Structural competency and global health education

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Published online: 22 Dec 2020.

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ABSTRACT

Structural competency is a new curricular framework for training health professionals to recognise and respond to disease and its unequal distribution as the outcome of social structures, such as economic and legal systems, healthcare and taxation policies, and international institutions. While extensive global health research has linked social structures to the disproportionate burden of disease in the Global South, formal attempts to incorporate the structural competency framework into US-based global health education have not been described in the literature. This paper fills this gap by articulating five sub-competencies for structurally competent global health instruction. Authors drew on their experiences developing global health and structural competency curricula—and consulted relevant structural competency, global health, social science, social theory, and social determinants of health literatures. The five sub-competencies include: (1) Describe the role of social structures in producing and maintaining health inequities globally, (2) Identify the ways that structural inequalities are naturalised within the field of global health, (3) Discuss the impact of structures on the practice of global health, (4) Recognise structural interventions for addressing global health inequities, and (5) Apply the concept of structural humility in the context of global health.

Academic global health programmes have recently undergone significant growth within US universities, initially as graduate education programmes and increasingly as undergraduate ones (Brewer, 2017; Drain et al., 2017; Merson, 2014). In response to the proliferation of global health programmes, various professional competencies have been proposed to capture the scope of skills and knowledge necessary for students to proficiently undertake global health research and practice upon graduation. To date, specific global health competencies have been proposed for a number of professions, including public health (ASPPH Master's Global Health Model, n.d.), nursing (Wilson et al., 2012), and medicine (Battat et al., 2010), as well as for inter-professional health educational programmes (Jogerst et al., 2015).

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Occurring parallel with this proliferation of global health competencies is the development of structural competency within health professional education. Structural competency is a recently developed educational framework for training health professionals to recognise and respond to disease and its unequal distribution as the outcome of harmful social structures, such as policies, institutions, and systems. These harmful social structures, rather than being contingent or unplanned, often originate in various oppressive social forces, ideologies, and projects, such as racism, classism, neoliberalism, capitalism, colonialism and neocolonialism, patriarchy, oppression against LGBTQI people, religious bigotry (i.e. islamophobia), and the cultures in which they are normalised (Metzl & Hansen, 2014; Neff et al., 2017, 2019, 2020). Structural competency builds on understandings of the social determinants of health—or 'the conditions in which people are born, grow, live, work and age' (WHO About Social Determinants of Health, n.d.)—by developing among trainees the ability to identify, analyse, and respond to the social structures that give rise to social determinants of health like poverty, homelessness, and inaccessible healthcare. So, for example, rather than focusing solely on poverty or homelessness, instruction based in structural competency emphasises the economic systems, social policies, government institutions, and social forces that produce and perpetuate poverty or homelessness.

In this way, structural competency calls for a more explicit engagement with the structural 'causes of the causes' (Braveman & Gottlieb, 2014) of health inequities by engaging with the policies, systems, institutions, and social forces that generate and maintain the conditions that produce health inequity. This educational framework also provides a corrective to common framings of health inequalities within health professional education premised on decontextualised biomedical, lifestyle, behavioural, and cultural explanations, which can serve to legitimate structural inequalities by placing responsibility and blame on individuals and communities for structurally generated health inequities (Castañeda et al., 2015; Harvey & McGladrey, 2019; Neff et al., 2019, 2020).

Structural competency also responds to recent calls within global health to 'decolonize,' 'meaningfully engage with global and local structures that drive [global] health inequities' (Büyüm et al., 2020) and recognise the 'upstream' determinants of global health inequities embedded within trade agreements, systems of international finance, the operations of global corporations, and the global political economy (Archer et al., 2011; Harvard Chan Student Committee for the Decolonization of Public Health, 2019; Oni et al., 2019). This involves historicising and politicising global health inequities by analytically incorporating histories of slavery, colonialism, racism, capitalism, sexism, ableism, 'and other harmful "-isms" [that] pose the largest threat to health equity' (Büyüm et al., 2020). These calls are born of criticisms of 'current paradigms of global health equity [that] are insufficient in counteracting structural oppression' and that 'ignore how health risks are shaped structurally by laws, policies and norms' (Büyüm et al., 2020). Structural competency could play a role in such a paradigm shift by providing a formal framework for incorporating critical structural analysis into global health education.

The development and assessment of curricula incorporating structural competency is currently ongoing (cf. Donald et al., 2019; Metzl et al., 2018; Metzl & Petty, 2017; Neff et al., 2017, 2019; Petty et al., 2017). To date, however, there have been few formal attempts to incorporate the structural competency framework into global health education (cf. Donald et al., 2019), even as global health researchers have long linked social structures to outsize disease burdens in the Global South (Castro & Singer, 2004; Farmer, 2001, 2005; Kim et al., 2002). This paper contributes to the burgeoning structural competency literature by describing five sub-competencies that can inform a framework for structurally competent global health education.

Methods

This research sought to demonstrate how the structural competency framework can inform global health instruction by articulating and describing five relevant sub-competencies. To inform competency development, the authors drew on the burgeoning structural competency literature, as

well as related global health, social science, social theory, and social determinants of health literatures. Authors also considered the historical social medicine tradition and contemporary literature that applies social medicine principles to contemporary global health inequities. Co-authors iteratively proposed, discussed, and refined the sub-competencies until arriving at the five presented here. Multiple drafts of the manuscript were circulated among all authors for review. The final manuscript was approved by all co-authors prior to submission.

All authors have developed and taught curricula related to global health, social medicine, and structural inequity at their respective intuitions and organisations, based in both the Global North and Global South. A majority of the authors are also involved in developing and delivering structural competency trainings to diverse audiences of healthcare professionals, including physicians, nurses, nurse practitioners, and midwives (Neff et al., 2017, 2019, 2020), primarily in the United States, but also in Mexico and Germany. Trainers and trainees reflect the racial, ethnic, and economic backgrounds of health professionals in the regions where trainings have taken part, principally in the San Francisco Bay Area. Many of these training materials have been made freely available online and published in the peer-reviewed literature along with participant feedback.

As an author team, we share a commitment to disrupting inequitable, hierarchical, and insufficient global health paradigms, which often serve to reinforce the inequalities they purportedly seek to address. To this end, we are all involved in different forms of practice to address the structural determinants of health inequities, both between Global North and Global South and within the countries where we are based. The author team developed over time through a professional network. Seven of the authors are based in institutions in the United States, two are based in Mexico, one is based in India, one is based in Zimbabwe, and one is based in Germany. A majority of authors are involved in reciprocal global health training programmes that involve trainees from the Global South working in the Global North and vice versa. All but two of the authors have doctoral degrees in medicine, and all those with medical training have also trained in various social science disciplines and social medicine. Those without medical degrees completed doctoral training in anthropology and public health, respectively.

