

## DISSERTATION / DISERTACIÓN

### Public health teaching in Mexico

#### La enseñanza de la salud pública en México

Daniela Hernández Ventura\*

Centro de Investigación en Nutrición y Salud, Instituto Nacional de Salud Pública. Av. Universidad 655, col. Santa María Ahuacatitlán. CP. 62100, Cuernavaca, Morelos, México.

*Dissertation history:*

Received 17 Mar 2023

Accepted 19 Mar 2023

Available online 30 Jun 2023

*\* Corresponding author:*

Daniela Hernández Ventura

Electronic mail address: [Daniela.hventura@insp.mx](mailto:Daniela.hventura@insp.mx)

Public health teaching in Mexico encompasses a broad range of topics and initiatives aimed at promoting health, preventing diseases, and improving the overall well-being of the population. Here are some key aspects of public health teaching in Mexico:

*Academic Programs:* Mexico has several universities and educational institutions offering academic programs in public health. These programs can range from undergraduate degrees to postgraduate degrees, such as Master's and Ph.D. programs in public health. These programs provide students with a comprehensive understanding of public health principles, epidemiology, biostatistics, health policy, environmental health, and other related disciplines.

*National Institutes:* Mexico has prominent national institutes dedicated to public health research, education, and policy development. The National Institute of Public Health (Instituto Nacional de Salud Pública, INSP) is a leading institution that provides postgraduate education, research, and training programs in public health. It collaborates with universities and international organizations to enhance public health teaching and research capacity.

*Health Education Campaigns:* The Mexican government, through the Ministry of Health, conducts various health education campaigns to raise awareness and promote healthy behaviors among the population. These campaigns focus on topics such as nutrition, physical activity, sexual and reproductive health, vaccination, hygiene practices, and disease prevention. They employ various mediums, including television, radio, print media, and digital platforms, to reach a wide audience.

*Community Outreach:* Public health teaching in Mexico often involves community-based approaches to engage with individuals and communities directly. Health professionals, educators, and volunteers organize workshops, seminars, and community health fairs to provide information on various health issues. These initiatives aim to empower individuals to make informed decisions about their health and adopt healthier lifestyles.

*Government Initiatives:* The Mexican government implements policies and initiatives to address public health challenges. These initiatives focus on areas such as reducing health disparities, improving access to healthcare services, strengthening disease surveillance systems, and promoting evidence-based practices. Public health

teaching is integrated into these initiatives to train healthcare professionals, policymakers, and the public.

*International Collaborations:* Mexico collaborates with international organizations, such as the World Health Organization (WHO) and the Pan American Health Organization (PAHO), to enhance public health teaching and research. These collaborations facilitate knowledge exchange, training programs, and technical assistance to strengthen the public health infrastructure in Mexico.

Overall, public health teaching in Mexico involves a multidimensional approach that combines academic programs, health education campaigns, community outreach, government initiatives, and international collaborations. The goal is to equip individuals, healthcare professionals, and policymakers with the knowledge and skills needed to promote health and improve the well-being of the Mexican population.

The COVID-19 pandemic has had a significant impact on the teaching of public health education worldwide, including in Mexico. Here are some key ways in which the pandemic has influenced public health education:

*Shift to Online Learning:* To adhere to social distancing measures and reduce the risk of virus transmission, many educational institutions, including those offering public health programs, transitioned to online learning. Lectures, seminars, and other teaching activities were conducted through virtual platforms, allowing students to continue their education remotely. This shift required educators to adapt teaching methods to the online environment and ensure access to digital resources for students.

*Focus on Epidemiology and Outbreak Response:* The pandemic highlighted the importance of epidemiology and outbreak response in public health. Public health education programs in

Mexico and globally emphasized these areas, providing students with a deeper understanding of infectious disease epidemiology, surveillance, contact tracing, testing strategies, and outbreak investigation. The pandemic served as a real-life case study, enabling students to witness the practical application of public health principles.

*Integration of COVID-19 Content:* Public health curricula were modified to incorporate COVID-19-related content. This included exploring the virology, transmission dynamics, and public health interventions specific to the virus. Students were exposed to the latest research findings, epidemiological data, and evolving public health guidelines related to COVID-19. This integration helped develop critical thinking skills and prepared students to respond effectively to future pandemics or health emergencies.

*Interdisciplinary Approach:* Public health education during the pandemic necessitated an interdisciplinary approach, encouraging collaboration between different fields of study. Public health students in Mexico had the opportunity to work with professionals from various disciplines, such as epidemiologists, physicians, nurses, sociologists, and economists, to understand the complex nature of the pandemic and develop holistic strategies for response and recovery.

