

# Virtual Mentor

American Medical Association Journal of Ethics  
September 2014, Volume 16, Number 9: 674-690.

## FROM VIRTUAL MENTOR SPECIAL CONTRIBUTORS

### Structural Competency Meets Structural Racism: Race, Politics, and the Structure of Medical Knowledge

Jonathan M. Metzl, MD, PhD, and Dorothy E. Roberts, JD

Physicians in the United States have long been trained to assess race and ethnicity in the context of clinical interactions. Medical students learn to identify how their patients' "demographic and cultural factors" influence their health behaviors [1]. Interns and residents receive "cultural competency" training to help them communicate with persons of differing "ethnic" backgrounds [2]. And clinicians are taught to observe the races of their patients and to dictate these observations into medical records—"Mr. Smith is a 45-year-old African American man"—as a matter of course [3].

To be sure, attention to matters of diversity in clinical settings has been shown to affect a number of factors central to effective diagnosis and treatment [4]. Yet an emerging educational movement challenges the basic premise that having a culturally competent or sensitive clinician reduces patients' overall experience of stigma or improves health outcomes. This movement, called "structural competency" [5], contends that many health-related factors previously attributed to culture or ethnicity also represent the downstream consequences of decisions about larger structural contexts, including health care and food delivery systems, zoning laws, local politics, urban and rural infrastructures, structural racisms, or even the very definitions of illness and health. Locating medical approaches to racial diversity solely in the bodies, backgrounds, or attitudes of patients and doctors, therefore, leaves practitioners unprepared to address the biological, socioeconomic, and racial impacts of upstream decisions on structural factors such as expanding health and wealth disparities [6].

In 1968, the US civil rights activist Stokely Carmichael famously assailed racial bias embedded, not in actions or beliefs of individuals, but in the functions of social structures and institutions. "I don't deal with the individual," he said. "I think it's a copout when people talk about the individual" [7]. Instead, speaking to a group of mental-health practitioners, Carmichael protested the silent racism of "established and respected forces in the society" that functioned above the level of individual perceptions or intentions and that worked to maintain the status quo through such structures as zoning laws, economic policies, welfare bureaucracies, school systems, criminal law enforcement, and courts. Institutionalized racism, he argued, "is less overt, far more subtle, less identifiable in terms of specific individuals committing the acts, but is no less destructive of human life" [7].

Attention to structure as an organizing principle in US medical education is particularly important at the current moment because the forces Carmichael described have become more pressing and recognizable. Indeed, US physicians have never known more about the ways in which the inequities of social and economic systems help to shape the material realities of their patients' lives. Epidemiologists tie the daily experience of racial discrimination to damaging levels of chronic stress, illuminating how racism is "embodied" [8, 9]. Neuroscientists show neuronal linkages of social exclusion and poverty with hampered brain functioning [10, 11]. Epigenetic researchers explain, at the level of gene methylation, how high-stress, resource-poor environments can produce risk factors for disease that may last for generations if not interrupted by social interventions [12]. And economists prove that people with low incomes can reduce their rates of diabetes and major depression by moving to safer, more affluent neighborhoods [13]. These are but a few examples of the types of research that doctors can now access to understand how disadvantages stemming from social and economic infrastructures can impair health.

On the other hand, evidence also suggests that inattention to these forces has caused a crisis of competence for which American medical education is ill-prepared. Eighty-five (85) percent of primary care providers and pediatricians polled in a 2011 Robert Wood Johnson survey agreed with the statement that "unmet social needs are leading directly to worse health for all Americans" while at the same time voicing concern that they did not "feel confident in their capacity to meet their patients' social needs," and that their failure to do so "impedes their ability to provide care" [14].

Building on scholarly work from fields including law [15], public health [16-18], history [19, 20], and sociology [21], structural competency addresses these "social needs"—and their links to race and racism [22]—by increasing clinician recognition of the health-related influences of institutions, markets, and health care delivery systems. This, in turn, shapes doctors' diagnostic knowledge, influencing what happens in the clinic in profound ways.

This essay uses three historical case studies to illustrate how extraclinical stigma, socioeconomic factors, and politics can shape diagnostic and treatment disparities. We then explore how attention to structure helps explain the role of race in clinical encounters. Finally, we draw some lessons for medical education that take account of structure.

### **Case 1: The Overdiagnosis of Schizophrenia**

An epidemic of insanity afflicted African American men in the 1960s-1980s. Or so it seemed to mental-health researchers at the time. In 1969, a series of National Institute of Mental Health studies found that "blacks" suffered from schizophrenia 65 percent more frequently than did "whites." In 1973, a series of studies in the *Archives of General Psychiatry* discovered that African American patients were "significantly more likely" than white patients to receive schizophrenia diagnoses and "significantly less likely" than white patients to receive diagnoses for other mental illnesses such as depression or bipolar disorder [23-25].

Such findings flew in the face of standard psychiatric understanding that most major psychiatric disorders should occur equally among all persons, regardless of race. And yet the problem worsened: researchers in the 1970s and 1980s discovered that doctors diagnosed the paranoid subtype of schizophrenia in African American men five to seven times more often than in white men [26, 27].

At the time, this overdiagnosis appeared to be a problem caused by doctor-patient miscommunication or mistrust. Clinical educators thus began a series of cross-cultural initiatives meant to eliminate physician bias, under the assumption that such bias was the prevailing cause of the diagnostic disparities. Yet these initiatives were largely unsuccessful [28]. Why?

