Commentary

Class, Race, and Infant Mortality in the United States

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Introduction

Social class differences in infant mortality trouble many societies. In the United States, the higher rates of infant mortality among our disadvantaged populations have been defined as a social problem for 130 years. 1 As public health professionals, we are continually concerned that not all babies have an equal chance of surviving to their first birthday. How societies reduce social disparities in infant mortality depends on how they identify and correct the causes of such differences. Poverty is generally identified as the primary cause of social-class differentials in infant mortality.2 The reduction of infant mortality through the reduction of poverty requires defining the population at risk (the poor), why they are at risk (the environmental, social, behavioral correlates of poverty, such as smoking, early childbearing, and high parity), and how to reduce this risk (eliminate poverty, improve the social condition of the poor through better access to social and health services and better understanding of the behaviors that place them at higher health risk). Sweden has long used this approach—a "poverty paradigm"-to reduce income differentials and to provide free and comprehensive health services; their success in greatly reducing social differences in infant mortality attests to the model's

In this commentary, we examine the Swedish experience for lessons that may be applicable to the United States. We conclude that, although the US public health community has used poverty to explain infant mortality differentials, we have not acted to eliminate poverty or ameliorate its effects as thoroughly or as consistently as has Sweden. Moreover, in our multicultural and multiracial society, we must question whether eliminating poverty is sufficient to eliminate social differences in infant mortality.

Swedish vs US Infant Mortality

In their paper on Swedish infant mortality in this issue, Nordstrom et al.3 reveal a society in which social differences in infant mortality (as measured by maternal education) exist but are small in comparison to other countries. The authors' findings are similar to those of other Swedish investigators who have used other definitions of social class to examine infant mortality differences.4,5 Nordstrom and her colleagues attribute the narrowness of social class differences in Sweden to interventions that have effectively eliminated poverty and to a national system of free prenatal and child health care.3 Kohler attributes Sweden's success more to its overall high socioeconomic status than to its health services.6

Regarding the differentials in infant mortality that remain in Sweden, by maternal educational level, babies whose mothers are the least educated have the highest infant mortality-although differences by maternal education are much smaller than those in the United States. In 1980, US babies born to the leasteducated White mothers were 2.3 times

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Editor's Note. See related articles by Nordstrom et al. (p 26) and Buekens et al. (p 31) in this issue.

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As a result of Sweden's efforts to eliminate poverty and to provide comprehensive health care, there are only small social class differences in infant mortality. The wider social differences in US infant mortality are a consequence of less consistent and thorough attempts at social equity and universal health care. US Black infant mortality continues to be twice that of Whites, and the excess may partially result from racism. Public health research should examine the role of racism in infant mortality and develop interventions to eliminate racism and its effects on the health of Black Americans. (Am J Public Health, 1993;83:9-12)

as likely to die as babies born to White college graduates. The mortality risk ratio for babies born to Black mothers with little education was 1.9 when compared with college-educated Black mothers, and 3.9 when compared with college-educated White mothers. In contrast, Nordstrom found only a 40% excess mortality among Swedish infants born to women with less than 10 years of education and a 20% excess mortality among infants of women with 10 to 11 years of education (compared with those of women with higher educational levels).³

The Swedish excess in infant mortality is due in part to poor health habits among the less educated women: smoking and teenage childbearing,3 short interbirth intervals,8 and delay in seeking medical care or noncompliance with medical advice.9 In the Nordstrom analvsis, one half of the excess infant mortality among the poorest educated maternal group was associated with the joint effects of the behavioral risks of younger maternal age, higher parity, and smoking. Smoking per se causes infant deaths, 10 and in the Nordstrom study, smoking increased the risk of sudden infant death syndrome.3 Of course, smoking is easier to diagnose than treat; smoking cessation programs have very limited success.11 In addition, very short interbirth intervals among the Swedes may increase the risk of neonatal death by 5 to 10%.8 This association may be directly causal or related to the different health-seeking behaviors of women with an unintended conception. In another study, 7% of perinatal deaths were attributed to inadequate care because of "delay in acknowledging pregnancy or refusal to accept proposed intervention."9 Whatever the reason for the association of these behavioral patterns to infant mortality, the modification of those individual behaviors by public health intervention is difficult. The Swedes have not been able to sufficiently modify behavior to eliminate these problems.

