Introductory Chapter: What Is Global Health?

David M. Claborn

Additional information is available at the end of the chapter

1. Introduction

A useful definition of "global health" is an elusive prey, hiding among its congeners of public health, international health, tropical public health, and global health governance. Some use the terms "international" and "global" interchangeably, though others contend that "international" is a more limited term used to describe health issues in the developing world from the perspective of the developed world. In other words, international health is the study of health in countries other than one's own, especially if the other countries are representatives of the developing world. This perspective on international health expanded during the period of European colonialism [1], contributing to the establishment of many leading public health institutions such as the London School of Hygiene and Tropical Medicine (founded in 1908) and the Institute of Tropical Medicine-Antwerp (founded in 1906). In the New World, the construction of the Panama Canal prompted the United States to focus on the tropical conditions that nurtured epidemics of yellow fever and malaria amongst the workers on the canal. Several professional organizations were started during this period to address the health risks provided by international trade and travel, including the American Society of Tropical Medicine and Hygiene (founded in 1903) and the Royal Society for Tropical Medicine and Hygiene (founded in 1907).

As Europe and the international community sought to distance themselves from the controversies and outright exploitation of colonialism, public health authorities sought to diminish the perceived paternalism inherent in the accepted definition of international health. Public health events also demonstrated the ability of health issues to transcend borders, presenting threats to rich and poor alike. The Spanish influenza pandemic of 1918 may have killed as much as 5% of the world's population at the time. Although morbidity reports at the time were suppressed due to concerns about divulging troop vulnerabilities in several combatant countries during WWI, the pandemic clarified the need for greater knowledge about transnational disease threats [2]. And, it was obvious that the developed world was not immune

to such pandemics. Over 50 years later, the pandemic of AIDS demonstrated that infectious diseases were resilient and could still threaten the developed and the developing countries of the world alike, though it was obvious that the risk of disease was greater in the developing world. In fact, some relatively wealthy nations such as the Soviet Union and Venezuela suffered catastrophic conditions as their public health and health care systems collapsed as a result of financial and political crises, leading to resurgent tuberculosis, diphtheria, and, in the case of Venezuela, malaria [3, 4]. The perspective of international health from the safe harbor of the developed world was apparently myopic and insufficient.

Due in part to the events mentioned above, the term "global health" took on a separate, more inclusive meaning that addressed health issues affecting most countries in the world, especially health issues that crossed national borders. In the past, such issues included many infectious diseases such as influenza, tuberculosis, yellow fever, and cholera. More recently, the chronic diseases or conditions such as obesity and diabetes have become prominent global health issues as well. Of course, health conditions that transcend borders have always been part of the study of international health, so this variable seems insufficient for differentiating between the fields of international health and global health.

More recently, some health authorities have chosen to extend the concept of "global health" to include issues that have political or ideological underpinnings. Those underpinnings help describe global health as a field that truly transcends borders, in part by postulating an alternative explanation of disease etiology. The issues of climate change, urbanization, health equity, social injustice, and income disparity all involve political perspectives and controversies revolving around models of science, governance, ethics, and health policy. For some, these and other politically charged subjects distinguish global health from the more restrictive field of international health. For instance, one definition of global health has been described as:

> …an area for study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide. Global health emphasizes transnational health issues, determinants, and solutions, involves many disciplines within and beyond the health sciences, and promotes interdisciplinary collaborations and is a synthesis of population- based prevention with individual clinical care [5].

This definition includes concepts such as "determinants of health" and "health equity" that require a public health perspective much different from the older model that identified health-related deficiencies, then sought to address those deficiencies through direct health interventions aimed at the immediate cause. For instance, the immediate cause of malaria is the parasite transmitted to the victim through the bite of certain mosquitoes. A direct intervention might be the destruction of the mosquitoes that serve as the disease vector, resulting in protection from the disease. The global health focus, however, changed to identifying social or health inequities rather than simpler proximal causes of disease. Such language seems based on political and economic perspectives that lead to a definition of global health and an explanation of disease etiology that is much different than the "paternalistic" definition of international health refined during the period of European colonialism. For instance, in the global health model, the interaction between poverty and disease is no longer seen as a mere association or influence, but a cause-effect relationship (hence use of the word "determinant"). Some observers would argue that "determinant" does not mean "cause," though this is the generally accepted meaning of the word. This term is defined by Merriam-Webster

as "an element that identifies or determines the nature of something or fixes or conditions an outcome" [6]. As an example, lack of education is described by some as the cause of mortality rather than just an influential variable [7]. Using the example of malaria, the global health model suggests that better protection for a human population might be gained by addressing the underlying economic and social inequities that allow disease transmission or the most serious disease manifestations to occur. Those underlying inequities might lead to inadequate housing that lacks window screens and doors, insufficient access to health care, lack of appropriate education, or nutritional deficiencies that lead to more serious manifestations of the disease. The term "inequity" in this usage, however, can be problematic in that it implies these disparities are due, not to a deficiency or the lack of resources, but rather to the social state in which one person has more than another: better housing, more access to health care, or better food. By definition, "inequity" in this context implies an unnecessary and unfair situation. In this definition, poor health is due, not solely to a deficiency of resources or to the disease agent causing the symptoms, but also to a disparity in the distribution of those resources. For some health professionals, this focus on inequities and social justice is key to understanding the difference between international health and global health [8].