We now recognize that the misdiagnosis of schizophrenia resulted, not just from clinical bias, but from structural shifts in psychiatric definitions of the illness. For instance, prior to the 1960s, psychiatry defined schizophrenia as a psychological “reaction” to a splitting of the basic functions of personality. In 1952, the first edition of what later became the *Diagnostic and Statistical Manual (DSM)* described “Schizophrenic Reaction” as “emotional disharmony, unpredictable disturbances in stream of thought,” and “regressive behavior” [29]. As a result of this framing, medical authors frequently described schizophrenia as a condition that afflicted middle-class, white housewives [30]. Until that time, mainstream American newspapers had described schizophrenia as an illness that occurred “in the seclusive, sensitive persons” [31, 32] or told of white “schizophrenic poets” who produced brilliant rhymes [33]. Popular magazines wrote stories about unhappily married, middle-class, white housewives whose “schizophrenic mood swings” were suggestive of “Doctor Jekyll and Mrs. Hyde” [34-38].

But in 1968, the second edition of the *DSM* recast paranoid schizophrenia as a condition of “hostility,” “aggression,” and projected anger, and included text explaining that, “the patient’s attitude is frequently hostile and aggressive, and his behavior tends to be consistent with his delusions” [39]. As Metzler has previously shown, the addition of concepts such as aggression and hostility had profound racial implications [20]. In the aftermath of the *DSM-II*, clinician overdiagnosis of schizophrenia in African American men rose significantly [40]. Published psychiatric research articles and case studies began to disproportionately describe “schizophrenic” African American men using descriptors such as *aggressive*, *hostile*, or *violent* (see figure 1).

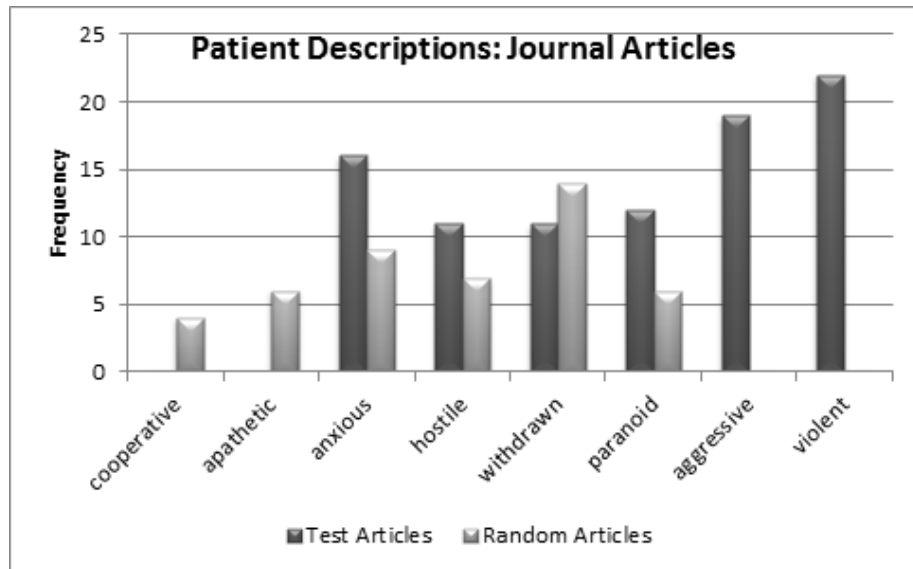


Figure 1. Adjectives used to describe patients with schizophrenia in psychiatric journals, 1960-1979 [20]. Test articles=those in which race was identified as “Negro” or “black.” Random articles=those in which race was unspecified and assumed white. N=341.

Advertisements for antipsychotic medications published in leading US journals made similar assumptions [30]. An advertisement for the antipsychotic medication Haldol that appeared in the May 1974 *Archives of General Psychiatry* (see figure 2) shows the troubling, distorted image of an angry African American man below the text, “Assaultive and belligerent? Cooperation often begins with Haldol” [41].

Figure 2. 1974 Haldol advertisement, *Archives of General Psychiatry* [41].

These and other examples suggest that the overdiagnosis of schizophrenia in African American men in the 1960s and 1970s resulted neither primarily from individual doctors' biases nor from the actions or symptoms of patients. Rather, it reflected a series of structural shifts in the framing of mental illness that incorporated racially and politically inflected terminology.

### **Case 2: The Unhealthy Diet**

For much of the twentieth century, medical practitioners defined patients who did not follow medical advice about diet or lifestyle as “noncompliant.” This rhetoric often coded such patients as refusing for individual or cultural reasons to take steps necessary to improve their health or longevity. In the US, the descriptor of noncompliance frequently applied to persons of lower socioeconomic status or persons from minority groups [42]. For instance in the mid-1980s, studies tended to define Native Americans with type 2 diabetes as being “diet noncompliant” [43]. Through the early 2000s, dieticians listed “the African-American diet” as a risk factor for the disease [44]. Over this same time period, even well-intentioned public-health efforts focused on altering minority “attitudes” and practices regarding such matters such as diet, exercise, and smoking [45, 46].

