

Health across the life span in the United States and England

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Extended Abstract

Introduction. Per capita spending on health care is higher in the United States than in any other country and double that in the United Kingdom (OECD, 2009). Despite the high rate of spending, adults 50 years and older in the United States have significantly worse health status (Banks et al., 2006a; Banks et al., 2006b; Avendano et al., 2009), lower life expectancy (WHO, 2007; OECD, 2009), and higher age-specific mortality except at the oldest ages (Deaton & Paxson, 2004) than their counterparts in England. Why health status differs so dramatically in these two countries, which share much in terms of history and culture, is an unresolved puzzle.

Existing evidence suggests that differences in health status between the two countries cannot be explained by health insurance, health behaviors, socioeconomic status, or racial/ethnic compositions. The main focus of previous studies has been on older ages and mortality. One study compared infant health based on birthweight and found no differences between the United States and England (Teitler et al., 2007). Very little attention has been paid in international comparative work to health differences across the life span.

This study uses data from two nationally representative surveys to compare the health of residents of the United States and England from childhood through old age, focusing on a number of chronic conditions. A systematic assessment of cross-country differences in health by age group and type of disease provides necessary context for

learning about why older residents of England are so much healthier than their United States counterparts.

Data and Methods. Data were obtained from the National Health and Nutrition Examination Survey (NHANES) for the United States 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.

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, separately for males and females, in each age group. Supplementary analyses further restrict the samples of males and females to whites and other subgroups based on socioeconomic status, health insurance status, health behaviors, and body mass index (BMI).

Results. The English are much healthier than Americans at all ages. The differences at young ages are as large as those at older ages for most health outcomes, including: obesity, low HDL cholesterol, high cholesterol ratio, high C-reactive protein,

hypertension (for females), diabetes, asthma, cancer, heart attack or angina (for females), and stroke (for females). For males, hypertension, heart attack or angina, and stroke are higher for most ages in England, though not statistically significant. Health differences between the United States and England are present even at young ages and do not appear to be due to differences in socioeconomic status, health insurance, or behavioral risk factors. We speculate about why this is the case and offer suggestions for future research that could help uncover causes of poor health across the life course, including further investigation of health differences between countries at very young ages.

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