

UC Berkeley

UC Berkeley Electronic Theses and Dissertations

Title

Structural Approaches to Public Health Theory and Pedagogy

Permalink

<https://escholarship.org/uc/item/25z5c60h>

Author

Harvey, Michael John

Publication Date

2017

Peer reviewed|Thesis/dissertation

Structural Approaches to Public Health Theory and Pedagogy

By

Michael J. Harvey

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Public Health

and the Designated Emphasis

in

Critical Theory

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor Seth Holmes, Chair
Professor Rachel Morello-Frosch
Professor Charles Briggs

Spring 2017

Abstract

Structural Approaches to Public Health Theory and Pedagogy

by

Michael J. Harvey

Doctor of Public Health

and the Designated Emphasis

in

Critical Theory

University of California, Berkeley

This dissertation is comprised of three separate manuscripts. Each manuscript concerns questions of social structure in relation to health, morbidity, and mortality. The first examines the epidemiologic theories taught most frequently in core master of public health coursework and proposes curricular changes to better engage with the structural determinants of health. The second provides a broad outline of one structural epidemiologic theory—political economy of health theory—for a public health audience. The third proposes a framework for ‘structurally competent’ global health pedagogy by defining and describing individual competencies. Together, these manuscripts seek to contribute to structural approaches to public health theory and pedagogy.

Manuscript One: Epidemiologic theory in core MPH coursework: The state of pedagogy and a call to expand the theoretical toolbox

Abstract

Objectives: This work examines the epidemiologic theories taught most frequently in core master of public health coursework and identifies lacunae. **Methods:** Thirty course syllabi were identified through online search and instructor outreach. Content analysis guided by grounded theory was conducted to identify theories that appear in at least five syllabi. Analysis continued until theoretical saturation. **Results:** Analysis indicated a preponderance of individual health behavior theory, the most common of which were the health belief model and the theory of planned behavior, both appearing in 83% of syllabi (n=25). Interpersonal health behavior theory was also prominent, including social cognitive theory (77%, n=23), social network theory (67%, n=20), and social support theory (53%, n=16). Behavioral-ecological theory was present in 87% (n=26) of syllabi. The fundamental cause theory (23%, n=7) was the only social-structural theory encountered in at least five syllabi. Reference to the social determinants of health and related empirical phenomena was observed in 60% of syllabi (n=18). Non-epidemiologic theories of public health practice also were encountered. **Conclusions:** Behavior-focused epidemiologic theory predominates in core MPH pedagogy.

Introduction

Theory, according to a popular public health textbook, “is a set of interrelated concepts, definitions, and propositions that present a *systematic* view of events or situations by specifying relations among variables, in order to *explain* and *predict* the events or situations” (emphasis in original) (Glanz et. al., 2008, p. 26). Krieger writes that theory helps researchers “explain causal connections between specified phenomena within and across specified domains by using interrelated sets of ideas whose plausibility can be tested by human action and thought” (Krieger, 2001). One theoretical domain within public health research and practice that is growing in prominence is epidemiologic theory, which “seeks to explain extant and changing population distributions of health, disease, and death, within and across societies, over time, space, and place” (Krieger, 2011, p. vii). Epidemiologic theory is principally concerned with the question, “Who and what determines population rates and distributions of morbidity, mortality, and health?” (Krieger, 2011, p. vii). The use of epidemiologic theory to inform understandings of health and disease patterning profoundly shapes public health research and practice. For instance, if particular disease distributions are theorized to arise from the summation of individual behaviors, then the task of public health is to better understand and change health-related behaviors. Alternatively, if disease distributions are theorized to arise from distributions of economic resources, then public health responses should entail studying and reducing economic inequality.

As Krieger notes, until the last decade of the 20th century, the development or analysis of epidemiologic theory rarely occurred (Krieger, 2014). Others have identified an “empirical bias” within the public health literature; the field contains a proliferation of empirical studies but lacks explicit consideration of the epidemiologic theory that drives hypothesis generation, informs research methodologies, and guides the interpretation of results (Smith & Schrecker, 2015).

Krieger's exploration of the theoretical content of the epidemiology literature suggests an overreliance on biological and lifestyle theories of health and disease patterning (Krieger, 2014). This article furthers Krieger's line of analysis by examining the epidemiologic theories taught in required Master of Public Health (MPH) coursework. I analyzed curricular components that are most likely to engage with epidemiologic theory: core social and behavioral science courses. Here, I offer a descriptive content analysis of the epidemiologic theories prevalent in MPH course syllabi and a discussion of the implications of the findings for public health.

Coursework for the MPH degree is commonly organized around the five traditional public health knowledge areas as defined by the Association of Schools and Programs of Public Health (ASPPH): biostatistics, environmental health sciences, epidemiology, health policy and management, and social and behavioral health sciences (SBHS) (MPH Core Competency Model, n.d.; MPH Degree Report, n.d.). Schools of public health are largely organized around these knowledge areas at the departmental level. In 2006, a definitive 'core competency model' for the MPH degree was published by the ASPPH that delineated the competencies corresponding to each of the five knowledge areas (MPH Core Competency Model, n.d.). This core competency model has since been augmented, first in 2014 with the ASPPH Framing the Future Reports (The MPH, n.d.) and then in 2016 with new program accreditation standards published by the Council on Education for Public Health (CEPH) (2016 revised criteria, n.d.). Due to how MPH competencies have been categorized in the five knowledge areas, epidemiologic theory is encountered within core SBHS coursework. The ASPPH defines the social and behavioral health sciences as "address[ing] the behavioral, social and cultural factors related to individual and population health and health disparities over the life course" (Association of Schools of Public Health, 2006). The first and second MPH competencies of the 2006 core competency model related to this knowledge area include: "Identify basic theories, concepts and models from a range of social and behavioral disciplines that are used in public health research and practice" and "Identify the causes of social and behavioral factors that affect health of individuals and populations" (Association of Schools of Public Health, 2006). This article explores how these competencies have been operationalized as pedagogy by identifying which social and behavioral theories have come to constitute the canonical epidemiologic theory taught within core SBHS courses.

Methods

I identified the theoretical content of core MPH SBHS courses by collecting and analyzing course syllabi. Online searches initially sought to identify the names of core SBHS courses by locating them on MPH program websites and within publicly available MPH student handbooks, which often indicate a program's required core coursework. I searched for syllabi for core SBHS courses within all CEPH-accredited US schools of public health (n=58), which were located by referencing the CEPH website (Accredited Schools & Programs, n.d.). Once the name of a core SBHS course was identified at a particular institution, an online search was conducted via Google to obtain its syllabus. In the case that a syllabus was found, it was retained and added to the database. When multiple syllabi for the same course were found, I retained only the most contemporary version. If, during a Google search, I encountered the syllabus of a core SBHS course of a different school of public health or public health program, then it was retained as long as it met the inclusion criteria defined below. Additionally, I contacted chairs of SBHS

departments within the top 25-ranked US schools of public health, according to *U.S. News and World Report*, if I was unable to locate their respective syllabi online (Best Public Health Programs, n.d.). I purposively elicited syllabi from these schools because of their established reputation and presumed influence on public health pedagogy. Syllabi were collected via these convenience sampling procedures until theoretical saturation was reached, which was achieved with 30 syllabi (22 from CEPH-accredited schools of public health and 8 from public health programs operating outside of schools of public health). This sample represents 38% of all CEPH-accredited US schools of public health. The syllabi collection process was deemed not human subjects research.

I excluded non-core, elective coursework from the analysis regardless of its engagement with epidemiologic theory in order to capture only those epidemiologic theories with which students were required to engage. I excluded syllabi for courses taught prior to 2010 and syllabi that did not contain clearly listed theories in the course outline or within the assigned readings. I excluded non-US programs. Four syllabi were excluded because they did not include identifiable epidemiologic theories.

A systematic content analysis was conducted in NVivo for Mac (Version: 11.3.2). I employed grounded theory (Corbin & Strauss, 2014) techniques to develop a coding framework, which involved open-coding the syllabi in NVivo drawing on my experience researching epidemiologic theory and teaching SBHS coursework to MPH and other master's-level health science students. Text in the syllabi was open-coded if it met the definition of epidemiologic theory, based on Krieger, Glanz, Rimer, and Viswanath, as describing the systematic interrelationship between concepts, definitions, empirical findings, and propositions in order to explain or predict population distributions of health, morbidity, and mortality (Glanz et. al., 2008, p. 26; Krieger, 2011, p. vii). Initial open codes were identified through multiple readings of the retained syllabi. Emergent code definitions were developed to capture the theoretical content represented in each syllabus. In order to further organize the results, I categorized them by six broader content domains based on similar organization in popular textbooks and by the ASPPH within a recent webinar entitled, "ASPPH Presents Certified in Public Health (CPH) Series: Social & Behavioral Sciences" (ASPPH, 2017; Glanz et. al., 2008). The modified versions of these domains include individual health behavior theory, interpersonal health behavior theory, ecological-behavioral theory, and social-structural theory. I further organized non-epidemiologic theories of public health practice into a distinct domain. Finally, I included a 'social determinants of health' domain.

Results

I identified 15 epidemiologic theories that appeared in at least 5 syllabi. In order to identify the most frequently taught theories, I report on those that appeared in at least 5 syllabi (17% of total). Table 1 below lists codes that appear in at least 5 syllabi by content domain. Seven were classified as individual behavioral theory. Five were classified as interpersonal behavioral theory. Two were classified as ecological-behavioral theory, and one was classified as social-structural theory. These data show that individual behavioral theories are the most prominent epidemiologic theories within SBHS MPH pedagogy. Interpersonal health behavior theory is the second most prominent. Also, a majority of syllabi made reference to social-ecological or

ecological theory (both of which were seemingly interchangeably referred to as frameworks or models). I characterize these as ‘ecological-behavioral theory’ because they often described the various “levels” that influence individual behavior. The methodology precluded distinguishing between references to those ecological theories that departed from a behavioral focus and those which adopted a behavioral emphasis. In addition, I encountered one theory present within at least 5 syllabi that I characterize as ‘social-structural’: the fundamental cause theory. I deem this theory social-structural because it describes how differences in socio-economic status result in durable health inequalities over time, even as the pathways that produce such inequalities are in constant flux (Phelan et. al, 2010). This theory was present in 23% of syllabi (n=7).

FIGURE 1. Descriptive statistics for epidemiologic theory present in syllabi sample (n=30)

		<i>Frequency</i>	<i>Percent</i>
<i>Individual Health Behavior Theory</i>	Health belief model	25	83
	Theory of planned behavior	25	83
	Transtheoretical model/stages of change	23	77
	Theory of reasoned action	22	73
	“Health behavior theory” (unspecified)	17	57
	“Health behavior change theory”(unspecified)	15	50
	Precaution adoption process model	10	33
	Integrated behavioral model	8	27
	Self-efficacy	6	20
<i>Interpersonal Health Behavior Theory</i>		<i>Frequency</i>	<i>Percent</i>
	Social cognitive theory	23	77
	Social networks	20	67
	Social support	16	53
	Stress and coping	9	30
	Social norms	7	23
<i>Ecological-behavioral theory</i>		<i>Frequency</i>	<i>Percent</i>
	Social-ecological theory*	19	63
	Ecological theory*	17	57
<i>Social-structural theory</i>		<i>Frequency</i>	<i>Percent</i>
	Fundamental cause theory	7	23

*Often referred to interchangeably as a theory, model, or framework.

In the inductive process of developing the coding framework, it became clear that much recurring syllabi content did not meet the specified definition of epidemiologic theory. This content (see Table 2) included public health practice-focused theories, methods, and approaches, such as diffusion of innovations, social marketing, and theories of organizational change. I categorized these as non-epidemiologic because they provide guidance for implementing programs and interventions rather than explain population distributions of health and disease. This content also included topics such as evidence-based public health and health literacy that do not meet any definition of theory, as they are purely conceptual.

Explicit reference to the social determinants of health was present in 37% (n=11) of syllabi examined. Twenty percent (n=6) made reference to various ‘environmental’ factors, such as the built environment, the physical environment, and the work environment, which are often associated—if not treated as synonymous—with the social determinants of health. Twenty percent (n=6) also made reference to structural factors, structural determinants, or structural interventions, and 17% of syllabi referenced neighborhood or place-based effects. Sixty percent

of syllabi (n=18) made reference to at least one of these codes. In the analysis, I coded these topics as empirical findings rather than as epidemiologic theories, as they describe statistical associations between social phenomena and health outcomes but do not provide systematic frameworks for explaining or predicting population distributions of health and disease. For example, the relationship between a population’s zip code or economic class and the observed mortality rate is an empirically established statistical relationship between variables rather than an epidemiologic theory, which would seek to explain the presence, mechanisms, and persistence of that association over time. Epidemiologic theories that might explain those relationships include the fundamental cause theory, the ecosocial theory, or the political economy of health theory. Additionally, I observed that the ‘social’ in the social determinants of health literature is extremely mutable and does not represent any kind of systematic appraisal of specific extra-individual influences of health.

FIGURE 2. Descriptive statistics for non-epidemiologic theory and non-theoretical content present in syllabi sample (n=30)

		<i>Frequency</i>	<i>Percent</i>
<i>Public Health Practice Theory (non-epidemiologic)</i>	Diffusion of innovations	22	73
	Community building/community organization	17	57
	Social marketing	17	57
	Communication theory	13	43
	Community-based participatory research	12	40
	Precede-proceed model	11	37
	Cultural competency	6	20
	Assessment and evaluation	6	20
	Motivational interviewing	6	20
	Organizational change	5	17
	RE-AIM framework	5	17
<i>Social Determinants of Health (non-theory)</i>	Social determinants of health	11	37
	Environmental effects	6	20
	Structural factors, causes, interventions	6	20
	Neighborhood/place-based effects	5	17
<i>Other Non-theoretical Content</i>	Evidence-based public health	11	37
	Ethics and public health	8	27
	Lay knowledge and health	5	17
	Health literacy	5	17

These trends regarding behavioral theories were reflected in the textbooks required by instructors. A majority of syllabi (53%) required either the 2008 (43%, n=13) or 2015 (10%, n=3) edition of the Glanz, Rimer, and Viswanath textbook entitled *Health Behavior and Health Education: Theory, Research, and Practice* and *Health Behavior: Theory, Research, and Practice*, respectively (Glanz et. al., 2008; Glanz et. al., 2015). Additionally, 43% (n=13) of syllabi either required or recommended *Theory at a Glance: A Guide for Health Promotion* by Glanz and Rimer (2005). The chapters of these texts closely mirror the epidemiologic theories encountered in this analysis. Based on the syllabi alone, I was unable to determine whether these texts influenced public health pedagogy or if they were chosen based on prior pedagogical goals of instructors. These texts explicitly focus on health behavior and health education, with the forward of the most popular text opening with assertion, “Health behavior change is our greatest

hope for reducing the burden of preventable disease and death around the world” (Glanz et. al., 2008, p. xiii). Furthermore, the authors note that their textbooks’ theories were chosen based on literature reviews identifying the most commonly employed theories within the health education, medicine, preventive medicine, and behavioral science literatures (Glanz et. al., 2008, p. 31).

This work has a number of limitations. I only examined syllabi from SBHS coursework, potentially excluding epidemiologic theories taught within other core coursework. Based on the ASPPH competency list, which apportions competencies related to epidemiologic theory to SBHS courses, and on my own review of syllabi from other core coursework, I believe that the theories captured within core SBHS courses represent the vast majority of epidemiologic theories MPH students encounter within core coursework. The study’s methodology also precluded in-depth consideration of the assigned readings themselves. If a given reading’s title or other contextualizing factors did not indicate the epidemiologic theory with which the reading engaged, then no theory was coded. However, I have no reason to believe that specific theories are systematically unidentified within article names or syllabi content. Classroom activities and discussion also might have included discussions of epidemiologic theories that were not captured within the syllabi, although—consonant with the findings—many classroom activities that were described within syllabi were organized explicitly around discussing behavior change interventions. Additionally, some syllabi provided much more detail than others, allowing for a higher number of epidemiologic theory codes within more detailed syllabi. However, I do not believe that the level of syllabus detail might have had any correlation with the epidemiologic theories taught in the class. Also, access to syllabi was limited by their public availability online or willingness on the part of department faculty to share them. To reduce the likelihood of availability bias, I employed a convenience sampling method until theoretical saturation was reached. These data would have been strengthened by more context, such as the instructors’ rationales for the inclusion of specific theories and their pedagogical strategies. Informal conversations between the author and a few SBHS instructors did not reveal any single impetus for content inclusion. This question of instructor rationale warrants further study.

