

# To Mitigate, Resist, or Undo: Addressing Structural Influences on the Health of Urban Populations

## ABSTRACT

Young to middle-aged residents of impoverished urban areas suffer extraordinary rates of excess mortality, to which deaths from chronic disease contribute heavily. Understanding of urban health disadvantages and attempts to reverse them will be incomplete if the structural factors that produced modern minority ghettos in central cities are not taken into account.

Dynamic conceptions of the role of race/ethnicity in producing health inequalities must encompass (1) social relationships *between* majority and minority populations that privilege the majority population and (2) the autonomous institutions *within* minority populations that members develop and sustain to mitigate, resist, or undo the adverse effects of discrimination. Broad social and economic policies that intensify poverty or undermine autonomous protections can reap dire consequences for health.

Following from this structural analysis and previous research, guiding principles for action and suggestions for continued research are proposed. Without taking poverty *and* race/ethnicity into account, public health professionals who hope to redress the health problems of urban life risk exaggerating the returns that can be expected of public health campaigns or overlooking important approaches for mounting successful interventions. (*Am J Public Health*. 2000;90:867-872)

Arline T. Geronimus, ScD

A compounding series of changes in the urban socioeconomic and demographic landscape since World War II has resulted in staggering and increasing rates of excess mortality in urban areas of concentrated poverty.<sup>1-3</sup> By 1990, African American youths in some urban areas faced lower probabilities of surviving to 45 years of age than White youths nationwide faced of surviving to 65 years. Popularized images emphasize the role of homicide among urban youth, although chronic diseases in early and middle adulthood are key contributors to these health inequalities and to their growth. For example, among young and middle-aged men in Harlem, the number of excess deaths attributed to homicide per 100 000 persons remained stable between 1980 and 1990 and then began to decline. In contrast, throughout the 1980s, excess deaths attributed to circulatory disease or cancer each *doubled* among young and middle-aged Harlem men.<sup>3</sup>

Attempts to understand, and to reverse, these growing health inequalities will be partial without consideration of the socioeconomic factors and, even more critical, the historical and structural factors that have produced modern ghettos in central cities with predominantly minority populations. About 80% of the residents of high-poverty urban areas in the United States are minorities; the figure is over 90% in the largest metropolitan areas. African Americans alone account for 50% of residents of high-poverty urban areas nationally and between 80% and 90% of the population in some of the largest urban ghettos, such as in Detroit and Chicago.<sup>4</sup> A range of policies, some now old and all apparently disconnected from health considerations, have reaped dire consequences for the health of these urban residents. In the wake of these policies, unless public health professionals take poverty *and* race/ethnicity into account, they risk exaggerating the returns that can be expected of narrow or conventional public health campaigns or overlooking important targets, approaches, and resources for mounting successful interventions.

### Poverty

Central city populations are characterized by extreme, persistent, and pervasive

poverty that intensified in the late 20th century. There was a decline in the real value of working-class wages and government transfers and, by extension, of the material resources available through the pooling of income across kin networks; at the same time, the cost of living increased.

The association between health and poverty (or, more broadly defined, socioeconomic position) is among the most robust findings of social epidemiology.<sup>5-9</sup> Consider the list of social and psychosocial factors that have demonstrated associations with morbidity and mortality, and consider that those in poverty suffer from increased exposure to most of them. These factors include material hardships, psychosocial conditions of acute and chronic stress or of overburdened or disrupted social supports, and toxic environmental exposures.<sup>10-14</sup> Generally and persistently difficult psychosocial conditions contribute to the increased tendency of the poor to engage in some unhealthy behaviors, suffer depression, or engage in persistent high-effort coping, which in itself is a risk factor for stress-related diseases in low-income populations.<sup>10-13,15-17</sup> As Link et al.<sup>18</sup> have outlined, those of a lower socioeconomic position also have less ability than others to gain access to information, services, or technologies that could protect them from or ameliorate risks. Further, there appears to be a "dose-response" relationship: long-term poverty is more devastating to health than short poverty spells, both for children and for adults.<sup>19,20</sup> For impoverished African Americans, excess morbidity and mortality increase over the young and middle adult years, suggesting the *cumulative* health impact of persistent disadvantage.<sup>13</sup>

The author is with the Department of Health Behavior and Health Education, the Population Studies Center, and the Center for Research on Ethnicity, Culture and Health, University of Michigan, Ann Arbor.