At the heart of any discussion of global health must be an accepted definition of public health. This broad field of study is the foundation for both international health and global health. A simple definition of public health is *the actions a community takes to ensure that members of that community can remain healthy*. This definition is so broad that it may not be very helpful, so some examples of public health successes may help to understand the definition. The American Centers for Disease Control and Prevention (CDC) identified 10 of the most notable public health achievements of the last century including:

1. vaccination programs that have greatly reduced the incidence of many fatal diseases;

2. fluoridation of drinking water leading to reduction of tooth decay and tooth loss;

3. improved family planning and contraceptive services;

4. reduction in the rate of occupational injuries;

5. safer food and reductions in the rates of food-borne diseases;

6. greater motor vehicle safety;

7. identification of tobacco as a major health threat;

8. improvements in the treatment and prevention of heart disease and stroke;

9. better hygiene, prenatal health care, and nutrition for mothers and babies; and

10. reduction in the rates of infectious diseases through improved access to clean water, improved sanitation and through the development and use of antibiotics [9].

These achievements were the result of multidisciplinary efforts and this is the key to understand what public health must be. At times, this multidisciplinary approach has emphasized collaboration between the health sciences and the social sciences [8]. Global health requires more by greater multidisciplinary collaboration that goes well beyond that of the parent field

of public health to include the work of professionals outside the health sciences including political scientists, civil engineers, religious leaders, and so on.

A final issue that should be addressed in any discussion of global health is the concept of "global health governance." This concept was developed, in part, due to dissatisfaction with international health governance (perhaps, exemplified by the work of the World Health Organization) and reflects a need for collective action to address shared health challenges [1]. Thus, global health governance has been defined as the "rules and procedures by which collective action is taken to achieve agreed goals that protect and promote health within a global context." Such governance has been described as "governance beyond government." In other words, sovereignty of states must be respected. This governance is made possible through a use of non-governmental organizations in collaboration with local governments to address health issues of shared concern, especially as related to the poor, vulnerable, or disadvantaged. Thus, the definition of global health takes on a practical application in a description of how global health issues are addressed and how transnational efforts are governed.

In summary, the definition of global health is still elusive, but there is some consensus that it deals with health issues that transcend borders, that it requires a multidisciplinary response, and that it probably includes a focus on politically and ethically charged global issues such as social justice, urbanization, rapid climate change, and health inequities. That said, the author continues to teach a course titled "International Health" at the university where he is employed. The faculty members chose the name of the course advisedly because they saw the need for students to look at public health issues through perspectives that are different from those of most Americans; that is, from an international perspective independent of American interests. The purpose of the course is to investigate public health issues as they affect others in the world, not as they might affect the local student. Perhaps, this helps to identify the differences between international health and global health even further. International health focuses on public health issues that may not affect the student of public health directly; global health deals with health issues that probably affect everyone, including the student in question. There is room and a need for both perspectives. In conclusion, the concept of global health is still inconsistently defined, yet this has not impeded its use in the health literature nor in practice. Most agree that it is not the same thing as international health, but the lines which divide these two concepts keep moving.

Conflict of interest

The author does not have any conflicts of interest regarding the subject of this chapter or the publication of this book.

Author details

David M. Claborn

Address all correspondence to: davidclaborn@missouristate.edu

Master of Public Health Program, Missouri State University, USA

References

[1] Lee K, Kamradt-Scott A. The multiple meanings of global health governance: A call for conceptual clarity. Globalization and Health. 2014;**10**:28

[2] Barry JM. The Great Influenza. London: Penguin Books Ltd.; 2004

[3] Droznin M, Johnson A, John AM. Multidrug resistant tuberculosis in prisons located in former Soviet countries: A systematic review. PLoS One. 2017;**12**(3):30174373. DOI: 10.1371/journal.pone.0174373

[4] Hotez PJ, Basanez MG, Acost-Serrano A, Grillet ME. Venezuela and its rising vector-borne neglected diseases. PLOS Neglected Tropical Diseases. 2017;**11**(6):e005423. DOI: 101371/journal.pntd.005423

[5] Koplan JP, Bond TC, Merson MH, et al. Towards a common definition of global health. Lancet. 2009;**373**(9679):193-1995

[6] Merriam-Webster Dictionary (Online). Available from: https://www.merriam-webster.com/dictionary/determinant [Downloaded: October 9, 2018]

[7] Krueger PM, Tran MK, Hummer RA, Chang VW. Mortality attributable to low levels of education in the United States. PLoS One. 2015. DOI: 10.1371/journal.pone.0131809

[8] Merson MH, Black RE, Mills AJ. Global Health. 4th ed. Burlington, MA: Jones and Bartlett Publishers; 2018

[9] Finkel ML. Public Health in the 21st Century (Volume 1). Santa Barbara, CA: ABC-CLIO; 2010. Retrieved from http://publisher.abc.clio.com/9780313375477