

The NEW ENGLAND JOURNAL of MEDICINE



CASE STUDIES IN SOCIAL MEDICINE

The Structural Violence of Hyperincarceration — A 44-Year-Old Man with Back Pain

George Karandinos, B.A., and Philippe Bourgois, Ph.D.



r. M., an uninsured, 44-year-old Puerto Rican man with chronic back pain, diabetes, hypertension, asthma, and a history of incarceration presented to a free clinic with acute exacerbation of back pain triggered by carrying heavy loads of trash at work. A premedical student acting as his health care advocate accompanied him.

Mr. M. was hesitant to seek health care because he had no health insurance and mistrusted institutions as a result of his extensive negative experiences with the criminal justice system. He was visibly nervous in the unfamiliar institutional environment of the clinic, which had no Latino staff and was located in a middle-class neighborhood far from his home.

The advocate reassured him in Spanish that the doctor was trustworthy and urged him to speak frankly about his health problems, including his challenges in obtaining medication. Embarrassed, Mr. M. reported that during recent back-pain exacerbations he occasionally resorted to purchasing one or two 5-mg oxycodone tablets in the open-air drug market operating on the inner-city block where he lived. The physician gave Mr. M. ibuprofen and a prescription for five 5-mg oxycodone tablets, enrolled him in the clinic's diabetes and hypertension programs, and scheduled a follow-up visit.

Mr. M. never filled the prescription and did not return to the clinic, despite repeated entreaties by the advocate both in person and over the phone. Mr.



M.'s pain had eased, and he claimed to be managing his diabetes, hypertension, and asthma by splitting medication with insured family members. To stretch

their supply, they rationed their doses for use only on the days when they "felt symptoms." Finally, 8 months later, Mr. M. admitted that he had not dared fill his prescription or return to the clinic for fear of being rearrested after admitting to the doctor that he had purchased oxycodone illegally.

Background

Mr. M. — whom we met while conducting anthropologic fieldwork on HIV, violence, and substance abuse in a poor, segregated Puerto Rican neighborhood in Philadelphia¹ — had sold drugs as an adolescent before being incarcerated for 10 years for manslaughter. In prison, he witnessed rape, fought off predatory inmates with homemade shanks, survived a riot, and was beaten by guards. When he was treated for injuries in the prison clinic, he perceived the medical staff as hostile and aligned with prison authorities.

In 2000, Mr. M. was released with 5 years of parole. Determined to stay free, he stopped all substance use and resisted temptations to support his family by reentering his neighborhood's narcotics trade. He obtained a parttime job cleaning office buildings downtown for minimum wage to obtain the tax-declared paycheck required by his parole officer. Mr. M.'s work schedule, however, occasionally made him a few minutes late for his appointments, and his parole officer repeatedly threatened to reincarcerate him for the minor administrative infraction of tardiness despite Mr. M.'s otherwise conscientious legal adherence to the terms of his supervision. A 1972 U.S. Supreme Court case, Morrissey v. Brewer, reduced the rights of parolees and granted parole officers the discretionary authority to reincarcerate supervisees on such technicalities without a trial or access to legal counsel

For 4 years, Mr. M. qualified for health benefits through a second job as an industrial welder, until he injured his back moving equipment and was subsequently laid off as part of Philadelphia's ongoing industrial downsizing. His criminal record disqualified him from better-paid service-sector employment, and his part-time income disqualified him from Medicaid because Pennsylvania initially declined to expand eligibility under the Affordable Care Act (ACA).

Social Analysis Concept: Structural Violence and Hyperincarceration

Structural violence is the infliction of physical harm by social, political, institutional, and economic systems that produce social inequality and expose specific populations to higher risks for disease, injury, and death (see box).

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

The concept, as defined by Farmer et al., draws attention to largescale social forces such as poverty, racism, gender inequality, and harmful public policies that

"often determine who falls ill and who has access to care."2 In medicine, the term "violence" denotes individual actions that cause trauma or injury; implicit in the notion of "structural violence" is a parallel between such immediately visible, direct, interpersonal violence and the ways in which social, political, institutional, and economic structures cause damage by producing unequal exposure to risk and disparities in access to resources and care. Because this violence results from durable systems of inequality rather than from isolated actions of individuals, it manifests in statistically observable patterns of harm to identifiable population groups that link their structural vulnerability to death and disability.3

The disproportionate incarceration of African Americans, Latinos, and Native Americans represents a form of structural violence that social scientists call "hyperincarceration." Overall, the United States imprisons greater numbers of people and a higher proportion of its population than any other country. An estimated 70 million U.S. citizens have criminal records as a result of the phenomenon often referred to as

