

MEDICINE AND SOCIETY

Clinicians' Need for an Ecological Approach to Violence Reduction

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Abstract

We now know that harmful social policies, such as those that deny health care to some people, can generate structural violence and be far more harmful than any type of direct violence. A health professional who engages in public health promotion must thus consider the adverse effects of structural violence generated by bad policies. On this view, the dictum, "first, do no harm," can be interpreted as a mandate to protect patients from injustice. Health care professionals' responsibilities extend to motivating policies that prevent avoidable deaths and disabilities. As we exist within an ecology, we must each recognize our responsibility to care for one another and for the larger human community.

And that we are all responsible to all for all
Fyodor Dostoevsky [1]

Introduction

We now know that weak health systems, poor education, defective social services, and harsh criminal justice systems are not just potent stimulants of violence but are forms of *structural violence* [2]. Structural violence, according to Johan Galtung, is violence "built into the structure" that "shows up as unequal power and consequently as unequal life chances" [3], which is distinct from simple, behavioral violence [2]. The fundamental principle of the Hippocratic Oath, *primum non nocere*, or "first, do no harm," in some versions refers to an ethical mandate to keep from injustice [4]. The oath has greater implications for justice in the contemporary context, since we now understand better that unjust social structures give rise to insidious harm. The deleterious effects of structural violence are in fact staggering: by one estimate, it causes up to 18 million deaths around the world per year [5], more than ten times greater than all the deaths from suicides, homicides, and warfare combined [6]. If the World Health Organization counted it among causes of death [7], it would certainly fall within the top ten. These are deaths that would have been prevented in a global system of perfect equality; they are caused "by poverty and unjust social, political, and economic institutions, systems, or structures" [8].

While perfect equality might not be achievable, it is useful for health professionals to be mindful of the immense implications of social injustice, or structural violence, for health. Each generation must redefine what “doing no harm” means for its time, and we try to do this here with the knowledge we now have about the violence that is embedded in social structures, including the unequal distribution of health care. Doing no harm may require preventing the occurrence of further harm and learning how to transform destructive social structures into caring ones.

The Meaning of “Do No Harm”

Doing no harm can reasonably be taken to mean avoiding committing obvious harms—that is, direct violence, such as murder, assault, or verbal abuse. However, the multidetermined nature of violence, no matter the scale, suggests that causes of violence are not always direct. For example, a critical predictor of interpersonal violence levels is income inequality [9]. In the twentieth century, the rate of homicide similarly paralleled increases in economic disparities between rich and poor [10]. Economic inequalities within nations also correlate with rises in civil strife and terrorism [11, 12]. Even the rate of suicide, or self-directed violence, increases with rises in unemployment [13]. Scientific evidence increasingly supports that violence is the result not just of individual dynamics but of relationships, family, community, and society [14]. Risk factors for violence operating on all these levels interact in what is called the *ecological model* of violence described by the World Health Organization (WHO) [14].

Once we recognize that ecology connects every person with everyone else as well as with the environment that we create through our collective decision making, we must accept the words of the wise elder of *The Brothers Karamazov*: “For no one can judge a criminal, until he recognizes that he is just such a criminal as the man standing before him” [15]. Labeling violence as an individual problem can no longer hold with what we now know; scientific evidence forces us to look at the larger social and economic structures that give rise to waves of violence, locally and throughout the globe. Doing no harm thus means preventing further—and, if possible, reducing— structural violence.

Similarly, the attempt to treat every ill patient is an uphill battle if we do not address the [ecological factors](#) involved in healthful living, health education, and health care access that influence whether someone gets ill in the first place. Working to prevent avoidable deaths and disabilities—which unjust social structures create—by advocating for just distribution of health care and other social resources should, therefore, become an integral part of a physician’s role [16].