Requests for reprints should be sent to Arline T. Geronimus, ScD, Department of Health Behavior and Health Education, University of Michigan School of Public Health, 1420 Washington Heights, Ann Arbor, MI 48109-2029 (e-mail: arline@umich.edu).

This article was accepted January 3, 2000.

**Editor's Note.** Please see related editorial by Cohen (p 841) in this issue.

While poverty has intensified in central city areas, it has also come to interact with characteristics of the urban environment to produce a particularly lethal combination. Several social and environmental factors are likely contributors to this phenomenon. First, economic restructuring away from a manufacturing to a service economy resulted in extraordinarily high levels of urban unemployment and the loss of well-paying, unionized jobs. Those now employed in the service sector often face unreliable and shifting part-time hours and have little or no health or retirement benefits. Second, there is a lack of adequate housing in major urban areas: increased housing prices have been a formidable problem for those whose already low incomes have failed to keep pace. The scarcity of housing has been exacerbated by reductions in municipal services, including fire department closings, which, among other consequences, have resulted in large numbers of burned-out buildings and the deterioration of the remaining housing stock.<sup>21</sup>

Third, massive reductions in outlays to maintain and supervise public parks in urban areas have led to the dramatic deterioration of these facilities and their use for illicit purposes.<sup>22</sup> One can imagine the cascade of events, as suggested by Wallace and Wallace,<sup>21</sup> that has been triggered by reductions in city services in low-income minority neighborhoods in New York City: an upsurge in family homelessness; the profound disruption of social networks, as those network members who lose their homes and can avert homelessness do so by fleeing or doubling up with other families; and the movement of drug users and traffickers into burned-out buildings and dilapidated public play spaces. These service reductions allowed urban areas to become the staging ground for the violence we have come to associate with urban neighborhoods and for other severe public health problems, including the crack and HIV/AIDS epidemics and the reemergence of tuberculosis. That stress-related diseases are on the increase hardly seems surprising. Meanwhile, the urban poor have confronted new challenges in gaining access to medical care.<sup>23–26</sup>

This description suggests that poverty and urban decay are among the causes of early health deterioration and excess mortality among residents of distressed urban areas. It also suggests several program and policy levers for improving the health of urban populations, among them (1) implementing job programs and measures to raise family incomes, (2) improving the quality, quantity, and affordability of housing, (3) improving municipal services, (4) redressing environmental inequities, and (5) expanding health

insurance coverage and increasing the number of physicians in depressed urban areas. Each of these measures deserves serious attention. However, without addressing the question of how urban decay, with its attendant health problems, was allowed to happen, and that of the role of race in this process, the promise of such policies may be limited. Socioeconomic characteristics of urban populations are unlikely to be transformed in isolation; they are not associated with an otherwise level playing field.

### *Race/Ethnicity*

For this discussion of the role of race/ethnicity in understanding poverty and urban health, race will be conceptualized in two intertwined ways. One is as a set of social relationships *between* majority and minority populations that have been institutionalized over time,<sup>27</sup> that privilege the majority population, and that are *prior* to the poverty that is associated with race.<sup>28,29</sup> The other is as a set of autonomous institutions *within* the minority population that are developed and maintained—even in the face of burdensome obligations or costs to individuals—because, on balance, they mitigate, resist, or undo the adverse effects imposed by institutionalized discrimination.

In terms of the first conceptualization, the current urban environment developed under the influence of race-conscious policies. A large-scale migration of African Americans from the South to northern urban locations began in the 1940s, initially in response to increased demand for labor to sustain the war effort. In northern urban destinations, European immigrant neighborhood groups, government officials, and developers worked to avoid the integration of African Americans with established immigrant neighborhoods, producing the outlines of urban Black ghettos.<sup>30</sup> Highway construction and public housing projects isolated Black neighborhoods from other areas, while other policies prevented Blacks from moving to emerging suburbs. Following World War II, African Americans were effectively frozen out of suburbs by racial covenants, discriminatory mortgage practices, and racial steering. In contrast, Whites were offered low-cost homes in suburbs and low interest rates on government-subsidized home mortgages, and they benefited from publicly funded transportation projects that linked their suburban homes to employment and cultural centers.<sup>31,32</sup>

