

FROM THEORY TO ACTION: APPLYING SOCIAL DETERMINANTS OF HEALTH TO PUBLIC HEALTH PRACTICE

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Recent approaches to population health have encouraged public health practitioners and policy makers to consider the broader determinants of health as part of a more comprehensive approach to improving health, addressing health inequalities, and accelerating health impact.¹⁻³ Implementing action on social determinants involves understanding the dynamic interaction among the behavioral, clinical, policy, systems, occupational, and environmental determinants of health; identifying synergisms and antagonisms; and employing cost-effective strategies to achieve sufficient and sustainable population coverage and scale. In an era of health system transformation, greater attention is now being paid to access, utilization, and quality of health care and its influence on population health. Similarly, research highlighting the importance of poverty, residential segregation, stigma and discrimination, incarceration, and educational attainment on health outcomes provides a deeper understanding of the complex social and structural determinants of health and pinpoints additional opportunities for enhancing prevention and control efforts.⁴⁻⁸ Our expanded understanding of the wider determinants of health and disease suggests that significant advances in health could be achieved if policy makers, program developers, and implementers address these broader influences on health outcomes while maintaining excellence in traditional disease control approaches.

This supplement is both timely and critical to continuing the momentum in incorporating the social determinants of health (SDH) into prevention programming. This supplement seeks to advance scientific knowledge and illustrate how public health professionals can address SDH across a range of public health activities that promote health equity among the populations most disproportionately impacted by infectious and chronic diseases. By focusing on the ways in which SDH approaches are being integrated into public health research, surveillance, communication, policy, program, capacity building, and partnership activities,

we hope to highlight best practices in addressing SDH across a broad range of public health activities.

TAKING ACTION ON SDH

Effective action on SDH requires having sufficient knowledge of the mechanisms influencing health inequities and adopting a conceptual framework that not only clarifies the relationship between social determinants and health inequities, but also helps to identify entry points for intervention. Setting priorities that include building workforce capacity to develop and implement an SDH agenda is vitally important. Supporting and creating organizational structures and health systems (via policies, research, and partnerships) that prioritize health equity also is necessary for effectively acting on the sources of health inequities.

Dean and Fenton describe progress made by the Centers for Disease Control and Prevention's (CDC's) National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) to integrate an SDH approach into its public health work during the past five years. They argue that while the development of overarching agency and national strategic plans was critical to providing supportive environments for enhanced action on SDH, ultimately, effective implementation within their organization required attention to capacity building, leadership and governance, strategic partnerships, and effective health communication. The key to success in NCHHSTP's SDH implementation approach was ensuring strong, supportive, and aligned leadership at every level of the organization to guide, monitor, and hold leadership accountable for real change in addressing health equity and SDH. Clear articulation of the rationale and value proposition of adopting this more comprehensive approach to prevention, and allaying fears and concerns that incorporating SDH would take away from, or diminish, the traditional, highly specialized vertical approach to disease control, are necessary to advance the focus on SDH. Effective, broad-based, sustainable improvements in population health also warrant a robust integration of science, program, and policy at the societal, organizational, and individual level to more fully address the complex context in which health occurs.⁹

NCHHSTP held a symposium in 2011 to highlight the role of data in informing and improving public health policy, practice, and research. The symposium featured national speakers, a scientific poster

session, and scientific workshops. Penman-Aguilar et al. provide a summary of key themes emerging from the symposium, such as the enduring effects of racism on health, the importance of where we live, the roles of measurement and communication, and the value of engaging communities as full partners if we are to make demonstrable strides in reducing health disparities and achieving health equity. Speakers also stressed the importance of CDC's critical role in leading efforts to advance health equity and emphasized the need for CDC to continue to build and nurture diverse, multisectoral partnerships.¹⁰

Sadana and Blas present a conceptual framework developed by the World Health Organization (WHO) Commission on Social Determinants of Health that illustrates the complex pathways in which SDH impact health equity and well-being. They describe how Priority Public Health Condition Knowledge Networks (i.e., global health knowledge networks) were established by WHO to synthesize existing knowledge and identify effective approaches to reduce health inequities for 12 health conditions. Using cardiovascular health as an example, they illustrate how the conceptual framework was further operationalized and how common SDH and promising entry points for action are identified.¹¹

POLICY CHANGE TO ADDRESS SDH

Establishing policy goals to address SDH is critical to facilitating wider action to reduce health disparities. Policy-level interventions can have an immediate and sustained impact on SDH. Four articles in this issue focus on policy-level change to address SDH.

Schaff et al. present a compelling case study that demonstrates how, through local policy change, the Place Matters initiative in Alameda County, California, addresses six SDH: criminal justice, economics, education, housing, land use, and transportation. The authors describe the development of the initiative, strategies for public health departments and communities to build capacity, policy- and systems-level successes, and best practices. A local policy agenda was created that details a strategy to tackle SDH, including establishing multisectoral partnerships. The results of the Place Matters initiative in Alameda County add to a growing body of literature documenting the value of addressing a range of social conditions impacting health. The lessons learned in this study may be useful to other jurisdictions as well.¹²

Bhatia and colleagues describe a novel approach for using public health functions to enforce compliance with labor standards. By combining efforts from public health and labor regulatory agencies to monitor health

and safety conditions in local businesses, the authors report that increases in enforcement capacity and compliance have resulted in improved working conditions. The authors share two case studies describing how the San Francisco Department of Public Health supports labor law compliance and opportunities and challenges for the health sector to collaborate with labor agencies. This article demonstrates that public health agencies working in partnership with labor regulatory authorities can contribute to labor laws that protect health.¹³

