuerte, mientras que los DGR/DER proporcionan experiencias vitales que pueden desvirtuar el SOC de las personas (4).

Lindström y Eriksson (18) utilizan la metáfora del río de la vida para ejemplificar la salutogénesis. Existen riesgos y recursos que, sumados a las experiencias y aprendizajes de las personas, influirán en el resultado de la travesía por el río. Las personas van adquiriendo la capacidad de identificar y utilizar los recursos necesarios (RGR) para viajar por él,

guardándolos en una mochila para ir afrontando eventos estresantes y dificultades. En el mismo río podrían encontrar RER pudiendo utilizarlos cuando se requiera, sin tener necesariamente que guardarlos en la mochila para el futuro, pues son recursos específicos para este contexto determinado (18).

El SOC facilita que las personas usen y manejen sus RGR y RER, activando los recursos más adecuados para evitar que la tensión se convierta en estrés que pueda debilitarlas (17), contribuyendo a optimizar sus opciones de salud y, en consecuencia, de la vida (18). Por tanto, los RGR y los RER se convierten en elementos sobre los que es necesario actuar si se quieren desarrollar intervenciones salutogénicas.

Sentido de coherencia (SOC): la fuerza motriz de la vida

El SOC fue la respuesta de Antonovsky a la pregunta sobre los orígenes de la salud (19). Su desarrollo implica un proceso complejo, interactivo e interdependiente, que fluye dinámicamente a través del curso de la vida y que tiene el potencial de crear habilidades promotoras de salud (15). Se define como una orientación global de las personas, que expresa el grado en que ellas tienen un sentimiento de confianza generalizado, duradero y dinámico en que: (a) los estímulos internos y externos en su vida son estructurados, predecibles y explicables; (b) cuentan con recursos disponibles para satisfacer las demandas planteadas por estos estímulos, y (c) estas demandas son desafíos dignos de tenerse en cuenta (4). De esta manera, los componentes del SOC son: (a) comprensibilidad (componente cognitivo), que hace referencia a cómo las personas explican o interpretan lo que les está sucediendo a ellas y/o a su entorno; (b) manejabilidad (componente instrumental o conductual), que aporta al reconocimiento de los recursos disponibles y la capacidad para obtenerlos y administrarlos; y (c) significatividad (componente motivacional), que alude a la búsqueda de significado, permitiendo que las personas visualicen estos eventos como desafíos que valen la pena y la vida como algo valioso (15).

Antonovsky también propuso que el SOC pudiera ser un atributo colectivo (19). Involucraría los mismos tres componentes del SOC individual, pero aplicados a grupos de personas (16) adicionando un cuarto componente: la influencia, o el grado en que las personas sienten que pueden afectar a su comunidad (20). El SOC comunitario tiene el potencial de mejorar las capacidades colectivas, que se generan cuando las personas participan en actividades comunitarias o forman parte de instancias locales que son coherentes con el tipo de vida que aspiran a tener, influyendo en el proceso de salud (15).

Pese a ello, la mayor parte de la evidencia disponible en salutogénesis se centra en el análisis de los resultados de aplicaciones de escalas individuales para medir el SOC y su asociación con una variedad de temas relacionados con salud (ej. calidad de vida) en grupos específicos de personas (21). Si bien esta evidencia permite generar información para la salud pública; no puede apoyar por sí misma el desarrollo de programas e intervenciones comunitarias.

Enfoque de activos para la salud y revitalización de la salud pública

La terminología de los activos para la salud resurgió en los debates de salud pública a finales de la década de los 2000 (8) en concordancia con la Carta de Ottawa (1). Morgan y Ziglio (3) propusieron un "modelo de activos" como un medio para impulsar diversas ideas y conceptos en el marco de la salud positiva, que podrían influir en la forma en que los profesionales de la salud pública piensan y actúan para crear salud. La salutogénesis se incorporó en este modelo como una construcción de un marco positivo para generar salud, que podría proporcionar evidencia para apoyar un cambio en el pensamiento patogénico predominante (22). Por su parte, el modelo del desarrollo comunitario basado en activos (ABCD) de Kretzman y McKnight (2) incluye principios útiles para garantizar que la salud pública cuente con los mejores medios para involucrar a las comunidades locales en el proceso de desarrollo de la salud (8).

Aplicación del modelo de activos: involucrar a las personas y las comunidades con un enfoque positivo

Morgan (8) propuso un conjunto de cinco principios para una aplicación exitosa del modelo de activos: (a) priorizar paradigmas positivos basados en teorías para el bienestar; (b) implicar efectiva y adecuadamente a personas y comunidades locales en el beneficio de la salud; (c) conectar a la

persona con la comunidad y la sociedad en general; (d) apoyar el trabajo multiprofesional y multidisciplinario centrado en la toma de decisiones, y (e) asegurar una inversión sostenible a través de un enfoque multimétodo basado en evidencia.

Existe evidencia que sugiere los beneficios de adoptar un enfoque de activos en la promoción de la salud y la salud pública (23). Ejemplos a nivel individual incluyen el estudio de activos para escolares nórdicos (24), o de "activos para el desarrollo" en la infancia y la adolescencia (25). El Consejo de Investigación Económica y Social (ESRC) del Reino Unido reconoció la resiliencia como un activo que permite a las personas recuperarse de la adversidad, apoyando su florecimiento en años futuros (26).

Identificación de activos: movilizar personas y comunidades

El modelo ABCD se orienta a empoderar a las comunidades para identificar y abordar sus propios problemas utilizando los activos locales disponibles (22). Kretzman y McKnight propusieron seis categorías de activos comunitarios: personas, asociaciones u organizaciones, instituciones, infraestructura o recursos físicos, economía y cultura (27).

De este modelo surge la metodología del mapeo de activos. A nivel comunitario, este proceso ayuda a reconocer los activos existentes que pueden ser utilizados en conjunto para lograr un propósito común. Su objetivo es visibilizar y dinamizar los recursos y activos de la comunidad, ayudando a crear una red de relaciones y soluciones basadas en los elementos positivos que tienen las personas, su comunidad y su contexto. El mapeo de activos es una herramienta útil para trabajar con las comunidades locales (28), ya que facilita establecer sus propias metas, actuar y perseguirlas (29), es decir, desarrollar su capacidad de agencia (30). Su propósito principal es movilizar los recursos identificados (31), para lo cual existen tres acciones estratégicas: (a) conectarlos (b) crear conciencia sobre ellos y (c) permitirles prosperar (5).

Considerando que, además de los activos comunitarios, las personas tienen sus propios activos, se requiere promover el uso de herramientas que ayuden a identificar y dinamizar estos últimos. Dado que la mayor parte de la evidencia sobre salutogénesis se encuentra a nivel individual (32), sobre el modelo de activos a nivel colectivo existe la necesidad y la oportunidad de integrarlos (31). Reunirlos en un marco común podría mejorar las posibilidades de desarrollar estrategias para fortalecer y mejorar las capacidades individuales y colectivas, fomentando el trabajo colaborativo entre profesionales, organizaciones, instituciones y ciudadanía.

La teoría bioecológica de Bronfenbrenner (33) podría ser el marco común que una el modelo de activos y la salutogénesis, pues propone un modelo de influencias en el desarrollo humano que incorpora elementos clave de ambos. Anteriormente se ha utilizado para conectar el desarrollo humano con la salutogénesis, mediante el modelo de Lindström de Calidad de Vida (24). La incorporación de este marco podría proporcionar un enfoque multinivel, multimetodológico y multidisciplinario para facilitar la generación de evidencia sobre su integración.

La teoría bioecológica como vía para integrar la salutogénesis y el modelo de activos para la salud

La teoría bioecológica de Bronfenbrenner establece que el bienestar de una persona está influenciado por su contexto social, incluyendo la calidad y función de sus relaciones con la familia, vecinos e instituciones. Proporciona un marco apropiado que facilita la integración de la salutogénesis con el modelo de activos, utilizando sus cuatro componentes: proceso, persona, contexto y tiempo (PPCT), que interactúan entre sí formando un sistema dinámico (33).

