VITAL TOPICS FORUM

Chronic Disaster: Reimagining Noncommunicable Chronic Disease

Alyshia Gálvez, Megan Carney, and Emily Yates-Doerr

Introduction

DOI: 10.1111/aman.13437

Alyshia Gálvez
Lehman College, City University of New York

Megan Carney
University of Arizona

Emily Yates-Doerr
Oregon State University / University of Amsterdam

Chronic metabolic conditions disproportionately cohere along lines of race, gender, class, and citizenship. Despite overwhelming evidence that racism, gendered violence, social and economic disparities, trade regulations, lack of food sovereignty, and land and livelihood dispossession play the biggest roles in chronic disease, the biomedical explanations given for why people become sick are often firmly rooted in personal behavior or "lifestyle." Mainstream discourse and public policies continue to center the individual in discussions of something they have insisted on labeling as "diet-related disease." Health issues such as diabetes, heart disease, and other metabolic conditions are positioned as failures in an individual's knowledge, habits, self-control, diet, and exercise.

As we finalize this collection for publication during the COVID-19 pandemic, we are yet again witnessing discursive efforts by mainstream media and elected officials to depict the unequal infection and mortality rates as sequelae of differing lifestyles. Racialized groups and those facing disproportionate exposure due to working in the riskiest and least-protected jobs are advised to boost their immunity through lifestyle improvements such as better diets and more exercise, even while they are already dying at higher rates. Preexisting metabolic conditions are a risk factor for severe cases of coronavirus—but bodily risk factors are themselves nested within social risk factors of racism and settler supremacy. Our essays here push back on the notion that metabolic disease is primarily or at all a product of lifestyle and are thus urgent for understanding the current moment. Structural inequalities place different groups at different proximity to risk, irrespective of their lifestyle "choices." This remains more evident today than ever.

We ask with the following collection of essays: What may studying metabolic illness teach us about understanding violence? We consider the massive proliferation of metabolic illnesses as a combination of structural and intimate violences. Structural violence, which names the historically patterned conditions that produce and maintain debilitating inequality, is a widely used concept in anthropology. The concept taught us to look at social structures and not individuals; this special issue brings the slow chronicity of metabolic disasters to bear on the question of how structures work and how they can be changed.

In this Vital Topics Forum, The Nutrire CoLab, a project of seventeen people who identify mainly as cisgender women, feminists, and anthropologists, draw on our empirical research carried out on slowly emergent and devastating metabolic illnesses to revisit the question of how to both conceptualize chronic disease and theorize violence and its structures. Citing our fieldwork in Latin America, Australia, Africa, the Pacific Islands, the United States, Canada, and Western Europe, we show how the global rise of metabolic illness is reshaping what it means to be human.

As with other approaches to studying violence, we ask how the historically formative and long-lingering effects of war, slavery, and genocide structure the possibilities and framings of human health. We also insist on the importance of caring about the quieter, banal, nonscientific, and often mother-centered spaces in which racism, sexism, and economic inequality come to grip people's lives. Structured and intimate kinds of inequality and violence are embodied in life's mundane activities of eating or feeding. In centering these, we trouble Paul Farmer's (2004) observation that structural violence often goes unnoticed or that it is invisible. While it is certainly often ignored by policymakers, who individualize health, the people among whom we have lived and conducted research were very aware of how entrenched

AMERICAN ANTHROPOLOGIST, Vol. 122, No. 3, pp. 639–665, ISSN 0002-7294, online ISSN 1548-1433. DOI: 10.1111/aman.13437

socio-historical structures of privilege shaped their bodies and lives.

If structural violence is to be a useful concept—and we think it is—it must bring gendered and racialized histories of conquest, settler colonization, and dispossession into conversations focused on economics or politics. This shift in framing forces recognition that slow-moving metabolic illnesses are deeply stratified, affecting some groups of people far more than others. Distinct from previous iterations of structural violence and vulnerability, many authors in this volume argue that chronic conditions and chronic disease are lived experiences reproduced through discrimination and trauma.

For example, Diana Burnett starts the series with a discussion of how anti-Blackness articulates with "nutritional colonialism." She shows how the suffering of the Brazilian women with whom she worked was at once ordinary and a result of violent global histories of slavery and racism. Hanna Garth describes how anti-Blackness plays out in public health programs in South Los Angeles that would rather focus on consumer behavior than on redlining, gentrification, zone redistricting, police brutality, or corruption in the US prison system. Several authors draw upon biological and cultural knowledges to reject the question of whether personal responsibility might play a causal role in dietary disease. Adele Hite's essay on the rhetoric of "dietary lifestyle" reverses the question to ask: Under what circumstances would it be reasonable to assign individual responsibility for health and illness on the basis of what a person chose to eat or not eat? After all, in only a few exceptions (e.g., alcohol-liver disease and sugar-dental caries) have scientists make causal associations between what people eat and chronic disease. The repeated insistence on behavioral interventions functions to "reproduce whiteness" in both scientific and culinary ideals of health, as argued by Natali Valdez.

We learn from the series that violence is embedded into deeply patterned historical (i.e., structural) practices and that the way it is lived and experienced enfolds many different temporal moments in "the everyday." Chronicity is now mundane; it is the structure through which we observe the uneven unfolding of life chances. The slow and premature death produced from the dangerous confluence of misdirected blame and misunderstood causality is especially insidious because of how it is made to be too vast to be treatable (Berlant 2011; Gilmore 2007; Povinelli 2011). Yet, those with wealth and status are often spared, leaving vulnerable communities to bear the burden of the disaster.

In this collection, we point to how the health risks faced by so many are often exacerbated by the very policies that claim to treat them. Meanwhile, we show how hegemonic prescriptions for healthy lifestyles are themselves coming apart, failing to achieve the results they had promised, and unsupported in ongoing science. We draw upon decades of fieldwork carried out in sites across the world to offer suggestions for how to ameliorate structural violence through responses that are nonindividualized, activist, and driven by communities. These essays illuminate the mechanics of global health crises as disasters within disasters, patterned as they are across time and space, and underscore the contributions of anthropology to be more important than ever.

REFERENCES CITED

Berlant, Lauren. 2011. *Cruel Optimism*. Durham, NC: Duke University Press.

Farmer, Paul. 2004. "An Anthropology of Structural Violence." *Current Anthropology* 45 (3): 305–25.

Gilmore, Ruth Wilson. 2007. *Golden Gulag: Prisons, Surplus, Crisis, and Opposition in Globalizing California*. Berkeley: University of California Press.

Povinelli, Elizabeth. 2011. *Economies of Abandonment: Social Belonging and Endurance in Late Liberalism*. Durham, NC: Duke University Press.

Anti-Blackness as the Lynchpin of the Structured Violence of Diet-Related Disease

DOI: 10.1111/aman.13438

Diana A. Burnett
Howard University

"People would call me a monkey when I eat bananas as a snack during or in between the long bus rides to work." My heart sank as she described how efforts to make changes in her dietary patterns were attacked by strangers who participated in the everyday acts of anti-Black violence. Her friend chimed in the conversation about other Black women like herself who were in their late twenties and thirties and who were already being diagnosed with preventable and reversible diseases like hypertension and diabetes. The final woman interjected with a story of being made to work long, hard hours that were consistent with the schedule and patterns of Black women's labor during slavery and had a direct impact on their ability to make choices about their dietary

patterns. Their experiences made me wonder: What are the manifestations of structural violence, particularly structural anti-Black violence, as it relates to nutrition-related chronic disease in Black women's lives in Brazil? I sat with these ethnographic examples of the enduring and contemporary manifestations of targeted racism as the Black women told their stories of attempting to make different choices amid the exclusion and dehumanization that reflected Brazil's "long, enduring, and foundational odium of Black people" (Alves and Vargas 2018).

Read together, the collective accounts told a story of the multiple, layered assaults rendered by anti-Blackness in Brazil. Here, it seemed quotidian, as accounts on a bus, as individualized diseases, or in difficult work schedules. However, these assaults run deep, as Alves and Vargas (2018) describe how "Brazil's democracy itself, and the country's DNA, is coded by antiblackness. By 'foundational and structural,' we mean that antiblackness, historically and contemporarily, is at the core of Brazilian social organization—its logic, symbolism, and performance." What emerged from listening to these stories together was the partnership between anti-Blackness and state-sponsored violence as recounted in their lived experiences that showed up in the body and interpersonal interactions. Each of these women was a research participant from a study focused on the nutritional transition on the consumption patterns, lifestyle practices, and health of Black women conducted in Salvador da Bahia Brazil, one of the poorest regions of Brazil, and also the one with the largest Black population. They shared with me the heartbreaking details of the ways the pathways for diagnosis for disease was centered around their personal behavior or lifestyle without an equal and significant attention to the pathological structure of racialized and gendered violence that contextualized them, namely, the anti-Black structures that leveled disproportionate disease rates in the bodies of Black people, specifically Black women. Nevertheless, these women emphasized to me how their behaviors and lifestyles were structured by outside forces that sought to palimpsestically inscribe the anti-Black violence that defines, structures, and governs the nation onto their bodies. While scholars have often focused on how Brazil has systematically carried out campaigns to exterminate Black youth through its policing, I wondered: In what other ways does anti-Black violence target the lives and the bodies of Black Brazilians, specifically Black women? Through their stories, I would come to ethnographically understand anti-Black violence as an invasion of their organs, which seeks to seep into their bodies and amplifies the peril under which they already live. The group of women detailed how the continuous assault of race, gender, and economics in their everyday experiences, locally combined with "how things were" in Brazil, created the conditions for Black women's suffering (Caldwell 2007), which was often rendered invisible.

Through an examination of scientific research on noncommunicable diseases (NCDs), the policies, legacies, and wider discourse that inform race in Brazil led me to revisit works that overlook a major component of the racial health-disparities discourse: How do we analyze and address the structured violence of an anti-Black state as its invisible violence manifests in the bodies of Black women? While several ethnographic works focused on Blackness across the Americas have demonstrated how violence is a part of the work of producing Blackness (Alves 2013; Smith 2016; Vargas and Alves 2010), there has been less work focusing on nutritional violence (Reese 2019). In this piece, I seek to name a number of forms of violence previously rendered invisible by other analyses. Specifically, I utilize this research to highlight how, while certain ethnic groups are being revered for the "health" of their food cultures, it was the narratives of these Black women who facilitated a nuanced understanding of what I term the structured violence of *nutritional colonialism* (Burnett 2014), as globalization seeks to transform and degenerate local food cultures with its specific denigration of local Black consumption practices as unhealthy and as catalysts for death and Black suffering. I theorized the concept of nutritional colonialism to attend to the specific modern effects and transformations set into motion by the global practices of transnational food conglomerates, which seek to destabilize local food cultures, erode the protective health factors of seasonal and local consumption, and promote participation in the normativity of Euro-American foods and patterns, while recognizing the deeply historical processes that work to disintegrate food cultures, devastate lifestyle patterns, and result in the production of disproportionate adverse health effects among the colonized.

It is the ordinariness of Black women's suffering in a place like Brazil that illuminates the interconnectedness of global iterations of anti-Black racism and its local manifestation of racial health disparities (Caldwell 2007). For the women in the study, classed and gendered manifestations of racism impacted everything from when they could eat, what they could eat, and even if they would eat, and told a radically different story than the pedestrian external narratives about "failure" around knowledge, habits, self-control, and a life built around a healthy diet and sufficient exercise.

For these Black Brazilian women, locating failure within their bodies was a typical and consistent narrative that sought to define Blackness in the Americas for centuries; the believed inferior, diseased, subhuman category of life came alive in the expression of chronic noncommunicable disease, in the slow deaths that Berlant (2008) references that are sped up by the urgency of the global phenomenon of early Black death. As scholar Luciane de Oliveira Rocha (2012) suggests, the violence perpetuated against Black Brazilian women has been perceived as less visible than the violence enacted against Black men by those documenting and studying the phenomenon. This larger collective of research focused on Black women highlights the need for more attenuated analyses beyond traditional analyses of violence to understand how these women navigate poverty, racial and

gendered discrimination, and forms of state violence. As this group of Black women in Brazil describes NCD disparities that disproportionately find home among and in Black women's bodies, the violence powered by the anti-Blackness fulcrum of the state distributes disease among those whose lives are less valued within the racial hierarchy. Similarly, the naming of nutritional colonialism details the structured role of food and nutrition as a form of violence in Brazil.

REFERENCES CITED

Alves, J. A. 2013. "From Necropolis to Blackpolis: Necropolitical Governance and Black Spatial Praxis in São Paulo, Brazil." *Antipode* 46 (2): 323–39.

Alves, J. A., and J. H. Costa Vargas. 2018. "Anti-Blackness and Brazilian Elections." *North American Congress on Latin America (NACLA) News*, November 21. https://nacla.org/news/2018/11/21/antiblackness-and-brazilian-elections.

Berlant, Lauren. 2008. "Slow Death (Sovereignty, Obesity, Lateral Agency)." *Critical Inquiry* 33 (4): 754–80.

Burnett, D. 2014. "Utilizing Photo-Elicitation to Explore the Impact of the Nutrition Transition on the Consumption Patterns, Lifestyle Practices, and Health of Black Women in Salvador da Bahia, Brazil." Unpublished manuscript, Philadelphia, PA: University of Pennsylvania.

Caldwell, Kia Lilly. 2007. *Negras in Brazil: Re-Envisioning Black Women, Citizenship, and the Politics of Identity*. New Brunswick, NJ: Rutgers University Press.

Reese, Ashanté. 2019. *Black Food Geographies: Race, Self-Reliance and Food Access in Washington DC*. Chapel Hill: University of North Carolina Press.

Rocha, Luciane de Oliveira. 2012. "Black Mothers' Experiences of Violence in Rio De Janeiro." *Cultural Dynamics* 24 (1): 59–73.

Smith, Christen A. 2016. *Afro-Paradise: Blackness, Violence, and Performance in Brazil*. Champaign: University of Illinois Press.

Vargas, Jõao. C., and Jaime Amparo Alves. 2010. "Geographies of Death: An Intersectional Analysis of Police Lethality and the Racialized Regimes of Citizenship in São Paulo." *Ethnic and Racial Studies* 33 (4): 611–36.

Critical Perspectives on the Microbiome

DOI: 10.1111/aman.13439

Megan A. Carney
University of Arizona

Studies of the "microbiome" as the genetic material and cellular communities of microbes inhabiting the human gut have revolutionized how researchers and health-care professionals think about the gut in relation to our overall health, positing that less microbial diversity increases risk for obesity and chronic disease. While often touted as "pathbreaking" research for reconceptualizing gut health within the broader context of the entire human body and its immune, endocrine, and neurological systems (see Finlay and Finlay 2019), anthropologists enhance this research by articulating how these systems extend beyond the human body and interact with the social body and local ecologies (Benezra, DeStefano, and Gordon 2012).

The concept of microbiopolitics (Paxson 2012) draws attention to how the microbiome cannot be decoupled from the institutional arrangements, social relations, and charismatic actors that govern its composition. Here, I would like to offer two contrasting examples from my fieldwork of how microbiopolitics produce differential outcomes in the composition of microbial populations and the distribution of chronic disease.

The Pacific Northwest craft brewer enjoys a quasi-celebrity status with his (rarely her) success among middle- to upper-class and mostly white urban consumers as the mastermind behind the careful selection of ingredients—water, barley, hops, and yeast—that will yield to a fermented beverage in increasingly high demand and selling at fairly favorable margins to affluent and/or discerning patrons. With his selection of a few strains of yeast from the hundreds that are available, and influencing his fellow brewers to select these strains as well, the craft brewer is ultimately one among the few individuals privileged to decide which microbes are put into circulation among thousands of bodies. We may analyze the craft brewer's relationship with microbes as one of biopolitics applied to microbial lives in his selection of which microbes are allowed to live and which are left to die. Whereas this reading of microbiopolitics resonates with existing applications of the concept in the anthropological literature, the experiences of people living on the social, political, and economic margins reveal at least one other way that anthropologists might engage microbiopolitics.

