

Mortality Attributable to Low Levels of Education in the United States

April 15, 2014

Patrick M. Krueger, PhD^{1,2}

Melanie K. Tran, MA¹

Robert A. Hummer, PhD³

Virginia W. Chang, MD, PhD⁴

¹University of Colorado Denver, Department of Health & Behavioral Sciences

²University of Colorado Boulder, Institute of Behavioral Sciences, Population Program

³University of Texas Austin, Department of Sociology and Population Research Center

⁴New York University, Department of Population Health and Department of Sociology

Abstract: 250 words (out of 250 allowed)

Text: 2960 words (out of 2700 allowed)

Acknowledgements: Direct all correspondence to the first author at Patrick.Krueger@ucdenver.edu. We thank the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) funded University of Colorado Population Center (grant R24 HD066613) for administrative support.

ABSTRACT

Background: Low educational attainment is strongly associated with premature mortality, and educational disparities in mortality have widened across birth cohorts. We estimate mortality attributable to: (1) having less than a high school degree rather than a high school degree or GED, and (2) having some college rather than a baccalaureate degree, while accounting for widening educational disparities across cohorts.

Methods: We estimate mortality rates for U.S. adults aged 25-85, using the 1986-2004 waves of the National Health Interview Survey linked to prospective mortality through 2006. We calculate attributable mortality with mortality rates specific to education disparities in mortality from the 1925, 1935, and 1945 birth cohorts. We also estimate attributable mortality for non-Hispanic blacks and whites, and for major causes of death.

Results: Annually, 145,243 deaths (10% of deaths) are attributable to having less than a high school degree rather than a high school degree or GED, and 110,068 deaths (8% of deaths) are attributable to having some college rather than a baccalaureate degree, given educational disparities in the 1945 birth cohort. Given educational disparities in mortality in the 1925 cohort, attributable mortality is half as large. Mortality attributable to having less than a high school degree is proportionally greater for women than for men, is similar for non-Hispanic blacks and whites, and is greater for cardiovascular disease than for cancer mortality.

Conclusions: Mortality attributable to low educational attainment is substantial and increasing across cohorts. Policies that increase educational attainment may save a substantial number of lives among U.S. adults.