However, what the Swedes have accomplished through social equality and equity in health services is impressive. Their overall infant mortality rate of 5.7 per 1000 live births from 1983 to 1986 compares favorably with the rate of babies born to White, college-educated US couples (5.4 per 1000 live births from 1983 to 1985). Could all babies in this country—not just those born to the besteducated women—achieve the same chance of survival that all Nordic babies have in Sweden? Lessening the burden of

infant mortality on disadvantaged US populations is possible, but it will require new efforts.

In fact, we are falling further behind. As evidence, let us consider changes in postneonatal mortality. Postneonatal mortality is generally thought to be more affected than total infant mortality by health programs designed to reduce social disparities in infant health. The major causes of death in the postneonatal period include sudden infant death syndrome and infection and injuries. For babies born weighing at least 2500 g and having college-educated parents, there is no difference in postneonatal mortality between Black and White infants.12 In 1983, overall postneonatal mortality in the United States was 60% higher than in Sweden. Over the next 5 years, postneonatal mortality in Sweden declined more rapidly than in the United States; by 1988, the US rate for all infants was 71% higher than the Swedish rate.13 The impact of this widening gap between the countries must be felt most strongly among the US poor.

Reducing Poverty, Reducing Mortality

During the past century in the United States, overall infant mortality rates have improved dramatically. One hundred years ago, one in two Black babies and one in four White babies died before reaching their first birthday.1 Now fewer than 2 in 100 Black babies and 1 in 100 White babies fail to reach their first birthday.13 Much of this dramatic improvement resulted from the progressive child welfare movement inspired by Florence Kelly, Lillian Wald, and other women. They used the poverty paradigm to define infant mortality as a social problem with multiple causes. 1 Through local efforts at first and then through the federal Children's Bureau and the Sheppard-Towner Act, these women compiled empirical evidence, built community consensus, and harnessed political will to attack the child welfare problem on many fronts. They provided safe milk supplies, improved housing and eliminated environmental hazards, eliminated exploitative child labor practices, and provided parenting education. Through reducing poverty and ameliorating the effects of poverty on the poor, the progressive child welfare movement demonstrated the effectiveness of social welfare in improving individual health. Although these approaches have been muted in recent years, they still provide a powerful blue-print for public health action. We need broad-based policies to accelerate improvements in infant mortality, reduce social disparities, and reverse the ever-increasing numbers of women and children living in poverty. We also need to help those living in poverty to obtain safe housing, adequate nutrition and education, and other basic health requirements.

There are three ways that societies have attempted to uncouple poverty and health: the elimination of poverty; the provision of free, high-quality health care for all; and the elimination of high-risk behaviors (such as smoking and early childbearing) among the poor. Sweden has consistently applied the first two approaches over time and with great success. When the United States has applied the same, it has also had great success. The third method encouraging behavior changes in the poor-has been less successful in both countries, largely because interventions have been conducted without consideration of the context (including structural contributors) that gives rise to high risk behaviors. A focus on changing individuals' behavior may lead to "victim blaming." Structural problems (e.g., limited employment opportunities, lack of resources beyond basic needs, lack of public transportation) contribute adversely to individuals' assumption of responsibility for their health. Programs designed to respect cultural norms and values and to consider structural limits provide optimal support to the reduction of high risk behaviors.

An intervention that focuses on high risk behaviors among the poor also tends to blind public health professionals to individuals' strengths. For example, some public health professionals continue to insist that the excess infant mortality of Black infants is a result of their mothers' unhealthy behaviors, despite clear evidence that some risk behaviors (e.g., smoking) are less common among Black than among White women of similar social standing.14 The Swedish experience demonstrates the effectiveness of a broader approach to eliminating social differences in infant mortality associated with poverty. However, it is not applicable to issues of discrepant health states among ethnic populations: the Nordstrom study excluded Sweden's non-Nordic population. Although there are ethnic differences in Europe,15 unlike the United States these differences are not played out against a history of racism.

The Role of Racism

For US Black men and women, a widespread achievement of economic equity may not mean the end of social inequity and its health consequences. As a group, Black, college-educated couples in the United States have adequate resources to seek health care, as measured by the percentage of women who receive prenatal care in the first trimester.12 Despite the relative affluence of college-educated Black parents, from 1983 to 1985 the mortality rate among their babies was 80% higher than the Swedish rate and 90% higher than the rate among infants born to White college-educated US parents.¹² This excess mortality was primarily related to a much higher rate of death associated with premature delivery.