Such housing and transportation policies promoted segregation and prevented many African Americans from escaping poverty, as

urban centers lost jobs (first as industry moved to the suburbs and later because of macroeconomic restructuring away from industrialized jobs). They also precluded Blacks from enjoying the accumulation of wealth associated with the vast appreciation of suburban housing values.<sup>33</sup> Meanwhile, there has been little sustained investment—public or private—in central city areas. Race has been an explicit factor in this circumstance.<sup>30</sup>

In terms of the second conceptualization of race/ethnicity, African Americans have historically participated in community networks of exchange and support in order to mitigate social and economic adversity.<sup>34,35</sup> These networks are dynamic systems that help to shore up material resources among members and also serve to provide social support and identity-affirming cultural frameworks across generations. In 1919, Du Bois wrestled with the “curious paradox” that without the strength of conviction and cultural identity forged through vital *separate* ethnic organizations, the determination of African Americans to fight against being *segregated* into an “ill-lighted, unpaved, unsewered ghetto” might have been dilute rather than resolute.<sup>36(p268)</sup> More recently, James<sup>37</sup> has speculated that members of minority groups find health-preserving protection in cultural frameworks that are alternatives to the dominant cultural framework in which they are marginalized. James proposes a model that can be interpreted to resolve the paradox Du Bois observed: as a minority group’s economic strength diminishes, its ability to supply the protection conferred by social support and identity-affirming symbols may be especially critical to preserving the health of its members.

In a vexing double whammy, policies and macroeconomic realities that gave rise to the ghettoization of poor African Americans in urban areas may have also dealt a series of hard blows to their critical social network systems, leaving such networks with fewer resources to meet the increasing needs of their members. Joblessness; homelessness; doubling up in overcrowded, substandard housing; ill health; and early death all undermine the efforts of kin to provide mutual aid or cultural affirmation. In addition, African Americans must vie with the dominant American culture to define urban Black identity. The dominant culture often defines urban minorities in disconfirming, negative stereotypes or ones that are affirming only in a narrow, perverse, and self-serving way—for example, in corporate images of urban athletes in high-priced athletic shoes. Kelley summarizes this restricted and confusing menu of images as “the circulation of the very representations of race that generate

terror in all of us at the sight of young black men and yet compels most of America to want to wear their shoes.<sup>32(p224)</sup>

Apart from this materialistic fantasy, few sincerely attempt to walk in the shoes of the urban African American poor. Instead, pervasive negative images inform policies with flawed logic. For example, the growing inability of community networks in poor urban areas to avert material hardship, violence, or disease is interpreted through the prism of the dominant cultural occupation with a perceived decline in personal responsibility and family values. Rather than consider the historical or structural precursors of urban decay, citizens and policymakers—liberal and conservative—identify the behavior of urban residents (and the disturbing values their behavior is thought to represent) as an important source of urban poverty and distress.<sup>38</sup> One hard-hitting extension of this reasoning is the reduction of antipoverty policy into welfare policy institutionalized in the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA; welfare reform),<sup>39</sup> a bill misguided and demeaning in many of its fundamental premises about the goals and motivations of the poor.<sup>40</sup>

### Implications for Public Health

Healthy People 2010<sup>41</sup> calls attention to socioeconomic disparities in health and, for the first time, boldly calls for the *elimination*—not simply the reduction—of racial/ethnic and socioeconomic disparities in health. The unfortunate truth is that descriptive documentation of these disparities is matched neither by well-tested explanations for them nor by evaluation research on *socioeconomic* interventions. Without progress in research, specific socioeconomic interventions cannot be confidently proposed. Still, the preceding “structural” analysis suggests some activities and leads to guiding principles for action and continued research.

#### *First Do No (More) Harm*

In a structural framework, policies that affect the context of urban poverty—such as the distribution of wealth, the built environment, segregation, and access to technologies, information, or other resources—influence fundamental causes of health inequality. So, too, do policies that affect the integrity of the autonomous institutions—formal organizations, informal networks, ideologies, and cultural frameworks—that members of oppressed groups work to develop and maintain in order to mitigate, resist, or undo the struc-

tural constraints they face. Policies that are likely to erode income, housing, or neighborhood conditions; fragment or impose new obligations on already overburdened networks; or proliferate demeaning and demoralizing stereotypes affect the material and psychosocial conditions of life for the urban poor and thus their health. Public health professionals can describe the health impact of proposed policies by evaluating the likelihood that they will do any of the above and can bring these considerations to the table.