Discussion

The content of core SBHS courses provides an important insight into the field of public health. While other core coursework, such as epidemiology, biostatistics, and environmental health, provide instrumental training in analytical methods, SBHS courses teach the theoretical ‘toolbox,’ which in turn informs public health research, practice, and arguably the very definition of the field itself. Although I encountered a variety of epidemiologic and non-epidemiologic theories, it is clear that a set of behavioral theories drawn from health education, psychology, medicine, preventive medicine, and behavioral science literatures predominate within pedagogy. Theories drawn from the fields of sociology, anthropology, political science, and other social sciences were almost entirely absent in this analysis. These findings show that within core SBHS courses, the behavioral sciences have an outsize representation, while many of the social sciences are largely excluded.

These findings echo those of other public health policy researchers who have noted the phenomenon of ‘lifestyle drift,’ or the tendency of public health interventions to begin with a focus on the social etiology of disease but ultimately to drift ‘downstream’ to focus on behavior

change (Hunter et. al., 2009). I extend this observation into public health pedagogy and epidemiologic theory; despite widespread recognition of the role of social factors such as poverty in explaining health disparities, epidemiologic theory pedagogy focuses overwhelmingly on understanding and modifying behavior. These findings also describe what might constitute the field's 'hidden curriculum,' a concept that is well developed in the medical education literature but has not been explored within the public health literature. By hidden curriculum, I refer to "the unwritten, unofficial, and often unintended lessons, values, and perspectives that students learn in school" (Glossary of Education Reform, 2015). That is, while public health per se does not explicitly privilege lifestyle, behavioral, or psychological epidemiologic theories, such theories predominate within pedagogy, thus establishing their implicit endorsement over competing social, political, economic, and structural theories. This finding should warrant concern that this orientation might poorly equip MPH students, who are being taught behavioral epidemiologic theories that insufficiently address health inequalities with social-structural and political origins.

It is beyond the scope of this work to identify the reasons for the preponderance of behavioral epidemiologic theories within public health pedagogy. Regardless, I will offer a brief consideration of the possible reasons for the state of theoretical pedagogy to inform future research. These findings could be the result of pedagogy following practice. If contemporary public health practice is largely behavioral, then the ASPPH competency, "Identify basic theories, concepts and models from a range of social and behavioral disciplines *that are used in public health research and practice*" (emphasis added) (Association of Schools of Public Health, 2006), would call for a behavioral theoretical pedagogy. The reasons for such a behaviorist orientation of public health practice could arise from a number of sociological factors, including disciplinary norms and associated funding streams for public health programs that focus disproportionately on behavior change. Perhaps reflecting the fact that many public health interventions are based on medical discoveries such as vaccinations and therefore inherit clinicians' orientation toward individual treatment of biologically caused disease, theories taught in MPH coursework are premised on the individual as the unit of analysis (Farmer et. al., 2006). Additionally, because the US healthcare system is privatized, health improvement typically is framed as the prerogative of the individual consumer by corporate entities that sell 'lifestyle' products such as exercise and diet plans, a framework that may subtly influence the theories deemed relevant to public health training in the US (Guthman, 2009). Finally, based on limited, informal conversations with instructors of core SBHS courses, I found that course content may lag behind structurally oriented developments in public health research and policy as instructors design curricula based on inherited course content or based on syllabi encountered online, phenomena that may perpetuate an outdated standard.

Public Health Implications

These findings echo Krieger's observation that the field of epidemiology is over-reliant on theories of lifestyle and biology when interpreting disease patterning across populations (Krieger, 2014). I raise similar concerns about public health pedagogy, which contains a preponderance of individual and interpersonal health behavior theories but almost no social-

structural epidemiologic theories that incorporate and seek to explain political economy, growing inequality, poverty, racism and racial hierarchies, heterosexism, and other social inequalities in relation to individual and population health outcomes. I share Farmer and colleagues' concern that the field appears "curiously desocialized" (Farmer et. al., 2006), with questions of health inequality frequently returning to explanations of behavior and its change rather than to explorations of broader social processes, their mechanisms, and how they might be challenged within institutional and political arenas. For example, I wonder how theoretical omissions might leave unexamined, and thus unchallenged, the social-structural etiology of disease, particularly as it manifests disproportionately among low-income and racially stigmatized communities. Echoing Farmer and colleagues, these findings call for a resocialization of public health pedagogy (Farmer et. al., 2006), a process that would retain core insights from the behavioral, educational, medical, and psychological sciences but would greatly expand the theoretical 'toolbox' to incorporate theories from sociology, anthropology, critical feminist and race studies, political science, and political economy. Implicit within this call is a greater degree of attention to the historical antecedents of present-day health inequalities. In this way, I imagine a social and behavioral science core pedagogy that is just as attentive to the 'social' as it currently is to the 'behavioral.'

References

Association of Schools and Programs of Public Health. (2017). *ASPPH Presents Certified in Public Health CPH Series: Social - Behavioral Sciences*. Retrieved from <https://www.youtube.com/watch?v=XpokR8HwhXM>

Association of Schools and Programs of Public Health. (n.d.). MPH Core Competency Model. Retrieved January 20, 2017, from <http://www.aspph.org/educate/models/mph-competency-model/>

Association of Schools and Programs of Public Health. (n.d.). MPH Degree Report. Retrieved January 20, 2017, from <http://www.aspph.org/educate/models/mph-degree-report/>

Association of Schools and Programs of Public Health. (n.d.). The MPH. Retrieved January 20, 2017, from <http://www.aspph.org/ftf-reports/the-mph/>

Association of Schools and Programs of Public Health. (2006). Master's Degree in Public Health Core Competency Development Project. Retrieved January 20, 2017, from http://www.aspph.org/app/uploads/2014/04/Version2.31_FINAL.pdf

Corbin, J., & Strauss, A. (2014). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage publications.

Council on Education for Public Health (n.d.). "2016 revised criteria". Retrieved January 20, 2017, from <http://ceph.org/criteria-revision/>

Council on Education for Public Health. (n.d.). Accredited Schools & Programs. Retrieved January 20, 2017, from <http://ceph.org/accredited/>

Farmer, P. E., Nizeye, B., Stulac, S., & Keshavjee, S. (2006). Structural Violence and Clinical Medicine. *PLOS Medicine*, 3(10), e449. .

Glanz, K., Rimer, B. K. (2005). *Theory at a Glance: A Guide for Health Promotion Practice* (2 edition). US National Cancer Institute.

Glanz, K., Rimer, B. K., & Viswanath, K. (2008). *Health Behavior and Health Education: Theory, Research, and Practice*. John Wiley & Sons.

Glanz, K., Rimer, B. K., & Viswanath, K. (2015). *Health Behavior: Theory, Research, and Practice*. John Wiley & Sons.

Glossary of Education Reform. (2015, July 13). Hidden Curriculum Definition. Retrieved January 20, 2017, from <http://edglossary.org/hidden-curriculum/>

Guthman, J. (2009). Neoliberalism and the constitution of contemporary bodies. *The Fat Studies Reader*, 187–196.

Hunter, D. J., Popay, J., Tannahill, C., Whitehead, M., & Elson, T. (2009). Learning lessons from the past: shaping a different future. *Marmot Review Working Committee*, 3, 1–11.

Krieger, N. (2001). Theories for social epidemiology in the 21st century: an ecosocial perspective. *International Journal of Epidemiology*, 30(4), 668–677.

Krieger, N. (2011). *Epidemiology and the People's Health: Theory and Context*. Oxford University Press.

Krieger, N. (2014). Got Theory? On the 21st c. CE Rise of Explicit use of Epidemiologic Theories of Disease Distribution: A Review and Ecosocial Analysis. *Current Epidemiology Reports*, 1(1), 45–56.

Phelan, J. C., Link, B. G., & Tehranifar, P. (2010). Social conditions as fundamental causes of health inequalities: theory, evidence, and policy implications. *Journal of Health and Social Behavior*, 51 Suppl, S28-40.

Smith, K. E., & Schrecker, T. (2015). Theorising health inequalities: Introduction to a double special issue. *Social Theory & Health*, 13(3–4), 219–226.

US News and World Report. (n.d.). Best Public Health Programs. Retrieved January 20, 2017, from <http://grad-schools.usnews.rankingsandreviews.com/best-graduate-schools/top-health-schools/public-health-rankings>

Manuscript Two: Advancing Political Economy of Health Theory within the Field of Public Health: An Exploration of Key Components

Abstract

Political economy of health is a social-structural epidemiologic theory that foregrounds conflicting societal forces, particularly between social classes, and the role of the resulting political economic system in explaining, predicting, and modifying disease etiology and distribution. While the theory has informed public health in manifold ways, it has been underutilized and undertheorized within the public health literature, which currently lacks in-depth descriptions of political economy of health theory. Additionally, few attempts have been made to identify and elaborate the theory's core components. This gap in the literature could constitute a barrier to public health researchers and practitioners who might otherwise utilize political economy of health theory to inform their scholarship and practice. To fill this gap, this work first defines the political economy of health theory by drawing on the extant political economy of health literature. Second, this work describes the historical antecedents of the political economy of health in critical social theory and the social medicine tradition. Finally, this work identifies and describes core theoretical components that make up contemporary political economy of health scholarship, including materialism, historical analysis, the political determinants of health, welfare state regimes, class conflict, neoliberalism, underdevelopment, and ideology.

Introduction

Public health researchers have recently called attention to the “empirical bias” within the field (Smith & Schrecker, 2015); public health literature contains ever more empirical studies but lacks explicit consideration of the theories upon which public health research and practice is premised. Furthermore, researchers have demonstrated that when theories of disease distribution are stated explicitly, they overwhelmingly focus on lifestyle and biological explanations of health and disease (Bell, 2017, p. 21; Kreiger, 2014). This confluence of atheoretical empiricism and bio-behavioralism undermines recent calls within the literature to investigate the “causes of the causes” of disease burdens and health inequalities (Braveman & Gottlieb, 2014). In addition, while the social determinants of health literature has repeatedly demonstrated the connection between social phenomena like poverty and poor health outcomes (Marmot et. al., 1984), this literature has left the origins of poverty and its social reproduction largely unexplored and unexplained. Today what is needed are theories of health and unequal disease patterning that attempt to explain the causes of the causes of epidemiologic phenomena. Political economy of health theory (PEH) provides one such attempt. Political economy of health is a social-structural theory that foregrounds conflicting societal forces, particularly between social classes, and the role of the resulting political economic system in explaining, predicting, and modifying disease etiology and distribution.

Despite the theoretical origins of PEH within the 19th century social medicine tradition—such as Friedrich Engels’ 1845 *The Condition of the Working Class in England* and Rudolf Virchow’s 1848 *Report on the Typhus Epidemic in Upper Silesia*—the public health literature contains few resources that explicitly define this theory and its relevance to public health research and

practice. This deficit may constitute a barrier to public health researchers who might otherwise utilize PEH to inform research question generation, research methodology, the interpretation of findings, public health interventions, or public health pedagogy. In order to fill this gap, this work provides an in-depth introduction to PEH by first defining the theory by reviewing literature by scholars working in the tradition and then by surveying its historical antecedents in the social medicine tradition. Finally, this work defines and elaborates core theoretical components of PEH: materialism, historical analysis, the political determinants of health, social welfare regimes, class-conflict, neoliberalism, underdevelopment, and ideology. Taken together, this work provides an historical, in-depth overview of an underutilized social-structural epidemiologic theory for researchers and practitioners within the field of public health, which is currently lacking social-structural theories of health inequalities, their reproduction, and their reduction.

Early Political Economy of Health

Vicente Navarro is often credited with being one of the first to develop PEH and PEH-driven health analysis (Baer, 1982; Birn et. al., 2009, p. 143; Krieger, 2011, p. 172). Navarro founded the International Journal of Health Services in 1971, and subsequently published *Medicine Under Capitalism* in 1976, as well as the edited collections *Health and Medical Care in the US: A Critical Analysis*, published in 1977, and *Imperialism, Health, and Medicine*, published in 1981. These resulted in a body of scholarship that approached questions of health, disease, and health systems with critical structural analysis that incorporated social class, the balance of class power in the political arena, the political character of the state, international processes of underdevelopment, and ideology within the context of the political economic system. Often this took the form of analyses that centered on critiquing the dynamics of capitalism and the outsized influence of the upper class in shaping social policies that privilege private profits over the public good, such as the defunding and privatization of social services, the concentration of wealth within fewer hands, and the loosening of corporate and environmental regulations. At the same time, Navarro and other researchers working in the PEH tradition employed the theory to critically analyze purportedly socialist or communist states (in the case of the USSR cf. Navarro, 1977; in the case of China cf. Zhang & Navarro, 2014). (For an extended exploration of Navarro's specific theoretical paradigm and form of health analysis, see: Coburn, 2015). In addition to Navarro's early writings, Lesley Doyal's book, *The Political Economy of Health* (1979), also did much to define early PEH theory. The book's title is the first use of the term 'political economy of health' and Doyal's later work applied PEH to gender inequality and health (1995).

Political economy of health theory developed out of multiple, sometimes intersecting, sometimes conflicting theoretical traditions. Both Navarro and Doyal situate their work within explicitly Marxian frameworks, incorporating categories and problematics famously developed by Marx and Marxian theorists, such as class and class struggle, inequality, capital accumulation, exploitation, ideology, and underdevelopment. During the 1970s when Navarro and Doyal were writing, the term 'political economy'—having taken on various definitions since the 16th century when it was first used by classical economists such as Adam Smith and David Ricardo—had come to refer to an unorthodox, broadly Marxian approach to analysis within the social sciences (Roseberry, 1988), though ambiguity around the term persists to the present. The theory's lineage

is also often traced to the social medicine tradition, which includes the writings of Rudolf Virchow, Friedrich Engels, and Salvador Allende on the political and economic dimensions of outside disease burdens among the lower classes. Political economy of health theory also arguably incorporates elements of mainstream liberal progressive political imaginaries and the social democratic tradition, such as Keynesianism and welfare-state liberalism.

Defining the Political Economy of Health Theory

Political economy of health theory has been utilized by public health researchers, epidemiologists, sociologists, anthropologists, and historians. Writing from the field of epidemiology, Krieger states, “At issue [within PEH] are priorities of capital accumulation and their enforcement by the state, so that the few can stay rich (or become richer) while the many are poor—whether referring to nations or to classes within a specified country” (2001). “The underlying hypothesis [of PEH],” Krieger writes, “is that economic and political institutions and decisions that create, enforce, and perpetuate economic and social privilege and inequality are root—or ‘fundamental’—causes of social inequalities in health” (2001). Elsewhere Krieger writes, PEH is “predominantly concerned with how capitalist political-economic systems’ imperative to maximize profit harms health” (2011, p. 178). Krieger’s characterization of PEH foregrounds issues of government capture by the upper class, state-enforced inequality through regressive social policy, capitalism’s tendency toward profit maximization at the expense of public health, and the associated tendency toward privatizing public goods. Krieger’s own ecosocial theory, which is gaining increasing influence within the field, was developed in an attempt to further elaborate PEH theory (2011, p. 213-214).

Birn and colleagues write that PEH “analyzes health in the context of the political, economic, and social structures of societies, that is, who owns what, who controls whom, and how these factors are shaped by and reflect the social and institutional fabric (i.e., class, racial/ethnic/gender structure, existence of a welfare state, etc.)” (2009, p. 13). According to Birn and colleagues, the theory views health “in terms of the nature of power relations and control over resources, their implications for social inequalities, and the institutions that challenge or reinforce the distribution of power and resources at local, national, and international levels” (2009, p. 13). Reflecting a classically Marxian paradigm, Birn and colleagues emphasize the salience of the struggle between owners of capital and the working class in shaping these power relations, which alter the character of institutions and modify the extent of social inequality. They connect this class struggle with the social determinants of health in noting, “[w]here there are more inequalities in political structures and institutions (to the disadvantage of the working class), there is less redistribution of material resources, social services, economic and social security, and democratic decision making, reflected in inequalities in virtually every other determinant of health” (Birn et. al., 2009, p. 349). Breaking slightly from Krieger’s characterization of PEH, Birn and colleagues suggest that the fundamental driver of health inequality is not “institutions and decisions” but rather the balance of class power between the working class and the upper class.

