

The Health of Men: Structured Inequalities and Opportunities

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I have summarized in this article data on the magnitude of health challenges faced by men in the United States.

Across a broad range of indicators, men report poorer health than women. Although men in all socioeconomic groups are doing poorly in terms of health, some especially high-risk groups include men of low socioeconomic status (SES) of all racial/ethnic backgrounds, low-SES minority men, and middle-class Black men. Multiple factors contribute to the elevated health risks of men. These include economic marginality, adverse working conditions, and gendered coping responses to stress, each of which can lead to high levels of substance use, other health-damaging behaviors, and an aversion to health-protective behaviors.

The forces that adversely affect men's health are interrelated, unfold over the life course, and are amenable to change. (*Am J Public Health*. 2003;93:724–731)

In the United States, as in virtually every country in the world, more boys than girls are born each year.^{1,2} However, infant males are more likely to die in their first year of life than infant females. This pattern persists over the entire life course.³ In this article, I describe a complex set of social forces that converge to adversely influence the health of men. I describe the magnitude of increased health risks for men, the social determinants of these disparities, and the ways in which social practices can be changed to improve the health of men.

THE HEALTH STATUS OF MEN

This section provides a brief overview of the health status of men in the United States and compares it with that of women. Making these gender comparisons in no way denies or minimizes the historic and ongoing systems of exploitation that have adversely affected women in general and women of color in the United States,^{4–6} or the pressing need to reduce health and social inequalities for women.⁷ Women continue to be disadvantaged on multiple social dimensions, and women of color continue to experience disparities for multiple indicators of health.^{8,9} Nonetheless, the health status of women provides a potentially achievable benchmark for the health of men in contemporary society.

Age-adjusted mortality rates for the 15 leading causes of death in the United States for the year 1999 reveal that, except for Alzheimer's disease, men have higher death rates than women.¹⁰ For both African Americans and Whites, the 2 racial groups for which these data are available, men have death rates that are at least twice as high as those of women for accidents, suicide, cirrhosis of the liver, and homicide.

Contrary to the view that men die younger than women but women have higher levels of illness than men, national data on morbidity suggest a more mixed pattern. Slightly more women (9.4%) than men (8.8%) report that they are in fair or poor health, and comparable numbers of men (12.6%) and women (12.4%) report activity limitations due to chronic disease.¹¹ In contrast, the prevalence of hypertension is 1.2 times higher for men than women, and the incidence of cancer is 1.3 times higher for men than women.¹¹

High-Risk Subgroups of Men

Socioeconomic status (SES) is one of the strongest known determinants of variations in health,^{12,13} but elevated health risks for men persist at all levels of SES. Table 1 shows that the number of years of education completed has a marked effect on all of the major types of mortality for both men and women in the United States, but there are marked gender

differences at all levels of education.¹¹ Men in all SES groups are disadvantaged in terms of health compared with women, but low-SES men are especially vulnerable. For some types of mortality (all causes, chronic and noncommunicable diseases, and non-HIV communicable diseases), the gender ratios are smaller at the higher levels of education, but the opposite pattern is true for HIV diseases and for injuries and accidents.

Men who belong to racial and ethnic minority populations are another high-risk group. The term “crisis” has been used to characterize the markedly elevated rates of morbidity, disability, and mortality of minority men compared with their White counterparts.¹⁴ These disparities are especially marked for African Americans. It is also noteworthy that the pattern of gender differences in mortality and morbidity is consistent for African Americans and Whites.^{10,11} African Americans have poorer health than the rest of the US population and are exposed to a broad range of social and environmental factors that adversely affect their health. However, both minority men and women are exposed to adverse pathogenic characteristics linked to SES and minority status. The health profile of men suggests that additional health risks are linked to masculinity as well.

Middle-Class Black Men

Middle-class African American men may be an understudied group of vulnerable men. Middle-class status does not provide African American men with the normally expected reductions for at least some health risks. In the large sample of the Hypertension Detection and Follow-Up Program,¹⁵ unlike the pattern for Whites, African Americans with a college degree had slightly higher levels of hypertension than those with some college education. Other data reveal that the SES–hypertension association varies by gender.^{16,17} In recent national data, there is an

TABLE 1—Age-Adjusted Death Rates (per 100 000) for Men (M) and Women (F) Aged 25 to 64 by Years of Education, 1998

Cause of Death	<12 y			12 y			≥13 y		
	M	F	M/F Ratio	M	F	M/F Ratio	M	F	M/F Ratio
All causes	727.60	395.60	1.84	627.10	330.90	1.90	271.90	174.30	1.56
Chronic and noncommunicable diseases	534.40	321.30	1.66	470.20	277.90	1.69	211.30	148.60	1.42
Unintentional injuries	52.80	29.60	1.78	39.40	18.40	2.14	15.70	7.00	2.24
HIV diseases	23.40	10.60	2.21	18.30	.56	3.27	7.50	1.10	6.82
All other communicable diseases	29.40	19.00	1.55	21.10	12.80	1.65	8.20	5.90	1.39

Source. National Center for Health Statistics, 2001.

inverse association between income and hypertension for African American women, but income is unrelated to hypertension for African American men.¹⁶ A recent study of a predominantly African American population in Harlem found that although men with a college degree had the lowest levels of cigarette smoking, physical inactivity, and overweight status, they had higher levels of hypertension than high school graduates.¹⁷ Similarly, men in the second-highest income category had the highest rate of hypertension. In contrast, hypertension risk declined with each higher level of income and education for women.