Microbes play a role in mediating biopolitics at the scale of human experience. What could be revealed through a perspective on biopolitics as beginning at the microbial level to determine which humans are allowed to live, or live well, vis-à-vis having healthier guts, versus those who must struggle with poor health and compromised life course? My past research on the lived experiences of food insecurity among im/migrant women in the United States serves as a poignant reminder of how both health and social status can begin and end at the microbial level (Carney 2015).

Estranged from family, working multiple part-time jobs to make ends meet, lacking the time or money required to eat according to one's own preferences, uninsured, attending to the needs of children both near and far, and living in perpetual fear of being apprehended by immigration officials—these circumstances describe the lived realities of all-too-many immigrants with precarious legal status in the United States (Kline 2019). The combination of stress, lack of rest, inadequate access to nutritious food, and constrained access to preventative health care is very likely to render negative consequences for gut health that surface in the form of chronic disease. Moreover, a deeper understanding of the structural conditions shaping food environments, how nutrients are digested, and changes to body-fat composition can help to illuminate why this socially and politically marginalized population struggles to avert weight gain and to manage chronic disease. Prescriptive nutrition advice under these conditions becomes its own form of violence.

Considering the mounting evidence that declining gut health is linked to a host of life-threatening conditions, how might we rethink the microbiome and the distribution of "good" versus "bad" bacteria across differentially located, gendered, and racialized bodies as part of a broader set of social, political, and economic conditions? Elsewhere, Alyshia Gálvez and I have referred to the amalgamation of these conditions as constituting the "*macro*biome" (Carney and Gálvez 2019). By shedding insights on the microbiopolitics that have direct and indirect implications for the microbiome, anthropologists may help to address some of humanity's most pressing global health concerns, including chronic noncommunicable disease. By extension, research in the biophysical and medical sciences might actually begin to question its own assumptions about what constitutes a "healthy gut" and curtail further reliance on measures of predominantly white Euro-American populations (see Valdez and Mendenhall, this collection). Instead, research on the microbiome could be reconceptualized as inseparable from macrobiomes: the social, political, economic, and environmental conditions shaping all lives, both human and nonhuman.

REFERENCES CITED

Benezra, A., J. DeStefano, and J. I. Gordon. 2012. "Anthropology of Microbes." *PNAS* 109 (17): 6378–81.

Carney, Megan A. 2015. *The Unending Hunger: Tracing Women and Food Insecurity across Borders*. Berkeley: University of California Press.

Carney, Megan A., and A. Gálvez. 2019. "The International Politics of Gut Health." *Scientific American* blog, March 14. https://blogs.scientificamerican.com/observations/the-international-politics-of-gut-health/.

Finlay, B., and J. Finlay. 2019. *The Whole-Body Microbiome: How to Harness Microbes—Inside and Out—for Lifelong Health*. New York: The Experiment.

Kline, Nolan. 2019. *Pathogenic Policing: Immigration Enforcement and Health in the US South*. New Brunswick, NJ: Rutgers University Press.

Paxson, Heather. 2012. *The Life of Cheese: Crafting Food and Value in America*. Berkeley: University of California Press.

Rethinking Fatness, Rethinking Diabetes

DOI: 10.1111/aman.13440

Lauren Carruth
American University

Being "fat"—most often translated from the Somali word *subag*, a term that also signifies flavorful, rich ghee or butter, and other times translated from the word *buuran*—is beautiful in the Somali Region of Ethiopia and is neither pejorative nor widely associated with higher risk of disease. Among Somali women in eastern Ethiopia, often dressed in lavishly draped hijabs and flowy cotton gowns, fatness, voluptuousness, and full, round cheeks all reflect physical health and happiness.

In contrast, Western biomedicine—as it is practiced in the rural Horn of Africa and elsewhere—frequently conflates fatness with illness and high risk of disease (e.g., Popkin 2009). The "war on fat" (from Greenhalgh 2012) is now a global war. Hegemonic associations between fatness and disease, and between bad "lifestyle choices" and obesity, have potentially blinded researchers and clinicians to the possibility that fatness may be neither universally pathological nor inherently pathogenic.

My collaborative research on diabetes among Somalis in Ethiopia (Carruth and Mendenhall 2019; Carruth et al. 2020) uncovers unusual sets of symptoms and struggles faced by people with type 2 diabetes. For example, obesity is relatively rare in eastern Ethiopia, and instead, many persons diagnosed with diabetes complained they could not stem what they perceived to be the loss of their healthy fatness. Even when taking prescribed medications and/or insulin, most patients still experienced "wasting away" (Carruth and Mendenhall 2019).

During the hottest hour of the day in July 2018, while sipping cold Fantas with several Somali friends and colleagues, a man lounging next to me said, smiling, "Somali

women want to be fat. They try to get fat. It is beautiful." Two women sitting nearby covered their grins and giggles with scarves as he continued, "Somali women, when they are fat, they will become happy. Even when a rich Somali woman becomes thin, it is because she worries." Once he paused, I asked, "Is fatness the cause or the effect of happiness?" Everyone nodded and laughed again as he replied, "Both, I think!"

In the medical and public health literature, type 2 diabetes is described as partially hereditary and triggered by combinations of obesity, individual behaviors like poor diet and smoking tobacco, and, increasingly, exposure to environmental toxins, such as in air pollution (WHO 2016; Zimmet 2017). Among Somalis in Ethiopia, by contrast, diabetes is defined as a humoral pathology, primarily marked by disruptions or excesses of humoral flows. In general, humoral pathologies are managed by Somalis through self-induced vomiting or gut evacuation (*bixin*); consuming camel milk; taking herbal remedies, such as special teas or oils; feasting, fasting, or otherwise changing the diet; halting consumption of *khat* leaves (a popular mild narcotic); and occasionally consuming pharmaceuticals (Carruth 2014). The management of internal humoral flows requires regulating what is consumed and felt from the external environment.

Conceived in this way, humoral pathologies like diabetes do not result from individual behaviors or poor lifestyle choices but rather from environmental changes and external events that trigger internal dysfunctions. Bodies cannot be separated from their embeddedness in social relationships, histories, and larger natural and social environments. Diets low in fresh, locally-grown foods but high in "oily" (*saliid leh*), "soft" (*jilicsan*), or "sweet" (*macaan*) foods are perceived to disrupt humoral flows and increase vulnerability to myriad diseases, including diabetes. Trauma, violence, forced migration, worry, and even anger, our Somali interlocutors proposed, can also trigger diabetes and affect other corporeal flows.

In discussions about their experience of type 2 diabetes, most people with diabetes mentioned their related problems with indigestion, gastritis, heartburn, and, most commonly, constipation (*calool istaag*—literally, "stopped stomach"). The most common symptoms that then motivated people to seek medical care included frequent urination and sudden weight loss—in other words, the uncontrolled and continuous draining of humoral flows and draining of the material body. So, for many Somalis I know, fatness reflects beauty and signals health and balanced humoral flows. By contrast, the loss of healthy fatness was a physical symptom of deeper disease, depletion, and stress—including, but not limited to, diabetes and the anxiety that chronic disease produces.

Being "fat" by biomedical standards may not necessarily either increase disease risk (Hadley and Hruschka 2014) or index pathology (Hardin 2018; Parker et al. 1995). In eastern Ethiopia, but also possibly elsewhere, diabetes may potentially derive from other risks and may not always be associated with high bodyweight (WHO 2016). In some individual cases and in some populations, being fat may be protective, may be associated with positive health outcomes, or may be a minor or insignificant factor in predicting diabetes risk. Contemporary and historical experiences of stress, trauma, displacement, hunger, and associated bodily inflammation and changes in appetite and digestion may for some be more important to the development and progression of disease.

To date, however, there is little research to test these potential alternative associations and processes, at least in part because most research on metabolic diseases is conducted in settings where rates of overweight and obesity are high and where there are popular associations between fatness and metabolic disease. Areas like the rural Horn of Africa are too often assumed to not have a diabetes problem, perhaps either because of their relatively low rates of obesity or because of the prioritization of interventions to address outbreaks of infectious diseases, undernutrition, and humanitarian crises. However, my research suggests otherwise: diabetes is a rising and critical problem in the Horn of Africa, in part because of long histories of hunger and crisis.

Somalis present alternative body epistemologies not entirely incommensurate with or unaffected by dominant biomedical or public health models of disease. Local clinicians' advice to their patients to reduce sugar consumption and monitor blood sugar, for example, made sense to the patients I spoke with and reinforced their notions of diabetes as fundamentally a humoral dysfunction. At the same time, Somalis' articulations also challenge the veracity and universality of three other dominant ideas: that fatness is inherently unhealthy, that diabetes is only a problem where obesity rates are high, and that type 2 diabetes patients necessarily need to work to lose weight. Somalis' experiences of diabetes instead demonstrate remarkable metabolic diversity and suggest that diseases, including diabetes, are contingent on the lives bodies live. Somalis also understand diabetes as rooted not in bad individual lifestyle or dietary choices but primarily in social, emotional, and environmental crises. Whether as researchers, health-care providers, or caregivers, we would all do well to adopt a similar, more contingent, and more collective approach to the consideration of metabolic diseases, and in doing so, counter the presumed failures and features of being fat.

REFERENCES CITED

Carruth, Lauren. 2014. "Camel Milk, Amoxicillin, and a Prayer: Medical Pluralism and Medical Humanitarian Aid in the Somali Region of Ethiopia." *Social Science & Medicine* 120: 405–12.

Carruth, Lauren, and Emily Mendenhall. 2019. "'Wasting Away': Food Insecurity, Medical Insecurity, and Diabetes in the Somali Region of Ethiopia." *Social Science & Medicine* 288: 155–63. https://doi.org/10.1016/j.socscimed.2019.03.026.

Carruth, Lauren, M. J. Ateye, A. Nassir, F. M. Hosh, and E. Mendenhall. 2020. "Diabetes in a Humanitarian Crisis: Atypical Clinical Presentations and Challenges to Clinical- and Community-Based Management among Somalis in Ethiopia." *Global*

Public Health 15(6): 828–39. https://doi.org/10.1080/17441692.2020.1718735.

Greenhalgh, Susan. 2012. "Weighty Subjects: The Biopolitics of the U.S. War on Fat." *American Ethnologist* 39 (3): 471–87.

Hadley, C., and D. J. Hruschka. 2014. "Population Level Differences in Adult Body Mass Emerge in Infancy and Early Childhood: Evidence from a Global Sample of Low and Lower-Income Countries." *American Journal of Physical Anthropology* 154 (2): 232–38.

Hardin, Jessica. 2018. "Embedded Narratives: Metabolic Disorders and Pentecostal Conversion in Samoa." *Medical Anthropology Quarterly* 32 (1): 22–41.

Parker, S., M. Nichter, M. Nichter, N. Vuckovic, C. Sims, and C. Ritenbaugh. 1995. "Body Image and Weight Concerns among African American and White Adolescent Females: Differences That Make a Difference." *Human Organization* 54 (2): 103–14.

Popkin, Barry M. 2009. *The World Is Fat: The Fads, Trends, Policies, and Products that Are Fattening the Human Race*. New York: Avery.

WHO (World Health Organization). 2016. *Global Report on Diabetes*. Geneva: World Health Organization. https://www.who.int/diabetes/global-report/en/.

Zimmet, Paul. 2017. "Diabetes and Its Drivers: The Largest Epidemic in Human History?" *Clinical Diabetes and Endocrinology* 3 (1): 1–8. https://doi.org/10.1186/s40842-016-0039-3.

Unending Work and the Emergence of Diabetes

DOI: 10.1111/aman.13441

Sarah Chard
University of Maryland, Baltimore County

National news outlets and scholarly publications are increasingly spotlighting the economic opportunities and risks presented by "flexible" work (Michaels and Paul 2019; Miller 2019; Ravenelle 2019; Rosenblat 2019; Span 2019). For entry-level and semi-professional working women, however, flexibility is often involuntary, and involves endless shifting between paid work and family needs. The metabolic "slow death" (Berlant 2008) produced by the configuration of flexible work has largely gone unaddressed (Horton 2016). Instead, metabolic conditions are the purview of public health discourses, which emphasize individual responsibility. Attention to the imprint of work structure on disease risk is critically needed, as employers' reliance on forms of flexibility, such as contingent or "casual" work, nontraditional hours, and work completion at home, is expanding across work sectors (Martin 1994, McMenamin 2007; NASEM 2017).

My own research on health, physical activity, and diabetes in Baltimore (Chard et al. 2017) suggests that metabolic disorders like diabetes arise not from willful inactivity but from the constant motion that constitutes women's daily work life. The accumulation of ill health in unending, unpredictable work is well illustrated by the case of Vivian (pseudonym), now in her early sixties and struggling with diabetes and weight gain. In the 1990s and 2000s, Vivian was employed as a social service caseworker while raising four children. Her day began at 8 a.m. and often did not end until after 9 p.m., since depending "on what was going on… I might be in the office trying to catch up on some things or … waiting for a placement or I might be in the hospital somewhere. So I really didn't know where I was going to be." She often needed to complete paperwork at home. Little time was left for activities such as exercise or cooking dinner, resulting in frequent carry-out from the limited range of restaurants in her city neighborhood:

> So a lot of times I picked up food and brought home for the kids and sometimes I got what they like…. I tried to get, at least I thought I was getting, good quality food from a couple of places that sell full-course meals, your vegetable, your carbohydrate, and your meat.

The injustice of her food options was quite visible to Vivian. She described visiting a suburban supermarket with her grandchildren:

> I said, "Look how pretty this is." I said, "Look at the things that you can get." You don't have that in the inner city, you know, is that fair? My kids say it ain't fair. I said I feel you baby, I tell you sometimes life might not be fair but you got to, it's all in what you make it. You got to rumble through this thing.

Vivian attributes her weight gain and subsequent diagnosis of diabetes to her diet, the stress of her unpredictable work, and life in the city. Looking back, she laments, "The hurting thing for me is that I tried to do and eat all of the right things and all; but the combination of things that I was eating might not [have] been proper. And I wasn't aware of it because I had a strenuous job." Vivian is pained that what she thought were positive choices for her family, including working long hours to pay her mortgage and carefully selecting meals from local foods, undermined her future health.

Women attending a local senior center echoed Vivian's sentiment that only after retiring did their stress reduce and they could focus on their weight gain and diabetes. They enthusiastically attend daily exercise classes, ranging from gospel aerobics to line dancing to Zumba. As Carol (pseudonym), in her late sixties, summarizes, "my classes

come first." A nutritious communal lunch follows the classes. These narratives underscore that self-health projects are not the natural course of retirement; rather, they address the vestiges of work life. In addition, such retirements are largely feasible because of pension plans, which are disappearing from many emerging flexible-work compacts.

NOTES

Acknowledgments. Subjective Experience of Diabetes Study (SED) participants were recruited through the Healthy Aging in Neighborhoods of Diversity across the Life Span Study (HANDLS) of the Intramural Research Program in the National Institute on Aging. I thank Michele Evans (HANDLS PI), Alan Zonderman (HANDLS Lead Associate Investigator), Jennifer Norbeck, and Monique Brown, along with all of the HANDLS team, for their support of this project. I am particularly grateful to Monique Brown for her help in participant recruitment, as well as to Ashanté Reese, Erin Roth, and Laura Girling for fostering rich discussions with participants, and the study participants for sharing their experiences. This work was supported by grants from the National Institute on Aging (5R01AG041709 to J. K. Eckert, PI) and the UMBC START Research Initiative (S. Chard, PI).

