

# Public Health Implications of Government Spending Reductions

Steven H. Woolf, MD, MPH

**A**CROSS THE UNITED STATES, CONCERNS OVER BUDGET deficits and a weak economy have prompted federal, state, and local governments to propose controversial spending reductions to balance their budgets. Debates and protests incited by these decisions dominate the news, but what is their relevance to medicine? The reflexive answer might be that government spending policies are relevant if they compromise health care services, essential public health programs, or biomedical research. However, the biggest threat to public health may come from funding cuts outside the health sector. Namely, budget decisions that affect basic living conditions—removing opportunities for education, employment, food security, and stable neighborhoods—could arguably have greater disease significance than disruptions in health care.

Health status is determined by more than health care. Education, income, and the neighborhood environment exert great influence on the development of disease—perhaps more than interventions by physicians or hospitals.<sup>1</sup> Consider the role of education. In 2007, adults with a bachelor's degree were 4 times less likely to report fair or poor health than those without a high school education.<sup>2</sup> The prevalence of diabetes among adults without a high school diploma was 13.2%, more than double the prevalence among adults with a bachelor's degree (6.4%).<sup>2</sup> In 2008-2009, the risk of stroke was 80% higher among adults who lacked a high school diploma than among those with some college education.<sup>3</sup> At age 25, life expectancy is at least 5 years longer among college graduates than among those who did not complete high school.<sup>4</sup> Multiple factors explain the health disparity associated with education. Educational attainment is inversely associated with smoking and obesity,<sup>3</sup> but it is also a pathway to better jobs, benefits (including health insurance), and financial security—each of which conveys health advantages.

Families with financial insecurity face hardships that often take priority over health concerns. These families tend to eat poorly, forgo exercise, and skip medications to stretch their budget. Low incomes force many to live in unhealthy housing or in struggling or insecure neighborhoods. Such neighborhoods tend to have limited access to medical care,

nutritious groceries, and safe places to exercise and an oversupply of fast foods, liquor stores, pollution, and crime.<sup>5</sup> A life of hardships is associated with higher rates of stress and depression.<sup>2</sup>

The association between income and health applies to everyone, not just those who are poor. Middle-class individuals have lower life expectancy and worse health status than those who are wealthy.<sup>4</sup> Rich or poor, individuals facing more difficult financial circumstances tend to defer clinical care and allow complications to linger. Disadvantaged patients present to physicians in more advanced stages of disease that are more difficult and costly to treat and are often less survivable.<sup>6</sup> In sum, budget policies that impose financial strain on families or curtail educational opportunities could, in time, cause greater morbidity, mortality, and costs—all of which are problematic on moral and economic grounds.

The moral issue is clear: it is unsettling to adopt policies that will induce a higher rate of premature deaths or greater disease or disability. Such policies tend to disproportionately affect those who are poor or who are members of racial or ethnic minority groups, and they often affect children as well. These policies would be soundly rejected if health outcomes and ethics were the only considerations, but policy makers must also contend with economic and political realities.

The core argument of fiscal conservatives is that difficult budget decisions and fiscal discipline are necessary for the economy—a worthy principle for many spending areas. However, fiscal discipline loses its logic when spending reductions lead to greater illness and thereby increase health care costs. Any policy that increases disease burden is a threat to the economy because medical spending is so costly to government and employers. Medicare, Medicaid, and children's health insurance consume 23% of the federal budget.<sup>7</sup> Health care costs are complicating efforts to balance state budgets, operate businesses, and compete in the global marketplace. The need to control medical cost inflation is a mounting national priority, one that argues against budgetary policies that would increase morbidity, heighten demand on the system, and drive up medical spending.

**Author Affiliations:** Virginia Commonwealth University Center on Human Needs, Virginia Commonwealth University, Richmond.

**Corresponding Author:** Steven H. Woolf, MD, MPH, Center on Human Needs, Virginia Commonwealth University, West Hospital, 1200 East Broad St, PO Box 980251, Richmond, VA 23298-0251 (swoolf@vcu.edu).