Policy, Structural Violence, and Health Care

With the knowledge and technological capacities we now have, and with the resources at our disposal, we can no longer justify ignoring forms of structural violence that produce greater mortality than direct violence [5]. While wars, genocides, and massacres might

grab headlines, these are not as lethal or as insidious as the violence that social structures generate, as we suggested earlier. Perhaps most illustrative of this situation is the recent political push to “repeal and replace” the Patient Protection and Affordable Care Act, or the Affordable Care Act (ACA), instituted into law on March 23, 2010 [17]. Despite the ACA’s achieving historically high rates of health insurance coverage in the US [18], in 2017 it was repeatedly in danger of being repealed without a satisfactory replacement. By most analyses, this is occurring for reasons of political structure. If successful, the consequences of partial repeal through the American Health Care Act would have been the loss of health insurance for up to 24 million people [19] and avoidable deaths estimated at 27,700 to 96,200 annually by 2026 as a direct result [20]. Through one legislative change, millions of lives would be at risk, and while politicians may see repeal as a matter of partisan ideology, health professionals consider its implications for health and disease, or life and death. The ACA and attempts to repeal it is just one illustration of how a simple adjustment of structure can be life changing for millions [21].

Not only is politics “nothing but medicine at a larger scale,” as Rudolf Virchow noted [22]; bad politics can become a generator of poor health. It is an anomaly that the US, the earth’s wealthiest nation, has not joined 58 other (developed and developing) nations in providing health coverage for all its citizens [23]. It is also an anomaly that the US is the only nation on the planet that has not agreed to join the Paris Climate Agreement [24], which is intended to prevent the climate devastations that could affect numerous lives and have direct and indirect health effects [25]. Structural violence operates through the institution and acceptance of unjust social structures, such as the denial of health care or the right to fair living conditions to certain segments of the population. And we have greater power in deciding how to organize our social structures—and what we are willing to accept—than we commonly believe [26]. Legislation that reduces inequities and destitution, on the other hand, can also reduce vast needs for welfare assistance, resentments and competition, and epidemics of violent deaths [27]. Health injustice usually operates in conjunction with other forms of structural violence, such as [inequalities in education](#), so that those who are deprived might not recognize the sources of their deprivation—or worse, their own contributions to it—with the result that economic, political, legal, and social disadvantages exacerbate and perpetuate health injustice.

Reducing Structural Violence in Health Care and the Human Ecology

Amid changing conditions, active health advocacy for equal access to health care has become one of health professionals’ primary obligations [28]. As we wrote elsewhere, physicians, “who have a negative duty not to harm and a positive duty to promote health, must pay attention to the larger social and cultural forces that determine who will fall ill in the first place and who will be provided relief” [29]. We further noted, citing Arya and Santa Barbara [30], “When health professionals work for optimal health care delivery,

they are working against violence and participating in the struggle for peace” [29]. What might be called “caring well” is at the heart of justice. Such caring arises from a sense of the ethical duty that informs decisions about how to distribute education and resources within a society to facilitate the health and well-being of its members [29]. As agents endowed with moral capacity and not mere technicians, clinicians must have a wider sense of ethical responsibility than is called for by their work role [31]. For the physician who “cares well,” doing no harm means not participating in legally authorized executions [32] or forced interrogation [33], as well as discouraging their use in the first place. Caring well in mental health [34], in criminal justice [35], and even in international security—where the United Nations has declared that the key to development and peace is in creating a more inclusive society in which “no one will be left behind” [36]—is also an effective preventative for all forms of violence.

Caring Well through Reducing Structural Violence

Any reforms in health care delivery would be incomplete without taking into account the wider ecology—relationships, family, community, and society—to which we all belong. We can shape and contribute to this ecology in ways that either help to [promote justice and health](#) or worsen our overall condition by benefiting some over the thriving of all. Since we do not start in a neutral state given the presence of structural violence, we need to develop and establish a foundation for caring well. This concept of doing no harm, or calibrating to a state of no harm, includes an active caring for all. It is none too soon: our capacity for violence has reached unacceptable levels, as we are the first species on earth to threaten its own extinction—either instantaneously through thermonuclear war or insidiously but permanently through the destruction of our habitat. If we are not overly concerned about this fact, then that should be a cause for greater concern. Not treating others well, dividing ourselves into in-groups and out-groups, and allowing for lethal injustices and inequities to continue can only worsen the threat to our collective survival.

