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Title
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Permalink
https://escholarship.org/uc/item/18v9s0sj

Journal
New England Journal of Medicine, 379(20)

ISSN
0028-4793

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Publication Date
2018-11-15

DOI
10.1056/nejmms1814262

Peer reviewed

MEDICINE AND SOCIETY

Case Studies in Social Medicine — Attending to Structural Forces in Clinical Practice

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Many clinicians and trainees see the social world as a messy, impenetrable black box: they may acknowledge its influence on their patients' health, but they lack the understanding and tools for incorporating it usefully into their diagnostic reasoning and therapeutic interventions. But the social sciences of health and medicine provide such tools — theories and methods for understanding social processes and intervening to effect change. Leading organizations in medical education have recommended providing additional training in social medicine, which deploys these approaches to improve health.[1,2] In this issue, the *Journal* launches Case Studies in Social Medicine, a series of Perspective articles, to highlight the importance of social concepts and social context in clinical medicine. The series will use discussions of real clinical cases to translate these tools into terms that can readily be used in medical education, clinical practice, and health system planning.

In their first year in medical school, all students learn to take a social history. As they transform their eyes, ears, and hands into sensors for detecting hidden causes of disease, they also learn to ask probing questions to illuminate patients' social contexts. What pathogenic exposures might a patient face en route to immigrate to the United States from Guatemala, in being subjected to police violence and arrest in a heavily patrolled nonwhite neighborhood, in working in pesticide-laden fields, or as a result of exclusion from health care coverage? Answers to such questions can dramatically change a diagnostic picture or therapeutic plan. Yet by the clinical years of medical school, students learn that the social history is often collapsed into a record of three biobehavioral exposures — to alcohol, tobacco, and illicit drugs. Much of what they read in clinical journals appears to corroborate the assumption that in clinical medicine, the biologic and behavioral world of a patient's body is more important than the social world outside it.

This erasure flies in the face of increasing evidence documenting the role of social forces in determining health, disease, treatment, and recovery. Noncommunicable diseases, including coronary heart disease, stroke, lung cancer, chronic obstructive pulmonary disease, and mental health disorders, remain major global causes of illness and death, and their prevalence is increasing.[3] The likelihood that these conditions and the prognoses and treatment outcomes associated with them will develop are strongly predicted by social factors, including income, race, ethnicity, immigration status, and place of residence: they cluster in social networks and are exacerbated by social inequalities.[4] The fundamental causes of health and disease, however, are not these seemingly static characteristics that mark inequalities, but rather the social, political, and economic forces that drive these inequalities in the first place — what we would call the structural determinants of the social determinants of health.[5]

The great promise of precision medicine — that health care will be improved by greater investment in genomic and proteomic knowledge mediated through computational biology — overlooks both the limited contribution that genomics has thus far made to the understanding and treatment of human disease and the uneven uptake of even existing (and relatively inexpensive) diagnostic and therapeutic interventions, let alone the $10,000 blood tests that precision medicine has produced to date.[4,6] If medicine is to reduce rather than augment health disparities, we will need solutions to both the social and the biologic bases of health and disease.

All medicine is social medicine, as the late

psychiatrist Leon Eisenberg noted, and all physicians should find something relevant to their own practice in these cases.[7] As a field of research, social medicine seeks to understand the ways in which social factors influence health, disease, and medical practice.[8-10] As a field of practice, it applies this understanding to inform health interventions at the individual, community, and society levels. Social medicine provides conceptual frameworks for approaching problems that otherwise seem intractable or outside the domain of clinical practice. Our hope is to show that social forces are just as amenable to analysis, investigation, and intervention as the cellular and molecular mechanisms of disease and to demonstrate that they are at least as important to analyze, investigate, and address.[11-13] Each article in the series is coauthored by a team of clinicians and social scientists, presents a clinical case, teaches a core concept from social medicine to help elucidate the problem, and discusses concrete steps that clinicians can take to manage related issues in their own practice.

STRUCTURE: A GUIDING CONCEPT FOR SOCIAL MEDICINE

A common theme linking these cases is the role of social structures in determining who gets sick and who gets better and why. Structure is a conceptual antidote to the tendency in clinical medicine to address all problems as the result of individual choices and residing in individual bodies. By "social structure," we mean durable patterned arrangements — from language barriers and social hierarchies to policies, economic systems, and other institutions (such as judicial systems, and educational systems) — that produce and maintain social inequalities and health disparities, often along the lines of social categories such as race, class, gender, and sexuality. A structural analysis contextualizes health-related behaviors by charting how the design of complex social institutions (such as hospitals, insurance plans, prisons, regulatory agencies, and religious institutions) as well as powerful forces guiding everyday social life (such as racism, gender bias, social networks, neighborhood segregation, and language) determine what happens to individual bodies.[14]

Structural analysis also extends to tools clinicians can use to approach their patients' social worlds beyond the narrow typology of cultural differences. U.S. medical schools, nursing schools, and residency programs now require training in "cultural competency," which aims to help clinicians translate between biomedical forms of knowledge and alternative approaches to understanding health and sickness. This approach can inculcate humility in clinicians functioning in a pluralistic world in which formal medical care is only one of many ways in which patients seek to regain health. Yet cultural competency and cultural humility capture only the fraction of the social determinants of health that stem from patients' mental constructs and the meanings they ascribe to things.[15,16] To focus on meaning without also attending to occupational and environmental exposures, access to health care, affordability of medications, and linguistic barriers, among other factors, is to overestimate the role of individual choices in producing health, disease, and treatment outcomes.[17,18] It may never be possible for physicians to become fully competent in as slippery a concept as "culture." But adding a basic competency in understanding how social forces affect our patients' health can help physicians to find more opportunities to intervene on their behalf.