REFERENCES CITED

Berlant, Lauren. 2008. "Slow Death (Sovereignty, Obesity, Lateral Agency)." *Critical Inquiry* 33 (4): 754–80.

Chard, Sarah, Brandy Harris-Wallace, Erin Roth, Laura Girling, Robert Rubinstein, Ashanté Reese, Charlene Quinn, and J. Kevin Eckert. 2017. "Successful Aging among African American Older Adults with Type 2 Diabetes." *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences* 72 (2): 319–27.

Horton, Sarah. 2016. *They Leave Their Kidneys in the Fields: Illness, Injury, and "Illegality" among U.S. Farmworkers*. Berkeley: University of California Press.

Martin, Emily. 1994. *Flexible Bodies*. Boston: Beacon Press.

McMenamin, Terence. 2007. "A Time to Work: Recent Trends in Shift Work and Flexible Schedules." *Monthly Labor Review* December:3–15.

Michaels, Daniel, and Paul Hannon. 2019. "Europe's New Jobs Lack Old Guarantees—Stoking Workers' Discontent; Unemployment in Europe Is at Its Lowest Level in a Generation, but Workers Complain about Lack of Benefits, Security." *Wall Street Journal* website, November 26.

Miller, Claire Cain. 2019. "Women Did Everything Right. Then Work Got 'Greedy.'" *New York Times*, April 28: BU 1: 6–7.

NASEM (National Academies of Sciences, Engineering, and Medicine). 2017. *Information Technology and the U.S. Workforce: Where Are We and Where Do We Go from Here?* Washington, DC: The National Academies Press.

Ravenelle, Alexandrea. 2019. *Hustle and Gig: Struggling and Surviving in the Sharing Economy*. Berkeley: University of California Press.

Rosenblat, Alex. 2019. *Uberland: How Algorithms Are Rewriting the Rules of Work*. Berkeley: University of California Press.

Span, Paula. 2019. "Your Uber Driver Is 'Retired'? That's No Surprise." *New York Times*, October 29:5.

Fiscal Violence in the United States' Food Safety Net

DOI: 10.1111/aman.13442

Maggie Dickinson
Guttman Community College, City University of New York

The number of people registered for food assistance in the United States through the Supplemental Nutrition Assistance Program (SNAP), formerly food stamps, has expanded rapidly since 2001, making the program a target of intense political debate. On the one hand, right-wing politicians have proposed adding increasingly draconian work requirements to the program as a way to reduce both the number of people on the rolls and program costs. Countering right-wing attacks on SNAP, center-left policymakers have attempted to reframe the program as a necessary public health initiative, arguing that cuts to benefit levels will make it harder for low-income families to manage their diets and, thereby, their health. In the long run, they argue, cuts to SNAP will cost the state more due to lost productivity and higher health-care costs. Though presented as opposing viewpoints, both right and center-left positions frame food assistance as a problem of fiscal responsibility and workforce development. This bipartisan commitment to reducing costs to the state and to employers is a form of fiscal violence that renders meaningless any attempts to address chronic health conditions through food assistance in the United States.

Since the Reagan era, welfare policy in the United States has been shaped by racist dog-whistle politics that traffic in stereotypes of a lazy, undeserving poor whose work ethic must be constantly vetted and policed (Haney-Lopez 2014). The current state of SNAP reflects this broader orientation to welfare policy: it is often described as a work support, designed to supplement the incomes of low-waged, insecure workers and their families. The program therefore operates as a subsidy to employers who refuse to pay their workers adequate wages. Additionally, work requirements push the unemployed and informally employed workers off the SNAP rolls (Dickinson 2020). Beyond work enforcement, SNAP's low benefit levels enforce ways of eating that contribute to chronic disease. SNAP benefit levels are set according to the

government's thrifty-food plan. This plan is calculated by the USDA to meet their dietary guidelines at the lowest possible cost. Meeting nutritional standards on the thrifty food plan requires cooking knowledge, facilities, and an ability to store food. This is beyond the capacity of many food-insecure households.

A political framework that defines chronic illness primarily as a workforce issue and a fiscal problem is inadequate in the face of a labor market that does not provide adequate work or income, a welfare system shaped by a racist work-first political orthodoxy, and a food system in which the cheapest calories are also the unhealthiest. Low-income families living in the United States are well aware of the long-term health risks associated with the consumption of cheap, processed foods (Carney 2015). However, the bipartisan logic of fiscal responsibility that shapes food and welfare policy create conditions where, in the words of one of my informants, people "eat at the whim of the grocery store." As she put it, "whatever's on sale, that's what I eat."

Debates over the future of food assistance in the United States are animated by concerns about chronic illnesses like diabetes and heart disease that disproportionately impact poor people. However, policymakers' attempts to tie food assistance to a pervasive public discourse around the "obesity epidemic" elides the ways that SNAP policy itself enforces modes of consumption that contribute to chronic disease. Framing SNAP as a public health intervention is inconsistent with competing aims to minimize aid, buttress low-wage labor markets, and foster reliance on cheap and unhealthy foods. Policymakers have failed to address low SNAP benefit levels, stagnant wages, or the racist logic of welfare as work support—all of which would have an enormous impact on households' abilities to access better-quality foods.

In this context, reframing SNAP as a public health intervention is a form of fiscal violence because it suggests that the real problem is sick people themselves and the costs to public coffers and private businesses of their poor health. Fiscal violence feeds the commonsense idea that the etiology of disease is squarely on the shoulders of the stigmatized sick. It operates through political appeals to the economistic logic of the market in ways that legitimize the persistence of everyday forms of slow violence, rendering viable solutions unthinkable and impractical.

Public health researchers know what kind of interventions would reduce incidence of and mortality from disease (see Manderson, this forum). These interventions—from ensuring livable wages and working conditions, adequate financial support for people left out of the labor market, universal access to nutritious food, and the reorganization of our industrial food system—all entail a redistribution of resources from employers, corporations, and the state into the hands of low-income people. SNAP could be a part of the solution to rising rates of chronic illness through increased benefit levels and universal access to the program. But achieving such a change would require a radical break with the underlying, often invisible, forms of fiscal violence that underpin current political common sense.

REFERENCES CITED

Carney, Megan. 2015. *The Unending Hunger: Tracing Women and Food Insecurity across Borders*. Oakland: University of California Press.

Dickinson, Maggie. 2020. *Feeding the Crisis: Care and Abandonment in America's Food Safety Net*. Berkeley: University of California Press.

Haney-Lopez, Ian. 2014. *Dog Whistle Politics: How Coded Racial Appeals Reinvented Racism and Wrecked the Middle Class*. New York: Oxford University Press.

Taking *Susto* Seriously: A Critique of Behavioral Approaches to Diabetes

DOI: 10.1111/aman.13443

Alyshia Gálvez
Lehman College, City University of New York

In Mexican and Mexican American communities, a common explanation for the onset of type 2 diabetes is *susto* (fright) or *coraje* (anger) (Akins 2019; Rubel, O'Nell, and Collado-Ardon 1991; Mendenhall 2012, 2019; Mendenhall et al. 2012). Rather than being taken seriously by health-care practitioners, these kinds of folk etiologies for diabetes—a vernacular explanation for the onset of disease—are often cited as an example of the inability to understand glucose and insulin and even mocked as "ignorance."

In my ethnographic research with people affected by diabetes as well as officials in the federal Ministry of Health in Mexico, I was told that vernacular etiologies for diabetes linking it to emotional fright or trauma are a barrier to comprehension, prevention, and treatment best addressed by educational interventions aimed at behavioral modifications. Indeed, the bulk of the interventions proposed by Mexico's ambitious *National Strategy for the Prevention and Control of Overweight, Obesity, and Diabetes* (Gálvez 2018; Saldaña and Vásquez, this forum) are aimed at dietary and behavioral

modifications and education. But a priest I interviewed in the state of Puebla in 2015 put it clearly when he said, "Diabetes is the disease of the migrant. Not just because migrants change the way they eat, but because it is the somatization of pain, trauma, and depression." Charged for forty-one years with serving migrant families in the diocese of Puebla, this priest spoke from pastoral experience, but he echoed emergent research on the syndemics of disease, especially the highly correlated relationship between diabetes, depression, abuse, and trauma (D'Alonzo, Johnson, and Fanfan 2012; Mendenhall et al. 2012; Smith-Morris 2008).

Public-health research was integral to the framing of the nationals strategy and led to obesity and diabetes being framed in it as "multi-factorial." The proposed solutions, likewise, encompass an array of different programs and government agencies. But in my analysis (Gálvez 2018), I found that the framing of diabetes as a disease primarily caused by personal behavior (diet and exercise) remains persistent. Thus, treatments and interventions focus on altering behavior and obviate the need to critically analyze the social and structural factors that contribute to disease. Patients' failure to improve is blamed on inadequate compliance with a regimen of personal improvement. In contrast, structural approaches indict economic and social structures that persist in unequally patterning propensity for poverty, health-care coverage and exposure to stress, violence and trauma—and resulting disease.

Even Mexico's globally lauded soda tax, while a structural intervention operating at an ambitious scale, only succeeds if it modifies individual behavior; no alterations are made to the availability of water (or traditional fruit- and corn-based beverages) or the ubiquity of soda. Mexico has one of the highest global rates of soda consumption (slightly reduced with the soda tax) (Colchero et al. 2016, 2017). While no one is obliging people to purchase and drink each of the 137 liters they on average consume each year, and soda consumption is of course not conducive to glucose management, an approach focused mainly on personal behavior overlooks important, and arguably more significant, factors. A behavior-based approach does not take into consideration the almost total shift in the economic, political, and social landscape in Mexico in the past twenty-five years in which policy has come to be oriented around foreign direct investment and industrial manufacturing and away from small-scale agriculture. Such policies have made water more expensive and soda cheaper, for example. More importantly, such policies have displaced people from the countryside and have allowed for an influx of US-grown corn and corn products, displacing small-scale corn growers. Policy decisions dismantled structural supports for farming and distribution of farm goods, while expanding incentives for industrialization of the food system and labor market produced widespread deterritorialization, especially of rural and Indigenous people, producing the largest wave of migration from Mexico to the United States, peaking in the late 1990s. Facing legal, social, and economic barriers to mobility and economic stability in both countries, the NAFTA refugees are also those likely to experience high levels of family separation, and its attendant stress and trauma.

In sum, we need etiologies of diabetes, like *susto*, that center emotional trauma in analyses of metabolic processes to understand the contemporary relationship between economic policy and the viability of life. Analyses of the so-called epidemic of diabetes and obesity should consider these larger structural forces rather than blaming individuals and their behavior in narrowly defined etiologies of disease. Listening carefully to those experiencing the seismic economic, political, and social shifts in economic policy and how those shifts affect bodies will alter not only how chronic disease is diagnosed but also lead to different remedies.

REFERENCES CITED

Akins, Karen, dir. 2019. *El Susto*. https://elsustomovie.com/.

Colchero, M. A., B. M. Popkin, J. A. Rivera, and S. W. Ng. 2016. "Beverage Purchases from Stores in Mexico Under the Excise Tax on Sugar Sweetened Beverages: Observational Study." *BMJ* 352: h6704.

Colchero, M. A., J. Rivera-Dommarco, B. M. Popkin, and S. W. Ng. 2017. "In Mexico, Evidence of Sustained Consumer Response Two Years after Implementing A Sugar-Sweetened Beverage Tax." *Health Affairs* 36 (3): 564–71.

D'Alonzo, K. T., S. Johnson, and D. Fanfan. 2012. "A Biobehavioral Approach to Understanding Obesity and the Development of Obesogenic Illnesses among Latino Immigrants in the United States." *Biological Research for Nursing* 14 (4): 364–74. https://doi.org/10.1177/1099800412457017.

Gálvez, Alyshia. 2018. *Eating NAFTA: Trade, Food Policies, and the Destruction of Mexico*. Berkeley: University of California Press.

Mendenhall, Emily. 2012. *Syndemic Suffering: Social Distress, Depression, and Diabetes among Mexican Immigrant Women*. New York: Routledge.

Mendenhall, Emily. 2019. *Rethinking Diabetes: Entanglements of Trauma, Poverty, and HIV*. Ithaca, NY: Cornell University Press.

Mendenhall, Emily, Alicia Fernandez, Nancy Adler, and Elizabeth A. Jacobs. 2012. "Susto, Coraje, and Abuse: Depression and Beliefs about Diabetes." *Culture, Medicine, and Psychiatry* 36 (3): 480–92.

Rubel, A. J., C. W. O'Nell, and R. Collado-Ardon. 1991. *Susto: A Folk Illness*. Oakland: University of California Press.

Smith-Morris, C. 2008. *Diabetes among the Pima: Stories of Survival*. Tucson: University of Arizona.

The Violence of Racial Capitalism and South Los Angeles's Obesity "Epidemic"

DOI: 10.1111/aman.13444

Hanna Garth
University of California, San Diego

In 2008, a ban on new fast-food restaurants was implemented in South Los Angeles. The justification for banning new fast-food restaurants was obesity, which was rising at a disproportionately higher rate in South LA, a predominantly Black and Latinx area, in comparison to LA in general. In efforts to curtail local obesity trends, a perfect storm of public health practitioners with federal dollars to combat the epidemic, urban planners, and a sympathetic public materialized to fight the effects of what people were then calling a "food desert," or an area lacking equal access to high-quality fresh foods. For many, the ban felt like a victory. Mark Vallianatos, director of the Center for Food and Justice at Occidental College, said that the ban was an important step in the intersection of urban planning and public health and added that "the solution is also grocery stores and improving corner stores, and how do farmers markets survive in low-income areas?" (Vick 2008). However, my own research suggests that the ban and similar projects are attempts to quickly fix rising rates of obesity without addressing the fact that these issues are deeply entangled within a much broader system of racial capitalism and racialized violence.

Around the same time, Fresh and Easy, the US version of UK-based grocery giant Tesco, came on the scene in January 2007 with a vision and promise to be the grocery chain to solve the obesity problem. Headquartered in El Segundo, California, Fresh and Easy Neighborhood Market pitched itself as a small chain of relatively small grocery stores that would be located primarily in areas designated as "food deserts." It soon became clear that this was just rhetoric to appease LA's grocery lobbies after the chain set up only two stores in the bounds of South LA, both safely nestled near the University of Southern California and gentrifying areas closer to downtown. They ended up positioning most of their stores around the best prospects for generating profit. On top of shirking their promise to locate in "food deserts," the 1,400,000-square-foot Fresh and Easy distribution center was located in the Riverside warehouse district, yet another site of low-paying, insecure jobs for Latinx and Black blue-collar workers in the region (De Lara 2012). The 2008 economic crisis sent Fresh and Easy into a death spiral, and by fall 2013 they filed for bankruptcy, later closing all stores.

In 2015, RAND, a nonprofit research think tank, released a report and study published in *Social Science and Medicine* showing that after the 2008 Fast Food Ban there was not a decline in obesity rates but rather that both fast-food consumption and rates of overweight and obesity increased (Sturm and Hattori 2015). According to their study, in 2007 an estimated 63 percent of South LA's 700,000 residents were overweight or obese, and by 2011 this figure had increased to 75 percent.[1] The authors suggest the following as potential reasons for the failure: "a slow change in the food environment, failure of the regulation targeting the key differences in food environments, and possibly a limited association between neighborhood food outlets and diet" (210).