For example, if such an analysis had been part of the deliberations on PRWORA, those concerned with its probable health impact would have noted not only its implications for Medicaid eligibility (which were considered) but also its likelihood of intensifying the material hardship, stress, and uncertainty faced by poor residents of urban areas (through, for example, its time-limits provisions) *and* its potential to impose further perturbations on the protective systems worked out by kin networks (through, for example, requiring all adult family members to work, no matter whether they then compete with each other for the same scarce low-wage jobs or whether this requirement depletes the reserve of kin members available to offer child care to others). By intensifying their exposure to risks and undermining their autonomous protections, PRWORA could further erode the health of the urban poor.

Similarly, a press to revitalize urban areas now comes from environmentalists and upper-middle-class Americans who, ironically, now bemoan the sprawl wrought by increasing suburbanization and White flight. However, if plans to reverse sprawl and reclaim urban areas for the socioeconomically advantaged have no equity component, they risk leading to the dispersion and fragmentation of poor inner city neighborhood residents as real estate prices increase. Already, evidence of this possibility is available in urban “success” sites such as downtown Atlanta, the South End of Boston, and San Francisco. On a more positive note, broad interest in reversing sprawl may offer opportunities for urban community leaders to build coalitions with environmentalists to galvanize interest in the revitalization of American cities.

#### *Work to Alter Public Perspectives on Race*

Negative stereotypic judgments of African Americans led to, and continue to reinforce, ghettoization; affect the treatment decisions of health providers<sup>42,43</sup>; influence the hiring practices of potential employers<sup>44</sup>; fuel distrust of public health initiatives<sup>45</sup>;

weaken public support for initiatives to improve the health of urban populations; and deny young, urban African Americans health-promoting, identity-affirming symbols. In a structural framework, understanding what shapes public sentiment on race and determining how it might be influenced become critical public health objectives. Incorporating the historical underpinnings of ghettoization and the deterioration of urban areas into discussions of urban life and health may alter the ways people think about the minority poor and their health. To the extent that social epidemiologists elucidate the social conditions and contexts that trigger unhealthy behaviors among the urban poor, these should be described to broad audiences to alter public understanding of these behaviors. For example, as King points out, high smoking rates in urban poor communities may be, in part, a response to pervasive psychosocial stress and to the targeting of these communities by tobacco companies for advertising.<sup>46</sup>

When social epidemiologists find evidence that, in the face of formidable structural impediments to success, there is a physical price attached even to coping in socially approved ways, this information should also be disseminated. For example, James has suggested and found evidence of a culturally salient behavioral predisposition among African Americans to engage in persistent high-effort coping with social and economic adversity (“John Henryism”). In low-income African American populations, individuals who exhibit high levels of John Henryism are the ones most apt to be hypertensive.<sup>15,16</sup> This evidence contradicts demeaning stereotypic notions that fatalism and indolence precipitate cardiovascular disease among low-income African Americans. Put another way, the empirical evidence on John Henryism suggests that low-income African Americans who work hard to cope with or surmount structural barriers to their achievement also express values and take actions that are in sync with the greater American ideological emphasis on self-control and a strong work ethic. However, these actions can exact a physical price whether or not they are successful in producing social mobility.

#### *Distinguish Between “Ameliorative” and “Fundamental” Approaches*

Positing that many social conditions are “fundamental causes” of disease, Link, Phelan, and colleagues<sup>18,47,48</sup> describe the social patterning of health and disease as a potent force that may take new shape but persists undeterred by the identification and amelioration of the risk factors that express that pat-

tering in a given time period. In the realm of intervention, this conceptual model implies a distinction between “ameliorative” and “fundamental” actions. Ameliorative approaches target the risk factors that link socioeconomic position to health in a particular context, but they do not fundamentally alter the context (or underlying inequalities). Public health practitioners are often engaged in what can be seen, by this rubric, as ameliorative actions. A substantial literature assesses ameliorative interventions, including ones specific to the urban context.<sup>49</sup>