The Pitt County, North Carolina, study of African Americans also reported a weak association between SES and hypertension in combined analyses of men and women.¹⁸ Intriguing gender differences were noted between SES and risk factors. SES was inversely related to self-rated ill health, cigarette smoking, alcohol consumption, high economic strain, and low emotional and instrumental support for both men and women.^{18,19} However, while SES was inversely related to stress for African American women, it was positively related to stress for African American men.^{18,19} This elevated level of psychosocial stress among middle-class African American men may contribute to their increased hypertension risk.²⁰

The stressors faced by middle-class African American males may also account for the pattern of suicide risk. For both African Americans and Whites, rates of suicide are much higher for males than females. Over the past 2 decades, the suicide rate has remained relatively stable for White men but has strikingly increased for young African American men.²¹

Several studies have found that while SES is inversely related to the suicide rate for Whites, it is positively related to the suicide rate for African American males.^{22–25}

Three factors may underlie the higher level of stress and its adverse consequences on middle-class African American men. First, exposure to racial discrimination is an added burden faced by middle-class African American men, and these perceptions of discrimination are stressors that can adversely affect physical and mental health.^{26,27} There is a positive association between perceptions of discrimination and education among African Americans, and African American men report higher levels of chronic and acute discrimination than African American women.²⁸

Second, middle-class status is often recent, tenuous, and marginal for African Americans.^{29–31} College-educated African American are 4 times more likely than Whites to experience unemployment.^{32,33} Middle-class African Americans have markedly lower levels of wealth than Whites of similar income³⁴ and are often active in the provision of material support to poorer relatives. They are also less likely than Whites of similar income to translate their higher economic status into desirable housing and neighborhood conditions.³⁵ Not surprisingly, one recent study found that while suburban residence was associated with lower mortality risk for Whites, it was predictive of markedly elevated mortality risks for African American men.³⁶

Third, expectations that are unfulfilled because their investment in education has not provided parallel gains in income may be a unique source of stress and alienation for African American men.^{23,31} Educational attain-

ment is an important indicator of lifetime economic opportunities, with higher levels of education being associated with higher wages, higher family income, and lower unemployment.³³ Over the last several decades, educational attainment has increased for African American males and other Americans. Although racial disparities in education still exist, there is only a narrow gap in educational attainment between African American and White men aged 25 to 29.³³ However, African American men have experienced less success than others in translating higher education into improved economic circumstances. At every level of education, minority men earn lower levels of income than Whites, and differences in pay between Whites on the one hand and African Americans and Hispanics on the other are larger for men than for women.³³

Moreover, trend data indicate that although African American men's earnings rose relative to those of White men between the early 1960s and the mid-1970s, the trend reversed in the mid- to late 1970s, and African American men's relative pay declined over the next 2 decades.³³ The relative pay of college-educated African American men compared with White men fell by more than 10 percentage points between 1979 and 1997, while college-educated Hispanic men lost little ground and earn more than college-educated African American men.³³

MULTIPLE DETERMINANTS OF MEN'S HEALTH

What are the factors responsible for the higher rates of morbidity and mortality

among men? Beliefs about masculinity and manhood that are deeply rooted in culture and supported by social institutions play a role in shaping the behavioral patterns of men in ways that have consequences for health. Men are socialized to project strength, individuality, autonomy, dominance, stoicism, and physical aggression, and to avoid demonstrations of emotion or vulnerability that could be construed as weakness.^{37,38} These cultural orientations and structural opportunities combine to increase health risks.

Marginality and the Absence of Work

Given Western culture's socialization of men to accept norms that emphasize achievement and competence, men often feel pressure to ensure economic survival, and their traditional sense of self often includes success at work and being a good provider. Since the early writings of Karl Marx and Max Weber, sociologists have long noted the centrality of work to well-being.³⁹ Men are often judged on the basis of their occupational status. Accordingly, the economic marginalization of men can have long-term negative consequences for their health.

Men are overrepresented in a broad range of stigmatizing social conditions, such as incarceration, homelessness, unemployment, and institutionalization for substance use and severe mental illness, that reflect social exclusion and separation from the labor market. Eighty-nine percent of the over 600 000 jail inmates and 94% of the 1 million prisoners in state and federal penitentiaries are men.⁴⁰ Men are also more likely to be homeless, and to be homeless for longer periods of time than women.^{41,42} Individuals who have less education, who have mental health and substance abuse problems, and who had been incarcerated also tend to be homeless longer than persons without those characteristics.⁴² Over 1 million clients received treatment at drug or alcohol treatment facilities in the United States in 1998, and 69% of them were men.⁴⁰

Over the last 50 years, the unemployment rate has been twice as high for African American men as for their White counterparts, and the unemployment rate for African Americans and Hispanics tends to rise more during economic recessions.³³ During the last

half of the 20th century, labor force participation rates (employed or actively seeking work) declined in general for men and markedly for African American men.³³ Among men aged 16 to 24, African Americans are 2.4 times as likely, and Hispanics are 1.8 times as likely, as Whites to be neither employed nor in school.³³

Current trends suggest that the challenges for men with employment security are likely to worsen. The share of workers who are employed by temporary agencies has been growing in recent years, and the number of poverty-level and low-wage jobs is also on the increase.⁴³ Relatedly, there is a global expansion of precarious employment.⁴⁴ Precarious employees are part-time and temporary workers, workers subject to organizational change (workplace restructuring, downsizing, privatization, and corporatization) that leads to job losses and job insecurity, workers in outsourcing and home-based arrangements, and employees of small businesses.

