Rural Realities and Challenges

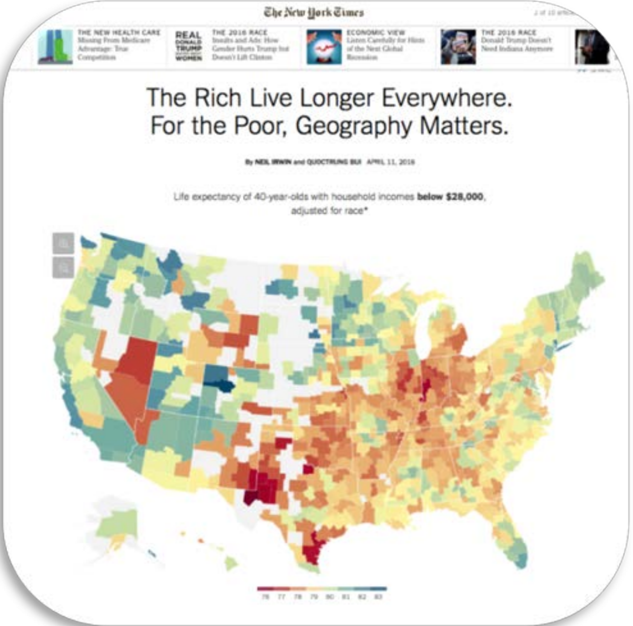
The Washington Post

‘We don’t know why it came to this’

As white women between 25 and 55 die at spiking rates, a close look at one tragedy

TECUMSEH, Okla.

Story by Eli Saslow



The New York Times

HEALTH

Alone on the Range, Seniors Often Lack Access to Health Care

Paula Span

U.S. Department of Health & Human Services
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Federal Office of Rural Health Policy

Rural Realities and Challenges

The Overlooked Rural Disparity

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Widening Rural–Urban Disparities in All-Cause Mortality and Mortality from Major Causes of Death in the USA, 1969–2009

Gopal K. Singh and Mohammad Siahpush

ABSTRACT *This study examined trends in rural–urban disparities in all-cause and cause-specific mortality in the USA between 1969 and 2009. A rural–urban continuum measure was linked to county-level mortality data. Age-adjusted death rates were calculated by sex, race, cause-of-death, area-poverty, and urbanization level for 13 time periods between 1969 and 2009. Cause-of-death decomposition and log-linear and Poisson regression were used to analyze rural–urban differentials. Mortality rates increased with increasing levels of rurality overall and for non-Hispanic whites, blacks, and American Indians/Alaska Natives. Despite the declining mortality trends, mortality risks for both males and females and for blacks and whites have been increasingly higher in non-metropolitan than metropolitan areas, particularly since 1990. In 2005–2009, mortality rates varied from 391.9 per 100,000 population for Asians/Pacific Islanders in rural areas to 1,063.2 for blacks in small-urban towns. Poverty gradients were steeper in rural areas, which maintained higher mortality than urban areas after adjustment for poverty level. Poor blacks in non-metropolitan areas experienced two to three times higher all-cause and premature mortality risks than affluent blacks and whites in metropolitan areas. Disparities widened over time; excess mortality from all causes combined and from several major causes of death in non-metropolitan areas was greater in 2005–2009 than in 1990–1992. Causes of death contributing most to the increasing rural–urban disparity and higher rural mortality include heart disease, unintentional injuries, COPD, lung cancer, stroke, suicide, diabetes, nephritis, pneumonia/influenza, cirrhosis, and Alzheimer's disease. Residents in metropolitan areas experienced larger mortality reductions during the past four decades than non-metropolitan residents, contributing to the widening gap.*

KEYWORDS *Mortality, Cause of death, Rural–urban, Metropolitan, Decomposition, Race, Poverty, Inequality, Trend, USA*

INTRODUCTION

Geographical inequalities in health have long represented an important area of public health research in the USA.[1–6] Mortality data for urban and rural areas have been available for several decades in the USA although mortality rates have been published infrequently due to the lack of appropriate denominator or population statistics.[1–3] Reduction of health inequalities, including those between rural and

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Widening Rural–Urban Disparities in Life Expectancy, U.S., 1969–2009

Gopal K. Singh, PhD, Mohammad Siahpush, PhD

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Background: There is limited research on rural–urban disparities in U.S. life expectancy.

Purpose: This study examined trends in rural–urban disparities in life expectancy at birth in the U.S. between 1969 and 2009.

Methods: The 1969–2009 U.S. county-level mortality data linked to a rural–urban continuum measure were analyzed. Life expectancies were calculated by age, gender, and race for 3-year time periods between 1969 and 2004 and for 2005–2009 using standard life-table methodology. Differences in life expectancy were decomposed by age and cause of death.

Results: Life expectancy was inversely related to levels of rurality. In 2005–2009, those in large metropolitan areas had a life expectancy of 79.1 years, compared with 76.9 years in small urban towns and 76.7 years in rural areas. When stratified by gender, race, and income, life expectancy ranged from 67.7 years among poor black men in nonmetropolitan areas to 89.6 among poor Asian/Pacific Islander women in metropolitan areas. Rural–urban disparities widened over time. In 1969–1971, life expectancy was 0.4 years longer in metropolitan than in nonmetropolitan areas (70.9 vs 70.5 years). By 2005–2009, the life expectancy difference had increased to 2.0 years (78.8 vs 76.8 years). The rural poor and rural blacks currently experience survival probabilities that urban rich and urban whites enjoyed 4 decades earlier. Causes of death contributing most to the increasing rural–urban disparity and lower life expectancy in rural areas include heart disease, unintentional injuries, COPD, lung cancer, stroke, suicide, and diabetes.

