

ON THE DECREASE IN BLACK MALE LIFE EXPECTANCY
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Introduction

In the United States, age-adjusted mortality rates for nonwhite male and female residents have for some time been approximately 40 percent higher than comparable figures for their white counterparts. Life expectancy, as a result, has been about five years lower. This disparity has been masked in commonly published crude mortality statistics since these do not reflect the nonwhite population's higher percentage of younger residents and concomitant lower percentage of older residents.

Age-specific and age-adjusted mortality rates declined fairly steadily for some time for each of the four race and sex groups. This decrease has continued to the present time for both white and nonwhite females. However, in the past decade (between 1960 and 1970) rates remained essentially unchanged for white males and increased quite appreciably for nonwhite males. Presently (1970), life expectancy is approximately 61 years for nonwhite males, 68 years for white males, 69 years for nonwhite females and 75 years for white females.

We here present Michigan data for 1959-61 and 1969-71, focusing on the relative impact of various causes of death and on variations in mortality rates at specific age levels. Possible cultural, economic and social issues related to the trends noted will be discussed and the implications of the widening disparity in rates will be considered. Although similar detailed data for the United States for the years 1969-71 have not as yet been published, available statistics indicate comparable trends.

Analysis of Findings

Michigan's total population increased 13.4 percent, from 7,823,000 to 8,875,000, between 1960 and 1970. During the same time period, the number of nonwhite residents increased 41.4 percent, from 737,000 to 1,042,000. Approximately half of this higher growth rate reflects the continuing substantial in-migration of younger nonwhite males (and their families) seeking employment in automobile related professions, particularly in the first half of the decade. More than 95 percent of all nonwhite residents are black and the terms nonwhite and black are therefore used interchangeably here. Approximately 75 percent of nonwhite residents, but only 10 percent of white residents, live in Detroit, Michigan's largest city. Most of the rest live in the state's other urban centers.

In 1959-61, annual age-adjusted mortality rates were 10.1 (per thousand) for white males, 6.6 for white females, 11.4 for nonwhite males, and 9.1 for nonwhite females. By 1969-71, these rates had remained unchanged for white males, decreased 10.6 percent (to 5.9) for white females, increased 15.8 percent (to 13.2) for nonwhite males, and decreased 6.6 percent (to 8.5) for nonwhite females. In 1959-61, black male mortality was 32.6 percent above the general state rate. By 1969-71, this excess was 53.5 percent. Conversely, white females (the group

with the lowest rate) were 23.3 percent below the state average in 1959-61 and 31.4 percent in 1969-71. In the latter period, the black male age-adjusted mortality rate was more than twice the comparable figure for white females.

Approximately 2/3 of the increase in the black male age-adjusted mortality rate resulted from a dramatic rise in deaths in the age group 15-44. Between 1959-61 and 1969-71, rates increased 131.3 percent (from 1.6 to 3.7) at ages 15-24, 100.0 percent (from 2.8 to 5.6) at ages 25-34 and 71.7 percent (from 5.3 to 9.1) at ages 35-44. Concurrently, they remained essentially unchanged in this age group for the three other race-sex groups. In comparison with rates for white males, black male rates in 1959-61 were 14.3 percent higher at ages 15-24, 75.0 percent higher at ages 25-34, and 89.3 percent higher at ages 35-44. By 1969-71, they were 117.6, 250.0, and 184.4 percent higher, respectively. In comparison with similar figures for black females, these percentages were 60.0, 21.7, and 15.2 in 1959-61 and 236.4, 166.7, and 89.6 in 1969-71. That is, the most dramatic absolute and relative rise occurred in the age group 15-24.

