“As Natural as the Air Around Us”: On the Origin and Development of the Concept of Structural Violence in Health Research

Fernando De Maio¹ and David Ansell²

Abstract
This article examines the concept of “structural violence.” Originating in the work of Johan Galtung in 1969 and popularized by Paul Farmer, structural violence is increasingly invoked in health literature. It is a complex concept – rich in its explanatory potential but vague in its operational definition and arguably limited in its theoretical precision. Its potential lies in the focus it gives to the deep structural roots of health inequities; in contrast to the more passive term “social determinants of health,” structural violence explicitly identifies social, economic, and political systems as the causes of the causes of poor health. It is also evocative in its framing of health inequities as an act of violence. Yet the formulation of structure used in this literature is largely atheoretical and, by extension, apolitical. Development of the concept hinges on clarifying the precise aspects of structure it points to (perhaps through using the concept in conjunction with larger theoretical frameworks) as well as improving operational definitions to enable its use in quantitative social epidemiology. We argue that the concept of structural violence can provide a useful lens for

¹Department of Sociology and Center for Community Health Equity, DePaul University, Chicago, USA
²Department of Internal Medicine and Center for Community Health Equity, Rush University Medical Center, Chicago, USA

Corresponding Author:
Fernando De Maio, Department of Sociology and Center for Community Health Equity, DePaul University, 990 W. Fullerton Ave., Suite 1100, Chicago, Illinois 60614, USA.
Email: fdemaio@depaul.edu
understanding health inequities, but its full potential is only realized when combined with larger theoretical frameworks.

**Keywords**
structural violence, theory, social determinants of health, sociology

“Structural violence” is a powerful and evocative term. It is a complex concept – rich in its explanatory potential but vague in its operational definition and arguably limited in its theoretical precision. Its potential lies in the focus it gives to the deep structural roots of health inequities; in contrast to the more passive term “social determinants of health,” structural violence explicitly identifies social, economic, and political systems as the causes of the causes of poor health. The concept of structural violence has similarities with a related concept, the “structural determinants of health,” which was favored by the WHO Commission on the Social Determinants of Health (CSDH). As used by the CSDH, the structural determinants of health refer to mechanisms that generate stratification and social class divisions in society and that simultaneously define an individual’s socioeconomic position within “hierarchies of power, prestige and access to resources.”¹ Both “structural violence” and “structural determinants of health” bring our attention to societal arrangements that exist far upstream from the behavior and biology of individuals; they both extend the traditional social determinants of health model by prioritizing the causal force of structural forces. Yet structural violence has a distinct etiology, and its evocative framing of health inequalities as an act of violence arguably adds something that even the “structural determinants of health” term lacks. This article reviews the origins of structural violence as a concept and explores how it is used in contemporary health literature. We outline some tensions embedded in the concept, including the idea that it enables researchers to call out structure but not identify particular “perpetrators,” leading to a somewhat atheoretical or even apolitical explanation of health inequities. We also discuss problems associated with operationalizing the concept for use in quantitative research.

The etiology of structural violence as a concept can be traced to the work of Johan Galtung, who argued for a basic definition of violence as “the cause of the difference between the potential and the actual, between what could have been and what is.”² Galtung differentiated between personal and structural violence, and advocated for the rejection of a narrow conceptualization of violence focused solely on the former. For Galtung, the social order – which he saw
reflected in a society’s system of stratification – was a critical source of the violence that limited human potential. While not disregarding the individual (the end target of violence), his conceptualization of structural violence brought into focus the underlying (often invisible) forces that affect our lives.

