

Social Determinants of Health: Impact on Health Disparities

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An individual's health is overwhelmingly determined (60%) by social and health risk factors.¹ However, unlike other developed countries, the United States spends the majority of our health dollars on medical care and medical procedures. Social determinants of health are inter-related and inter-dependent, a confluence of factors that when combined contribute to shortened life expectancy, poor health, cycles of joblessness and homelessness and, in some circumstances, violence. The most significant social determinants of health include: education, economic stability, health care access, community context, and the built environment.

SOCIAL DETERMINANTS OF HEALTH

The "process" of *education* happens in an individual's home, in their community and, of course, in school, while the "outcome" of education is the achievement of a degree or the acquisition of skills. Early in life, children in low-income families are less likely to receive stimulation and more likely to be in less responsive environments. Similarly, due to limited resources, the quality of schools and the education offered may be diminished in low socio-economic neighborhoods. Educational attainment is correlated to several health indicators (e.g. life expectancy, obesity, and management of chronic diseases) as well as health risk factors and behaviors (e.g. diet, seatbelt use, smoking, and exercise). In Massachusetts, when compared to residents with a four-year college degree, residents with a high school diploma/GED are significantly more likely to report their health as fair or poor, be obese, not eat the recommended daily allowance of fruits and vegetables, and take risks such as not wearing a seatbelt.²

Decades of discriminatory *housing* policies and predatory lending practices have caused a disparity in achieving home ownership among racially diverse cohorts. Low income neighborhoods are therefore more likely to be comprised of marginalized racial and ethnic groups such as African Americans/Blacks, Hispanics/Latinos, and Native Americans.³ Home ownership brings stability as well as substantial financial and social benefits, all of which add to community cohesion and strengthen neighborhoods, health, and well-being. Inversely, the lack of these conditions contributes to a cycle of crime, creating fear and distrust within the community and repelling businesses, which in turn eliminates economic opportunities, contributing to more crime. In high-crime communities, people frequently have been or know others who have been the victims of crime, causing high degrees of trauma and adverse health effects.⁴

HEALTH AND WEALTH: SOCIOECONOMIC DISPARITIES

In Massachusetts, *unemployment* rates for African American/Black males and females were twice those for their White counterparts in the fourth quarter of both 2015 and 2016. The difference was most pronounced among cohorts aged 20-34 years, where unemployment rates were more than and almost double those for African Americans/Blacks and Hispanics/Latinos, respectively, compared to Whites. Additionally, *gendered income inequity* exists, with women earning an average of 83% of men's salaries.⁵ Economic stability depends upon employment and consistent income, and fosters a person's access to

high quality housing, healthy food, and educational opportunities. Poor and substandard housing quality affects health through noise, crowding/congestion, strained relationships, segregated neighborhoods, as well as exposure to toxins and pollutants. Stable housing reduces psychosocial burden and stress, and increases roots in the community/community cohesion. Additionally, when housing is affordable (roughly 30% of income),⁶ it frees up resources to cover costs for better nutrition and medical care.

According to the Massachusetts Behavioral Risk Factor Surveillance System (BRFSS) survey, 88.9% Massachusetts respondents reported that they have a personal provider and over three-quarters reported having a routine checkup with a doctor in the past year. However, when compared to White respondents, Black and Hispanic/Latino residents were significantly more likely to rate their health as poor or fair, and to be uninsured.² In 2015, 16.5% (119,447) of patients from Massachusetts' network of Federally Qualified Health Centers (FQHCs) were uninsured. Many more were underinsured — where copays and deductibles cause undue financial burden when paying for care or filling prescriptions. Additionally, there is an insufficient supply of accessible and linguistically and culturally appropriate clinicians. *Low health literacy* (a person's ability to find, understand, and process basic health information) predominantly experienced by racially and ethnically diverse cohorts, people with low income levels, and people with less than a high school degree or GED certificate, has been linked to higher reports of fair/poor health status, higher rates of hospitalization, and less frequent use of preventive services.^{7,8}