El componente Proceso (P) abarca los procesos proximales referidos a la interacción recíproca y progresiva entre las personas y su entorno. Permite comprender cómo evoluciona esta relación, volviéndose más compleja a medida que ellas crecen y se desarrollan.

El componente Persona (P) reconoce elementos biológicos, genéticos o físicos de los individuos, como también la naturaleza subjetiva de sus características personales, habilidades y formas de ver el mundo.

El componente Contexto (C) comprende cuatro sistemas imbricados que interactúan y se influyen mutuamente (33):

1. Microsistema: entorno más cercano, donde la persona participa activamente e interactúa cara a cara con otros (ej. familia).
2. Mesosistema: relaciones entre dos o más microsistemas en los que la persona participa activamente (ej. familia-escuela).
3. Exosistema: otras personas, entidades y/o lugares a los que la persona o su familia pueden acceder, no interactuando tan a menudo, pero experimentando su influencia (ej. comunidad, medios de comunicación).
4. Macrosistema: grupo más grande y remoto de personas, estructuras u organizaciones, con gran influencia sobre los sistemas anteriores. Involucra sistemas institucionales que pertenecen exclusivamente a una cultura o subcultura (ej. sistemas económicos, educacionales, políticos), como también opiniones y costumbres que representan el tejido cultural de una sociedad.

Finalmente, el componente Tiempo (T) se refiere a las interacciones y/o cambios en las personas y su entorno a lo largo de su desarrollo, generados por experiencias internas y/o externas.

Modelo integrado de salutogénesis y activos para la salud: una propuesta

Morgan y Ziglio (3) plantearon que podría reunirse una amplia gama de ideas y conceptos para contribuir a la salud pública a través de un enfoque salutogénico. Pese a que no mencionaron explícitamente el SOC, el modelo de activos hacía referencia a sus componentes, especialmente a la identificación de recursos y a las estrategias de gestión utilizadas por las personas para proteger y promover su salud (11). Reconocieron el potencial de herramientas como el "mapeo de activos", como un medio para apoyar el trabajo con comunidades desde un enfoque basado en las fortalezas. También destacaron la necesidad de incorporar "indicadores salutogénicos" para evaluar la eficacia de los programas y las intervenciones de promoción (3,22).

Aunque pueden identificarse algunos elementos comunes entre la salutogénesis y el modelo de activos, la dificultad de visualizar sus interacciones obstaculiza una posible sinergia. Lindström y Eriksson plantearon un modelo de investigación de promoción que integra el enfoque ecológico, salutogénico, la resiliencia y la calidad de vida (34). Incluyeron diferentes niveles de análisis (microsistema, mesosistema, exosistema y macrosistema) con la finalidad de lograr un equilibrio entre el enfoque de riesgo y la salutogénesis en la investigación en salud. Enfatizaron en la necesidad de desarrollar el SOC y fortalecer su conexión con los RGR/RER y los DGR/DER, describiendo cómo implementar un enfoque salutogénico en el desarrollo de políticas públicas relacionadas con la salud. Aunque este intento de integración fue un avance importante, no especifica cómo interactúan los diferentes componentes del modelo ni considera enfoques basados en activos.

Dado lo anterior, la propuesta del modelo sinérgico de salud (MSS) contiene las siguientes ideas centrales:

Primero, confirma la premisa de que la salutogénesis proporciona un marco útil para reforzar los enfoques positivos de salud pública, visualizándose como una estructura teórica respaldada por el modelo de activos, siendo estos últimos un método práctico de implementación (3,8).

Segundo, considera los RGR/RER como activos para la salud. Los DGR/DER también podrían convertirse en activos si las personas reflexionan sobre las lecciones que estas experiencias pueden traer, incorporando estos aprendizajes en la "mochila". Todos estos recursos contribuyen a enfrentar situaciones estresantes, a promover la salud y el bienestar y a prosperar en situaciones cotidianas (7,8,15,16).

Tercero, se busca avanzar en el trabajo de Lindström y Eriksson, extendiendo sus ideas a través de la teoría bioecológica en sus cuatro componentes: proceso, persona, contexto y tiempo (PPCT) (33). Esto facilitaría explorar activos de salud en diferentes niveles e identificar los actores estratégicos necesarios para su dinamización:

- En el componente Proceso (P) se puede indagar la interdependencia entre personas, comunidades y activos en las interacciones regulares que se producen durante largos períodos de tiempo. Por ejemplo, en los bebés la disponibilidad y la interacción con figuras de apego aumentan las posibilidades de desarrollar una sensación de seguridad y confianza (16).

- En el componente Persona (P) se pueden identificar activos internos (3), contribuciones al bien común (2,27), y RGR/RER y DGR/DER (14). Estos activos pueden ser habilidades, conocimientos, aprendizajes e incluso la capacidad de articular activos personales y ambientales.
- El componente Contexto (C) facilita identificar activos relacionados con redes de apoyo, organizaciones, instituciones (3), grupos y cultura (2,27) en los niveles micro, meso, exo y macrosistema.
- El componente Tiempo (T) permite explorar activos a lo largo del ciclo vital. Por ejemplo, la adquisición de mayor seguridad en las habilidades profesionales durante la trayectoria laboral. Estos activos podrían cambiar a lo largo del curso de la vida y en futuras generaciones.

Entre las fases de identificación y dinamización de activos existe un proceso de concientización, donde los activos deben ser reconocidos como disponibles. Es aquí donde surge el SOC como elemento clave – individual o colectivamente – puesto que la mera identificación de activos no implica su disponibilidad ni su implementación.

Por tanto, se podría diferenciar entre recursos potenciales – no visualizados o utilizados – y activos disponibles. El SOC tendría un rol central, contribuyendo a la transformación de los primeros en activos, una vez que las personas los reconozcan, comprendan, manejen y les encuentren sentido. Así, el SOC es un componente clave para movilizar y conectar activos, aumentar la conciencia de su disponibilidad y facilitar su desarrollo, mejorando su visión sobre sus vidas.

Desde el MSS, retomando la metáfora de la persona que viaja por el río de la vida, la mochila que lleva consigo contiene recursos potenciales y activos disponibles obtenidos durante su trayectoria vital con ayuda del SOC. Así, por ejemplo, una cantimplora es un artículo que puede ser un recurso posible para una expedición. Pero solo será un activo si la persona sabe que es un recipiente para llevar líquido (comprensibilidad), tiene las habilidades para llevarla colgada del hombro o abrochada a la cintura (manejabilidad), y si le encuentra sentido a mantenerse hidratada (significatividad), por lo que podrá disponer de ella y utilizarla en su viaje. Por el contrario, el insuficiente desarrollo de alguno de los componentes del SOC muestra qué debería trabajarse para transformarla de recurso en activo. Si la comprensibilidad es insuficiente, las acciones deberían orientarse a entregar información sobre la función de la cantimplora en la expedición. Si la manejabilidad fuera escasa, las acciones podrían enfocarse en entrenar a las personas en cómo cargarla y utilizarla. Y si la significatividad estuviera limitada, podría fortalecerse la motivación y el sentido que la hidratación adecuada puede tener para la persona. De este modo, la exploración de los tres componentes del SOC es fundamental para transformar un recurso en activo, permitiendo identificar las acciones más pertinentes para facilitar su uso, movilización y fortalecimiento.

Los activos se van agregando a la mochila en función de las propias experiencias, del equilibrio entre demandas y recursos, de las decisiones que determinan su futuro y de los vínculos emocionales con otros. Con esta mochila las personas están más preparadas para enfrentar las dificultades que encontrarán en su viaje por el río de la vida, pero también para disfrutar del agua o descansar, puesto que los activos no solo permiten enfrentar el estrés sino también mejorar las condiciones que promuevan la salud y el bienestar. Así también es necesario explorar activos asociados a los componentes contexto y tiempo. El contexto permite visualizar que algunos activos son exclusivos del lugar donde está el río, pudiendo facilitar u obstruir su avance (ej. guías de viaje, puentes, etc.) y el tiempo incidirá en la capacidad para transitar por el río, que va cambiando a lo largo de la vida.

