Identifying the Root Causes of Health Inequities: Reflections on the 2011 National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention **Health Equity Symposium**

ANA PENMAN-AGUILAR, PHD, $MPH^{a,b}$ KATHLEEN McDavid HARRISON, PHD, MPHa HAZEL D. DEAN, ScD, MPH^a

In August 2011, the Centers for Disease Control and Prevention's (CDC's) National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHH-STP) held a one-day health equity symposium titled "Identifying Root Causes of Health Inequities: Using Data to Monitor and Improve Health." The goal of the symposium was to strengthen CDC's role as a leader in health equity by (1) increasing awareness, engagement, and action to address the social determinants of health (SDH); and (2) highlighting the role of data in informing and improving public health policy, practice, and research. The symposium featured keynote presentations by national experts, a question-and-answer session with the presenters, 40 scientific posters highlighting CDC's SDH activities, and five simultaneous scientific workshops. We describe the highlights of the main messages delivered by each of several keynote speakers who are not affiliated with CDC. In offering this account of messages delivered by private citizens, CDC authors respect the autonomy and integrity of the proceedings of a public meeting and offer no judgment regarding the merits of what was discussed or the implications of specific comments for CDC and its partners.

KEYNOTE PRESENTATION THEMES

The keynote presentations touched on several interrelated themes. These themes, as well as the speakers' views on lessons and challenges for CDC and its partners, are summarized hereafter.

The enduring effects of racism on health

Gail C. Christopher, DN, vice president for program strategy at the W.K. Kellogg Foundation, described racism as a "wound in the heart of our nation" from which the United States has never fully recovered, noting that, for 300 years, human worth was based on skin color, with some people deemed less than human. Observing that the Civil Rights Movement did not eliminate this belief system from science, religion, government policies, and the ways in which we communicate, Dr. Christopher shared her view that as a nation, we must

Address correspondence to: Ana Penman-Aguilar, PhD, MPH, Centers for Disease Control and Prevention, Office of the Director, Office of Minority Health and Health Equity, 4770 Buford Hwy. NE, MS-K77, Atlanta, GA 30333; tel. 770-488-8194; fax 770-488-8140; e-mail
bpv4@cdc.gov>.

^aCenters for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Atlanta, GA ^bCurrent affiliation: Centers for Disease Control and Prevention, Office of the Director, Office of Minority Health and Health Equity, Atlanta, GA

come to terms with the enduring effects of racism on health. Dr. Christopher holds that it is incumbent on the fields of medicine and public health to "connect the dots" and bring to light the biological processes through which SDH, including the chronic stress that results from being denied equality, subjects so many of us to disease. She noted that societal acceptance is a basic need for all people; when it is lacking, the body and its functions are adversely affected.

Lessons and challenges offered to CDC and its partners. Dr. Christopher challenged CDC and its partners to advance racial equity in health by (1) identifying the pathways through which chronic stress from experiencing racism may increase susceptibility to illness and (2) intervening on these processes to avoid unnecessary illness and death.

The importance of where we live

Anthony B. Iton, MD, JD, MPH, senior vice president, healthy communities, California Endowment, shared data pointing to the long-term health consequences of living in underprivileged communities, including data from various U.S. metropolitan areas that demonstrate a strong positive correlation, at the census-tract level, between average income and life expectancy at birth. Although improving access to high-quality health care is vital, Dr. Iton observed that it cannot entirely eliminate health inequities because "where you live matters." He noted that low-trajectory neighborhoods—distinguished by inferior housing units, schools, and employment opportunities, as well as high crime rates—place residents at risk of poor health. Low-trajectory neighborhoods generally include higher numbers of short-term lending facilities and liquor stores and lower numbers of playgrounds and fullservice grocery stores, as compared with high-trajectory neighborhoods (i.e., those with lower crime rates and better housing, education systems, and employment opportunities). Dr. Iton's presentation provided evidence that high-trajectory neighborhoods predispose residents to comparatively better health.

