

Introduction

Significant improvements in the overall health of the population in the United States have been realized over the last four decades. In general, improvements in health may be attributable to a combined effect of improved living standards, advancements in medical treatment, improved access to medical care and resources, and increased awareness about health risks in the general population. However improvements in health outcomes have not been realized by all segments of the population and have resulted in significant disparities along a number of dimensions including gender, ethnicity, socioeconomic status, and geographic location.

The National Institutes of Health (NIH) define health disparities as:

"Health disparities are differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups in the United States." (National Institutes of Health)

Disparities in health exert an enormous burden on the health care community and on society. Variations in social, cultural, behavioral, biologic, genetic, and environmental factors contribute to differences in health among population subgroups and geographic locations. Among factors that are likely to contribute to disparities in health, access to medical care and quality of medical care are critical.

Reducing health disparities was a goal of the Healthy People 2000 objectives. Healthy People 2010 objectives have been substantially expanded to include eliminating health disparities, and this represents one of the most significant

challenges for the nation. One of the key elements to the successful reduction of disparities along all socio-demographic and geographic dimensions is developing an understanding of the nature and extent of disparities.

The Appalachian region has endured significant excesses in adverse health outcomes. In general, the Appalachian region has lagged economically from other parts of the U.S. Relatively high levels of unemployment, low regional incomes, and educational deficits continue to contribute to a lower standard of living than enjoyed in many areas of the U.S. However, Appalachia also represents significant levels of socioeconomic diversity. For example, metropolitan areas in the region have more diversified economies, higher per capita incomes, and greater access to medical care than non-metropolitan areas (Barnett, et al). Local socioeconomic differences within the Appalachian region are likely to be key contributors to disparities in health outcomes with those areas having diminished access to social, economic, and medical care resources experiencing more adverse outcomes. However, detailed data which describe the extent and nature of these disparities has been lacking.

This study was commissioned by the Appalachian Region Commission in order to provide detailed, baseline information about health disparities in the Appalachian region. In addition, information has been compiled that may provide clues to disparities between Appalachian and the non-Appalachian U.S. and also among Appalachian counties. Together these data will aid in targeting resources and efforts towards developing interventions to reduce health disparities in the region.

The Appalachian region and the A.R.C.

The Appalachian Regional Commission (ARC) is a federal-state partnership established in 1965 by the Appalachian Regional Development Act to promote economic and social development of the Appalachian Region. With a total population of 22.8 million, the Appalachian Region includes, as amended in 2002, 410 counties. When this study was commissioned in October of 2001, the ARC designated region consisted of 406 counties. The 406 county designation has been retained for this study. The ARC designated region includes all of West Virginia and parts of 12 other states and extends more than a thousand miles from the southern tier of New York to northeast Mississippi.

When the ARC was established, one of three Appalachians lived in poverty, a rate 50 percent higher than the national rate. By 2000, the regional poverty rate had been reduced to 13.6 percent, and the spread between Appalachia and the nation has narrowed to 1.2 percentage points. Over the 1960–80 period, the number of economically distressed counties in the Region showed a steady decline, falling from 223 in 1960 to 84 in 1980, but over the next 20 years there was a steady, slow increase with the number rising to 121 distressed counties in fiscal year 2003.

Appalachia's population is geographically distributed across the urban-rural spectrum, from large urban areas in metropolitan counties to small, very remote counties lacking even small urban concentrations. Sixty percent of the population live in metropolitan counties, twenty-five percent live in counties adjacent to metropolitan counties, while the balance of the population live in more remote, rural locations.

For 38 years, the Commission has funded a wide range of programs in the Region, including highway corridors; community water and sewer facilities and other physical infrastructure; health, education, and human resource development; economic development programs and local capacity building, and leadership development. In FY 2003, the Commission's definitions of economic development levels designates 221 counties as distressed because of high rates of poverty and unemployment and low rates of per capita market income compared to national averages; 259 counties were designated transitional (42 of these transitional counties may be characterized as "at-risk"), with higher than average rates of poverty and unemployment and lower per capita market income; 21 counties have nearly achieved parity with national socioeconomic norms and are now designated as competitive and; 9 counties have reached or exceeded national norms and are now designated as attainment counties.

Organization of Report

Section I of this report describes regional disparities in mortality from leading causes of death between the Appalachian region and the non-Appalachia United States. Regional death rates as well as county-level death rates were generated for eight population subgroups; white and black men and women ages 35 to 64 and 65 and older. County-level maps of death rates are presented for all counties in the coterminous U.S. and separately for the Appalachian region. This section highlights regional and county-level disparities in death rates. Section II examines county-level rates of hospitalizations from leading causes of illness for selected counties in the Appalachian region. Hospitalization rates are presented by county for six population subgroups: all persons ages 35 to 64

and 65 and older, and men and women ages 35 to 64 and 65 and older. Section III describes general socioeconomic conditions among Appalachian counties. Section IV examines leading health indicators among behavioral risks. Section V documents medical care resources in the Appalachian region. Section VI provides a overview of the study results and suggests several avenues for further research.

References

National Institutes of Health, Working Group on Health Disparities.

Barnett E, Elmes GA, Braham VE, Halverson JA, Lee JY, Loftus S. *Heart Disease in Appalachia: An Atlas of County Economic Conditions, Mortality, and Medical care Resources*. Prevention Research Center, West Virginia University, Morgantown WV: June 1998.

U.S. Department of Health and Human Services. *Healthy people 2000: National Health Promotion and Disease Prevention Objectives*. DHHS Publication No. 017-001-00473-1. Washington DC: Government Printing Office, 1990.

U.S. Department of Health and Human Services. *Healthy People 2010: Understanding and Improving Health*. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000.