No doubt individual choice and cultural influence are important in the development of health-promoting behaviors. Recently, however, the impact of socioeconomic and structural factors on such choices has become more apparent. For instance, it has become increasingly clear that maintenance of a “healthy” diet is rendered exceedingly difficult for persons who live in low-income or underserved areas, not because of racial or ethnic attitudes, but because these areas are dramatically lacking in the services that make a healthy diet possible in the first place. Sociologists [47] detail how, since certain impoverished neighborhoods in the US contain no grocery stores and are inaccessible by public transportation, residents of these neighborhoods must walk up to three hours to purchase fresh produce—and how such a commute is rendered exponentially more challenging by the absence of sidewalks [48].

Residents of low-income areas are at the same time targets of marketing and product manipulations. The *Wall Street Journal* detailed how junk-food companies aggressively market discounted bags of potato chips to “inner-city African Americans and Latinos” [49]. Meanwhile, a *New York Times* investigative report uncovered how cigarette companies upped the nicotine content of cigarettes [50] and public-health scholars describe how food corporations manipulate unhealthy products to enhance their addictive appeal [51].

Together, such findings suggest that attributes previously defined as “cultural” reflect the influences and actions, not just of persons, cultures, or attitudes, but also of the larger social and economic forces that influence diet, such as the distribution of resources, the presence or absence of food choices, targeted marketing, and the condition of infrastructure. Interventions that locate compliance or noncompliance in

clinic-level decisions risk overlooking, or indeed misdiagnosing, the impact of such structural forces on individual or cultural morbidities and mortalities.

### **Case 3: The Punitive Treatment of Women Who Use Drugs During Pregnancy**

In fall 1989, the Medical University of South Carolina (MUSC), a state hospital serving an indigent minority population, began collaborating with Charleston police and prosecutors to address a perceived increase in babies testing positive for drugs [52]. Hospital and law enforcement officials instituted what was called the “Interagency Policy on Cocaine Abuse in Pregnancy,” which allowed for nonconsensual drug testing of pregnant patients, reporting of results to police, and arrest of patients who tested positive on charges of child neglect or distribution of drugs to a minor. Lori Griffin, a patient who went to MUSC for prenatal care, was arrested pursuant to the Interagency Policy when she was eight months pregnant and locked up in the decrepit Charleston County Jail. She was transported weekly from the jail to the hospital for prenatal care in handcuffs and leg shackles. Three weeks after her arrest, she went into labor and was driven, still in handcuffs and shackles, to the hospital. Once at the hospital, she was handcuffed to a bed during the entire delivery [52].

The Interagency Policy resulted in the arrests of more than 40 patients [53], all but one of them black women. Police arrested some patients within days or even hours of giving birth and transferred them to jail in handcuffs and leg shackles. The Interagency Policy was halted five years after its inception, when the National Institutes of Health determined that it constituted an experiment on human subjects, which the hospital had been conducting without federally mandated protections for the women it was testing [54]. In 2001, the US Supreme Court ruled that the policy violated the women’s constitutional right against warrantless searches [55]. Between 1985 and 1995, at least 200 women in 30 states were charged with maternal drug use, the vast majority of whom were poor and black and addicted to crack cocaine [56].

*A health problem becomes a crime.* How did a health problem—substance use during pregnancy—become a crime? And how did doctors become complicit both in portraying substance use by pregnant patients as a criminal offense and in facilitating their arrest and incarceration? As Roberts has previously shown, doctors made decisions about their pregnant patients within structure-level shifts in cultural representations of maternal drug use, generated by national drug policy, longstanding racial stereotypes, and contemporary media accounts [57]. The identification of a “crack epidemic” in the 1980s coincided with a 1988 study by the National Association for Perinatal Addiction Research and Education that found that 11 percent of newborns in 36 hospitals surveyed were affected by their mothers’ illegal drug use during pregnancy [58]. Policymakers and the media located both problems in black communities and created a panic over gestational crack-cocaine exposure [59].

The diagnosis of prenatal substance use as a crime worthy of punishment depended on the race of the patients and a long-standing, disparaging mythology about black mothers. Attitudes originating in slavery painted black mothers as reckless reproducers whose degeneracy and neglect made them bad mothers [60-63]. In the 1960s, the stereotypical matriarch was held responsible for the disintegration of the black family, and the Reagan Administration promoted the image of the “welfare queen” who bred children just to fatten her welfare check and then wasted the money recklessly on herself.

The pregnant crack addict was added to the iconography of depraved black maternity during the so-called crack epidemic that began in the late 1980s. The media depicted mothers addicted to crack cocaine as careless and selfish women who put their love for drugs above concern for their children [64], as indicated by headlines like 1989’s “Crack Babies: The Worst Threat is Mom Herself” [65].

In other words, they were portrayed as the exact opposite of good mothers—“promiscuous, uncaring, and self-indulgent” [66]. The US media also created the so-called “crack baby”—typically assumed to be black, although use of crack and other illegal drugs cut across racial categories—who was predicted to suffer not only permanent physical damage but to become a social pariah [59, 67]. In fact, medical research has since discredited the stereotypical portrayal of the “crack baby” as scientifically unfounded; researchers simply cannot determine authoritatively which of the many hazards poor black babies confront caused outcomes attributed in prior studies to drugs or negligent mothers [68]. Moreover, recent studies found little difference between poor children who were and were not exposed to crack cocaine in outcomes such as cognitive and language development, pointing to poverty as causing more serious harm [69]. The US media exaggerated the extent and nature of harm crack caused prenatally and erroneously suggested that the problem of maternal drug use was confined to the black community.