"mass incarceration." The term hyperincarceration highlights more precisely that punitive criminal justice policies disproportionately target the poor and particular racial and ethnic minorities. For example, in Pennsylvania, African Americans, Latinos, and Native Americans have incarceration rates that are, respectively, nine times, five times, and three times that of whites. A growing epidemiologic literature documents negative health outcomes among formerly incarcerated populations, suggesting that hyperincarceration may cause health disparities. Nosrati et al., for example, calculate that between 2001 and 2014, deindustrialization and incarceration together reduced the lifespans of poor people in the United States by 2.5 years.5

Incarceration harmed Mr. M.'s health directly and also alienated him from health care providers. Multiple additional manifestations of structural violence further undermined his access to health care: declining industrial labor markets in the Rust Belt, prohibitions against hiring people with felony records, high dropout rates at inner-city high schools, and expensive health insurance.

Clinical Implications: Countering Hyperincarceration

Clinicians can intervene not only at the level of clinical care, but also as power brokers within health care systems and as advocates for policy change to reduce harm to patients caused by structural violence. Therapeutic alliances can also be improved if the uncontrolled medical conditions of patients like Mr. M. are recognized as the biologic manifestation ("embodiment") of structural

forces (e.g., hyperincarceration, precarious labor markets, discretionarily punitive criminal justice laws, and inadequate public health insurance) that systematically worsen health outcomes among

the inner-city poor, rather than the product of an individual patient's willful nonadherence. We suggest the following approaches for clinician engagement.

1. Health care organizations can design clinical services that counteract structural violence. Like most forms of structural violence, incarceration causes harm by typical mechanisms that can be identified and counteracted. For example, when people are released from prison, they begin an especially high-risk phase, as they enter an unstable social world that heightens their exposure to interpersonal violence, overdose, unemployment, food insecurity, homelessness, stigma, and lack of access to high-quality medical care. Furthermore, as in Mr. M.'s case, extended experience with punitive institutions (such as prison and parole) can result in reflexive mistrust of wellintentioned providers of medical or social services. Culturally appropriate, welcoming systems that provide a bridge to communitybased care after incarceration can

counteract many of the dangers of this reentry phase. One model is the Transitions Clinic Network, which meets with released prisoners to schedule appointments immediately on their reentry into society and pairs them with community health workers with a history of incarceration, who integrate patients into a fuller set of social services, including employment-support programs.

2. Clinicians can leverage their status within health care systems to implement structural interventions. The barriers to care that Mr. M. faced stemmed largely from his inability to obtain stable, high-quality employment.For instance, people with criminal records are often disqualified by law and institutional policy from employment in the health care sector, which in many cities, including Philadelphia, is the largest source of jobs. Meanwhile, hospitals and clinics struggle to fill entry-level positions as the demand for medical services grows. In notable instances — such as the partnership between Johns Hopkins and local job-training and community-reentry programs — health care systems have invested in training and employing formerly incarcerated people. Physicians can use their status within health care institutions³ to advocate for interventions that target upstream structures to improve patient health.

3. Physicians can advocate for policy change. Before Pennsylvania finally expanded its Medicaid program, Mr. M. fell into a health care coverage gap. An advocacy movement involving clinicians could have added pressure on the state legislature to fully expand Medicaid earlier. Physicians' credibility could be used to leverage formal statements by health care institutions favoring policy changes that would benefit vulnerable patients.3 Citing the effects of hyperincarceration and other structural violence on health disparities, clinicians can effectively engage in efforts to reform nationwide criminal justice and other policies.

Case Follow-up

After Pennsylvania expanded Medicaid in 2015, Mr. M. had reliable access to care for the first time since he left prison. His vision was already failing, however, and he had decreased sensation in his feet. Mr. M. now visits a primary care physician regularly and has lost more than 30 pounds in the past 2 years. But his economic situation remains precarious, undermining his ability to attend medical visits. Furthermore, Republican efforts to dismantle the ACA and restrict

An audio interview with Dr. Karandinos is available at NEJM.org

Medicaid and Medicare could threaten health care access for Mr. M. and millions of other low-income Americans.

Mr. M.'s case demonstrates the urgent need to address the health challenges faced by millions of people after three decades of systematic hyperincarceration. Jails discharge approximately 9 million inmates each year. During 2015 alone, more than 640,000 people were released from prisons and federal facilities, and according to the Bureau of Justice Statistics, more than 2 million remained incarcerated in state or federal prisons or local jails and nearly 4.7 million were subject to punitive monitoring in the form of parole or probation. Physicians' scientific credibility and caregiving mission contribute to their potential to lead efforts to mobilize local institutional resources, promote national policy change, and improve care for this vulnerable population. Recognizing the health consequences of hyperincarceration and other forms of structural violence can be a first step toward improving population-level health outcomes.

