HHS Public Access

Author manuscript

Cancer Health Disparities. Author manuscript; available in PMC 2021 May 25.

Published in final edited form as:

Cancer Health Disparities. 2020 ; 4: e1–e5.

SPEECH: Synergistic Partnership for Enhancing Equity in Cancer Health

Olorunseun O. Ogunwobi[1,2], **Grace X. Ma**[3,4]

[1]Department of Biological Sciences, Hunter College of The City University of New York, New York, NY.

[2]Hunter College Center for Cancer Health Disparities Research (CCHDR), New York, NY

[3]Center for Asian Health, Lewis Katz School of Medicine, Temple University, Philadelphia, PA.

[4]Department of Clinical Sciences, Lewis Katz School of Medicine, Temple University, Philadelphia, PA.

Abstract

Minority populations disproportionately bear the burden of cancers in the United States of America. The Synergistic Partnership for Enhancing Equity in Cancer Health (SPEECH) was established to focus on research, workforce development and community-based activities relevant to cancer health disparities in the Philadelphia-New Jersey-New York City (PNN) corridor. SPEECH's overarching goal is to impact cancer health disparities through research and training, and by improving community health, cancer awareness, and access to good quality healthcare.

Keywords

Cancer; health disparities; minorities; translational research; collaboration; multidisciplinary research; team science

According to the Unites States (US) Census Bureau, in 2018 approximately 39% of the entire US population identified themselves as members of a minority group (US Census Bureau, 2018). These groups include African Americans (13.4%), Hispanics (18.1%), Asian Americans (5.8%), American Indian (1.3%) and Pacific Islanders (0.2%) (US Census Bureau, 2018). Presently, the US is much more ethnically diverse than it has been before (Caplan et al., 2016; US Census Bureau, 2011). Racial and ethnic diversity is increasing rapidly along with population increase (Kolb et al., 2006). Asian Americans are the fastest growing group in the United States (Narayan et al., 2010; Colby and Ortman, 2017). According to the United States Census Bureau, the Asian American population is projected

*Correspondence to: oo158@hunter.cuny.edu or grace.ma@temple.edu.

Authors' contributions

OOO and GXM jointly conceived of this article. OOO wrote the first draft of the article. Both authors revised, and approved final version of the article.

Conflict of interest

The authors declare that no competing or conflict of interests exists. The funders had no role in study design, writing of the manuscript, or decision to publish.

to increase by 143% to 49 million, accounting for 11.7% of the US population by 2060 (Colby and Ortman, 2017). The Hispanic population is the largest ethnic minority group in the US; it is projected to increase by 114.8% to 119 million, accounting for 28.6% of the US population (Colby and Ortman, 2017). In addition, African Americans, or non-Hispanic Blacks, are the second largest minority group in the US, and would increase to 74 million, making up 14.3% of the total US population by 2060 (Colby and Ortman, 2017). The Center for Disease Control and Prevention (CDC) predicts that by 2050, the minority population would increase to nearly 50% of the entire U.S population (Agency for Healthcare Research and Quality, 2011; Centers for Disease Control and Prevention, 2004). In concert with the increasing diversity of the US population is the concomitant rise of health challenges that are most prevalent amongst minority groups. One major concern that remains an unfortunate reality is the disproportionate burden of disabilities, diseases and premature deaths experienced by racial and ethnic groups (Agency for Healthcare Research and Quality, 2011), whereby approximately 80% of combined deaths are associated with diabetes, heart disease, stroke, cancer, liver cirrhosis and homicide/accidents (Caplan et al., 2016). In the 2011 CDC Health Disparities and Inequalities Report, health disparities was defined as, “differences in health outcomes and their determinants between segments of the population, as defined by social, demographic, environmental, and geographic attributes” (Centers for Disease Control and Prevention, 2011). These “differences,” as they are called, were demonstrated to have a relationship to disease in the 1967 landmark Whitehall Study in Britain (O’Keefe et al., 2015). Similarly in the US, it was reported that disease incidence, mortality and survival rates were strongly associated with socioeconomic status, as well as race/ethnicity (O’Keefe et al., 2015). In addition to socioeconomic factors, leading health indicators that continue to contribute to health disparities in minorities include social environment, lifestyle behaviors and access to clinical preventative services (Centers for Disease Control and Prevention, 2004). Whereas only 9% of Whites in the US live below the poverty line, 21% of African Americans live below the poverty line (American Cancer Society, 2019). This difference likely correlates with African Americans being less likely to be diagnosed early enough to receive adequate clinical care, and are being more likely to die from a disease than Whites (American Cancer Society, 2019).