Approximately 2/3 of this increase in black male deaths in the age group 15-44 was in turn caused by a major rise in mortality from two causes--accidents and homicides. Between 1959-61 and 1969-71, the death rate for accidents increased 59.8 percent (from 59.7 per 100,000 to 95.4) while the rate for homicides rose 236.5 percent (from 54.0 to 181.7). These two causes accounted for approximately 1/3 of all black male deaths in this age group in 1959-61 compared with 1/2 in 1969-71. In comparison with rates for white males, black male rates in 1959-61 were 11.2 percent lower for accidents and 1,442.8 percent higher for homicides. By 1969-71, the comparable figures were 13.3 and 2,012.8 percent higher, respectively, for black males. In comparison with black females, black male rates were 209.3 and 193.5 percent higher in 1959-61 and 250.7 and 544.3 percent higher in 1969-71. Concurrently, while black male death rates decreased from a number of other leading causes such as heart disease, cancer, vascular lesions, and diabetes, they generally remained higher than similar figures for each of the other three race and sex groups.

At age 15, black males in 1969-71 had a life expectancy of 49.1 years, a decrease of 3.7 years from the 52.8 noted in 1959-61. This former figure was 6.0 years less than the comparable 55.1 for white males, 8.1 years less than the 57.2 for black females and 13.0 years less than the 62.1 for white females. The gap gradually decreased with advancing age. Beginning at age 65, black male life expectancy exceeded white males'.

In 1959-61 and 1969-71, white males, white females, and nonwhite females at birth had a 70-75 percent probability of eventually dying from the three leading causes of death--heart disease, cancer, and vascular lesions. This probability for nonwhite males was 64.2 percent in 1959-61 and 58.3 percent in 1969-71. Compensating for this decrease was an increase in the probability

of dying from accidents (from 4.7 to 5.8 percent) and from homicides (from 2.9 to 6.9 percent). Given current rates, one out of eight black males will ultimately die from an accident or from homicide. This probability is one out of 17 for white males, one out of 30 for white females and one out of 26 for nonwhite females.

Based on 1969-71 rates, elimination of heart disease deaths would increase the life expectancy in each of the four race-sex groups by 5-6 years with the least impact (5.1 years) on black males. Should no further cancer deaths occur, life expectancy would rise about 2.5 years. Homicides, which reduced life expectancy of black males by 0.8 years in 1959-61, were responsible for a reduction of 2.3 years in 1969-71 compared with 0.2 years for white males, less than 0.05 years for white females and 0.5 years for black females. That is, homicides and cancer have virtually an equal impact on reducing black male life expectancy. The impact of accidents as well as influenza and pneumonia in reducing black male life expectancy was also relatively large.

Discussion

The facts presented here surely should be a matter of major concern. Prime among the questions raised are the reasons for the reduced black male life expectancy, the impact of the relatively large black male in-migration, and whether or not remedial actions are available. While some definitive responses readily come to mind, others cannot be documented or may be open to question. It would certainly appear, however, that the trend noted resulted from the interaction of a number of factors or conditions.

As documented, most directly responsible for the decrease in black male life expectancy has been the dramatic increase in homicides, particularly in the age group 15-44. In fact, the number has continued to go up, virtually doubled in the last five years and is currently (1974) at a record level. More than three-quarters of all homicides of black males in 1973 were caused by handguns, primarily either in a crime of passion between relatives and/or acquaintances or as the end result of the commission of a crime. Handguns are readily available in our major cities and the number in the hands of private citizens

is estimated to be in the hundreds of thousands or even millions. Surely the data presented here provide an indication of the need for vigorous enforcement of existing statutes as well as new legislation required to control and limit the manufacture, distribution, and possession of handguns. It may logically be argued that the rising and excessive homicide rate among black males is directly related to cultural, economic and social issues which must ultimately be reconciled and resolved. However, such effort would require a long-range, ongoing commitment and does not preclude the need for concurrent preventive actions related to manifestations of these issues.

The number of black residents increased 40 percent in Michigan between 1960 and 1970. This figure was even higher in the younger ages and was particularly pronounced in the city of Detroit. Unemployment and under-employment is appreciably above the national average and has resulted in a widening economic gap. It is our impression also that employment with an actual or potential health hazard is increasingly filled by black males. Rigorous enforcement of safety standards and pollution control requirements as well as expanded vocational training with the potential for meaningful upward mobility would all appear to be indicated.