The primary cause of the persistently higher rate of preterm delivery among US Black women is unknown. It is but one of a number of health problems for Black mothers and infants that cannot be explained by the poverty paradigm. For example, why do babies born to Black immigrant couples have low-birthweight rates that are much lower than those of babies of native Black couples but that are similar to the rates of babies born to White couples?¹⁶ Why do Black and White babies in Cuba appear to have similarly low rates of low birthweight, despite their poverty?¹⁷ Why do Black pregnant women in Boston, St. Louis, and Mississippi have higher rates of complications precipitating preterm delivery than their White counterparts?¹⁸ Why do Black babies born in more segregated cities have higher rates of infant mortality than their Black counterparts born in less segregated cities?19

One hundred years ago in this country, Black babies were twice as likely to die as White babies; today, Black babies are twice as likely to die as White babies. During the 20th century, general efforts to improve US infant mortality have focused on programs designed for equal participation of all racial and ethnic groups. General gains for the White population may have largely blunted any political impetus for continuing efforts to improve Black infant mortality.

From as early as 1867, Black spokespersons concluded that racism was a major contributor to the poor health of Black Americans. US racism against Black people has been a potent social force in the North as well as in the South since before the Civil War. Raoul Berger writes that "the key to an understanding of the Fourteenth Amendment is that the North was shot through with Negrophobia, that the Republicans, except for a minority of extremists, were swayed by the racism that gripped their constituents rather than by abolitionist ideology."²⁰ Continuing structural racism may create barriers to adequate health care, and dealing with both structural barriers and personal racial insults may cause stress-related health problems, including pregnancy-induced hypertension among Black women.

Perhaps it is time to focus public health research on racism and its effects as the potential origin of continuing disparities in infant mortality among Black babies. This will require operational definitions of racism, as well as attention to interventions proposed by the Black community.1 After the Civil War, the Blacks' "thinking on 'the race problem' was that they must work out their own salvation in a hostile environment and that Blacks must be united in their efforts at racial elevation." This thinking led to Black community-based data collection, church-based missions, self-help groups, and community-controlled organizations with programs that addressed the community's self-judged needs. Although these efforts have been marginalized and poorly documented, they hold promise for identifying public health interventions that reduce the impact of racism on Black Americans. It is likely that the public health field's careful investigation of racism will reveal further potential methods for (1) at the societal level, reducing racism and ameliorating its ill effects, and (2) at the individual level, promoting healthy behaviors that can counteract racism's effects on its victims.

Social differences in infant mortality narrow when societies attempt to level wealth among social classes, eliminate discrimination, and erase the effects of any remaining social disadvantage through universal health care. As public health professionals, we must not lose sight of the importance of social policies designed to attain social justice, social equality, and social equity in health care. These policies are the critical points at which we need to intervene in the progression from social disadvantage to an infant's death.

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Planning Themes in the Journal: A Call for Papers

This annotation introduces a small experiment, an innovation for the Journal. For a number of the issues in each volume, our intention is to plan and announce ahead their themes (the featured topic of each issue). For this purpose, we invite potential authors among our readership to submit papers relevant to the chosen topic by a date far enough ahead to permit review and preparation (see below for topics and dates; for guidelines and submission address, see "What AJPH Authors Should Know" in each issue). In recent volumes, Journal editors have managed with growing frequency to assemble themes out of the material on hand. Readers' response has been positive.

Theme issues that have been announced in advance will certainly be more coherent if they attract the number of authors we hope for. They will also enable us to indicate the Journal's interest in neglected areas that authors may not see as high on our agenda. (In general, we suspect that authors tend to submit topics that they recognize are already the domain of a journal. The result is a self-perpetuating cycle difficult to break.)

We begin the trial by announcing three themes. The first two deadlines will have a 4-month interval. The third deadline is still to be decided. Until we get a sense of the flow of manuscripts and of the review process entailed, we shall not attempt to set exact publication dates for the theme issues, but we do expect them to be expedited to some degree. With too exiguous a flow, the featured theme may not be realizable. With too full a flow, some papers submitted and publishable may not fit into the single issue and may be deferred. The first three themes and the deadlines for submission are as follows:

Children: Societal and Individual Violence, Injury, and Abuse Submissions due April 1, 1993

Age and Aging: Epidemiology, Health Care, and General Public Health Submissions due August 1, 1993

Primary Care and Public Health Submission date to be announced