Findings

Five sub-competencies for structurally competent global health education are defined and described below. These include: (1) Describe the role of social structures in producing and maintaining health inequities globally, (2) Identify the ways that structural inequalities are naturalised within the field of global health, (3) Discuss the impact of structures on the practice of global health, (4) Recognise structural interventions for addressing global health inequities, and (5) Apply the concept of structural humility in the context of global health.

Competency 1: Describe the role of social structures in producing and maintaining health inequities globally

As noted by Metzl and Hansen (2014), the notion of social structure has a long history within the social sciences and its definition is the topic of ongoing debate. Within the structural competency literature, social structures have been defined as the policies, systems, and institutions, that organise society and shape social inequity, including health inequity, often along the lines of social categories such as race, class, caste, gender, sexuality, and geography (Neff et al., 2019; Stonington et al., 2018). These include healthcare policies, judicial institutions, educational systems, and economic policies. Pathogenic social structures often arise from and are maintained by oppressive social forces, ideologies, and projects, such as racism, neoliberalism, capitalism, patriarchy, homophobia, and state violence; what have been referred to as 'interlocking systems of oppression' (Taylor, 2017) by Black feminist scholars and activists in the US. Therefore, while social structures might be harmful to some groups, they can also benefit others, who thus have a vested interest in their maintenance.

Social structures can also be health enhancing, or salutogenic, as in the case of redistributive social policies, progressive taxation systems, land reform programmes, environmental regulation and remediation, universal educational and healthcare systems, or otherwise publicly guaranteed social protections. A number of interrelated and overlapping concepts derive from this notion of social structure.

One such concept is the 'structural determinants of health,' which refers to the policies, systems, and institutions that give rise to the conditions that constitute the social determinants of health. If the social determinants of health refer to 'the conditions in which people are born, grow, live, work and age' (WHO About Social Determinants of Health, n.d.)—such as such as poverty, homelessness, unemployment, and inaccessible healthcare services—the structural determinants of health call for a more explicit analysis of the systems, policies, institutions, and social forces that shape—and unequally impose—those pathogenic social conditions. In this way, the notion of 'structural determinants of health' forces analysis further 'upstream' than is implied by the more passive and general 'social determinants of health' and it specifically implicates institutions, politics, power, and macro-social processes in the production and maintenance of health inequity (De Maio & Ansell, 2018).

A closely related concept that is central to understanding the relationship among social structure, illness, and health is 'structural violence,' which is 'one way of describing social arrangements that put individuals and populations in harm's way'; they are *structural* because they are embedded in society's political and economic organisation and *violent* because they result in injury (Farmer et al., 2006). Elsewhere, structural violence is defined as

> the imposition of unequal risk for disease, injury, and death by social, political, institutional, and economic configurations and policies on identifiable population groups. This violence is structural because it results from durable systemic inequality produced by large-scale social forces, including racism, gender inequality, poverty, and harmful public policies rather than from isolated individual actions or serendipity (Karandinos & Bourgois, 2019).

In these definitions, the term 'violence' brings with it an ethical injunction; structural violence results in physical and psychological harm just as interpersonal violence does, and therefore calls for just as urgent a response.

Table 1. Definitions of Structural Concepts.

Social structures – The policies, systems, and institutions, that organise society and shape social inequity, including health inequity, often along the lines of social categories such as race, ethnicity, class, gender, and sexuality (Neff et al., 2019; Stonington et al., 2018). Harmful social structures arise from and are maintained by pathogenic social forces, ideologies, and projects, such as racism, neoliberalism, capitalism, patriarchy, and homophobia. Social structures can also be health enhancing, as in the case of redistributive social policies, stringent environmental regulations, or universal health care systems. Some social structures benefit some groups while harming others.
Structural determinants of health – Those policies, systems, and institutions that give rise to the conditions that constitute the social determinants of health, such as poverty, homelessness, unemployment, and inaccessible health care services. The notion of structural determinants of health forces analysis further 'upstream' to consider the structures that generate the social conditions that produce health inequities (De Maio & Ansell, 2018).
Structural violence – Social arrangements that are embedded in society's political and economic organisation and that result in physical and psychological harm to identifiable groups and individuals (Farmer et al., 2006; Karandinos & Bourgois, 2019)
Structural vulnerability – The risk of injury, morbidity, or mortality that an individual experiences as a result of structural violence – including their location in multiple social and economic hierarchies (Neff et al., 2019; Quesada et al., 2011).

Case study: Access to healthcare among indigenous Guatemalans

Historical case studies aid in illustrating the role of structural violence in producing health inequities globally. For example, in Guatemala, austerity-driven national health policies apportion low levels of funding to public sector healthcare facilities, which then lack the services necessary to provide adequate care, particularly within rural, predominantly indigenous parts of the country (Bowser & Mahal, 2011). The imposition of structurally violent policies by the Guatemalan state on poor and indigenous populations has deep historical precedent that goes back to the Spanish Conquest

(Lovell, 2010; McAllister & Nelson, 2013). The Conquest and subsequent centuries saw the lands of indigenous Guatemalans expropriated by Europeans and then non-indigenous Guatemalans for crop cultivation. Dispossessed indigenous Guatemalans were then exploited through involvement in the low-wage labour of cultivating their expropriated land—labour that was often explicitly coerced through forced labour drafts and vagrancy laws.

These inequalities in land ownership in a country with a significant agricultural economy resulted in steep inequalities between indigenous Guatemalans and the largely non-indigenous, land-holding elite. In 1950, Guatemalans sought to remedy this situation by electing a progressive reformer, Jacobo Árbenz, to the presidency. Árbenz sought to break-up and redistribute large land-holdings to the country's largely indigenous rural landless peasants. These reforms threatened the interests of Guatemalan elites and US businesses, such as the United Fruit Company; both stood to lose vast land holdings under the reforms (Schlesinger & Kinzer, 2005). As a result, in 1954, Árbenz was deposed in a US-supported *coup d'état*. The *coup* triggered a 36-year civil war during which a US-supported, right-wing dictatorship committed acts of genocide against indigenous communities suspected of being associated with left-wing resistance movements, many of which sought a return to Árbenz's redistributive political vision. The subsequent Peace Accords took part during a time of ascendant neoliberalism. The neoliberal market-based land reform measures embraced by those brokering the accords not only failed to redistribute landholdings, they also further indebted and marginalised indigenous communities (Gauster & Isakson, 2007).

