Foreword: The Intersection of Social Behavior, Population Health, and Inherited Traits

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In This Issue

Despite decades of research focusing on health and health care disparities between African Americans and other ethnic groups compared with White Americans,[1-3] only minimal interdisciplinary research has worked to advance the understanding of the etiology of racial and ethnic disparities in health and health care outcomes across the life course.[2-4] Consequently, we have seen slow progress in the development of interventions and policies to eliminate disparities. Research frameworks from the National Institutes of Aging (NIA) and National Institute on Minority Health and Health Disparities (NIMHD) Health Disparities call for research that is interdisciplinary and multi-level, establishing pathways through environmental, sociocultural, behavioral and biological health determinants for priority populations.[5,6]

This vital research is increasingly complex because the ability to address the root causes of adverse health and health care outcomes of racial/ethnic minority adults requires an integration of biological, behavioral, sociocultural, and environmental data.[5,6] Thus, moving beyond the traditional silo-like structures of research and training that tend not to communicate across disciplines is the next logical step to diversifying our biomedical workforce and the research it produces.[7,8] The emergence of transdisciplinary research can accelerate breakthroughs in the prevention and management of illness across populations. To reach this goal, we must conduct an in-depth study of what individuals do (behavior) and what motivates them to do (social, attitudes, beliefs) at the intersection of an individual's inherited and environmentally influenced biology.

This themed issue of *Ethnicity & Disease* presents a collection of articles that addresses work at the nexus of social behavior, population health, and inherited traits. Research from the featured authors provides the latest findings through various lenses that integrate the behavioral, psychosocial, and biological factors representing underpinnings of health and disease along the spectrum of individual, community, and population health disparities. Key insights from each of the articles follow.

In the first article, using data from an Asian subsample of the 2015 Tobacco Use Supplement to the Current Population Survey, Shi and colleagues examined whether there are differences in cigarette smoking between Asian subpopulations who arrived in the United States at different life stages. These scholars found that the pattern of smoking varied by sex and when the Asians came to the United States. They concluded that these different patterns could possibly reflect differences in cultural norms in smoking between the United States and Asian countries and called attention to the need for relevant policies and tobacco control efforts among Asian Americans.

Young and colleagues examined predictors of perceived breast cancer risk, and perceived breast cancer risk impact on breast cancer surveillance. Using data from a baseline survey of a randomized controlled trial of women

free of cancer recruited by relatives with early-onset breast cancer, these authors found that the majority of women with a family history of early-onset breast cancer erroneously perceived their risk for developing breast cancer. In addition, women who overestimated their risk underutilized mammography and younger women tended to overestimate their risk, irrespective of race. These scholars underscore the importance of using this information for tailoring interventions to advance the progress in adherence to breast cancer surveillance.

Next, Kitzman and team evaluated the benefits of integrating population health strategies focused on social determinants of health into a primary care medical home (PCMH) that serves a low-income, primarily ethnic minority community. These authors report that integrating population health services into the PCMH can improve chronic disease outcomes, and impact hospital utilization and cost in un- or under-insured populations.

In the last article, Gianaris and team examined the potential racial/ethnic differences in hypertension self-care behaviors and perceived susceptibility to developing kidney disease. Using data from the multi-center Wellness and Health Outcomes of LivE Donors (WHOLE-Donor) Hypertension Care Study, these investigators did not find any appreciable differences in perceived susceptibility to kidney disease among Black and White donors. The authors note that this finding was in spite of published evidence that Black donors may experience greater risk of developing kidney disease than White donors. Gianaris et al conclude that developing behavioral interventions to increase the knowledge, attitudes, and self-care strategies among living kidney donors could be worthwhile.

Conclusion

In summary, the articles in this themed collection highlight and support the need for additional interdisciplinary research. By using the NIA or NIMHD research frameworks, [5,6] researchers will seek more than one perspective to continue to address health disparities. While this interdisciplinary approach is critical, we must also note that a key element to eliminating health disparities is addressing racism.[9-14] For a better understanding of the link between racism and health, please review a series of articles on racism and health that were recently published in *Ethnicity & Disease*.[15] Combining the work from that themed issue and key concepts from this current themed issue provides a provocative discourse that has the potential to move us closer to achieving health equity in the United States.

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