

VIEWPOINT

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Black Gains in Life Expectancy

In recent decades the US black population has experienced substantial gains in life expectancy, now approaching the life expectancy of the white population. Between 1995 and 2014, the increase in black life expectancy at birth was more than double the white increase: a gain of 6.0 years from 69.6 years to 75.6 years for black people compared with a gain of 2.5 years from 76.5 years to 79.0 for white people.¹ The difference in the percent per annum rate of increase was also more than double: 0.44 for black people, 0.17 for white people.

Male life expectancy increased more rapidly than female life expectancy in both races. From 1995 through 2014, life expectancy at birth increased from 65.7 years to 72.5 years among black men, from 73.3 years to 76.7 years among white men, from 73.9 years to 78.4 years among black women, and from 79.6 years to 81.4 years among white women¹; thus, black men had the largest gains of the 4 race-sex groups, with a rate of increase of 0.52% per annum. Also noteworthy is that between 1990 and 2011, the bottom half of the black survivor distribution gained appreciably more than the top half: 0.65% per annum vs 0.24%. The bottom half, a gain of 8 years of life expectancy, and the top have had a gain of 4 years. In 1990 for black individuals, life expectancy for the top half of the survivor distribution was 30.3 years more than the lower half (84.3 vs 54.0 years); in 2011, the gap was reduced to 26.8 years (88.7 vs 61.9 years).¹

In a study of changes in black-white differences in life expectancy from 1999 to 2013, Kochanek et al² found that the gap in life expectancy closed by 2.3 years, from 5.9 to 3.6 years. The authors reported that

greater decreases in cardiovascular disease mortality for blacks accounted for 0.37 years of the total decrease in the gap, cancer accounted for 0.32 years, human immunodeficiency virus (HIV) disease for 0.31 years, unintentional injuries for 0.28 years, and perinatal conditions for 0.14 years. Thus, gains in just 5 causes accounted for almost 60% of the decrease in the black-white life expectancy gap. A study by Firebaugh et al³ shifted the emphasis to black-white changes in age of death rather than cause of death. Their study combined all causes of death into just 4 major categories. Because there is an interaction between cause and age, cause of death might have been found to have more influence and age less of an influence if the study had divided cause of death into many more discrete categories.

The potential for further closing the gap in life expectancy between blacks and whites has changed significantly since the 1990s. The death rate for HIV disease has declined so substantially that even elimination of the large racial differential could not have a major effect on the existing life expectancy gap for all causes. Much the same could apply for deaths from perinatal conditions and, to a lesser extent, even to deaths from cardiovascular disease. Although cardiovascular disease is still a major cause of death, the average age of death from this cause has increased appreciably for both sexes, thus reducing the potential for further gains in life expectancy. For instance, in 2014, more than half the deaths from cardiovascular disease in white and black women occurred after age 85 years. Among white men, the median age of death from cardiovascular diseases was 78 years; for black men, it was 68 years.

Table. Significant Causes of Death With the Highest Ratio of Deaths of Black to White and Total Number of Deaths From Each Cause, 2014^a

Cause of Death	Total No. of Deaths ^b	Age-Adjusted Death Rates per 100 000		Black-White Ratio
		Blacks	Whites	
Human immunodeficiency virus infection	6721	8.3	1.1	7.5
Homicide	15 809	17.2	3.0	5.7
Essential hypertension and hypertensive renal disease	30 221	15.6	7.4	2.1
Nephritis, nephrotic syndrome, and nephrosis	48 146	24.6	12.1	2.0
Cancer of prostate	28 344	13.9	7.3	1.9
Diabetes mellitus	76 488	37.3	19.3	1.9
Septicemia	38 940	10.2	17.9	1.8
Cancer of breast	41 678	16.4	11.0	1.5
Cerebrovascular disease	133 103	49.7	35.2	1.4
Cancer of colon, rectum, anus	52 234	18.6	14.0	1.3
Diseases of the heart	614 348	206.3	165.9	1.2

^a Adapted from Kochanek et al¹ (Tables 12 and 16).

^b Total number of deaths for all races and ethnicities.

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To make a significant contribution to reducing the current gap between black and white life expectancy, a cause must have substantial number of deaths and a significantly higher age-adjusted death rate for blacks than for whites. Eleven causes of death meet those 2 criteria (Table). For example, diabetes mellitus ranks high on both counts, with a black age-adjusted death rate almost double the white death rate (37.3 vs 19.3 per 100 000 in 2014 and more total deaths, 13 435 among blacks and 59 741 among whites in 2014) than most of the other causes on the list. With a goal of reducing the 17% differential in black-white all-cause deaths, it appears that progress in just a few causes probably will not be enough; progress in many causes will be required.

The very high black-white ratio for age-adjusted homicide deaths suggests another opportunity for reducing the racial gap in all-cause deaths, but realization of the opportunity depends

more on public health measures such as gun control than on medical care. Essential hypertension, prostate cancer, kidney disease (nephritis, nephrotic syndrome, nephrosis), and septicemia all have high black-white age-adjusted mortality ratios and a substantial number of total deaths, posing a challenge to research, prevention, diagnosis, and therapeutic interventions. Continued progress in preventing and treating heart disease in black men could also make a substantial contribution because of the large number of these men who die young relative to white men and black women.

In 1944, Gunnar Myrdahl,⁴ Nobel Prize winner in Economics, wrote that black-white differences were arguably the United States most important problem. Major advances in life expectancy that bring blacks closer to whites is a significant contribution to its solution.

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REFERENCES

1. Kochanek KD, Murphy SL, Xu J, Tejada-Vera B. Deaths: final data for 2014. *Natl Vital Stat Rep*. 2016;65(4):1-122.
2. Kochanek KD, Arias E, Anderson RN. *Leading Causes of Death Contributing to Decrease in Life Expectancy Gap Between Black and White Populations: United States, 1999-2013*. Atlanta, GA: National Center for Health Statistics; November 2015. Data brief, 218.
3. Firebaugh G, Acciai F, Noah AJ, Prather C, Nau C. Why the racial gap in life expectancy is declining in the United States. *Demogr Res*. 2014;31(32):975-1006.
4. Myrdahl G. *An American Dilemma: The Negro Problem and Modern Democracy*. New York, NY: Harper & Bros; 1944:194.