Continued implementation of and refinements in ameliorative approaches are necessary to avoid health disparities from widening uncontrollably. Certainly, it is wise to build on the accumulated base of knowledge on how best to implement health promotion initiatives or expand access to medical services; it is also wise to target and tailor them appropriately for urban and minority populations. Still, such initiatives and services alone will not result in the *elimination* of health disparities. As Link, Phelan, and colleagues<sup>18,47,48</sup> outline, energy put forth to address a specific risk factor will achieve limited success in improving the health of a disadvantaged population. The risk factor may be virtually inevitable in a given social context, or it may be only one of the many risk factors that follow from a set of social conditions. Even the eradication of specific risk factors may be followed by the emergence of new risks that, similar to the old risks, are more likely to be averted by a population in more favorable social circumstances than by the population one is trying to help. From this perspective, the only way to eliminate differentials in health is to address the underlying “social inequalities that so reliably produce them.”<sup>48(p472)</sup>

It is easiest to understand individual behavior change strategies or the expansion of access to medical services (especially tertiary services) as falling under the rubric of ameliorative interventions. It is also important to recognize that community-based public health initiatives can also be ameliorative rather than fundamental. The value of community partners in research, the importance of community members on boards of local health care facilities, and the necessity of the participation and leadership of community members in social or policy change efforts is clear and has been well described elsewhere.<sup>26,29,45,50</sup> In fact, aspects of the structural paradigm urge working in partnerships with communities, engaging in “bottom-up” approaches, and recognizing that historically important and effective social movements derive their moral, political, and practical force from the autonomous networks and institu-

tions developed and kindled within minority communities.

However, the paradigm also suggests a caveat regarding overreliance on community-centered approaches. As Halpern notes, one possible pitfall of overreliance on such approaches is that “those who have the least role in making and the largest role in bearing the brunt of society’s economic and social choices [are left] to deal with the effects of those choices.”<sup>30(p5)</sup> If social, political, and economic exclusion are among the distal causes of the disproportionate health burden absorbed by the urban minority poor, and if, as a result, community members own and control little, the prospects for local community initiatives to alter fundamental causes of morbidity and mortality may be modest. The comments of a community legal aid activist of the 1960s are cautionary: “We undoubtedly brought some solace and relief to many individual tenants. . . . Nevertheless in those same three years the housing situation in San Francisco became a great deal worse. . . . [It] might appear [that we made] the process a little more humane without having any effect on the underlying machinery.”<sup>51(p146)</sup>

In addition to cautioning against unrealistic expectations of what community-based public health approaches can be expected to achieve, this caveat also suggests broadening the set of community-based networks and organizations that can be enlisted to address structural barriers to include organizations with substantial economic leverage. For example, the largest and wealthiest minority organizations include labor unions. In some cities, minority-run public sector unions are a major force in city/state politics and policy. More generally, altering fundamental causes of health inequality requires working at multiple levels and making connections between levels. The scope and target of public health activity can move (as it has, to an extent) from the individual to the family to the community and also encompass large societal institutions, pervasive and influential ideologies, intergroup relations, and macroeconomic policy.

#### *Increase Attention to the Needs of Adults*

Many public health activities target or favor the health and well-being of youths over those of adults, because youths are viewed either as being more deserving of our efforts or as more at risk. However, adults are critical to the vitality of families and communities, and research findings suggest the merit of stimulating increased attention to the needs of young and middle-aged adults in impoverished urban areas. As noted previ-

ously, social differentials in morbidity and mortality are most pronounced among adults of reproductive and working-age.<sup>13,52</sup>

Adults of these ages play critical social roles as economic providers and caretakers. Improving adult health in impoverished urban areas would reap advantages for residents of all ages. Some examples are straightforward, such as the importance of maternal health to infant health. In addition, high levels of health-induced disability among working-age African American men and women contribute to their relatively low rates of participation in the labor force and thereby to their ability to support families economically.<sup>53</sup> Meanwhile, extensive and competing obligations to family and larger social networks as well as to paid jobs lead to stress-related disease, particularly among women.<sup>13,54</sup> More speculatively, pervasive uncertainty regarding health among young adult and middle-aged members of a community shapes the expectations of youths and may influence the timing of childbearing toward earlier ages<sup>13,40</sup> or the propensity of some youths to engage in risk-taking behaviors.<sup>55</sup>

#### *Continued Research*

To inform efforts to reduce or eliminate urban health disadvantages, continued research should evaluate the impact of social and economic policies on the health of urban residents. In addition, evidence of important interactions of race, poverty, and locality in influencing health is growing,<sup>3,56</sup> but social epidemiologists more often look at general patterns of the relationship between socioeconomic position and health (e.g., providing estimates based on national or statewide averages or averaging across all residents of major metropolitan areas). Stepping up research on variation among local poor populations may prove beneficial to those hoping to remedy the effects of urban life on health.