Medical professionals also contributed to a false portrait of pregnant crack addicts and their babies. The *Wall Street Journal* quoted a nurse as saying that “the most remarkable and hideous aspect of crack cocaine seems to be the undermining of the maternal instinct” [70]. Medical journals focused one-sided attention on studies showing detrimental outcomes from cocaine exposure. They published four times as many papers concerning prenatal cocaine exposure as had been published concerning the prenatal effects of heroin a decade earlier [71].

The caricature of the crack baby—trembling in a tiny hospital bed, permanently brain damaged, and on his way to becoming a criminal—supported a punitive approach to the problem of prenatal substance abuse. Legislators, policymakers, and prosecutors transformed a public health problem that affected all racial, ethnic, and socioeconomic groups into a crime resulting from black mothers’ depravity that warranted harsh punishment.

*Structural discrimination.* In addition to the structural forces that created the crime of gestational drug exposure, a second structural context helped to determine doctors' decisions about their pregnant patients. Testing for and reporting of positive infant toxicologies were performed almost exclusively in public hospitals, like MUSC, that served poor minority communities. Private hospitals were less likely to have drug screening protocols and rarely reported their patients to the police. Several studies showed that health care professionals were far more likely to report black women who used drugs during pregnancy than their white patients [72]. A 1990 study in Pinellas County, Florida, for example, discovered that doctors were ten times more likely to report black women than white women to government authorities, despite similar rates of substance use [73].

The racially disparate treatment of prenatal substance use, in turn, helped perpetuate structural inequities. Black mothers' crack cocaine use became a primary explanation for high rates of black infant mortality, a trend long predating the crack epidemic. Identifying “bad” mothering as the cause of deplorable social conditions diverts attention away from the structural causes of health inequities and the need for social change.

### **The Clinical Implications of Addressing Race from a Structural Perspective**

These brief case examples illustrate the complex ways that seemingly clinically relevant “cultural” characteristics and attitudes also reflect structural inequities, medical politics, legal codes, invisible discrimination, and socioeconomic disparities. Black men who appeared schizophrenic to medical practitioners did so in part because of the framing of new diagnostic codes. Lower-income persons who “refused” to eat well or exercise lived in neighborhoods without grocery stores or sidewalks. Black women who seemed to be uniquely harming their children by using crack cocaine while pregnant were victims of racial stereotyping, as well as of a selection bias in which decisions about which patients were reported to law enforcement depended on the racial and economic segregation of prenatal care. In this sense, approaches that attempt to address issues—such as the misdiagnosis of schizophrenia in black men, perceived diet “noncompliance” in minority populations, or the punishment of “crack mothers”—through a heuristic aimed solely at enhancing cross-cultural communication between doctors and patients, though surely well intentioned, will overlook the potentially pathologizing impact of structural factors set in motion long before patients or doctors enter exam rooms.

Structural factors impact majority populations as well as minority ones, and structures of privilege or opulence also influence expressions of illness and health. For instance, in the United States, research suggests that pediatricians disproportionately overdiagnose ADHD in white school-aged children [74]. Until recently, medical researchers in many global locales assumed, wrongly, that eating disorders afflicted only affluent persons [75].



Yet of late, medicine and medical education have struggled most with addressing ways that structural forces impact and disadvantage communities of color. As sociologist Hannah Bradby rightly explains it,

hypothesizing mechanisms that include the micro-processes of interactions between patients and professionals and the macro-processes of population-level inequalities is a missing step in our reasoning at present.... [A]s long as we see the solution to racism lying only in educating the individual, we fail to address the complexity of racism and risk alienating patients and physicians alike [76].

### **Imparting Structural Awareness**

It is of course the case that many lessons of history are learned only in retrospect. Interventions that arise out of good intentions, such as diagnostic criteria, dietary guidelines, or public-health safety precautions, are only later revealed to enhance structural disparities.

So too, the notion that health or stigma might be addressed by structural engagement has long functioned as common sense in many parts of the world [77, 78]. In the United States, however, an ideological framework centered on “individual choice” and “individual responsibility” often makes attempts to improve health infrastructures or health/race/wealth inequities more difficult [79].

Working to address this inadequacy, US medical and public health schools have recently begun a series of initiatives that attempt to make students aware of the structural components of race, socioeconomic, illness, and health. For instance, Hatzenbuehler, Link, and other public-health scholars [16] initiated a series of projects that explore the relationships between “structural stigma and health.” They research how “macro-social” forms of stigma—termed “*structural stigma*”—work invisibly to disadvantage stigmatized persons. Quesada, Hart, and Bourgois [80] use anthropological methods to analyze “structural vulnerability” to help physicians identify how political, economic, racial, and gendered social structures or hierarchies produce vulnerability for particular groups of patients.

Metzl’s and Hansen’s formulation of structural competency [5] similarly attempts to elucidate the relationship between the microprocesses of interactions between patients and doctors and the macroprocesses of population-level inequalities. Its interdisciplinary theoretical model emerged from a historical study of race and mental illness, brought to bear on medical education more broadly. The common aim of these initiatives is to develop more nuanced ways of identifying forces that influence health outcomes beyond the level of individual behavior and to systematically train health care professionals to take this larger structural context into account when treating patients.

