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Calling for a Bold New Vision of Health Disparities Intervention Research

In 2003, the National Cancer Institute (NCI), the National Institute of Environmental Health Sciences, the National Institute on Aging, and the Office of Behavioral and Social Sciences Research established the Centers for Population Health and Health Disparities (CPHHD) Program in response to a strategic priority at the National Institutes of Health (NIH) to better address inequities in health among underserved racial, ethnic, and poor populations.¹ In 2009, NCI, the National Heart, Lung, and Blood Institute; and the Office of Behavioral and Social Sciences Research partnered to continue the Program. This time they focused on addressing inequities in cancer and heart, lung, and blood diseases. The objectives of the 10 current CPHHDs are to develop and test multilevel interventions to reduce health disparities, to use community-based participatory research (CBPR) principles, to train a new generation of transdisciplinary researchers in collaborative team science, and to promote translation and broad dissemination of evidence-based strategies into practice and policy.

Over the past five years, we, the Principal Investigators of the current CPHHDs, have drawn upon diverse scientific disciplines, populations, and geographic regions. We have worked together across the CPHHDs to engage in in-depth exploration of the most compelling health issues facing diverse, underserved populations and to advance the science of health disparities research. Based on our experiences, we suggest a bold new vision for health disparities intervention research. To inform this vision, we draw upon previous frameworks^{2,3}

and present our own recommended intervention strategies to tackle health disparities.

FRAME HEALTH DISPARITIES FOR POSITIVE INFLUENCE

The framing and definitions of social and health problems influence public opinion and support. Emerging evidence suggests that the most effective health disparities interventions benefit from having both individual and macrolevel components.⁴ To date there is considerable disagreement on how best to frame health disparities. Much of this is because of the focus on individual behavior to the exclusion of the social, physical, and policy environments within which individuals live. These critical missing components hamper progress in gaining support for health disparities research, programs, and policies. We must strategically frame the issues of inequities in health, monitor the effectiveness of diverse individual and macrolevel approaches, and advocate for funding research that will inform the adaptation of language and development of strategies to build public consensus and political will to implement effective large-scale interventions.

TEST MULTILEVEL INTERVENTIONS

We believe that multilevel interventions are necessary.¹ Health disparities are multifactorial and solutions require the involvement of stakeholders at multiple levels, including, but not limited to, individuals, families, policymakers, health providers, community-based organizations, schools, law enforcement, social welfare, and health departments. However, evidence for the effectiveness of

multilevel interventions in reducing disparities is limited.⁵ Current CPHHD multilevel interventions include a corner store intervention project in East Los Angeles, California⁶; health system quality improvement projects to reduce hypertension disparities in Baltimore, Maryland, and rural North Carolina^{7,8}; a media training program for community-based organizations and toolkit for journalists to influence the public agenda on tobacco-related health disparities in Lawrence, Massachusetts; and a reservation-wide, multimedia campaign to increase colorectal cancer screening in the Northern Plains. Issues that need to be addressed in multilevel intervention research range from the very definition of what constitutes a multilevel intervention to identifying the best methodologies for intervention design, implementation, analyses, and optimizing translation, dissemination, and sustainability.

TARGET SOCIOECONOMIC DISADVANTAGE

Evidence of the effectiveness of interventions addressing social determinants of health to reduce health disparities is growing.⁹ However, knowledge gaps persist for interventions targeting housing, employment, healthy communities, families, education policy, and the justice system. More systematic attention to assessing the effects of social policy interventions on the health and health equity outcomes of diverse populations are needed. New approaches, such as Health Impact Assessments which will make the consideration of health and health equity routine in all policy making, enhance public and policymaker awareness that effective strategies to eliminate both social and health inequities lay outside traditional health policy.

IMPROVE HEALTH BEHAVIOR CHOICES AND OPPORTUNITIES

Addressing disparities at the individual and community levels requires interventions that improve health behavior choices and opportunities. The frameworks, models, and lessons learned from successful smoking cessation, physical activity, dietary quality, and self-management skills training interventions offer insights into the targeting and tailoring of interventions that align with group and individual characteristics, the potential value of technology, the importance of changing physical and social environment barriers, and the roles that communities play in individual and population-level behavior change. However, to increase the success of behavioral interventions aimed to reduce health disparities, it is important to explore new approaches, including comprehensive interventions that target multiple chronic conditions across populations. This is especially important for conditions with shared risks, which are especially common in underserved populations. For example, dramatic declines in population prevalence of smoking over time—but widening education gaps—highlight the need for interventions that address underlying social and economic barriers to healthy choices.

PURSUE EQUITY IN ACCESS AND QUALITY OF CARE

Disparities in healthcare access and quality have improved for some conditions. However, many disparities affecting racial and ethnic minorities and poor persons have not changed; in fact,

many have become worse. Bridging knowledge gaps in achieving health care equity requires understanding how quality improvement and patient-centeredness can inform equity initiatives and how to enhance communication and cultural competency among health professionals to reduce the impact of bias and stereotyping. We also need to assess when tailored interventions are indicated versus a one-size-fits-all approach and strengthen linkages between healthcare systems and community resources. Several challenges also remain in translating evidence into practice and policy, including recognizing cost-effective interventions that reduce disparities, addressing the unique challenges of stakeholder engagement in healthcare, and improving understanding of implementation and sustainability barriers. State variations in implementation of the Affordable Care Act present an opportunity to assess the impact of this policy on disparities in health care and outcomes. Working with local health delivery systems, especially safety-net providers, is crucial for ensuring that best practices learned from research are implemented in health care for underserved populations.