Indicators of personal experience with racism and racialized stress have been added to the set of studied influences on health,<sup>57</sup> but few investigators have systematically considered the health consequences of the manifestations of racism in the *structures* of society.<sup>8,25</sup> Conceptually, research in this area would benefit from the development of dynamic and contextualized understandings of the role of culture in health. This development would replace static constructions of culture as an imported set of behaviors, practices, or values that are subject to change only inasmuch as they are traded in for the dominant set.

As part of this activity, investigators should become more attuned to the *functioning* of autonomous social institutions within

communities and less concerned with their *form*. For example, classifying mothers as married or unmarried provides more questionable information about children's well-being or local social organization than does understanding who, in a broader social network, is expected and available to participate in the care and support of children. Classifying mothers as married or unmarried also overlooks important questions such as why autonomous caretaking systems evolved and how they are maintained.<sup>34,35,40,58</sup> To this end, development and empirical testing of theories that draw from African American (or other urban ethnic) culture, history, and life experience to hypothesize links between structural barriers, personal and social coping mechanisms, and their physiologic effects and health manifestations offer more promise than studies that draw from political theories abstracted from the lived experience of urban Americans.

A deeper understanding of how culture relates to inequalities in health will also require evaluation of the role the dominant cultural system plays in the maintenance of inequality. The history of race-based ghettoization suggests that there is a cultural component to the perpetuation of poverty and that it comes, in the main, from the dominant culture, not from the poor. One interpretation is that the health of the African American poor has been sacrificed to maintain the core American myth that some people are more equal than others. In this myth, the populace is divided into those who are responsible members of civil society, deserving of its full benefits, and those who are deemed a threat to civil society and are to be segregated, marginalized, or even policed.<sup>59</sup>

These comments have focused on African American residents of impoverished urban areas because both real and imagined threats to public health emanate from the long-term ghettoization of African Americans. Historical processes underpin this ghettoization, but there are also emerging racial/ethnic challenges and opportunities that affect the landscape and dynamics of urban centers. The 1990s witnessed the greatest influx of immigrants in 50 years, and many of these immigrants moved into high-poverty urban areas. Whether they become long-term residents of ghettos or barrios, or whether, like some immigrant populations before them, they are enabled to move through these areas and into higher-income areas, is an open question. Meanwhile, their needs and perspectives deserve articulation, and the influence of intergroup dynamics, coalitions, and tensions on health must also be examined and incorporated into programs and policies to improve the health of urban residents. In

the spirit of this structural analysis, a key part of the process of examination is to discern the ways dominant American cultural ideologies and institutions shape, relieve, or reinforce the tensions between new immigrant groups and urban African Americans. Otherwise, a race-based culture of exclusivity will continue to draw its support by taxing the health of African Americans. □

## Acknowledgments

The author received financial support for this work from the William T. Grant Foundation and from a Robert Wood Johnson Foundation Investigator in Health Policy Research Award.

In developing these ideas, I benefited tremendously from exchanges with J. Philip Thompson. I am also grateful to Sherman James, Sylvia Tesh, and Adam Becker for commenting on earlier drafts. The views expressed are my own.

