Towards Reducing Disparities in Disparities Research

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Volume 31 of Epidemiologic Reviews, which accompanies this issue of the Journal, focuses on health disparities. Research on “differences”—that is, comparing groups of people who differ with respect to a health condition or risk factor—is the core of epidemiologic research. “Disparities” research is the field of epidemiology that seeks to understand and eliminate health differences derived from systematic, persistent discrimination against disadvantaged social groups (1). In this issue of Epidemiologic Reviews, James makes the case that “the current global attention on health disparities reduction is arguably best understood as the legacy of an implicit human rights-inspired paradigm shift in epidemiologic research that began in the middle of the 20th century” (2, p. 1). It is vitally important for epidemiologists to conduct more research on health disparities, James says, because “the ultimate determination of what is ‘unnecessary’ and ‘unjust’” (2, p. 1) will be based to a significant degree on insights from epidemiologic research.

Yet gaps in epidemiologic theory, methods, and data quality hamper progress toward maximizing epidemiologic contributions. Just as the paradigmatic risk factor approach to chronic diseases introduced theoretical, methodological, and statistical advances (such as population-based longitudinal studies and logistic regression) to identify preventable causes of heart disease, cancer, and diabetes, so too the health disparities approach needs new and robust theoretical, data-based, and statistical advances to identify preventable causes of disease disparities (3, 4). The 10 articles included in this issue of Epidemiologic Reviews (5–14) mark substantial progress toward meeting those goals.

Beckfield and Krieger (5) combine theories in political sociology and social epidemiology into a novel, coherent theory for the epidemiologic study of political systems. Utilizing this framework within the context of a comprehensive literature review of studies published since 1992, they posit and test questions about the impact of different political systems on health equities. Their findings are illuminating and challenging and offer explicit directions for future research.

The political system is but one of many important social determinants of health (15). Others relate to social position and to racial and ethnic minority status. In a previous review of published biomedical studies supported by the National Cancer Institute, Lee concluded that authors have rarely defined or operationalized the concepts of “race” and “ethnicity” adequately (16). She contended that this “under-theorized and unspecified use of race or ethnicity and the biological conclusions drawn about health and difference have the potential to reify ‘race’ and to limit our thinking about what these biomedical differences suggest about health disparities and inequalities in general” (16, p. 1184).

A strong antidote to false reification is the specification of causal frameworks for observed racial or ethnic health disparities which lead to testable hypotheses. Clearly hypothesized causal pathways serve to contextualize potential biomedical and genetic factors. James (2) provides such a framework for specification in future studies, while Gee et al.’s iceberg metaphor (6) emphasizes the pervasive nature of discrimination, which must be accounted for in causal models of marginalized groups. In addition, 4 theory-based literature reviews address health disparities within the larger minority populations in the developed world, especially in the United States. Miranda et al.’s assessment of pregnancy outcome studies (7) points to the necessity to consider multiple variables and posits the primacy of psychosocial stress in explaining excess pregnancy risks among African-American women, while Kramer and Hogue (8) present a biosocial framework for examining excess risk of very preterm birth among African Americans. McKenzie and Jeffreys (9) illustrate the benefit of specifying potential causal pathways in their examination of lifestyle and social factors as potential explanations for ethnic and racial differences in breast cancer survival. Vega et al. (10) utilize within-group differences in adult mortality to examine how nativity, age, and socioeconomic position influence patterns of mortality among Hispanics in the United States.

The reviews in this issue also include important assessments of understudied minority populations in the United States. Despite the fact that Native Hawaiians and other Pacific Islanders suffer from some of the highest rates of cardiovascular disease, diabetes, and obesity in the United States, there is a paucity of both etiologic and intervention research on these groups (11). Mau et al. (11) outline needed steps to improve both data collection and intervention
research for Native Hawaiians and Pacific Islanders, while Gee et al. (6) tackle the questions of whether Asian Americans suffer from discrimination in the United States and whether discrimination negatively affects the health of Asian Americans. Key findings include high rates of reported discrimination, which are correlated with mental health problems and possibly with risky behaviors and poor physical health. There is substantial heterogeneity among Asian Americans, which is lost in some studies by “lumping” of disparate groups. In addition, there may be considerable misspecification of discrimination through the use of instruments originally designed to measure discrimination in other minority groups.

This issue also contains advances in methodology. Reducing misspecification of exposure to segregation is the theme of Kramer and Hogue’s study of the impact of segregation on health (12). By asking key questions about how segregation is best measured, whether the segregation-health association is biologically or socially plausible, whether studies of segregation present evidence of a segregation-health association, and whether segregation is a modifiable risk factor, they find relatively consistent but complex relations. Their recommendations for future work reflect the need for specificity within a multilevel analytic framework.

Epidemiologists need to shoulder the burden of hard work called for by these investigators. This imperative is underlined by the global obesity epidemic, which is hitting socially disadvantaged populations and most minority groups harder and faster than more advantaged groups (13, 14). The only “positive” finding is that disparities in obesity are narrowing in some countries, owing to the better-advantaged groups’ “catching up” with the less-advantaged groups with regard to obesity rates. This trend toward equalization in obesity prevalence across socioeconomic groups can only lead to increased poor health for all.

Much remains to be done before disparities research has attained the quality and sophistication of risk factor research—and before the impact of high-quality research can be felt in terms of improvements in health outcomes for the most vulnerable groups among us. For example, a major gap identified by several of these reviewers is the lack of disparities research in developing countries, particularly those in the Southern Hemisphere. The papers in this year’s issue of Epidemiologic Reviews point the way to the future in concrete and useful directions.

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REFERENCES