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PREMATURE DEATH AMONG AFRICAN-AMERICANS AND AMERICAN INDIANS

IF "DEATH IS KNOWLEDGE," to quote German poet Friederich von Schiller, then what can be learned from the study of mortality patterns among Oregon's African-Americans and American Indians? Oregon vital statistics indicate that these populations have risks of premature death that are much higher than those of white Oregonians. The timing of death has long been considered the single most reliable indicator of a population's overall health. Along with its associated statistical measures, death is the ultimate manifestation of the complex interactions of many factors, including income, cultural practices, duration and quality of education, lifestyle choices, medical risk factors, geographic distribution, genetic background, and utilization of quality health care.

This article presents findings that suggest a cause for concern about the health of these two populations.*[1] It is abridged from a recently published Health Division report, *Multicultural Health: Mortality Patterns by Race and Ethnicity, Oregon, 1986-1994.* (For a copy of the full report, call 503/731-4354.) Data were compiled from death certificates filed with the Health Division's Center for Health Statistics. Death rates were calculated for resident deaths occurring from 1986 to 1994 and age-adjusted to the 1990 Oregon standard.†

* Mortality patterns for Oregonians of Hispanic, Chinese, and Japanese origin are also included in the report. Methodological considerations limited the analysis for Hispanics, but they appear to be at greater risk of death from unintentional injuries, homicides, alcoholism, and diabetes. By race, persons of Chinese or Japanese origin had the most favorable mortality profile.

† Age-adjusted death rates are used to permit the comparison of populations with different age structures; the rates are generated as if each group had the same age distribution (an arbitrarily chosen standard). Crude death rates do not take account of these important differences.

AFRICAN-AMERICANS

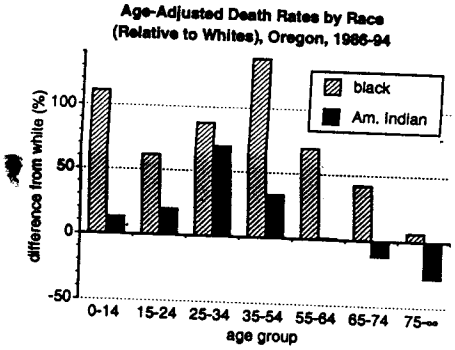
The risk of death in any given year is on average 36% greater for black Oregonians than for whites. The age-adjusted death rate was 1,209.3 per 100,000 black residents (versus 887.8 for whites). The black death rate was higher than the white rate in every age group. The difference was most dramatic (2.4 times higher) among 35-54-year-olds (see figure). Black Oregonians died at a median age of 65 years—compared to 76 for whites. Nationally, the life expectancy of African-Americans is comparable to that of white Americans in 1960.

Black Oregonians had significantly higher age-adjusted death rates for nearly all leading chronic diseases, as well as for homicide and unintentional injuries. Rates were more than twice as high for at least four causes of death: homicide, diabetes, AIDS, and alcoholism.

Homicide. No other cause of death so greatly differentiates blacks and whites. Black Oregonians were 7.5 times more likely to be murdered than whites (34.8/100,000 versus 4.6/100,000). Those in the 15–24 age category were at the greatest risk; their death rate (72.5) was *twelve* times higher than that of similarly aged whites (6.2). Homicide was the fifth leading cause of death among African-Americans; it was seventeenth for whites.

Attempts to explain the high African-American homicide rate have focused on the issue of poverty. Some analyses have shown that when poverty, race, and other demographic characteristics are assessed together, poverty and its correlates emerge as the most significant predictors of homicide.[2,3]

Diabetes Mellitus. Diabetes was 2.8 times more likely to claim African-Americans than whites (47.7 vs. 17.3).



Research has pointed toward causes such as hereditary factors and the increased prevalence of poor diet, sedentary lifestyles, and obesity.[4,5]

AIDS. The AIDS epidemic has hit African-Americans especially hard. Their age-adjusted death rate was 15.8—nearly 2.5 times higher than the white rate of 6.4. Although sexual transmission is the most common route of exposure in Oregon, African-Americans were more likely than whites to report infection via intravenous drug use.

