Chapter 1
Global Health: Reimagining Perspectives

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Introduction

Global health offers a particularly valuable lens to view the world. On the one hand, global health offers an image of development and overall improvements, with progression from the "age of pestilence and famine" to a newer age where more and more populations live longer and longer. This is supported by a number of indicators showing widespread (aggregate) improvements in critical epidemiological indicators, including life expectancy and infant mortality, over the past 50 years [1]. Yet, on the other hand, global health offers an image of great heartbreak and disappointment – with millions suffering from the burdens of neglected diseases and coping with morbidity and mortality from preventable causes associated with chronic non-communicable diseases [2–5]. This is supported by the brute facts indicative of broad inequity: life expectancy varies from 50 years to over 80 years in different countries, and diarrhoea remains a leading cause of death for children aged 5 and younger [1]. The toll of tuberculosis – despite the development of effective medications more than 40 years ago – is still unacceptably high [1, 5]. And when we go beyond national averages to look at within-country inequities, we recognize that the national pictures are misleading, hiding the very real and substantial inequities that exist in rich and poor countries alike [6]. Understanding the complexities of global health requires us to grapple with the world as deeply unequal and unjust [7]. Disparities in management and hence outcomes of non-communicable diseases such as asthma and allergies are examples of these inequities. Inequities are observed

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not only between populations in different countries but also within the same populations living in one city in countries with overall good levels of population health [8].

We can discern different ways of conceptualizing global health [2, 3, 9]. One tradition, the "statist" tradition, frames global health primarily as a question of security; it sees disease as a *threat* to be defeated [10, 11]. It invokes the state's obligation to defend its borders from external threats. In doing so, this type of thinking pathologizes the suffering of poor people, seeing their existence as a threat that must be contained [10]. In this light, Ebola matters to rich countries because it strikes fear, and "vulnerability" is generalized to everyone [11]. National policies based on this perspective actively screen out "sick" immigrants, erecting barriers (in the case of the United States under the Trump administration, calling for a physical wall on the southern border with Mexico). Under the statist perspective, migration itself becomes a danger to rich countries [4, 12, 13]. Under the statist perspective, global health takes place "out there", in so-called developing countries [14], and interventions often take the guise of charity [5] – a type of intervention that sidesteps the underlying questions of social justice [15].

The alternative way of understanding global health is from the perspective of human rights. This "globalist" tradition offers a rebuke to the statist tradition – from this perspective, we are interested in global health not because global patterns of disease are necessarily a *threat* but because we recognize the interconnectedness of all populations and the right of every individual on the planet to benefit from advances in medical care [5]. From this perspective, global health is not just about what happens *out there*. Instead, global health is concerned with how health/disease is shaped by global economic, political and cultural forces that transcend national boundaries. When our health is influenced by international food processing regulations, we witness global health in practice. When we work with or for companies with a global presence, we are part of a chain of events connected to global health; health "there" is influenced by actions here. For Koplan et al., global health:

> refers to any health issue that concerns many countries or is affected by transnational determinants, such as climate change or urbanisation, or solutions, such as polio eradication. Epidemic infectious diseases such as dengue, influenza A (H5N1), and HIV infection are clearly global. But global health should also address tobacco control, micronutrient deficiencies, obesity, injury prevention, migrant-worker health, and migration of health workers. *The global in global health refers to the scope of the problems, not their location* (emphasis added). [14]

Seeing global health from the globalist tradition shifts our intervention efforts from charity towards something far more structural – towards what the WHO has named the "uneven distribution of power, money, and resources" [16].

In this chapter, we explore the statist and globalist traditions in global health through an analysis of an important theoretical framework: epidemiologic transition. We identify the broad contours of the model and discuss some of its main critiques, before moving to a discussion of the United Nations' Sustainable Development Goals (SDGs). Our analysis identifies challenges and opportunities for adopting an equity-based perspective that would call out and challenge the root causes of avoidable and unnecessary morbidity and mortality in the world today.