## Concrete Ways for Health Care Professionals to Become More Structurally Competent

Specific steps include:

1. *Be skeptical of race-based differences in diagnosis.* Findings such as the overdiagnosis of schizophrenia in African-American men [20] or of neurologic syndromes in Latin American populations [81] were initially held to result from biological differences among “ethnic” groups, only to later be discovered to have social or structural etiologies [82, 83].
2. *Create alliances between doctors and other professionals who serve the same vulnerable patients* to better address the multiple and entangled structural forces that affect patients’ health. Programs that partner doctors and lawyers, such as the Medical-Legal Partnership in Boston, integrate legal assistance as a core component of patient health care to address the complex needs of low-income patients and ensure that they can meet their basic needs of food, housing, employment, family stability, and safety [84]. Medical-legal partnerships also “go beyond curing an individual” by working to improve conditions, such as dangerous housing, for entire communities [85]. Similarly, clinician Mindy Fullilove partners doctors with community-based organizations, urban planners, and architects to “treat” cities that have been “fractured and wounded” by racial segregation, urban renewal, and redlining policies that discriminate against inner-city neighborhoods, with the ultimate aim of creating healthy spaces for use by all city residents [86].
3. *Be creative in addressing extraclinical structural problems.* For instance, when medical students in Tennessee observed that minority and low-income patients failed to comply with instructions to take their medications after meals because they had to travel more than two hours to reach the nearest grocery stores, they created a social enterprise program called Nashville Mobile Market that partnered with community organizations to deliver food and other items to impoverished areas in refrigerated food trucks [87]. So too, Health Leads, an organization founded by Rebecca Onie while she was an undergraduate at Harvard University, provides resource desks in the waiting rooms of urban health centers. At these sites, doctors “prescribe” a wide range of basic resources, like food assistance or heating fuel subsidies, which Health Leads’ volunteers “fill” [88].
4. *Learn from social science and humanities disciplines such as sociology, anthropology, history, and critical race theory to be more aware of the ways racism is embedded in institutions and operates apart from the blatant acts of individual bias.* As sociologist Eduardo Bonilla-Silva notes in his classic *Racism Without Racists*, seemingly colorblind policies that focus on individuals can leave in place the structural roots of racial inequality [21, 89].
5. *Draw lessons from other professions that have taken active steps toward addressing structural racism.* For instance, the National Association of Social

Workers convened a presidential task force subcommittee on institutional racism. The report produced by the subcommittee, “Institutional Racism and The Social Work Profession: A Call to Action,” urged social workers to develop a “knowledge base, theories, and values to understand relevant social issues,” understand historical notions of race and racism, and “look in the mirror” as a means of self-reflection [90]. The report ultimately called for a series of short- and long-term steps aimed at investigating and challenging structural racism, including “dialogue and inclusion/become partners and allies,” “interpersonal capacity and collaboration,” “social work organizations becoming antiracist entities,” and “focus on client, community, and social policy” [90]. Meanwhile, the Grassroots Policy Project produced a workbook for “Dismantling Structural Racism” that includes a guide to “Racial Justice Policy Development” [91]. And the city government of Seattle, Washington, approved funding for “technical assistance” to Seattle’s network of human services agencies to build their capacity to address structural racism [92].

6. *Speak up more vocally about structural issues that impact patients—politically.* In the current US political landscape, the loudest political voices that emerge from medicine are often unfortunately those that argue for dismantling many of the social-support networks and infrastructures that ameliorate the effects of structural stigma and racism [93]. Meanwhile, organizations such as Physicians for a National Health Program (PHNP) that speak out against the inadequacies of health insurance and advocate for single-payer national health insurance are frequently marginalized. Given this climate, the US vitally needs coherent voices from within medicine to argue for the medical and moral necessity of assuring equitable health and health care for everyone.

## **Conclusion**

In sum, the call for structural competency encourages US medicine to broaden its approach to matters of race and culture so that it might better address both individual-level doctor and patient characteristics as well as the “institutional” factors that Carmichael rightly described as potentially “destructive of human life” [7]. Structural competency and other emerging approaches theorize ways to reconceptualize social and economic influences on health so that they can be more effectively addressed by medical practitioners and professional organizations.

Promoting awareness of structural forces serves as a small first step toward recognition of the web of interpersonal networks, environmental factors and political/socioeconomic forces that surround clinical encounters. At the same time, it provides a means of encouraging new forms of coalition between knowledge about diseases and bodies and expert analysis of social systems in ways that, over time, might help put notions of structure at the center of US conceptualizations of the relationships between race, law, economics, illness, and health.