Foreshadowing the adoption of the concept in the health equity literature, Galtung used a health example to illustrate his concept: “if a person died from tuberculosis in the eighteenth century, it would be hard to conceive of this as violence since it might have been quite unavoidable, but if he dies from it today, despite all the medical resources in the world, then violence is present according to our definition.”2 For Galtung, structural violence is synonymous with social injustice – a social order that generates unnecessary and avoidable suffering. In this way, his concept of structural violence is not dissimilar to Friedrich Engels’s3 charge of murder against the capitalist system in The Condition of the Working Class in England (though Galtung himself did not make a connection to Engels, and aside from acknowledging the roots of structural violence in stratification, Galtung never advanced a connection between the concept and underlying political-economic forces, as did Engels in his critique of capitalism). A noted affinity also exists between Galtung’s conceptualization of structural violence and the idea of “structural sin” that emerged from liberation theologians in Latin America.4–6

Galtung highlighted how structural violence can come to be accepted as normal: “personal violence represents change and dynamism – not only ripples on waves, but waves on otherwise tranquil waters. Structural violence is silent, it does not show – it is essentially static, it is the tranquil waters.”2 Structural violence, then, is hegemonic – it is all around us, and part of its power is that it is taken for granted as normal. Indeed, Galtung described it as “as natural as the air around us.”2 This quality – “as natural as the air around us” – is echoed in the work of the medical anthropologist and infectious disease doctor Paul Farmer, whose powerful work has exposed many of the gross health inequalities we see in the world today.

Structural violence is the underlying concept in much of Farmer’s work, perhaps most notably in Infections and Inequalities7 and the widely read Pathologies of Power.8,9 For Farmer, structural violence shows up as “a host of offensives against human dignity: extreme and relative poverty, social inequalities ranging from racism to gender inequality, and the more spectacular forms of violence that are uncontestably human rights abuses, some of them punishment for efforts to escape structural violence.”8 But arguably the clearest definition of structural violence in Farmer’s work was offered in a short, coauthored essay titled “Structural violence and clinical medicine,” where he defined the term this way: “social arrangements that put individuals and populations in harm’s way. The arrangements are structural because they are embedded in the political and economic organization of our social world; they are violent because they cause injury to people.”10 In Farmer’s ethnographic writing, structural
violence is used as a foundational concept that explains the inequalities he sees in Haiti, Peru, Siberian prisons, and later on, Rwanda.

Rooted in ethnographic analysis, Farmer never tries to measure structural violence in any systematic way – what matters to him are the health outcomes he sees in his clinic, and structural violence takes on the role of what critical realists call a generative mechanism rather than a quantified “independent variable” to be used in a statistical analysis. In Farmer’s use, structural violence is an orienting concept, an analytical lens – and not a variable to be entered into a regression model. In Farmer’s use of the concept, structural violence is arguably also atheoretical – there is no theory to describe the origins of structural violence, no general explanation of how inequality comes to be. Structure is called out but never defined, and the “perpetrators” of the violence remain obscured, as we will discuss below.

Use of “Structural Violence” in Health Studies

Arguably because of the popularity of Farmer’s work, structural violence has been invoked in a large number of recent articles. Figure 1 plots MEDLINE hits for articles that used “structural violence” in the title, abstract, or keywords, differentiating articles focused on the global south and the global north.

As shown in Figure 1, publications invoking structural violence as a concept has significantly increased in the past 30+ years. Out of a total of 164 articles, 95 (or 58%) reported data from or focused on a setting in the global south, while 63 (or 38%) were centered in the global north (a substantial proportion of these in

Figure 1. Use of “structural violence” in the research literature, 1985–2017.
Canada). A small number of articles (6, or 4%) were review articles with no specific setting or geographic focus.

Work in the global south has invoked structural violence to understand historical trauma, poverty, and gender inequality. Much of this work is qualitative, often based on semi-structured interviews. Structural violence, in this tradition, is a framework to help contextualize and make sense of a study’s findings. For example, Shannon and colleagues, in a study of gender and health inequalities in the Peruvian Amazon, describe structural violence as “a comprehensive framework to explain the mechanisms by which social forces such as poverty, racism and gender inequity become embodied as individual experiences and health outcomes.” In a somewhat different use of the term, Hilliard and colleagues use structural violence in a qualitative study with women in western Kenya to understand the perceived impact of a land and property rights program that aimed to reduce violence against women and lower HIV risks for the community. Many of the studies based in the global south examine migration – from violence among internally displaced youth in Haiti to the plight of Syrian refugees in Lebanon and HIV risks for Pakistani labor migrants in the Persian Gulf.