Today, the issues of economic inequality and the ownership of arable land by a small elite still dominate Guatemalan society. This concentration of economic resources translates to concentrated political power within the Guatemalan government and the ability of the landed upper class to manipulate national priorities and policy in their own interests. One consequence of this is the country's underfunded public sector healthcare system. As a result, many lifesaving medicines, tests, and procedures are available only within the private sector, which is accessible only to those patients with the financial means to afford such care (Chary & Rohloff, 2015). Access to healthcare services in Guatemala is therefore highly unequal and contingent on one's ability to pay (United States Agency for International Development, 2008; World Bank, 2009). Furthermore, due to the history of state-sponsored ethno-racial discrimination, exploitation, expropriation, and physical violence against indigenous communities (Lovell, 2010), indigenous Guatemalans are twice as likely to live in poverty as non-indigenous Guatemalans (Wessendorf & International Work Group for Indigenous Affairs, 2011) and are therefore less able to pay for needed healthcare services within a privatised healthcare marketplace. These structural inequalities are reflected in various public health statistics, such as the country's already high maternal mortality ratio, which is three times higher for indigenous Guatemalans than it is for the non-indigenous (Méndez, 2003).

Case study: Burden of HIV/AIDS in Haiti

Famer's structural analysis of the high rate of HIV/AIDS in Haiti (2004, 2006b, 2006a) similarly puts the nation's disease burdens into broad historical relief. The analysis begins with the arrival of Columbus to the island in 1492 and the first documented genocide in the 'New World' of Hispaniola's indigenous Taíno people, who were enslaved under Spanish colonisers. Enslaved indigenous labour was later replaced by enslaved African labour, and the western third of Hispaniola was ceded to France, for whom Haiti became one of its most valuable colonies. The subsequent Haitian Revolution instilled deep fears within many countries like the US, where the system of chattel slavery was central to economic growth and the prosperity of European settler colonists (James, 1989). As a result, Haiti's successful war for independence resulted in centuries of embargoes, military incursions, *coup d'états*, and various forms of political and economic subjugation orchestrated by hostile colonial and then neo-colonial powers, including France and the US (Robinson, 2008).

A significant aspect of this subjugation included forced debt repayments to France amounting to billions of US dollars for lost economic resources from the Haitian Revolution, including for the

'lost' enslaved people who liberated themselves from French ownership. Over time, a class of local, US-supported comprador elites emerged in Haiti eager to placate the punitive international community at the expense of the Haitian people. This situation perpetuated Haiti's extreme poverty, inadequate public health surveillance, and ill-equipped public sector healthcare system, all of which directly contributed to the rapid spread of HIV/AIDS throughout the country. The treatment of HIV/AIDS was further hobbled by pharmaceutical companies that priced antiretroviral therapy well beyond the ability of Haitians or the Haitian government to purchase the life-saving medications in sufficient quantities. These prices were propped up by US-enforced patent protections —enshrined in global trade agreements—that ensured maximum profits for pharmaceutical companies and prevented the production of low-cost generic medicines.

In both case studies, present-day disease burdens are contextualised within the historical forms of structural violence from which they arose, thereby providing a more complete understanding of contemporary global health inequities. Such case studies might incorporate critical theories of empire, development, racism, neo-colonialism, capitalism, and neoliberalism as they relate to the historical 'roots of global health inequity' (Mukherjee, 2018) and global economic inequity (Hickel, 2018; Rodney, 2018). This instruction might draw on Rosa Luxemburg's theory of imperialism, Frantz Fanon's analysis of colonialism and subjectivity, Kwame Nkrumah's theory of neo-colonialism, Andre Gunder Frank's theory of underdevelopment, Hans Singer, Raúl Prebisch, and Paul Baran's theories of dependency, Samir Amin's theory of unequal development, Immanuel Wallerstein and Giovanni Arrighi's world systems analysis, or David Harvey's theory of neoliberalism. Recent global health textbooks that include critical perspectives on global health inequities could complement this instruction (cf. Biehl & Petryna, 2013; Birn et al., 2017; Farmer et al., 2013; Mukherjee, 2018).

At the same time, such analysis need not focus solely on the exploitative relationship between the Global North and Global South or on structural violence within Global South countries; many of the same forms of structural violence are at work within Global North countries as well. Within the US and Canada, for example, similar case studies could consider the role of European settler colonialism, state violence, forced removal, and genocide on contemporary health inequities among Indigenous or Native Peoples. In the US, recent literature has explored the historical role of structural anti-Black racism in its various forms—the institution of slavery, Jim Crow laws and segregation, racist housing policies (e.g. racial covenants, redlining, and 'urban renewal' projects), 'broken windows' and 'stop and frisk' policing policies, the war on drugs, and mass incarceration—as a fundamental driver of racial health inequities today (Bailey et al., 2017; Phelan & Link, 2015; Metzl & Roberts, 2014; Paul et al., 2020). Treating these as global health issues also challenges the North–South binary that traditionally characterises the field of global health.

Competency 2: Identify the ways that structural inequalities are naturalised within the field of global health

Previous attempts to define a framework for structural competency included the ability to recognise the ways in which structural inequalities are ignored, naturalised, and made to seem deserved, rather than imposed and unjust (Neff et al., 2019, 2020). The naturalisation of structurally-generated health inequalities in turn aids in their social justification and reproduction (Carrasco et al., 2019; Holmes, 2013, p. 31). The idea of naturalised inequality derives from a long tradition within social theory that seeks to explain how social hierarchies are justified and perpetuated. For example, Bourdieu's concept of symbolic violence refers to the beliefs, perceptions, feelings, and sentiments that serve to justify social hierarchies—like class, race, or gender inequalities—to the benefit of dominant groups and with the implicit assent of the dominated, who, along with the broader society, come to see their social position as natural and deserved (Bourdieu, 2001). The concept of symbolic violence accords with longstanding theories of ideology, which state that prevailing societal ideas ultimately serve the purposes of the 'ruling class,' whose social position affords

them the power to make their own self-serving ideas seem universal, objective, commonsensical, and reflections of a natural order characterised by deep inequality (Gramsci, 1971; Marx & Engels, 1972). Similar ideas animate scholarship in feminist, cultural, and critical race studies.

Understanding the ways in which inequality is naturalised within global health opens up the possibility for challenging ideologies of inequality that justify a pathogenic status quo. Below, two instances of naturalising inequality are explored: individualising narratives of disease and assumed scarcity.