Theorizing Global Health

One of the most influential (and debated) models in global health is Abdel Omran's theory of epidemiologic transition. His theory describes changes in a country's leading causes of death from infectious (or communicable) to chronic (or non-communicable) diseases [2, 17, 18]. The classic formulation of this model posits that the transition is primarily associated with a country's economic development. It describes how countries transition over time from an "era of pestilence and famine," characterized by brutally low life expectancies and outbreaks of infectious pathogens, to an era of "receding pandemics" and finally to an era of "man-made and degenerative" diseases, where life expectancy is high and mortality relatively predictable from 1 year to the next. Omran's model certainly describes the experience of the rich industrialized countries of the world – but the extent to which it applies to countries of the global south today is much debated.

As a theoretical framework, the epidemiologic transition is often implicit in global health thinking. It is often taken for granted that the model works and that it describes with some degree of precision the development of global health over time. Indeed, we have seen shifts in the leading causes of death towards chronic non-communicable diseases [19]. Yet researchers have also paused to unpack the model, sometimes developing ways of extending the theory to better fit contemporary epidemiological profiles in specific countries and regions [20–26] and sometimes criticizing it and calling for its abandonment altogether [27–29].

The most recent research in this area has questioned the assumptions of epidemiologic transition theory, and empirical findings show that many countries of the global south experience a persistent "dual burden" of disease, something that the original theory did not foresee in its stages of transition. Omran's model was very optimistic about the shift in population health profiles from infectious to non-communicable diseases. The coexistence of chronic diseases such as cancer, cardiovascular disease, adult-onset diabetes and arthritis with infectious diseases such as tuberculosis and malaria presents formidable challenges to fragmented and underfunded healthcare systems. Understanding epidemiologic transition, or what we might instead see as epidemiologic *overlap*, is therefore critical to gauging the pressures on healthcare systems in the global south, as well as to thinking about strengthening those healthcare systems.

Omran's theory, like all theories, was a product of its time – steeped in modernization theory and lacking the nuanced critiques raised by dependency theory and, later, world-systems approaches [2]. Omran saw development naturally occurring over time, though the pacing of that development could vary from place to place. But the notion of progress, of development through stages, was nevertheless fundamental to Omran's theory – from his theory, we have an image of the world *developing* towards higher and higher levels of population health, with longer life expectancies. And on this issue, epidemiologic transition is incompatible with more critical approaches to understand the world today [28, 30]. Martínez and Leal argue, for example, that the

model is grossly *optimistic*, assuming that epidemiologic and economic improvement will naturally occur over time, ultimately labelling it an *illusion* [27]. Critics argue that Omran's model was naïve about economic development (which dependency and world-systems theories argue are not inevitable) and about infectious diseases (with HIV/AIDS being the clearest rebuke to the idea that infectious diseases could no longer threaten "post-transition" populations). Omran's theory also had very little, if anything, to say about global health inequities – which the WHO CSDH has poignantly framed as the critical social justice question of our time [2, 7, 16].

Global health discussions have turned from the passive perspective of Omran's epidemiologic transition theory to the far more active "structural determinants of health" model advocated by the WHO *Commission on the Social Determinants of Health.* The WHO Commission shifted the focus of the work from economic development to health equity, ultimately concluding that "reducing health inequalities is an ethical imperative. Social injustice is killing people on a grand scale" [16]. The CSDH took an openly progressive political stance, emphasizing that "it does not have to be this way and it is not right that it should be like this. Where systematic differences in health are judged to be avoidable by reasonable action they are, quite simply, unfair. Putting right these inequities – the huge and remediable differences in health between and within countries – is a matter of social justice" [16]. The CSDH openly questioned the benefits of globalization for the world's poor, observing that increasingly transnational risks are borne by low- and middle-income countries, while the financial benefits of new global trade agreements are unequally distributed in favour of high-income regions [2].