The editors of the Case Studies in Social Medicine are Scott D. Stonington, M.D., Ph.D., Seth M. Holmes, Ph.D., M.D., Helena Hansen, M.D., Ph.D., Jeremy A. Greene, M.D., Ph.D., Keith A. Wailoo, Ph.D., Debra

Malina, Ph.D., Stephen Morrissey, Ph.D., Paul E. Farmer, M.D., Ph.D., and Michael G. Marmot, M.B., B.S., Ph.D.

The initial and other identifying characteristics of the patient have been changed to protect his privacy.

Disclosure forms provided by the authors are available at NEJM.org.

From Harvard Medical School, Boston, and the Department of Anthropology, Harvard University, Cambridge — both in Massachusetts (G.K.); and the Department of Anthropology, the Center for Social Medicine, and the Semel Institute of Neuroscience, University of California, Los Angeles, Los Angeles (P.B.).

- 1. Karandinos G, Hart LK, Castrillo FM, Bourgois P. The moral economy of violence in the US inner city. Curr Anthropol 2014;55:
- 2. Farmer PE, Nizeve B, Stulac S, Keshavjee S. Structural violence and clinical medicine. PLoS Med 2006:3(10):e449.
- 3. Bourgois P, Holmes SM, Sue K, Quesada
- J. Structural vulnerability: operationalizing the concept to address health dispari-

ties in clinical care. Acad Med 2017;92:299-

4. Wacquant L. Punishing the poor: the neoliberal government of social insecurity. Durham, NC: Duke University Press, 2009. 5. Nosrati E, Ash M, Marmot M, McKee M, King LP. The association between income and life expectancy revisited: deindustrialization, incarceration and the widening health gap. Int J Epidemiol 2017 November 22 (Epub ahead of print).

DOI: 10.1056/NEJMp1811542 Copyright © 2019 Massachusetts Medical Society.

Climate Change — A Health Emergency

Caren G. Solomon, M.D., M.P.H., and Regina C. LaRocque, M.D., M.P.H.

Related article, page 263

s the Camp wildfire spread rapidly in California in early November 2018, the University of California, Davis, Burn Center received a call that nearby Feather City Hospital was on fire and patients were being urgently transferred. That, recalls David Greenhalgh, professor and chief of the Burn Division, UC Davis Department of Surgery, was when the chaos began. Within the next 24 hours, with fires raging, 12 new burn patients were rushed to his facility (which usually admits 1 or 2 patients in a given day). The most severely injured man had burns over nearly half his body, with exposed bone and tendon; a month later, he and two other patients remained hospitalized, facing repeated surgeries. And these were the patients fortunate enough to have made it to the hospital. At least 85 people died and nearly 14,000 homes were lost in what is the largest California wildfire on record — a record that unfortunately is likely to be short-lived.

In this issue of the Journal, Haines and Ebi summarize the devastating effects that the global burning of fossil fuels is having on our planet (pages 263-273). Disruption of our climate system, once a theoretical concern, is now occurring in plain view - with a growing human toll brought by powerful storms, flooding, droughts, wildfires, and rising numbers of insectborne diseases. Psychological stress, political instability, forced migration, and conflict are other unsettling consequences. In addition, particulate air pollutants released by burning fossil fuels are shortening human life in many regions of the world. These effects of climate disruption are fundamentally health issues, and they pose existential risks to all of us. People who are sick or poor will suffer the most.

As physicians, we have a special responsibility to safeguard health and alleviate suffering. Working to rapidly curtail greenhouse gas emissions is now essential to our healing mission. The United Nations Intergovernmental Panel on Climate Change concluded that we need to cut global greenhouse gas emissions in half by 2030 and entirely by 2040 to avoid the most catastrophic effects of climate change.1 Yet these emissions hit a record high in 2018. Rapid but equitable changes in energy, transportation, and other economic sectors are needed if we are even to begin to meet the requisite emissions-reduction targets. Tackling this challenge may feel overwhelming, but physicians are well placed and, we believe, morally bound to take a lead role in confronting climate change with the urgency that it demands.

Individual lifestyle actions (e.g., walking or cycling rather than driving, eating less meat, reducing food waste, and conserving energy) are the easiest for us to undertake, offer many benefits for personal wellness, and allow us to model health-promoting behaviors as we reduce our environmental footprint. But individual actions are far from enough to address the challenge we collectively face. The financial interests of organizations vested in the fossil fuel industry, a federal administration that disavows climate science and its own respon-