Esto demuestra cuán dinámicos pueden ser los activos y cómo pueden proyectarse a otros escenarios. En este caso, la capacidad de planificar el viaje por el río podría ayudar a planear nuevos proyectos. Asimismo, compartir este conocimiento con otras personas puede ayudarles a ellas a planificar su propio viaje.

El MSS podría utilizarse para fortalecer procesos participativos. Puede contribuir a ampliar la búsqueda de activos en una comunidad, considerando los componentes de la teoría bioecológica (PPCT). El uso del SOC como mediador podría ayudar a movilizarlos, contribuyendo a que las personas, familias y comunidades diversifiquen sus estrategias

para afrontar el estrés, el riesgo o las enfermedades, y fortalezcan la autonomía para su salud y desarrollo.

La salutogénesis y el modelo de activos pueden complementar el paradigma patogénico, influyendo en diferentes estrategias para la salud y reorientando las acciones para optimizar sus efectos. Es necesario avanzar en la evidencia y evaluación, como en el diseño de políticas que refuercen intervenciones de promoción de la salud y prevención de enfermedades.

Conclusión

Dado que, en general, las ideas de la salutogénesis y del modelo de activos para la salud se han desarrollado en paralelo, el principal aporte del MSS es la integración de conceptos clave de ambos, en el marco de la teoría bioecológica de Bronfenbrenner. El MSS ofrece una oportunidad para potenciar las conexiones entre la teoría y la práctica, reconociendo la fortaleza del desarrollo teórico de la salutogénesis y el aporte del modelo de activos en proporcionar un proceso útil para el trabajo efectivo dirigido por/para la comunidad.

El MSS se basa en estas fortalezas, contribuyendo a traducir sus principios complementarios en acción, mejorando así la ciencia de la promoción de la salud para la política, la práctica y la investigación. Esto permite aprovechar su potencial dentro de un marco de generación de salud, bienestar y contribución a un desarrollo sostenible y global, mediante una mejor comprensión de los enfoques basados en activos en lugar de los enfoques basados en el déficit.

El rol clave del SOC permite transformar recursos potenciales en activos, proponiendo un camino de desarrollo y facilitando la articulación de la salutogénesis y el modelo de activos en los diferentes puntos del continuo de salud.

Setenta y cinco años después de la Declaración de Salud de la OMS, aún es necesario destacar y fortalecer la dimensión "salud-bienestar" de este concepto, para lo que este artículo podría servir como guía. Asimismo, la aplicación del MSS puede encontrarse no solo en el ámbito de la promoción de la salud, sino también en estrategias preventivas, curativas y/o paliativas, trabajando con una orientación salutogénica. De este modo, se podrían diversificar sus contribuciones a nivel individual y colectivo, ampliando sus campos de acción en escenarios más allá del sanitario.

La principal limitación de esta propuesta guarda relación con la necesidad de generar evidencia de su aplicación en el desarrollo de intervenciones salutogénicas. Sin embargo, el principal obstáculo –más que en el MSS como tal– podría encontrarse en la posible falta de voluntad para dejar de trabajar de forma paralela en los respectivos campos, dificultando avanzar en su acercamiento e integración *de facto*.

Este artículo es una invitación a redoblar esfuerzos para facilitar procesos que permitan a las personas tener un mayor control sobre sus determinantes de salud, abogando por el desarrollo de modelos de salud más integrados que tengan a "lo colectivo" como piedra angular del desarrollo humano, lo que cobra aún más importancia en estos tiempos de crisis.

Agradecimiento

Este artículo es parte de la tesis doctoral de la primera autora, Doctora en Ciencias de la Salud por la Universidad de Alicante.

Declaración de conflicto de intereses

Ningún conflicto declarado.

Financiación

Ninguna financiación declarada.

Información ética

Este es un artículo teórico, que no involucra a seres humanos.

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Influencia de los hábitos y los conocimientos sobre alimentación en la sobrecarga ponderal según el ámbito de residencia: estudio transversal

Alejandro Alvarez Alvarez[1], Mara van Leeuwen Sierra[1], Emma Alvarez Faedo[1] y José Antonio Cernuda Martínez[2]

Resumen:
Objetivo: comprobar la influencia de los conocimientos y los hábitos alimenticios en la sobrecarga ponderal según el ámbito de residencia (urbano o rural).
Método: se administró un cuestionario a 451 personas, residentes en la zona básica de salud de Villaviciosa (Asturias, España), entre 35 y 65 años, distribuidas en zona rural y urbana, formulario compuesto por preguntas sobre datos sociodemográficos, hábitos y conocimientos nutricionales. Se calcularon frecuencias relativas (%) para las variables cualitativas, y medias aritméticas (desviaciones estándar) para las cuantitativas. Se empleó la correlación de Pearson para comprobar o descartar la relación entre la puntuación en el cuestionario de conocimientos sobre nutrición y el índice de masa corporal (IMC). Para estudiar la relación entre cada pregunta del cuestionario de hábitos y el ámbito de residencia se empleó la prueba chi-cuadrado. Para comparar las medias del IMC por ámbito se aplicó la prueba *t* para muestras independientes. Se realizaron regresiones logísticas para calcular las *odds ratio* (OR) entre la variable dependiente (sobrecarga ponderal) y las variables sociodemográficas.
Resultados: la edad media de los encuestados fue de 49.96 años y el IMC promedio de 26.87 kg/m^2, presentando sobrecarga ponderal el 57.6 % total. No leer las etiquetas nutricionales aumenta el riesgo de tener sobrecarga ponderal (OR = 2.2; $p = 0.001$); quienes consideran que comen en exceso muchas veces presentan mayor probabilidad de sobrecarga ponderal (OR = 8.6; $p < 0.001$); comer fuera de casa varias veces por semana (OR = 11.6; $p = 0.019$), así como el consumo de refrescos o zumos procesados (OR = 3.3; $p = 0.013$) y alcohol de baja graduación (OR = 2.8; $p = 0.003$) durante las comidas aumentan la probabilidad de sobrecarga ponderal.
Conclusiones: los hábitos alimenticios y los patrones de actividad física son los principales responsables de sobrecarga ponderal. El adecuado conocimiento en la población puede ayudar a la elaboración de un plan preventivo que permita frenar el crecimiento del sobrepeso y la obesidad

Palabras clave: conocimientos básicos de salud, obesidad / sobrepeso, nutrición

Introducción

La Organización Mundial de la Salud (OMS) (1) define sobrepeso y obesidad como una acumulación anormal o excesiva de grasa que puede ser perjudicial para la salud. Ambas situaciones se consideran problemas de salud prevenibles, cuya causa principal es un desequilibrio energético producido por un aumento en la ingesta calórica y un descenso de la actividad física. Para identificar estos problemas se utiliza el índice de masa corporal (IMC), indicador simple de la relación entre el peso y la talla, que se

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(Este manuscrito fue presentado el 12 de noviembre del 2022. Tras revisión por pares, fue aceptado para la publicación el 1 de marzo del 2023.)

Global Health Promotion 1757-9759; Vol 30(4): 83–92; 1164103 DOI: 10.1177/17577592311641O3 journals.sagepub.com/home/ghp

calcula dividiendo el peso de una persona en kilos por el cuadrado de su talla en metros (kg/m^2). En el caso de los adultos, la OMS define el sobrepeso como un IMC igual o superior a 25 kg/m^2 y la obesidad como IMC igual o superior a 30 kg/m^2.

Según la OMS (1), en el 2016, aproximadamente 1 900 millones de personas (el 39 % de la población adulta mundial) sufrían de sobrepeso, de los cuales más de 650 millones (el 13 % de la población adulta mundial) sufrían de obesidad.

Tanto el sobrepeso como la obesidad se asocian con un aumento de la mortalidad, la morbilidad y la discapacidad, ya que ambos son factores de riesgo de desarrollo de enfermedades cardiovasculares (primera causa de muerte en el mundo), de diabetes mellitus tipo 2 y de algunos tipos de cáncer, que repercuten tanto en la calidad de vida de las personas como en el gasto sanitario generado (2).