Lessons and challenges offered to CDC and its partners. Dr. Iton exhorted CDC and its partners to identify and target for change those policies that support the existence of low-trajectory neighborhoods. He noted that awareness by policy makers can be raised by simply telling a persuasive story based on data that highlights the downstream negative or positive impacts of policies on public health, and that this awareness, in turn, can lead to policy change.

The role of measurement

David Satcher, MD, PhD, the 16th U.S. Surgeon General, former CDC director, and director of the Center of Excellence on Health Disparities and the Satcher Health Leadership Institute at Morehouse School of Medicine, stressed the need to effectively measure SDH, noting that effective measurement is essential for evaluating the influence of public health interventions on SDH. Dr. Satcher emphasized the importance of integrity. In his view, ongoing measurement of one's progress and continuous efforts to keep stakeholders informed are effective ways to demonstrate integrity and hold one's institution accountable.

Dr. Satcher believes that the "enduring public health approach"—which focuses on "fulfilling society's interest in assuring the conditions in which people can be healthy"²—is inclusive of an increased commitment to addressing SDH. Dr. Satcher reminded the audience that, in public health, we ask, "What is the problem, what is its cause, and how can we intervene?" He observed that, when the problem is a health inequity, it can be complicated and challenging to measure. Nevertheless, he believes that CDC possesses the necessary resources and authority to not only lead the way in identifying effective methods to measure SDH and health inequities, but also to move the nation toward a public health system that fully acknowledges SDH as a root cause of unnecessary morbidity and mortality.

Steven Teutsch, MD, MPH, chief science officer at the Los Angeles County Public Health Department, similarly emphasized the importance of measuring SDH in a way that allows stakeholders to hold institutions accountable. Teutsch summarized two Institute of Medicine (IOM) reports, 3,4 highlighting specific recommendations including those that call for standardized health-outcome indicators; annual reporting by the U.S. Department of Health and Human Services of disparities and trends in the social and environmental determinants of health; application of a Health in All Policies approach that acknowledges that legislation, regulations, and other policies have downstream health effects; and engagement of stakeholders in efforts to improve the health of communities.

Lessons and challenges offered to CDC and its partners. Dr. Satcher encouraged CDC and its partners to use rigorous measurement of SDH as a platform for developing science-based health policies and programs. In his presentation, Dr. Teutsch shared his belief that the IOM reports can help the public health system leverage the resources it needs to measure the social and environmental determinants of health.

The role of communication

Drew Westen, PhD, MA, professor of psychology at Emory University, shared three principles for ensuring that SDH messages have a persuasive impact on policy makers and the public. The first principle is to be aware of "associative networks"—subconscious associations, images, and emotions—that are triggered during communication. In other words, some words and phrases are more likely than others to stimulate associative networks. For example, Dr. Western observed that when someone uses the term "health disparity," that person is likely to activate strongly favorable or strongly unfavorable associative networks in the listener. The second principle described by Dr. Westen is to rigorously evaluate SDH messages and, whenever possible, use messages in which emotional influence has been tested and verified. The third principle is to tell a story that resonates with policy makers and the public; stories motivate listeners and provide them with a framework that makes it easier for the listeners to absorb complicated messages.⁵

Lessons and challenges offered to CDC and its partners. Dr. Westen offered the lesson that adhering to principles of effective messaging in communication with policy makers and the public can lead to greater acceptance of SDH messages. In his view, effective messaging can lead to action on these messages.

Communities as full partners

One theme that cut across the keynote presentations was the importance of engaging communities. For example, Dr. Iton recommended that, whenever possible, individual-level interventions should be transformed into community-based activities. In his view, a paradigm shift is needed: a key focus of public health should be ensuring that communities possess the capacity to develop solutions to their own healthrelated concerns. Other speakers touched on this theme as well, with Dr. Christopher sharing that the W.K. Kellogg Foundation values community engagement because it views people as the force for change. Drs. Teutsch and Satcher focused on the importance of stakeholder input and involvement. For example, Dr. Satcher noted that the Satcher Leadership Institute defines leaders as individuals who are open to learning from the experiences of others, including the communities that they serve.