Between 1973 and 1996, these changes in the nature of work led to stagnation or decline in the wages of men in the bottom two thirds of the income distribution, even as overall per capita income was increasing.⁴⁵ Importantly, precarious employment is associated with worsening occupational health and safety in terms of injury rates, disease risk, and hazardous exposures.⁴⁴ Poor African American and Hispanic men are also employed disproportionately in jobs with higher rates of layoffs and lower rates of reemployment after job displacement.²¹

Research reveals that unemployment and job insecurity are associated with elevated rates of stress, illness, disability, and mortality.⁴⁰ Some of these effects are evident as soon as employees perceive that their jobs are threatened, with persons who are laid off reporting higher levels of stress, illness, and disability than those who keep their jobs.⁴³ A study in Harlem showed, for example, that men who were not employed, who had a history of not having steady work, and who had a history of homelessness were more likely to be hypertensive and more likely to smoke than men who worked full-time and who had steady work.¹⁷

Health status changes for men following the collapse of the Soviet Union in 1991 dra-

matically illustrate how economic marginality can adversely affect health. In the wake of increased inflation, unemployment, and reduced wages,⁴⁶ life expectancy for men in Russia declined by 6 years between 1991 and 1994.⁴⁷ The increases in mortality were largest for middle-aged urban males in manual occupations and for those with the lowest levels of education.⁴⁷

Work Conditions and Stress

A growing body of research also indicates that the quality of employment affects the health status of men. Men tend to work in more dangerous jobs than women, and men represent 90% of job fatalities.³⁷ Occupational disease is responsible for an estimated 860 000 illnesses and 60 300 deaths annually.⁴⁸

The specific conditions of work that are more likely to lead to poor health are the combination of high job demands with little control over them⁴⁹ and the combination of high levels of effort with low levels of reward.⁵⁰ Persons who have low occupational status at work often face elevated levels of stress in nonwork contexts as well.⁵¹ Moreover, the combination of these 2 sources of stress with other risk factors, such as social isolation and poor diet, can lead to altered functioning of neuroendocrine stress pathways that can adversely affect health.⁵¹

Stressors and the negative emotional states created by them can also lead to health behaviors such as impaired sleeping patterns, decreased physical activity, increased substance use, and the consumption of more food than usual, all of which can increase the risk of chronic diseases.⁵² In the Whitehall Study, good health practices were positively associated with occupational grade, but health behaviors accounted for only a small part of the variation in heart disease risk for men.⁵¹ In contrast, perceptions of control in the workplace accounted for more than half of the variation in the incidence of heart disease.⁵³

Desirable occupational opportunities are differentially distributed by race. Relatively high percentages of White and Asian men are employed in managerial and professional occupations, while African American, Hispanic, and American Indian men are overrepresented in lower-skilled and lower-paid occupa-

tional categories such as operators, fabricators, and laborers.³³ Since the 1970s, earnings for low-skilled men have deteriorated markedly. The African American, Hispanic, and American Indian men who are overrepresented at the low end of the earnings distribution have also been disproportionately affected by the earnings decline.³³ The jobs in which low-SES men in general and minority males in particular are disproportionately concentrated are jobs that are characterized not only by low levels of income but also by high levels of stress (high demands and effort with low control and rewards).

Minority men also tend to be concentrated in jobs that pose high levels of exposure to pathogens in the physical environment. For example, agriculture is one of the most hazardous employment sectors for occupational injuries and deaths, and agricultural employers are exempted from many government workplace regulations that apply to other industries.⁵⁴ Men in general, and Hispanic men in particular, are overrepresented among hired farm workers in the United States. Sixty percent of farm workers earn so little that their families live in poverty. Similarly, even after education and job experience are adjusted for, employed African Americans are more likely than their White counterparts to be exposed to occupational hazards and carcinogens.^{55,56}

Personal Health Practices

Beliefs about masculinity and manhood can lead men either to take actions that harm themselves or to refrain from engaging in health-protective behaviors. Women are more likely to engage in a broad range of preventive and health-promoting behaviors than men, while men are more likely to engage in over 30 behaviors that have been shown to increase the risk of morbidity, injury, and mortality.³⁷ For example, compared with women, men are more likely to smoke cigarettes (26% vs 22%) and twice as likely to consume 5 or more drinks of alcohol in a single day.¹¹ At the same time, men are more likely to engage in leisure-time physical activity (65% vs 59%) and less likely to be overweight than women (21% vs 26%). Importantly, engaging in risky behavior, declining to take part in health-promoting activities,

and claiming that high-risk behaviors (e.g., alcohol drinking) will not impair performance (e.g., driving) are often demonstrations of the norms of masculinity in the larger culture, and ways in which men construct and reinforce their masculinity.³⁷

Gendered Responses to Stress and Coping

Differential exposure to stressors and responses to them also contribute to the health challenges that men face. Stress has been shown to have long-term negative consequences for a broad range of health outcomes, including mental health, susceptibility to infectious diseases, and risk of chronic conditions such as diabetes and hypertension.⁵² Women are more exposed to stress than men,³⁸ but some evidence suggests that men may have higher levels of employment-related stress.^{57,58} Moreover, women may employ more effective coping strategies, especially for interpersonal stress. Across multiple animal species and many human societies, females are more likely than males to seek social support, especially social support from other females in response to stress.⁵⁹ Compared with men, women seek more support, receive more, are more satisfied with the support that they receive, provide support more frequently, and are more effective in the provision of support.^{59,60}

Cultural scripts that contribute to gender differences in responses to stress also lead to gender differences in specific types of illness. Although there are no gender differences in the overall prevalence of psychiatric disorders, women in many societies have higher rates than men of internalizing disorders (feelings are focused on self) such as depression and anxiety, while men have higher rates than women of externalizing disorders (emotions are expressed in outward behavior) such as alcohol, drug abuse, and antisocial behavior.⁶⁰

Substance use (tobacco, alcohol, other drugs) is one externalizing coping response to high levels of stressors. People often turn to alcohol and drugs to escape adversity and numb the pain of negative social and economic conditions. Research from animal and human studies indicates that stress is a major contributor to the initiation of substance use and to the continuation of addiction to alco-

hol and other drugs, as well as to relapse.⁶¹ Exposure to stress may also underlie the pattern of racial differences in substance use over the life course. African American adolescents have lower levels of use of marijuana, alcohol, cigarettes, and binge drinking than Whites and Hispanics.⁶² However, although African American adolescent substance use begins at later ages, once initiated, heavy use continues for a longer time.²¹ The transition to adulthood for African Americans may be associated with heightened awareness of restricted opportunities that may lead to increased levels of stress in early adulthood and maladaptive patterns of coping.