Para aunar los términos de sobrepeso y obesidad se utiliza el concepto de sobrecarga ponderal (SP), que se define como una acumulación anormal o excesiva de grasa perjudicial para la salud (3).

Los datos más recientes de España provienen de la Encuesta Nacional de Salud del 2017, en la que se señalaba que la obesidad continúa aumentando, afectando al 17.4 % de la población adulta, y que la SP alcanza al 54.5 % de dicha población (4). Además, en el Estudio Nutricional de la Población Española (ENPE) (5) se determinó que tanto el sobrepeso como la obesidad eran más frecuentes en varones y en habitantes de zonas urbanas, cifras similares a las comunicadas en Canadá (6) y en Portugal (7).

A nivel regional, en España, en Asturias se constató una prevalencia del 25.7 % de obesidad en el 2015, siendo la región con las cifras más altas de España, según el Atlas de Sobrepeso y Obesidad en Asturias (8). Atendiendo a los resultados recogidos en la última Encuesta de Salud de Asturias (9) en el 2017, un 54 % de la población presentaba SP. En el análisis ajustado por edad se pudo comprobar una correlación positiva entre edad y peso. La franja etaria comprendida entre los 30 y los 64 años presentaba una situación preocupante, debido a que estas edades se relacionan con un menor uso de los servicios de salud de Atención Primaria y no hay un lugar concreto de captación, además de unas cifras de SP elevadas (52.65 %) (9). Más concretamente, la zona básica de salud (ZBS) de Villaviciosa, en la que la población predominante se encuentra entre los 35 y los 65 años, se situó en el número 73 de 76 municipios (cuanto más próximo a 76, peor calidad de dieta) de la lista de dieta inadecuada realizada por el Observatorio de Salud de Asturias (10–12).

El objetivo de este estudio fue comprobar la influencia de los conocimientos formales o científicos y las prácticas de alimentación en el IMC según el ámbito de residencia (urbano o rural) en la ZBS de Villaviciosa (Asturias, España) en personas de entre 35 y 65 años.

Material y método

Diseño del estudio y participantes

Se realizó un estudio transversal sobre las personas con edades comprendidas entre los 35 y los 65 años y residentes en el ámbito urbano o rural de la ZBS de Villaviciosa (Asturias, España). Del total de la población de la ZBS ($N = 14480$), se extrajo una muestra con un nivel de confianza del 95 %, un error del 5 % y un valor $\pi = 0.5$ ($n = 375$). Para prevenir posibles pérdidas, se aumentó la muestra en un 20 %, por lo que la muestra final estuvo compuesta por 451 personas. Teniendo en cuenta que en la ZBS de Villaviciosa el 50.11 % vive en ámbito urbano y el 49.89 % en el rural y que el 47 % son varones y el 53 % son mujeres, la muestra se estratificó según el ámbito de residencia y el sexo.

Mediante muestreo aleatorio con reemplazamiento se realizó un primer contacto telefónico en el que se explicó en qué consistía la realización del estudio. En caso de rechazar la participación o no conseguir contacto en tres ocasiones, se desechó la participación. Se les envió a las 451 personas de la muestra, por e-mail o por WhatsApp, un enlace a la encuesta, compuesta por preguntas cerradas de elección múltiple, con una única posibilidad de respuesta, en formato "Google Forms". El método de envío fue escogido por la persona participante. Se informó que se procedería a realizar un nuevo contacto a los tres días para resolver problemas y recibir sugerencias.

Consideraciones éticas

A todos los participantes se les proporcionó información clara y concisa sobre los objetivos y procedimientos del estudio, así como la naturaleza voluntaria y anónima de la participación. Se respetaron los principios éticos de la Declaración de

Helsinki, así como las siguientes normas de la legislación española: Ley Orgánica 3/2018, del 5 de diciembre, de Protección de Datos Personales y Garantía de los Derechos Digitales y ley 14/2007, del 3 de julio, de Investigación Biomédica. El estudio contó con la aprobación del Comité de Ética de la Investigación de Asturias (España) (código 2021.384). Los números telefónicos fueron obtenidos de las historias clínicas y no se emplearon para otros fines que no fueran los relativos a esta investigación. El Comité de Ética correspondiente no puso objeciones a su utilización.

Variables de estudio

Prácticas de alimentación

Al no existir cuestionarios validados que se adaptaran a la población de estudio, se elaboró un cuestionario *ad hoc* teniendo en cuenta publicaciones existentes que abordaban el objetivo del estudio (9,13). Esta sección se compuso de doce preguntas con cuatro opciones de respuesta y marcación obligatoria de una de ellas.

Conocimientos formales o científicos sobre alimentación

Esta parte del cuestionario se realizó con base en el *General Nutrition Knowledge Questionnaire* (14), adaptándolo al tipo de muestra y al objetivo del estudio. Finalmente, esta parte del cuestionario se compuso de 11 preguntas con cuatro posibilidades de respuesta y solamente una correcta. En este caso, el acierto de la pregunta se valoró con un punto y el fallo con cero puntos, lo que posibilitó obtener una puntuación total de conocimientos para cada participante entre 0 puntos (mínimo) y 11 puntos (máximo).

Otras variables

Se evaluaron características sociodemográficas: sexo, edad, estado civil, nivel máximo de estudios alcanzado, situación laboral actual, ingresos anuales medios, ámbito de residencia (rural/urbano), peso (en kilogramos) y talla (en centímetros).

En el Anexo I se incluye el cuestionario completo (datos sociodemográficos, prácticas de alimentación y conocimientos científicos o formales sobe nutrición).

Análisis estadístico

Se calcularon frecuencias relativas (%) para las variables cualitativas y medias, así como sus desviaciones estándar (DE) para las cuantitativas. Se empleó la correlación de Pearson para comprobar la existencia o no de relación entre la puntuación obtenida en el cuestionario de conocimientos sobre nutrición y el IMC.

Para estudiar la relación entre cada una de las preguntas del cuestionario de prácticas de alimentación y el ámbito de residencia se empleó la prueba de chi-cuadrado (χ^2). Para comparar las medias del IMC por ámbito (rural/urbano), así como los conocimientos formales o científicos de nutrición, se aplicó la prueba *t* de Student para muestras independientes. Se realizó una regresión logística multinomial para calcular la *odds ratio* (OR) entre el IMC categorizado (variable dependiente) y el ámbito de residencia (rural o urbano), ajustada por las variables sociodemográficas (el sexo, la edad, el estado civil, el nivel máximo de estudios alcanzado, la situación laboral actual y los ingresos anuales medios). El IMC se categorizó en normopeso ($IMC < 25\,kg/m^2$), sobrepeso ($IMC \geq 25\,kg/m^2$, pero $< 30\,kg/m^2$) y obesidad ($IMC \geq 30\,kg/m^2$). Se realizaron regresiones logísticas binarias para calcular las OR entre la existencia de SP o no (variable dependiente) y cada una de las prácticas de alimentación (variables independientes). Se consideró como SP todo IMC igual o superior a $25\,kg/m^2$ y se consideró como normopeso todo IMC inferior a $25\,kg/m^2$.

Para todos los resultados se consideró un nivel de significación $\alpha = 0.05$ y un índice de confianza del 95%, por lo que los valores de $p < 0.05$ se consideraron como estadísticamente significativos. El análisis se llevó a cabo mediante el programa estadístico Stata v. 15.0 (Stata Corp., College Station, TX).

Resultados

En el estudio participaron 451 personas, de las que 225 (49.89 %) vivían en ámbito rural y 226 (50.11 %) en ámbito urbano. Participaron 239 mujeres (52.99 %) y 212 hombres (47.01 %). Los datos sociodemográficos, tanto generales como específicos del ámbito rural y urbano, se presentan en la Tabla 1. En la Tabla 2 se indican los porcentajes

Tabla 1. Características sociodemográficas de la muestra ($n = 451$).