In northern industrial states such as Michigan, black residents can be expected to continue living primarily in core areas of large cities. The ongoing drift of health manpower and facilities to the suburbs must be halted and reversed. Reasonable access to required services as well as some equitable third-party payment mechanism would appear to be essential to bridging presently existing gaps.

It is possible that mortality rates have been rising among black males because of the large scale migration from Southern states of individuals concentrated in the lowest socio-economic levels. This in-migration has now virtually ceased and there is, in fact, evidence of some out-migration. We cannot document the relative impact of this migration and do not know whether black male mortality rates differ between long-term residents and recent arrivals. A detailed analysis within the context of socio-economic and cultural variables is indicated.

TABLE 1
ANNUAL AGE-SPECIFIC MORTALITY RATES (PER 1,000) BY RACE AND SEX
MICHIGAN
1959-1961 AND 1969-1971

<u>AGE (IN YEARS)</u>	<u>White Male</u>		<u>White Female</u>		<u>Nonwhite Male</u>		<u>Nonwhite Female</u>	
	<u>1960</u>	<u>1970</u>	<u>1960</u>	<u>1970</u>	<u>1960</u>	<u>1970</u>	<u>1960</u>	<u>1970</u>
TOTAL (CRUDE)	10.2	10.1	7.2	7.3	8.7	10.6	6.8	7.0
(AGE ADJ.)	10.1	10.1	6.6	5.9	11.4	13.2	9.1	8.5
-1	26.2	20.7	19.5	15.5	43.4	38.2	34.1	30.7
1-4	0.9	0.8	0.8	0.7	1.3	1.3	1.0	1.2
5-14	0.5	0.5	0.3	0.3	0.5	0.6	0.4	0.4
15-24	1.4	1.7	0.5	0.6	1.6	3.7	1.0	1.1
25-34	1.6	1.6	0.8	0.8	2.8	5.6	2.3	2.1
35-44	2.8	3.2	1.8	2.0	5.3	9.1	4.6	4.8
45-54	8.8	8.4	4.7	4.5	12.6	15.4	10.2	9.6
55-64	21.6	21.6	11.1	10.4	26.6	29.1	22.0	18.9
65-74	49.5	49.4	28.9	25.9	53.5	53.9	39.1	36.3
75-84	106.6	106.5	78.9	68.7	78.6	90.7	63.1	63.0
85 +	220.2	194.4	195.4	162.0	136.7	108.8	127.2	96.2

TABLE 2
RACE AND SEX SPECIFIC MORTALITY RATES AS A PERCENT OF
THE TOTAL 1959-1961 MORTALITY RATE
MICHIGAN

<u>YEAR</u>	<u>WHITE MALE</u>	<u>WHITE FEMALE</u>	<u>NONWHITE MALE</u>	<u>NONWHITE FEMALE</u>
1959 - 1961	117.4	76.7	132.6	105.6
1969 - 1971	117.4	68.6	153.5	98.5
CHANGE	-	- 8.1	+ 20.9	- 7.1

TABLE 3

ANNUAL MORTALITY RATES (Per 100,000) IN THE AGE GROUP 15-44
BY RACE, SEX, AND LEADING CAUSES OF DEATH
MICHIGAN 1959-1961 AND 1969-1971

CAUSE OF DEATH	White Male		White Female		Nonwhite Male		Nonwhite Female	
	1960	1970	1960	1970	1960	1970	1960	1970
TOTAL	195.7	209.2	106.5	103.5	336.3	566.1	269.4	240.6
HEART DISEASE	42.2	29.1	11.8	8.8	58.4	58.0	45.2	28.6
CANCER	24.4	24.7	30.3	24.5	31.4	28.5	47.0	29.2
VASCULAR LESIONS	5.8	4.9	5.2	5.0	18.0	15.1	23.0	18.6
INFLUENZA & PNEUMONIA	3.3	3.8	2.8	3.1	11.1	24.3	12.6	10.2
DIABETES	3.0	2.4	2.4	2.0	7.6	7.0	4.8	6.5
ACCIDENTS	67.2	84.2	15.9	23.6	59.7	95.4	19.3	27.2
HOMICIDES	3.5	8.6	1.6	2.8	54.0	181.7	18.4	28.2
ALL OTHER	46.3	51.6	36.5	33.6	96.2	156.0	99.1	91.9