## **References**

1. Association of American Medical Colleges. Tool for Assessing Cultural Competence Training (TACCT). <https://www.aamc.org/initiatives/tacct>. Accessed July 17, 2014.
2. Pérez MA, Luquis RR. *Cultural Competence in Health Education and Health Promotion*. 2nd ed. New York, NY: Jossey Bass-Wiley; 2008.
3. Peek ME, Odoms-Young A, Quinn MT, Gorawara-Bhat R, Wilson SC, Chin MH. Race and shared decision-making: perspectives of African-Americans with diabetes. *Soc Sci Med*. 2010;71(1):1-9.
4. Stepanikova I, Zhang Q, Wieland D, Eleazer GP, Stewart T. Non-verbal communication between primary care physicians and older patients: how does race matter? *J Gen Intern Med*. 2012;27(5):576-581.
5. Metzl JM, Hansen H. Structural competency: theorizing a new medical engagement with stigma and inequality. *Soc Sci Med*. 2014;103:126-133.
6. Deaton A. Health, income, and inequality. *NBER Reporter*. Spring 2003. <http://www.nber.org/reporter/spring03/health.html>. Accessed July 17, 2014.
7. Carmichael S. Black Power, A critique of the system of international white supremacy & international capitalism. In: Cooper DG, ed. *The Dialectics of Liberation*. New York: Penguin; 1968:151.
8. Krieger N. Embodying inequality: a review of concepts, measures, and methods for studying health consequences of discrimination. *Int J Health Serv*. 1999;29(2):295-352.
9. Roberts D. *Fatal Invention: How Science, Politics, and Big Business Re-Crete Race in the Twenty-first Century*. New York: New Press; 2011:123-146.
10. Evans GW, Schamberg MA. Childhood poverty, chronic stress and adult working memory. *Proc Natl Acad Sci USA*. 2009;106(16):6545-6549.
11. Buwalda B, Kole MH, Veenema AH, et al. Long-term effects of social stress on brain and behavior: a focus on hippocampal functioning. *Neurosci Biobehav Rev*. 2005;29(1)83-97.
12. Johnstone SE, Baylin SB. Stress and the epigenetic landscape: a link to the pathobiology of human diseases? *Nature Rev Genetics*. 2010;11(11):806-812.
13. Ludwig J, Sanbonmatsu L, Gennetian L, et al. Neighborhoods, obesity, and diabetes--a randomized social experiment. *New Engl J Med*. 2011;365(16):1509-1519.
14. Goldstein D, Holmes J. 2011 Physicians' daily life report. <http://www.rwjf.org/content/dam/web-assets/2011/11/2011-physicians--daily-life-report>. Accessed July 17, 2014.
15. Roberts DE. *Killing the Black Body: Race, Reproduction, and the Meaning of Liberty*. New York: Vintage Books; 1999.
16. Hatzenbuehler ML, Link BG. Introduction to the special issue on structural stigma and health. *Soc Sci Med*. 2014;103:1-6.
17. Farmer P, Castro A. Understanding and addressing AIDS-related stigma: from anthropological theory to clinical practice in Haiti. *Am J Public Health*. 2005;95(1):53-59.
18. Farmer PE, Nizeye B, Stulac S, Keshavjee S. Structural violence and clinical medicine. *PLoS Med*. 2006;3(10)e449:1686-1691.

19. Raz M. *What's Wrong with the Poor?: Psychiatry, Race, and the War on Poverty*. Chapel Hill: University of North Carolina Press; 2013.
20. Metzl JM. *The Protest Psychosis: How Schizophrenia Became a Black Disease*. Boston: Beacon Press; 2009.
21. Bonilla-Silva E. Rethinking racism: toward a structural interpretation. *Am Sociol Rev*. 1997;62(3):465-480.
22. Bradby H. What do we mean by "racism"? Conceptualising the range of what we call racism in health care settings: a commentary on Peek et al. *Soc Sci Med*. 2010;71(1):10-12.
23. Taube C. *Admission Rates to State and County Mental Hospitals by Age, Sex, and Color, United States, 1969*. Washington, DC: Survey and Reports Section, Biometry Branch, National Institute of Mental Health; 1971;1-7. *Statistical Note* vol. 41.
24. Simon RJ, Fleiss JL, Gurland BJ, Stiller PR, Sharpe L. Depression and schizophrenia in black and white mental patients. *Arch Gen Psychiatr*. 1973;28(4):509-512.
25. Liss JL, Welner A, Robins E, Richardson M. Psychiatric symptoms in white and black inpatients. *Comprehens Psychiatr*. 1973;14(6):475-481.
26. Mukherjee S, Shukla S, Woodle J, Rosen AM, Olarte S. Misdiagnosis of schizophrenia in bipolar patients: a multiethnic comparison. *Am J Psychiatr*. 1983;140(12):1571-1574.
27. Delahanty JR, Ram L, Postrado T, Balis L, Green-Paden L, Dixon L. Differences in rates of depression in schizophrenia by race. *Schizophr Bull*. 2001;27(1):29-38.
28. Baker FM, Bell CC. Issues in the psychiatric treatment of African Americans. *Psychiatr Serv*. 1999;50(3):362-368.
29. American Psychiatric Association Committee on Nomenclature and Statistics. *Diagnostic and Statistical Manual: Mental Disorders (DSM-I)*. Washington: American Psychiatric Association Press; 1952:26-27.
30. Metzl JM. Mainstream anxieties about race in antipsychotic drug ads. *Virtual Mentor*. 2012;14(6):494-502.
31. Shyness is blamed in mental illness. *New York Times*. December 29, 1929:9.
32. Writes in defense of Lincoln's wife. *New York Times*. March 2, 1932:17.
33. Insanity ascribed to some authors: psychiatrists are told of "literary artists" who evidence schizophrenia: grandiloquence is sign. *New York Times*. May 15, 1935:23.
34. Cooley D. Don't tell them we're all going crazy. *Better Homes and Gardens*. July 1947:122-125.
35. Marsden A, Adams J. Are you likely to be a happily married woman? *Ladies' Home Journal*. March 1949:31.
36. Dual personality revealed by meter. *New York Times*. September 11, 1932:14.
37. Robbins M. Would you share your home with a mental case? The Tuckers did. *Colliers*. December 20, 1952:20-22.
38. Greer IM. Occupational therapy in mental hospitals. *Hygeia*. April 1939:341-344.