		Global *n (%)*	*Rural* *n (%)*	*Urbano* *n (%)*
Estado civil	Soltero	49 (10.86)	20 (8.89)	29 (12.83)
	Casado	272 (60.31)	139 (61.78)	133 (58.85)
	Conviviendo	76 (16.85)	37 (16.44)	39 (17.26)
	Relación sin convivir	17 (3.77)	8 (3.56)	9 (3.98)
	Divorciado	27 (5.99)	19 (8.44)	8 (3.54)
	Viudo	10 (2.22)	2 (0.89)	8 (3.54)
Nivel de estudios	Primaria	79 (17.52)	25 (11.11)	54 (23.89)
	Secundaria	131 (29.05)	70 (31.11)	61 (26.99)
	Formación profesional	84 (18.63)	43 (19.11)	41 (18.14)
	Universidad	134 (29.71)	76 (33.78)	58 (25.66)
	Posgrado universitario	19 (4.21)	10 (4.44)	9 (3.98)
	Sin estudios	4 (0.89)	1 (0.44)	3 (1.33)
Situación laboral	Empleado	324 (71.84)	169 (75.11)	155 (68.58)
	Desempleado	79 (17.52)	39 (17.33)	40 (17.70)
	Baja temporal	11 (2.44)	7 (3.11)	4 (1.77)
	Expediente de regulación temporal de empleo	2 (0.44)	1 (0.44)	1 (0.44)
	Jubilado	35 (7.76)	9 (4.00)	26 (11.5)
Ingresos anuales medios	Menos de 20 000 euros anuales	250 (55.43)	110 (48.89)	140 (61.95)
	Entre 20 000 y 40 000 euros anuales	170 (37.69)	104 (46.22)	66 (29.20)
	Más de 40 000 euros anuales	31 (6.87)	11 (4.89)	20 (8.85)

de respuestas sobre los hábitos alimenticios según el ámbito, así como el valor de la prueba χ^2 y el valor *p*. En la Tabla 3 se muestran los porcentajes de IMC categorizado (normopeso, sobrepeso y obesidad) por sexo y ámbito. En la Tabla 4 se indican las medias de edad, IMC y conocimientos científicos o formales sobre nutrición en general y disgregados por ámbito y sexo, así como sus DE, el resultado de la prueba *t* de medias entre rural y urbano y su valor *p*. En la Tabla 5 se puede apreciar la OR entre el IMC categorizado (normopeso, sobrepeso y obesidad) y el lugar de residencia, ajustado por las variables demográficas tras realizar regresión logística multinomial, así como sus IC 95 % y sus valores *p*, tomando el normopeso como categoría de referencia.

En la correlación entre el IMC y la puntuación en el cuestionario de conocimientos sobre alimentación, se pudo comprobar que quienes poseían mayor nivel de conocimientos tenían un menor IMC, y este resultado fue estadísticamente significativo ($r = 0.132$; IC 95% = de–0.222 a –0.040; $p = 0.005$).

Discusión

El objetivo general del presente estudio fue comprobar la influencia de los conocimientos y los hábitos alimenticios en la SP según el ámbito de residencia. Los resultados obtenidos sobre el porcentaje de población con SP son similares a los publicados en la Encuesta de Salud del Principado de Asturias del año 2017 (9) y en la Encuesta Europea de Salud en España del año 2020 (15). También concuerdan los resultados de mayor SP en hombres que en mujeres. Se encontraron pequeñas diferencias entre el ámbito rural y el urbano (9). Además, las personas con estudios primarios mostraron una mayor SP respecto a las personas con niveles educativos superiores, al igual que sucede en los trabajos de Margolles *et al*. (8,9).

No se encontraron relaciones estadísticamente significativas entre los conocimientos nutricionales de las personas de la muestra estudiada y la presencia de SP. Koch *et al*. (16), en su estudio sobre población alemana, destacaron que el conocimiento por sí solo no mejora el comportamiento dietético. Sin embargo,

Tabla 2. Porcentajes de respuestas sobre los hábitos alimenticios según el ámbito, así como el valor de la prueba χ^2 y el valor *p*.

Pregunta	*Opciones de respuesta*	*Total (%)*	*Rural (%)*	*Urbano (%)*	χ^2	**Valor *p***
¿Suele leer las etiquetas nutricionales?	No, por falta de tiempo	16.63	14.67	18.58	6.23	0.098
	No, por falta de interés	23.28	20.44	26.11		
	Las leo pero no las entiendo	13.08	12	14.16		
	Las leo y las entiendo	47.01	52.89	41.15		
¿Qué manera de cocinar los alimentos utiliza más en su día a día?	Fritos, rebozados o empanados	7.98	6.67	9.29	3.42	0.331
	Hervidos o al vapor	4.43	4.89	3.98		
	A la plancha u horneados	39.02	42.67	35.4		
	Guisados	48.56	45.78	51.33		
Durante una semana habitual, ¿quién prepara las comidas en su casa?	Yo	62.75	66.67	58.85	8.01	0.046*
	Un familiar	33.26	31.56	34.96		
	Las compro ya preparadas	0.89	0	1.77		
	Como fuera de casa	3.1	1.78	4.42		
¿Qué hace normalmente cuando se siente lleno?	Dejo de comer sin dificultad	75.17	71.56	78.76	3.45	0.327
	Dejo de comer, aunque me cuesta	12.64	14.67	10.62		
	Sigo comiendo sin problema	2.44	3.11	1.77		
	Sigo comiendo, pero luego me arrepiento	9.76	10.67	8.85		
¿Cuántas veces suele comer fuera de casa?	Solo fines de semana	18.63	24.44	12.83	14.69	0.002*
	Varias veces por semana	11.53	7.56	15.49		
	Esporádicamente	62.97	61.78	64.16		
	Nunca	6.87	6.22	7.52		
¿Cuántas veces cree que come en exceso?	Nunca	5.76	4.44	7.08	3.65	0.302
	Pocas veces	67.18	69.33	65.04		
	Muchas veces	25.28	25.33	25.22		
	Siempre	1.77	0.89	2.65		
¿Qué haría para cuidar su cuerpo?	Controlar alimentación y hacer ejercicio por mi cuenta	75.39	74.67	76.11	2.79	0.425
	Seguir pautas de un profesional	17.96	19.56	16.37		
	Tomar suplementos dietéticos	0.44	0	0.88		
	Nada	6.21	5.78	6.64		
¿Qué cree que necesita para mejorar su alimentación?	Formación	14.19	14.67	13.72	1.77	0.621
	Dinero	8.65	8.44	8.85		
	Motivación	40.58	43.11	38.05		
	Nada, considero que mi alimentación es buena	36.59	33.78	39.38		
¿A quién acudiría si quiere consejo sobre nutrición?	Enfermera de AP	18.18	16.89	19.47	13.06	0.005*
	Nutricionista privado	37.92	45.78	30.09		
	Médico de AP	29.71	26.67	32.74		
	Internet	14.19	10.67	17.7		
¿Cuál es la bebida que más ingiere en su día a día?	Refresco/zumos procesados	6.21	5.33	7.08	2.31	0.511
	Café/té	11.53	12.44	10.62		
	Agua	71.18	72.89	69.47		
	Cerveza/vino	11.09	9.33	12.83		

(Continued)

Table 2. (Continued)

Pregunta	*Opciones de respuesta*	*Total (%)*	*Rural (%)*	*Urbano (%)*	χ^2	**Valor *p***
Durante una semana normal, ¿qué actividad física realiza?	Algún deporte como ciclismo o natación	18.4	19.56	17.26	0.56	0.905
	Camino o corro por placer	39.25	39.56	38.94		
	No suelo realizar actividad física	41.91	40.44	43.36		
	Deportista de alto nivel o similar	0.44	0.44	0.44		
Indique las características de la actividad física que realiza en su trabajo	Paso tiempo de pie y caminando, pero sin coger peso	26.22	30.22	22.22	8.64	0.034*
	Estoy sentado la mayor parte del tiempo	27.33	29.33	25.33		
	Estoy la mayoría del tiempo de pie y realizando trabajo con pesos o herramientas	24.89	19.56	30.22		
	No estoy trabajando actualmente	21.56	20.89	22.22		

*Valor estadísticamente significativo ($p < 0.05$).

Tabla 3. Porcentajes de IMC categorizado (normopeso, sobrepeso y obesidad) por sexo y ámbito.

