Medical Xpress

Research shows who dies when and where

September 18 2006

In the United States, the best-off people, like Asian women in Bergen County, N.J., have a life expectancy 33 years longer than the worst-off, Native American males in some South Dakota counties - 91 versus 58 years. So concludes the most comprehensive study to date of who dies when and where in this country.

In order to determine how unequal life expectancy is in the United States, and why, researchers from the Harvard School of Public Health and Harvard Initiative for Global Health analyzed census and health statistics data for the years 1982 to 2001. They found what they call "an enormous gap" in life expectancies based on race, counties of residence, income, and a few other social factors.

The analysis led the researchers to the idea that there are "eight different Americas." White middle America and black middle America are different from each other (whites live longer than blacks) and from low-income white America, Southern low-income rural black America, Northern low-income rural white America, high-risk urban black America, and Asian America.

"Put in a global context, the disparities in mortality among the eight Americas are enormous," says Majid Ezzati, an associate professor of international health at the School of Public Health. "Our analysis indicates that 10 million Americans with the best health have achieved one of the highest levels of life expectancy on record, three years better than Japan for women, and four years better than Iceland for men. At the same time, tens of millions of Americans are experiencing levels of

health that are more typical of people in developing countries."

Christopher Murray, faculty director of the Harvard Initiative for Global Health, Ezzati, and their colleagues uncovered many striking differences between people living in the different Americas. For the best-off versus worst-off males, Asians can expect to live more than 15 years longer than high-risk urban blacks. Asian females, in general, outlive poor, urban black males by more than 20 years and low-income rural Southern black women by almost 13 years.

The gaps are largest for young (15 to 44 years old) and middle-aged (45 to 59 years old) adults compared with children and the elderly. In 2001, 15-year-old blacks in high-risk city areas were three to four times more likely than Asians to die before age 60, and four to five times more likely before age 45. In fact, young black men living in poor, high-crime urban America have death risks similar to people living in Russia or sub-Saharan Africa.

Diseases, injuries cause gaps

The researchers attribute such gaps to injuries and chronic diseases, including heart disease, cancer, and diabetes. These killers, in turn, are a consequence of well-known and largely controllable risk factors such as smoking, alcohol use, obesity, high blood pressure, and high cholesterol. In high-risk urban black communities, male mortality is increased by homicides and exposure to AIDS.

Despite all the warnings in media and elsewhere, gaps in life expectancy in the different Americas did not improve between 1982 and 2001. In some groups, death rates even worsened. For example, life expectancy among low-income white women in Appalachia and the Mississippi Valley decreased during those years.

A big effort is being made in the United States to provide health insurance for the nearly 47 million Americans who don't have it. Increasing access to coverage is bound to narrow the gap in life span, but will not come close to eliminating it, the researchers speculate. "The variation in health plan coverage across the eight Americas is small relative to the very large difference in health outcome," notes Murray, who is lead author of the report. "It is likely that expanding insurance coverage alone would still leave huge disparities in young and middle-aged adults."

Ezzati, Murray, and their colleagues recommend such steps as increased tobacco taxes, stricter enforcement of drinking and driving laws, and reduction of alcohol-induced violence. Things like high blood pressure, high cholesterol, and even obesity are not all about individual behavior, they argue. Removing financial and cultural barriers to lifestyle and medication that have proven effective for controlling weight, blood pressure, cholesterol, and blood sugar should help reduce the large inequities in chronic disease, they believe.

The research team concludes that "because policies aimed at reducing fundamental socioeconomic inequalities are currently practically absent in the United States, health disparities will have to be at least partly addressed through public health strategies that reduce risk factors for chronic disease and injuries."

The report is printed in the open access journal and appears online at the *Public Library of Science*.

Source: Harvard University, By William J. Cromie