We as physicians can extend our model for caring for the individual into the areas of health advocacy and good governance. The ultimate prevention model in health care is not just to alleviate suffering but to keep it from arising in the first place; hence, alleviating harm involves understanding the ripple effect that social structures have through our human ecology and how we are all responsible for all. What the World Health Organization has advocated—to help attain for all people “the highest possible level of health” [37]—thus promises to bring about enhanced health for each individual.

Ethics involves a continual application of principles to changing circumstances. While perfect justice may not be attainable, health professionals can engage in a continual effort to improve societal conditions, including injustices and inequality, which literally translates into saving lives. In a state of society wherein stasis is not an option, doing no

harm might mean preventing the occurrence of further harm by thinking creatively about how to transform unjust social structures into caring ones.

References

1. Dostoevsky F. *The Brothers Karamazov*. Garnett C, trans. New York, NY: Lowell Press; 1912:335. <http://www.gutenberg.org/files/28054/28054-h/28054-h.html>. Accessed November 27, 2017.
2. Lee BX. Causes and cures VII: structural violence. *Aggress Violent Behav*. 2016;28:109-114.
3. Galtung J. Violence, peace, and peace research. *J Peace Res*. 1969;6(3):171.
4. National Library of Medicine. The Hippocratic Oath. North M, trans. https://www.nlm.nih.gov/hmd/greek/greek_oath.html. Published 2002. Accessed November 27, 2017.
5. Köhler G, Alcock N. An empirical table of structural violence. *J Peace Res*. 1976;13(4):343-356.
6. World Health Organization. 10 facts about violence prevention. <http://www.who.int/features/factfiles/violence/en/>. Updated May 2017. Accessed November 27, 2017.
7. World Health Organization. Top 10 causes of death worldwide. <http://www.who.int/mediacentre/factsheets/fs310/en/>. Updated January 2017. Accessed November 27, 2017.
8. Köhler, Alcock, 343.
9. Fajnzylber P, Lederman D, Loayza N. Inequality and violent crime. *J Law Econ*. 2002;45(1):1-39.
10. Gilligan J. *Preventing Violence*. New York, NY: Thames and Hudson; 2001.
11. Cederman L, Gleditsch KS, Buhaug H. *Inequality, Grievances, and Civil War*. New York, NY: Cambridge University Press; 2013.
12. Goldstein KB. Unemployment, inequality and terrorism: another look at the relationship between economics and terrorism. *Undergrad Econ Rev*. 2005;1(1):6. <https://digitalcommons.iwu.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1006&context=uer>. Accessed November 27, 2017.
13. Nordt C, Warnke I, Seifritz E, Kawohl W. Modelling suicide and unemployment: a longitudinal analysis covering 63 countries, 2000-11. *Lancet Psychiatry*. 2015;2(3):239-245.
14. Krug EG, Dahlberg LL, Mercy JA, Zwi AB, Lozano R, eds. *World Report on Violence and Health*. Geneva, Switzerland: World Health Organization; 2002. http://apps.who.int/iris/bitstream/10665/42495/1/9241545615_eng.pdf. Accessed November 27, 2017.
15. Dostoevsky, 357.
16. Freeman J. Advocacy by physicians for patients and for social change. *Virtual Mentor*. 2014;16(9):722-725.