## References

- McCord C, Freeman HP. Excess mortality in Harlem. *N Engl J Med*. 1990;322:173–177.
- Geronimus AT, Bound J, Waidmann TA, et al. Excess mortality among Blacks and Whites in the United States. *N Engl J Med*. 1996;335:1552–1558.
- Geronimus AT, Bound J, Waidmann TA. Poverty, time and place: variation in excess mortality across selected US populations, 1980–1990. *J Epidemiol Community Health*. 1999;53:325–334.
- Jargowsky PA. *Poverty and Place: Ghettos, Barrios, and the American City*. New York, NY: Russell Sage Foundation; 1997.
- Antonovsky A. Social class, life expectancy and overall mortality. *Milbank Mem Fund Q*. 1967;45:31–73.
- Kitagawa EM, Hauser PM. *Differential Mortality in the United States: A Study in Socioeconomic Epidemiology*. Cambridge, Mass: Harvard University Press; 1973.
- Adler NA, Boyce T, Chesney MA, et al. Socioeconomic status and health: the challenge of the gradient. *Am Psychol*. 1994;49:15–24.
- Williams DR, Collins C. US socioeconomic and racial differences in health: patterns and explanations. *Annu Rev Sociol*. 1995;21:349–386.
- Backlund E, Sorlie PD, Johnson NJ. The shape of the relationship between income and mortality in the United States: evidence from the National Longitudinal Mortality Study. *Ann Epidemiol*. 1996;6:12–20.
- Lantz PM, House JS, Lepowski JM, Williams DR, Mero RP, Chen J. Socioeconomic factors, health behaviors, and mortality: results from a nationally representative prospective study of US adults. *JAMA*. 1998;279:1703–1708.
- Marmot MG, Kogevinas M, Elston MA. Social/economic status and disease. *Annu Rev Public Health*. 1987;8:111–135.
- Williams DR, House JS. Stress, social support, control and coping: a social epidemiological view. *WHO Reg Publ Eur Ser*. 1991;37:147–172.
- Geronimus AT. The weathering hypothesis and the health of African-American women and infants: evidence and speculations. *Ethn Dis*. 1992;2:207–221.
- Mohai P, Bryant B. Environmental injustice: weighing race and class as factors in the distribution of environmental hazards. *University of Colorado Law Review*. 1992;63:921–932.
- James SA. John Henryism and the health of African-Americans. *Cult Med Psychiatry*. 1994;18:163–182.
- James SA, Strogatz SB, Browning SR, Garrett JM. Socioeconomic status, John Henryism and hypertension in Blacks and Whites. *Am J Epidemiol*. 1987;126:664–673.
- Northridge ME, Morabia A, Ganz ML, et al. Contribution of smoking to excess mortality in Harlem. *Am J Epidemiol*. 1998;147:250–258.
- Link BG, Northridge M, Phelan JC, Ganz M. Social epidemiology and the fundamental cause concept: on the structuring of effective cancer screens by socioeconomic status. *Milbank Q*. 1998;76:304–305, 375–402.
- Lynch JW, Kaplan GA, Shema SJ. Cumulative impact of sustained economic hardship on physical, cognitive, psychological, and social functioning. *N Engl J Med*. 1997;337:1889–1895.
- Miller JE, Korenman S. Poverty and children's nutritional status in the United States. *Am J Epidemiol*. 1994;140:233–243.
- Wallace R, Wallace D. Origins of public health collapse in New York City: the dynamics of planned shrinkage, contagious urban decay and social disintegration. *Bull NY Acad Med*. 1990;66:391–434.
- Kelley RDG. Playing for keeps: pleasure and profit on the postindustrial playground. In: Lubiano W, ed. *The House That Race Built*. New York, NY: Pantheon Books; 1997:195–231.
- Fossett JW, Perloff JD, Peterson JA, Kletke PR. Medicaid in the inner city: the case of maternity care in Chicago. *Milbank Q*. 1990;68:111–141.
- Fossett JW, Perloff JD. *The "New" Health Reform and Access to Care: The Problem of the Inner City*. Washington, DC: Kaiser Commission on the Future of Medicaid; December 1995.
- Polednak AP. Segregation, discrimination and mortality in US Blacks. *Ethn Dis*. 1996;6:99–108.
- Schlesinger M. Paying the price: medical care, minorities and the newly competitive health care system. *Milbank Q*. 1987;65(suppl 2):270–296.
- O'Connor A. Historical perspectives on race and community revitalization. Paper presented at: Meeting of the Race and Community Revitalization Project of the Aspen Institute Roundtable on Comprehensive Community Initiatives; November 13–15, 1998; Wye River Conference Center, Queenstown, Md.
- Cooper R, David R. The biological concept of race and its application in public health and epidemiology. *J Health Polit Policy Law*. 1986;11:97–116.
- Thompson JP. Universalism and deconcentration: why race still matters in poverty and economic development. *Politics and Society*. 1998;26:181–219.
- Halpern R. *Rebuilding the Inner City: A History of Neighborhood Initiatives to Address Poverty in the United States*. New York, NY: Columbia University Press; 1995.
- Oliver ML, Shapiro TM. *Black Wealth/White Wealth: A New Perspective on Racial Inequality*. New York, NY: Routledge; 1995.
- Massey D, Denton N. *American Apartheid: Segregation and the Making of the Underclass*.