Individualising narratives of disease

Within the field of global health, Farmer (2001) identifies an 'exaggeration of personal agency, often through highlighting certain psychological or cultural attributes' when explaining why some are healthy and others are not (p. 84). By focusing exclusively on individual agency, these 'immodest claims of causality' (p. 4) minimise or erase the role of structural violence in making some individuals and groups more susceptible to disease, disability, and death than others. For example, patients who do not closely follow treatment regimens are deemed 'noncompliant' and those who fail to adopt behavioural changes are chastised for their 'unhealthy lifestyles,' while social factors that might constrain patient agency—such as the cost of medicines, lack of transportation to appointments, inability to take time off from work, the need to partake in unhealthy activities or dangerous work for financial reasons, or social forces that unequally distribute these constraints by race, gender, and class—go unconsidered. As Farmer (2001) notes, 'Calls to change "lifestyle and behavior" are often directed to precisely those persons whose agency is most constrained' (p. 258). In the U.S., Holmes (2013) describes how physicians treating migrant farmworkers misattribute their patients' physical ailments to their improper farming techniques and failure to follow protocol, all the while ignoring the profoundly exploitative and pathogenic conditions under which they work and live. In these cases, providers fail to perceive the structural conditions of their patients' lives or take seriously the expressed 'social history' of their patients' illness.

In addition, individualising narratives can rely on blinkered notions of culture to explain why some are sick and others are healthy. For example, early hypothesising about the spread of HIV/AIDS in Haiti focused on the role of voodoo ceremonies and other 'exotic' (in the eyes of US and European academics) cultural practices, while ignoring the role of widespread poverty, lack of access to healthcare, and limited public health surveillance systems, factors that are widely recognised as central to the spread and virulence of disease (Farmer, 2001, p. 142). Similarly, during the 2014 West African Ebola outbreak, numerous media and academic sources focused exclusively on regionally-specific burial practices and food cultures that include eating animals caught in the wild (i.e. 'bushmeat') that might have contributed to the outbreak (Hogenboom, 2014). Others have identified an individualising 'narrative of mistrust' that places responsibility for the transmission of the Ebola virus on the low levels of trust expressed by people in west African countries toward their health institutions (Richardson, 2019; Richardson et al., 2019). Such accounts ignore the much more determinative role of extreme poverty and failing healthcare infrastructure (Frankfurter, 2019). Benton and Dionne (2015) further describe the continuing relevance of the trans-Atlantic slave trade, colonialism, International Monetary Fund (IMF) and World Bank structural adjustment policies, and contemporary forms of foreign aid dependency to creating the conditions necessary for the rapid spread of the Ebola virus. Examples like these develop among trainees an understanding of how individualising narratives of disease can naturalise inequality by eliding the role of structural violence in creating health inequities.

Assumed scarcity and cost-effectiveness

The naturalisation of structural inequalities within global health is especially pronounced in the way the field commonly approaches the issue of resource scarcity, which is often treated as objective and

unchangeable—even a defining feature of the field—rather than historically contingent, structurally produced, and open to challenge and change. Such assumptions of scarcity were central to the shift in the early 1980s from the expansive, egalitarian 'Health for All' agenda of the Alma Ata Declaration to the much more circumscribed 'selective primary healthcare' agenda, which, on scarcity-assuming grounds, advocated funding only a limited number of the most cost-effective healthcare interventions within low-income countries (Basilico et al., 2013). Selective primary care was proposed during a time of global economic crisis as part of an 'interim strategy' on the road toward a more universal and robust vision of global health (Walsh & Warren, 1980). Yet today, cost-effectiveness, and the assumed scarcity upon which it is premised, has become a central organising principle, and even a 'moral imperative' (Ord, 2013), of the field of global health.

Traditionally, the World Health Organization deems a medical treatment 'cost-effective,' and therefore worthy of government financing, if it costs between 1–3 times the GDP per capita within a given country and avoids one disability adjusted life year (DALY), or one year of ill-health, disability, or early death (Robinson et al., 2017; "WHO WHO-CHOICE," n.d.). While such a calculation might be warranted in the context of high-income countries, many of which enjoy GDPs per capita in excess of $40,000 USD, dozens of countries in sub-Saharan Africa alone have GDPs per capita of less than $1,000 USD. Through a seemingly apolitical and morally neutral calculation, cost-effectiveness analysis deems advanced medical treatments among patients in the Global North 'cost-effective' and thereby 'appropriate' while the same treatments, and even much less advanced treatments, are deemed 'not cost-effective' and thereby 'inappropriate' in the context of the Global South. In this way, cost-effectiveness analysis in the context of steep, structurally generated global economic and racial inequalities implicitly values the extension of life among those in the Global North much higher than among those in the Global South. Nicholson and colleagues (2016) have documented how such logics can create unjust 'double standards' throughout the field of global health.

This double standard was evident during debates about extending access to lifesaving HIV/AIDS medications to patients in low-income countries. In 2002, US researchers employed cost-effectiveness analysis to argue that additional AIDS-related funding in sub-Saharan Africa should go almost exclusively toward prevention of the disease rather than to its treatment (Marseille et al., 2002). In that same year, 2.5 million people died from AIDS in sub-Saharan Africa and 30 million people were living with the disease, even as highly active antiretroviral therapy (HAART) had been widely available in the US and other high-income countries since the mid-1990s. Focusing funding solely on prevention—the most 'cost-effective' approach—would have effectively denied lifesaving treatment to millions of people and ensured their early mortality from AIDS-related illness (Farmer et al., 2001; Messac & Prabhu, 2013).

More recently, prominent global health bioethicists have argued that older, less effective, and more toxic HIV/AIDS treatments should be given to the global poor in order to free up additional monies for other healthcare services (Persad & Emanuel, 2016). Still other global health researchers have argued that neither HIV/AIDS treatment nor HIV prevention should be funded as both interventions siphon funds away from even more cost-effective ones (Easterly, 2009). Similar arguments have also been made against assistance during the 2015 West African Ebola outbreak (Miller, 2014) and against the treatment of multi-drug resistant tuberculosis (MDR-TB) in low-income countries (Nicholson et al., 2016).