Johan Galtung introduced the term "structural violence" in 1969 to explain the process by which social institutions caused harm to individuals or groups by preventing them from reaching their potential or by depriving them of the resources they need to survive.[19] Scholars, including one of us (P.E.F.), Nancy Scheper-Hughes, and others have subsequently expanded the use of this concept in medical anthropology, medical sociology, social

epidemiology, and historical analysis to illustrate its applicability in understanding the differential health outcomes of individuals and populations.

Structural violence provides a key frame for understanding the disproportionate harm to certain groups of people inflicted by large-scale social forces, such as resource distribution or hierarchies of race, gender, or language. A related concept, "structural vulnerability," describes the increased risk — for certain diseases, lack of access to care, or poor outcomes — caused by one's location in the social world as defined by the intersection of these large-scale forces.[20]

To date, however, the clinical literature on structural violence and structural vulnerability has had limited impact on practice, for at least two reasons. First, much relevant social science work is perceived as negative critique that doesn't provide clinicians with positive tools for understanding and intervening in the mechanisms by which structures harm patients. This series is designed to resolve this problem by teaching core concepts in social medicine and offering steps for addressing specific problems that arise in clinical practice. How do health systems participate in the creation of racial disparities in health, and what can be done to prevent and counteract that dynamic?[21] How can a clinician work against harmful policies and administrative restrictions imposed by, for example, discriminatory disability determinations, regulation of particular medications, or unequal access to health care and social services? How does the medical world deem certain problems medical or nonmedical, and what effect does this categorization have on patient outcomes? These questions point to core concepts in social medicine that can be given concrete form in responses to clinical cases.

Second, some clinicians and trainees may find structural analysis somewhat overwhelming on first encounter. Unlike resectable lesions or targetable drug receptors, structural social forces may seem too large and entrenched to be altered — a perception that reinforces the assumption that they lie outside the purview of clinical medicine. Each case in this series illustrates social analysis as an integral part of clinicians' understanding of disease and efforts to improve their patients' health. Many of the articles present unfamiliar skills, such as an approach to developing a "structural differential" for a particular problem — one piece of a proposed "structural competency" for medical education.[17] More specifically, each case discusses clinical implications — steps by which a social medicine concept can be applied to everyday problems. Research indicates that clinicians may be more empathetic when they learn about the structural factors affecting their patients' health. They may also be less overwhelmed when they learn about historical and contemporary examples of actions that can alter those factors.[22]

Clinicians and health systems can use social medicine concepts to understand and respond to health problems, not only with individual patients in and beyond the clinical encounter, but also by working to change the social structures that cause ill health and disease in the first place.[17] Historically, members of groups whose disproportionate disease burden stems from social inequities have acted collectively on their own behalf and collaborated with clinicians to reinvent health care interventions and systems — from the community health movement of the 1960s that led to federally funded community health centers offering economic development and education programs in low-income areas[23] to the women's health movement of the 1970s[24] and AIDS activism of the 1980s[25] that fostered peer health education, harm-reduction interventions, and community participation in clinical research design. A core component of social medicine, as these cases acknowledge, is collaboration with communities that have their own expertise and resourcefulness in resisting the structural violence that affects them, an approach we might call "structural humility."

SOCIALIZING THE CASE STUDY

Case studies have long been essential to medical education[26]; the genre we know as the clinico-pathological conference was introduced by the *Journal* thanks to clinical pathologist Richard C. Cabot. From the first publication of the Case Records of the Massachusetts General Hospital, Cabot advocated for cases as the best way to practice processing information as it unfolds in real clinical encounters. The case subsequently developed into a key way that clinicians learn and reinforce the process of converting subjective information (history) into objective signs (physical exam and studies) to pinpoint internal pathologic

processes cleanly demarcated from alternative explanations. These cases typically began with the patient's voice but ended with the patient's body speaking truths about the nature of disease. Yet Cabot also devoted his career to addressing the social roots of disease. In 1905, he created one of the first positions in the world for a clinical social worker, paid out of his personal salary, and he campaigned vigorously for socialized medicine as an ardent supporter of universal health care.[27]

The goal of Case Studies in Social Medicine is to reunite these two intellectual traditions: the case study as a mode of teaching elements of diagnosis, therapeutics, and prognosis and the exploration of and response to the social forces affecting people's health. The clinical scenarios that will be presented hinge on social forces as much as on natural progression of diseases or twists of therapeutic decision making, demonstrating the inseparability of these forces from the logic of clinical medicine.

Social structures, important forces in determining health, are integral to the problems clinicians face every day. We are convinced that it is time to develop approaches to addressing those forces, allowing clinicians to participate in building more effective health systems and a healthier society.

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