POLICIES THAT WORK

Policies such as the Earned Income Tax Credit (EITC) have been shown to improve economic stability, which in turn improves mental and physical health. Economic and social support for housing and job-training reduce health care costs and improve stability and social cohesion. A study in metro-Boston showed that kids in subsidized housing were less likely to be food insecure or underweight, and more likely to be considered "well" (Children's Health Watch 2009).⁹ Likewise, Moving to Opportunity, a housing voucher experiment that moved randomly selected families to lower-poverty neighborhoods, resulted in improved mental health, physical health and improved college attendance rates and earnings for children who were younger than 13 when they moved.¹⁰ The National School Lunch Program, Supplemental Nutrition Assistance Program (SNAP), and Nutrition Program for Women, Infants and Children (WIC), contribute to healthy food access. SNAP has been linked to reduced inpatient expenditures,¹¹ while WIC has shown to increase consumption of fruits and vegetables, low-fat milk, whole grains, etc. and to reduce preterm birth and infant mortality, and improve birthweights. Similarly, the Maternal, Infant and Early Childhood Home Visiting Program (part of ACA), a program that visits families during pregnancy and early childhood, has been shown to reduce smoking among pregnant women, have positive effects on parenting, reduce child abuse, reduce arrest rates, and reduce days on food stamps.¹²

POLICY RECOMMENDATIONS

- Advocate for the continuation of critical federal-level policies and funding that improve the social determinants of health, especially for poor and racially and ethnically diverse populations.
- Create a Massachusetts "Moving to Opportunity" demonstration project.
- Strengthen education infrastructure and resources in low-income neighborhoods including job training and job readiness programming.
- Sustain the Massachusetts Prevention and Wellness Trust Fund.
- Adopt a Health in All Policies¹³ approach, whereby health and health equity are considered in and across all sectors — housing, transportation, fiscal, environment, etc. with regard to all policies, programs and processes.

REFERENCES

- 1 McGinnis, J.M., Williams-Russon, P., and Knickman, J.R. (2002). The case for more active policy attention to health promotion. *Health Affairs(Millwood)*, 21(2), 78-9.
- 2 Massachusetts Department of Public Health. 2015. "A Profile of Health Among Massachusetts Adults In Selected Cities, 2015." Results from the Behavioral Risk Factor Surveillance System.
- 3 Badger, Emily. 2015. "Redlining: Still a Thing." *Washington Post*. May 28.
- 4 Wu, Charles. 2009. "Mortgages and Murder: The Effect of Homeownership on Crime." MIT.
- 5 U.S. Bureau of Labor Statistics. 2016. "Highlights of Women's Earnings in 2015". Report 1064.
- 6 Community Catalyst Learning Community. 2016. "Health and Housing 101: Understanding the Intersections." National Housing Conference.
- 7 U.S. Department of Health and Human Services. 2000. *Healthy People 2010*. Washington, DC: U.S. Government Printing Office.
- 8 National Center for Education Statistics. 2006. *The Health Literacy of America's Adults: Results From the 2003 National Assessment of Adult Literacy*. Washington, DC: U.S. Department of Education.
- 9 Taylor, L., Coyle, C., Ndumele, C., Rogan, E., Canavan, M., Curry, L. and Bradley, E. "Leveraging the Social Determinants of Health-What Works?" BCBSMA Foundation (June 2015).
- 10 Chetty, R., Hendren, N, and Katz, L. "The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment." Harvard University and NBER (August 2015).
- 11 Sonik, R.A. "Massachusetts Inpatient Medicaid Cost Response to Increased Supplemental Nutrition Assistance Program Benefits." *American Journal of Public Health* March 2016, 106(3): 443-448.
- 12 Olds, D. et al "Long Term Effects of Nurse Home Visitation on Children's Criminal and Antisocial Behavior: Fifteen year Follow up of a Randomized Controlled Trial," *Journal of the American Medical Association* (14 October 1998): 1238-1244.
- 13 The Public Health Institute. 2013. "Health in All Policies: A Guide for State and Local Governments." American Public Health Association.