Lessons and challenges offered to CDC and its partners. Drs. Satcher and Teutsch urged CDC to continue on its course of reaching out to a large and diverse set of partners and engaging them in meaningful ways. Dr. Satcher challenged CDC to develop nontraditional

partnerships and alliances, and Dr. Iton emphasized the importance of building partnerships with low-trajectory neighborhoods and developing their capacity, so that they become well-equipped to address health inequities that affect them on a daily basis.

SKILL-BUILDING WORKSHOPS

Workshops were developed with the broad goal of providing information and tools to CDC staff seeking to address SDH in their day-to-day activities, and they were tailored to the needs of CDC staff working in research, surveillance, policy, and programs. "SDH 101: A Primer on Social Determinants of Health" provided a basic overview of SDH concepts. In "Addressing SDH by Influencing Policy and Program Planning Activities," presenters spoke from a wealth of experience in integrating SDH approaches into CDC funding opportunity announcements, health service provision, and the Healthy People 2020 initiative.⁶

"Using Public Health Legal Research to Drive Policy Development and Improve Health Equity" addressed the role of legal research in the development of policies that support health equity. "Measuring, Monitoring, and Linking Social Determinants of Health Variables to Health Outcome Variables" focused on analytic approaches that take into consideration the complex relationships among SDH variables and health outcomes. In "Practical Solutions for Identifying Social Determinants of Health and Measuring Health Disparities," presenters demonstrated how to complement individual-level disease outcome data with SDH data to provide a more complete picture of affected populations, with the broader goal of contributing to informed decision-making to eliminate health inequities.

CONCLUSIONS

Addressing SDH is critical to the success of many public health programs.⁷ One of the most important challenges faced by public health today is how best to use data to identify SDH that place individuals and communities at risk of disease.^{8,9} Another challenge is the limited information that is available on how to put SDH concepts into practice in research, surveillance, policy, and programs. Symposium keynote speakers shared examples from personal and professional experiences in putting SDH principles into practice, and workshop presenters shared their views on how CDC and its partners might help to identify root causes of health inequities and use data to monitor and improve health.

Symposium keynote speakers—all of whom

represented organizations external to CDC—noted that CDC has a critical role in leading efforts to advance health equity. They observed that diverse, multisectoral partnerships will be critical in this effort, and they urged CDC to collaborate with other partners, including those outside of the public health sector, to:

- Recognize and attend to the underlying causes of health inequities;
- Confront unconscious prejudices in ourselves and our affiliated organizations that may impede our ability to address SDH;
- Identify and apply science-based approaches for communicating with colleagues, partners, the public, and policy makers about health equity, SDH, and the downstream effects of policies on health;
- Develop and disseminate standardized methods for measuring health disparities and evaluating progress toward their elimination;
- Undertake a broad-based approach to public health promotion and disease prevention that is inclusive of individual-level and SDH approaches;
- Promote social cohesion and build communitylevel capacity by developing and applying community-based participatory approaches;
- Develop and maintain long-term, multisectoral partnerships that leverage the strengths and resources of partner organizations to optimize health and combat inequities; and
- Make a "business case" for SDH approaches, showing that they improve health and lower health-care costs.

In 2011, NCHHSTP published a white paper on the importance of addressing SDH to advance a holistic approach to the design of public health programs.10 The white paper laid out NCHHSTP's plan to address challenges, some of which were mentioned by the symposium keynote speakers. Further, NCHHSTP's Strategic Plan, 2010–2015—a document that articulates NCHHSTP's overarching goals—includes a goal to promote health equity through addressing SDH.¹¹ NCHHSTP maintains an online dashboard to routinely monitor the implementation of strategic activities, including those activities aligned with the health equity

goal.¹² The ongoing monitoring of progress made on implementation of key health equity objectives will serve as a barometer to gauge how well challenges identified by both NCHHSTP and speakers at the symposium are addressed in future public health work.

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The findings and conclusions in this article are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention

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