- Cambridge, Mass: Harvard University Press; 1993.
33. Conley D. *Being Black, Living in the Red: Race, Wealth, and Social Policy in America*. Berkeley: University of California Press; 1999.
  34. Stack CB. *All Our Kin*. New York, NY: Harper & Row; 1974.
  35. Stack C, Burton LM. Kinscripts. *J Comp Fam Stud*. 1993;24:157–170.
  36. Du Bois WEB. “Jim Crowe.” In: Weinberg M, ed. *W.E.B. Du Bois: A Reader*. New York, NY: Harper & Row; 1970:267–268.
  37. James SA. Racial and ethnic differences in infant mortality and low birth weight: a psychosocial critique. *Ann Epidemiol*. 1993;3:130–136.
  38. Gans HJ. *The War Against the Poor*. New York, NY: Basic Books; 1995.
  39. Pub L No. 104–193, 110 Stat 2105–2355 (1996).
  40. Geronimus AT. Teenage childbearing and personal responsibility: an alternative view. *Political Sci Q*. 1997;112:405–430.
  41. *Healthy People 2010: Understanding and Improving Health*. Washington, DC: US Dept of Health and Human Services; January 2000. DHHS publication 017-001-00543-6.
  42. Chasnoff IJ, Landress HJ, Barrett ME. The prevalence of illicit-drug or alcohol use during pregnancy and discrepancies in mandatory reporting in Pinellas County, Florida. *N Engl J Med*. 1990;322:1202–1206.
  43. Schulman KA, Berlin JA, Harless W, et al. The effect of race and sex on physicians’ recommendations for cardiac catheterization. *N Engl J Med*. 1999;340:618–626.
  44. Wilson WJ. *When Work Disappears: The World of the New Urban Poor*. New York, NY: Alfred A. Knopf; 1996.
  45. Dalton H. AIDS in blackface. *Daedalus*. 1989; Summer:205–227.
  46. King G. The “race” concept in smoking: a review of research on African Americans. *Soc Sci Med*. 1997;45:1075–1087.
  47. Link BG, Phelan JC. Social conditions as fundamental causes of disease. *J Health Soc Behav*. 1995;(spec no.):80–94.
  48. Link BG, Phelan JC. Understanding sociodemographic differences in health: the role of fundamental social causes. *Am J Public Health*. 1996; 86:471–473.
  49. Freudenberg N. Community-based health education for urban populations: an overview. *Health Educ Behav*. 1998;25:11–23.
  50. Israel BA, Schulz AJ, Parker EA, Becker AB. Review of community-based research: assessing partnership approaches to improve public health. *Annu Rev Public Health*. 1998;18: 173–202.
  51. Carlin J. Storefront lawyers in San Francisco. In: Pilisuk M, Pilisuk P, eds. *How We Lost the War on Poverty*. New Brunswick, NJ: Transaction Books; 1973:136–158.
  52. House JS, Lepkowski JM, Kinney AM, Mero RP, Kessler RC, Herzog AR. The social stratification of aging and health. *J Health Soc Behav*. 1994;35:213–234.
  53. Bound J, Schoenbaum M, Waidmann T. Race differences in labor force attachment and disability status. *Gerontologist*. 1996;36:311–321.
  54. LeClere FB, Rogers RG, Peters K. Neighborhood social context and racial differences in women’s heart disease mortality. *J Health Soc Behav*. 1998;39:91–107.
  55. Wilson M, Daly M. Life expectancy, economic inequality, homicide, and reproductive timing in Chicago neighbourhoods. *BMJ*. 1997;314: 1271–1274.
  56. Davey Smith G, Hart C, Watt G, et al. Individual social class, area-based deprivation, cardiovascular disease risk factors, and mortality: the Renfrew and Paisley Study. *J Epidemiol Community Health*. 1998;52:399–405.
  57. Williams DR, Yu Y, Jackson JS, Anderson NB. Racial differences in physical and mental health: socioeconomic status, stress and discrimination. *J Health Psychol*. 1997;2:335–351.
  58. Sharff JW. *King Kong on 4th Street*. Boulder, Colo: Westview Press; 1998.
  59. Brodtkin K. *How Jews Became White Folks and What That Says About Race in America*. New Brunswick, NJ: Rutgers University Press; 1998.