17. Patient Protection and Affordable Care Act of 2010, Pub Law No. 111-148, 124 Stat 119. <https://www.gpo.gov/fdsys/pkg/PLAW-111publ148/pdf/PLAW-111publ148.pdf>. Accessed November 27, 2017.
18. Council of Economic Advisers. *The Economic Record of the Obama Administration: Reforming the Health Care System*. Washington, DC: Council of Economic Advisers; December 2016.
https://obamawhitehouse.archives.gov/sites/default/files/page/files/20161213_cea_record_health_care_reform.pdf. Accessed November 27, 2017.
19. Congressional Budget Office. Congressional Budget Office cost estimate: American Health Care Act. <https://www.cbo.gov/system/files/115th-congress-2017-2018/costestimate/americanhealthcareact.pdf>. Published March 13, 2017. Accessed November 27, 2017.
20. Hiltzik M. How many people will die from the Republicans' Obamacare repeal bills? Tens of thousands per year. *Los Angeles Times*. June 26, 2017.
<http://www.latimes.com/business/hiltzik/la-fi-hiltzik-repeal-deaths-20170623-htmlstory.html>. Accessed November 27, 2017.
21. Cover RM. Violence and the word. *Yale Law J*. 1986;95(8):1601-1629.
22. Virchow R. Der armenarzt. *Medicinische Reform*. 1848;18:125-127. Quoted by: Mackenbach J. Public health's biggest idea: modern resonances of Rudolf Virchow's revolutionary years. Rotterdam, The Netherlands: Erasmus Medical Center Department of Public Health: January 9, 2008:9.
https://www.researchgate.net/profile/Johan_Mackenbach/publication/23566981_Politics_is_Nothing_but_Medicine_at_a_Larger_Scale_Reflections_on_Public_Health%27s_Biggest_Idea/links/00b7d5207e53ad6921000000/Politics-is-Nothing-but-Medicine-at-a-Larger-Scale-Reflections-on-Public-Healths-Biggest-Idea.pdf. Accessed November 27, 2017.
23. Stuckler D, Feigl AB, Basu S, McKee M. The political economy of universal health coverage. Paper presented at: First Global Symposium on Health Systems Research, November 16-19, 2010; Montreux, Switzerland.
<http://www.pacifichealthsummit.org/downloads/UHC/the%20political%20economy%20of%20uhc.PDF>. Accessed November 27, 2017.
24. Friedman L. Syria joins Paris climate accord, leaving only US opposed. *New York Times*. November 7, 2017.
<https://www.nytimes.com/2017/11/07/climate/syria-joins-paris-agreement.html>. Accessed November 27, 2017.
25. McMichael AJ, Woodruff RE, Hales S. Climate change and human health: present and future risks. *Lancet*. 2006;367(9513):859-869.
26. Ackerman P, DuVall J. *A Force More Powerful: A Century of Non-Violent Conflict*. New York, NY: St. Martin's Press; 2000.
27. Wilkinson R, Pickett K. *The Spirit Level: Why More Equal Societies Almost Always Do Better*. London, England: Allen Lane; 2009.

28. American Medical Association. Principles of medical ethics. <https://www.ama-assn.org/sites/default/files/media-browser/principles-of-medical-ethics.pdf>. Updated June 2001. Accessed November 27, 2017.
29. Lee BX, Young JL. Building a global health ethic without doing further violence. *Am J Bioeth.* 2012;12(12):59.
30. Arya N, Barbara JS, eds. *Peace through Health: How Health Professionals Can Work for a Less Violent World*. Sterling, VA: Kumarian Press; 2008.
31. Young JL. Commentary: it's about the fundamentals. *J Am Acad Psychiatry Law.* 2006;34(4):479-481.
32. American Psychiatric Association. The principles of medical ethics with annotations especially applicable to psychiatry. <https://www.psychiatry.org/File%20Library/Psychiatrists/Practice/Ethics/principles-medical-ethics.pdf>. Published 2013. Accessed November 27, 2017.
33. American Psychiatric Association. Position statement on psychiatric participation in interrogation of detainees. <http://www.psychiatry.org/File%20Library/Learn/Archives/Position-2014-Interrogation-Detainees-Psychiatric-Participation.pdf>. Published May 2006. Accessed November 27, 2017.
34. Masten AS, Shaffer A. How families matter in child development: reflections from research on risk and resilience. In: Clarke-Stewart A, Dunn J, eds. *Families Count: Effects on Child and Adolescent Development*. New York, NY: Cambridge University Press; 2006:5-25.
35. Gilligan J, Lee B. The resolve to stop the violence project: transforming an in-house culture of violence through a jail-based programme. *J Public Health (Oxf).* 2005;27(2):149-155.
36. United Nations. Transforming our world: the 2030 agenda for sustainable development. http://www.un.org/ga/search/view_doc.asp?symbol=A/70/L.1&Lang=E. Published September 18, 2015. Accessed November 27, 2017.
37. World Health Organization. Constitution of the World Health Organization. http://www.who.int/governance/eb/who_constitution_en.pdf. Revised September 15, 2005:2. Accessed November 27, 2017.

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