*Field Experience Challenges:* Public health education often includes field experiences, such as internships, practicums, and community-based projects. However, the pandemic limited or disrupted these opportunities due to travel restrictions, lockdown measures, and safety concerns. As a result, students may have faced challenges in gaining practical, hands-on experience. Institutions and educators had to adapt by providing alternative virtual or remote learning experiences, emphasizing data analysis, policy development, and virtual simulations.

*Research and Data Analysis:* The pandemic generated an immense amount of data and research related to COVID-19. Public health education focused on teaching students how to critically analyze and interpret epidemiological data, evaluate research studies, and apply evidence-based decision-making principles. Students were encouraged to engage in COVID-19-related research projects, contributing to the body of knowledge and understanding of the virus.

The COVID-19 pandemic forced public health education to adapt rapidly, incorporating pandemic-specific content, leveraging online learning platforms, and emphasizing practical skills for outbreak response. While the challenges were significant, the pandemic also presented unique opportunities for students to witness the importance of public health in real-time and develop the necessary skills to address future public health crises.

Teaching public health education in primary schools is crucial for promoting health literacy and empowering children to make informed decisions about their well-being. Here are some key considerations for teaching public health education in primary schools:

*Age-Appropriate Curriculum:* Public health education should be tailored to the age and developmental level of primary school students. The curriculum should focus on foundational concepts, such as personal hygiene, nutrition, physical activity, mental health, and safety. Lessons should be engaging, interactive, and use age-appropriate language and visuals to ensure students can grasp the concepts effectively.

*Health Promotion:* Public health education in primary schools should emphasize health promotion and disease prevention. Students should learn about the importance of regular handwashing, proper nutrition, staying active, getting enough sleep, and maintaining good oral health. Lessons can include interactive activities,

games, and demonstrations to encourage healthy behaviors.

*Social and Emotional Well-being:* Primary school is an important time for social and emotional development. Public health education should address topics like managing emotions, building positive relationships, effective communication, and coping with stress. Teaching strategies such as storytelling, role-playing, and group discussions can help students understand and practice these skills.

*Personal Safety:* Public health education should include lessons on personal safety to empower students to protect themselves and others. Topics may include road safety, fire safety, water safety, and basic first aid. Teachers can use scenarios, visual aids, and simulations to teach students how to recognize and respond to potentially dangerous situations.

*Environmental Health:* Teaching students about environmental health fosters an understanding of how the environment impacts their well-being. Topics such as pollution, waste management, conservation, and sustainable practices can be incorporated into the curriculum. Students can engage in hands-on activities like planting gardens, recycling projects, or community clean-ups to reinforce environmental health concepts.

*Collaboration with Parents and Community:* Involving parents and the wider community is essential for reinforcing public health education. Schools can organize workshops or informational sessions for parents to learn about the curriculum and ways to support healthy behaviors at home. Engaging community organizations, local health professionals, and public health experts as guest speakers or facilitators can provide additional expertise and resources.

*Experiential Learning:* Public health education in primary schools should incorporate experiential learning opportunities. Field trips to local health

facilities, farms, or parks can help students connect theoretical knowledge to real-world contexts. Role-playing activities, hands-on experiments, and group projects can also enhance student engagement and understanding.

*Evaluation and Assessment:* Regular assessment and evaluation are necessary to gauge students' understanding and the effectiveness of public health education. Assessments can include quizzes, projects, presentations, or practical demonstrations. Teachers can provide constructive feedback to guide students' progress and address any misconceptions.

By integrating public health education into the primary school curriculum, students can develop lifelong habits and attitudes that contribute to their overall well-being. It lays the foundation for informed decision-making and empowers children to become health-conscious individuals who prioritize their health and the health of others.

It is an essential obligation of health professionals: Doctors, Nurses, Clinical Biologists, Clinical Chemists and Pharmacists to undertake strategies to increase social awareness of individual and community public health. From the home with the closest people to generating institutional and/or governmental programs to promote the concept, scope and applications of public health.

By promoting health professionals to participate, integrate and/or collaborate in professional or community non-profit civil organizations, it will also increase the expectation of achieving a culture of quality similar to that of first world countries.



**Mexican Academy of Health Education A.C. Membership:** Our commitment is to keep professionals and students in training updated in this constantly evolving area. If you are interested in being part of our community and accessing exclusive benefits, the first step is to obtain your membership. Join us and stay up to date with advances in health education.

MEMBERSHIP SUBSCRIPTION IS FREE.  
Request your membership to the email:  
[journalmhe@gmail.com](mailto:journalmhe@gmail.com)



**The concepts and opinions of the articles are the sole responsibility of their author(s); at no time does it compromise the guidelines and policies of the Journal of Microbiology & Health Education and its Editorial Committee.**