Those trained in structural competency would identify forms of naturalised inequality like these and challenge their ideological premises. For example, rather than accepting 'double standards' in global health, they would interrogate the inequity implicit in cost-effectiveness analysis, as well the social structures that create 'resource-scarce settings' in some parts of the world and 'resource-rich settings' in others (Mehta, 2010; Schrecker, 2013). For instance, instead of adjudicating in the pages of *The Lancet* whether the global poor should have access to more effective and less toxic—yet more costly—HIV/AIDS medications or less effective and more toxic—yet cheaper—ones (Persad & Emanuel, 2016), structurally competent global health practitioners might examine the structures that frame scarcity-assuming debates, which can serve to rationalise sub-standard care and

commonly pit access to one life-saving treatment against another. Such an examination would uncover the outsize political power of global elites and the pharmaceutical industry in shaping international intellectual property law and in setting unaffordable prices for their drugs; the inequitable nature of global trade agreements that enshrine intellectual property law; the role of international organisations like USAID, the World Bank, and the IMF in promoting the privatisation and commodification of healthcare services within low- and middle-income countries; and the continuing relevance of exploitative colonial, imperial, and neoliberal projects—imposed on the Global South by actors in the Global North—to contemporary forms of economic, racial, and political hierarchy.

Competency 3: Discuss the impact of structures on the practice of global health

Previous formulations of structural competency in the context of clinical medicine in the US have sought to instil among trainees the role of structures in shaping the doctor-patient clinical encounter, and in shaping the wider field of medicine, in ways that perpetuate health inequities (Metzl & Hansen, 2014; Neff et al., 2019, 2020). Those trainings have identified structures like physician benchmarking, the standard 15-minute clinical visit, and high nurse-to-patient ratios, which limit the time physicians and nurses are able to spend with patients and can thereby undermine optimal care. Within the US, the impact of structures on the clinical encounter is also evident in the role of industry in shaping medical knowledge and treatment protocols, and in profit-driven insurance plans, which undermine treatment by imposing prohibitively high out-of-pocket costs, limited provider networks, and restrictive drug formularies on patients. By recognising the ways in which structures limit optimal patient care, providers can begin to challenge these structural constraints on their work.

Structural competency can similarly help those working in global health to identify the role of structures in shaping the field in ways that can undermine health equity. For example, during the 1980s and 1990s, the field of global health was radically altered as the leadership role of the World Health Organization—a global institution with some degree of democratic control exercised by its member states despite being financially dependent on countries in the Global North—was diminished and the role of the World Bank and the IMF—institutions with no democratic pretenses—greatly expanded (Brown et al., 2006). These financial institutions inaugurated a period of neoliberal policy reforms within the field that came to be referred to as the 'Washington consensus,' which stipulated deep cuts to public budgets for services like healthcare and an increased emphasis on the private sector to deliver these formerly public goods (Basilico et al., 2013; Moosa & Moosa, 2019). Those working within global health had to contend with these new 'unhealthy health policies' (Castro & Singer, 2004) that constrained their work and asked them to lower their expectations regarding what global institutions, governments, and the movement for global health equity could accomplish.

As part of this shift toward neoliberalism in global health, the World Bank and the IMF also oversaw the imposition of structural adjustment programmes within low- and middle-income countries. Hickel (2018) provides a concise overview of this complex and consequential history. In short, as part of the negotiated truce among countries involved in the Six Day War and subsequent OPEC oil embargo, newly cash-flush OPEC-affiliated countries would cycle these funds through banks in New York and London (Harvey, 2007; Hickel, 2018; Klein, 2007; Roos, 2019). These banks in turn sought out investment opportunities with their newly acquired funds. Banks found borrowers in the governments of low- and middle-income countries that needed the funds to pay for increasingly costly imports, such as oil, and national development programmes, such as infrastructure projects and the expansion of healthcare and education systems. After countries assumed these debts, the US Federal Reserve, in order to reduce escalating inflation in the US, made the decision to increase interest rates, an event referred to as the 'Volcker shock,' in reference to Paul Volcker, who chaired the Federal Reserve at the time. This had the effect of

drastically increasing the interest rates on the debt held by low- and middle-income countries; countries that now began to struggle to keep up with their higher repayment obligations. This difficulty was exacerbated by a drop in the prices of global commodities, the primary export of low- and middle-income countries.

Rather than help these countries renegotiate their loans on sustainable terms or cancel the debts outright, the international community, working through the World Bank and the IMF, offered indebted countries additional loans that would allow them to continue financing government operations and making payments on their outstanding debt (Harvey, 2007; Lilley, 2006). However, these loans came with conditions that included adopting so-called 'structural adjustment programs.' These programmes included various neoliberal policies in line with the Washington consensus, such as shrinking the size of the public sector, reducing the wages of public sector workers, eliminating or scaling back pensions, cutting government spending on healthcare and education (and replacing that spending with regressive 'user fees'), privatising what were previously publicly-administered services and publicly-owned enterprises, eliminating tariffs that served to protect nascent national industries, eliminating price controls that ensured the affordability of important consumer goods, devaluing currency, deregulating capital controls, and implementing regressive taxation policies (Gershman & Irwin, 2000; Harvey, 2007; Pfeiffer & Chapman, 2010; Yates, 2009).

While the impacts of structural adjustment policies are still being studied (Kentikelenis, 2017), recent research has confirmed the concerns of long-time critics (Pfeiffer & Chapman, 2010); economic inequality increased within countries that adopted these policies (Forster et al., 2019), government health expenditures decreased (Kentikelenis, 2017; Moosa, 2018; Stubbs et al., 2017), neonatal, child, and maternal health worsened (Forster et al., 2019; Thomson et al., 2017), state administrative capacity decreased (Reinsberg et al., 2019), and health rights, labour rights, civil rights, and political rights were weakened (Reinsberg et al., 2019; Stubbs & Kentikelenis, 2017). And, more broadly, in the wake of decolonisation and calls for a fairer global economic system (i.e. a 'New International Economic Order') by countries in the Global South, structural adjustment programmes represented a reassertion of class- and race-based colonial relations by the Global North, an imposition of neoliberal economic policy that further entrenched postcolonial nations at the bottom of a global economic and racial hierarchy (Getachew, 2019).

Those working in global health during this time were forced to navigate these structural constraints on their work. Keshavjee (2014), for example, provides a first-hand ethnographic account of the imposition of neoliberal policy prescriptions on a project ostensibly committed to rebuilding healthcare infrastructure in rural Tajikistan in the wake of the collapse of the Soviet Union. Keshavjee writes of his experience working for the Aga Khan Foundation under a USAID grant that required the foundation to set up a pharmaceutical marketplace that would be funded by patient fees. It was clear to Keshavjee that villagers in the area—who earned on average $70 USD annually and who had previously received medicines without cost from the government—would face significant financial barriers to accessing needed medicines under such a system. The USAID-imposed marketplace prompted one villager to remark, 'You can't sell medicines to starving people' (Keshavjee, 2014, p. xviii).