The greater proclivity of men to use alcohol and drugs as a strategy to cope with stress is costly to them individually, as well as to their families and society. A comprehensive report on substance abuse outlined several reasons why it is America's number one health problem.⁶³ First, alcohol is a central cause of premature mortality and a major contributor to deaths from cirrhosis of the liver, accidents, suicide, and homicide—the causes of death where gender differences are most marked. Alcohol is responsible for almost half of cirrhosis deaths, traffic fatalities, and other accidents.

Second, the use of illicit drugs also has a marked effect on the health of men, especially minority men, through deaths directly related to illegal drugs, as well as through associated conditions such as HIV/AIDS, hepatitis, tuberculosis, falls, motor vehicle accidents, and homicide. Third, in addition to being a serious financial drain on a family, substance abuse is also a major cause of family problems, including divorce, separation, marital violence, child abuse, emotional and adjustment difficulties for children, and the increased risk of children, especially boys, becoming a substance abuser as an adult.

Fourth, substance use has a major impact on increasing health care costs. It is estimated that 25% to 40% of all general hospital patients are hospitalized because of complications related to alcohol use. Fifth, substance use is also a major determinant of crime. At least half of all persons arrested for major crimes such as homicide, theft, and assault were using illegal drugs at the time of their arrest and about half of the persons convicted

of violent crime were under the influence of alcohol or drugs at the time the crime was committed. Finally, substance abuse often leads to lower levels of income and occupational mobility. Moreover, compared with Whites, African American and Hispanic adolescents and adults experience higher levels of the negative mental, physical, and social consequences of substance use even when their overall levels of use are lower than or similar to those of Whites.⁶²

Use of Health Services

The male tendency to suppress the expression of need and minimize pain may also be reflected in lower male engagement in preventive health care visits.³⁷ These differences in use of care can importantly contribute to differences in health outcomes. In 1999, men were almost twice as likely as women (23% vs 12%) not to have visited a doctor, and 69% of women aged 18 to 64 had a dental visit compared with 60% of similarly aged men.¹¹

Men also tend to have lower levels of adherence to medical regimens than women.⁶⁴ These differences are pronounced for vulnerable subgroups of men. Compared with their higher-SES peers, low-SES men have lower levels of health information, and individuals dealing with high levels of stress tend not to make prevention and management of chronic disease a priority.^{52,65} Moreover, high levels of stress have been shown to reduce the efficacy of many pharmacological agents.⁶⁶ Not surprisingly, African American men aged 18 to 49 have the lowest rates of awareness, treatment, and control of hypertension of all age, race, and gender groups in the United States.⁶⁴

Health care institutions and practitioners also respond differently to men and women. For example, in the emergency room, men with depressive symptoms (inconsistent with gender norms) are more likely to be hospitalized than women with the same symptoms, and women with antisocial behavior or substance use problems are more likely to be hospitalized than men presenting these symptoms.⁶⁰ In addition, compared with Whites, minority men and women receive less intensive and poorer-quality medical care for a broad range of medical conditions.⁶⁷

There are also large gender differences in the typical medical encounter. Health care

providers spend less time with men than women; provide them with fewer services, less health information, and less advice; and are less likely to talk about the need to change behaviors to improve health.³⁷ One study found that physicians were 3 times more likely to routinely provide instruction to age-appropriate women on breast self-examination (86%) than to age-appropriate men on testicular self-examination (29%).⁶⁸

Cumulative Adversity Over the Life Course

Many of the risk factors considered here co-occur and lead to a pattern of cumulative disadvantage over time. That is, social and economic disadvantages are key determinants of health throughout the life course. Receiving a poor education, having high rates of unemployment and underemployment, being stuck in dead-end jobs, residing in a bad neighborhood, and having high job insecurity and poor-quality housing are multiple disadvantages that tend to be concentrated among the same individuals and households, and their effects tend to cumulate on health over time.^{69,70}

The forces that affect the health of adult men often begin early in childhood. Early childhood exposure to poor social and economic conditions not only adversely affects child health and growth, but it sets the child on a low education and economic trajectory that increases the risk of poor physical and mental health in adulthood.⁷¹ For example, high rates of unemployment, poverty, violent crime, incarceration, and homicide among African American adult males reflect the cumulation of disadvantage at multiple transition points during their development.

Iron deficiency, fetal alcohol exposure, low birthweight, and exposure to lead are examples of conditions during infancy and childhood that contribute to poor health by placing the child on a trajectory of poorer cognitive functioning and low educational performance.²¹ There are marked SES and racial/ethnic differences for all of these factors. The experience of early abuse is another risk factor in childhood and adolescence that has pervasive adverse consequences. Abuse in childhood predicts poorer school achievement in childhood and adolescence and lower educational and occupational attainment in adulthood.⁷² Adolescent

victims of abuse have lower educational aspirations and efforts as well as lower educational attainment, occupational status, and earned income as adults compared with individuals who did not experience abuse.⁷² Moreover, victimization in adolescence is predictive of future violent and nonviolent criminal behavior and substance use.⁷²

Thus, growing up poor is associated with multiple adversities that lead to less readiness for school and poorer school achievement. There is little variation in parents' expectations and aspirations for their children, even in the most economically disadvantaged neighborhoods.⁷³ However, there are large variations in the availability of resources and in parents' knowledge and expertise in navigating the social system to maximize opportunities for their children. There are also large variations in the quality of schools.⁷⁴ High-risk children are more likely than others to attend poor-quality schools in disadvantaged neighborhoods where their vulnerabilities are further reinforced. These schools have more deteriorated buildings, fewer qualified teachers, more limited curricula, little serious academic counseling, fewer connections with colleges and employers, and higher levels of teen pregnancy.