Digging deeper into the flawed logics of the fast-food ban, in particular as it relates to the Fresh and Easy debacle, raises the question: What if instead of looking for quick fixes to the obesity epidemic, we framed the problem as deeply embedded and inextricably intertwined within a system of racial capitalism and racialized violence? My research suggests that rising rates of obesity in South LA are a symptom of racism and racial capitalism. By this, I draw attention to the deep histories of exploitation, which encourage violence against people of color for the benefit of those with economic power. To treat the symptom without seeking to intervene on the complex problem of the entrenched racism in the food system furthers the very problem that it claims to solve. Rather than approach the problem with a Band-Aid for a "food desert," we need to understand it as "food apartheid" (Penniman 2018; Reese 2019).

The proliferation of fast food, the relative lack of large supermarkets, and the subsequent lack of access to fresh fruits and vegetables by comparison to other parts of Los Angeles falls within a logical structural violence framework, which can have moralizing undertones implying that low-income and Black and Latinx communities need to be intervened in and have policies dictated for them. Consider what would be changed by thinking of obesity in South LA as produced not by what people eat but by the racism embedded within racial capitalism and state-based violence. For one, it would force a rethinking of public health to encompass the larger racist structures in which food injustice flourishes, such as redlining, gentrification, zone redistricting, reforms into police brutality, and an overhaul of the prison system. Following Ruth Wilson Gilmore's (2006, 28) definition, racism is "the state-sanctioned and/or extralegal production and exploitation of group-differentiated vulnerability to premature death." Understanding chronic health conditions in this context requires a racial justice and economic justice framework to solve.

If we first situate the problem within racial capitalism, it becomes clear that we must understand part of a long and deliberate divestment from South Central LA "accompanied by a devastating loss of quality jobs in the region, decreases in federal support for housing, education, and inner-city community building" and a proliferation of police violence and a "judicial system failed to value black life or rights" (Hunt 2012, xiv; see also Khan-Cullors and Bandele 2018). Building from a racial capitalism framework, we could then begin to see how these conditions of racialized violence are embedded within the global industrial food system and foundational to the conditions that give rise to an obesity epidemic.

NOTE

1. Their data was based on self-reported heights and weights from a random sample of residents of South Los Angeles.

REFERENCES CITED

De Lara, Juan D. 2012. "Post City of Quartz Los Angeles." *Human Geography* 5 (3): 94–96.

Gilmore, Ruth Wilson. 2006. *Golden Gulag: Prisons, Surplus, Crisis, and Opposition in Globalizing California*. Berkeley: University of California Press.

Hunt, Darnell. 2012. "American Toxicity: Twenty Years after the 1992 Los Angeles 'Riots.'" *Amerasia Journal* 38 (1): ix–xviii.

Khan-Cullors, Patrisse, and Asha Bandele. 2018. *When They Call You a Terrorist: A Black Lives Matter Memoir*. New York: St. Martin's Press.

Penniman, Leah. 2018. *Farming While Black: Soul Fire Farm's Practical Guide to Liberation on the Land*. White River Junction, VT: Chelsea Green Publishing.

Reese, Ashanté. 2019. *Black Food Geographies: Race, Self-Reliance and Food Access in Washington DC*. Chapel Hill: University of North Carolina Press.

Sturm, Roland, and Aiko Hattori. 2015. "Diet and Obesity in Los Angeles County 2007–2012: Is There a Measurable Effect of the 2008 'Fast-Food Ban'?" *Social Science & Medicine* 133:205–11.

Vick, Karl. 2008. "L.A. Official Wants a Change of Menu." *Washington Post*, July 13. http://www.washingtonpost.com/wp-dyn/content/article/2008/07/12/AR2008071201557_2.html.

Ceaseless Healing and Never-Natural Disasters

DOI: 10.1111/aman.13445

Jessica Hardin
Rochester Institute of Technology

In Samoa, friends, pastors, clinicians, and farmers search to find and address the human causes of cardiometabolic disorders. Samoan Pentecostals could see that the widespread experience of, for example, diabetes, hypertension, and gout were not natural or synonymous with being Samoan, but instead were a result of human-created conditions—or what we call "chronic disaster." And yet, Pentecostal stories about the social causes of chronic sickness did not primarily focus on human suffering. Instead, their etiologies identified structured inequalities through their ceaseless efforts to heal communities, relationships, and bodies.

Christianity provides a particularly clear assumptive world from which to understand the experience of suffering. Critique, in particular, is essential to Christian practice, thus providing Christians with vital tools with which to analyze chronic disaster (Handman 2015; Hardin 2019). For Pentecostal Christians around the globe, the world needs healing, and this healing will occur when Christ returns to Earth. Until that time, Christians are responsible for bringing the Kingdom of God onto Earth. Everyday life is guided by the work of locating responsibility for suffering as evidence of its human origins because absence of health reflects human activity, not Godly intention.

Tanu, my adopted father, a man in his seventies, had converted to Pentecostalism nearly four decades before I met him. He was a prodigious storyteller, and his favorite story was about his conversion. Like many men of his generation, he expected secondary education to be adequate to earn a salary that could meet his obligations—an essential way that individuals, especially men, are recognized as persons and potential titled family leaders (Gershon 2012). He stopped working his family's land and instead contributed to his family through the cash he earned. With a mix of pride and repentance, he admitted that during this time he fathered many children with different women. He would live with one and then move on. Tanu was also perpetually underemployed and he often lacked sufficient resources to sustain these families.

Before conversion, Tanu would describe himself as fat, and as he'd explain, "everything changed then." With conversion, he settled down with his first wife and their children, he began cultivating his plantation, and he also began losing weight. Before he converted, he knew he wasn't well because he didn't have an appetite and he felt stressed, suffered headaches, and began to feel weak. Even before Tanu was diagnosed with hypertension, he understood the banality of chronic violence. I use "banality" (instead of, for example, mundane) because this suffering was commonplace but also worn out; it was expected but *not* normal. Christianity helped people see the abnormality of chronic violence.

Tanu first told me this story when I asked him about his initial diagnosis. Although he told me his conversion

story time and time again, he never told me much about his hypertension diagnosis. Instead, he would thank God for healing. Analysis of this kind of embedded narrative (Hardin 2018)—that is, stories about illness embedded in stories about conversion—requires answering the question: What does religious conversion have to do with chronic disaster?

Conversion makes apparent that illness, despite its categorization, is not always experienced as chronic nor as a disaster. Instead, common symptoms of chronic sickness are endured as fundamental to everyday life (Berlant 2007). Tanu's experiences of being overweight—with a dulled appetite, fatigue, or enduring headaches—were as typical as his experience of a chronic shortage of cash (Mendenhall 2019). These were interwoven, normalized features of everyday life. In fact, their ubiquity was subsumed by his conversion story, where healing was the primary driver of narrative; it was the unifying frame that explained the difficulties he faced in his day-to-day relationships, including romantic and familial relations, unemployment, and hypertension. Pentecostal stories highlight how, in the healing of relationships to family or land (as Tanu's cultivation of his family land shows), hypertension could resolve. Tanu did not highlight the fact that as he began cultivating his land, he did not need as much cash because he could provide food for his family from his own garden (even selling this food occasionally). He also did not highlight that he had taken medication regularly for over twenty years. Instead, his story featured the social work of healing.

These kinds of stories matter because they show how people recognize the human creation of disaster; they show the everyday ways that people locate responsibility as beyond their own control, identifying environments, political leaders, or global organizations as responsible for their mundane experiences of chronic suffering (Galvéz 2018). These kinds of stories also highlight how the everyday cultivation of land and relationships are essential to healing (Marshall 2012; McMullin 2005, 2010).

What can anthropologists, and our scholarly interlocutors, learn from Pentecostal perspectives and their wide global success? Perhaps it is that ceaseless healing is an invisible counterpart to chronic disaster. When the people with whom I worked talked about being diagnosed with cardiometabolic disorders, they talked about the changing (and unequal) global economy that made daily experiences of weight gain, hunger, amputation, or dizziness commonplace, even banal. The massive proliferation of cardiometabolic disorders across the Pacific Islands shows quotidian violence that is structured by global food trade, migration, and agricultural change. In their search for salvation, Samoan Pentecostals socialized believers into seeing those human origins of chronic disaster. These discerning skills make space for individuals to make change in their lives, as Tanu did, while critically navigating the structures that have created chronic disaster.

REFERENCES CITED

Berlant, Lauren. 2007. "Slow Death (Sovereignty, Obesity, Lateral Agency)." *Critical Inquiry* 33 (4): 754–80.

Galvéz, Alyshia. 2018. *Eating NAFTA: Trade, Food Policies, and the Destruction of Mexico*. Oakland: University of California Press.

Gershon, Ilana. 2012. *No Family Is an Island: Cultural Expertise among Samoans in Diaspora*. Ithaca, NY: Cornell University Press.

Handman, Courtney. 2015. *Critical Christianity: Translation and Denominational Conflict in Papua New Guinea*. Berkeley: University of California Press.

Hardin, Jessica. 2018. "Embedded Narratives: Metabolic Disorders and Pentecostal Conversion in Samoa." *Medical Anthropology Quarterly* 32 (1): 22–41.

Hardin, Jessica. 2019. *Faith and the Pursuit of Health: Cardiometabolic Disorders in Samoa*. New Brunswick, NJ: Rutgers University Press.

Marshall, Wende Elizabeth. 2012. "Tasting Earth: Healing, Resistance Knowledge, and the Challenge to Dominion." *Anthropology and Humanism* 37 (1): 84–99.

McMullin, Juliet. 2005. "The Call to Life: Revitalizing a Healthy Hawaiian Identity." *Social Science & Medicine* 61(4): 809–20.

McMullin, Juliet. 2010. *The Healthy Ancestor: Embodied Inequality and the Revitalization of Native Hawaiian Health*. Walnut Creek, CA: Left Coast Press.

Mendenhall, Emily. 2019. *Rethinking Diabetes: Entanglements with Trauma, Poverty, and HIV*. Ithaca, NY: Cornell University Press.

A Critical Perspective on "Diet-Related" Diseases

DOI: 10.1111/aman.13446

Adele Hite
Ronin Institute

A foundational assumption underlies the political and economic remedies to prevent chronic disease: dietary choices cause, and can be changed to prevent, chronic disease. But we must consider how and why we think we know this.

The focus on dietary choice is relatively recent, emerging only in the second half of the twentieth century, when "lifestyle" became the focus of public health messages. Previous dietary guidance emphasized choosing foods that would provide adequate essential nutrition, and early nutrition sci-

ence sought to understand what nutrients must be in the diet in order to prevent diseases of deficiency. The observational epidemiological methods used to identify diseases related to inadequate nutrition did not show cause-effect relationships, but these relationships could be ascertained in clinical trials. Studies investigating the links between diet and chronic diseases use these same methods of observational epidemiology, but without the backstop of clinical trials. Importantly, the populations that carry the heaviest burden of chronic disease are typically not represented in those studies. The names of some of the most influential observational studies of diet and chronic disease—the Nurses' Health Study, the Health Professionals' Follow-Up Study, and the Physicians' Health Study—point to the fact that the study populations are whiter, wealthier, and better educated than the general population, with better access to health care and a strong investment in the pursuit of health through lifestyle choices (Belanger et al. 1978; Crawford 2006). Because observational studies do not indicate causal relationships, causality is established rhetorically. It is common for researchers who use observational epidemiology to study nutrition to use cause-effect language, make policy recommendations, and overgeneralize their findings to populations not included in their study samples (Cofield, Corona, and Allison 2010; Dumit and de Laet 2014; Menachemi et al. 2013).

Complicating this picture is that all dietary information collected in these studies is through self-report. This has been considered "the most serious limitation to research in nutritional epidemiology" (Willett 1998, 5). These self-reports may not be based on what was actually eaten but instead on current food and health beliefs combined with a sort of "wishful thinking" about usual intake (Kristal, Peters, and Potter 2005). In other words, in observational epidemiological studies linking diet to chronic disease, there is no way to differentiate between the health advantages that accompany class status, other health-related behaviors, an investment in the pursuit of health, and the effects of a diet that participants report eating (Hite 2018). Nevertheless, better health outcomes are attributed to "better" dietary choices.

Whether this definition of "healthy diet" is appropriate to all is an open question; however, it is clear that when observational studies seeking to establish the relationships between diet and chronic disease survey more diverse populations, these same associations are not found (Dehghan et al. 2017; Djoussé, Kamineni, and Gaziano 2016). Dietary recommendations, such as those that limit eggs and encourage adults to eat six to eight slices of bread per day, are based on the purported eating habits of white middle-class Americans and may not benefit the long-term health of other groups. Some compelling research has shown that African Americans and low-income Americans have increased rates of diabetes, hypertension, and high cholesterol and remain at higher risk for development of obesity, diabetes, and prediabetic conditions—despite adherence to eating patterns defined as "healthy" in public health nutrition guidance (Ben-Shalom, Fox, and Newby 2012; Lindquist, Gower, and Goran 2000; Zamora et al. 2010). When everything we think we know about dietary guidance for prevention of chronic disease has been determined by the eating habits and worldviews of a privileged few, the application of this guidance to others is questionable, at best. At worst, it is another form of colonization, one that usurps food cultures, traditions, and local knowledges (Greenhalgh 2012).

The concepts of "healthy diet" and "healthy food" should not be taken at face value. The links between diet and chronic disease are highly contested within the field of nutrition science; whether any specific dietary pattern can prevent chronic disease is unknown and perhaps unknowable. Recommendations to prevent chronic disease through dietary change persist not because they are supported by scientific evidence but because they are driven by complex social, political, and economic forces. Even as food-system reform and food-sovereignty activism seeks to move away from reductionist, expert-oriented definitions of "healthy food," defining chronic diseases as "diet-related" reinforces problematic claims to scientific certainty, claims that ultimately perpetuate class-based and race-based notions about what it means to "eat right."

REFERENCES CITED

Belanger, Charlene. F. Charles, H. Hennekens, Bernard Rosner, and Frank E. Speizer. 1978. "The Nurses' Health Study." *The American Journal of Nursing* 78 (6): 1039–40.

Ben-Shalom, Yonatan, Mary Kay Fox, and P. K. Newby. 2012. *Characteristics and Dietary Patterns of Healthy and Less-Healthy Eaters in the Low-Income Population*. Washington, DC: US Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis. https://fns-prod.azureedge.net/sites/default/files/HEI.pdf

Cofield, Stacey S., Rachel V. Corona, and David B. Allison. 2010. "Use of Causal Language in Observational Studies of Obesity and Nutrition." *Obesity Facts* 3 (6): 353–56.

Crawford, Robert. 2006. "Health as a Meaningful Social Practice." *Health* 10 (4): 401–20.

Dehghan, Mahshid, Andrew Mente, Xiaohe Zhang, et al. 2017. "Associations of Fats and Carbohydrate Intake with Cardiovascular Disease and Mortality in 18 Countries from Five Continents (PURE): A Prospective Cohort Study." *The Lancet* 390 (10107): 2050–62.

Djoussé, Luc, Owais A. Kamineni, and J. Michael Gaziano. 2016. "Egg Consumption and Risk of Type 2 Diabetes: A Meta-Analysis of Prospective Studies." *American Journal of Clinical Nutrition* 103 (2): 474–80.

Dumit, Joseph, and Marianne de Laet. 2014. "Curves to Bodies: The Material Life of Graphs." In *Routledge Handbook of Science, Technology, and Society*, edited by Daniel L. Kleinman and Kelly Moore, 71–89. London: Routledge.

Greenhalgh, Susan. 2012. "Weighty Subjects: The Biopolitics of the U.S. War on Fat." *American Ethnologist* 39 (3): 471–87.