39. American Psychiatric Association Committee on Nomenclature and Statistics. *Diagnostic and Statistical Manual of Mental Disorders*. 2nd ed. Washington: APA Press; 1968:33-35.
40. Lane C. How schizophrenia became a black disease: an interview with Jonathan Metzl. *Psychology Today*. <http://www.psychologytoday.com/blog/side-effects/201005/how-schizophrenia-became-black-disease-interview-jonathan-metzl>. Accessed March 30, 2014.
41. Haldol advertisement. *Arch Gen Psychiatr*. 1974;31(5):732-733.
42. Parikh AR, Ramamoorthy KH, Kim BK, Holland BK, Houghton J. Fecal occult blood testing in a noncompliant inner city minority population: increased compliance and adherence to screening procedures without loss of test sensitivity using stool obtained at the time of in-office rectal examination. *Am J Gastroenterol*. 2001;96(6):1908-1913.
43. Broussard BA, Baas MA, Jackson MY. Reasons for diabetic diet noncompliance among Cherokee indians. *J Nutr Educ*. 1982;14(2):56-67.
44. Kulkarni KD. Food, culture, and diabetes in the United States. *Clin Diabetes*. 2004;22(4):190-192. <http://clinical.diabetesjournals.org/content/22/4/190.full>. Accessed July 22, 2014.
45. Gohdes D. Diet therapy for minority patients with diabetes. *Diabetes Care*. 1988;11(2):189-191.
46. American Lung Association. African Americans. <http://www.lung.org/stop-smoking/about-smoking/facts-figures/african-americans-and-tobacco.html>. Accessed March 30, 2014.
47. Rose DJ. Captive audience? Strategies for acquiring food in two Detroit neighborhoods. *Qualitative Health Res*. 2011;21(5):642-651.
48. Schulz A, Williams D, Israel B, et al. Unfair treatment, neighborhood effects, and mental health in the Detroit metropolitan area. *J Health Soc Behav*. 2000;41(3):314-332.
49. Terhune C. Lighten up. Pepsi sales force tries to push “healthier” snacks in inner city. *Wall Street Journal*. October 5, 2006:A1.
50. Raising nicotine doses, on the sly. *New York Times*. August 31, 2006. <http://www.nytimes.com/2006/08/31/opinion/31thu2.html>. Accessed July 17, 2014.
51. Freudenberg N. *Lethal but Legal: Corporations, Consumption, and Protecting Public Health*. New York: Oxford University Press; 2014.
52. Roberts, *Killing the Black Body*, 164-166.
53. Hilts PJ. Hospital sought out prenatal drug abuse. *New York Times*. January 21, 1994:A12.
54. Hilts PJ. Hospital put on probation over tests on poor women. *New York Times*. October 5, 1994:B9.
55. *Ferguson v. City of Charleston*, 532 US 67 (2001).
56. Roberts, *Killing the Black Body*, 153, 172.
57. Roberts, *Killing the Black Body*, 150-201.
58. Brody JE. Widespread abuse of drugs by pregnant women is found. *New York Times*. August 30, 1988:A1.

59. Connell R. The hidden devastation of crack. *Los Angeles Times*. December 18, 1994:A1.
60. Roberts, *Killing the Black Body*, 8-21.
61. Collins PH. *Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment*. Boston: Unwin Hyman; 1990:69-96.
62. White DG. *Ar'n't I a Woman? Female Slaves in the Plantation South*. New York, NY: Norton; 1999: 27-61.
63. Morton P. *Disfigured Images: The Historical Assault on Afro-American Women*. Westport, CT: Greenwood Publishing, 1991:1-16, 125-136.
64. Zerai A, Banks R. *Dehumanizing Discourse, Anti-Drug Law, and Policy in America: A Crack Mother's Nightmare*. Aldershot, UK: Ashgate Publishing; 2002:41-66.
65. Besharov DJ. Crack babies: the worst threat is mom herself. *Washington Post*. August 6, 1989.
66. Roberts, *Killing the Black Body*, 156.
67. Greider K. Crackpot ideas: exaggerated reports of damage done to babies born to mothers who use crack cocaine. *Mother Jones*. July 1995:52. <http://www.motherjones.com/politics/1995/07/crackpot-ideas>. Accessed July 17, 2014.
68. Flavin J, Paltrow LM. Punishing pregnant drug-using women: defying law, medicine, and common sense. *J Addictive Dis*. 2010;29(2):231-244.
69. Fitzgerald S. "Crack baby" study ends with unexpected but clear result. *Philadelphia Inquirer*. July 22, 2013. [http://articles.philly.com/2013-07-22/news/40709969\\_1\\_hallam-hurt-so-called-crack-babies-funded-study](http://articles.philly.com/2013-07-22/news/40709969_1_hallam-hurt-so-called-crack-babies-funded-study). Accessed July 23, 2014.
70. Trost C. Born to lose: babies of crack users crowd hospitals, break everybody's heart. *Wall Street Journal*. July 18, 1989:A1.
71. Gomez LE. *Misconceiving Mothers: Legislators, Prosecutors, and the Politics of Prenatal Drug Exposure*. Philadelphia, PA: Temple University Press; 1997.
72. Betancourt LM, Yang W, Brodsky NL, et al. Adolescents with and without gestational cocaine exposure: longitudinal analysis of inhibitory control, memory, and receptive language. *Neurotoxicol Teratol*. 2011;33(1):36-46.
73. Chasnott IJ, Landress HJ, Barrett ME. The prevalence of illicit-drug or alcohol use during pregnancy and discrepancies in mandatory reporting in Pinellas County, Florida. *New Engl J Med*. 1990;322(17):1202-1206.
74. Morgan PL, Staff J, Hillemeier MM, Farkas G, Maczuga S. Racial and ethnic disparities in ADHD diagnosis from kindergarten to eighth grade. *Pediatrics*. 2013;132(1):85-93. <http://pediatrics.aappublications.org/content/132/1/85.1>. Accessed July 18, 2014.
75. National Eating Disorders Association. Race, ethnicity, and culture. <http://www.nationaleatingdisorders.org/race-ethnicity-and-culture>. Accessed March 30, 2014.
76. Bradby, 12.
77. Jutel AG, Dew K, eds. *Social Issues in Diagnosis: An Introduction for Students and Clinicians*. Baltimore: Johns Hopkins University Press; 2014.