Conclusions: Between 1969 and 2009, residents in metropolitan areas experienced larger gains in life expectancy than those in nonmetropolitan areas, contributing to the widening gap.
(Am J Prev Med 2014;46(2):e19–e29) Published by Elsevier Inc. on behalf of American Journal of Preventive Medicine

Introduction

Life expectancy is an important health indicator and a key measure of human development globally.[1–4] Since 1990, reducing health inequalities and increasing life expectancy have been the two most important overarching goals for the U.S., as specified in its national health initiative, *Healthy People*.[1–3]

Life expectancy estimates are routinely available for gender and broad racial/ethnic groups in the U.S.[5–8] Many U.S. studies have analyzed spatial–temporal patterns in mortality,[9–21] and a few studies have reported differentials in life expectancy according to SES or area-based deprivation level.[22–24] Estimates of U.S. life expectancy according to urbanization level are limited, particularly analysis of trends in life expectancy among rural and urban populations over time.[25] Although substantial disparities in life expectancy exist among gender, racial/ethnic, and socioeconomic groups in the U.S., it is important to know the magnitude and causes of life expectancy disparities been rural and urban areas for the purposes of social planning and public health decision making.

Life expectancy is a summary index of mortality that can be used to document both absolute and relative inequalities in survival between rural and urban

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Metro, Both Sexes
Non-Metro, Both Sexes
Metro Males
Non-Metro, Males
Metro, Females
Non-Metro, Females

85
80
75
70
65

1969-1971 1975-1977 1981-1983 1987-1989 1993-1995 1999-2001 2005-2009

Source: Singh GK, Siahpush M. American Journal of Preventive Medicine. 2014;46(2):e19-e29 (updated data)

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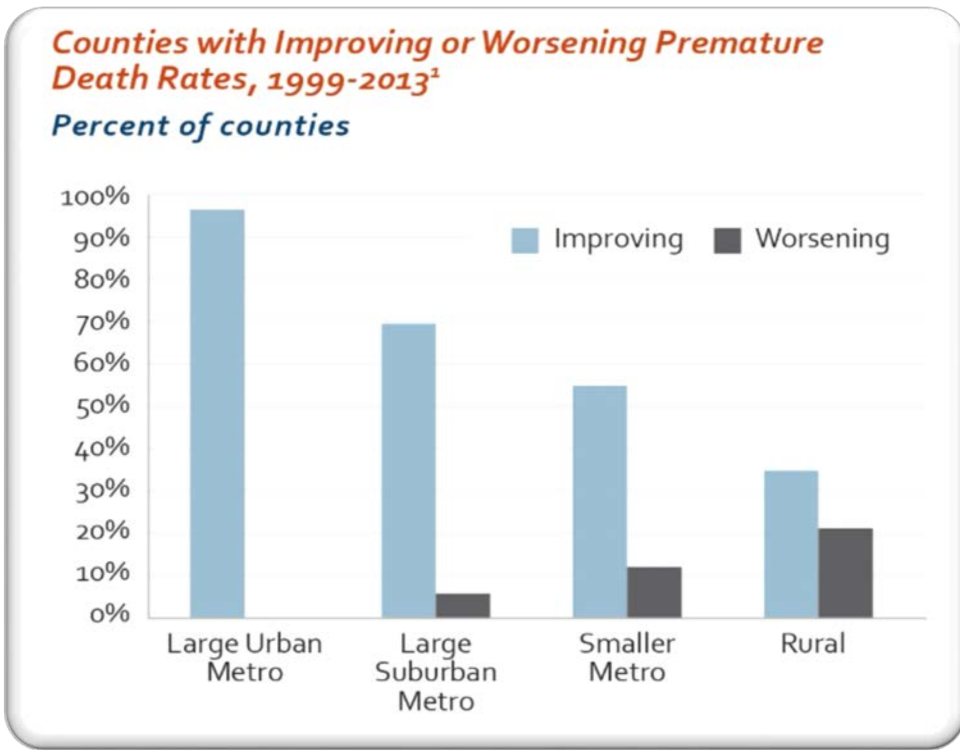

Findings from the 2016 RWJ County Health Rankings

Rural Realities and Challenges

Though opioid abuse and opioid-related death has been on the rise nationally, rural communities are disproportionately affected

- Drug-related deaths 45% higher in rural
- Rural communities have a history of substance abuse
- Rural residents are most likely to be prescribed opioid painkillers

- Rural has greater prevalence of risk factors and fewer options for treatment.

Rural Realities and Challenges

Other Factors

- Higher Rates of Chronic Disease
- Higher Rates of Suicide
- Higher Rates of Smoking
- Higher Rates of Poverty
- Lower Rates of Educational Attainment

U.S. Department of Health & Human Services
HRSA
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