Hite, Adele. 2018. "Nutritional Epidemiology of Chronic Disease and Defining 'Healthy Diet.'" *Global Food History* 4 (2): 207–25.

Kristal, Alan R., Ulrike Peters, and John D. Potter. 2005. "Is It Time to Abandon the Food Frequency Questionnaire?" *Cancer Epidemiology Biomarkers & Prevention* 14 (12): 2826–28.

Lindquist, Christine H., Barbara A. Gower, and Michael I. Goran. 2000. "Role of Dietary Factors in Ethnic Differences in Early Risk of Cardiovascular Disease and Type 2 Diabetes." *The American Journal of Clinical Nutrition* 71 (3): 725–32.

Menachemi, Nir, Gabriel Tajeu, Bisakha Sen, et al. 2013. "Overstatement of Results in the Nutrition and Obesity Peer-Reviewed Literature." *American Journal of Preventive Medicine* 45 (5): 615–21.

Willett, Walter. 1998. *Nutritional Epidemiology*. Oxford: Oxford University Press.

Zamora, Daisy, Penny Gordon-Larsen, David R. Jacobs Jr., and Barry M. Popkin. 2010. "Diet Quality and Weight Gain among Black and White Young Adults: The Coronary Artery Risk Development in Young Adults (CARDIA) Study (1985–2005)." *The American Journal of Clinical Nutrition* 92 (4): 784–93.

History, Truth, and Reconciliation in Settler Health Care

DOI: 10.1111/aman.13447

Heather A. Howard
Michigan State University

In 2015, the Canadian Truth and Reconciliation Commission (TRC) released a list of ninety-four "calls to action," among which are seven aimed specifically at addressing Indigenous people's health (see also Government of Canada 2019). These implore Canadian governments and those with the power to act within health care to close the health-outcomes gap between Indigenous and non-Indigenous people by acknowledging that the poor health status of Indigenous people is a "direct result of previous Canadian government policies, including residential schools" (TRC 2015, 2). These schools operated from 1876 through 1996, and within their walls, Indigenous child inmates suffered extensive sexual, physical, and emotional abuse. As a result of a massive class-action settlement for survivors of these schools, in 2008, the TRC was mandated to document this structural violence (truth) and recommend pathways to restructure the relationship between settlers and Indigenous people (reconciliation).

In my research (Howard 2014) on the implications for diabetes management of the legacies of residential school, I have described how food featured in the regimentation, discipline, punishment, morality, deprivation, and even sexual abuse experienced by school survivors. This resulted in highly negative relationships with food and eating that continued into adult life, transmitted socially to subsequent generations of descendants of survivors, and provides context for understanding so-called non-adherence to standardized diabetes dietary regimens. This was taken up in an Indigenous community-based intervention, which shared the residential school narratives around food but also highlighted survivor strength, bravery, resilience, and creativity. The intervention included activities focused on Indigenous food traditions in storytelling, preparation, and eating together. Participants' memories of life with their families and living on the land before the schools helped them to survive there, and that resourcefulness was viewed as a resilience that might support diabetes management (Howard 2014).

In the Indigenous ontological framing of this intervention, memory of residential school experience and living with diabetes are intertwined through the personal intimacy of individual bodies, where autonomy, choice, and control intersect with collective affective connections to land, animal, human, and elemental others. Diabetes is a disease of (past and ongoing) colonization, suffered collectively as an array of relationships in which individual actions ripple as enactments of relational responsibility, reciprocity, and coexistence. Making meaning from the past in order to act in the present and change the future is a central tenet of many diabetes-prevention and -management interventions in Indigenous health-care settings. Deficit-causing histories of colonization, oppression, and victimhood are retooled as survivance and resilience, and diabetes interventions recenter ideologies of ancestral Indigenous life as balanced and healthful (Jacklin et al. 2016; McMullin 2016).

Joanne Dallaire, an Elder and counselor assisting my research, stated powerfully that "the impact of the residential schools was quite traumatic … our bodies take it in and we store it [and] how we remember teaches us how to live" (Howard 2014, 529). How history is remembered is, as Bruyneel (2016, 353) writes, "profoundly important to politics, for authoritative claims to the meaning of the past are a product of and also shape power relations, inequalities, and oppressions in the present, while also serving as sites with the potential for liberation." Indigenous-informed diabetes care understands the personal disruption of disease in these terms and demonstrates the limits of the reconciliation approach to Indigenous people's health. As David Garneau (2016, 30–31) writes, it is rather "the action of bringing into harmony" that is the starting point for healing because reconciliation is "a continuation of the settlement narrative" that fictitiously asserts a previous harmony where none existed.

Meanwhile, in mainstream medical management of diabetes, where arguably most Indigenous patients receive care and where the TRC calls for action, "patient empowerment"

is a predominant approach, which utilizes affective, personalized tools such as motivational interviewing, patient-readiness assessment, and shared decision-making (Coppola et al. 2016). These methods also take history into account—however, only by placing the individual at the center of, for example, family histories of illness, eating habits, or adverse childhood events, which are correlated to the causation of chronic disease and the barriers patients have self-managing.

To enact recognition of the legacy of state policy violence on health, the TRC calls for all health-care professionals to undergo cultural-competency training and for medical and nursing students to take a required course about the history of residential schools in relation to Indigenous rights and treaties and social justice approaches (TRC 2015, 2–3). This training is aimed at repositioning provider understandings of the past as not only having lasting and ongoing impacts on their Indigenous patients but as reframing their power within settler biomedical care to change structurally determined illness and disease. This is a tall order for health practitioners, and not surprisingly those embracing the challenge to take account of this history in practice focus on historical trauma. It is a readily medicalizable framework, already taken up in epigenetics and conceptualized as a clinical condition and life stressor relevant to understanding psychological illness and chronic conditions (Hartmann et al. 2019; see also Mendenhall, this forum). For example, physiotherapists who tend considerably to chronic illness and disability are advocating for the acknowledgment of historical trauma and resilience as a means through which to provide humbler and more culturally safe care (Gasparelli et al. 2016). In recommending postcolonial analysis in rehabilitation training, Hojjati et al. (2018) emphasize that practitioners take into account the implications of historical trauma in hands-on therapy and patient motivation.

The invocation of the healing power of history, as it "explains contemporary pathology and situates it strategically along a continuum of agency" (Waldram 2014, 373), has been entangled for some time in complex contradictions between Indigenous and non-Indigenous medical ontologies. Within the steadfast authoritative structures of settler-colonial biomedicine, these types of historicization efforts reindividualize structural violence and therefore recolonize Indigenous experience (Anderson 2018; Churchill et al. 2017; Green 2012; Howard 2018; Lalich 2016). If Indigenous historicities of disease and health are only going to be pressed into alignment with biomedical frameworks of individual responsibility and choice, reconciliation as a state approach that claims to take up structural violence in fact entrenches settler-colonial biogovernance through its technologies of chronic disease management (Howard 2018).

The health care Indigenous people receive will remain vulnerable to reframings of structural suffering as lifestyle choices if policy violence is reinscribed as individualized behavioral change, and problematic "cultural sensitivity" training (see Manderson, this forum) merely supplemented with "trauma sensitivity." Efforts to responsibilize settler society through truth and reconciliatory collective memory-making cannot just be personalized in individual provider self-analyses. These naturalize and fetishize Indigenous trauma (Daigle 2019) while mystifying biomedical hegemony. Instead of leaving intact settler-colonial violences that shape the distribution of health, illness, and disease, centering Indigenous community-led health-care initiatives will better open the conciliatory pathways necessary for Indigenous history to transform health-care practice in the ways the TRC portends to advocate.

REFERENCES CITED

Anderson, Marcia. 2018. "An Indigenous Physician's Response to the Settler Physician Perspective on Indigenous Health, Truth, and Reconciliation." *Canadian Medical Education Journal* 9 (4): e142–43.

Bruyneel, Kevin. 2016. "Codename Geronimo: Settler Memory and the Production of American Satism." *Settler Colonial Studies* 6 (4): 349–64.

Churchill, Mackenzie, Michèle Parent-Bergeron, Janet Smylie, Cheryl Ward, Alycia Fridkin, Diane Smylie, and Michelle Firestone. 2017. *Evidence Brief: Wise Practices for Indigenous-Specific Cultural Safety Training Programs*. Toronto: Well-Living House.

Coppola, Adriana, Loredana Sasso, Annamaria Bagnasco, Andrea Giustina, and Carmine Gazzaruso. 2016. "The Role of Patient Education in the Prevention and Management of Type 2 Diabetes: An Overview." *Endocrine* 53 (1): 18–27.

Daigle, Michelle. 2019. "The Spectacle of Reconciliation: On (the) Unsettling Responsibilities to Indigenous Peoples in the Academy." *Environment and Planning D: Society and Space* 37 (4): 703–21.

Garneau, David. 2016. "Imaginary Spaces of Conciliation and Reconciliation: Art, Curation and Healing." In *Arts of Engagement: Taking Aesthetic Action in and Beyond the Truth and Reconciliation Commission of Canada*, edited by Dylan Robinson and Keavy Martin, 21–41. Waterloo, ON: Wilfrid Laurier University Press.

Gasparelli, Katie, Hilary Crowley, Moni Fricke, Brooke McKenzie, Sarah Oosman, and Stephanie A. Nixon. 2016. "Mobilizing Reconciliation: Implications of the Truth and Reconciliation Commission Report for Physiotherapy in Canada." *Physiotherapy Canada* 68 (3): 211–12.

Government of Canada. 2019. "Health: Learn How the Government of Canada Is Responding to the Truth and Reconciliation Commission's Calls to Action 18 to 24." https://www.rcaanc-cirnac.gc.ca/eng/1524499024614/1557512659251.

Green, Robyn. 2012. "Unsettling Cures: Exploring the Limits of the Indian Residential School Settlement Agreement." *Canadian Journal of Law & Society / La Revue Canadienne Droit et Société* 27 (1): 129–48.

Hartmann, William E., Dennis C. Wendt, Rachel L. Burrage, Andrew Pomerville, and Joseph P. Gone. 2019. "American Indian Historical Trauma: Anticolonial Prescriptions for Healing, Resilience, and Survivance." *American Psychologist* 74 (1): 6–19.

Hojjati, Ala, Allana S. W. Beavis, Aly Kassam, Daniel Choudhury, Michelle Fraser, Renée Masching, and Stephanie A. Nixon. 2018. "Educational Content Related to Postcolonialism and

Indigenous Health Inequities Recommended for All Rehabilitation Students in Canada: A Qualitative Study." *Disability and Rehabilitation* 40 (26): 3206–16.

Howard, Heather A. 2014. "Canadian Residential Schools and Urban Indigenous Knowledge Production about Diabetes." *Medical Anthropology* 33 (6): 529–45.

Howard, Heather A. 2018. "Settler Colonialism, Biogovernance, and the Logic of a Surgical Cure for Diabetes." *American Anthropologist* 120 (4): 817–22.

Jacklin, Kristen, Anh Ly, Betty Calam, Michael Green, Leah Walker, and Lynden Crowshoe. 2016. "An Innovative Sequential Focus Group Method for Investigating Diabetes Care Experiences with Indigenous Peoples in Canada." *International Journal of Qualitative Methods* 15 (1): 1–12.

Lalich, Leah. 2016. "When It Comes to Indigenous Competency Training, Ontario Has a Lot of Unlearning to Do." Torontoist, February 24. https://torontoist.com/2016/02/when-it-comes-to-indigenous-competency-training-ontario-has-a-lot-of-unlearning-to-do/.

McMullin, Juliet. 2016. *The Healthy Ancestor: Embodied Inequality and the Revitalization of Native Hawai'ian Health*. London: Routledge.

TRC (Truth and Reconciliation Commission of Canada). 2015. *Truth and Reconciliation Commission of Canada: Calls to Action*. Winnipeg, Manitoba: Truth and Reconciliation Commission of Canada.

Waldram, James B. 2014. "Healing History? Aboriginal Healing, Historical Trauma, and Personal Responsibility." *Transcultural Psychiatry* 51 (3): 370–86.

"Lifestyle" Disease on the Margins

DOI: 10.1111/aman.13448

Lenore Manderson
University of the Witwatersrand

Poverty, inequality, and social structures such as gender and race divide populations and determine disadvantage and exclusion. These chronic social factors, and the health problems they produce, typically load onto one another and complicate disease outcomes (Manderson and Warren 2016).

A common clinical and public health approach to the high incidence of noncommunicable conditions is to ask patients to change their "lifestyle," an omnibus term for a range of behaviors, values, and activities. Culture is often seen by public health professionals and medical authorities as intractable, hence the advocacy for culturally sensitive approaches. Lifestyle, in contrast, is regarded as individual, volitional, and elastic, consequently determining the focus of health-promotion messaging, public health programs, and medical advice to people at risk of or diagnosed with noncommunicable diseases. Advice is often reduced to exercise and diet: avoiding foods with high saturated fats, refined sugars, and carbohydrates because of inherent risks and to avoid obesity, diabetes, heart disease, and their complications (including depression) (see Valdez, Warin, and Carruth, this forum).

From 2009 to 2013, I conducted research in Melbourne's outer residential suburbs. By 2013, this area had a rapidly expanding population of over half a million people, over half first-generation immigrants, mostly from non-English-speaking backgrounds and from over 180 countries. Social (public) and commercial housing, including transitional housing for people receiving state benefits, are built on low-lying former farmland. These suburbs were and are still (in 2019) among the poorest in the state, although economically and socially they differ little from other peri-urban areas of Melbourne and other cities in Australia (Warin and Zivkovic 2019) and beyond. Here, social exclusion was endemic: low educational outcomes and low functional and financial literacy; limited employment opportunities and low incomes; limited and costly public transport; poor access to social support, services, and shops; and poor health and well-being. Obesity rates in these suburbs were among the highest nationally and worldwide.

Invited to attend advisory committee meetings, I observed a network of some eighty agencies: ethnic-specific, Indigenous, and faith-based large and small NGOs and government agencies, including the police, sheriff's office (largely charged with evictions), employment services, and welfare. Most of these organizations referred or provided intersecting services of emergency food and housing; parental support and support for gender-based violence; mental health, drug, and alcohol services; and prisoner rehabilitation.

Waiting times for subsidized public housing in these areas are up to twenty years. Alternative rental stock is limited and rent relatively high, and landlords are sometimes reluctant to rent to people who they deem outsiders. Negotiating these constraints, multiple families may live in houses zoned (and built) for single families. In one instance, twenty-eight people from four immigrant families lived in a four-bedroom house. Others, cash-poor even when family members were in paid employment, lived in caravans, cars, and sheds and in rooming houses where co-tenants' living spaces were divided only by curtains.

Depending on household and community habitus, people do often eat high-fat, calorie-dense food, and they do not usually exercise in ways recommended by health providers.

But this is not a "lifestyle" choice. Fresh-food outlets and supermarkets providing diverse products are few, cash flow is often limited, and people cannot afford to bulk buy, even were they to have storage space. People living in cars and boarding houses may not have fridges to keep food fresh, they do not have a stove to cook, and they cannot afford to eat in restaurants. In general, people purchase small quantities of food from small suburban shops, despite higher cost. Although cooked meals are provided by local charities redistributing meals from NGOs that "rescue" food from farms, wholesalers, supermarkets, and other businesses,[1] these meals do not meet even identified need. For people with cash in hand, McDonald's and KFC may provide an affordable option, while offering small moments of pleasure.

