

"Death and Disadvantage in the United States and in England," by James Banks, Michael Marmot, Zoe Oldfield, James Smith, Journal of the American Medical Association , vol. 295, no.17, 2006.

This study compares the health of 4386 residents of the United States aged 55-64 using 2002 data from the US Health and Retirement Survey with the health of 3681 residents (age 55-64) of England based on 2002 data from the English Longitudinal Study of Aging; the samples were matched for health, income and education. The study was limited to non - Hispanic whites in both countries to eliminate racial differences in health outcomes from the analysis.

The authors note in the first paragraph that the United States has a much higher per capita expenditure for health care than England (\$5274 vs. \$2164); the study sought to establish whether the additional US expenditure for health care translates into better health outcomes. The short version is "no". When the authors compared rates of diabetes, hypertension, heart disease, myocardial infarctions, strokes, lung disease and cancer, "Americans (55-64) report higher levels of disease than the English, and in most cases much higher levels." "Diabetes prevalence is twice as high in the United States (12.5%) compared with England (6.1%). The same pattern exists for heart disease (15% US vs.10% England), hypertension (42% US vs. 35% England), and cancer (9.5% US vs. 5.4% England).

Some of these authors are famous for research demonstrating that health outcomes follow a social gradient based on income, education and / or occupational prestige, that is persons with lower incomes, less education and lower occupational prestige have poorer health than persons with higher incomes, more education and higher status jobs. The social gradient in health holds in this study with the exception of cancer. However, "Level differences between countries are sufficiently large that individuals in the top of the education and income strata in the United States have comparable rates of diabetes and heart disease as those in the bottom of the income and educational strata in England."

The authors consider "the usual suspects" to account for these large differences in health outcomes. Smoking rates in the US and England are similar with about 1 in 5 people in this age group currently smoking. "In contrast, obesity is much higher in the United States, an across - country differential especially pronounced in the lowest education and income groups." On the other hand, the English residents in this age range were far more likely to engage in heavy drinking than their American counterparts. Heavy drinking was also more common among persons at the top of the income and education strata. Based on statistical analysis utilizing regression models,

the authors estimate that less than one fifth of the difference in diabetes rates between the residents of the two countries is the result of higher US obesity rates.

The authors consider the possibility that health differences are exaggerated by relying on self reports of persons in the study. After comparing self report data to biological markers of disease, the authors assert that "The findings from the self - reports are generally confirmed." The authors acknowledge that higher cancer rates for the US sample may be due (in part) to better screening for cancer in the United States. However, "The magnitude of the across - country differences in cancer prevalence appears too large to be fully explained by these factors (i.e., screening rates) alone." The authors also point out that differences in disease rates for low income Americans compared to low income residents of England are unlikely to be the result of better detection of disease in the US for persons who often lack health insurance. In addition, the authors state that "the top SES tier of the US population has close to universal access (to medical care) but their health outcomes are often worse than those of their English counterparts."

The authors comment that "Much evidence points to the social determinants of health -- the circumstances in which people live and work -- as explanation for social gradients in health. Low status is related to adverse conditions at work, in residential areas, and in general, to lack of empowerment -- all are plausible links between SES and disease. Whether the same set of social determinants account for higher rates of morbidity in the United States is difficult to say." "Certainly, the US -England difference is more pronounced for those in the lowest social groups, but the high status Americans are also at a disadvantage." And in a major understatement, the authors add "This is fertile ground for additional exploration."

The authors close by summarizing: "Two simple but powerful conclusions follow from our comparisons using biological and self reports of disease in England and the United States. First, Americans are much sicker than the English. Second, the SES - health gradient is also not a reporting mirage ..." "Instead, the SES health gradient appears with equal force in either self reports or biological measures of health."

Unfortunately, this is not an adequate commentary on national health differences of this magnitude. It appears that other unidentified factors at least as strong as SES are influencing health outcomes and that these factors may lie in the social / cultural realm. Theorists as bold as the researchers responsible for the famous Whitehall studies of British civil servants should have some plausible ideas to guide further research. Instead, the authors refuse to speculate, preferring to play it safe for the editors and readers of JAMA.