Overall, the WHO CSDH proposed 12 objectives categorized into three broad principles:

1. Improve daily living conditions
   - A more equitable start in life
   - A flourishing living environment
   - Fair employment and decent work
   - Universal social protection
   - Universal healthcare
2. Tackle the inequitable distribution of power, money and resources
   - Coherent approach to health equity
   - Fair financing
   - Market responsibility
   - Improving gender equity for health
   - Fairness in voice and inclusion
   - Good global governance
3. Measure and understand the problem and assess the impact of action
   - Enhanced capacity for monitoring, research and intervention [16]

The report emphasized the need for the pragmatic improvement of day-to-day living conditions for the world's poor. Building on a large literature on the health effects of childhood deprivation, the CSDH took a life course perspective and called

for a major emphasis on early child development and education. At the same time, it called for strengthened social policies and legislation for working age populations, emphasizing the need to "improve the working conditions for all workers to reduce their exposure to material hazards, work-related stress, and health-damaging behaviours" [16]. Moreover, the CSDH called for living wage legislation and emphasized the need to "establish and strengthen universal comprehensive social protection policies that support a level of income sufficient for healthy living for all" [16]. The WHO CSDH advocated for a clear focus on the structural and social determinants of health.

The Commission described the 40-year gap in life expectancy from the poorest to the richest as four decades that are "denied" [16]. At the same time, it documented *within*-country inequities based on a variety of factors – economic, political and gender-based. The Commission calls for a refocusing of much of the global discourse on health, away from development towards equity, towards social justice.

We argue that responding to the WHO Commission's call will require global health researchers to name and challenge the status quo, to name and challenge our roles and our institutions' roles in the maintenance of an unequal system. At the core of this work is the concept of structural violence, defined by Paul Farmer et al. as "social arrangements that put individuals and populations in harm's way... The arrangements are *structural* because they are embedded in the political and economic organization of our social world; they are *violent* because they cause injury to people". It is structural violence that maintains the patterns of global health inequities that we see in the world today [31].

Selected Global Health Targets

Much of the contemporary global health discourse revolves around the United Nations' Sustainable Development Goals (SDGs), which build upon the previous Millennium Development Goals (MDGs) [32–34]. There are 17 SDGs:

1. No Poverty
2. Zero Hunger
3. Good Health and Well-Being
4. Quality Education
5. Gender Equality
6. Clean Water and Sanitation
7. Affordable and Clean Energy
8. Decent Work and Economic Growth
9. Industry, Innovation and Infrastructure
10. Reduced Inequality
11. Sustainable Cities and Communities
12. Responsible Consumption and Production
13. Climate Action
14. Life Below Water
15. Life on Land

16. Peace and Justice Strong Institutions
17. Partnerships to Achieve the Goal

While SDG 3 is the only one explicitly framed in the language of health, all of the other SDGs connect to health outcomes (perhaps, most clearly SDG 1, dealing with poverty; SDG 2, dealing with hunger; and SDG 10, dealing with inequality). SDG 3 is then organized into 13 targets, as shown in Table 1.1.

Table 1.1 Targets associated with SDG 3 "General Health and Well-Being". (Source: https://www.who.int/sdg/targets/en/)

By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births	Achieve *universal health coverage*, including financial risk protection, *access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all*
By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases	Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate
By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	Support the research and development of vaccines and medicines for the communicable and noncommunicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all
Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol	Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States
By 2020, halve the number of global deaths and injuries from road traffic accidents	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks
By 2030, ensure *universal access to sexual and reproductive health-care services*, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	

Several of the targets aim at big mortality indicators – with explicit targets associated with reductions in maternal mortality and child mortality by 2030. The epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases are also called out for particular attention, as is the burden of chronic non-communicable diseases – the latter building on a great deal of advocacy lead by the WHO in the past 20 years [19, 35, 36]. Morbidity indicators take a backseat, and allergic diseases (the focus of this book) are problematically not highlighted as priorities.

Challenges and Opportunities

The WHO CSDH and the new SGD framework offer important opportunities for global health research and advocacy. The WHO CSDH, in particular, has attempted to shift attention towards structural and social determinants of health, framing global health inequities in the language of social justice. And the SDGs, much like the previous MDGs, attempt to set quantitative benchmarks to track progress and galvanize attention. However, as well intentioned as these works may be, we face an unequal playing field, and the fundamental question of how to nurture health equity in an increasingly unequal world is unaddressed. We live in a world that contains more scientific, technological and medical power than ever before. Yet what Paul Farmer describes as the "fault lines of inequality" are also more pronounced than ever [37].