78. Beteille A. Race and descent as social categories in India. *Daedalus*. 1967;96(2):444-463.
79. Metzl JM, Kirkland A, eds. *Against Health: Is Health the New Morality?* New York, NY: NYU Press: 2010.
80. Quesada J, Hart LK, Bourgois P. Structural vulnerability and health: Latino migrant laborers in the United States. *Med Anthropol*. 2011;30(4):339-362.
81. Gherovici P. *The Puerto Rican Syndrome*. New York, NY: Other Press; 2003.
82. Metzl JM, Franklin J. Race, civil rights, and psychiatry. *Atrium*. 2011;9:12-16.
83. American Association of Physical Anthropologists. AAPA statement on biological aspects of race. *Am J Phys Anthropol*. 1996;101:569-570.
84. Medical-Legal Partnership, Boston website. [www.mlpboston.org](http://www.mlpboston.org). Accessed March 25, 2014.
85. Rosenberg T. When poverty makes you sick, a lawyer can be the cure. *Opinionator*. <http://opinionator.blogs.nytimes.com/2014/07/17/when-poverty-makes-you-sick-a-lawyer-can-be-the-cure/>. Accessed July 30, 2014.
86. Fullilove M. *Urban Alchemy: Restoring Joy in America's Sorted-Out Cities*. Oakland, CA: New Village Press; 2013.
87. Nashville Mobile Market website. <http://www.nashvillemobilemarket.org>. Accessed March 25, 2014.
88. Health Leads website. <http://www.healthleadsusa.org>. Accessed March 25, 2014.
89. Bonilla-Silva E. *Racism without Racists: Color-Blind Racism and the Persistence of Racial Inequality in America*. Lanham, MD: Rowman & Littlefield; 2006.
90. National Association of Social Workers. Institutional racism and the social work profession: a call to action. <http://www.socialworkers.org/diversity/institutionalracism.pdf>. Accessed March 25, 2014.
91. Grassroots Policy Project. Race, power and policy: dismantling structural racism. [http://www.strategicpractice.org/system/files/race\\_power\\_policy\\_workbook.pdf](http://www.strategicpractice.org/system/files/race_power_policy_workbook.pdf). Accessed March 25, 2014.
92. City of Seattle Office for Civil Rights. Structural racism technical assistance for human service agencies request for proposals (RFP). <http://www.seattle.gov/docs/2014-Structural-Racism-TA-RFP-2-7-14.pdf>. Accessed March 35, 2014.
93. Peters JW. Is there a doctor in the House? Yes, 17. And 3 in the Senate. *New York Times*. March 8, 2014:A1. <http://www.nytimes.com/2014/03/08/us/politics/doctors-confident-in-their-healing-powers-rush-for-congress.html>. Accessed July 18, 2014.

Jonathan M. Metzl, MD, PhD, is the Frederick B. Rentschler II Professor of Sociology and Medicine, Health, and Society; director of the Center for Medicine, Health, and Society; and a professor of psychiatry at Vanderbilt University in Nashville, Tennessee.



Dorothy E. Roberts, JD, is the George A. Weiss University Professor of Law and Sociology, the Raymond Pace and Sadie Tanner Mossell Alexander Professor of Civil Rights, a professor of Africana studies, and the director of the Program on Race, Science, and Society at the University of Pennsylvania in Philadelphia.

### **Acknowledgment**

The authors wish to thank Nathan Pauly, Jordan King, and Helena Hansen for their assistance developing this manuscript.

### **Related in VM**

[Mainstream Anxieties about Race in Antipsychotic Drug Ads](#), June 2012

[“Vulnerable” Populations—Medicine, Race, and Presumptions of Identity](#), February 2011

[The Fallacy and Dangers of Dichotomizing Cultural Differences: The Truth about Medical Truth Telling in China](#), April 2012

[Mention of a Patient’s “Race” in Clinical Presentations](#), June 2014

[Race, Discrimination, and Cardiovascular Disease](#), June 2014

*The viewpoints expressed on this site are those of the authors and do not necessarily reflect the views and policies of the AMA.*

Copyright 2014 American Medical Association. All rights reserved.