Political economy of health theory has seen significant development among Canadian and UK-based health researchers who are productively employing it to examine national and global health inequalities. Raphael writes about PEH in terms of economic and political systems that

distribute resources to particular social groups based on their relative levels of power in society (2015). For instance, powerful groups, like the corporate sector, are able to shape policy to their benefit, while non-powerful ones cannot, a reality that results in an unequal distribution of resources and thus unequal health outcomes. Raphael also writes of the power of ideology—particularly neoliberal ideology—in justifying these processes and giving them social legitimacy. Raphael stresses the role of welfare states in challenging these inequalities through progressive redistributive policies and social welfare services. Elsewhere, Raphael & Bryant write that political economy is concerned with “how a society produces and distributes societal resources among its population”, with PEH being an explicit examination of how those processes determine discrepant health outcomes (2006). Other prominent Canadian PEH researchers include Coburn, who writes critically about the role of neoliberal policies in exacerbating social determinants of health like poverty and inequality (2000), and Labonté, who points out the harmful effects of austerity policies (2012). Question of neoliberalism, austerity, and the welfare state have also been taken up by many UK-based PEH researchers, including Stuckler and Basu (2013), and Schrecker and Bambra (2015).

In addition to public health researchers, medical anthropologists have also contributed substantially to the definition and elaboration of PEH. The incorporation of PEH into medical anthropology, beginning in the 1970s, led to a "critical turn" within the field and the rise of the ‘critical medical anthropology’ sub-field. This movement challenged the traditional work of medical anthropology, which until that point had approached the cultural practices and beliefs of communities outside the Global North (i.e. “non-Western” communities) as self-contained and largely separate from national and international political economy. Critical medical anthropologists instead proposed that ethnography “must be conducted with the recognition that disease and its treatment occur within the context of the capitalist world system” (Baer et. al., 2003). Otherwise, anthropologists risk producing blinkered ethnographic accounts of exoticized, supposedly culturally-bound, symbolic systems, practices, and rituals that ignore the political economic origins of global poverty and inequality (Farmer, 1997a; Farmer, 1997b).

Baer, writing as a critical medical anthropologist, states that PEH is in essence “a critical endeavor which attempts to understand health-related issues within the context of the class and imperialist relations” that define the global organization of societies and nations under capitalism (1982). Baer divides PEH between ‘the political economy of illness’ and ‘the political economy of health care’. The former refers to the study of the ways in which illness is embedded in and socially produced by the political economic context in which people live and the latter “is concerned with the impact that the capitalist mode of production has on the production, distribution, and consumption of health services and how these processes reflect the class relations of the larger societies within which medical institutions are embedded.” Echoing Krieger, Baer notes that those working in the PEH tradition see a contradictory relationship between the profit motive within capitalism and the health needs of populations around the globe.

Taken together, these definitions reveal a social-structural epidemiologic theory that foregrounds conflicting societal forces, particularly between the upper (i.e. "capitalist") and working classes, and the role of the subsequent political economic system—comprising labor, taxation, welfare, and social service institutions and policies—in explaining, predicting, and modifying disease

etiology and distribution. In this way, PEH entails theories of disease causation, disease distribution, and social change. Regarding disease causation, PEH does not completely discount biological factors, but rather contextualizes them within broader political economic systems, which determine levels of inequality, and which institutionalize unequal access to social goods like health care, education, housing, and food. This in turn results in the pathogenic social and environmental conditions that are referred to as the social determinants of health. Navarro therefore refers to disease not as a decontextualized biological phenomenon, but instead as a social and political category that is imposed on people "within an enormously repressive social and economic capitalist system" (2009). Regarding disease distribution, PEH views the unequal access to resources, and especially wealth, as a principle determinant of epidemiologic patterning of health and disease. For this reason, PEH has also been referred to as the social production of disease theory, as disease patterning is perceived as following from unequal structural organization of society. Finally, regarding social change, PEH views social inequalities as resulting from a balance of political power that favors the upper class, which resists the forms of progressive wealth, income, and corporate taxation needed to redistribute wealth and finance robust and equitable social welfare policies that ensure universal access to public goods. As such, PEH posits that progressive left political coalitions based in the working class can challenge the political power of the upper class and thereby advance egalitarian social agendas.

The Social Medicine Origins of Political Economy of Health Theory

Overviews of the social medicine tradition abound within PEH and public health scholarship (cf. Birn et. al., 2009; Waitzkin, 1981), but a brief summary is warranted in light of the aims of this work. Researchers employing political economy of health theory often trace its origins to the 19th century texts of social medicine, particularly Friedrich Engels' *The Condition of the Working Class in England* and Rudolf Virchow's *Report on the Typhus Epidemic in Upper Silesia*. In the former, Engels explores the health effects of the development of industrial capitalism in the English mill town of Manchester on workers and their families. Engels learns from his informants about the concept of "social murder," which was used by workers to refer to the ways in which their social and working environments put them and their families "under conditions in which they can neither retain health nor live long... [and] hurries them to the grave before their time" (Engels, 2009 [1845], p. 107). Engels concurs with the workers' insight by noting, "society knows how injurious such conditions are to the health and the life of the workers, and yet does nothing to improve these conditions." The concept of "social murder" foreshadowed similar contemporary terms like the social determinants of health (Wilkinson & Marmot 2003), structural violence (Farmer, 2004a; Rylko-Bauer & Farmer, 2016), structural vulnerability (Quesada et. al., 2011), the social production of disease (Doyal, 1979), and the social determination of health (Breilh, 2008), all of which describe the pathogenic effects of social organization that benefits the upper class and harms others.

Rudolf Virchow, a 19th century physician whose name today is commonly associated with discoveries in the area of cellular pathology, read Engels' 1845 work. Like Engels, Virchow wrote about the material conditions in which disease manifested and how political and economic forces prevented social reforms aimed at alleviating poverty, food insecurity, and harsh labor conditions among the poor and working classes (Waitzkin, 2007, p. 111). Virchow advocated for prevention of disease over the biomedical treatment paradigm and argued against fee-based

medical care, which invariably reduced access to medical services for the working and lower classes (an argument also made by Engels). Virchow wrote that biomedical and public health interventions among these classes would always be ineffectual if they failed to challenge upper class political power and the economic exigencies of industrial capitalism that together produced the social conditions that were fundamentally responsible for health inequalities. Virchow's famous dictum, "Medicine is a social science and politics is nothing else but medicine on a large scale" (1985 [1948], p. 33), conveys his desire to situate the medical field within PEH and to frame medical practice as inherently political, rather than purely technical and narrowly biomedical.

A third prominent figure in the social medicine tradition is Salvador Allende, Chile's first democratically-elected socialist president. During his medical training, Allende received instruction from former students of Virchow who had emigrated from Germany to Chile. As the Chilean Minister of Health, Allende penned the report *The Chilean Socio-Medical Reality*, which—in the spirit of writings by Virchow and Engels—identified the working and living conditions of the working class as fundamentally responsible for their disease burdens. One of Allende's unique contributions to the social medicine tradition was his interrogation of exploitative international economic relations shaped by wealthy countries and imposed on poorer ones, first under slavery and colonialism and subsequently under various forms of corporate, political, and economic neo-colonialism (Waitzkin, 2007, p. 113-117). Allende became a prophet of his own future, as his reforms to counter neo-colonialism and improve the conditions of the poor and working classes engendered a *coup d'etat* in 1973 that was initiated by the Chilean upper class and sponsored by the US Central Intelligence Agency (CIA), which was eager to depose a successful, democratically-elected socialist during the height of the Cold War.

The subsequent dictatorship of General Augusto Pinochet initiated a period of rapid deregulatory pro-business and anti-welfare reforms. These policies were famously spearheaded by members of the Economics Department at the University of Chicago—most notably by Milton Friedman, one of the primary architects of what has come to be referred to as neoliberal economic policy—and counterparts at the Pontifical Catholic University of Chile. Prior to the *coup d'etat*, both of these institutions received funding from the US-based Ford and Rockefeller foundations to influence economic thinking in Chile toward reduced public expenditure on social programs, deregulated markets, and other regressive social policies. Such policies were simultaneously promoted by the US foreign policy establishment and were favored by the US and Chilean upper classes. Despite Allende's premature ouster and death, his writings and political movement have inspired generations of Latin American health researchers to critically consider the outside role of both the national and international upper class in maintaining inequality and influencing social policy relevant to public health.

The body of research that has developed in part out of Allende's writings and politics has come to be referred to as Latin American social medicine (LASM) or 'collective health' (*salud colectiva*) (Granada, 2003), a rearticulation of the social medicine tradition within the post-colonial and neo-colonial context of Latin America. Despite the rich theoretical and empirical contributions by LASM researchers to understandings of health inequalities in relation to broader political and economic forces, the research remains largely untranslated from Spanish and Portuguese and largely unknown among English-speaking public health researchers. Prominent

contributors to this literature whose work has been partly translated into English include Jaime Breilh and Asa Cristina Laurell. Vicente Navarro, who advised the Allende cabinet prior to the Chilean president's ouster, was perhaps the first to draw on the nascent LASM movement in an English-language context. Like Allende, Navarro's work focuses on the political economy of medicine, of health care, of the health labor force, of health systems, and of health care services. These interlocking analyses inhere in what has come to be called political economy of health theory. In the following sections, this paper explores the various theoretical components that have come to comprise PEH.

Theoretical Components of Political Economy of Health

The political economy of health tradition is theoretically capacious and heterodox, with diverse and sometimes diverging elements. Despite this heterogeneity, this paper identifies a non-exhaustive list of core theoretical components that comprise the theory by reviewing extant PEH literature. For example, Coburn notes the "materialist" nature of PEH (2010). Minkler and colleagues foreground historical analysis, class struggle, and the role of the state (1994). Navarro describes the dominance of upper class power through a consideration of neoliberalism as both a class project and as an ideology (2007, 2009). Raphael and Bryant stress the role of redistributive policies and welfare states, as well as the conflicting political interests that seek to promote or dismantle them (2006). And Farmer internationalizes these perspectives by bringing attention to how these forces operate across geographies over time, as in the case of trans-Atlantic slavery, colonialism, and the modern-day architecture of international capitalism (2004b). These theoretical components of PEH are explored individually below.

Materialism

Materialism refers to a broad philosophical tradition that stresses the primacy of the physical world and its organization. Researchers note that the particular version of political economy employed within PEH is a materialist one (Birn et. al., 2009, p. 349; Coburn, 2010). Within PEH, the 'material' has come to refer broadly to the physical, institutional, and economic organization of society, such as the distribution of material resources, the organization of labor and the production process ("...who is producing, literally, what goods and services, for whom, for what reason, and at what cost to whom..." [Krieger, 2011, p. 184]), employment levels and wage hierarchies, differential exposure to pollutants and toxins, "housing and neighborhood quality, consumption potential (e.g. the financial means to buy healthy food, warm clothing, etc.), and the physical work environment" (World Health Organization, 2010). These material factors—whether or not they are identified as such—are represented across the public health literature, for example, in examinations of the built environment (Jackson, 2003), embodiment (Krieger, 2005), environmental 'riskscapes' (Morello-Frosch & Shenassa, 2006), poverty (Marmot, 2005), economic inequality (Therborn, 2014; Wilkinson, 2002), labor hierarchy (Marmot et. al., 1991), neighborhood effects (Sampson et. al., 2002), and social conditions as a 'fundamental cause' of health inequalities (Link & Phelan, 1995). This research stresses the role of the material organization of society in unequally distributing health and disease, rather than the role of social and cultural norms, health beliefs, or individual behavior.

Much PEH research conforms to notions of materialism put forward in the famous Black Report, which claimed that many health inequalities can be seen as “consequences of the class structure: poverty, working conditions... and deprivation in its various forms...” (Black et. al., 1982). This materialism was clearly present in the texts of Engels, Virchow, and Allende, who in each of their own geographically- and historically-specific epidemiologic analyses, rooted their respective observations in the material realities of the individuals and groups that they studied. In philosophy, materialism is often contrasted with the tradition of idealism, which stresses the primacy of ideas, beliefs, or norms. According to an idealist perspective, ideas are responsible for the subsequent material organization of society; that is, when people learn and believe new things, or as social and cultural norms change, individuals and groups subsequently change their material circumstances (McDonnell et. al., 2009, p. 40). As is suggested by the prominence of the behavioral change literature (Glanz & Bishop, 2010), various health belief models (Glanz et. al., 2008), theories of individual self-efficacy (Bandura, 1994), approaches to cultural change (Berezin & Lamont, 2016), and emerging fields like health behavioral economics (Roberto & Kawachi, 2015), idealist theoretical approaches hold a prominent position within the field of public health.

A materialist rejoinder to idealist epidemiologic theories might contend that the variables that such ‘idealist’ approaches seek to modify are profoundly inflected (if not wholly determined) by the material conditions in which people live. Put another way, beliefs about health, behavioral habits, and even cultural norms are potentially epiphenomenal to, and at least influenced by, the material worlds that people inhabit, such as the affluence of one’s neighborhood, the wealth of one’s immediate and extended family, and the quality of the social services—whether educational, municipal, or health-related—to which one has access. A materialist approach suggests that by reducing the material inequalities in society, health inequalities will shrink accordingly. In contrast, the idealist approach that focuses on changing beliefs about health or one’s motivation to become healthier does not change material circumstances like poverty, which—as the materialist tradition suggests—largely determine health outcomes.

One illustration of health analysis driven by a materialist political economy perspective is provided by Engels in his description of alcohol use among workers in Manchester, England during the industrial revolution. Engels writes, “Liquor is almost [the workers’] only source of pleasure... The working man comes from his work tired, exhausted, finds his home comfortless, damp, dirty, repulsive;... he *must* have something to make work worth his trouble, to make the prospect of the next day endurable... How can he be expected to resist the temptation?” (Engels 2009 [1845], p. 113). In this analysis, it is the organization of production under industrial capitalism and the resulting stresses of factory labor, along with the social conditions that low wages afford the working class, that produces a form of desperation that results in drinking habits. To Engels, such habits are simultaneously physically harmful and psychologically necessary to survive under conditions of exploitation and material scarcity. This analysis broke sharply with moralizing discourses that emphasized ‘personal responsibility’, or biological, cultural, or psychological explanations, which elided broader social, political, and economic contexts. According to Engels, without changing the material conditions of workers, excessive alcohol consumption was all but assured, irrespective of public health interventions that might have focused on changes in individual behavior or aspiration.

Materialist-driven epidemiologic research has interrogated the income and wealth gradient that defines class-stratified societies. The concept of social class is a prominent theme within PEH, its social medicine antecedents, and the LASM/collective health literature. This focus is justified by empirical research into the health gradient that results from class position. Prominent materialist health gradient studies include the Black Report (Black et. al., 1982), the first and second Whitehall studies (Marmot et. al., 1984; Marmot et. al., 1991), and the Acheson Report (Acheson, 1998), all of which find stark gradients in health that correspond to class hierarchies. Within this research, class has been conceptualized as an independent variable of analysis that is variously operationalized as income level, wealth, position within the occupational hierarchy, workplace independence, educational attainment, and in terms of capital ownership. Although, however central the class structure is to materialist analysis, researchers working in the PEH tradition have also insisted on understanding the social dynamics that unequally distribute material resources along other social hierarchies, such as race, ethnicity, sex, gender, and citizenship. For example, Doyal's work has examined the ways in which various forms of gender inequality intersect with political economy to result in material and health inequalities specific to females (1979). Navarro's work has also advocated such analysis with an eye toward the specific effects of racial discrimination and oppression in the context of the United States (Navarro, 1989; Navarro, 1990). Implied by these works is the historically, geographically, and culturally specific ways in which political economic dynamics structure, and are structured by, non-class-based hierarchies along axes of race, ethnicity, sex, gender, and citizenship, among others.