These conditions can give rise to peer pressure against academic achievement and in support of crime and substance use. This combination of student and school characteristics leads to higher rates of dropping out of school and inadequate preparation for college and the labor market for those who remain in school.⁷¹ The path toward lower socioeconomic attainment and poor health status is further exacerbated by the structure of the labor market. In the last 4 decades, there has been a large out-migration of high-pay, lower-skilled jobs from the urban areas where poor African Americans are concentrated.^{75,76} The absence of employment opportunities for males leads to high rates of male joblessness, and prospects of low earnings in the legal job market can enhance the attractiveness of illegal activities.

Research reveals that the economic marginalization of African American males (high unemployment and low wage rates) is the central determinant of the high rates of female-headed households among African Americans.^{77–80} In 1960, two thirds of African American children were living with both

parents, compared with 38% in 1999.⁸¹ In contrast, 82% of Asian children, 78% of non-Hispanic White children, 63% of American-born Hispanic children, 73% of foreign-born Hispanic children, and 55% of American Indian children lived with both parents in 1999.⁸² Male labor market earnings are the largest source of household income in the United States.³³ Thus, the combination of low earnings for African American males with low pay for African American women leads to high rates of poverty for African American children.

Research reveals that levels of supervision of children are lower in single-parent households.⁸⁰ For both African Americans and Whites, being raised in a single-parent home is the key determinant of increased risk of juvenile delinquency and participation in violent crime.⁸⁰ Moreover, compared with children raised by 2 parents, those raised by single parents are more likely to grow up poor, drop out of high school, and be idle during their late teens and less likely to enroll in college.⁸³

McLoyd and Lozoff²¹ further indicate that marked increases in African American male violence in recent decades coincided with increases in unemployment, the percentage of young African American male high school dropouts with no reported earnings, the use and trafficking of crack cocaine, and declines in the real earnings of young African American males, absolutely as well as relative to Whites. These processes unfolded in areas of concentrated poverty that were created by larger societal policies,⁸⁴ at the same time that there was a shift in federal drug policy and a decline in federal spending on drug treatment.²¹ Moreover, aggressive and discriminatory mandatory sentencing of African American males for drug crimes⁸⁵ removes a high proportion of African American men from the community and keeps them from providing economic and social support to families and children. A criminal record, in turn, reduces the chances for future employment.

Thus, racial differences in crime, unemployment, and single-parent households are not driven by differences in family values but by lifelong interactions of coping responses with restricted access to good neighborhoods, schools, and employment opportunities.

CONCLUSION

The health status of men is linked to the nature of social organization and of economic opportunity in society. Many of the stable and relatively universally noted differences between men and women are not biologically inevitable but are importantly shaped by social arrangements. For example, the higher prevalence of symptoms of depression and anxiety among women than men is reversed when men and women are not in their traditional roles. Wives who are employed have lower depression and anxiety scores than their husbands, and when women or men earn less relative to their spouses they experience more symptoms of depression and anxiety.⁶⁰ Similarly, although women are generally better at providing social support than men, men who are the primary providers of child care exhibit social support skills that are comparable to those of women.⁸⁶

A broad range of solutions are available to address some of the challenges facing men in our society in general and vulnerable men in particular. Improving the health of future generations of men and women will require improving the economic circumstances of men. This must include enhancing the quality of educational institutions and reducing educational failure in elementary and high schools. Investments to enrich the quality of neighborhood environments are also central to any comprehensive strategy that seeks to ensure that no child is left behind.⁸⁴ The research reviewed here indicates that the employment of men can have ripple effects on the economic and social well-being of men, as well as their families and communities. Employment initiatives should emphasize human resource development through education and training so that individuals are provided with the basic skills that are necessary for meaningful employment opportunities in a rapidly changing technological environment. These public and private training initiatives must include efforts to retool the currently unskilled and to create better job ladders for the least skilled.⁴⁵

International comparisons suggest that much can be done to provide economic and social support to vulnerable families and children.⁸⁷ Although Sweden has rates of single-parent households similar to those of the

United States, the provision of support has broken the strong link evident in the United States between family structure and childhood poverty.⁸⁷ These investments have long-term beneficial effects for society. A comparison of the United States and Canada (both with high rates of child poverty) with Sweden (with low child poverty) revealed that the level of verbal and quantitative skills for the least well-educated adults in Sweden is markedly superior to that of their counterparts in the United States and Canada.⁸⁸

Efforts to improve the conditions of work, enhance employee participation in decision-making, and redesign workplaces to reduce injuries can also improve men's health. Research reveals that a broad range of strategies have been effective in reducing occupational stress, although these interventions are more effective among those with higher occupational status.⁸⁹

The decline in the prevalence of iron deficiency among US infants is one example of how public health policy has had a dramatic impact on improving outcomes for children. The use of iron-fortified formula for bottle-fed babies, the provision of iron-fortified formula in the federal government's Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and the encouragement of breastfeeding (the iron in breastmilk is readily absorbed) have had a dramatic impact in providing more iron to most American children.²¹ However, targeted intervention efforts are still needed for the most vulnerable groups. Although iron deficiency has declined over time, the reduction for Whites (tenfold) has been much larger than that for African Americans (fourfold).²¹ Similarly, federal regulations prohibiting lead in house paint and gasoline have had a dramatic impact in reducing lead levels in US children.²¹ The research on iron deficiency also illustrates the long-term consequences of at least some early exposures even if corrective steps are taken. Ten years after the initial treatment for chronic severe iron deficiency in infancy, those children that had been deficient still had lower test scores during adolescence.²¹

Increased educational outreach efforts targeted to men are also required. Historically, many health promotion campaigns have been targeted to women.³⁷ A recent Harlem study

highlighted the need for more health education.¹⁷ Although only 12% of men indicated that they had ever been diagnosed with hypertension, assessment of their blood pressure levels revealed that 32% of the men were hypertensive. Educational outreach must include enhancing men's awareness that at least some culturally supported norms of masculinity can lead to health-damaging orientations and behaviors. Efforts to redefine the cultural meaning of manhood in positive ways will require parallel changes in cultural institutions and social structures to reinforce positive health behaviors in men over the life course.