		Global		*Rural*		*Urbano*	
		n	%	*n*	%	*n*	%
Mujeres	Normopeso	115	48.12%	55	45.08%	60	51.28%
	Sobrepeso	72	30.13%	36	29.51%	36	30.77%
	Obesidad	52	21.76%	31	25.41%	21	17.95%
Varones	Normopeso	76	35.85%	41	39.81%	35	32.11%
	Sobrepeso	78	36.79%	40	38.83%	38	34.86%
	Obesidad	58	27.36%	22	21.36%	36	33.03%
Total	Normopeso	191	42.35%	96	42.67%	95	42.04%
	Sobrepeso	150	33.26%	76	33.78%	74	32.74%
	Obesidad	110	24.39%	53	23.56%	57	25.22%

Tabla 4. Medias de edad, IMC y conocimientos científicos o formales sobre nutrición en general y disgregados por ámbito y sexo, así como sus DE, el resultado de la prueba *t* de medias entre rural y urbano y su valor *p*.

		Global		*Rural*		*Urbano*		*Prueba t de Student (rural vs. urbano)*	*Valor p*
		Media	*DE*	*Media*	*DE*	*Media*	*DE*		
Edad (años)	Total	49.96	8.35	48.62	7.60	51.30	8.84		
	Masculino	49.21	8.24	47.97	7.78	50.39	8.53		
	Femenino	50.62	8.40	49.16	7.43	52.15	9.08		
IMC (kg/m^2)	Total	26.87	5.66	26.67	5.33	27.07	5.97	–0.747	0.454
	Masculino	27.47	5.01	26.93	5.00	27.97	5.01	–1.511	0.132
	Femenino	26.34	6.13	26.44	5.60	26.22	6.67	0.276	0.783
Conocimientos nutrición (puntos)	Total	8.84	1.62	8.95	1.63	8.73	1.61	1.452	0.147
	Masculino	8.75	1.49	8.93	1.49	8.58	1.49	1.728	0.048*
	Femenino	8.92	1.72	8.97	1.74	8.87	1.69	0.429	0.669

*Valor estadísticamente significativo ($p < 0.05$).

Tabla 5. OR entre el IMC categorizado (normopeso, sobrepeso y obesidad) y el lugar de residencia.

			OR (IC 95%)	*Valor p*
Lugar de residencia	Urbano (*vs.* rural)	Sobrepeso	0.861 (de 0.542 a 1.364)	0.522
		Obesidad	0.784 (de 0.464 a 1.323)	0.362
Sexo	Masculino (*vs.* femenino)	Sobrepeso	2.141 (de 1.321 a 3.469)	0.002*
		Obesidad	2.102 (de 1.236 a 3.576)	0.006*
Edad		Sobrepeso	1.045 (de 1.014 a 1.077)	0.003*
		Obesidad	1.034 (de 1.005 a 1.074)	0.023*
Estado civil	Casado (*vs.* soltero)	Sobrepeso	2.266 (de 1.013 a 5.068)	0.046*
		Obesidad	0.894 (de 0.411 a 1.943)	0.777
	Conviviendo (*vs.* soltero)	Sobrepeso	1.312 (de 0.522 a 3.301)	0.564
		Obesidad	0.741 (de 0.301 a 1.832)	0.517
	Relación sin convivir (*vs.* soltero)	Sobrepeso	1.469 (de 0.398 a 5.428)	0.563
		Obesidad	0.331 (de 0.102 a 0.831)	0.034*
	Divorciado (*vs.* soltero)	Sobrepeso	1.116 (de 0.308 a 4.039)	0.868
		Obesidad	1.069 (de 0.327 a 3.497)	0.517
	Viudo (*vs.* soltero)	Sobrepeso	4.744 (de 1.064 a 23.345)	0.046*
		Obesidad	1.029 (de 0.842 a 1.334)	0.897
Nivel de estudios	Secundaria (*vs.* primaria)	Sobrepeso	0.794 (de 0.384 a 1.644)	0.535
		Obesidad	0.513 (de 0.239 a 1.101)	0.087
	Formación profesional (*vs.* primaria)	Sobrepeso	0.567 (de 0.253 a 1.266)	0.166
		Obesidad	0.514 (de 0.223 a 1.183)	0.118
	Universidad (*vs.* primaria)	Sobrepeso	0.665 (de 0.311 a 1.419)	0.291
		Obesidad	0.376 (de 0.166 a 0.845)	0.018*
	Posgrado univesitario (*vs.* primaria)	Sobrepeso	0.971 (de 0.276 a 3.406)	0.962
		Obesidad	0.372 (de 0.081 a 0.964)	0.034*
	Sin estudios (*vs.* primaria)	Sobrepeso	0.565 (de 0.269 a 1.464)	0.436
		Obesidad	0.863 (de 0.576 a 1.556)	0.785
Situación laboral actual	Desempleado (*vs.* empleado)	Sobrepeso	0.968 (de 0.514 a 1.823)	0.921
		Obesidad	0.831 (de 0.413 a 1.676)	0.605
	Baja temporal (*vs.* empleado)	Sobrepeso	1.401 (de 0.337 a 5.815)	0.643
		Obesidad	0.653 (de 0.107 a 4.001)	0.645
	Expediente de regulación temporal de empleo (*vs.* empleado)	Sobrepeso	0.921 (de 0.814 a 1.843)	0.898
		Obesidad	Sin datos	
	Jubilado (*vs.* empleado)	Sobrepeso	0.668 (de 0.258 a 1.731)	0.407
		Obesidad	0.853 (de 0.321 a 2.267)	0.749
Ingresos medios anuales	Entre 20 000 y 40 000 euros (*vs.* menos de 20 000)	Sobrepeso	0.838 (de 0.501 a 1.401)	0.921
		Obesidad	0.551 (de 0.303 a 0.998)	0.048*
	Más de 40 000 euros anuales (*vs.* menos de 20 000)	Sobrepeso	0.335 (de 0.114 a 0.981)	0.046*
		Obesidad	0.819 (de 0.301 a 2.228)	0.696

*Valor estadísticamente significativo ($p < 0.05$).

Jeruszka *et al.* (17), en su estudio multicéntrico (con población de Francia, Italia, Polonia, Países Bajos y Reino Unido) sí encontraron una relación negativa y estadísticamente significativa entre los conocimientos sobre alimentación y el IMC. Por otro lado, Girois *et al.* (18), en su estudio sobre adultos suizos y estadounidenses de edades comprendidas entre los 35 y los 75 años, mostraron

que los conocimientos y las actitudes no están correlacionados, a pesar de la concienciación sobre una alimentación adecuada.

En el presente estudio, con relación a la lectura del etiquetado de los alimentos, se encontró que la mayoría de la población estudiada no lee las etiquetas nutricionales y, en caso de hacerlo, tiene una comprensión parcial de la información nutricional, lo que concuerda con López-Cano y Restrepo-Mesa (19). Se comprobó que aquellas personas que preparaban los alimentos de forma frita, rebozada o empanada tenían un riesgo mayor de padecer SP, tal y como se describe en algunas investigaciones (20,21), en las que se señaló que el consumo de comida frita tenía una relación estadísticamente significativa con padecer SP.

Comer fuera de casa ha sido el hábito nutricional que más se relaciona con la presencia de SP en este estudio. Esto concuerda con lo indicado por Kim y Ahn (22), quienes, en su estudio en adultos coreanos con edades comprendidas entre los 19 y los 64 años, concluyeron que esta acción aumentaba las desviaciones de las ingestas dietéticas respecto a las ingestas de referencia, además de que los consumidores que comen más veces fuera de casa tienen una probabilidad elevada de ser obesos. No obstante, teniendo en cuenta lo anterior y lo hallado en estudios previos (23,24), hay que destacar que no solo influye el hecho de comer fuera, sino también el número de veces, el lugar y los motivos, datos no recabados en el estudio presente.

Por otro lado, se observó que las personas que respondieron que comían en exceso muchas veces tienen un riesgo mayor de padecer SP, lo que concuerda con el estudio de Arreortúa *et al*. (25) en población mexicana.