Historical Analysis

Implied within materialist analysis is a critical consideration of the historical development of present-day material inequalities. While new theoretical approaches within public health research and practice, like life course frameworks, seek to correct the ahistorical bias present within much public health analysis, PEH considers not only the life course of the individual and their immediate kin, but how social forces acting throughout history have come to shape contemporary social organization and material inequalities, like national patterns of wealth inequality, the distribution of wealth globally, and even the boundaries that constitute nation-states. Some PEH researchers have foregrounded such historical analysis and the need to view disease, its etiology, and even its definition, within "broad historical relief" (Minkler et. al., 1994). Farmer states that it is through the exclusion of critical historical perspectives that contemporary understandings of inequality are separated from their historical origins and thus made to seem natural and morally legitimate, a phenomenon that ultimately aids in their perpetuation (2004a).

For example, Benton and Dionne draw on political economy to critically examine the 2014 Ebola outbreak in west Africa (2015). The researchers challenge popular explanations of the severity of the outbreak that focus solely on extant poor health care conditions in West Africa and on the slow response of national and international global health organizations. Rather, they suggest a much deeper historical analysis is needed to understand the presence of Ebola in the region and its epidemiologic dynamics. The authors identify the continuing effects of the trans-Atlantic slave trade, the legacy of European-led colonialism, the IMF's recent structural adjustment policies, destabilizing civil wars, and postwar foreign aid dependency. Together,

these historical trends undermined the establishment and strengthening of robust public sector health systems, which could have prevented the 2014 outbreak.

The Political Determinants of Health

While politics is often treated as a "forbidden subject" in public health (Navarro, 2008), researchers working in the PEH tradition view the interaction between politics, political struggle, and the political character of the state as a fundamental driver of health inequalities. In short, politics produce and shape the social determinants of health—like access to health care, wealth inequality, and working conditions—and are therefore seen as the "causes of the causes" of health inequalities (Braveman & Gottlieb, 2014). The state can enact policies that maintain or exacerbate structural material inequalities between classes and other social groups or it can enact policies that reduce or eliminate such inequalities. Policies aimed at reducing material inequalities include progressive taxation and redistribution, robust social welfare policies like universal and equitable access to health care services and education, a living wage and guaranteed income, public housing and rent controls, and pro-labor social policies and workplace regulations. It is through such policies that the state can substantially diminish the impact of the social determinants of health across classes and other unequal social relationships, such as among genders, racial and ethnic categories, and citizenship status. Conversely, within countries with little or no redistribution, ones that enact regressive taxation policies, whereby the upper class pays a relatively small proportion of taxes, and whose social welfare policies ensure only minimal access to public goods, the social determinants of health are much more prominent and more unequally distributed.

These questions of political economy, politics, social policy, and health have recently been taken up under various headings: the political determinants of health (Navarro, 2009), political epidemiology (Gil-González et. al., 2009), health political science (Kickbusch, 2013), the political context of health inequalities (Navarro & Shi, 2001), and calls to locate politics within social epidemiology (Muntaner et al., 2012). Across this literature, there is a shared concern with understanding how politics, political struggle, and political parties influence the professed commitments of the state; the relationship between those professed commitments and the kinds of social welfare policies states enact; and how these social welfare policies in turn affect the distribution of material resources in society, access to social services, and the epidemiologic patterning of health and disease. Despite his longstanding engagement with the topic, Navarro notes that the relationship between politics and health is still very much a neglected topic within mainstream public health research (2008). This is also despite the fact that the politics of health was a foundational concern of 19th and 20th century social medicine, represented by Virchow's statement that politics is "public health in the most profound sense" (Taylor & Rieger, 1985). Waitzkin notes that recent claims of novelty regarding the connections between politics and the social determinants of health are perhaps a reflection of the periodic "forgetting" of the tenants of the social medicine tradition during times of political conservatism (2007).

Welfare State Regime Research

One area of political determinants of health research with which PEH-trained scholars engage is welfare state regime research. The term 'welfare state regimes' refers to the various forms of

political and economic arrangements associated with particular types of welfare state capitalism (Bambra, 2011a). This research examines the political character of welfare states by exploring their health and welfare policies, and the effects of those policies on health and disease distribution. Much of the extant literature builds on Esping-Andersen's 'three worlds' typology of welfare regimes under capitalism: liberal, corporatist-conservative, and social democratic (1990). In this typology, liberal refers to regimes that exhibit low levels of redistribution and promote the commodification and marketization of goods and services (often associated with the welfare system of the United States). Social democratic regimes exist on the opposite end of the spectrum, instituting progressive redistributive tax and welfare policies and decommodifying goods and services deemed worthy of universal and equitable provision, such as health care, education, and minimum incomes (often associated with northern European Nordic countries). Between these poles is the corporatist-conservative regime, which exhibits moderately progressive taxation policies, moderate welfare provision, and a moderate embrace of marketized society (often associated with southern European countries like Spain and Italy).

Consonant with the broader political determinants of health literature, welfare state regime research demonstrates that social democratic welfare regimes, with their professed commitment to egalitarian societies, enact policies that result in healthier populations with lower levels of health inequalities (Bambra, 2011b). As implied in the examples above, much of the welfare state regime research focuses on high-income countries within the Global North. However, early studies were much more global in scope (cf. Halstead et. al., 1985). Moreover, researchers have recently called for expanded welfare typologies that can inform understandings of welfare regimes in middle- and low-income countries of the Global South (Chung & Muntaner, 2008)—a call that researchers are increasingly heeding (cf. Armada et. al., 2002; Ataguba & Alaba, 2012; Karim et. al., 2010). Researchers employing PEH have also called attention to the substantial criticisms of Esping-Andersen's original tripartite model on empirical, methodological, and theoretical grounds, as well as the tendency of welfare state regime research to neglect the ways that welfare states and welfare provision are experienced unequally along axes of race, ethnicity, citizenship, sex, and gender (Bambra, 2007). For example, as state provision of social services recedes, poor and marginalized communities suffer disproportionately and as services previously provided by the state get transferred to the household, women disproportionately assume those responsibilities. Analysis driven by PEH thus requires sensitivity to both the progressivity of national-level welfare state policies and the ways in which those policies come to be experienced differentially along social hierarchies.

Class conflict, class coalitions, and class power theories of health

While the professed commitments of the state are central to shaping public policy and modifying the impact of the social determinants of health within society, PEH broadens this analysis to take into account theories of power that seek to explain why some nation-states adopt egalitarian social democratic welfare state regimes while others adopt inegalitarian marketized liberal (or neoliberal) ones. Within the public health literature, this question is often reduced to anecdotes about 'national culture' (i.e. communal vs. individualistic societies) or unspecific notions of 'political will'. While PEH does not rely on a single theory of power to explain the political character of states, one such theory is provided by Navarro, who outlines a class-power theory of health and social welfare state formation. This theory claims that while power is distributed

along lines of gender, religion, race, professional organizations, and interest groups, it is primarily a function of class relations within society. Navarro describes class relations as “the class structure, class formation, class alliances, and class interests, as well as the behavior of the political and economic instruments [i.e. parties, unions, chambers of commerce, fraternities, etc.] of those classes” (1989). According to this framework, by examining the degree of unionization within a country, the degree of unity and coordination between those unions, the existence of linkages between the labor movement and a political party that represents its interests, and the broader electoral following of that party, and by comparing that dynamic against the organization and political strength of the upper class (or “capitalist class”, in Navarro’s terminology), the relative influence of these two groups on national policy can be understood. This balance of class power is then reflected in electoral gains, the commitments of the state, public policies and welfare regimes, levels of poverty and inequality, and ultimately the distribution of health and disease.

In proposing this theory of power, Navarro adopts a traditional left, social democratic political imaginary, which revolves around the conflict between the interests of capital (or the upper class) and the interests of labor (or the working class). When working class power is strong relative to the upper class, welfare states are more redistributive, health systems more robust and egalitarian, and the social determinants of health like poverty and various other forms of material deprivation diminish. Conversely, when labor’s power is weak compared to that of the upper class, the welfare state reflects that dynamic in adopting non-universal, regressively financed, and less redistributive social welfare and health policies, which in turn exacerbate the social determinants of health and increase health inequalities. In proposing this theory of power, Navarro notes the central role that the working class and its labor movement have traditionally played in the development of the welfare state, the passage of redistributive social policies, and the establishment of national health programs funded through progressively indexed taxation schemes. At the same time, Navarro points out that any such analysis of power must also incorporate social dynamics operating along race and gender hierarchies (2004; 2009), noting that racial hierarchies and discrimination can undermine otherwise effective working class coalitions committed to redistributive policies (1989).

Conflict theory, structural-functionalism, and political will

In sociological terms, PEH can be referred to as a conflict theory of society, which posits that social organization does not reflect a purported natural order or ideal democratic consensus, nor commonly-used but opaque terms like ‘political will’ and ‘national culture’, but rather the outcome of a struggle between social groups. Various conflict theories of society have been put forward, though Marx and Engels provide perhaps the most well-known and pithy formulation when they wrote, “The history of all hitherto existing society is the history of class struggles” (2002 [1848]), a formulation that Navarro extends into analyses of welfare state regimes and health policy. A class conflict theory of health policy breaks sharply from mainstream public health and epidemiologic analysis, which generally elides explicit consideration of sociological theories of power that seek to explain social organization and inequality. Navarro laments that rather than a conflict-based, class-relational perspective, public health research often produces non-relational, non-conflictual analyses centered on ‘income’ (2004) or ‘socioeconomic status’ (2007). This new research program approaches income as affecting an individual’s consumption

potential, their perceived status, social capital, and their community's social cohesion. In these analyses, central tenants of political economy get lost as notions of social conflict (along lines of class, but also race and gender), exploitation, and pathogenic upper class influence in policymaking fall out of analytical view.

Instead of framing research within a social conflict theory, public health scholarship often implicitly (and unconsciously) adopts the more politically conservative theoretical tenants of structural-functionalism, which approaches extant social organization as reflective of a stable internal order. Structural-functionalism adopts—for example— notions of policy as reflective of democratic consensus, notions of wealth inequality based on meritocracy, and notions of individual action based in unencumbered individual agency. But idealized structural-functionalist claims like 'health policy reflects the democratic will of the people' is contradicted by researchers who have shown that when popular will and the preferences of the upper class diverge, public policies more often reflect the preferences of the upper class (Gilens & Page, 2014). Further, Navarro points out that upper class influence within the social sphere shapes the very value systems and normative goals with which society engages (1989), whether within popular media, by politicians, or within the academy. Additionally, high levels of wealth inheritance and low levels of intergenerational mobility belie idealized meritocratic interpretations of inequality. Finally, assumptions of unencumbered human agency elide the agency-constraining and coercive effects of broader structural forces, such as structurally embedded wealth inequality. In short, seemingly atheoretical research premised on non-conflictual and structural-functionalist social theories—whether explicitly stated or (more often) latent—obscure the role of the upper class in organizing society to their benefit and producing unequal patterns of health and disease in the process. Within PEH, class conflict theory brings these contradictions to the fore.

A conflict theory of health can also provide an important corrective to political theories of change that stop at emphasizing the need for increased 'political will' to achieve progressive social change in the domain of health. Marmot and colleagues' influential report, *Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health* (2008), provides one such example. The report's summary outlines various redistributive policies and progressive public programs to combat the social determinants of health, but concludes with the statement, "What is needed now is the political will to implement these eminently difficult but feasible changes." How such political will might be conjured is left unexplored, but the authors seem to imply that with enough evidence and determination on the part of health professionals, this gap between available and necessary political will might be closed. This position elides insights from PEH that regressive taxation, austere social spending, and inequitable health care systems result from the ascendancy of upper class interests in the political sphere. The upper class has a strong material interest in avoiding the forms of progressive taxation that is necessary to reduce inequality and fund egalitarian social policies. According to Navarro's class-based theory of power, a committed group of health professionals, no matter how energetic, cannot challenge the status quo without broad working class organization to counter upper class political power. While Marmot and colleagues offer a laudable vision of health equity, they fail to acknowledge the entrenched upper class forces arrayed against the policies they propose.

Neoliberalism

Many researchers working in the PEH tradition on questions of politics, social policy, and the welfare state have found the concept of neoliberalism productive in describing contemporary political, economic, and ideological trends (cf. Navarro, 2007; Laurell, 2015; Schrecker & Bambra, 2015). While neoliberalism is a contested concept both within—and increasingly outside—the academy, the term is often used to refer to an upper class political program that was launched in the post-World War II period to counter relatively new forms of labor-friendly state involvement in society, such as progressive income and inheritance taxes, the expansion of universal social welfare services, full employment policies, minimum wage guarantees, and various forms of capital control and business regulation. Those advocating for what would come to be referred to as neoliberal policy called for reduced taxation on upper class incomes and the abolishment of inheritance taxes, reduced public spending on social welfare programs, reduced state involvement in the provision of social services like health care and education, and the loosening of business regulations. In place of the public provision of social goods, the state would divest itself from these responsibilities, transferring them to the private sector and private markets (the dual processes of privatization and marketization).

In the latter part of the century, particularly in the wake of the global economic crises of the 1970s and in the face of the phenomenon of ‘stagflation’ (a combination of monetary inflation and stagnant economic growth), neoliberal policies came to be embraced by governments around the world (Harvey, 2007). Such policies resulted in widespread state-led privatization, the commodification and marketization of goods and services that were previously funded and managed by the public sector, a rash of business-friendly policies that redounded to the benefit of the upper class and reduced the power of the labor movement and their unions. Significantly, this period saw a substantial reduction in upper class wealth and inheritance taxation, as such fiscal responsibilities were transferred to the lower classes. Among political scientists and within the PEH literature, there is a general consensus that this neoliberal trend has continued through to the present. Within the high-income countries of the Global North, these policies have resulted in rising poverty and inequality, a reduction in the size of the middle class, stagnant middle and lower class wages, a transfer of wealth to the upper class, a reduction in the power of organized labor, and a retrenchment of social welfare services—all of which have exacerbated the social determinants of health.

Within countries in the Global South, PEH research has focused on the effects of World Bank and IMF-led structural adjustment policies (and their subsequent rebirth as ‘poverty reduction strategy papers’), which stipulate the reduction of public sector spending for public services such as health care and education, and that promote the privatization and marketization of these services. Market-based ideas were also implemented within the public sector, like the introduction of user fees at public hospitals that require patients to pay for health services at the point of care—a policy that resulted in reduced access, particularly among the poor (Farmer, 2004b; Keshavjee, 2014). Research by Farmer and Keshavjee has also examined the role of neoliberal policy and ideology within the burgeoning field of global health, and how the field, which purports to promote the equitable access to health care services around the world, wittingly and unwittingly promotes instead neoliberal policy agendas, which contradict global health’s purported universalistic and equitable ideals.

Development and Underdevelopment

While the political determinants of health literature stresses the balance of class power, political parties, and the character of the state, much of this literature focuses on individual countries within the Global North. This trend not only neglects the experience of countries within the Global South, but also the historical relationships between countries in the Global North and Global South, and more specifically how these historical relationships shape international distributions of wealth and health (cf. Bambra, 2011b; Mackenbach, 2013). Such relationships—often established through military intervention, colonialism, economic exploitation, and unequal terms of trade—make possible a relatively generous welfare state in some countries while materially foreclosing such policies in others. Theories that seek to explain these economic differences between countries—that is, theories of development—are rarely if ever stated explicitly within the public health or global health literatures, nor within the analysis of researchers working within the PEH tradition.

Instead, as in the case of implicit epidemiologic theories that attribute disease patterning to individual behavior and implicit sociological theories that elide conflict and adopt structural-functional assumptions, theories of development within the global public health literature are similarly latent and uncritical of historical and contemporary forms of exploitation and power asymmetries. For example, within this literature, wealthy and poor countries are commonly treated as distinct and unrelated units of analysis, detached from international economic systems, overt or covert cross-border political or military interventions, or histories of colonization and enslavement. Political and economic relationships between countries—when they are recognized explicitly—are often treated as benign or mutually beneficial, as in the case of trade agreements, labor migration, foreign investment, or international aid programs. In this mostly decontextualized formulation, wealthy and poor countries come to represent ‘ideal types’, with the implication that low-income countries of the Global South need only emulate high-income countries in the Global North in order to attain higher levels of economic development and living standards.