The charitable sector is one of the fastest-growing industries in the global economy. This deluge of philanthropy has helped create a world where billionaires wield more power over education policy, global agriculture and global health than ever before [38]. Yet, the charitable model has failed to address the root causes of inequality. As Farmer notes:

> Those who believe that charity is the answer to the world's problems often have a tendency – sometimes striking, sometimes subtle, and surely lurking in all of us – to regard those needing charity as intrinsically inferior. This is different from regarding the poor as powerless or impoverished because of historical processes and events…. There is an enormous difference between seeing people as the victims of innate shortcomings and seeing them as the victims of structural violence. [5]

In place of charity, Farmer would have us adopt a social justice lens – one with a clear eye focus on structural violence as a driver of health and economic inequities despite overall economic growth (whose benefits do not "trickle down" to the poor).

One of the most promising developments in global health – a development with the real potential to change "business as usual" towards a more progressive system guided by equity – is the global revival in "social medicine". The term social medicine has deep roots – associated in Europe with Rudolph Virchow and in Latin America with a long-standing tradition symbolized perhaps most clearly by Argentina's Ramon Carrillo [39] and Chile's Salvador Allende [40, 41]. Most recently, it has been taken up by the "Social Medicine Consortium" (see http://www.socialmedicineconsortium.org/), who declares itself: "rooted in the belief that

inequity kills, and that together we can achieve health equity by constructing systems that demand justice, recognize our global interconnectedness, and enable the next generation of health professionals". Groups like the Social Medicine Consortium actively develop local and global discussions focused on the structural roots of illness, guided by the conviction that health systems can and must address inequities in health in far deeper ways than are allowed by the traditional biomedical perspective.

Other groups, including the "People's Health Movement" (https://phmovement.org/), visualize a world in which equity between and within countries is achieved and health for all is a reality. They "demand that governments, international financial institutions and the United Nations agencies including the WHO be accountable to people, not to transnational corporations and their agents". They base their analysis on politics and economics, seeing those parts of life as integral to the delivery of healthcare; their analysis is rooted in Carillo and Allende's social medicine and echoes in the work of the WHO CDSH:

> High income countries, working closely with transnational corporations, are promoting neo-liberal policies to manage the contemporary crisis of globalized capitalism in the interests of the transnational capitalist class. With help from a network of one-sided 'trade and investment' agreements, these policies are either being accepted by or being forced on the governments of low and middle income countries. The resulting national policies are having far reaching consequences for the social conditions that shape people's health, and also for the approach and funding of comprehensive health care. Such policies are worsening the fundamental determinants of health, and progressively crippling healthcare infrastructure and delivery of services. Such policies are encouraging national governments to abdicate their responsibilities to public health... [42]

Groups like the Social Medicine Consortium and the People's Health Movement call the "decolonizing" of global health, prioritizing, instead, collaborations and partnerships that do not impose agendas onto poor people in the global south. To be clear, the default setting – the charity model – is rooted in unequal power relations, implying that the global north has answers for problems in the global south. What we require – if the promise of the WHO CSDH is to be followed through – is a new type of global health research, one based on science but also cognizant of politics and history. This reimagined global health must acknowledge and respect the great resources that exist in the global south and must look for insights from low-income countries that may actually be transferable to wealthier (but still unequal) contexts [43]. A great example of this is the critical role that community health workers may play in improving health outcomes in a range of settings [44–46].

Conclusion

Global health is at a crossroad. There are more funds available for global health research and advocacy than ever before. There are important global agenda-setting documents, including the WHO CSDH and the United Nations' SDGs, that frame

global health in innovative new ways, bringing focus to the structural and social determinants of health. And we have better epidemiological data than ever before. Yet, do we have the political will to prioritize global health? Or will global health matter first and foremost when it becomes a security threat (the statist perspective), perhaps calling for more and more well-intentioned but ultimately ineffective charity? Our challenge is to reimagine global health – acknowledging that the overall improvements we have seen in aggregate-level indicators have not been equally shared, acknowledging the persistent and growing inequities that exist despite unprecedented global economic growth. This reimagined global health may conceptualize health inequities as a manifestation of structural violence, calling for the structural solutions identified by social medicine.

From this broad-ranging review of global health thinking, we now turn our attention to allergic diseases in the global south, an important but neglected issue in global health.

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