Effective educational and clinical intervention activities must be culturally appropriate in terms of both interpersonal and technical aspects of care. For example, African Americans and low-SES persons with symptoms of heart attack are more likely than Whites and their economically favored peers to delay going to a hospital for treatment.⁹⁰ One contributing factor to patients' delay in taking action, and providers' misdiagnosis, is that African Americans and low-SES individuals are less likely than Whites to present with the classic symptom of myocardial infarction—chest pain—knowledge of which came from studies of middle-class White men. African Americans are more likely than Whites to report dyspnea as a presenting symptom, and both patients and providers need to be educated about the significance of this symptom.

The evidence reviewed here indicates that the living and working conditions of men in general, and the added burdens of minority men, have harmful effects on their health. Public health practitioners and policymakers need an enhanced appreciation of the magnitude of the health challenges faced by men. Optimal upstream interventions require the awareness that since the major factors affecting men's health risks are socially determined, they can also be socially ameliorated. ■

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References

1. Martin JA, Hamilton BE, Ventura SJ, Menacker F, Park MM, Sutton PhD. Births: final data for 2001. *Natl Vital Statistics Rep*; 51:2. Hyattsville, Md: National Center for Health Statistics; 2002.
2. United Nations. *World Population Prospects, The 2000 Revision*. New York: United Nations Dept of Economic and Social Affairs; 2000.
3. National Center for Health Statistics. *Health, United States, 2002, with chartbook on trends in the health of Americans*. Hyattsville, Md: Dept of Health and Human Services; 2002.
4. Krieger N, Rowley DL, Herman AA, Avery B, Phillips MT. Racism, sexism, and social class: implications for studies of health, disease, and well-being. *Am J Prev Med*. 1993;9(suppl 6):82–122.
5. Sanchez-Hucles JV. Jeopardy not bonus status for African American women in the work force: why does the myth of advantage persist? *Am J Community Psychol*. 1997;25:565–580.
6. Ehrenreich B, Piven FF. The feminization of poverty. *Dissent*. 1984;31:162–170.
7. Williams DR, Dickerson N. Conclusion. In: Adams D, ed. *Women of Color: A Cultural Diversity Health Perspective*. Thousand Oaks, Calif: Sage Publications; 1995:239–247.
8. Lillie-Blanton M, Martinez RM, Taylor AK, Robinson BG. Latina and African American women: continuing disparities in health. *Int J Health Serv*. 1993;23:555–584.
9. Williams DR. Racial/ethnic variations in women's health: the social embeddedness of health. *Am J Public Health*. 2002;92:588–597.
10. Hoyert DL, Arias E, Smith BL, Murphy SL, Kochanek KD. Deaths: final data for 1999. *Natl Vital Stat Rep*. September 21, 2001;49(8).
11. *Health, United States, 2001, With Urban and Rural Health Chartbook*. Washington, DC: National Center for Health Statistics; 2001.
12. Adler NE, Boyce T, Chesney MA, Folkman S, Syme SL. Socioeconomic inequalities in health: no easy solution. *JAMA*. 1993;269:3140–3145.
13. Williams DR, Collins C. US socioeconomic and racial differences in health. *Annu Rev Sociol*. 1995;21:349–386.
14. Rich JA, Ro M. *A Poor Man's Plight: Uncovering the Disparity in Men's Health*. Battle Creek, Mich: W.K. Kellogg Foundation; 2002.
15. Hypertension Detection and Follow-Up Program Cooperative Group. Race, education, and prevalence of hypertension. *Am J Epidemiol*. 1977;106:351–361.
16. Pamuk E, Makuk D, Heck K, Reuben C. *Health, United States, 1998, With Socioeconomic Status and Health Chartbook*. Hyattsville, Md: National Center for Health Statistics; 1998.
17. Diez-Roux AV, Northridge ME, Morabia A, Bassett MT, Shea S. Prevalence and social correlates of cardiovascular disease risk factors in Harlem. *Am J Public Health*. 1999;89:302–307.
18. James SA, Keenan NL, Strogatz DS, Browning SR, Garrett JM. Socioeconomic status, John Henryism, and blood pressure in black adults: The Pitt County Study. *Am J Epidemiol*. 1992;135:59–67.
19. Strogatz DS, Croft JB, James SA, et al. Social support, stress, and blood pressure in black adults. *Epidemiology*. 1997;8:482–487.
20. James SA. John Henryism and the health of African-Americans. *Cult Med Psychiatry*. 1994;18:163–182.
21. McLoyd VC, Lozoff B. Racial and ethnic trends in children's and adolescents' behavior and development. In: Smelser NJ, Wilson WJ, Mitchell F, eds. *America Becoming: Racial Trends and Their Consequences*. Washington, DC: National Academy Press; 2001:311–350.
22. Stack S. Education and risk of suicide: an analysis of African Americans. *Sociol Focus*. 1998;31:295–302.
23. Davis R, Short J. Dimensions of black suicide: a theoretical model. *Suicide Life Threat Behav*. 1979;8:161–173.
24. Lester D. *Suicide in African Americans*. Commack, NY: Nova Science; 1998.
25. Fernquist RM. Education, race/ethnicity, age, sex, and suicide: individual-level data in the United States. *Curr Res Soc Psychol*. 2001;3:277–290.
26. Krieger N. Embodying inequality: a review of concepts, measures, and methods for studying health consequences of discrimination. *Int J Health Serv*. 1999;29:295–352.
27. Williams DR, Neighbors HW, Jackson JS. Racial/ethnic discrimination and health: findings from community studies. *Am J Public Health*. 2003;93:200–208.
28. Forman TA, Williams DR, Jackson JS. Race, place, and discrimination. In: Gardner C, ed. *Perspectives on Social Problems*. Vol 9. New York, NY: JAI Press; 1997:231–261.
29. Collins SM. Blacks on the bubble: the vulnerability of black executives in white corporations. *Sociol Q*. 1993;34:429–447.
30. Collins SM. Black mobility in white corporations: up the corporate ladder but out on a limb. *Soc Problems*. 1997;44:55–67.
31. Anderson E. The social situation of the black executive: black and white identities in the corporate world. In: Lamont M, ed. *The Cultural Territories of Race: Black and White Boundaries*. Chicago, Ill: University of Chicago Press; 1999:3–29.
32. Wilhelm SM. Economic demise of blacks in America: a prelude to genocide? *J Black Stud*. 1987;17:201–254.
33. *Changing America: Indicators of Social and Economic Well-Being by Race and Hispanic Origin*. Washington, DC: Council of Economic Advisers for the President's Initiative on Race; 1998.
34. Davern ME, Fisher PJ. *Household Net Worth and Asset Ownership*. Washington, DC: US Census Bureau; 1995. Current Population Reports, Household Economic Studies, Series P70–71.
35. Alba RD, Logan JR, Stults BJ. How segregated are middle-class African Americans? *Soc Problems*. 2000;47:543–558.
36. House JS, Lepkowski JM, Williams DR, et al. Excess mortality among urban residents: how much, for