Inherent within such implicit formulations is the legacy of modernization theory, which was first expounded in the 1950s and whose influence has waxed and waned within debates about development ever since (Gilman, 2003, p. 270). In general terms, modernization theory attempted to explain how wealthy countries had ascended to their economic position by passing through a series of more-or-less universally necessary stages. Modernization theory’s ‘stages of economic growth’ model was outlined by Walt Rostow, who claimed that all societies move from low-income traditional forms to high-income modern forms by initiating a series of economic, social, and cultural changes that result in industrialization and wealth accumulation (1990 [1960]). To Rostow and other modernization theorists, poor countries were characterized by incomplete forms of development, whereby the urban capitals had begun this modernization process but the rural areas remained stuck in traditional cultural and economic practices that undermined modernization and prevented wealth accumulation. It was only through the diffusion of investment capital and cultural norms from the urban metropolis to these so-called “backward” rural areas that countries could continue through the stages of growth and achieve

wealth and modernity; a process that was overseen and enabled by the wealthy, capitalist countries of the Global North.

The premise of modernization theory was then that poor countries' own internal failures had resulted in their stalled economic convergence with wealthy countries, and it was only through increased engagement with global capitalism through greater adherence to the Global North's social, cultural, and economic policy prescriptions that this convergence could be achieved (Navarro, 1974). The process of capitalist development was presented as beneficial to all countries involved, and the role of historical colonialism, slavery, and military intervention on the part of the Global North within the Global South, or the coercive power that the Global North was able to exert over the Global South, went unacknowledged. But far from a disinterested exercise in development theory, Rostow's model played a central role in the ideological fight against competing notions of development advocated both by socialist and nationalist movements within the rapidly decolonizing "Third World" and by communist states like the Soviet Union and China. Rostow became a major proponent of military action against countries that followed different theoretical models of development, like Vietnam and Chile (under Salvador Allende). Rostow's stages of growth model was widely supported by the US foreign policy community, and Rostow himself became the highest-ranking official to serve through both the Kennedy and Johnson administrations (Gilman, 2003, p. 198-199).

Early PEH research incorporated theories of development that stood in contrast to Rostow's modernization theory. Navarro and Doyal drew instead on the work of Andre Gunder Frank, a German-American economist whose theory of underdevelopment was a stark rebuttal to Rostow's thesis. Frank's 1966 essay, *The Development of Underdevelopment*, turned Rostow's formulation on its head by claiming that wealthy countries and poor countries, far from existing as independent units and developing more-or-less separately from one another, were in fact intimately linked and had been for centuries, first under mercantilist colonialism and subsequently under global capitalism (1966). To Frank, the poverty that was observed in rural areas of the Global South was not the result of "traditional culture" and "backwards" economic and cultural practices, but rather of a kind of development pattern that was intrinsic to global capitalism, one that produced great wealth accumulation in "core" countries of the Global North (i.e. western Europe and industrialized North America) and immiseration within "peripheral" countries of the Global South (i.e. Latin America, Africa, Asia, and the Middle East). In Frank's formulation, the economic conditions within countries that Rostow characterized as "traditional", stalled in their advancement toward wealth and modernity, and not sufficiently integrated within the relations of global capitalism, were in fact the product of an exploitative regime of international capitalism that enriched and developed the Global North while impoverishing and producing patterns of underdevelopment in the Global South.

According to Frank, the outsize accumulation of capital within the Global North was the result of this longstanding globally-integrated economic system wherein "core" countries—those that held structurally dominant positions—were able to systematically extract resources from and take advantage of cheap labor within "peripheral" countries, thus leading to continued development in the global core and underdevelopment within the global periphery. Furthermore, according to Gunder Frank, Rostow's claim that poor countries must break from traditional cultures and develop a modern entrepreneurial culture had also already occurred in the form of a national

comprador elite (the “lumpen-bourgeoisie”, in Frank’s terminology) who, in league with the upper class in wealthy countries, oversaw this process of wealth extraction from peripheral to core countries. Gunder Frank’s theory of underdevelopment thus rewrote Rostow’s narrative by theorizing poor countries not as suffering from internal social, economic, or cultural deficiencies, but rather as the product of a process of structural exploitation and wealth extraction that had been directed by the wealthy countries themselves. In this sense, in the words of Navarro, “development and underdevelopment are bipolar consequences of the process of capital accumulation that was initially part of colonialism and is now associated with neocolonialism” (1976). To Gunder Frank, modernization theory—far from being a novel theory of development—was a new iteration of an old strategy of wealth extraction from poor countries to rich ones.

Navarro’s 1974 essay, *The Underdevelopment of Health or the Health of Underdevelopment*, draws on Frank’s insights to analyze the distribution of health resources within Latin American countries (1974). Navarro explores how a state of underdevelopment is reflected in the distribution of health resources and epidemiologic disease patterning. Navarro claims that the same forces that drive underdevelopment—the structurally subordinate position of poor peripheral countries to wealthy core ones and the political influence of the landed, urban, comprador elite within peripheral countries—also drive what he terms “the underdevelopment of health.” With this term, Navarro is referring to the distribution of health resources and the structuring of the health care system in a way that reflects the health needs of a national upper class and state administrators rather than the broader population or the rural poor, among whom health burdens are most pronounced. This phenomenon is evident in spending patterns that show disproportionate investment in private-sector health care services and state-sponsored social security programs, both of which are enjoyed by affluent state employees, while minimal investments are made in public sector health care services or public works, like water and sewage treatment, particularly in impoverished and rural areas.

Frank’s theory of underdevelopment, core-periphery economic relations, the global division of labor, and the school of ‘dependency theory’ with which Frank’s work is associated, is still an active, if not an altogether mainstream, area of development theory. Wallerstein’s world systems analysis is one such area of research that draws heavily on Gunder Frank’s work and refines it to reflect more recent trends in scholarship on global economic development and political economy. Critically-oriented medical anthropologists working in the tradition of PEH, have recently drawn on Wallerstein’s world systems analysis to propose a “geographically broad and historically deep” (Farmer, 2006, p. xxi) analytic approach to understanding health inequalities. Farmer elaborated this approach as a way of situating Haiti, the country’s HIV epidemic, and its entrenched poverty within the historical context of colonialism and slavery, the country’s war for independence against France, post-independence economic embargoes, international political meddling, military incursions, and present-day neo-colonial economic arrangements.

Ideology

Within social theory, the term ideology has multiple and contested definitions. In everyday usage, the term often refers to a non-pragmatic, rigid, often political view or opinion. By contrast, within PEH ideology refers to a system of beliefs or a ‘world view’ that is promoted by

the upper class to maintain their dominant position and to further their material interests. Often the promotion of this world view is so effective that it becomes a form of “common sense”, an unquestioned—and often imperceptible—social reality (Gramsci, 1971, p. 423). The production and maintenance of ideology might, for example, take the form of an upper class-funded think tank that employs researchers focused on the “inefficiency” of national health systems and the purported benefits of private-sector approaches to health care provision. Such actions are ideological in the sense that they are both empirically false, eliding the benefits of public-sector health care systems and the inequitable outcomes of highly privatized ones, and they serve the material interests of the upper class by implicitly promoting the shifting the source of health care financing from government funds raised through progressive taxation to individual patients.

This definition of ideology draws on the works of Marx and Engels, who wrote, “The ideas of the ruling class are in every epoch the ruling ideas, i.e. the class which is the ruling material force of society, is at the same time its ruling intellectual force. The class which has the means of material production at its disposal, has control at the same time over the means of mental production...” (1998 [1932], p. 67). This definition of ideology suggests that popular ideas within society, and by extension within public health, are not the result of disinterested scientific findings and empirical analysis. Instead, the production of public health knowledge, the research questions deemed worthy of consideration, and even the framing of the field itself (i.e. quantitatively, biomedically, apolitically, as a series of discrete “interventions”) are in manifold ways contingent upon the whims of the upper class, which promotes a research agenda that serves its own material interests and maintains the status quo.

From this perspective, biomedical, genetic, behavioral, and lifestyle theories of disease distribution that elide broader political forces and the role of the upper class in maintaining material inequalities serve an important ideological function. These dominant theories frame health inequalities as ultimately the responsibility of the individual, rather than the effect of—for example—structural poverty, austere social welfare policies, and the ascendancy of upper class interests in the political sphere. Political economy of health researchers have referred to neoliberalism not only as a set of policies that result in increased inequality, regressive taxation, dismantled welfare policies, and privatized health care and education systems, but also as an ideology (Navarro, 2007) that follows former UK Prime Minister Margaret Thatcher’s infamous saying, “There is no alternative.” Political economy of health theory, by incorporating the role of ideology in the production of the field of public health, provides the conceptual tools for examining how upper class interests come to shape dominant ideas and paradigms within the field. The critique of ideology thus creates a conceptual space for critical examinations and reimagining of the field itself.

Conclusion

Presented here is one attempt to distill and outline a heterogeneous literature that broadly conforms to the theoretical tradition referred to as the political economy of health. The individual theoretical components identified include materialism, historical analysis, the political determinants of health, class conflict theory, neoliberalism, underdevelopment, and ideology. The components of PEH are situated within a heterodox progressive political imaginary that is primarily concerned with achieving social justice and material equity, a central tenant of the field

of public health. As shown, PEH can incorporate and be incorporated into other health and social theories (as in the case of Krieger's ecosocial theory). In short, PEH provides a relevant organizing framework for public health researchers and practitioners concerned with the "causes of the causes" of health inequalities in a time of growing social inequalities. Additional research is needed to further refine this theory and to employ it in the domains of public health research, practice, and pedagogy.

References

- Acheson, D. (1998). Inequalities in health: Report on inequalities in health did give priority for steps to be tackled. *BMJ: British Medical Journal*, 317(7173), 1659.
- Armada, F., Muntaner, C., & Navarro, V. (2002). Income inequality and population health in Latin America and the Caribbean. *Hispanic Health Care International*, 1(1), 42-55.
- Ataguba, J. E. O., & Alaba, O. (2012). Explaining health inequalities in South Africa: a political economy perspective. *Development Southern Africa*, 29(5), 756-764.
- Bambra, C. (2007). Going beyond The three worlds of welfare capitalism: regime theory and public health research. *Journal of epidemiology and community health*, 61(12), 1098-1102.
- Bambra, C. (2011a). *Work, worklessness, and the political economy of health*. Oxford University Press.
- Bambra, C. (2011b). Health inequalities and welfare state regimes: theoretical insights on a public health 'puzzle'. *Journal of epidemiology and community health*, 65(9), 740-745.
- Baer, H. A. (1982). On the political economy of health. *Medical Anthropology Newsletter*, 14(1), 1-17.
- Baer, H. A., Singer, M., & Susser, I. (2003). *Medical anthropology and the world system*. Greenwood Publishing Group.
- Bandura, A. (1994). *Self-efficacy*. John Wiley & Sons, Inc.
- Benton, A., & Dionne, K. Y. (2015). International political economy and the 2014 West African Ebola outbreak. *African Studies Review*, 58(01), 223-236.
- Berezin, M., & Lamont, M. (2016). Mutuality, mobilization, and messaging for health promotion: Toward collective cultural change. *Social science & medicine* (1982), 165, 201.
- Birn, A. E., Pillay, Y., & Holtz, T. H. (2009). *Textbook of international health: global health in a dynamic world*. Oxford University Press USA.
- Black D, Morris JN, Smith C, Townsend P. *Inequalities in health: the Black Report*. London: Penguin, 1982.

Braveman, P., & Gottlieb, L. (2014). The social determinants of health: it's time to consider the causes of the causes. *Public health reports*, 129(1_suppl2), 19-31.

Breilh, J. (2008). Latin American critical ('social') epidemiology: new settings for an old dream. *International Journal of Epidemiology*, 37(4), 745-750.

Chung, H., & Muntaner, C. (2008). Welfare regime types and global health: an emerging challenge. *Journal of Epidemiology and Community Health*, 62(4), 282-283.

Coburn, D. (2000). Income inequality, social cohesion and the health status of populations: the role of neo-liberalism. *Social Science & Medicine*, 51(1), 135-146.

Coburn, D. (2010). Health and health care: a political economy perspective. In *Staying alive: Critical perspectives on health, illness, and health care*, 2, 65-91.

Coburn, D. (2015). Vicente Navarro: Marxism, Medical Dominance, Healthcare and Health. In *The Palgrave Handbook of Social Theory in Health, Illness and Medicine* (pp. 405-423). Palgrave Macmillan UK.

Doyal, L. (1979). *The political economy of health*. Pluto Press.

Doyal, L. (1995). *What makes women sick: Gender and the political economy of health*. Palgrave.

Engels, F. (2009). *The condition of the working class in England*. Oxford University Press, USA.

Esping-Andersen, G. (1990). *The three worlds of welfare state*. Princeton University Press.

Farmer, P. (1997a). Ethnography, social analysis, and the prevention of sexually transmitted HIV infection. *The anthropology of infectious disease*. Amsterdam: Gordon and Breach, 413-38.

Farmer, P. (1997b). Social scientists and the new tuberculosis. *Social science & medicine*, 44(3), 347-358.

Farmer, P. (2004a). An anthropology of structural violence. *Current anthropology*, 45(3), 305-325.

Farmer, P. (2004b). *Pathologies of power: Health, human rights, and the new war on the poor* (Vol. 4). Univ of California Press.

Farmer, P. (2006). *AIDS and Accusation: Haiti and the Geography of Blame*. Univ of California Press.

Frank, Andre Gunder. 1966. "The Development of Underdevelopment." *Monthly Review*. Vol. 18, No. 4.

Gil-González, D., Ruiz-Cantero, M. T., & Álvarez-Dardet, C. (2009). How political epidemiology research can address why the millennium development goals have not been achieved: developing a research agenda. *Journal of epidemiology and community health*, 63(4), 278-280.

Gilens, M., & Page, B. I. (2014). Testing theories of American politics: Elites, interest groups, and average citizens. *Perspectives on politics*, 12(03), 564-581.

Gilman, N. (2003). *Mandarins of the future: Modernization theory in Cold War America*. JHU Press.

Glanz, K., Rimer, B. K., & Viswanath, K. (Eds.). (2008). *Health behavior and health education: theory, research, and practice*. John Wiley & Sons.

Glanz, K., & Bishop, D. B. (2010). The role of behavioral science theory in development and implementation of public health interventions. *Annual review of public health*, 31, 399-418.

Gramsci, A. (1971). *Selections from the Prison Notebooks of Antonio Gramsci*: Ed. and Transl. by Quintin Hoare and Geoffrey Nowell Smith. G. Nowell-Smith, & Q. Hoare (Eds.). International Publishers.

Granda, Edmundo (2003) "¿A qué cosa llamamos salud colectiva, hoy?" *Ponencia presentada en el VII Congreso Brasileño de Salud Colectiva* (Brasilia).

Harvey, D. (2007). *A brief history of neoliberalism*. Oxford University Press, USA.

Halstead, S. B., Walsh, J. A., & Warren, K. S. (1985). *Good health at low cost*. Rockefeller Foundation, Bellagio.

Jackson, R. J. (2003). The impact of the built environment on health: an emerging field. *American Journal of Public Health*, 93(9), 1382-1384.

Karim, S. A., Eikemo, T. A., & Bambra, C. (2010). Welfare state regimes and population health: integrating the East Asian welfare states. *Health policy*, 94(1), 45-53.

Keshavjee, M. S. (2014). *Blind spot: how neoliberalism infiltrated global health* (Vol. 30). Univ of California Press.

Kickbusch, I. (2013) Foreword: we need to build a health political science. In Clavier, C. and De Leeuw, E. (eds), *Health Promotion and the Policy Process*. Oxford University Press, Oxford, UK, pp. iii–iiv.

Krieger, N. (2001). Theories for social epidemiology in the 21st century: an ecosocial perspective. *International journal of epidemiology*, 30(4), 668-677.

Krieger, N. (2005). Embodiment: a conceptual glossary for epidemiology. *Journal of Epidemiology and Community Health*, 59(5), 350-355.

Krieger, N. (2011). *Epidemiology and the people's health: theory and context* (Vol. 213). New York: Oxford University Press.

Krieger, N. (2014). Got Theory? On the 21st c. CE Rise of Explicit Use of Epidemiologic Theories of Disease Distribution: A Review and Ecosocial Analysis. *Current Epidemiology Reports*, 1(1), 45-56.

Labonté, R. (2012). The austerity agenda: how did we get here and where do we go next?. *Critical Public Health*, 22(3), 257-265.

Laurell, A. C. (2015). Three Decades of Neoliberalism in Mexico The Destruction of Society. *International Journal of Health Services*, 45(2), 246-264.

Link, B. G., & Phelan, J. (1995). Social conditions as fundamental causes of disease. *Journal of health and social behavior*, 80-94.