Racial and ethnic disparities definitely exist for cancer. Although reports suggest that cancer-related deaths in the overall US population are declining, cancer remains a significant public health burden among ethnic minority populations. Underserved African, Asian-Pacific, and Hispanic Americans have higher incidence of certain cancers, and higher rates of overall mortality due to distinct risk factors and cancer screening barriers. Specifically, cancer is the leading cause of death among Hispanics (20.7%) and Asians/Pacific Islanders (27.1%). It is the second leading cause of death for African Americans (25.1%) and American Indians/Alaskan Natives (18.6%) (Centers for Disease Control and Prevention, 2010). Cancer mortality and morbidity rates remain significantly higher among African American men and women, while overall survival rates are much shorter when compared to their white counterparts (Caplan et al., 2016; O’ Keefe et al., 2015; American Cancer Society, 2019). In fact, overall, African Americans experience a higher cancer death rate than that of all other ethnic groups, excluding American Indian/Alaska-Natives (Caplan et al., 2016; O’ Keefe et al., 2015). Asian Americans experience the highest incidence and mortality rates of both

liver and stomach cancers, in correlation with incidence and prevalence of hepatitis B virus infection (National Institute on Minority Health and Health Disparities, 2016). Several initiatives and public awareness campaigns, such as the Executive Order on Increasing Participation of Asian Americans and Pacific Islanders in Federal Programs, and the Healthy People 2020 initiative, were launched as an attempt to address this problem (Kolb et al., 2006; Centers for Disease Control and Prevention, 2004; US Department of Health and Human Services, 2000). However, addressing health disparities, including cancer health disparities, will require more than just an improving access to resources for minority groups.

To address the problem of cancer health disparities in the Philadelphia-New Jersey-New York City (PNN) corridor, we have established the Synergistic Partnership for Enhancing Equity in Cancer Health (SPEECH). SPEECH is a collaborative effort between Hunter College of The City University of New York and Temple University/Fox Chase Cancer Center. SPEECH's overarching goal is to better understand and reduce cancer health disparities in underserved and minority populations in the PNN area. One objective of SPEECH is to serve underrepresented groups by launching initiatives to expand knowledge, and implement evidence-based practices in African American, Asian American and Hispanic American communities in the PNN region. The partnership, which is spear-headed by Dr. Grace Ma of Temple University, and Dr. Olorunseun Ogunwobi of Hunter College, aims to focus on three core areas: (1) innovative and rigorous multidisciplinary cancer research including basic, translational and clinical cancer research; (2) building a diverse cancer research workforce through training and mentorship of undergraduate students, graduate students, postdoctoral fellows, and junior faculty; and (3) community outreach through community-based initiatives that promote cancer screening, early detection, prevention, and access to highquality cancer care. The activities of SPEECH are organized through five integrated cores: administrative core, planning and evaluation core, community outreach core, bioinformatics and biostatistics core, and research education core. SPEECH is initially focused on tackling liver cancer, lung cancer, and colorectal cancer. However, we have already started developing new projects focused on cancers in other organ sites. SPEECH will impact cancer health disparities by improving community health and cancer awareness, while implementing strategies to improve better healthcare access. Additionally, SPEECH will build a more diverse research and medical community, such that the cultural and scientific strengths of a more diverse cancer research workforce significantly contribute to solutions addressing cancer health disparities.