whom, and why? *Am J Public Health*. 2000;90:1898–1904.

37. Courtenay WH. Constructions of masculinity and their influence on men's well-being: a theory of gender and health. *Soc Sci Med*. 2000;50:1385–1401.
38. Davis MC, Matthews KA, Twamley EW. Is life more difficult on Mars or Venus? A meta-analytic review of sex differences in major and minor life events. *Ann Behav Med*. 1999;21:83–97.
39. Erikson K, Vallas S. *The Nature of Work: Sociological Perspectives*. New Haven, Conn: Yale University Press; 1990.
40. *Statistical Abstract of the United States*. Washington, DC: Bureau of the Census; 2001.
41. Link BG, Susser E, Stueve A, Phelan J, Moore RE, Struening E. Lifetime and five-year prevalence of homelessness in the United States. *Am J Public Health*. 1994;84:1907–1912.
42. Phelan JC, Link BG. Who are “the homeless”? Reconsidering the stability and composition of the homeless population. *Am J Public Health*. 1999;89:1334–1338.
43. Yen IH, Frank JW. *Improving the Health of Working Families: Research Connections Between Work and Health*. Washington, DC: National Policy Association; 2002. Report 302 2002.
44. Quinlan M, Mayhew C, Bohle P. The global expansion of precarious employment, work disorganization, and consequences for occupational health: a review of recent research. *Int J Health Serv*. 2001;31:335–414.
45. Ellwood, DT, Blank RM, Blasi J, Kruse D, Niskanen WA, Lynn-Dyson K. *A Working Nation*. New York, NY: Russell Sage Foundation; 2000.
46. Little RE. Public health in Central and Eastern Europe and the role of environmental pollution. *Annu Rev Public Health*. 1998;19:153–172.
47. Cockerham WC. The social determinants of the decline of life expectancy in Russia and Eastern Europe: a lifestyle explanation. *J Health Soc Behav*. 1997;38:117–130.
48. Lax M, Grant W, Manetti F, Klein R. Recognizing occupational disease—taking an effective occupational history. *Am Fam Physician*. 1998;58:935–944.
49. Karasek RA, Theorell T. *Healthy Work*. New York, NY: Basic Books; 1990.
50. Siegrist J. Adverse health effects of high-effort/low-reward conditions. *J Occup Health Psychol*. 1996;1:27–41.
51. Marmot M, Brunner E. Epidemiological applications of long-term stress in daily life. *Adv Psychosom Med*. 2001;22:80–90.
52. Cohen S, Kessler RC, Gordon LU. Strategies for measuring stress in studies of psychiatric and physical disorders. In: Cohen S, Kessler RC, Gordon LU, eds. *Measuring Stress: A Guide for Health and Social Scientists*. New York, NY: Oxford University Press; 1995:3–26.
53. Marmot MG, Bosma H, Hemingway H, Brunner E, Stansfeld S. Contribution of job control and other risk factors to social variations in coronary heart disease incidence. *Lancet*. 1997;350:1404–1405.
54. Villarejo D, Baron SL. The occupational health status of hired farm workers. *Occup Med*. 1999;14:613–635.
55. Robinson J. Racial inequality and the probability of occupation-related injury or illness. *Milbank Mem Fund Q*. 1984;62:567–593.
56. Michaels D. Occupational cancer in the black population: the health effects of job discrimination. *J Natl Med Assoc*. 1983;75:1014–1018.
57. Almeida DM, Kessler RC. Everyday stressors and gender differences in daily distress. *J Pers Soc Psychol*. 1998;75:670–680.
58. Almeida DM, Wethington E, Kessler RC. The daily inventory of stressful events: an interview-based approach for measuring daily stressors. *Assessment*. 2002;9:41–55.
59. Taylor SE, Klein LC, Lewis BP, Gruenewald TL, Gurung RAR, Updegraff JA. Biobehavioral responses to stress in females: tend-and-befriend, not fight-or-flight. *Psychol Rev*. 2000;107:411–429.
60. Rosenfield S. Gender and mental health: do women have more psychopathology, men more, or both the same (and why)? In: Horowitz A, Scheid T, eds. *A Handbook for the Study of Mental Health: Social Contexts, Theories, and Systems*. New York, NY: Cambridge University Press; 1999:348–360.
61. Brady KT, Sonne SC. The role of stress in alcohol use, alcoholism treatment, and relapse. *Alcohol Res Health*. 1999;23:263–271.
62. Wallace JM Jr. The social ecology of addiction: race, risk, and resilience. *Pediatrics*. 1999;103:1122–1127.
63. Institute for Health Policy, Brandeis University. *Substance Abuse: The Nation's Number One Health Problem: Key Indicators for Policy*. Princeton, NJ: Robert Wood Johnson Foundation; 1993.