Mackenbach, J. P. (2013). Political conditions and life expectancy in Europe, 1900–2008. *Social Science & Medicine*, 82, 134-146

Marmot, M. (2005). Social determinants of health inequalities. *The Lancet*, 365(9464), 1099-1104.

Marmot, M., Friel, S., Bell, R., Houweling, T. A., Taylor, S., & Commission on Social Determinants of Health. (2008). Closing the gap in a generation: health equity through action on the social determinants of health. *The Lancet*, 372(9650), 1661-1669.

Marmot, M. G., Shipley, M. J., & Rose, G. (1984). Inequalities in death—specific explanations of a general pattern?. *The Lancet*, 323(8384), 1003-1006.

Marmot, M. G., Stansfeld, S., Patel, C., North, F., Head, J., White, I., ... & Smith, G. D. (1991). Health inequalities among British civil servants: the Whitehall II study. *The Lancet*, 337(8754), 1387-1393.

Marx, K., & Engels, F. (1998). *The german ideology*. New York: Prometheus Books.

Marx, K., & Engels, F. (2002). *The communist manifesto*. Penguin.

McDonnell, O., Lohan, M., Hyde, A., & Porter, S. (2009). *Social theory, health and healthcare*. Palgrave Macmillan.

Minkler, M., Wallace, S. P., & McDonald, M. (1994). The political economy of health: A useful theoretical tool for health education practice. *International Quarterly of Community Health Education*, 15(2), 111-125.

Morello-Frosch, R., & Shenassa, E. D. (2006). The environmental “riskscape” and social inequality: implications for explaining maternal and child health disparities. *Environmental health perspectives*, 1150-1153.

Muntaner, C., Borrell, C., Ng, E., Chung, H., Espelt, A., Rodriguez-Sanz, M., ... & O'Campo, P. (2012). Locating politics in social epidemiology. In *Rethinking Social Epidemiology* (pp. 175-202). Springer Netherlands.

Navarro, V. (1974). The underdevelopment of health or the health of underdevelopment: an analysis of the distribution of human health resources in Latin America. *International Journal of Health Services*, 4(1), 5-27.

Navarro, V. (1976). *Medicine under capitalism*. New York: Prodist.

Navarro, V. (1977). *Social Security and Medicine in the USSR: A Marxist Critique*. Lexington, MA: Lexington Books.

Navarro, V. (1989). Why some countries have national health insurance, others have national health services, and the US has neither. *Social science & medicine*, 28(9), 887-898.

Navarro, V. (1990). Race or class versus race and class: mortality differentials in the United States. *The Lancet*, 336(8725), 1238-1240.

Navarro, V. (2004). The politics of health inequalities research in the United States. *International Journal of Health Services*, 34(1), 87-99.

Navarro, V. (2007). Neoliberalism as a class ideology; or, the political causes of the growth of inequalities. *International Journal of Health Services*, 37(1), 47-62.

Navarro, V. (2008). Politics and health: a neglected area of research. *The European Journal of Public Health*, 18(4), 354-355.

Navarro, V. (2009). What we mean by social determinants of health. *International Journal of Health Services*, 39(3), 423-441.

Navarro, V., & Shi, L. (2001). The political context of social inequalities and health. *Social science & medicine*, 52(3), 481-491.

Quesada, J., Hart, L. K., & Bourgois, P. (2011). Structural vulnerability and health: Latino migrant laborers in the United States. *Medical anthropology*, 30(4), 339-362.

Raphael, D. (2015). The Political economy of Health: A research Agenda for Addressing Health inequalities in Canada. *Canadian Public Policy*, 41(Supplement 2), S17-S25.

Raphael, D., & Bryant, T. (2006). Maintaining population health in a period of welfare state decline: political economy as the missing dimension in health promotion theory and practice. *Global Health Promotion*, 13(4), 236.

Roberto, C. A., & Kawachi, I. (Eds.). (2015). *Behavioral economics and public health*. Oxford University Press.

Roseberry, W. 1988. Political economy. *Annual Review of Anthropology* 17: 161-185.

Rostow, W. W. (1990). *The stages of economic growth: A non-communist manifesto*. Cambridge university press.

Rylko-Bauer, B., & Farmer, P. (2016). Structural Violence, Poverty, and Social Suffering. *The Oxford Handbook of the Social Science of Poverty*, 47.

Sampson, R. J., Morenoff, J. D., & Gannon-Rowley, T. (2002). Assessing “neighborhood effects”: Social processes and new directions in research. *Annual review of sociology*, 443-478.

Schrecker, T., & Bambra, C. (2015). *How politics makes us sick: Neoliberal epidemics*. Springer.

Smith, K. E., & Schrecker, T. (2015). Theorising health inequalities: Introduction to a double special issue. *Social Theory & Health*, 219-226.

Stuckler, D., & Basu, S. (2013). *The body economic: why austerity kills*. Basic Books.

Taylor, R., & Rieger, A. (1985). Medicine as social science: Rudolf Virchow on the typhus epidemic in Upper Silesia. *International Journal of Health Services*, 15(4), 547-559.

Therborn, G. (2014). *The killing fields of inequality*. John Wiley & Sons.

Virchow, R. (1985). *Collected essays on public health and epidemiology*. Cambridge: Science History Publications, USA.

Waitzkin, H. (1981). The social origins of illness: a neglected history. *International Journal of Health Services*, 11(1), 77-103.

Waitzkin, H. (2007). Political economic systems and the health of populations: historical thought and current directions. In *Macrosocial Determinants of Population Health* (pp. 105-138). Springer New York.

Wilkinson, R. G. (2002). *Unhealthy societies: the afflictions of inequality*. Routledge.

World Health Organization. (2010). A conceptual framework for action on the social determinants of health. Retrieved from http://apps.who.int/iris/bitstream/10665/44489/1/9789241500852_eng.pdf

Zhang, W., & Navarro, V. (2014). Why hasn't China's high-profile health reform (2003–2012) delivered? An analysis of its neoliberal roots. *Critical Social Policy*, 34(2), 175-198.

Manuscript Three: Structural Competency and Global Public Health Pedagogy

Abstract

Background: Structural competency is a new curricular framework for training health professionals to recognize and respond to health disparities as the outcome of structural phenomena, such as economic, political, judicial, educational, and healthcare policies, systems, and institutions. These phenomena arise from, perpetuate, and are legitimated by social hierarchies along axes of class, race, ethnicity, gender, sexuality, nationality, citizenship, and ability. Structural competency builds on social determinants of health pedagogy by foregrounding the structural determinants of the social determinants of health and their disparate impact along social hierarchies. While significant global public health research has been conducted that links structural factors to disproportionate disease burdens in the Global South, formal attempts to incorporate the structural competency framework into academic global health pedagogy have not yet been developed. This research seeks to develop a model for structurally competent global health pedagogy by defining and describing individual competencies.

Methods: An overview of relevant structural health pedagogy, global health, social science, and structural determinants of health literatures was conducted to define individual competencies that can inform a model for structurally competent global health pedagogy among multidisciplinary global health professionals. **Results:** Five competencies are identified and described for the purpose of informing structurally competent global health pedagogy. These include: (1) articulate a language of ‘structure’ in relation to health and healthcare disparities, (2) identify the structural determinants of the social determinants of health in specific global contexts, (3) recognize ways that structural factors are elided or legitimated within the field of global health, (4) design structural interventions to address health and healthcare disparities in specific global contexts, (5) apply the concept of structural humility in the context of global health. **Conclusion:** Structural competency is an innovative framework within health professional pedagogy that can inform the design of global health training.

Introduction

Academic global health programs have recently undergone significant growth within U.S. universities, initially as graduate education programs and increasingly as undergraduate ones (Brewer, 2017; Drain et. al., 2017; Merson, 2014). In response to the proliferation of global health programs, various researchers and institutions have proposed professional competencies to capture the scope of skills and knowledge necessary for students to proficiently undertake global health research and practice upon graduation. Lists of competencies have been proposed for public health researchers and practitioners (Association of Schools and Programs of Public Health, 2011), nurses (Wilson et. al., 2012), and physicians (Battat et. al., 2010), while others have proposed inter-professional global health competencies that span the health professions (Jogerst et. al., 2015).

The proliferation of global health programs and competencies is occurring in tandem with the rise of structural competency within health professional education. Structural competency is a new curricular framework for training health professionals to recognize and respond to health disparities as the outcome of structural phenomena, such as economic, political, judicial,

educational, and healthcare policies, systems, and institutions (Metzl & Hansen, 2014; Neff et al., 2016). These phenomena can arise from, perpetuate, and be legitimated by social hierarchies along axes of class, race, ethnicity, gender, sexuality, nationality, citizenship status, and ability. Structural competency therefore builds on understandings of the social determinants of health—or “the conditions in which people are born, grow, live, work and age” (WHO n.d.)—by exploring the production and maintenance of these conditions within societal structures. In this way, structural competency calls for a more explicit engagement with the “causes of the causes” of health inequalities (Braveman & Gottlieb, 2014) by exploring the policies, systems, and institutions that generate and maintain the conditions of health inequality. Structural competency also represents a corrective to implicit framing of health inequalities within the health professions that rely disproportionately on decontextualized biomedical, lifestyle, behavioral, and cultural explanations (Castañeda et al., 2015).

While significant global public health research has been conducted linking structural factors to disproportionate disease burdens in the Global South, there has been no formal attempt to incorporate the structural competency framework into academic global health pedagogy. This work surveys relevant global health, social science, and structural determinants of health literatures, as well as the burgeoning structural health pedagogy literature, to define individual competencies that can inform a framework for structurally competent global health pedagogy. To date, there have been few attempts within the structural health pedagogy literature to define the concepts, pedagogical competencies, or learning objectives related to structural competency in a way that can inform curriculum design (cf. Metzl & Hansen, 2014; Metzl & Petty, 2017; Neff et al., 2016). This paper draws on these nascent efforts to propose and elaborate five competencies related to structurally competent global health pedagogy. These include: (1) articulate a language of ‘structure’ in relation to health and healthcare disparities, (2) identify the structural determinants of the social determinants of health in specific global contexts, (3) recognize ways that structural factors are elided or legitimated within the field of global health, (4) design structural interventions to address health and healthcare disparities in specific global contexts, (5) apply the concept of structural humility in the context of global health.

1. Articulate a language of ‘structure’ in relation to health inequalities

Despite widespread acknowledgement of the social determinants of health, researchers have observed a tendency within the health professions to stress individualized understandings of disease etiology that focus disproportionately on biology, psychology, behavior, and culture. Public health researchers have noted a ‘psychological fundamentalism’ within their field that is reflected in the ascendant status of positive psychology and health behaviorism (Friedli, 2015). Indicative of this trend, a widely-used public health textbook opens with the statement, “Health behavior change is our greatest hope for reducing the burden of preventable disease and death around the world” (Glanz et al., 2008). Similar observations have been made about the theories of health present in the epidemiology literature, wherein articles are much more likely to be indexed by ‘biomedicine or lifestyle’ than by ‘social epidemiology or health disparities.’ This suggests that public health, including global health, overly invests in biomedical and lifestyle theories, models, and frameworks of population disease patterns (Krieger, 2014). Regarding medical practice, there is a substantial literature highlighting the ways in which decontextualized behavioral, lifestyle, and biomedical theories of health unduly influence physician perceptions of

patient cases (c.f. Davenport, 2000; Holmes & Ponte, 2011; Holmes, 2012). Finally, inseparable from concerns about behavior and psychology is a preoccupation with culture and purportedly pathogenic cultural norms (Holmes, 2013, p. 146).

Structural competency augments this default frame within the health professions by sensitizing trainees to structural factors that constrain individual agency, produce pathogenic social conditions, and result in population-level health inequalities across social categories like class, race, and gender. This sensitization entails building an understanding of ‘structure’ in relation to health inequalities. First, the concept of the ‘structural determinants of the social determinants of health’ builds on the popular definition of the social determinants of health—that is “the [unequal] conditions in which people are born, grow, live, work and age” (WHO n.d.)—and refers to the societal structures that produce and maintain those unequal living conditions. In this way, trainees are challenged to explore how phenomena like poverty, ethnic and racial inequalities, and unequal access to health care services are produced and maintained by inequitable institutions, systems, and policies, such as exclusionary health care policies, punitive and underfunded welfare systems, regressive taxation laws, and the political coalitions and ideologies that support the status quo. A second concept central to structural competency is ‘structural violence’, which Farmer and colleagues define as “social arrangements that put individuals and populations in harm’s way”; they are *structural*—the authors note—because they are embedded in society’s political and economic organization and *violent* because they result in injury (2006). Finally, the concept of ‘structural vulnerability’ describes how patterned forms of suffering are observed among groups and individuals within specific positions in society. Quesada and colleagues locate this positionality at the confluence of class-based economic exploitation, discrimination along the axes of race, ethnicity, sex, and gender, and the particular social ideologies that legitimize these social hierarchies (Quesada et. al., 2011).

Social scientists within the health field have also explored the ways in which social phenomena commonly conceived of on the intrapersonal and interpersonal level, such as racism and ethnic discrimination, stigma and stigmatized identities, and sex and gender inequalities are also produced and reproduced on the structural level. Concepts like structural racism (Bailey et. al., 2017; Metzl & Roberts, 2014), structural stigma (Hatzenbuehler et. al., 2014; Metzl & Hansen, 2014), and structural poverty (Rylko-Bauer & Farmer, 2016) sensitize trainees to the ways in which these phenomena are produced and maintained by policies, systems, and institutions operating beyond the intrapersonal and interpersonal. Structurally-oriented epidemiologic theories are also central to developing a language of structure in relation to health inequalities. The fundamental cause theory of health inequalities (Phelan et. al., 2010), political economy of health theory (Doyal, 1979; Minkler et. al., 1994), and ecosocial theory (Krieger, 2011, p.202) all depart from common individualizing epidemiological theories based on health beliefs, lifestyle, and biology. Instead, structural epidemiologic theories foreground the role of structural factors in distributing health and disease unequally across populations. In addition, instruction in the social medicine tradition, represented by Rudolf Virchow’s insight that “Medicine is a social science and politics is nothing else but medicine on a large scale” (Taylor & Rieger, 1985), places structural theorizing in relation to health within a much broader historical context. Finally, the field of Latin American Social Medicine, represented by contemporary researchers like Jaime Breilh (2008) and Asa Cristina Laurell (2003), situates structural theorizing of health inequalities within a broader geographical context as well.

2. Identify the structural determinants of the social determinants of health in specific global contexts

Global health structural competency includes analyzing diverse global contexts using structural theories and concepts. Such structural analysis explores various dimensions of the structural determinants of health as they operate nationally, internationally, and historically. On the national level, for instance, structural analysis might take into account health care systems, welfare states, social policies, systems of taxation and redistribution, as well as regional social hierarchies along which structural phenomena might be differentially experienced, as in the case of gender inequalities and ethno-racial hierarchies. For example, in the case of Guatemala, low-government health expenditures have resulted in a health care system that is highly privatized and access to health care services is therefore highly unequal and contingent on one's ability to pay (United States Agency for International Development, 2009; World Bank, 2013). Due to historical patterns of elite-led and state-sponsored ethno-racial discrimination, exploitation, and violence against indigenous communities, indigenous Guatemalans have double the poverty level as non-indigenous (International Work Group for Indigenous Affairs, 2011). Therefore, the structural violence of the Guatemalan health care system is even more pronounced among indigenous communities, who are much less likely to be able to purchase needed health care services. These realities are reflected in health statistics, such as the country's maternal mortality rate, which is three times higher for indigenous women than it is for non-indigenous (Méndez, 2003).

National level structural analysis might also bring to bear international aspects of the structural determinants of health. For example, much has been written about the inequitable and pathogenic effects of structural adjustment programs that have been imposed by the World Bank and the International Monetary Fund (IMF), first on low- and middle-income countries in the Global South (Pfeiffer & Chapman, 2010) and more recently on countries in Europe like Greece, Ireland, and Portugal (Greer, 2014). In these cases, slowdowns in the global economy resulted in unsustainable debt payments to international creditors. In order to maintain these payments, the World Bank and IMF offered indebted countries additional lines of credit. However, these funds were made conditional on enacting structural adjustment programs, which involved cutting funding for public goods like health care and education, policy changes that had disproportionately negative effects on women (Cornia et. al., 1987) and the poor (Melville, 2002). Other researchers have noted the harmful effects of international trade agreements. For instance, the North American Free Trade Agreement (NAFTA) allowed for the tariff-free importation of highly-subsidized corn from United States into Mexico, thereby flooding the Mexican market and driving small-scale corn farmers out of business. This resulted in the further impoverishment and the break-up of Mexican families, as newly unemployed family members were forced to migrate, often to farms in the United States, in order to find work (Bacon, 2013).