Acknowledgements

Fayola Levine assisted in compiling information used in writing this article. Olorunseun Ogunwobi and Grace Ma are supported by the TUFCCC/HC Regional Comprehensive Cancer Health Disparity Partnership, award number U54 CA221704(5) (Contact PIs: Grace X. Ma, PhD; Olorunseun O. Ogunwobi, MD, PhD) from the National Cancer Institute. The content of this article is solely the responsibility of the authors and does not necessarily represent the official views of the National Cancer Institute or the National Institutes of Health.

REFERENCES

U.S. Census Bureau. (2018). U.S. Census Bureau QuickFacts: UNITED STATES. https://www.census.gov/quickfacts/fact/table/US/PST120216. Accessed March 8, 2018.

Caplan LS, Akintobi TH, Gordon TK, Zellner T, Smith SA, and Blumenthal DS (2016). Reducing Disparities by way of a Cancer Disparities Research Training Program. J Health Disparities Res. Pract 9, 103–114.

Census Bureau US. (2011). 2010 Census Shows America's Diversity. https://www.census.gov/newsroom/releases/archives/2010_census/cb11-cn125.html. Accessed March 20, 2019.

Kolb B, Wallace AM, Hill D, and Royce M (2006). Disparities in Cancer Care Among Racial and Ethnic Minorities. Cancer Network https://www.cancernetwork.com/review-article/disparities-cancer-care-among-racial-and-ethnic-minorities. Accessed March 20, 2019.

Narayan KMV, Aviles-Santa L, Oza-Frank R, Pandey M, Curb JD, McNeely M, Araneta MRG, Palaniappan L, Rajpathak S, Barrett-Connor E, and Group CD in A and PIPNW. (2010). Report of a National Heart, Lung, and Blood Institute Workshop: Heterogeneity in Cardiometabolic Risk in Asian Americans in the U.S.: Opportunities for Research. J Am Coll Cardiol. 55, 966–973. doi:10.1016/j.jacc.2009.07.075. [PubMed: 20202512]

Colby SL, and Ortman JM (2017). Projections of the Size and Composition of the US Population: 2014 to 2060: Population Estimates and Projections. http://wedocs.unep.org//handle/20.500.11822/20152. Accessed October 16, 2017.

Agency for Healthcare Research and Quality. (2011). Disparities in Health Care Quality Among Racial and Ethnic Minority Groups: Selected Findings from the AHRQ 2010 NHQR and NHDR. Rockville, MD. https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqrdr/nhqrdr10/minority.pdf. Accessed March 19, 2019.

Centers for Disease Control and Prevention. (2004). Health Disparities Experienced by Racial/Ethnic Minority Populations. Morb Mortal Wkly Rep. 53, 755.

Centers for Disease Control and Prevention. (2011). CDC Health Disparities and Inequalities Report — United States. Morb Mortal Wkly Rep. 60. https://www.cdc.gov/mmwr/pdf/other/su6001.pdf.

O'Keefe EB, Meltzer JP, and Bethea TN (2015). Health disparities and cancer: racial disparities in cancer mortality in the United States, 2000–2010. Front Public Health. 3, 51. doi:10.3389/fpubh.2015.00051. [PubMed: 25932459]

American Cancer Society. (2019). Cancer Facts & Figures for African Americans 2019–2021. https://www.cancer.org/research/cancer-facts-statistics/cancer-facts-figures-forafricanamericans.html. Accessed March 20, 2019.

Centers for Disease Control and Prevention. (2010). Leading Causes of Death by Age Group, Race/Ethnicity Males, United States. https://www.cdc.gov/healthequity/lcod/men/2010/LCODrace_ethnicityMen2010.pdf.

National Institute on Minority Health and Health Disparities. (2016). The Center for Asian Health Engages Communities in Research to Reduce Asian American Health Disparities. NIMHD https://www.nimhd.nih.gov/news-events/features/training-workforce-dev/center-asian-health.html. Accessed March 20, 2019.

US Department of Health and Human Services, Office of Disease Prevention and Health Promotion, US Department of Health and Human Services, Office of Disease Prevention and Health Promotion. (2000). Healthy People 2020. https://www.healthypeople.gov/. Accessed March 20, 2019.