Far from being a phenomenon limited to the recent past, structural adjustment policies are still being imposed at the behest of the World Bank and IMF, often under new terminology, like 'Poverty Reduction Strategy Papers' or euphemisms like 'pro-poor development' (Kentikelenis et al., 2016). In the wake of the financial crisis of 2007–08, structural adjustment policies were even imposed on many debt-burdened European countries, most infamously on Greece. And today, there are again concerns being raised by the IMF, the World Bank, and global health organisations about the rising levels of debt within low- and middle-income countries (A View of the New Debt Landscape for Developing Countries, 2019; Global Waves of Debt, 2020). Those working toward health equity may have to contend with renewed calls—potentially even coming from those within the global health community—to slash healthcare budgets and dismantle social protections for people most in need of them.

Other harmful structural influences on the field of global health include the World Trade Organization and the inequitable international trade system, which upholds intellectual property laws that keep lifesaving medicines out of the hands of billions of people around the world at the behest of countries in the Global North and global pharmaceutical companies (Chapman, 2016; Hickel, 2018). Austerity-driven global health budgets in the Global North limit resource transfers from high- to low-income countries. Many scholars have pointed out the outsize role of private, undemocratic, philanthropic organisations in shaping the priorities and practices of the field (Birn, 2005, 2014; McGoey, 2015; Storeng, 2014). Additionally, researchers have identified a '10/90 gap,' which refers to the finding that 'only 10% of health sciences' research dollars address the health problems of 90% of the world's population' (Vidyasagar, 2006), thereby depriving the pharmaceutical pipeline of treatments that are most relevant to people in the Global South. Trainees in structural competency would learn to recognise the role of these structures in shaping the field of global health in ways that undermine the ability of those working in the field to advance health equity.

Competency 4: Recognise structural interventions for addressing global health inequities

Metzl and Hansen (2014) remark that despite the influence and scale of social structures, they are neither timeless nor immutable; rather they can be intervened upon and altered in ways that reduce harm and increase health equity. With an understanding of the role of social structures in producing health inequities, trainees in structural competency could better recognise, and subsequently take part in, actions that might address those inequities. Such 'structural interventions' recognise, analyse, and engage social structures and the underlying social forces that impact health. These interventions can take various forms. A structural intervention might identify a structurally violent policy or system and seek to alter it. Social structures are not necessarily harmful, and it is possible to replace harmful social structures with equitable, health-enhancing ones.

Structural interventions have a long history in medicine and public health (Sommer & Parker, 2013). Their origins are often associated with the social medicine tradition, represented by the works of Rudolf Virchow and Salvador Allende, both of whom called for more egalitarian and less exploitative forms of social organisation to reduce health inequities and took part in political movements to bring about those changes (Waitzkin, 1981). Such calls, and the political movements that supported them, resulted in expanded access to healthcare services, regulations to counter pathogenic overcrowding within growing cities, the establishment of potable water delivery at the municipal level, and progressive labour laws to prevent workplace deaths and injuries. Waitzkin (2006) argues that during times of conservative political reaction, such structural approaches are conveniently 'forgotten,' supplanted by narrow biomedical and individual approaches that elide the social origins of illness. However, in recent years there have been efforts to reengage with the social medicine tradition and renew structural approaches to addressing health inequities (Bailey et al., 2017; Farmer et al., 2006; Holmes et al., 2014; Metzl & Hansen, 2014; Sommer & Parker, 2013; Stonington et al., 2006; Stonington et al., 2018) Table 1.

Conceptualising structural interventions to address health inequities can seem daunting. Previous trainings in structural competency have emphasised the various ecological 'levels' at which structural interventions might occur (Neff et al., 2019). In Table 2, we propose potential structural interventions at *individual, clinical, community, national*, and *international* levels (See Table 2).

As shown in Table 2, structural interventions can take various forms and can be undertaken by various actors, whether NGOs, private foundations, healthcare institutions, organised communities, political parties, labor unions, governments in the Global North or Global South, intergovernmental organisations, or broad-based social movements that involve networks of actors, organisations, and governments. The response to the global HIV/AIDS crisis is instructive, as it involves various structural interventions overseen by diverse networks (Messac & Prabhu, 2013; Mukherjee, 2018, Chapter 2). Activist and civil society groups, like the Treatment Action Campaign in South Africa and Health GAP and ACT UP in the US, advocated rich and poor governments

Table 2. Examples of Structural Interventions at Different Ecological Levels.

Level	Intervention	Outcome
Individual level	• Reflecting on one's own position vis-à-vis social structures and recognition of the ways in which one's position of structural advantage can simultaneously enforce structural disadvantage for others, as in the case of racism, gender oppression, or class hierarchy (Romano, 2018) • When working to address health inequity outside one's own country or community (especially in the case of international volunteering), researching the role of structural violence in the communities where the clinics were located (Briggs & Mantini-Briggs, 2009; EqualHealth's #KnowBeforeYouGo Project impresses upon potential international volunteers in Haiti the oppressive and extractive role the Global North has historically played within Haiti—and the complicated and often harmful role of international volunteers and NGOs within the country (EqualHealth, 2016)	• Understanding of how one's own social position is structurally influenced and how both individual change and collective action is necessary to challenge and transform harmful structures • Those seeking to address health inequities outside their own communities understand the forms of structural violence that gave rise to those inequities—and understand the ways in which their own country or community might be implicated in that structural violence. This should disabuse potential volunteers of (often white) saviorism and encourage horizontal forms of partnership built on long-term solidarity and deference to the knowledge and priorities of host community members.
Clinical level	• Providers challenging individualising narratives of patient illness by listening to their patients as they describe their 'social histories' and the role of social structures in disease etiology. This might involve taking a 'structural differential,' which 'delineates the social, political, and economic factors that may be influencing a patient's health and healthcare and facilitates responses to the modifiable factors' (Seymour et al., 2018). For example, at the Jan Swasthya Sahyog (People's Health Support Group) Hospital in rural Chhattisgarh, India, senior staff conduct daily social medicine rounds, which elucidate the social, political, and economic roots of the biological presentation of patient illness • Jan Swasthya Sahyog also conducts 'structural' morbidity and mortality conferences that explore not only the immediate medical cause of death, but also the social causes (e.g. poverty, undernutrition) and structural causes (e.g. institutional and systems failures, deficient policies). They disseminate these findings annually in the Atlas of Rural Health (Jan Swasthya Sahyog, 2016) • The non-profit organisation Wuqú Kawoq providing linguistically competent healthcare services to Mayan-language speaking patients in rural Guatemala, where such services are typically provided only in Spanish (Flood et al., 2018)	• Providers are sensitised to the role of harmful social structures in patient narratives and better able to respond to the structural causes of illness. Providers also learn to utilise formal tools to modify their medical practice in a way that takes into account the role of social structures. The clinical culture is also altered as providers develop a shared understanding of the social-structural origins of illness • Providers trained to explain death in decontextualised biomedical terms are challenged to identify contributory social and structural factors. Additionally, providers at other institutions gain access to these insights through an annual publication • Patient health outcomes improve as healthcare institutions become accessible to Mayan-language speaking patients
Community level	• Providers engaging with activist groups and political organisations to address the structural origins of their patients' illnesses (Dubal, 2018, p. 225) • Cuban health workers conducting annual home visits to better understand health-relevant living conditions and community needs (Keck & Reed, 2012) • The Venezuelan government implementing the *Misión Barrio Adentro* programme, which created free community health clinics and required attending physicians to live in the communities where the clinics were located (Briggs & Mantini-Briggs, 2009; Muntaner et al., 2006) • Partners in Health working with the Haitian government to establish the University Hospital in Mirebalais, a 300-bed teaching hospital that trains needed healthcare workers in Haiti while providing high-quality care and high-paying jobs to those in the region (Hôpital Universitaire de Mirebalais, n.d.)	• Providers avoid privileging the treatment of the biological presentation of illness over its structural origins • Community-engaged providers can better understand and more effectively respond to social and structural determinants of health • Communities historically excluded from the healthcare system have ready access to community-based care and providers who are familiar with community health needs • Healthcare services greatly expand and health outcomes improve, needed healthcare professionals are trained, and economic opportunities for those in the surrounding region are created