64. Rose L, Kim MT, Dennison CR, Hill MN. The contexts of adherence for African Americans with high blood pressure. *J Adv Nurs*. 2000;32:587–594.
65. Williams DR. Socioeconomic differentials in health: a review and redirection. *Soc Psychol Q*. 1990;53:81–99.
66. Haller J. The link between stress and the efficacy of anxiolytics: a new avenue of research. *Physiol Behav*. 2002;73:337–342.
67. Smedley BD, Stith AY, Nelson AR, eds (Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care). *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. Washington, DC: National Academy Press; 2002.
68. Misener TR, Fuller SG. Testicular versus breast and colorectal cancer screening: early detection practices of primary care physicians. *Cancer Pract*. 1995;3:310–316.
69. Smith GD, Hart C, Blane D, Gillis C, Hawthorne V. Lifetime socioeconomic position and mortality: prospective observational study. *BMJ*. 1997;314:547–552.
70. Lynch JW, Kaplan GA, Sherma SR. Cumulative impact of sustained economic hardship on physical, cognitive, psychological, and social functioning. *N Engl J Med*. 1997;337:1889–1895.
71. Hertzman C, Wiens M. Child development and long-term outcomes: a population health perspective and summary of successful interventions. *Soc Sci Med*. 1996;43:1083–1095.
72. Macmillan R. Violence and the life course: the consequences of victimization for personal and social development. *Annu Rev Sociol*. 2001;27:1–22.
73. Furstenberg FF Jr, Cook TD, Eccles J, Elder GH Jr, Sameroff A. *Managing to Make It: Urban Families and Adolescent Success*. Chicago, Ill: University of Chicago Press; 1999.
74. Orfield G, Eaton SE. *Dismantling Desegregation: The Quiet Reversal of Brown v Board of Education*. New York, NY: The New Press; 1996.
75. Wilson WJ. *The Truly Disadvantaged*. Chicago, Ill: University of Chicago Press; 1987.
76. Wilson WJ. *When Work Disappears: The World of the New Urban Poor*. New York, NY: Alfred A. Knopf Inc; 1996.
77. Bishop JH. Jobs, cash transfers, and marital instability: a review and synthesis of the evidence. *J Hum Resour*. 1980;15:301–334.
78. Testa M, Astone NM, Krogh M, Neckerman KM. Employment and marriage among inner-city fathers. In: Wilson WJ, ed. *The Ghetto Underclass*. Newberry Park, Calif: Sage; 1993:96–108.
79. Wilson W, Neckerman KM. Poverty and family structure: the widening gap between evidence and public policy issues. In: Danziger SH, Weinberg DH, eds. *Fighting Poverty*. Cambridge, Mass: Harvard University Press; 1986:232–259.
80. Sampson RJ. Urban black violence: the effect of male joblessness and family disruption. *Am J Sociol*. 1987;93:348–382.
81. Tucker M. Considerations in the development of family policy for African Americans. In: Jackson J, ed. *New Directions: African Americans in a Diversifying Nation*. Washington, DC: National Policy Association; 2000:162–206.
82. Farley R. Demographic, economic, and social trends in a multicultural America. In: Jackson J, ed. *New Directions: African Americans in a Diversifying Nation*. Washington, DC: National Policy Association; 2000:11–44.
83. McLanahan S, Sandefur G. *Growing Up With a Single Parent: What Hurts, What Helps*. Cambridge, Mass: Harvard University Press; 1994.
84. Williams DR, Collins CA. Racial residential segregation: a fundamental cause of racial disparities in health. *Public Health Rep*. 2001;16:404–415.
85. Kennedy R. Racial trends in the administration of criminal justice. In: Smelser N, Wilson WJ, Mitchell F, eds. *America Becoming: Racial Trends and Their Consequences*. Vol 2. Washington, DC: National Academy Press; 2001:1–20.
86. Risman B. Intimate relationships from a microstructural perspective: men who mother. *Gender Soc*. 1987;1:6–32.
87. United Nations Children's Fund. *A League Table of Child Poverty in Rich Nations*. Florence, Italy: Innocenti Research Center; 2000.
88. Hertzman C. Population health and child development: a view from Canada. In: Auerbach JA, Kringold BK, eds. *Income, Socioeconomic Status, and Health: Exploring the Relationships*. Washington, DC: National Policy Association; 2001:44–55.
89. van der Klink JJ, Blonk R, Schene AH, van Dijk FJH. The benefits of interventions for work-related stress. *Am J Public Health*. 2001;91:270–276.
90. Lee HO. Typical and atypical clinical signs and symptoms of myocardial infarction and delayed seeking of professional care among blacks. *Am J Crit Care*. 1997;6:7–15.