Assessing Health Issues in States with Large Minority Populations

Michelle Long, MPH[a], Charles E. Menifield, MPA, PhD[b], Audwin B. Fletcher, PhD, APRN, FNP-BC[c,*]

KEYWORDS

• Health outcomes • Infant mortality • Obesity • Low birth weight
• Teenage pregnancy • Per capita health care spending • Minority population

KEY POINTS

- Regions with large minority populations have the highest average low birth, obesity, infant mortality, and teenage pregnancy.
- Regions with large minority populations have the lowest per capita health care spending rates.
- Statistical analysis reveals there are several variables policymakers can control via the policy-making process that could impact health outcomes.

INTRODUCTION

The term budget crisis has been at the forefront of many current events and political and economic discussions for some time. Health expenditures is often brought up as a contributing factor to this crisis, as the United States has witnessed significantly large increases in health care spending in recent decades. In 2010, per capita health expenditures were $8,402, more than 48% higher than that of the next highest spending country, Switzerland.[1] As such, it is easy to conclude that higher levels of spending would yield positive health outcomes. However, by most measures of health status, this is not the case.

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[a] Master of Public Health Program, University of Missouri, 804 Lewis Hall, Columbia, MO 65211, USA; [b] Truman School of Public Affairs, University of Missouri, 121 Middlebush, Columbia, MO 65203, USA; [c] University of Mississippi Medical School of Nursing, 2500 North State Street, Jackson, MS 39216, USA
* Corresponding author.
E-mail address: afletcher@umc.edu

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Recent research indicated teenage pregnancy and infant mortality rates have decreased by several percentage points over the last 2 decades.[2–4] These decreases raised the main question for this research: are governmental efforts to curtail negative health outcomes and social problems working? Hence, a study was proposed to assess the relationship between per capita state health care expenditures and several health outcomes (infant mortality, obesity, low birth weight, and teenage pregnancy). More specifically, the authors were interested in comparing per capita health care spending in states with large minority populations to changes in the aforementioned outcomes in 5-year increments beginning in 1990; this led to the following research question: Is there a relationship between per capita health care spending and location of a state as it relates to various health outcomes? This question is an important one because the evidence indicated southern states tend to have poorer health outcomes. In the bigger scheme of health care finance, the authors also wanted answers to some more general questions, such as: Should health care spending be more targeted toward specific outcomes? Are there special characteristics about states that cause the outcomes to vary? Are there policy decisions that can promote a healthier state?

LITERATURE REVIEW

Although there is much research examining health outcomes,[5,6] the authors focused their attention on research that examined health outcomes and spending at various levels of analysis (individual, country, and so on). Using data from the Organization for Economic Co-Operation and Development (OECD), Anderson and Poullier[7] found per capita health care spending in the United States ($3925) far surpassed that of any other of 18 nations (developed) in the data set. The next closest country was Switzerland at $2547. Anderson and Poullier[7] also found that health care spending as a percentage of gross domestic product (GDP) was highest in the United States at 13.5% in 1997 compared with a low of 4% in Korea and Turkey. Compared with the United States, the researchers found infant mortality was higher and life expectancy was lower in Korea and Turkey.[7] Bokhari and colleagues[8] found in a more recent country level analysis that health care expenditures do improve health outcomes with substantial variations across countries. For example, allocating funds for more hospital staff could improve health outcomes, but these efforts may be thwarted if the quality and quantity of roads in the country do not coincide with those changes.

Anderson and colleagues[9] also discussed spending patterns and poor health outcomes and suggested high rates of chronic illness in the United States could be a contributing factor to rising costs. Although insightful and relevant, neither Anderson and colleagues[9] nor Anderson and Poullier made claims about causation or use statistical analysis to support their claims.[7]

Hadley and colleagues[10] found a relationship between health care spending and better health outcomes, suggesting cuts in health care among poorer elderly could result in poorer health.[10] Although a quasi-experimental study, this study differed from most of the other studies the authors examined in their study. In fact, the study was one of the few found with a statistically significant correlation between spending and outcomes. Perhaps this is due to the specific population (elderly) Hadley and colleagues examined.

In contrast to Hadley's findings, Gupta and colleagues[11] found (using a cross-sectional study with data from 70 countries) low-income persons generally have worse health outcomes than higher income individuals. The researchers also concluded that health spending alone will not significantly improve the health status of the poor, but it remains an important variable. When considering specific variables, for example, they