Respecto a la opción de controlar la alimentación y realizar ejercicio físico por cuenta propia, se evidenció una disminución de la probabilidad de padecer SP, lo que parece concordar con datos de otros estudios (26,27) que indican que una combinación de una dieta controlada con la práctica de actividad física hace que ambas se potencien mutuamente, lo que reduce significativamente el riesgo de padecer SP.

Se observó que aquellas personas con falta de motivación para mejorar su alimentación tenían mayor probabilidad de SP. Este resultado coincide con lo encontrado en el estudio de Ashton *et al*. (28) sobre población australiana, quienes ilustraron cómo la falta de motivación conduce a una alimentación inadecuada y a la no realización de la actividad física recomendada.

El hábito de consumir refrescos o zumos procesados como bebida principal diaria respecto al consumo de agua muestra un riesgo mayor de padecer SP, como apoya el estudio de Marqueta de Salas *et al*. (29) en España, en el que se relacionó el consumo de cierto tipo de refrescos y zumos con un aumento de la SP. Asimismo, en el 2015, O'Connor *et al*. (30), en su estudio llevado a cabo en el Reino Unido, establecieron la asociación entre el consumo de bebidas azucaradas y la obesidad.

Respecto al consumo de alcohol, el presente estudio pone de manifiesto que ingerir bebidas alcohólicas durante la comida aumenta el riesgo de padecer SP, como ya lo habían demostrado Traversy y Chaput (31), en su metaanálisis, quienes constataron que el consumo de alcohol se relaciona más consistentemente con un aumento de la adiposidad. Yeomans (32), en otro metaanálisis, destacó algunas de las posibles explicaciones de la influencia del alcohol en el aumento de peso o la obesidad ya que, más allá de agregar energía a una comida, el alcohol puede estimular la ingesta de alimentos al aumentar el apetito en respuesta a los estímulos alimentarios.

En cuanto a la actividad física, los resultados obtenidos en el presente trabajo demuestran que su no realización aumenta el riesgo de padecer SP, con respecto a las personas que practican deporte de manera habitual. Varela-Moreiras *et al*. (33) relacionaron el sedentarismo y la inactividad física con el sobrepeso y la obesidad en un documento de consenso español.

En esta investigación pudo comprobarse que los determinantes sociales (sexo y ámbito de residencia) pueden influir en alcanzar un nivel óptimo de salud. Ahondando en ello, Weigert (34) señaló que las estructuras sociales pueden llegar a producir una distribución inequitativa de los recursos, siendo este daño potencialmente evitable. Más concretamente, este daño es producido durante la satisfacción de las necesidades humanas básicas. Galtung (35) popularizó el concepto de "violencia estructural" para referirse a injusticia social y a su presencia a nivel institucional, incluso aunque no exista violencia en el sentido más estricto de la palabra. De hecho, el tipo de estructura económica y de hegemonía generadas en España tienen una capacidad explicativa muy elevada de sus pautas

epidemiológicas, como las mencionadas en el presente estudio.

Este estudio presenta ciertas limitaciones. En primer lugar, en la ZBS estudiada hay también zonas rurales muy influenciadas por núcleos urbanos adyacentes. En segundo lugar, tanto el peso como la talla de las personas encuestadas fueron autorreportados, por lo que puede existir un sesgo de veracidad en estos datos. En tercer lugar, solo se consideraron como variables las sociodemográficas y los conocimientos formales o científicos sobre nutrición, dejando al margen otros posibles factores que puedan estar interviniendo en las prácticas alimentarias.

Conclusiones

Respecto a la prevalencia de SP no hay diferencias estadísticamente significativas entre las dos zonas (rural y urbana) estudiadas. No leer las etiquetas nutricionales por falta de interés, la preparación diaria de alimentos fritos, rebozados o empanados, comer fuera de casa habitualmente, la falta de motivación para mejorar la alimentación, la consideración subjetiva de comer en exceso muchas veces, beber prioritariamente zumos procesados, refrescos o alcohol de baja graduación, y el sedentarismo son los principales factores de riesgo para desarrollar SP.

Las prácticas alimentarias y los patrones de actividad física son los principales responsables de la SP. Por ello, el adecuado conocimiento puede ayudar a la elaboración de un plan preventivo que permita frenar el crecimiento del sobrepeso y la obesidad. Los profesionales sanitarios de atención primaria quedan relegados en cuestión de información nutricional, y se acude a ellos cuando el problema ya está instaurado. El principal reto al que estos profesionales deben hacer frente es lograr un mayor uso, por parte de la población diana, de los servicios de salud. Hacerse más presentes en la comunidad, ser más proactivos en el concierto de citas clínicas o realizar intervenciones comunitarias de manera frecuente podrían lograr atraer a las personas que conforman el grupo etario al centro de salud y, en consecuencia, introducir las acciones preventivas o terapéuticas para evitar la existencia de SP.

Declaración de conflicto de intereses

Ningún conflicto declarado.

Financiación

Ninguna financiación declarada.

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Material complementario

Este artículo tiene material complementario disponible en línea.

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Resúmenes

Conspiración y confianza en las vacunas, percepciones de quienes dudan y se resisten a la vacuna contra la COVID-19: estudio transversal

Hüseyin Eriş, Fatma Karasu y Duygu Ayar

Contexto: las creencias personales en las teorías conspirativas y la defensa antivacunas desempeñan un papel en las cifras de la propagación de la COVID-19.
Objetivo: este estudio busca determinar la percepción de la confianza en las vacunas y la percepción de las teorías de la conspiración con respecto a la vacunación entre quienes presentan dudas y resistencia frente a la vacuna de la COVID-19 en una provincia de Turquía.
Métodos: estudio realizado con 1 244 personas que aceptaron participar en él, en la provincia con los más bajos índices de vacunación en Turquía. Para recolectar los datos se utilizaron el 'Formulario de información personal' y la 'Escala de percepción y actitudes frente a la vacuna de la COVID-19'.
Resultados: quienes se declararon resistentes a las vacunas tuvieron una puntuación media baja en la Percepción de la confianza y un puntaje medio alto en la Percepción de la conspiración. La variable de la percepción de la conspiración tuvo un efecto significativamente negativo y alto en la percepción de la confianza.
Conclusión: los participantes se mostraron altamente resistentes a las vacunas contra la COVID-19. Su nivel de percepción de la confianza en las vacunas contra la COVID-19 fue moderado, mientras que su nivel de percepción de la conspiración fue alto.
Palabras clave: COVID-19, vacunas, dudas frente a las vacunas, rechazo a las vacunas, Turquía. (Global Health Promotion, 2023; 30(4): 6–15)

Conocimientos, percepciones, prevención y prácticas sicilianas relacionadas con la vacunación durante la pandemia: encuesta basada en cuestionarios

Sami Basha y Basma Salameh

Contexto: la COVID-19 ha influido en Sicilia (Italia) tanto como en cualquier otro lugar del mundo y las personas han reaccionado de diferentes formas a esta epidemia global. Este estudio busca evaluar el comportamiento, la percepción y la voluntad de la población siciliana para aceptar la vacunación, así como sus actitudes frente a las teorías de la conspiración, que han sido una preocupación para los gobiernos alrededor del mundo.
Métodos: diseño del estudio: estudio transversal descriptivo. Los datos se recolectaron mediante una encuesta basada en un protocolo de la oficina regional para Europa de la Organización Mundial de la Salud, que fue distribuido en dos olas. La primera se realizó en abril y mayo del 2020, y durante junio y julio se repartió un cuestionario modificado.
Resultados: los sicilianos mostraron un muy buen conocimiento del virus, mientras que su actitud positiva frente a la vacuna cambió en la segunda ola. Mostraron también una confianza media en las instituciones gubernamentales, lo que permite que existan dudas de conspiración en la población.
Conclusiones: aunque los resultados indican un buen nivel de conocimientos y actitud positiva frente a la vacunación, creemos que se deben realizar más estudios en el Mediterráneo para comprender mejor cómo enfrentar futuras epidemias con recursos limitados en el sistema de salud, en comparación con otros países.
Palabras clave: Sicilia, Mediterráneo, COVID-19, pandemia, vacunación, comportamientos. (Global Health Promotion, 2023; 30(4): 16–24)

Global Health Promotion 1757-9759; Vol 30(4): 93–95; 1213200 DOI: 10.1177/17577597231213200 journals.sagepub.com/home/ghp

Cultivar la tierra en un nuevo país: evaluación participativa con comunidades de inmigrantes en el sur de Alberta

Ulises Charles-Rodriguez, Aiat Aborawi, Kamal Khatiwada, Ashmita Shahi, Silvia Koso, Savanna Prociw, Christa Sanford y Richard Larouche

Los inmigrantes experimentan un alto riesgo de deterioración de su salud mental después de que se establecen en Canadá. Las comunidades de inmigrantes se benefician de intervenciones de promoción de la salud que estimulan la inclusión social y el sentido de pertenencia como factores de protección. En este contexto, los jardines comunitarios han sido reconocidos como intervenciones que fomentan comportamientos saludables, el apego y el sentido de pertenencia a un lugar.