The agency representatives at the various meetings that I attended focused on networking and the value of "joined-up services" to provide food relief, shelter, income, and other support. From their viewpoint, the promotion of healthy lifestyles by medical and public health professionals was unrealistic. Those who insisted on the need to encourage people to eat better food, drink less alcohol and sugar-sweetened beverages, and exercise more were frustrated at their limited success, yet public health has a weak record in convincing governments to redress structural inequalities.

What makes us sick may sometimes be fast food and sedentary occupations. But what makes us really sick is the failure to support people who have no choice. In a culture of "treat to prevent," technologies provide ways of intervening with individuals at risk of disease or with early disease, bypassing the challenges to behavioral change. The approach is seductive. Drugs such as statins, referred to by Joseph Dumit (2012) as "drugs for life," and bariatric surgery for those who are exceptionally obese (Howard, this forum), may cost less than addressing the social determinants of chronic conditions; such long-term technological interventions are also profit-making.

Lifestyle diseases everywhere are most common among people who don't have a "lifestyle" that can be tampered with. The social determinants of illness have a bidirectional effect: they contribute, and often cause, ill-health, and ill-health in turn can create or exacerbate poverty and social exclusion (Manderson and Warren 2016). Social marginality inhibits people from seeking health care and typically correlates with compromised quality of care. Although conventional social and public health models of illness and disease acknowledge socioeconomic, political, and cultural forces, health professionals and policymakers consistently sidestep factors that contribute to individual suffering. Health problems are intersectoral, and without structural and institutional changes, we cannot address the intersections of illness and inequality.

NOTE

1. See: http://www.fareshare.net.au/about-us/.

REFERENCES CITED

Dumit, Joseph. 2012. *Drugs for Life: How Pharmaceutical Companies Define Our Health*. Durham, NC: Duke University Press.

Manderson, Lenore, and Narelle Warren. 2016. "'Just One Thing after Another': Recursive Cascades and Chronic Conditions." *Medical Anthropology Quarterly* 30 (4): 479–97.

Warin, Megan, and Tanya Zivkovic. 2019. *Fatness, Obesity and Disadvantage in the Australian Suburbs: Unpalatable Politics*. London: Palgrave.

Metabolic Reflections: Blurring the Line between Trauma and Diabetes

DOI: 10.1111/aman.13449

Emily Mendenhall
Georgetown University

Rarely are the impacts of chronic stress and trauma on metabolism recognized in clinical studies of diabetes. Yet, from hundreds of interviews with people living with diabetes, and an expanding body of scholarship in anthropology and epigenetics, I argue that lines between trauma and diabetes are blurred and that violence and subjugation may irreversibly impact metabolism, even across generations. Arguments focused on how trauma is experienced and embodied in diabetes complicate biomedical narratives for what drives insulin resistance; these narratives primarily focus on genetics, weight, and lifestyle. My research has shown that changes to diet and exercise alone will not solve the global and local undercurrents of the epidemic (see Mendenhall 2019).

Recognizing the impact of social and psychological suffering on diabetes is a question of both the social and the biological. Anthropologists have illustrated that trauma, displacement, and fear weigh heavily on diabetes (Carruth and Mendenhall 2019; Mendenhall 2012, 2019; Page-Reeves et al. 2013; Smith-Morris 2008), unveiling how violence threatens personal security in private and public spaces and appears to be implicated in diabetes, as well as its frequent companion, depression. Alongside this ethnographic evidence, clinicians and epidemiologists show that chronic

stress and multiple traumatic experiences can produce elevated cortisol and inflammation that literally work on human cells to make them insulin-resistant (Golden et al. 2007; Lee, Tsenkova, and Carr 2014). These pathways show how heightened social stress over a life can get under the skin and be measured in the body. This puts questions of cortisol and inflammation at the center of the diabetes story, calling into question the belief that genetics, diet, and physical movement fully explain diabetes risk and recovery. At the same time, we must critically interpret how the black box of stress diverges from one place to the next. This stress may be communicated using local idioms, somatic symptoms, and even other diseases. Stress may mediate how "risk" for diabetes is conceived and how "adherence" to diabetes care is constituted. As diabetes moves along the fault lines of society and settles among those who are the most geographically and economically vulnerable, understanding how historical and social processes, including racism, produce and perpetuate these disease clusters becomes a priority.

Residential segregation and structural racism that foster food insecurity among some populations and not others are examples of how geographic vulnerabilities can define diabetes risk. Historical traumas involving political violence and struggle linked to racist segregation and oppression, such as the influence of apartheid in South Africa or Jim Crow laws in the United States, may fuel diabetes affliction within communities affected by these forms of structural violence (Thayer and Kuzawa 2011). These examples show how extreme marginalization can physically siphon people off from certain parts of a geographic place through laws; however, they also have cumulative effects on the body that cannot be dissociated from the higher burden of diabetes-related suffering among those who have experienced long-standing social trauma (also see Mullings 2002). This argument is in part based on a theory of epigenetics, proposing that historical trauma and oppression may be passed through generations, turning on and off certain genes through methylation to change how bodies respond to the worlds in which we live (Thayer and Non 2015). Powerful evidence of the long-term impact of trauma has been measured in the children of Holocaust survivors and families in Congo (Thayer and Non 2015). These changes to biology are reproduced in our children, linking trauma from the past with our present and future (Kuzawa and Quinn 2009).

Geographic vulnerabilities are also linked to epidemiological histories that produce circumstances where two or more diseases may cluster in one context differently compared to another context, and therefore produce varied realities. For example, diabetes becomes reconstituted across contexts (Mendenhall 2019), and this was ubiquitous in my research in South Africa, which contrasted significantly from previous studies in urban spaces in the United States and India, where people with diabetes related their illness to stress and depression, but rarely infection. The legacies of the HIV epidemic exemplify this dynamic, revealing how deeply influential ideas about HIV are today upon those who are infected and affected by the epidemic. People living with, in separate studies, either diabetes (Mendenhall and Norris 2015) or cancer (Mendenhall et al. 2019) described to me how they feared these conditions in part because their diagnosis would be conflated with HIV. This reflects the long-standing efforts to reduce stigma for those living with HIV and what has come to be defined as chronic care due to HIV. People illustrate the confluence of ideas when they state that they have diabetes to disguise an HIV diagnosis or, conversely, when diabetes produces a stigma-by-association with AIDS (Mendenhall and Norris 2015).

Geographic vulnerabilities are also revealed in the emergence of the tuberculosis-diabetes syndemic. Living in a poorly ventilated and crowded structure increases the likelihood of tuberculosis infection, and having diabetes escalates the risk of infection three times for acquiring active tuberculosis when a family member has active tuberculosis. Although my ethnographic evidence on this link is sparser, this concern emerged in my research in India, South Africa, and Kenya, and reveals how astutely people are thinking about this convergence as they care for the health of their families and communities (Mendenhall 2019). This link parallels that of HIV, where the rise of HIV-linked immunosuppression has caused a resurgence of tuberculosis. Diabetes, too, has the potential to exacerbate this reemerged infection.

Historical, experiential, and epidemiological evidence is insufficient to inform changes to how health systems function. Policy-level influences can have an irreversible impact on people's diagnosis, care seeking, and recovery. The notion that someone may have a life-threatening condition such as diabetes can be traumatic for individuals, families, and communities. As diabetes and other noninfectious conditions increase among socially and economically disadvantaged populations around the world, the systematic exclusion of care from some and not others becomes more visible (Bosire et al. 2018). Although I have argued that in some contexts, such as the United States, diabetes may serve as an entry point into the health system to speak about social and psychological suffering (Mendenhall 2012), recognizing the embodied and entangled relationship of chronic stress and trauma with metabolic conditions is imperative—full stop—to provide holistic, integrated health care for people with chronic illness. Without recognizing the intimate, personal scars from social trauma and violence—which are often never cared for, despite its crippling impact on people's lives—the physical scars cannot recover.

REFERENCES CITED

Bosire, E., E. Mendenhall, G. B. Omondi, and D. Ndetei. 2018. "When Diabetes Confronts HIV: Biological Sub-Citizenship at a Public Hospital in Nairobi, Kenya." *Medical Anthropology Quarterly* 32 (4): 574–92. https://doi.org/10.1111/maq.12476.

Carruth, Lauren, and Emily Mendenhall. 2019. "'Wasting Away': Food Insecurity, Medical Insecurity, and Diabetes in the Somali Region of Ethiopia." *Social Science & Medicine* 288:155–63. https://doi.org/10.1016/j.socscimed.2019.03.026.

Golden, S. H., H. B. Lee, P. J. Schreiner, A. D. Roux, A. L. Fitzpatrick, M. Szklo, and C. Lyketsos. 2007. "Depression and Type 2 Diabetes Mellitus: The Multiethnic Study of Atherosclerosis." *Psychosomatic Medicine* 69 (6): 529–36. https://doi.org/10.1097/PSY.0b013e3180f61c5c.

Kuzawa, C. W., and E. A. Quinn. 2009. "Developmental Origins of Adult Function and Health: Evolutionary Hypotheses." *Annual Review of Anthropology* 38:131–47. https://doi.org/10.1146/annurev-anthro-091908-164350.

Lee, C., V. Tsenkova, and D. Carr. 2014. "Childhood Trauma and Metabolic Syndrome in Men and Women." *Social Science & Medicine* 105 (122): 130.

Mendenhall, Emily. 2012. *Syndemic Suffering: Social Distress, Depression, and Diabetes among Mexican Immigrant Women*. New York: Routledge.

Mendenhall, Emily. 2019. *Rethinking Diabetes: Entanglements with Trauma, Poverty, and HIV*. Ithaca, NY: Cornell University Press.

Mendenhall, Emily, and S. A. Norris. 2015. "When HIV Is Ordinary and Diabetes New: Remaking Suffering in a South African Township." *Global Public Health* 10 (4): 449–62.

Mendenhall, Emily, E. N. Bosire, A. W. Kim, and S. A. Norris. 2019. "Cancer, Chemotherapy, and HIV: Living with Cancer Amidst Comorbidity in a South African Township." *Social Science & Medicine* 237:112461.

Mullings, Leith. 2002. "The Sojourner Syndrome: Race, Class, and Gender in Health and Illness." *VOICES, A Publication of the Association for Feminist Anthropology* 2 (1): 32–36.

Page-Reeves, J., J. Niforatos, S. Mishra, L. Regino, A. Gingrich, and R. Bulten. 2013. "Health Disparity and Structural Violence: How Fear Undermines Health Among Immigrants at Risk for Diabetes." *Journal of Health Disparities Research and Practice* 6 (2): 30–47.

Smith-Morris, C. 2008. *Diabetes among the Pima: Stories of Survival*. Tucson: University of Arizona.

Thayer, Z. M., and A. L. Non. 2015. "Anthropology Meets Epigenetics: Current and Future Directions." *American Anthropologist* 117 (4): 722–35. https://doi.org/10.1111/aman.12351.

Thayer, Z. M., and C. W. Kuzawa. 2011. "Biological Memories of Past Environments: Epigenetic Pathways to Health Disparities." *Epigenetics* 6 (7): 798–803. https://doi.org/10.4161/epi.6.7.16222.

Violence, Obesity, and National Policy in Mexico

DOI: 10.1111/aman.13450

Abril Saldaña-Tejeda
Universidad de Guanajuato, Mexico

Nos queremos vivas/We want ourselves alive[1]

In 2013, Mexico produced its first *National Strategy for the Prevention and Control of Overweight, Obesity, and Diabetes*. Backed by corporate funding, the strategy focused on technological innovations and research alongside educational campaigns to promote a "healthy lifestyle" through diet and physical activity (Vásquez and Gálvez, this forum). In other words, the strategy prioritized individual responsibility over the effects of structural inequalities and, as I suggest here, violence (Gálvez 2018).

On May 6, 2019, Alejandra decided to step outside her home in the state of Michoacán to take a call on her mobile phone. She never came back. Alejandra was only thirteen years old and was still wearing the sport uniform from her local secondary school. During the next twenty-four hours of Alejandra's disappearance, two other thirteen-year-old girls disappeared in Michoacán.[2] The scale of the violence that women and children face in Mexico has been gradually eroding their right to free movement and use of public spaces. Paradoxically, the national strategy suggests that the problem of obesity has compromised the survival of future generations while neglecting the extent to which everyday insecurity shapes, constraints, and threatens that same body they intend to sanitize (Secretaría de Salud 2013, 7).

During 2015–2016, I conducted in-depth interviews with seventeen mothers of children treated for obesity at a children's hospital in Mexico City. Mothers' experiences called into question the strategy's focus on "lifestyle," instead linking obesity to large-scale social forces like violence and environmental neglect/disaster. For instance, while the strategy calls for all sectors of society to promote physical activity and to provide adequate spaces to exercise, mothers described the difficulties of exercising because of local security: children were simply too afraid to play outside, and parents felt the same fear about letting them go outside.

In 2016, only 17.2 percent of Mexican children between ten and fourteen years of age reported being involved in some kind of organized physical activity, with boys more active (21.8 percent) than girls (12.7 percent) (Shamah-Levy et al. 2016). These patterns of physical activity must be seen alongside the increasing rates of violence against women and children. In 2018 alone, official records estimated more than 34,000 homicides in Mexico, establishing it as the most violent year in history. The same year, the government reported 870 femicides,[3] and in January and February 2019,

147 women and girls were murdered.[4] The scale and effects of violence and insecurity on children's and women's use of public spaces for physical activity is yet to be acknowledged by public officials. We all must affirm our right to healthy, affordable, and sustainable food systems, but, as Butler (2004, 195) rightly notes, "there is no affirmation without survival."

Violence has not only the power to paralyze the body. It also affects our eating practices, and therefore it may be also implicated in self-construction through bodily form. Lourdes, one of the mothers interviewed, who had suffered herself from obesity, described being sexually abused as a child. She didn't tell anyone at the time because of fear of her father's potential violent reaction. She saw overeating as a way of protecting herself from unwanted attention. "I kept quiet," she said. "*I ate it all*, I took refuge in food, I punished myself as I thought, 'I don't want anyone to touch me ever again.'" In this account, Lourdes offers us a vivid metaphor of pain *as* food, as something that can be *consumed* and therefore made to disappear from sight. Food can be felt both as a refuge and as a punishment. Women like Lourdes are starting to link overeating to factors other than diet. As one mother stated, "We have learned why we are eating like this, what is the cause of our overeating, and we are learning to know ourselves. [We eat because] we are nervous. I now realize that it is nervousness, stress."

The connection between chronic diseases and large-scale social forces is still absent from public policies designed to address obesity and diabetes (Tsai et al. 2017). Focusing on individual behavior or "ignorance" overlooks the histories of poverty and disadvantage while making women feel responsible not only for their own health but for the health of generations to come (Manderson 2016). Public health officials keep prescribing responsible citizens able to look after their own health and well-being. At the same time, everyday violence in Mexico is leaving many with no life to look after, with no body to nourish.

NOTES

1. *Nos queremos vivas* is a slogan adopted by feminist movements that emerged in response to femicides in Latin America.
2. See: https://lasillarota.com/estados/alejandra-maria-y-valeria-las-ninas-de-13-anos-que-desaparecieron-en-2-dias-en-michoacan-michoacan-fiscalia-alerta-ambar-alerta/284253.
3. The World Health Organization defines femicides as the intentional murder of women because of their gender (Garcia-Moreno, Guedes, and Knerr 2012).
4. See: http://secretariadoejecutivo.gob.mx/docs/pdfs/nueva-metodologia/Info_violencia_contra_mujeres_FEB2019.pdf.

REFERENCES CITED

Butler, Judith. 2004. *Undoing Gender*. New York: Routledge.

Gálvez, Alyshia. 2018. *Eating NAFTA: Trade, Food Policies, and the Destruction of Mexico*. Berkeley: University of California Press.