National level	• Ugandan physicians organising in partnership with EqualHealth to launch the #Focus15ForHealth campaign to pressure the Ugandan government to commit 15% of the budget to the health sector in accordance with the 2001 Abuja Declaration (Focus15ForHealth, n.d.) • Health Alliance International partners with ministries of health in low-income countries to assist in establishing robust public-sector healthcare systems, rather than create parallel, NGO-operated, private systems that often weaken the public system by siphoning away health professionals (Health Alliance International – Supporting Governments in Strengthening Health Systems, n.d.) • The Brazilian government breaking pharmaceutical patents and producing cheaper, generic versions of antiretroviral therapy for treating patients with HIV/AIDS (Jack & Lapper, 2007) • The Cuban government establishing the Latin American School of Medicine, the largest school of medicine in the world, that trains Cubans and students from low-income backgrounds from around the world who are committed to working with underserved patients (ELAM, n.d.) • The National Nurses United union organising workplaces in the US to empower workers in their demands for fair pay, safe staffing ratios, appropriate supplies, racial and economic justice, and universal access to healthcare	• Increased funding to the Ugandan health sector would result in a more universal healthcare system, improved patient outcomes, better pay for healthcare workers, and would create working conditions attractive to Ugandan healthcare workers, who might otherwise emigrate • Unified and universal public-sector healthcare systems are strengthened, health outcomes improve, and the development of parallel, fragmented, and low-quality public and private healthcare systems is avoided • More patients in Brazil gained access to antiretroviral therapy, resulting in fewer deaths from AIDS, and creating a model AIDS-treatment programme • Cuba has the highest physician density in the world and it is providing underserved populations worldwide with highly-trained medical providers • Empowered healthcare workers gain workplace protections, patient protections, and realise broader societal change through policy advocacy
International level	• The movement to increase access to antiretroviral therapy globally that challenged assumptions of scarcity, negotiated down drug prices, and mobilised government and foundation donations (Messac & Prabhu, 2013) • Brazil's 'health cooperation' initiatives that involve building health system capacity within countries in Latin America and sub-Saharan Africa by training health professionals, donating medicines, and building factories for producing medicines (Birn & Muntaner, 2019) • Partnering with international social justice organisations advocating a human right to health, debt relief, equitable international relations, and anti-imperialism. These include: Progressive International, the Centre for Economic and Social Rights, Third World Forum, People's Health Movement, Tricontinental, Latindadd (Red Latinoamericana sobre Deuda, Desarrollo y Derechos), the Institute for Economic Justice in South Africa, Partners in Health, and EqualHealth	• Millions of people in low- and middle-income countries who would have died of AIDS-related diseases are able to access lifesaving treatment • Countries within the Global South share expertise and resources, build capacity, improve health outcomes, and establish bonds based in social justice and solidarity through 'South-South Health Cooperation' (Birn & Muntaner, 2019) • International networks of people committed to social justice and eliminating health inequities can facilitate coordinated actions at the international level and bring about structural change

alike to take the crisis seriously and confronted pharmaceutical companies to develop medications and to make them available to all. Under pressure, governments in the Global North established new programmes to purchase antiretroviral therapy for poor patients around the world (e.g. The U.S. President's Emergency Plan for AIDS Relief and The Global Fund to Fight AIDS, Tuberculosis, and Malaria). Private foundations, like the Clinton Foundation, negotiated with pharmaceutical companies to reduce the cost of these medications. Global South governments dedicated large parts of their budgets to purchasing drugs and threatened to circumvent international patent law to produce cheaper, generic versions of the medications. And ministries of health, along with non-governmental organisations, innovated programmatically at the community level to demonstrate the feasibility, scalability, and effectiveness of community-based HIV/AIDS treatment programmes (Behforouz et al., 2004; Farmer et al., 2001; Mukherjee et al., 2006). Many also critiqued the 'naturalized inequality' perpetuated by so-called experts who claimed that treating HIV/AIDS in countries in Africa was 'unaffordable,' 'impractical,' 'not cost-effective,' and doomed to failure due to patient behaviour or cultural practices (Mukherjee, 2018, Chapter 2).

At the same time, the concept of an 'intervention' often implies an apolitical, top-down, expert-led form of change that ignores power, politics, organising, and political struggle. Structural competency, acknowledging Virchow's observation that 'politics is nothing else but medicine on a large scale' (Taylor & Rieger, 1985), incorporates expanded notions of 'interventions' that entail political engagement, coalition building, and collective struggle to address the structural determinants of health and the social forces from which they arise (cf. Mukherjee, 2018, Chapter 14). Such work might include involvement in local or national electoral politics, civil society activism, or labour organising and mobilisation.

Sometimes large-scale structural interventions simply are not possible, particularly in the short term. In these cases, interventions can nonetheless take into account and respond to the reality of harmful social structures in order to achieve their intended outcome. For example, Partners In Health provides food along with tuberculosis medications to patients with a tuberculosis diagnosis who are subject to social structures that deny them access to adequate nutrition when they are undergoing treatment (Palazuelos et al., 2018). Such an intervention does not eliminate longstanding, violent social structures, but it recognises the role of structural violence, poverty, and malnutrition in producing poor health outcomes among patients and pragmatically attempts to minimise their impact. Similarly, the Jan Swasthya Sahyog (People's Health Support Group) hospital in rural Chhattisgarh, India, prioritises patients from vulnerable tribal groups, who are seen quicker and who have unlimited time with healthcare providers, in recognition of the outsize disease burden faced by these patients and the structural barriers they normally experience when trying to access needed healthcare services.

