The dramatic effect of poverty on death rates in the US

By Debra Watson
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A research team from Columbia University’s Mailman School of Public Health in New York City has estimated that 875,000 deaths in the US in 2000 could be attributed to a cluster of social factors bound up with poverty and income inequality.

According to US government statistics, some 2.45 million Americans died in 2000. Thus, the researchers’ estimate means that social deprivation was responsible for some 36 percent of total US deaths that year, a staggering total.

There is no reason to believe, after a decade that has seen sustained attacks on social programs and consistently high unemployment rates, that the social mortality rate has declined. On the contrary, it has likely risen.

The social causes considered by the research team surpass in their deadly consequences heart disease and lung cancer, accidents and factors often categorized as lifestyle-related, such as smoking and obesity (which, of course, in many cases, are also associated with social conditions).

“The number of deaths the researchers calculated as attributable to low education—245,000—is comparable to the number caused by heart attacks—192,898—which was the leading cause of US deaths in 2000,” principal investigator Dr. Sandro Galea, chair of Mailman’s Department of Epidemiology, told the New York Times. Galea is a distinguished epidemiologist, with more than 250 scientific journal articles, 50 chapters and commentaries, and five books to his credit.

For purposes of the Columbia study, a low level of education was defined as not having graduated from high school. Researchers also found large numbers of deaths linked to other social factors, including 176,000 due to racial segregation, 162,000 to low social support, 133,000 to individual-level poverty, 119,000 to income inequality, and 39,000 to area-level poverty. By comparison, 119,000 people in the United States die from accidents each year, and 156,000 from lung cancer.

Dr. Galea continued, “If you say that 193,000 deaths are due to heart attack, then heart attack matters. If you say 300,000 deaths are due to obesity, then obesity matters. Well, if 291,000 deaths are due to poverty and income inequality, then those things matter too.”

However, while considerable effort is made to raise money for research into methods of eradicating heart disease, the Obama administration and the Republicans in Congress are currently considering how best to decimate the programs that have historically alleviated poverty and income inequality.

The research appears in the June edition of the American Journal of Public Health. It is based on a meta-analysis of “all English-language articles published between 1980 and 2007 with estimates of the relation between social factors and adult all-cause mortality,” write the researchers in their abstract. The studies were generally based on large national surveys, such as those conducted by the Centers for Disease Control and Prevention.

Using the pooled data, notes the Times, “the researchers calculated the ‘population-attributable fraction’ of deaths—that is, the number of deaths caused by living with a given social disadvantage. Finally, they multiplied that fraction by the total number of deaths in the year 2000 to come up with a number of deaths caused by each of the six social conditions. The researchers then separated the contribution of each social factor.”

Dr. Galea noted that “any time you try to say that
death is attributable to a single cause, there’s a problem—all deaths are attributable to many causes. But what we did is just as valid as what was done to establish smoking as a cause of death.”

One finding of the researchers underscores the importance of entitlement programs such as Social Security and Medicare. The risks associated with both poverty and low education were higher for individuals age 25-64 than for those 65 or older who qualified for Social Security and Medicare. In this connection entitlement takes on a significant meaning—literally being entitled not to die.

Poverty in the US has increased markedly in the last decade. Only this week, for example, Childstats.gov, the US government clearing house for children and family statistics noted a sharp rise in child poverty since 2000. By 2009, 21 percent of all children ages 0–17 (15.5 million) lived in families below the official (and derisory) US poverty line. This was up from 16 percent in 2000, the year that Galea’s team looked at.

“This trend is consistent with expectations related to the recent economic downturn,” says a note on the Childstats page. Some have looked at this trend and predicted one in four children in the US will soon be living below the official poverty level.

As low-income families sink to or below the poverty line, $22,350 for a family of four, they will be added to the ranks of those who face death from one or more factor of social deprivation.

The discussion around how to approach public health has reached the bizarre. In a July release from the National Bureau of Economic Research, Amy Finkelstein and others compared health outcomes between winners and losers in the ghoulish 2008 Oregon Medicaid lottery.

In 2002 there were 110,000 people in the state of Oregon with Medicaid insurance. Budget cuts reduced that number to just 19,000 by 2008. Rather than return eligibility to the roughly 90,000 who lost coverage, the state decided to add only 10,000 to its rolls. Since nearly 90,000 applied for the coverage, the state resorted to a lottery to pick the 10,000 who would be offered insurance.

Katherine Baicker, professor of health economics at the Harvard School of Public Health and former economics advisor to the George W. Bush administration, joined Finkelstein, also an economist.

They noted, “In the year after random assignment, the treatment group selected by the lottery was about 25 percentage points more likely to have insurance than the control group that was not selected. We find that in this first year, the treatment group had substantively and statistically significantly higher health care utilization (including primary and preventive care as well as hospitalizations,) lower out-of-pocket medical expenditures and medical debt (including fewer bills sent to collection) and better self-reported physical and mental health than the control group.”

Dr. Galea and other medical and social researchers have made an important contribution to social and medical science in bringing to light the link between social factors and mortality. Ultimately, it is up to the population to draw the necessary political conclusions.