Garcia-Moreno, Claudia, Guedes Alessandra, and Knerr Wendy. 2012. *Understanding and Addressing Violence Against Women*. Geneva: World Health Organization. https://apps.who.int/iris/bitstream/handle/10665/77421/WHO_RHR_12.38_eng.pdf.

Manderson, Lenore. 2016. "Foetal Politics and the Prevention of Chronic Disease." *Australian Feminist Studies* 31 (88): 154–71.

Secretaría, de Salud. 2013. *Estrategia nacional para la prevención y el control del sobrepeso, la obesidad y la diabetes* [National strategy for the prevention and control of overweight, obesity and diabetes]. Mexico: Secretaría de Salud. https://www.gob.mx/cms/uploads/attachment/file/200355/Estrategia_nacional_para_prevencion_y_control_de_sobrepeso_obesidad_y_diabetes.pdf.

Shamah-Levy, T., L. Cuevas-Nasu, J. Rivera-Dommarco, and M. Hernández-Ávila. 2016. *Encuesta nacional de nutrición y salud de medio camino 2016* [Halfway national health and nutrition survey 2016]. https://www.insp.mx/ensanut/medio-camino-16.html.

Tsai, Alexander C., Emily Mendenhall, James A. Trostle, and Ichiro Kawachi. 2017. "Co-Occurring Epidemics, Syndemics, and Population Health." *The Lancet* 389 (10072): 978–82.

Reproducing Whiteness: Race, Food, and Epigenetics

DOI: 10.1111/aman.13451

Natali Valdez
Wellesley College

"You are what you eat" is a lie.

Rather, it's not quite the full story. The fields of epigenetics and developmental origins of health and disease have cracked this maxim wide open to include: you are what your mom or surrogate ate during gestation, what your grandparents ate or did not eat, and what the cow—that you may eat—ate.

Food has held and continues to hold a sacred place in social and biological (re)production and health across the life course. The boundaries of "critical periods" within the life course are ambiguous when we consider how DNA methylation can happen in hours, days, years, or past generations (Landecker 2011). Epigenetics broadly examines gene–environment interaction and regulation; nutritional and environmental epigenetics attends to how food or

different scales of the environment can stimulate modifications to the genome. However, in certain scientific applications, such as prenatal trials, food or nutrition is wielded as a kind of "neutral" sterile tool for experimentation. Multiple trials around the globe have emerged to target nutritional interventions during pregnancy with the hope that a "healthier" diet will reduce pregnancy risk for the mother and metabolic risks for the children (Flynn et al. 2016; Thangaratinam et al. 2012).

Similarly, national health policies across the United States and United Kingdom also call for more prenatal nutritional interventions on obese pregnant women (IOM 2009; NICE 2010). Through my ethnographic work on clinical trials with ethnically diverse obese pregnant women (Valdez 2018), I found that nutritional interventions mobilize colonial regimes of living by promoting Eurocentric diets as "healthy." Diana Burnett (2014), included here, uses the term "nutritional colonialism" to frame the structural violence that constrains conditions of eating and well-being for Black women in Brazil.

Although some interventions tried to be "culturally competent" by including "tortillas" and "frijoles" into the dietary recall surveys, for example, the majority of the nutritional interventions I examined across the United States and United Kingdom promoted a "Mediterranean" diet as the ideal. This culturally and economically inaccessible diet—itself an invention of US chemist Ancel Keys—illustrates how so-called treatments still operated within a racialized system of exclusion that set patients up for failure and harm. Scholarship in feminist and critical race studies of science illustrates that racism can creep into our food and bodies through the Trojan horse of "neutral" science and "healthy" interventions (Duster 2005; Roberts 2012; TallBear 2013).

On a sunny afternoon in April, Mary—a pregnant participant in one of the prenatal trials I worked on—came in for her last intervention visit with Donna, a staff member on a clinical trial in the United Kingdom. Mary, a first-generation British citizen whose parents and family were all from Senegal, self-identified as West African and was studying for her master's in computer engineering. Donna identified as Afro-Caribbean and was one of only two women of color working on the UK trial.

During the intervention session, Donna asked Mary, "What are the main staple foods in Senegal?" Mary replied: rice, okra, and palm oil. Donna observed that most of those foods were high on the glycemic index. She proposed that when Mary returned to Senegal to visit her family, she would need to focus on portion control. Mary responded, "Portion, portion, portion, I do not want to share a house with you [Donna], too much portion. I just put a plate of food down and as long as you want to eat you just mix, eat, and tummy is full." Mary gave a huge smile and both women started laughing.

The session continued, and Donna asked Mary, "What's been your biggest achievement and challenge?" Mary responded that her biggest achievement was how the intervention had "changed the way I eat, the way I think about food—I behave myself more." Again, she smiled. To address the second part of the question, Mary went on to say that one of her biggest challenges was having to always be "aware of everything, like portions and liquid beverages. I'm not used to it, it will be hard because I've been eating this way for years."

Controlling one's portion was at first a foreign concept to Mary. The idea that one would measure a "serving" of food calculated by grams of sugar, carbohydrates, and fat is a different epistemological (and Eurocentric) approach to food, eating, and sharing. As Mary mentioned here and in other conversations, she usually just put a big plate of different kinds of food in the middle of the table, and her family would take what they wanted. Encouraging the idea of portion control intervenes on a cultural and social way of relating and sharing foods with others. Mary commented that the intervention had "made her behave more": the nutritional intervention intended to change her. The idea that the intervention made her "behave more" reflected the underlying notion that how she grew up eating in her Senegalese immigrant household was unruly, unhealthy, and even risky.

Nutrition interventions are never neutral, and they too are a lie. Rather, they do not represent the whole story about what counts as a nutritious diet. A hidden aspect of nutritional interventions is that how certain diets are defined as "healthy" is entangled with cultural and racialized values. Reproducing whiteness is not just about what foods and behaviors are deemed healthy but also about how we reproduce scientific knowledge practices. In this way, food as a scientific tool cannot be separated from the colonial cultures, contexts, and histories that shape its existence, distribution, access, and impact on diverse participants.

REFERENCES CITED

Burnett, D. 2014. "Utilizing Photo-Elicitation to Explore the Impact of the Nutrition Transition on the Consumption Patterns, Lifestyle Practices, and Health of Black women in Salvador da Bahia, Brazil." Unpublished manuscript, University of Pennsylvania, Philadelphia, PA.

Duster, T. 2005. "Race and Reification in Science." *Science* 307 (5712): 1050–51.

Flynn, Angela C., Kathryn Dalrymple, Suzanne Barr, Lucilla Poston, Louise M. Goff, Ewelina Rogozińska, and Mireille van Poppel. 2016. "Dietary Interventions in Overweight and Obese Pregnant Women: A Systematic Review of the Content, Delivery, and Outcomes of Randomized Controlled Trials." *Nutrition Reviews* 74 (5): 312–28.

IOM (Institute of Medicine and National Research Council). 2009. *Weight Gain during Pregnancy: Reexamining the Guidelines*. Washington, DC: National Academies Press.

Landecker, H. 2011. "Food as Exposure: Nutritional Epigenetics and the New Metabolism." *BioSocieties* 6 (2): 167–94.

NICE (National Institute for Health and Care Excellence). 2010. *Weight Management Before, During, and After Pregnancy*. London: National Institute for Health and Care Excellence.

Roberts, D. 2012. *Fatal Invention: How Science, Politics, and Big Business Re-Create Race in the Twenty-First Century*. New York: The New Press.

Tallbear, Kim. 2013. *Native American DNA: Tribal Belonging and the False Promise of Genetic Science*. Minneapolis: University of Minnesota Press.

Thangaratinam, S., E. Rogozińska, K. Jolly, S. Glinkowski, T. Roseboom, J. W. Tomlinson, R. Kunz, et al. 2012. "Effects of Interventions in Pregnancy on Maternal Weight and Obstetric Outcomes: Meta-Analysis of Randomised Evidence." *BMJ* 344: e2088.

Valdez, Natali. 2018. "The Redistribution of Reproductive Responsibility: On the Epigenetics of 'Environment' in Prenatal Interventions." *Medical Anthropology Quarterly* 32 (3): 425–42. https://doi.org/10.1111/maq.12424.

Redefining Diabetes Risk in Mexico

DOI: 10.1111/aman.13452

Emily E. Vasquez
Columbia University

Amid mounting alarm over diabetes and obesity, Mexico's then-president Enrique Peña Nieto announced a *National Strategy for the Prevention and Control of Overweight, Obesity, and Diabetes* in 2013. In a press conference, he explained the strategy included steps to improve care for those already sick, but it also emphasized prevention targeted at sectors of the population identified as "at risk" (Aristegui Noticias 2013). In addition to public campaigns promoting lifestyle change (see Gálvez and Saldaña, this forum), the idea was to target prevention efforts to those at the edge of developing disease.

This feature of the national strategy reflected, in large part, the Mexican government's partnership with the Carlos Slim Foundation, a Mexico City–based philanthropic organization invested in fostering a paradigm shift to combat chronic disease—"a radical change … toward a proactive, preventive model … rather than the traditional, passive, curative, hospital-centered approach" (Tapia-Conyer, Gallardo-Rincón, and Saucedo-Martine 2013, 10). Not just a philanthropic organization, the foundation is also a "think tank." Rather than funding external proposals, it analyzes needs itself, then designs and oversees the implementation of solutions. Accordingly, the foundation emerged as one of the government's most important collaborators in health reform over the course of Peña Nieto's administration. As then-secretary of health Dr. José Narro Robles noted in a 2018 interview, "we have an extraordinary alliance with the foundation, there is a symbiosis, a sum of capabilities, of possibilities."

The foundation's strategy leverages its benefactor's vision, business acumen, and political weight. A telecommunications titan, Carlos Slim controls Latin America's largest mobile telecom company, with extensive holdings from banking and civil infrastructure to retail and pharmacies. Slim was the richest man in the world from 2010 to 2013, and he remains the wealthiest man in Mexico. Incorporating telecommunications technology, the foundation has worked to integrate new screening tools into public primary-care clinics to detect and monitor chronic disease, pre-disease (like prediabetes and pre-hypertension), and their risk factors (like elevated BMI or blood sugar or a family history of disease). These screening tools are intended to help channel the group of individuals deemed "at risk"—on the cusp of a diabetes diagnosis, for example—into preventive care (nutritional counseling or a Metformin prescription for prediabetes) or into timely treatment for those diagnosed with chronic disease (Tapia-Conyer et al. 2017).

But the foundation did not stop at traditional risk factors. Turning its gaze to the level of the molecular, between 2010 and 2013 the foundation donated $139 million to research to advance understanding of the genetic drivers of diabetes, focusing on Mexican and Latin American DNA (Broad Institute 2013). Drawing on this research, the foundation helped develop and promote a commercial test for genetic predisposition to diabetes that is tailored to "Mexicans" (Miranda 2017). It also helped bring to Mexico a cutting-edge metabolomic test that can detect chemical signs of diabetes risk in the body up to ten years before an HbA1c (Business Wire 2014). With these technologies, risk is no longer just read on the body, based on BMI or a test of sugar in the blood, but is surfaced from deep within, from DNA, and on a timescale reaching years earlier than previously possible.

These tools are proof of concept for the foundation's vision for diabetes prevention—and for the future of public health (Vasquez and García-Deister 2019). As its director of global solutions explained to public health students last year, "What I am going to tell you goes totally against what our public health professors have taught us since our first engagement with this discipline, that public health is about population dynamics. Here we're going to the other extreme, to the most intimate, most individual aspect of each human being … genomics and a few of the other fields we'll see at work today are enabling us to individualize risk, create profiles, and better characterize our population" (Betancourt 2018). This, he explained, is "personalized public health."

Early on, as the foundation's directors were designing their approach, they traveled widely to consult experts at top institutions. A diabetes expert at the Mayo Clinic told me about his experience meeting them. To his frustration, the directors seemed to already be focused on risk detection and health education. "I expressed that it was not a matter of identifying the slow fish in the stream, but rather that it would be much better to change the stream all together," he said. "And particularly with somebody like Slim, with those resources, that would have been a potentially feasible task." He continued, "Affecting the conditions that create the epidemic is a political task, you have to reduce poverty, you have to reduce crime, socioeconomic distress. You have to work on access to food and physical activity and recreation and stress reduction … the task is to change the way your society is set up."

But the foundation chose a different route, one that is illuminating new understanding of *embodied* risk—and one in line with its benefactor's and its directors' expertise and interests. Increased screening, preventive medical attention, and proactive treatment are immensely valuable from a medical perspective and from that of the health-care industry. But as this approach centers new diagnostic tests, electronic tracking, and lifestyle apps, key upstream structural drivers of Mexico's diabetes epidemic go undisturbed. A hard look at food policy and what livable wages in Mexico might mean for creating healthier households is diverted.

Global health challenges are increasingly placed under the stewardship of private foundations, like the Carlos Slim Foundation. Scholars have noted that the world's mega-rich, many of whom made their fortunes in the tech sector—perhaps most famously Bill Gates—are now leading global health initiatives that are shaped, like their companies, "by logics of the individual, the market, and of societal progress through technological innovation" (Fejerskov 2017). As they develop these initiatives—outside the purview of democratic oversight—they also redirect otherwise taxable millions from public coffers (Birn 2005, 2014; McGoey 2015). Extraordinary benefits may come of these gifts, but we are also faced with an important reckoning regarding the reach of philanthropy's power. Under their stewardship, it is critical to examine which drivers of chronic disease—which kinds of risk—are coming into focus and which may slip further out of view.

REFERENCES CITED

Aristegui Noticias. 2013. "Lanza Peña Nieto campaña integral de obesidad frente a empresarios" [Peña Nieto launches comprehensive obesity campaign in front of businessmen]. YouTube video, October 31. https://www.youtube.com/watch?v = xLf_yTiZ__Q.

Betancourt, Miguel. 2018. "Genómica y Enfermedades Crónicas" [Genomics and chronic disease], Facebook post. January 26. https://www.facebook.com/posgradosupaep/videos/1708053432573911/.

Birn, Anne-Emanuelle. 2005. "Gates's Grandest Challenge: Transcending Technology as Public Health Ideology." *Lancet* 366 (9484): 514–19.

Birn, Anne-Emanuelle. 2014. "Philanthrocapitalism, Past and Present: The Rockefeller Foundation, the Gates Foundation, and the Setting(s) of the International/Global Health Agenda." *Hypothesis* 12 (1): e8.

Broad Institute. 2013. "Mexico-US Genomics Partnership Launches Second Phase." Broad Institute website, October 29. https://www.broadinstitute.org/news/mexico-us-genomics-partnership-launches-second-phase.

Business Wire. 2014. "Metabolon Enters into Agreement with the Carlos Slim Institute, Patia and Clinica Ruiz for Quantose Prediabetes Test in Mexico." *Business Wire* website, February 24. https://www.businesswire.com/news/home/20140224006691/en/Metabolon-Enters-Agreement-Carlos-Slim-Institute-Patia.

Fejerskov, Adam Moe. 2017. "The New Technopolitics of Development and the Global South as a Laboratory of Technological Experimentation." *Science, Technology, & Human Values* 42 (5): 947–68.

Miranda, Perla. 2017. "Nueva prueba identifica personas en riesgo de padecer diabetes" [New test identifies people at risk of developing diabetes]. *El Universal* website, January 25. https://www.eluniversal.com.mx/articulo/nacion/sociedad/2017/01/25/nueva-prueba-identifica-personas-en-riesgo-de-padecer-diabetes.