Finally, by adding a temporal component to such analysis consonant with the Latin American Social Medicine tradition (Breilh, 2008), the historical role of structurally violent systems, institutions, and policies in shaping contemporary global inequalities is brought into view. Farmer's analysis of the prevalence and effects of HIV/AIDS in Haiti (2006), for instance, begins with the arrival of Columbus in 1492 and the first documented genocide in the New

World of Hispaniola's indigenous Taino people, who were enslaved under the Spanish colonizers. Enslaved indigenous labor was soon replaced by enslaved African labor, and the western third of Hispaniola was subsequently ceded to France, for whom Haiti became one of its most valuable colonies. The subsequent Haitian Revolution resulted in centuries of embargoes, military incursions, *coup d'états*, and various forms of political and economic subjugation orchestrated by hostile Western powers, like France and the U.S., who feared additional violent revolts against the institution of slavery. An emerging class of local comprador elites in Haiti were eager to placate the punitive international community at the expense of the Haitian poor. For Farmer, understanding the contemporary forms of structural violence that contributed to the country's high HIV/AIDS prevalence—such as high levels of extreme poverty, inadequate public health surveillance, and an ill-equipped public-sector health care system—is not possible without an understanding of how structural forces have operated throughout history to produce that reality (Farmer, 2004a).

This form of structural analysis is referred to by researchers as historical political economy, which includes both “geographically broad and historically deep” components (Benton & Dionne, 2015; Farmer, 2006, p. xiii). Such analysis serves as a corrective to accounts of health and disease distribution that neglect critical readings of the historical and international forces that shape contemporary structural determinants of health in a given locality. Benton and Dionne employ this framework in providing a structural analysis of the 2014 West African Ebola outbreak (2015). The authors push back against claims that the virulence of the outbreak can be attributed solely to the slow response from domestic and international health authorities. Rather, they describe the continuing relevance of the trans-Atlantic slave trade, colonialism, IMF and World Bank structural adjustment policies, recent civil wars, and contemporary forms of foreign aid dependency in producing the conditions necessary for the rapid spread of the Ebola virus. Case studies, like those offered by Farmer, Benton, and Dionne, provide trainees with insights into the historical and international aspects of the structural factors that shape disease patterning.

3. Recognize ways that structural factors are elided or legitimated within the field of global health

The analytic elision of the structural determinants of health can itself play an important role in their perpetuation and further entrenchment. As structural factors fall out of analytic view, they can come to seem natural or normal and therefore legitimate, deserved, and unamenable to change. Holmes notes that the treatment of structural inequalities within the health field as normal, natural, and deserved aids in their perpetuation through by the production of indifference to such inequalities (2013, p. 156). For example, interventions to increase adherence to medications that focus solely on patient behavior and ignore the structural barriers patients face in accessing medications and maintaining treatment regimens imply that such structural barriers are insignificant or unchangeable. The result is that structurally violent social policies and health systems go unacknowledged and thus unchallenged. Furthermore, already marginalized patient populations are then often blamed for their continued “nonadherence” when narrowly conceived behavioral interventions unsurprisingly fail in the face of structurally violent health systems and social policies. In cases like these, the field of global health can implicitly serve to legitimate and perpetuate structurally violent policies, institutions, and systems while misattributing blame to the victims of those harmful structures. Structural competency therefore includes the trained

ability to recognize instances in which structural issues are ignored or marginalized, and thereby made to seem natural, legitimate, deserved, inevitable, or simply irrelevant. This paper focuses on three instances in which structural factors are marginalized and inequality is subsequently naturalized within global health: immodest claims of disease causality, assumed scarcity, and technology ideology.

Immodest Claims of Causality

As noted, the health field tends to view disease etiology in decontextualized biological, cultural, behavioral, and psychological terms, neglecting broader sociological and structural understandings of who gets sick and why. Within the context of global health, Farmer has referred to such instances of etiologic misattribution as “immodest claims of causality”, that is, the field’s overemphasis on individual agency, psychology, or culture in explaining disease etiology, while minimizing or erasing the role of structurally violent social organization. Returning to the example of 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, while ignoring the much more determinative role of extreme poverty and failing health care infrastructure, or their historical colonial origins (Hogenboom, 2014). A similar phenomenon was present in early hypothesizing about the spread of HIV/AIDS in Haiti that focused on the role of voodoo ceremonies and other cultural practices, while ignoring extreme poverty, lack of health care access, and weak public health surveillance systems (Farmer, 2001, p. 142). Briggs further demonstrates the ways in which narratives of health inequalities produced and circulated by government and popular media also play an important role in blaming marginalized populations by eliding the historical and structural dimensions such health inequalities (2005).

Examples of “immodest claims of causality” abound within the U.S. context as well. Holmes describes how physicians treating indigenous Mexican farmworkers in Washington state misattribute their patients’ physical and psychological ailments to behavioral and cultural factors, all the while ignoring the exploitative and pathogenic conditions under which their patients live and work (2013). More generally, conservative U.S. political commentators have long blamed a purported “culture of poverty” within poor minority communities when explaining social issues and health inequalities, while ignoring the increasingly porous social safety net, structural inequality, and historical legacies of racial caste, discrimination, and violence. Klinenberg’s “social autopsy” of the 1995 Chicago Heat Wave examines how city officials naturalized and depoliticized the heat-related deaths of hundreds of poor, African American, and elderly Chicagoans by framing the deaths as resulting from a “natural disaster” that was exacerbated by the unwillingness of residents to heed the recommendations of city officials to seek out air conditioned refuge (1999). Klinenberg instead shows that excess heat-related mortality can be directly traced to the radical reduction in state services and capacity since the 1980s, extreme social isolation of the elderly within violent neighborhoods, deteriorating conditions within low-income housing, and structural and racialized patterns of poverty within the city. The “immodest claims of causality” of Chicago city officials served not only to exonerate those officials by eliding the broader structural causes of heat-attributable mortality, but also to blame the victims of structural violence. Other researchers have similarly critiqued the characterization of excess

mortality and morbidity related to the 2010 Haitian Earthquake as resulting from a “natural disaster,” without consideration of the historical political economy of Haiti’s present-day structural poverty that greatly exacerbated the earthquake’s effects (Pinto, 2010).

Assumed Scarcity

The marginalization and naturalization of structural inequalities within global health is also seen in the way the field commonly approaches the issue of resource scarcity, which is often treated as objective and unchangeable, rather than structurally produced and open to challenge. Such assumptions of scarcity were present in the late 1970s when the expansive, egalitarian ‘Health for All’ agenda of the Alma Ata Declaration was supplanted by the much more circumscribed selective primary health care movement, which focused on only a limited number of cost-effective health care interventions (Basilico et. al., 2013, p. 81). A second high-profile instance of assumed scarcity occurred in 2002 during debates about extending access to lifesaving HIV/AIDS medications to poor populations around the globe. U.S. researchers argued that based on cost-effectiveness analysis additional AIDS-related funding in sub-Saharan Africa should go solely 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 available in high-income countries for the better part of a decade. In sub-Saharan Africa, HAART was accessible to only a small number of those infected with HIV/AIDS, and focusing limited funding solely on prevention would have effectively denied lifesaving treatment to millions of people (Messac & Prabhu, 2013, p. 118). Other global health researchers have since argued that perhaps neither HIV/AIDS treatment nor HIV prevention should be funded as both interventions siphon monies away from even cheaper and more impactful—that is, more cost-effective—interventions (Easterly, 2009). Prominent global health bioethicists have also argued that less effective, more toxic HIV/AIDS treatments should be given to the global poor in order to free up additional monies for other health care services (Persad & Emanuel, 2016). Assumed scarcity is also reflected in global health’s perennial preoccupation with the “sustainability”, or economic justifiability, of lifesaving forms of treatment. For instance, in the wake of Soviet support for public-sector health services in rural Tajikistan, Keshavjee observed an ideological preoccupation among western global health organizations regarding the “unsustainability” of restoring the public-sector health care system, and the concomitant unwillingness of western governments to assist in the financing of such a system. This unwillingness led to the privatization of the village’s health care services, which unsurprisingly resulted in greatly decreased access to treatment among poor villagers who now had to pay out-of-pocket for care (2014).

Underlying all of these arguments is the notion that scarcity is an objective, unchangeable, and uncontroversial aspect of global health, rather than historically and structurally produced, and open to political challenge and change. It has been suggested that those working in global health are socialized for assumed scarcity (Messac & Prabhu, 2013, p. 115), implicitly and explicitly taught to make do under extreme resource constraints in their work. Such a socialization process risks normalizing inferior care among those populations subject to “scarce resources” (i.e. the poor and marginalized racial and ethnic groups) and superior care among those for whom resources are in abundance. Other researchers contend that efforts to realize health justice

globally should instead approach resource scarcity as the result of political and economic structures that often benefit the global rich at the expense of the global poor, and that global health should—rather than uncritically accept that scarcity—investigate the decisions and interests that produce ‘resource-scarce settings’ in some parts of the world and ‘resource-rich settings’ in others (Mehta, 2013; Schrecker, 2013). In reference to the previously raised bioethical questions about toxic HIV/AIDS treatments, rather than adjudicating in the pages of *The Lancet* whether the global poor should have access to more effective and less toxic, albeit more costly, HIV/AIDS medications or cheaper, more toxic, and less effective ones (Persad & Emanuel, 2016), structurally competent global health advocates should examine the structures that frame scarcity-assuming debates. Such an examination would uncover the outsize political power of global elites and the pharmaceutical industry in shaping international intellectual property regulation and in determining drug prices, the inequitable nature of global trade agreements that inflate drug costs, the role of international organizations like USAID, the World Bank, and the IMF in promoting the privatization and commodification of health care services within low- and middle-income countries, and the continuing relevance of western colonial, imperial, and extractive projects to entrenched global inequality. Such an examination might also consider the role of bioethical frameworks in eliding, rationalizing, and justifying such global structural inequalities.

“Magic Bullets” and Technology Ideology

A third instance of the marginalization and normalization of the structural determinants of health within global health is the field’s tendency to focus on technology-driven “quick fixes” and “magic bullets,” which neglect more comprehensive structural change, ethical and moral engagements, and broader political struggles over resource distribution (Biehl, 2011; Cueto, 2013). “Magic bullet” approaches usually involve narrow, disease-specific interventions based on new medical technologies that seek to reduce disease burdens. They thus attempt to sidestep the structural determinants of health and the “messy” social and political engagements required to challenge them. Birn refers to this phenomenon as global health’s ideology of technology, or the “assumption that scientific and technical aspects of health improvement can be separated from political, social, and economic aspects” (2005). The field’s ideology of technology assumes “that the problems of global health stem from a shortage of scientific knowledge, translated into technical interventions”, rather than political and social engagement.

While scientific innovations in medicine cannot be discounted, a fixation on “magic bullets” and the ideology of technology can serve to erase the structural production of the health inequalities that such technologies seek to diminish. They also run counter to longstanding understandings within public health of the durable correlation between wealth inequality and health inequality—the so-called ‘health gradient’ (Black et. al., 1982; Marmot et. al., 1984)—and the McKeown thesis, which states that broadly realized improvements in living standards are much more determinative of improved health status than novel medical treatments or any single public health intervention (Colgrove, 2002). Furthermore, today it is clearer than ever that medical innovations are in abundance, while their accessibility by the global poor is structurally constrained; as Farmer notes, “In an age of explosive development in the realm of medical technology, it is unnerving to find that the discoveries of Salk, Sabin, and even Pasteur remain irrelevant to much of humanity” (2004, p. 144). Reduced wealth inequality, broadly realized

improvements in living standards, and universal access to medical technologies are ultimately determined by politics and political struggles over the distribution of resources on local, national, and global levels, rather than biomedical innovations (Birn, 2005).

Immodest claims of causality, assumed scarcity, and technology ideology represent just three trends within the field of global health that direct attention away from structurally violent policies, institutions, systems, and histories. The result is that structurally violent social organization and its effects can come to seem natural and legitimate, rather than imposed and changeable. The ability to recognize the ways in which structural factors are made to seem insignificant or, worse, justified is a necessary step in understanding how structural violence is perpetuated and how it can be challenged.

4. Design structural interventions to address health and healthcare disparities in specific global contexts

Structural interventions seek to alter policies, institutions, and systems—“the context within which health and illness are produced and reproduced” (Sommer & Parker, 2013, p. 1)—for the purpose of reducing health inequalities. As noted, this contrasts with popular contemporary approaches to public health practice that seek to modify health-related behaviors, beliefs, and knowledge. However, structural interventions have a long history in public health. Their origins are sometimes associated with the social medicine tradition, represented by the works of Friedrich Engels, Salvador Allende, and Rudolf Virchow, each of whom called for more egalitarian and less exploitative social organization to reduce health inequalities. Such calls—and the political movements that backed them—resulted in expanded access to medical care, regulations to counter pathogenic overcrowding within growing cities, the establishment of potable water delivery at the municipal level, and progressive labor laws to prevent workplace deaths and injuries. Due in part to the rise of the germ theory of disease in the early 20th century, a biomedical and individual-focused approach supplanted structural interventions. However, structurally-oriented public health never disappeared entirely, and recently there have been efforts to renew the structural tradition of public health (cf. Holtz et. al., 2006, Metzl & Hansen, 2014; Sommer & Parker, 2013).

Conceptualizing and designing structural interventions to address health and healthcare disparities can seem daunting. It can be clarifying to think in terms of the various “levels” at which a structural intervention might be targeted. The local level concerns sub-national regions, cities, districts, or even neighborhoods, the national level focuses on country-wide initiatives, while the international level includes multiple nation-states, multilateral organizations like the World Health Organization, and international civil society groups. On the local level, the U.S.-based non-profit Partners in Health intervened structurally within Haiti’s central plateau region by establishing a robust health care system where there previously existed only scant health care services. This intervention altered the local health care system and resulted in reduced morbidity and mortality attributable to a lack of access to health care. Working on the national level, Health Alliance International partners with ministries of health to assist in establishing robust public-sector health care systems, rather than create parallel, privatized ones. Ensuring the human right to health entails progressive public policy and sustained government financing. Health Alliance

International's approach therefore furthers this right by shoring up the public sector's ability and commitment to providing universal access to health care services.

Regarding interventions on the international level, it is instructive to return to the example of global HIV/AIDS treatment. In the same year that U.S. researchers were arguing against extending HIV/AIDS treatment to the global poor on scarcity-assuming cost-effectiveness grounds, activists, governments, researchers, and NGOs intervened structurally by advocating increased funding for and reduced costs of treatment. The Global Fund to Fight AIDS, Tuberculosis, and Malaria and The U.S. President's Emergency Plan for AIDS Relief (PEPFAR) together increased funding for HAART substantially. Pharmaceutical companies were also pressured to reduce prices, with Brazil even threatening to disregard intellectual property laws altogether to produce generic versions in the name of their citizens' human right to health, all of which resulted in HAART prices falling and access expanding substantially (Messac & Prabhu, 2013). Other structural interventions on the international level include movements to abolish health care user fees, which often prevent the poor from accessing care, and to enact policies ensuring universal access to health services. The 2000 Jubilee debt relief movement, which called for the cancellation of debts owed by poorer countries in the Global South to richer ones in the Global North, can also be thought of as a structural intervention, challenging punitive international lending norms, which overly burden poor countries and prevent them from financing social programs, like health care and education.

At the same time, the concept of an "intervention" can reify a top-down, expert-led notion of change that neglects the broader political landscape, which determines the political feasibility of a given intervention. For example, proposed legislation ensuring universal access to health care services would quickly find detractors in classes, interest groups, and political parties opposed to the forms of redistributive legislation necessary to realize such policy. 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 include political engagement and coalition building to bring about health equity. Such work might include involvement in local or national electoral politics, civil society activism, or labor organizing and mobilization. These actions help to open the political space for more ambitious equity-driven structural interventions. Health policy and political economy of health researchers have long noted the relationship between the commitments of the political party or coalition in power, the degree of redistributive social, welfare, and health policies, and the extent of health inequalities in a given country (Halstead et. al., 1985; Navarro & Shi, 2001; Navarro et. al., 2006).