TABLE 4

LIFE EXPECTANCY AT SPECIFIED AGE LEVELS BY RACE AND SEX
MICHIGAN 1959-1961 AND 1969-1971

AGE	White Male		White Female		Nonwhite Male		Nonwhite Female	
	1960	1970	1960	1970	1960	1970	1960	1970
0	67.7	68.1	74.7	75.5	64.3	61.1	68.0	69.4
1	68.5	68.6	75.2	75.6	66.2	62.5	69.4	70.6
5	64.8	64.8	71.3	71.8	62.5	58.8	65.7	67.0
15	55.1	55.1	61.5	62.1	52.8	49.1	55.9	57.2
25	45.8	45.9	51.7	52.4	43.6	40.7	46.4	47.8
35	36.5	36.6	42.0	42.8	34.6	32.8	37.3	38.7
45	27.3	27.6	32.6	32.5	26.2	25.4	28.4	30.4
55	19.4	19.5	23.8	24.8	19.0	18.8	21.4	22.9
65	12.7	12.9	15.9	16.9	13.3	13.4	15.4	16.5
75	7.8	8.1	9.4	10.4	9.3	9.7	10.4	11.6
85	4.3	5.2	4.8	6.0	5.1	7.5	5.4	7.8

TABLE 5

PROBABILITY OF EVENTUALLY DYING FROM SPECIFIED CAUSES BY RACE AND SEX
MICHIGAN 1959-1961 AND 1969-1971

<u>CAUSE OF DEATH</u>	White Male		White Female		Nonwhite Male		Nonwhite Female	
	<u>1960</u>	<u>1970</u>	<u>1960</u>	<u>1970</u>	<u>1960</u>	<u>1970</u>	<u>1960</u>	<u>1970</u>
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
HEART DISEASE	43.2	43.0	41.0	43.0	34.4	32.5	37.4	38.4
CANCER	16.0	17.4	16.0	16.1	17.2	16.8	14.0	14.3
VASCULAR LESIONS	11.2	9.3	16.6	14.4	12.8	9.0	18.3	15.4
INFLUENZA & PNEUMONIA	2.8	2.7	2.3	2.8	4.6	4.3	4.4	4.0
DIABETES	1.9	2.2	3.6	3.6	1.7	2.3	4.1	4.8
ACCIDENTS	5.2	5.4	3.7	3.2	4.7	5.8	2.3	2.5
HOMICIDES	0.2	0.5	0.1	0.1	2.9	6.9	1.2	1.3
ALL OTHER	19.5	19.6	16.7	16.8	21.8	22.6	18.4	19.5

TABLE 6

REDUCTIONS IN LIFE EXPECTANCY DUE TO SPECIFIC CAUSES OF DEATH BY RACE AND SEX
MICHIGAN 1959-1961 AND 1969-1971

<u>CAUSE OF DEATH</u>	White Male		White Female		Nonwhite Male		Nonwhite Female	
	<u>1960</u>	<u>1970</u>	<u>1960</u>	<u>1970</u>	<u>1960</u>	<u>1970</u>	<u>1960</u>	<u>1970</u>
HEART DISEASE	6.5	6.6	5.3	5.7	5.4	5.1	5.8	6.0
CANCER	1.9	2.5	1.9	2.7	2.5	2.6	2.4	2.6
VASCULAR LESIONS	1.1	1.0	1.9	1.5	1.3	1.2	2.2	2.2
INFLUENZA & PNEUMONIA	0.5	0.4	0.3	0.4	0.9	0.8	0.8	0.8
DIABETES	0.2	0.7	0.4	0.4	0.2	0.3	0.6	0.8
ACCIDENTS	1.5	1.5	0.9	0.8	1.3	1.7	0.6	0.8
HOMICIDES	0.1	0.2	*	*	0.8	2.3	0.3	0.5

*Less than 0.05