McGoey, Linsey. 2015. *No Such Thing as a Free Gift: The Gates Foundation and the Price of Philanthropy*. London: Verso.

Tapia-Conyer, Roberto, Héctor Gallardo-Rincón, and Rodrigo Saucedo-Martine. 2013. "CASALUD: An Innovative Health-Care System to Control and Prevent Non-Communicable Diseases in Mexico." *Perspectives in Public Health* 135 (4): 180–90.

Tapia-Conyer, Roberto, Rodrigo Saucedo-Martínez, Ricardo Mújica-Rosales, Héctor Gallardo-Rincón, Evan Lee, Craig Waugh, Lucía Guajardo, et al. 2017. "A Policy Analysis on the Proactive Prevention of Chronic Disease: Learnings from the Initial Implementation of Integrated Measurement for Early Detection (MIDO)." *International Journal of Health Policy and Managemen*t 6 (6): 339–44.

Vasquez, Emily E., and Vivette García-Deister. 2019. "In Pursuit of Genomic Justice: Sovereignty, Inclusion, and Innovation in Mexico." In *Routledge Handbook on the Politics of Global Health*, edited by R. G. Parker and J. García, 421–32. London: Routledge.

The "Gentle and Invisible" Violence of Obesity Prevention

DOI: 10.1111/aman.13453

Megan Warin
University of Adelaide

In Australia, the current positioning of the obesity problem entails interweaving forms of care and violence. This is not overt or explicit violence, but a "gentle and invisible violence" (Bourdieu 1977, 192) that is legitimated through pedagogic authority and political abandonment. This violence differs in its temporal rendering from catastrophic events like hurricanes, COVID-19, or the global financial crisis, as it creeps insidiously into everyday life and is normalized and taken for granted. Slow violence, as Elizabeth Povinelli (2008, 162) writes, "distributes misery" and wears people down (Berlant 2008; Nixon 2011). It is a "quasi-event" operating through ordinariness, remaining under the radar, allowing an absence of ethical response.

In this short piece, I draw on a decade of obesity fieldwork in various South Australian communities, including an ethnographic study of Australia's largest childhood-obesity intervention in a community that has experienced significant disadvantage. I argue that programs that position themselves as well intentioned can reproduce forms of slow and symbolic violence through pedagogic care; in doing so, I acknowledge the scholarship of anthropologists who have examined the complex politics and ethics of "doing good" in situations where unequal power relations exist (Kowal 2015; Mosse 2005; Povinelli 2011). "Doing good" can be intimately entwined with symbolic violence; it involves power relations that intersect across race, class, and gender and are misrecognized as "legitimate in the eyes of the beholder" (Bourdieu and Passeron 1977, xiii).

As obesity is seen as a matter of individual choice, it does not demand immediate attention. Like action on climate change, the "creeping" speed of obesity allows all manner of papering over and political abandonments to take place. Australian newspapers declare that "poverty [is] no excuse for fat kids" (Bita 2013). Government ministers in Australia have extolled citizens to "take responsibility on yourself … put on a pair of sandshoes and walk around the block … get yourself a robust chair and a heavy table and half-way through the meal put both hands on the table and just push back—that will help you lose weight" (Joyce 2017). Such exhortation of individual care, testimony to the continual rejection of research on the social determinants of health, is an enactment of symbolic violence (Mayes 2016, 66).

This version of care of self is premised on the assumption that certain sections of society are ignorant and need to be shown how to enact care and how to take better care of their health and their bodies by achieving "a healthy weight" (Farrell et al. 2016; Sanabria 2016). In Adelaide suburbs identified as "obesogenic," dietitians were positioned as central to administering education on "healthy eating" (Warin 2018). They always came armed with a plethora of information—new low-fat and low-salt recipes, plastic replicas of correct food sizes, weight charts, dietary guidelines, and cooking demonstrations of food with tastes not always familiar to local palates and habitus (Warin and Zivkovic 2019). Middle-class discourses on "good nutrition" (Hite 2019) were imparted as biopedagogic authority, with factual nutrition information transmitted to correct deficit knowledge and "save" people from the "ills of obesity." Despite the contestation within nutrition science of what constitutes a "healthy diet" and its assumed links to chronic diseases (Hite, this forum), the hegemonic discourse of fat as unhealthy was taken for granted in all obesity interventions. The imperative to correct knowledge was thus situated as a form of care in the name of public health.

This "doing good" of pedagogic work is misrecognized as neutral, and the legitimacy of such knowledge is taken for granted as "caring," "correct," and "right" by those who impart it. But well-intentioned education is not always well received, and some responded by caring for themselves and others in ways that countered dominant healthy-eating messages (e.g., rejecting normative and classed discourses of "health" by sharing sugary and high-fat foods as demonstrations of care, pleasure, and successful parenting [Warin, Jay, and Zivkovic 2019]).

When people are unable or unwilling to enact education on normative healthy lifestyles (often because they do not have the material resources to do so), then they are less likely to elicit empathy and are blamed for their failures and abandoned. In less public forums, I was told by some working in a community with high levels of disadvantage that the obesity program did not focus on adults because they were "a lost cause" and that interventions wouldn't "make any difference." And since this program had shown no statistically significant difference to children's BMI over a five-year period of intervention (2009–2014) (Flinders University OPAL Evaluation Project Team 2016), the federal government withdrew funding. The effects of focusing on such narrow proxies, coupled with biopedagogic authority and abandonment, compounds the political inertia in which slow violence plays out.

NOTES

Acknowledgments. This project was funded by an Australian Research Council Future Fellow (Project ID: FT140100825).

REFERENCES CITED

Berlant, Lauren. 2008. "Slow Death (Sovereignty, Obesity, Lateral Agency)." *Critical Inquiry* 33 (4): 754–80.

Bita, Natasha. 2013. "Poverty No Excuse for Fat Kids." *The Advertiser*, August 3.

Bourdieu, Pierre. 1977. *Outline of a Theory of Practice*. Cambridge: Cambridge University Press.

Bourdieu, Pierre, and Jean-Claude Passeron. 1977. *Reproduction in Education, Society and Culture*. London: SAGE.

Farrell, Lucy, Megan Warin, Vivienne Moore, and Jackie Street. 2016. "Socio-Economic Divergence in Public Opinions about Preventive Obesity Regulations: Is the Purpose to 'Make Some Things Cheaper, More Affordable' or to 'Help Them Get Over Their Own Ignorance'?" *Social Science and Medicine* 154:1–8.

Flinders University OPAL Evaluation Project Team. 2016. *OPAL Evaluation Final Report*. https://www.sahealth.sa.gov.au/wps/wcm/connect/73c1d1804f54bcf2b396ffdd8959a390/FLINDERSOPALFINALREPORT.PDF.

Hite, Adele. 2019. "A Material-Discursive Exploration of 'Healthy Food' and the *Dietary Guidelines for Americans*." PhD dissertation, North Carolina State University.

Joyce, Barnaby. 2017. "Federal Sugar Tax Proposals Divide Experts and Federal Government." *Sydney Morning Herald*, February 17. https://www.smh.com.au/politics/federal/sugar-tax-proposals-divide-experts-and-federal-government-20170217-guf0sd.html0.

Kowal, Emma. 2015. *Trapped in the Gap: Doing Good in Indigenous Australia*. New York: Berghahn Books.

Mayes, Christopher. 2016. *The Biopolitics of Lifestyle: Foucault, Ethics and Healthy Choices*. New York: Routledge.

Mosse, David. 2005. *Cultivating Development: An Ethnography of Aid Policy and Practice*. London: Pluto Press.

Nixon, Rob. 2011. *Slow Violence and the Environmentalism of the Poor*. Cambridge, MA: Harvard University Press.

Povinelli, Elizabeth. 2008. "The Child in the Broom Closet: States of Killing and Letting Die." *South Atlantic Quarterly* 107 (3): 509–30.

Povinelli, Elizabeth. 2011. *Economies of Abandonment: Social Belonging and Endurance in Late Liberalism*. Durham, NC: Duke University Press.

Sanabria, Emilia. 2016. "Circulating Ignorance: Complexity and Agnogenesis in the Obesity Epidemic." *Cultural Anthropology* 31 (1): 131–58.

Warin, Megan. 2018. "Information Is Not Knowledge: Cooking and Eating as Skilled Practice in Australian Obesity Education." *The Australian Journal of Anthropology* 29 (1): 108–24.

Warin, Megan, and Tanya Zivkovic. 2019. *Fatness, Obesity and Disadvantage in the Australian Suburbs: Unpalatable Politics*. London: Palgrave.

Warin, Megan, Bridget Jay, and Tanya Zivkovic. 2019. "'Ready-Made' Assumptions: Situating Convenience as Care in the Australian Obesity Debate." *Food and Foodways* 27 (4): 273–95.

Imperialist Irony

DOI: 10.1111/aman.13454

Emily Yates-Doerr
Oregon State University / University of Amsterdam

Not long ago, a US journalist released a podcast titled *A Craving for Nutritional Knowledge*,[1] which described the nutritional landscape of Guatemala as "ironic": "The main crop here was irony. The same valleys that produced a cornucopia of vegetables of enormous size … also produced the highest rates of stunting in the Western hemisphere."

Roger Thurow, a hunger policy consultant who worked for three decades as a foreign correspondent for the *Wall Street Journal*, had traveled to a rural K'iche' health clinic where he attended a nutrition rehabilitation class for new moms and moms-to-be. He tells a story about how a K'iche' clinician quizzed the dozen women in the room about where calcium and iron came from and how the women answered back with great enthusiasm: "Milk, meat, green vegetables, spinach, beans."

Their correct answers offer evidence for the uncomfortable truth that knowledge does little to alleviate hunger in Guatemala's highlands, where, as Thurow reports, "childhood malnutrition and stunting rates were about the highest you will find anywhere in the world." He mentions that Guatemala's civil war ravaged the countryside, and he highlights the inequalities of the export trade, which keeps the cost of healthy vegetables high. Thurow is struck by the tragedy of the situation: women who produce food for the world do not, themselves, have enough to eat.

I have visited the clinic he describes several times and know many people from the United States who have spent months volunteering there. The clinic is a close commute to Xela, Guatemala's second-largest city. Volunteers typically live in the city, where they have hot showers and access to the French or sushi restaurants that nuance Thurow's story of Guatemalan poverty. The uninformed listener would be forgiven for thinking that the journalist is far off the beaten path, since he implies that he is. He describes the clinic as "decrepit," and he speaks of the long-standing neglect that has exacerbated malnutrition in the region.

In fact, the clinic is a well-networked living laboratory of nonprofit and nongovernmental aid. It has a polished English-language webpage and several US Americans

sit on its board, including at least one anthropologist. These omissions belie other absences in Thurow's story of chronic hunger. Not once in his discussion of Guatemala's entrenched poverty does he mention his own government, which has spent decades squashing any grassroots-led attempts to alleviate poverty in Guatemala (Gleijeses 1989). Nor does he mention the role that US journalists have played in upending what had been a peaceful land reform by repeating false narratives about the growing threat of communism (Curtis 2002; Grandin 2015). As I have written about elsewhere, "civil war," though widely used to describe the violence in Guatemala, is a deceptive misnomer for what was actually a multi-state-sponsored genocide (Yates-Doerr 2019).

Thirty years ago, Renato Rosaldo (1989) coined the term "imperialist nostalgia" to characterize the mourning for a past that one has been complicit in destroying. He gives the example of colonial officers and missionaries who deplete environmental resources and then worship nature, kill and then deify their victim, or alter life immeasurably and then lament that life is not how it was before they arrived. "Imperialist nostalgia," writes Rosaldo, "uses a pose of 'innocent yearning' both to capture people's imaginations and to conceal its complicity with often brutal domination" (108).

Alyshia Gálvez (2018) documents how imperialist nostalgia underlies discussions of the changing food landscape of post-NAFTA Mexico, where policymakers celebrate the intangible heritage of Mexican cuisine on the international stage, all the while refusing to make tangible policy changes to protect small farmers' way of life. Guatemala's political landscape is also rife with this form of imperialist food nostalgia, as is Thurow's podcast, which mourns Guatemalan poverty while sidestepping his role in its production (Alonso-Fradejas 2012).

In this Vital Topics contribution, I suggest that we might add *imperialist irony* to the concept of imperialist nostalgia. Irony, like nostalgia, is a Greek word, with origins in *eirōneia*, meaning simulated ignorance. Historically, *eirōneia* served as a performative device in Greek tragedy, where the audience was a knowing observer of conditions about which characters living through these conditions were unaware.

As with imperialist nostalgia, imperialist irony functions as a power play: those standing apart see something that they mark as surprising or unexpected, which insiders do not see themselves. And as with imperialist nostalgia, imperialist irony allows an observer to convey a longing for things to be otherwise while they elide their own culpability for the way things have become.

Irony, or simulated ignorance, becomes an especially convenient device for policymakers when they discuss what or why or how people eat. Emilia Sanabria (2016) makes this point clear when she demonstrates how nutrition policymakers routinely, and willfully, produce certain kinds of people and communities as ignorant so as to justify intervening upon their behaviors while leaving untouched the political and economic systems in which they live. Likewise, when someone claims irony, they put themselves in the role of the knower, casting the people in the scene they are viewing as ignorant. This maneuver of making the viewer the expert redirects attention away from expertise of the people in the scene when it comes to the question of what to do next.

Thurow concludes his podcast about nutrition in Guatemala with the message: "[The women] left the classroom empowered and burdened at the same time and walked home, past the fields of the valley, ripe with irony."

Except this is wrong. Thurow is correct in his assessment that knowledge of nutrients will do little to improve the women's lives, but there is not irony in this fact. The conditions that Thurow documents are neither surprising nor a product of neglect. For years, people in political power in Guatemala, with the aid of US politicians and the complicity of many US-based newspapers (Malkin 2013), have run an intentional and well-orchestrated campaign of Indigenous genocide, targeting women in particular. There is nothing ironic about how women are today marginalized in a land of plenty or about how their children suffer. Great effort has gone into foreclosing their life possibilities, of which they are well aware.

NOTE

1. https://www.thechicagocouncil.org/blog/outrage-and-inspire/outrage-and-inspire-roger-thurow-craving-nutrition-knowledge.

REFERENCES CITED

Alonso-Fradejas, Alberto. 2012. "Land Control-Grabbing in Guatemala: the Political Economy of Contemporary Agrarian Change." *Canadian Journal of Development Studies* 33 (4): 509–28.

Curtis, Adam. 2002. "The Century of the Self." YouTube. https://youtu.be/BI5RSptFAiA.

Gálvez, Alyshia. 2018. *Eating NAFTA: Trade, Food Policies, and the Destruction of Mexico*. Berkeley: University of California Press.

Gleijeses, Piero. 1989. "The Agrarian Reform of Jacobo Arbenz." *Journal of Latin American Studies* 21 (3): 453–80.

Grandin, Greg. 2015. "What Bill O'Reilly Really Did in El Salvador Was Worse Than Lying." *The Nation*, February 27.

Malkin, Elisabeth. 2013. "Trial on Guatemalan Civil War Carnage Leaves Out U.S. Role." *New York Times*, May 16. https://www.nytimes.com/2013/05/17/world/americas/trial-on-guatemalan-civil-war-carnage-leaves-out-us-role.html?_r=1&.

Rosaldo, Renato. 1989. "Imperialist Nostalgia." *Representations* 26 (Spring): 107–22.

Sanabria, Emilia. 2016. "Circulating Ignorance: Complexity and Agnogenesis in the Obesity Epidemic." *Cultural Anthropology* 31 (1): 131–58.

Yates-Doerr, Emily. 2019. "An Unfinished War." *Anthropology Now* 11 (1–2): 57–73.