Este artículo resume nuestra experiencia durante una investigación participativa basada en la comunidad, para la cual involucramos a las partes interesadas en la planeación, la implementación y la evaluación de un jardín comunitario para inmigrantes. Realizamos la investigación con el fin de proporcionar información pertinente y oportuna para la adaptación y el desarrollo del programa. Los participantes, intérpretes y organizadores intervinieron a través de encuestas, grupos de discusión y entrevistas semiestructuradas que dieron lugar a una serie de motivaciones, beneficios, desafíos y recomendaciones. El jardín fue un lugar que fomentaba el aprendizaje y promovía comportamientos saludables, como la actividad física y la socialización. Sin embargo, hubo ciertos retos en la organización y la comunicación con los participantes. Los resultados fueron utilizados para adaptar las actividades a las necesidades de los inmigrantes y para ampliar la programación de las organizaciones colaboradoras. El hecho de involucrar a las partes interesadas facilitó la capacitación y el uso directo de los resultados. Este método puede catalizar una acción comunitaria sostenible con las comunidades de inmigrantes.

Palabras clave: inmigrantes, refugiados, promoción de la salud, jardines comunitarios, evaluación participativa, investigación basada en la comunidad/investigación participativa. (Global Health Promotion, 2023; 30(4): 25–34)

Relación entre conocimientos, actitudes y prácticas (CAP) de MyPlate en los jóvenes de Indonesia y factores sociodemográficos, satisfacción corporal, accesibilidad y fuentes de información

Jeslin y Junaida Astina

MyPlate es una campaña del 2017 sobre las Directrices de Nutrición Equilibrada de Indonesia. El conocimiento de la juventud en materia de nutrición desempeña un papel importante, dado que el estado nutricional de los jóvenes afecta la salud de su descendencia. Además, serán más propensos a ser obesos en el futuro, particularmente en las áreas urbanas. El objetivo principal de este estudio descriptivo fue el de evaluar la relación entre conocimiento, actitudes y prácticas (CAP) de MyPlate, con factores sociodemográficos, la satisfacción corporal, accesibilidad y fuentes de información. Los datos se recolectaron mediante un estudio transversal que involucró a 413 jóvenes en Yakarta. El cuestionario en línea se modificó de estudios previos, fue validado por tres expertos, probado previamente y su fiabilidad demostrada a través del coeficiente alfa de Cronbach de 0.714. En este estudio, la mayoría de los participantes tuvo un pobre conocimiento (54 %), una buena actitud (80 %), prácticas razonables (72 %), un nivel de satisfacción corporal del 51 % y buena accesibilidad (70 %). Los análisis chi-cuadrado mostraron unas relaciones significativas (valor $p < 0.05$) de conocimientos con satisfacción corporal, nivel educativo, especialidad; actitudes con accesibilidad; prácticas con satisfacción corporal y accesibilidad; satisfacción corporal con género; accesibilidad con estatus socioeconómico; fuentes de información con nivel de educación y especialidad. Asimismo, la fuente de información más grande de MyPlate fue este cuestionario (45 %), lo que significa que antes no estaban familiarizados con MyPlate. Este estudio confirma la necesidad de intensificar su promoción y mejorar los conocimientos y las prácticas nutricionales de los jóvenes.

Palabras clave: actitudes, conocimientos, MyPlate, prácticas, jóvenes. (Global Health Promotion, 2023; 30(4): 35–44)

La salud de los niños refugiados: una revisión sistemática de las condiciones de salud en niños de 0 a 6 años que viven en países de ingreso alto

Chloe Higgins, Deirdre Gartland, Jane Yelland, Stephanie Brown, Josef Szwarc, Ida Kaplan, Georgia Paxton y Elisha Riggs

Este estudio describe el alcance, la calidad y la idoneidad cultural de la investigación actual sobre las condiciones de salud de los niños refugiados con edades entre 0 y 6 años que viven en países de ingreso alto. Se realizó una revisión sistemática que incluyó artículos originales publicados sobre las condiciones de salud de los niños refugiados. Se analizó un total de 71 artículos, cuyos estudios variaban considerablemente en cuanto a sus diseños de investigación, las características de la población y las condiciones de salud. Los estudios incluían información sobre 37 condiciones diferentes de salud, con la mayoría de las enfermedades no transmisibles, en particular crecimiento, desnutrición y densidad ósea. Aunque los estudios identificaron una amplia gama de problemas de salud, faltó un esfuerzo coordinado para dar prioridad a la investigación sobre temas de salud concretos, y las condiciones de salud estudiadas no coinciden con la carga mundial de enfermedad para esta población. Además, a pesar de tener una evaluación de calidad media-alta, la mayoría de los estudios no describía las medidas tomadas para garantizar la competencia cultural y la participación comunitaria en su investigación. Sugerimos un esfuerzo de investigación coordinado para esta cohorte, con un mayor énfasis en involucrar a la comunidad, a fin de mejorar la base de evidencia de las necesidades de salud de los niños refugiados.
Palabras clave: refugiados, niños, salud. (Global Health Promotion, 2023; 30(4): 45–55)

Por una salud pública en favor de una justicia epistémica

Amandine Fillol, Leslie Fonquerne, Linda Cambon y Valéry Ridde

La salud pública se orienta cada vez más hacia el estudio de estructuras opresivas (como el racismo, el sexismo o el validismo) y de su influencia en el mercado laboral, en los sistemas educativos y judiciales y en el acceso a servicios de salud de calidad. Este comentario busca proponer una reflexión sobre cómo influyen estas estructuras en el ejercicio de la salud pública. A través del concepto de injusticia epistémica, que describe el hecho de que la organización social influye la posibilidad de saber y de hacer valer su conocimiento en una sociedad, demostramos que como actores/actrices de la salud pública, podemos reproducir y fortalecer las injusticias sociales. Las injusticias epistémicas son, con frecuencia, el fruto de estructuras y de prácticas cotidianas. Se necesita desarrollar el uso de herramientas que permitan promover la reflexividad para facilitar la puesta en perspectiva de las injusticias y los privilegios.
Palabras clave: conocimientos en salud, equidad/justicia social, salud pública, injusticia epistémica. (Global Health Promotion, 2023; 30(4): 62–66)

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The Global Health Promotion editorial team would like to thank all reviewers who agreed to review manuscripts between 12 October 2022 and 1st November 2023, thus contributing to the high quality of the journal.

L'équipe éditoriale de Global Health Promotion souhaiterait remercier tous les réviseurs et réviseures qui ont accepté de relire des manuscrits entre le 12 octobre 2022 et le 1er novembre 2023, contribuant ainsi à la haute qualité de la revue.

El equipo editorial de Global Health Promotion desea agradecer a quienes aceptaron revisar manuscritos entre el 12 de octubre de 2022 y el 1 de noviembre de 2023, contribuyendo con ello a la alta calidad de la revista.

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Global Health Promotion 1757-9759; Vol 30(4): 96–97; 1216063 DOI: 10.1177/17579759231216063 journals.sagepub.com/home/ghp

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