Much of the published work on structural violence in the global north has focused on immigrant groups, indigenous peoples, and marginalized populations such as the homeless. Some of the papers in this group invoked structural violence as a lens to analyze domestic violence. Khenti described structural violence as a “theory” to understand the effect of the war on drugs on black people in Canada. Pedersen and colleagues used structural violence in the context of aboriginal/nonaboriginal inequalities in postseparation violence against Canadian women. Choiniere and colleagues explored structural violence in the context of mental health nursing. Banerjee and colleagues compared Canadian and Scandinavian systems for the long-term, residential care of older people. Some U.S.-based work has used structural violence to examine urban retail food markets and low birth weight as well as to understand racial disparities in HIV transmission, while other U.S.-based work on structural violence has focused on safety-net mechanisms for health care delivery.

Also in the United States, Zakrison and colleagues poignantly argued that “gun violence is structural violence” and went on to describe the need for work that sees gun violence in its social and political context. For Zakrison and colleagues, structural violence is the analytic lens through which social class and racism can be understood: “African Americans are disproportionately affected by unemployment, poverty and hunger. Subpar education by design (with property tax funding public schools) leads to illegal activity to generate a livable income for many. African Americans are also killed by law enforcement officers at a rate 2.5 times higher than whites, creating a contemporary public health crisis of unprecedented proportions, since the days of rampant, state-sanctioned lynching.” Reflecting across the U.S.-based literature, theirs is one of the few
analyses that explicitly and centrally linked structural violence to systemic racism.

**Tensions in the Concept**

A common feature in much of this literature is that structural violence is invoked – as it is in Farmer’s analyses – as an overarching explanatory concept, a framework within which a research question can be contextualized. While in some cases it is described as a *theory*, it is not typically used as an idea that can be tested, nor is it operationalized as part of a hypothesis. For the most part, the concept has been used in very broad terms, with no real consensus on how structure should be conceptualized or defined.

As a result, structural violence is a nebulous term – something that can describe gross violations of human rights, high levels of income inequality, or complex international trade agreements. For some, this represents a fundamental liability – for if structural violence can manifest in so many different ways, it ceases to be a useful explanatory force, becoming instead a “black box” that can be invoked in almost any situation. A corollary is that use of the concept – by Galtung and Farmer but also in general in the literature – has arguably been atheoretical. There is no consensus in this literature about the origins of structural violence, no consistent explanation of the political and economic forces that drive inequality. Structure is called out but never defined, the “perpetrators” of the violence remaining obscured. In this way, structural violence researchers may fall under the following critique from David Himmelstein, originally developed in relation to quantitative health disparities studies: “In analyzing typhus, Virchow found the social seeds of disease and prescribed the overthrow of a social system . . . Too often, today’s researchers describe the phenomenology of inequality and injustice, but leave its origins and perpetrators obscured . . . They would redistribute wealth, but not renounce the market relations and property rights that engender inequality.” In this way, the concept of structural violence – by itself – is insufficient as an explanation of health disparities. Only when used in combination with a larger theoretical framework – critical race theory, feminism, Marxism, or other approaches – might it have the level of theoretical precision needed to clarify what aspects of “structure” are most important in any given analysis.

A second tension embedded in the concept is that a direct method to observe and quantify structural violence does not exist. We have no metric for structural violence that mirrors the specificity of gross domestic product per capita (the most common measure of a country’s economic development) or the Gini coefficient (a commonly used measure of inequality). And given the nebulous and wide-ranging definition in both Galtung’s formulation as well as in Farmer’s adaptation of the concept, no single measure will emerge, and structural
violence will likely continue to be invoked in general ways as an explanatory concept rather than a measurable phenomenon.