Alcoholism. African-Americans were 2.2 times more likely than whites to die from alcoholism and related disorders (24.8 vs. 11.3). Nationally, heavy drinking among white men declined during 1984-92, but not for their African-American counterparts—and African-American men were more likely to report heavy drinking than white men.[6]

AMERICAN INDIANS

American Indians were far more apt than whites to die prematurely, but once they reached their sixty-fifth birthday, their risk of death was actually lower. Mathematically, this dichotomy is apparent (perhaps more clearly to statisticians than others) in that the age-adjusted death rate among American Indians was 14% lower than that for whites (761.9 vs. 887.8), while at the same time, their years of potential life

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lost index** was significantly (30%) higher. The median age at death for American Indians was sixty years.

Three of the six leading causes of death among American Indians were particularly likely to disproportionately affect the young: unintentional injuries, alcoholic diseases, and homicide. These were the only causes with age-adjusted death rates higher than those for whites. In fact, an American Indian's risk of death from heart disease, cancer, or cerebrovascular disease was significantly lower than that for a white Oregonian.

Alcoholism. Alcoholism was the fourth leading cause of death among American Indians—it ranked twelfth for whites—and the age-adjusted death rate was 3.4 times higher (38.1 vs. 11.3). The greatest disparity was among those aged 25 to 34, where American Indians were 8.1 times more likely to die from alcoholism. The disrupted social heritage experienced by many American Indians is thought to be a contributing factor. Loss of land, poverty, forced abandonment of traditional lifeways and language, less education, disruption of family life, and a harsh reservation environment can all be associated with alcohol abuse.[7]

Alcohol and many of its related risk factors are also implicated in two other causes of death: homicide and unintentional injuries.

** The years of potential life lost index is a common measure of premature mortality (counting only deaths before age 65) that controls for the age distribution differences of populations.

Homicide. Homicide was the sixth leading cause of death among American Indians, whose death rates showed them to be >3 times as likely as whites to be murdered (14.9 vs. 4.6).

Unintentional Injuries. American Indians were more likely to die from unintentional injuries than any other racial group. Their age-adjusted death rate (57.9) was 46% higher than the white rate (39.6). More than half (54%) of all unintentional injury deaths among American Indians resulted from motor vehicle crashes, with a death rate 150% that of whites (30.4 vs. 19.7).

It is likely that many of these deaths were alcohol related. Nationally, 69% of American Indian drivers who died in motor vehicle crashes had been drinking, compared to 46% of whites.

PREVENTABLE RISK FACTORS

African-Americans and American Indians share certain historical experiences, many of which may directly or indirectly affect these indices of health. It is equally true, however, that—as with whites—all of our leading causes of death in Oregon have behavioral risk factors—most notably, smoking, poor dietary habits, lack of exercise, alcohol and drug use, and unsafe sex. The fact that these risk factors can be prevented affords opportunities for substantially reducing excess deaths— through culturally appropriate community health education about lifestyle issues, adherence to medical regimens, and increased availability and use of preventive services. Health care providers have vital roles to play in reducing the incidence of premature death among African-Americans and American Indians. These range from provision of clinical preventive services among high risk groups (e.g., HbA1C monitoring in diabetics), querying patients about the potential for violence in their surroundings, and encouraging their patients to adopt healthy lifestyles.

REFERENCES

1. Oregon Health Division. Multicultural health: mortality patterns by race and ethnicity, Oregon, 1986–1994. Oregon Department of Human Resources. Portland, Oregon. 1997.
2. Onawuachi-Saunders C, Hawkins DF. Black-white differences in injury: race or social class? An Epidemiol, 1993;3:150-153.
3. Kaplan GA, Pamuk ER, Lynch JW, et al. Inequality in income and mortality in the United States: analysis of mortality and potential pathways. Brit Med J 1996;312:999-1003.
4. Wyngaarden JB. From the National Institutes of Health. JAMA 1989;261:200.
5. Carter JS, Pugh JA, Monterrosa J. Non-insulin-dependent diabetes mellitus in minorities in the United States. Ann Intern Med 1996;125:221-232.
6. Caetano R, Kaskutas LA. Changes in drinking patterns among whites, Blacks, and Hispanics, 1984-1992. J Stud Alcohol 1995;56:558-565.
7. US Department of Health and Human Services. Report of the Secretary's Task Force on Black and Minority Health. Washington, DC. 1988.

Short Takes: Flu Update

The second half of the annual influenza season has been marked by a shift from almost exclusively type A to almost exclusively type B (*infra*).