ENGAGE “POWER” TO REDUCE HEALTH DISPARITIES

CBPR principles embody the value of equitable power distributions. These principles include (1) building and maintaining community partnerships and capacity, (2) obtaining community buy-in and input in all phases of the research, and (3) emphasizing the acceptability and sustainability of interventions for long-term population health impact. Framing

CBPR in the language of social justice engages communities to exercise their power to make a difference. Individual (e.g., providing professional training and opportunities to community residents and activating patients to participate in self-management and decision-making) and community avenues of power engagement (e.g., policies to improve the social and built environments, promotion of healthy social norms, access to health promoting options) can be instrumental in improving population health outcomes. Such interventions should be fostered and disseminated, with their influence on long-term health and disparities reduction investigated.

APPLY GENOMIC SCIENCE

Advances in genomic science are providing insights regarding disease biology. This represents an opportunity for evaluation of the potential for genomic strategies to inform population health disparities. Our collective research and experience suggest that the addition of knowledge of genetic risk to the development of clinical and public health tools will maximize the potential to reduce health and healthcare inequities and to inform practice and policy to minimize the potential risks of population-based genomic investigations. This transformation will require strong collaboration among members of transdisciplinary research teams, partnerships with community stakeholders, and reorientation of the current research agenda to better align genomic discovery efforts with public health priorities that ensure equitable health care delivery.⁹ It also calls for greater attention to investigating gene-environment interactions and the extent to which

distinct social environments of racial/ethnic populations contribute to differences in gene expression.¹⁰

RECOMMENDATIONS

1. Reframe the discussion about health disparities and inequities.
2. Design and evaluate rigorous multilevel interventions to change both individual behavior and the social, policy, and built environments; assess multidirectional influences of interventions.
3. Use a social determinants framework for health disparities interventions and a “health in all policies” approach to policy interventions targeting socioeconomic disadvantage.
4. Improve communication skills and cultural competency of health professionals, researchers, interventionists, and community stakeholders.
5. Expand efforts to dismantle historical and contemporary drivers of stigmatization and discrimination of persons who are members of disparate populations.
6. Prioritize community engagement and equitably shared community and researcher power to maximize intervention success and sustainability.
7. Foster transdisciplinary collaborations that integrate evidence from basic biomedical science with social, behavioral, and population science methodologies in intervention design and outcomes assessment.

Interventions to address health disparities present us—as researchers, public health practitioners, educators,

clinicians, policymakers, advocates, and individual citizens—with an extraordinary opportunity to use our collective conscience, knowledge, skills, and commitment to transform the lives of millions of people in the United States and globally. Let's answer the call and create this bold new vision. ■

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Human Participant Protection

The institutional review boards at Johns Hopkins University; the University of California, Los Angeles; the University of North Carolina; the University of Washington; The Ohio State University; Rush University; the University of Massachusetts, Lowell; the Fred Hutchinson Cancer Research Center; University of Illinois, Chicago; Harvard University; the Black Hills Center for American Indian Health; and the University of Arizona approved all study protocols. Where the institutional review board deemed necessary, all patients provided written informed consent. All clinicians provided either oral or written informed consent.

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Beyond Health Equity: Achieving Wellness Within American Indian and Alaska Native Communities

Indigenous peoples across the globe have higher morbidity and mortality rates than their non-Indigenous counterparts.¹ The nine-year gap in life expectancy between New Zealand's Indigenous Maori population and other New Zealanders has led to sweeping primary care reforms to improve health and reduce disparities.^{2,3} The seven-year gap between Canada's First Nations, Metis, and Inuit populations and other Canadians led to the dedication of one of the 13 Canadian Institutes of Health Research, the Institute of Aboriginal Peoples' Health, solely to improving the

health of Canada's Indigenous peoples.⁴ Finally, the shameful 17-year gap in life expectancy between Indigenous and non-Indigenous Australians led to a partnership in 2007 between all levels of government to "Close the Gap" on Indigenous disadvantage, allocating more than five billion dollars in additional resources to halve the mortality rate of Indigenous children within 10 years.⁵

In the United States, where American Indians and Alaska Natives (AI/ANs) have the lowest life expectancy of any racial/ethnic group,⁶ equivalent large-scale efforts do not exist. Health disparities

among AI/ANs not only persist but are also worsening in some communities.^{7,8} Yet, as life expectancy also stagnates or worsens for large segments of the US population,^{9,10} achieving health equity for AI/ANs no longer seems a laudable goal. A new approach to health disparities intervention research is required.

Tribal communities and research scientists are working in partnership with the National Institutes of Health (NIH) to implement the Interventions for Health Promotion and Disease Prevention in Native American Populations initiative, launched in 2011 (PAR-11-346) and reissued in