Racial and ethnic disparities in health across the life span in the United States and England

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Extended Abstract

Introduction. Several recent comparative studies examine socioeconomic disparities in the United States (U.S.) and England among older adults (Banks et al., 2006a; Banks et al., 2006b; Avendano et al., 2009) and children (Currie et al., 2007, Case & Paxson, 2008), however comparisons of racial and ethnic disparities in the two countries are lacking. Despite historical and cultural similarities between the U.S. and England, there is reason to believe that racial and ethnic disparities would be smaller in England than the U.S. due to universal health care and more generous social safety net policies (OECD, 2009). Yet, Teitler et al. (2007) find similar levels of racial/ethnic disparities in low birth weight in both countries. Meanwhile, Nazroo et al. (2007) find similarities in disparities (self-reported health) between white and African American adults in the U.S. and Black Caribbeans in England, though they find no statistical difference in the health of "Caribbean Americans" and whites in the U.S.

In order to make sense of the patchwork of information on racial and ethnic disparities in the two countries, a systematic comparison of disparities throughout the life span is needed. This study uses data from two nationally representative surveys to compare health in the U.S. and England by racial/ethnic group from childhood through old age for both males and females, focusing on a number of chronic conditions, in order to understand the extent of health disparities in each country.

Data and Methods. Data were obtained from the National Health and Nutrition Examination Survey (NHANES) for the U.S. and the Health Survey for England (HSE). Both are large, nationally representative health surveys that have comparable measures of health assessed through interviews and physical examinations. Health measures based on physical examinations and/or laboratory reports include obesity, hypertension, diabetes, low HDL cholesterol, high cholesterol ratio, and high C-reactive protein (a marker for inflammation). The self-reported measures of health are based on subjects' responses to standard survey questions for the following outcomes: asthma, heart attack or angina, stroke, and cancer.

The race and ethnicity groups examined in the U.S. are non-Hispanic white, non-Hispanic black, and Hispanic. White, black, and Asian (Indian, Pakistani, and Bangladeshi national origin) are the race and ethnicity groups for England. Age is categorized into broad groups that correspond to the Centers for Disease Control (CDC) Stages of Life. The categories are infants (0-3 years), children (4-11 years), adolescents (12-19 years), young adults (20-34 years), middle age adults (35-49 and 50-64 years), and old age adults (65 to 80 years).

Weighted proportions and 95% confidence intervals are calculated for each health condition by race/ethnicity, separately for males and females, in each age group. Supplementary analyses further restrict the samples based on socioeconomic status, health insurance status, health behaviors, and body mass index (BMI).

Results. Preliminary results demonstrate a mixed picture of health disparities varying by health outcome in the two countries. Disparities among diseases such as hypertension and diabetes, which Hispanics and blacks suffer from disproportionately compared to whites in the U.S., show similar patterns in England with Asians and blacks experiencing higher rates of disease. I discuss these findings and suggest directions for future research to address health disparities in these two countries.

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