Implications of New Age Adjustment Standard on Racial/Ethnic Health Disparities

By Olivia Carter-Pokras, PhD

Closing the Gap, Hispanic Agenda for Action • October 1998

As of September 1, 1998, HHS agencies and programs that use age-adjusted* death rates must change the population standard they use from the year 1940 base to the year 2000 projections from the Bureau of the Census. This new standard, which will be applied to adjusted numbers, ratios, and rates of death for 1999 and beyond, has important implications for assessing the relative health of racial and ethnic minorities. Compared to the age-adjusted rates using the old 1940 standard, use of the new standard may give the appearance that disparities in mortality have been significantly reduced.

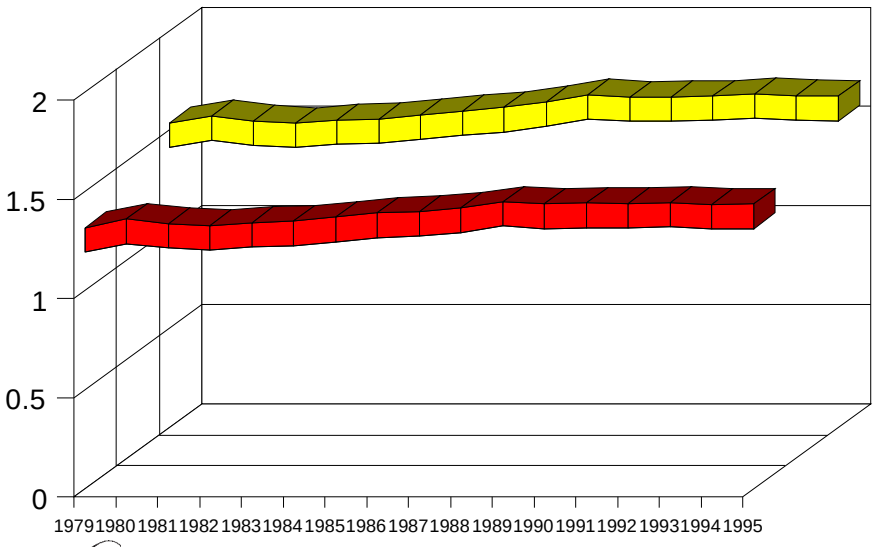
Age-adjusted death rates are widely used by Federal and state health agencies and programs to measure trends and differentials in the risk of death over time and among population groups and geographic areas. The rates are summary measures, or averages, across all age groups, which are free from the distorting effects of differences in age distributions among comparison groups. Age-adjusted death rates are indices rather than direct measures of mortality, and should be used only when examining trends or comparing population groups. Also, in detailed analyses of health, age-adjusted death rates should be supplemented with rates specific for age.

Before the new policy was implemented, HHS agencies used several different population standards to produce age-adjusted death rates. This created confusion among data users, such as the media, and imposed a burden on State and local data users who must produce several data series in order to be consistent with Federal data. Use of the new standard will produce mortality data that are uniform throughout the Department, and that are more consistent with the current population structure (older) than the 1940 population standard (younger) that it replaces. In addition, it will reduce the statistical burden on State and local health agencies, and result in more effective communication with the public. Although researchers are generally required to use the new HHS standard, they may use other appropriate standards if a rationale is given.

When describing the disparities in mortality that racial and ethnic minorities experience, it is important to understand the impact of the change in age-adjustment standard. The National Center for Health Statistics (NCHS) has found in preliminary analyses that the size of the mortality disparity between Blacks and Whites, and between Hispanics and non-Hispanics, will be affected. The changing population standard will also likely affect mortality differentials for other racial and ethnic minority groups although the effects may be different from that for the Black population.

The mortality race ratio for the Black and White populations in 1995 is reduced by a third from 1.6 using the 1940 standard to 1.4 using the year 2000 standard. Since Blacks tend to be a younger population than Whites, the effect of the change from using a younger 1940 population standard to using an older 2000 population standard will differ for Blacks than Whites. The mortality ratio is highest for 0 to 24 year olds, where Blacks have twice the death rate of Whites. For those 65 years of age and older, the mortality ratio is 1.1. The reduction in the overall (all ages combined) mortality ratio from the 1940 to the year 2000 standard reflects the greater weight that the year 2000 standard gives to the older population, where race differentials in mortality are smaller. The single ratio of age-adjusted rates masks the important age-specific differences in the mortality race ratio.

Mortality race ratio based on 1940 and year 2000 standard populations: U.S., 1979-1995



Race ratio = ratio of age-adjusted death rates for the Black population to that for the White population.

Will our ability to monitor mortality trends be compromised?

How does the change in the new standard affect our ability to monitor trends in mortality over time? While the magnitude of the mortality race ratio is affected by the change in standard, the trend in the ratio over time when the same standard is used is not seriously affected. The trends in the mortality race ratio based on both the 1940 and 2000 standards are nearly parallel. The *widening or narrowing of the*

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race gap in mortality will be approximately the same when the same standard is used, even if the magnitude of the gap itself is different.

What can you do?

OMH and NCHS recommend that you:

• Encourage researchers analyzing mortality data by race and ethnicity to present their data by race/ethnicity *and* age (i.e., age-specific rates), not just adjusted for age.

• Use age-specific rates when discussing racial and ethnic disparities in mortality.

• If an age-adjusted rate or ratio has to be used to describe racial and ethnic disparities in mortality, make sure that users understand the impact of the change in the age-adjustment standard and supplement age-adjusted rates or ratios with age-specific rates.

• When comparing age-adjusted rates or ratios over time, make sure the same standard is used throughout.

• Encourage research on the impact of the new standard on mortality rates and ratios for Hispanic subgroups as well as American Indians/Alaska Natives, and Asian Americans/Pacific Islanders.

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