Avey et al. explore data, policy, and community efficacy opportunities for reducing sexually transmitted diseases (STDs) and improving the sexual health of residents in an area surrounding a Georgia army base undergoing redevelopment, using an innovative Health in All Policies (HiAP) approach. The investigators describe a mixed-methods HiAP design that included consultations with subject-matter experts, extensive literature reviews, mapping of SDH, interviews with key stakeholders regarding policy interventions, use of Photovoice to identify community assets, and obtaining stakeholder input for determining next steps. The findings and recommendations from this study are reported using five SDH known to have an impact on STDs: education, employment, drug and alcohol marketing, male incarceration, and social capital. The results of this study provide support for the application of a HiAP framework to increase the understanding of underlying causes of disparities and to develop health policies and interventions.¹⁴

Hardy and colleagues combined a rapid assessment technique—Rapid Assessment, Response, and Evaluation—and evidence-based community engagement strategies to develop a community- and policy-level intervention to prevent childhood obesity in a southwestern U.S. city. The authors describe the importance of engaging multidisciplinary partners, data collection and analysis procedures, and the process for developing evidence-based strategies and a policy coalition. Although the *Hermosa Vida* project is still underway, the authors report that selected strategies have shown preliminary evidence of community-level impact.¹⁵

RESEARCH, RESEARCH TRANSLATION, AND SDH

Although there is currently a strong body of evidence supporting the relationship between social determinants and various health outcomes, it is critical to continue bringing attention to the impact of SDH and to employ methods that will stimulate sustainable action.

In an examination of the geospatial distribution of incident tuberculosis (TB) cases in Maryland, Prussing

et al. explore the extent of overlap between the geospatial and genotype clustering of TB cases and select demographic, socioeconomic, and individual-level risk factors. Results indicate that the burden of TB varied by geographic location and demographic, socioeconomic, and behavioral risk factors; however, poverty and crowded living conditions were common characteristics shared across geospatial clusters. Although results of prior studies using genotype and geospatial clustering have varied, the authors suggest that these differences may be an artifact of differing patterns of transmission, disease incidence, and variations in the underlying social determinants that make some populations more vulnerable than others.¹⁶ Similar studies will help to more accurately characterize the epidemiologic distribution of TB and inform the development of targeted TB prevention and control programs.

Johnson et al. describe a systematic, mixed-methods approach to conducting a multistage health impact assessment (HIA) of a comprehensive rezoning effort in Maryland. Using a prospective framework, the authors assessed the impact of three methods—mixed-use and transit-oriented development and enhanced pedestrian-oriented design—on physical activity, violent crime, and obesity. The authors used qualitative analysis, literature review, zoning code analysis, and quantitative impact assessments to determine potential health impacts in high- and low-poverty neighborhoods. Findings revealed the presence of mixed-use development as a key strategy impacting all three outcomes of interest. This article supports the use of HIAs as a mechanism for assessing the impact of policies and programs on health and developing evidence-based recommendations to inform local decision-making.¹⁷

Huang and colleagues examined the school context as a key social determinant impacting children's health. Based on a comprehensive review of the scientific literature, the authors identified six domains representing school determinants of health, including the physical environment, health policies, health programs, health resources, school climate, and school composition. Next, they assessed gap by exploring existing public health strategies that apply the school determinants approach. The authors present a range of research, practice, and policy recommendations for addressing SDH in a school context.¹⁸

STRATEGIC PARTNERSHIPS AND CAPACITY BUILDING

Due to the complex, multifactorial nature of SDH, action to address SDH requires coordination and cooperation of multilevel partnerships across sectors. Although partnership is a common theme in this

issue, three articles devote considerable attention to describing the processes, challenges, and benefits in developing sustainable partnerships to address SDH.

Flynn and colleagues provide an example of a successful binational collaboration between CDC's National Institute for Occupational Safety and Health (NIOSH) and the Mexican Ministry of Foreign Affairs to improve the occupational health of Mexican immigrant workers.¹⁹ One benefit of this collaboration is improvement in NIOSH's capacity to address obstacles to occupational safety and health (OSH) experienced by Mexican immigrant workers. Planning to capitalize on this unique partnership, the authors propose additional opportunities for collaboration in research and surveillance, information dissemination, and access to resources. This collaboration has produced important results for addressing the significant disparities in OSH experienced by a vulnerable population.

Ferdinand et al. developed a multilevel partnership model between a national health promotion foundation and academic, policy, and community stakeholders to develop an evidence-based, community-level intervention to reduce race-based discrimination and improve the health of Aboriginal and migrant communities.²⁰ The Localities Embracing and Accepting Diversity partnership model was informed by best practices and included representation from multiple sectors (e.g., education and labor). Although the project is currently being implemented, evidence suggests that the partnership model strengthened the implementation design, enhanced the programs' reach and sustainability, and improved communication and resource dissemination in multiple sectors.

Ramos and colleagues describe an innovative partnership between community members and academicians that resulted in a successful grant funding model aimed at reducing diabetes disparities. The authors report that this new peer-review system resulted in an increased understanding of the complex nature of health disparities and organizational challenges to address disparities, an increased respect for varying perspectives, and substantive improvements in community members' capacity to review and write grants. The authors present examples of projects funded with this collaborative grant review process. This novel approach likely has relevance in its application for targeting resources to address a range of negative health outcomes.²¹

CONCLUSION

The articles in this supplement represent an effort to describe and collate existing experiences with integrating and implementing SDH approaches in public

health practice. The diversity of issues, settings, audiences, and findings highlighted in this supplement illustrate innovation and real-world challenges and suggest areas for further development and prioritization. The supplement also recognizes the emerging nature of the field and the importance of “learning and sharing as we are doing” to accelerate progress and to disseminate lessons learned. Finally, we hope this collection of articles will inspire practitioners, researchers, and policy makers to continue to identify, implement, and evaluate practical ways to address SDH.

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