5. Apply the concept of structural humility in the context of global health

The concept of cultural humility developed as a corrective to the cultural competency movement within the health professions (Tervalon & Garcia, 1998). Cultural competency sought to bridge health-relevant cultural differences between providers and patients for the purpose of improving health outcomes, particularly among racial and ethnic minority communities. This push for cultural competency on the part of health professionals has been met with criticism within the literature, with researchers expressing concern with the idea that cultural knowledge can be reduced to a technical skill (Good, 1995) and that cultural competency's treatment of specific

cultures is inaccurately homogenizing and static (Jenks, 2011, Kleinman & Benson, 2006), both of which can result in essentialist understandings of culture that threaten to reinforce cultural misunderstandings, cultural hierarchies, and ethno-racial stereotypes (Gregg & Saha, 2006, Kleinman & Benson, 2006). In addition, cultural competency presented ethno-racial health inequalities as arising from cultural difference and providers' inability to effectively work across that difference, rather than from racism, discrimination, poverty, and structural determinants of health (Gregg & Saha, 2006). One response to the shortcomings of cultural competency was put forward by Tervalon and Garcia with their concept of cultural humility, which 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 (1998).

Structural humility builds on cultural humility and encourages a self-reflective approach that values partnering with patients and communities to inform understandings of structural vulnerability and to explore how best to respond to structural determinants of health (Metzl & Hansen, 2014; Neff et. al., 2016). Metzl and Hansen suggest that structural humility can provide more nuanced understandings of the structural vulnerability of patients and their communities, understandings that can otherwise be easily missed (2014). Structural humility may also provide an important corrective to the tendency within global health to conflate structural violence and cultural difference (Farmer 2004b), or to misperceive the origins of disease in cultural practices rather than structurally violent social organization. Structural humility's emphasis on self-reflection and collaboration might also correct the field's tendency embrace a vision of top-down humanitarianism rather than more horizontal forms of solidarity based in justice and the human right to health and health care. Finally, critical reflection on the field itself can generate awareness of the historical imbrication of international medical humanitarianism with western projects of colonialism and empire, as in the case of colonial medicine (Greene et. al., 2013). This awareness is important for avoiding the use of contemporary global health projects to advance otherwise harmful agendas of powerful international actors, such as corporations, business groups, and nation-states.

Conclusion

Structural competency is an emerging framework for training health professionals to recognize and respond to health disparities as the outcome of structural phenomena, such as inequitable and discriminatory legal, educational, and health systems, regressive and punitive social welfare policies, and the political ideologies and coalitions that support the status quo. This work reframes previously proposed structural educational competencies for a growing student population, global health researchers and practitioners. This work also demonstrates that previous structural analysis and theorizing by global health researchers is compatible with this emerging pedagogical framework. In a time of extreme, longstanding, and persistent structural global inequalities in health and access to quality health care services, structural competency presents a relevant, novel, and promising addition to established global health pedagogy. More work is needed to operationalize the competencies proposed here into curricula and to evaluate the effects of those curricula on trainee knowledge, skills, and impact.

References

- Association of Schools and Programs of Public Health. (2011, October 31). Master's Global Health Competency Model . Retrieved February 03, 2017, from <http://www.aspph.org/educate/models/masters-global-health/>
- Bacon, D. (2013). *The right to stay home: How US policy drives Mexican migration*. Beacon Press.
- Bailey, Z. D., Krieger, N., Agénor, M., Graves, J., Linos, N., & Bassett, M. T. (2017). Structural racism and health inequities in the USA: evidence and interventions. *The Lancet*, 389(10077), 1453-1463.
- Basilico, M., Weigel, J., Motgi, A., Bor, J., & Keshavjee, S. (2013). Health for all? Competing theories and geopolitics. *Reimagining global health: an introduction*, 74-110.
- Battat, R., Seidman, G., Chadi, N., Chanda, M. Y., Nehme, J., Hulme, J., ... & Brewer, T. F. (2010). Global health competencies and approaches in medical education: a literature review. *BMC Medical Education*, 10(1), 94.
- Benton, A., & Dionne, K. Y. (2015). International political economy and the 2014 West African Ebola outbreak. *African Studies Review*, 58(1), 223-236.
- Biehl, J. (2011). When people come first: beyond technical and theoretical quick-fixes in global health. *Global Political Ecology*, 100-130.
- Birn, A. E. (2005). Gates's grandest challenge: transcending technology as public health ideology. *The Lancet*, 366(9484), 514.
- Black D, Morris JN, Smith C, Townsend P. *Inequalities in health: the Black Report*. London: Penguin, 1982.
- Braveman, P., & Gottlieb, L. (2014). The social determinants of health: it's time to consider the causes of the causes. *Public Health Reports*, 129.
- Breilh, J. (2008). Latin American critical ('social') epidemiology: new settings for an old dream. *International Journal of Epidemiology*, 37(4), 745-750.
- Brewer, T. F. (2017). Undergraduate Global Health Degrees: The Time is Right. *The American Journal of Tropical Medicine and Hygiene*, 96(1), 7-8.
- Briggs, C. L. (2005). Communicability, racial discourse, and disease. *Annu. Rev. Anthropol.*, 34, 269-291.

Castañeda, H., Holmes, S. M., Madrigal, D. S., Young, M. E. D., Beyeler, N., & Quesada, J. (2015). Immigration as a social determinant of health. *Annual review of public health, 36*, 375-392.

Chong, N. (2002). *The Latino patient: A cultural guide for health care providers*. Nicholas Brealey Publishing.

Colgrove, J. (2002). The McKeown thesis: a historical controversy and its enduring influence. *American journal of public health, 92*(5), 725-729.

Cornia, G. A., Jolly, R., & Stewart, F. (1987). *Adjustment with a human face Vol. I: protecting the vulnerable and promoting growth*. Clarendon Press.

Cueto, M. (2013). A return to the Magic Bullet?. In *When People Come First: Critical Studies in Global Health*, 30-53.

Davenport, B. A. (2000). Witnessing and the medical gaze: how medical students learn to see at a free clinic for the homeless. *Medical Anthropology Quarterly, 14*(3), 310-327.

Doyal, L. (1979). *The political economy of health*. Pluto Press.

Drain, P. K., Mock, C., Toole, D., Rosenwald, A., Jehn, M., Csordas, T., ... & Wasserheit, J. N. (2017). The Emergence of Undergraduate Majors in Global Health: Systematic Review of Programs and Recommendations for Future Directions. *The American Journal of Tropical Medicine and Hygiene, 96*(1), 16-23.

Easterly, W. (2009, October 12). Human rights are the wrong basis for healthcare. Retrieved January 10, 2017, from <https://www.ft.com/content/89bbbd2-b763-11de-9812-00144feab49a>

Farmer, P. (2001). *Infections and inequalities: The modern plagues*. Univ of California Press.

Farmer, P. (2004a). An anthropology of structural violence. *Current anthropology, 45*(3), 305-325.

Farmer, P. (2004b). *Pathologies of power: Health, human rights, and the new war on the poor* (Vol. 4). Univ of California Press.

Farmer, P. (2006). *The uses of Haiti*. Common Courage Press.

Farmer, P. E., Nizeye, B., Stulac, S., & Keshavjee, S. (2006). Structural violence and clinical medicine. *PLoS Med, 3*(10), e449.

Friedli, L. (2015). The politics of tackling inequalities: The rise of psychological fundamentalism in public health and welfare reform. *Health Inequalities: Critical Perspectives*, 206.

Glanz, K., Rimer, B. K., & Viswanath, K. (Eds.). (2008). *Health behavior and health education: theory, research, and practice*. John Wiley & Sons.

Good, M. J. D. (1995). *American medicine: The quest for competence*. Univ of California Press.

Greene, J., Basilico, M. T., Kim, H., & Farmer, P. (2013). Colonial medicine and its legacies. In *Reimagining global health: An introduction*, 33-73.

Greer, S. (2014). Structural adjustment comes to Europe: Lessons for the Eurozone from the conditionality debates. *Global Social Policy*, 14(1), 51-71.

Gregg, J., & Saha, S. (2006). Losing culture on the way to competence: the use and misuse of culture in medical education. *Academic Medicine*, 81(6), 542-547.

Halstead, S. B., Walsh, J. A., & Warren, K. S. (1985). *Good health at low cost*. Rockefeller Foundation, Bellagio.

Hatzenbuehler, M. L., Bellatorre, A., Lee, Y., Finch, B. K., Muennig, P., & Fiscella, K. (2014). Structural stigma and all-cause mortality in sexual minority populations. *Social Science & Medicine*, 103, 33-41.

Hogenboom, M. (2014, October 19). Ebola: Is bushmeat behind the outbreak? BBC, Retrieved from <http://www.bbc.com/news/health-29604204>

Holmes, S. M. (2012). The clinical gaze in the practice of migrant health: Mexican migrants in the United States. *Social science & medicine*, 74(6), 873-881.

Holmes, S. (2013). *Fresh fruit, broken bodies: Migrant farmworkers in the United States* (Vol. 27). Univ of California Press.

Holmes, S. M., & Ponte, M. (2011). En-case-ing the patient: disciplining uncertainty in medical student patient presentations. *Culture, Medicine, and Psychiatry*, 35(2), 163-182.

Holtz, T. H., Holmes, S., Stonington, S., & Eisenberg, L. (2006). Health is still social: contemporary examples in the age of the genome. *PLoS Med*, 3(10), e419.

International Work Group for Indigenous Affairs (IWGIA). (2011). The 2011 Indigenous World Report. Retrieved from International Work Group for Indigenous Affairs website: http://www.iwgia.org/iwgia_files_publications_files/0454_THE_INDIGENOUS_ORLD-2011_eb.pdf

Jenks, A. C. (2011). From “lists of traits” to “open-mindedness”: emerging issues in cultural competence education. *Culture, Medicine, and Psychiatry*, 35(2), 209.

Keshavjee, S. (2014). *Blind spot: how neoliberalism infiltrated global health* (Vol. 30). Univ of California Press.

Kleinman, A., & Benson, P. (2006). Anthropology in the clinic: the problem of cultural competency and how to fix it. *PLoS Med*, 3(10), e294.

Klinenberg, E. (1999). Denaturalizing disaster: a social autopsy of the 1995 Chicago heat wave. *Theory and Society*, 28(2), 239-295.

Krieger, N. (2011). *Epidemiology and the people's health: theory and context*. Oxford University Press.

Krieger, N. (2014). Got theory? On the 21st c. CE rise of explicit use of epidemiologic theories of disease distribution: A review and ecosocial analysis. *Current Epidemiology Reports*, 1(1), 45-56.

Laurell, A. C. (2003). What does Latin American social medicine do when it governs? The case of the Mexico City government. *American Journal of Public Health*, 93(12), 2028-2031.

Marmot, M. G., Shipley, M. J., & Rose, G. (1984). Inequalities in death—specific explanations of a general pattern?. *The Lancet*, 323(8384), 1003-1006.

Marseille, E., Hofmann, P. B., & Kahn, J. G. (2002). HIV prevention before HAART in sub-Saharan Africa. *The Lancet*, 359(9320), 1851-1856.

Mehta, L. (2013). *The limits to scarcity: Contesting the politics of allocation*. Routledge.

Melville, J. A. (2002, November). The impact of structural adjustment on the poor. In *Basseterre: St. Kitts and Nevis: 7th Annual Development Conference, Eastern Caribbean Central Bank*.

Méndez, N. F. (2003, June). Maternal Mortality in Guatemala: A Preventable Tragedy. Retrieved January 03, 2017, from <http://www.prb.org/Publications/Articles/2003/MaternalMortalityinGuatemalaAPreventableTragedy.aspx>

Merson, M. H. (2014). University engagement in global health. *The New England journal of medicine*, 370(18), 1676.

Messac, L., & Prabhu, K. (2013). Redefining the possible: the global AIDS response. In *Reimagining global health: an introduction*, 111-132.

Metzl, J. M., & Hansen, H. (2014). Structural competency: Theorizing a new medical engagement with stigma and inequality. *Social Science & Medicine*, *103*, 126-133.

Metzl, J. M., & Roberts, D. E. (2014). Structural competency meets structural racism: Race, politics, and the structure of medical knowledge. *Virtual Mentor*, *16*(9), 674.

Metzl, J. M., & Petty, J. (2017). Integrating and Assessing Structural Competency in an Innovative Prehealth Curriculum at Vanderbilt University. *Academic Medicine*.

Minkler, M., Wallace, S. P., & McDonald, M. (1994). The political economy of health: A useful theoretical tool for health education practice. *International Quarterly of Community Health Education*, *15*(2), 111-125.

Navarro, V., & Shi, L. (2001). The political context of social inequalities and health. *Social science & medicine*, *52*(3), 481-491.

Navarro, V., Muntaner, C., Borrell, C., Benach, J., Quiroga, Á., Rodríguez-Sanz, M., ... & Pasarín, M. I. (2006). Politics and health outcomes. *The Lancet*, *368*(9540), 1033-1037.

Neff, J., Knight, K. R., Satterwhite, S., Nelson, N., Matthews, J., & Holmes, S. M. (2016). Teaching Structure: A Qualitative Evaluation of a Structural Competency Training for Resident Physicians. *Journal of General Internal Medicine*, 1-4.

Persad, G. C., & Emanuel, E. J. (2016). The ethics of expanding access to cheaper, less effective treatments. *The Lancet*, *388*(10047), 932-934.

Pfeiffer, J., & Chapman, R. (2010). Anthropological perspectives on structural adjustment and public health. *Annual Review of Anthropology*, *39*, 149-165.

Phelan, J. C., Link, B. G., & Tehranifar, P. (2010). Social conditions as fundamental causes of health inequalities theory, evidence, and policy implications. *Journal of health and social behavior*, *51*(1 suppl), S28-S40.

Pinto, A. D. (2010). Denaturalizing “natural” disasters: Haiti’s earthquake and the humanitarian impulse. *Open Medicine*, *4*(4), e193.

Porter, D. (2006). How did social medicine evolve, and where is it heading?. *PLoS Med*, *3*(10), e399.

Quesada, J., Hart, L. K., & Bourgois, P. (2011). Structural vulnerability and health: Latino migrant laborers in the United States. *Medical anthropology*, *30*(4), 339-362.

Rylko-Bauer, B., & Farmer, P. (2016). Structural Violence, Poverty, and Social Suffering. *The Oxford Handbook of the Social Science of Poverty*, 47.

Schrecker, T. (2013). Interrogating scarcity: how to think about 'resource-scarce settings'. *Health policy and planning*, 28(4), 400-409.

Sommer, M., & Parker, R. (Eds.). (2013). *Structural approaches in public health*. Routledge.

Taylor, R., & Rieger, A. (1985). Medicine as social science: Rudolf Virchow on the typhus epidemic in Upper Silesia. *International Journal of Health Services*, 15(4), 547-559.

Tervalon, M., & Murray-Garcia, J. (1998). Cultural humility versus cultural competence: a critical distinction in defining physician training outcomes in multicultural education. *Journal of health care for the poor and underserved*, 9(2), 117-125.

United States Agency for International Development (USAID). (2009). ¿Quién financia el sistema de salud en Guatemala? Retrieved from: <http://www.comunicacionparaelcambio.org/change/files/file/%C2%BFQui%C3%A9n%20financia%20el%20sistema%20de%20salud%20en%20Guatemala.pdf>

Waitzkin, H. (2015). *Medicine and public health at the end of empire*. Routledge.

Wilson, L., Harper, D. C., Tami-Maury, I., Zarate, R., Salas, S., Farley, J., ... & Ventura, C. (2012). Global health competencies for nurses in the Americas. *Journal of Professional Nursing*, 28(4), 213-222.

World Bank, 2013. Towards better expenditure quality : Guatemala public expenditure review. Public Expenditure Review (PER). Washington DC : World Bank. Retrieved from: <http://documents.worldbank.org/curated/en/2013/05/17817212/towards-better-expenditure-quality-guatemala-public-expenditure-review>

World Health Organization (WHO) | What are social determinants of health? (n.d.). Retrieved from http://www.who.int/social_determinants/sdh_definition/en/