As one example of how structural violence could be operationalized, at least in the context of large cities in the United States, consider the index of concentration at the extremes (ICE). The ICE quantifies the extent to which a community’s residents are concentrated in the extremes of distributions, typically conceptualized as poverty and affluence. The measure can take a value of $-1$ to $+1$; a value of $-1$ indicates that all of that community’s population is concentrated in the most deprived group, while a value of $+1$ indicates that all of that community’s population is concentrated in the most privileged group. Moreover, the ICE can be modified to account for distributions of community characteristics other than just income, including educational attainment and racial/ethnic composition.

The ICE defines a spectrum of concentrated disadvantage and affluence, “ranging from a negative extreme (where all families are disadvantaged) to a neutral point (where affluent and disadvantaged families are equally balanced) to a positive extreme (where all families are affluent).” This makes the ICE a potentially very powerful measure for monitoring community-level inequalities, particularly when used to quantify the concentration of income simultaneously with racial/ethnic segregation. Nancy Krieger and colleagues, e.g., examined the use of the ICE as a public health monitoring tool in New York City, concluding that ICE is “a metric that reveals, in a single measure, the extremes of selected social and economic relationships implicated in producing health inequities.” In this example, Krieger and colleagues used the ICE measure in combination with a larger theoretical framework, eco-social theory, which presents a multi-level and historical framework for understanding the distribution of disease in populations. Krieger’s eco-social theory offered the larger framework depicting causality; it enabled the ICE to serve as an indirect measure of “social and economic relationships implicated producing health inequalities.” The ICE is not a measure of structural violence by itself – but it can be used as an interesting proxy, particularly when used as a predictor of health inequalities.

Despite some unresolved limitations and tensions, the concept of structural violence has important strengths that merit its use in the health equity literature. Its potential lies in the focus it gives to deep structural roots of health inequities; in contrast to the more passive term “social determinants of health,” structural violence explicitly identifies social, economic, and political systems as the causes of the causes of poor health. It is also evocative in its framing of health inequities as an act of violence. Perhaps most importantly, by naming social structures as a root cause of avoidable and unnecessary morbidity and mortality, the concept can be used as a counterweight to the belief that our current patterns of population health are natural (“as natural as the air around us”). Galtung pointed this out by arguing that “personal violence shows. The object of personal violence perceives the violence, usually, and may complain – the object of
structural violence may be persuaded not to perceive this at all.”

2 By naming structural violence, researchers can push the need to identify the root cause of health inequities and thus channel our efforts raise awareness of how very different the world could be.

Declaration of Conflicting Interests
The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding
The authors received no financial support for the research, authorship, and/or publication of this article.

References


**Author Biographies**

**Fernando De Maio,** PhD, is an associate professor of Sociology at DePaul University, where he also teaches Social Epidemiology in the Master of Public Health program. Born in Buenos Aires, he graduated from the University of Toronto and completed his graduate studies at the University of Essex. He is the author two books, *Health & Social Theory* and *Global Health Inequities: A Sociological Perspective* (both with Palgrave Macmillan) and is a co-editor of the forthcoming *Community Health Equity: A Chicago Reader* (University of Chicago Press). His research and teaching revolves around structural violence and the social determinants of health. He serves as co-director of the Center for Community Health Equity in Chicago, Illinois.
David Ansell, MD, MPH, is currently the senior vice president and associate provost for community health equity, and the Michael E. Kelly Professor of Medicine at Rush University Medical Center in Chicago, Illinois. He is a practicing physician and a social epidemiologist who has worked on Chicago’s Westside since 1978. His work as a doctor, researcher, and health improver has focused on overcoming the structural forces of racism, poverty, and neighborhood and their impact on health outcomes in the United States. He has written and lectured widely on the effect of racism, insurance status, neighborhood, and income on life expectancy in America. He is a co-founder and board president of the Metropolitan Chicago Breast Cancer Taskforce a not-for-profit organization dedicated to eliminating racial and ethnic inequity in breast cancer mortality. He is the author of two books, *County: Life, Death and Politics at Chicago’s Public Hospital* (Academy Chicago Press, 2011) and *The Death Gap: How Inequality Kills* (University of Chicago Press, 2017).