Finally, implicit in the idea of a structural intervention is participation and praxis, or self-reflective action based in considered theoretical understanding of the change one seeks. While the structural analysis described above can inform the development of structural interventions, it is through participating in and experiencing such work that those trained in structural competency develop deeper understandings of structural violence and the process of structural change. A principle aspect of such praxis includes structural humility, as described below.

Competency 5: Apply the concept of structural humility in the context of global health

Cultural competency training seeks to impart upon health professionals a deeper knowledge of the different cultures of the communities and individuals with whom they work. This deeper knowledge is meant to facilitate mutual understanding, respectful interaction, and, in the case of providers, optimal patient-provider communication and health outcomes. The concept of cultural *humility* was developed as a corrective to cultural competency (Tervalon & Murray-García, 1998), which faced various criticisms, including its presentation of different cultural groups as homogenous and static (Jenks, 2011; Kleinman & Benson, 2006), thereby reinforcing essentialist and

even stereotyped ideas of different 'cultures' (Gregg & Saha, 2006; Kleinman & Benson, 2006). Cultural humility entails a continuous commitment to cultural understanding, self-evaluation, and self-critique regarding one's own cultural stereotypes and biases, ameliorating the power inequalities in the patient-provider dynamic, and partnering with patients and communities in non-paternalistic and mutually beneficial ways (Tervalon & Murray-García, 1998). The concept of *structural humility* builds on cultural humility.

Structural humility is a self-reflective approach to addressing the structural determinants of health that requires partnering with individuals and communities to inform understandings of structural violence and to explore how best to respond to it (Metzl & Hansen, 2014; Neff et al., 2019, 2020). Metzl and Hansen (2014) suggest that such humility and partnership guards against over-assured structural understandings of the lives of others, and thereby results in more nuanced understandings of the particular experience of individuals and their communities with structural violence. Structural humility's emphasis on self-reflection and collaboration might serve as a corrective to the field of global health's tendency to embrace a vision of top-down, 'technocratic,' expert-led, humanitarianism rather than more horizontal forms of collaboration based in solidarity, justice, and shared power, whether at international, institutional, or community levels.

Within the field of global health, critical reflection includes awareness of the historical imbrication of international medical humanitarianism with projects of colonialism, racism, capitalism, and empire. Global health grew out of international health, which originated in colonial medicine, a field that developed to aid the expansion of European empire and the project of colonialism by ensuring the health of colonial administrators and the workforces necessary for resource extraction (Greene et al., 2013). Not only does this explain the historical 'roots of global health inequity' (Hickel, 2018; Mukherjee, 2018, Chapter 1), but elements of colonial medicine remain embedded within the field of global health today. For example, the 'global health security' agenda, advocated by public agencies in the US, commonly presents global health as an opportunity to secure global corporate profits for US firms, maintain economic dominance, and prevent diseases that are endemic in poor regions in the world from spreading to the US (Cassell et al., 2017; Global Health Security Division of Global Health Protection Global Health CDC, 2019). In addition, neo-Malthusian population control initiatives also betray colonial logics by seeking to suppress population growth in poor countries in order to preserve environmental resources for those in wealthy countries (Bandarage, 1997; Hartmann, 2016).

From the perspective of US-based academic global health, the primary audience for this work, structural humility requires global health practitioners to question and sometimes critique and challenge the very institutions, academic fields, and grant-making agencies that support their work. The current structures of academic medicine, public health, and social science, the metrics of professional success, and the requirements of funders—both in the Global North and Global South—often directly or indirectly exclude representation from, or true partnership with, the communities purportedly served by these fields. Indeed, as described by Crane (2013), the practice of academic global health can reproduce colonial extractive relations that global health researchers ostensibly abhor. To actualise a more egalitarian vision of global health, structurally competent practitioners would seek to refashion their institutions to account for the unequal power relationships inherent in North–South educational, clinical, and research partnerships. This shift not only entails examining who is symbolically 'invited to the table' but also who ultimately holds the resources and decision-making power and the extent to which each party materially benefits from the partnership.

One example of an educational programme attempting to practice structural humility is the HEAL (Health, Equity, Action, and Leadership) Initiative, an organisation with which several of the authors are either directly or indirectly involved. Based out of University of California, San Francisco, the HEAL Initiative trains and seeks to transform front line health professionals through building a community dedicated to serving the underserved as their lifelong choice. Their two-year global health fellowship aims to challenge the traditional unidirectional global

health fellowship model that sends trainees from the Global North to the Global South in two key ways: 1) HEAL partners with community organisations serving underserved populations domestically and internationally, recognising the same powerful social structures that create health inequity in resource-denied countries around the world are also present within the US and 2) HEAL creates opportunities for growth and development of local capacity and leadership by ensuring that more than half of HEAL fellows are healthcare providers who already live and work in the communities they serve. To promote power-sharing and collaboration, HEAL's steering committee is comprised of representatives from partner communities. Despite all this, HEAL remains housed within a large and well-known US educational institution and replicates a traditional framework of a US-centric fellowship model. Nevertheless, it is through applying structural humility, and the ongoing self-reflection and self-critique entailed by the concept, that global health programmes like HEAL can continue to move toward global health equity.

Conclusion

Structural competency is an emerging framework for training health professionals to recognise and respond to health inequities as the outcome of social structures. It accords with recent developments in public health that emphasise 'structural approaches' to research and practice (Sommer & Parker, 2013; Stonington et al., 2018) and responds to calls to 'decolonize' the field of global health. This article reframes previously proposed structural educational competencies for global health trainees, a growing student population in the US and around the world. More work is now needed to further refine and operationalise the competencies proposed here into curricula, to develop relevant pedagogy, and to evaluate its effects on trainee knowledge, skills, and real-world impact. Such work could draw on other recent attempts to develop curriculum and effective pedagogy in global health equity and social medicine (Finnegan et al., 2017; Van Wieren et al., 2014). In a time of extreme, longstanding, and persistent inequities in the global burden of morbidity and mortality, structural competency represents a relevant and critical addition to established global health instruction. We contend that by understanding the structural determinants of global health, their historical origins, and the ways in which they are commonly elided, global health researchers and practitioners can more effectively champion global health equity.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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