That unwanted scenario is a potential outcome of the more austere budget cuts under current consideration, many of which would impose economic strain on families, weaken support for education, and allow neighborhood living conditions to become more unhealthy. The effect of these conditions on health, relative to medical care, is often underestimated. According to one estimate, giving every adult the mortality rate of those who attend college would save 7 times as many lives as those saved by biomedical advances.<sup>8</sup> It has been estimated that 25% of all deaths in Virginia between 1990 and 2006 might not have occurred if the entire population had experienced the mortality rate of those who lived in the state's most affluent counties and cities.<sup>9</sup>

In the United States, the adverse socioeconomic conditions that are linked with mortality have become more prevalent in the past decade, especially with the economic recession. Between 2007 and 2009, median household income decreased from \$51 965 to \$49 777, down from a peak of \$52 388 in 1999.<sup>10</sup> Between 2000 and 2009, the number of households with food insecurity increased from 10 million to 17 million.<sup>10</sup> The percentage of individuals with severe housing costs burdens (spending more than 50% of their income on housing) increased from 13% in 2001 to more than 18% in 2009.<sup>10</sup> The number of homeless individuals in families requiring shelters or transitional housing increased from 474 000 in 2007 to 535 000 in 2009.<sup>10</sup> The poverty rate increased from 11.3% in 2000 to 14.3% in 2009, its highest percentage since 1994 and the largest absolute number on record.<sup>10</sup>

It is reasonable to predict that the population's exposure to these conditions will eventually result in some increase in the prevalence and severity of major illnesses, a trend that would place greater demands on the health care system. Already, emergency departments and hospitals are noting the recession's effect on admissions for uncontrolled diabetes and heart failure. Lasting effects may take years to document. Many of today's children could endure greater illness decades hence and a shorter life expectancy because they grew up during current conditions. This dismal forecast bears attention from health care leaders, who must prepare capacity plans for the wave of patients that a distressed economy would push into the system, and from politicians and economists,

who must consider how that care will be financed by a system already too expensive to sustain.

Amid these conditions, it is fair to ask whether now is the right time to cut programs that sustain living conditions for good health and that protect US residents from losing their jobs, income, education, and food. The answer may be disappointing, as the downstream effects on illness and spending may not be enough to outweigh the budgetary pressures of the present, but the question should at least be posed and the tradeoffs discussed. Too often, policy makers and the public fail to recognize the connection between social and health policies, and this seems true again as proponents and critics of current budget reforms wage their debate. When policies could claim lives, exacerbate illnesses, and worsen the economic crisis, these ramifications should at least be discussed.

**Conflict of Interest Disclosures:** The author has completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest and none were reported.

**Funding/Support:** This Commentary cites research by the Virginia Commonwealth University Center on Human Needs that was funded by the Robert Wood Johnson Foundation (grant 63408) and the statistics were compiled by the Center on Human Needs' Project on Societal Distress, which is supported by the W. K. Kellogg Foundation (grants P3008553, P3011306, and P3015544).

**Role of the Sponsor:** The W. K. Kellogg Foundation and Robert Wood Johnson Foundation had no role in the preparation, review, or approval of the manuscript.

#### REFERENCES

1. Woolf SH. Social policy as health policy. *JAMA*. 2009;301(11):1166-1169.
2. Pleis JR, Lucas JW. Summary health statistics for US adults: National Health Interview Survey 2007. *Vital Health Stat 10*. 2007;(240):1-159.
3. National Center for Health Statistics. *Health, United States, 2010: With Special Feature on Death and Dying*. Hyattsville, MD: National Center for Health Statistics; 2011.
4. Braveman P, Egerter S. *Overcoming Obstacles to Health: Report From the Robert Wood Johnson Foundation to the Commission to Build a Healthier America*. Princeton, NJ: Robert Wood Johnson Foundation; 2008.
5. Miller WD, Pollack CE, Williams DR. Healthy homes and communities: putting the pieces together. *Am J Prev Med*. 2011;40(1 suppl 1):S48-S57.
6. Singh GK, Miller BA, Hankey BF, Edwards BK. Area socioeconomic variation in US cancer incidence, mortality, stage, treatment, and survival 1975-1999. In: *NCI Cancer Surveillance Monograph Series, Number 4*. Bethesda, MD: National Cancer Institute; 2003. NIH publication 03-5417.
7. Office of Management and Budget. *Fiscal Year 2012 Budget of the US Government*. Washington, DC: Executive Office of the President of the United States; 2011.
8. Woolf SH, Johnson RE, Phillips RL Jr, Phillips M. Giving everyone the health of the educated: an examination of whether social change would save more lives than medical advances. *Am J Public Health*. 2007;97(4):679-683.
9. Woolf SH, Jones RM, Johnson RE, Phillips RL Jr, Oliver MN, Vichare A. Avertable deaths in Virginia associated with areas of reduced household income. *Am J Public Health*. 2010;100:750-755.
10. Virginia Commonwealth University Center on Human Needs. VCU Project on Societal Distress. <http://www.societaldistress.org/>. Accessed March 22, 2011.