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Public policy and the socioeconomic mortality differential in infancy*

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Abstract. This paper discusses some of the findings and policy implications of a recently completed study of socioeconomic differences in infant mortality in eight metropolitan areas of Ohio at three points in time. The study revealed that, in spite of a considerable decline in the overall rate of infant mortality since 1960, the inverse socioeconomic differential remains as wide as ever. This clearly suggests that, although maternal and child health has improved overall, the lower economic groups in our society still do not have equal access either to health care or to other amenities essential to the maintenance of good health. Moreover, consideration of recent and current policy proposals with respect to welfare programs in general, and maternal and child health care programs in particular, leads to the conclusion that this situation is not likely to change in the near future. Finally, some policy recommendations for enhancing the health status of low-income families are offered.

Introduction

Research has established that the infant mortality rate is one of our most sensitive indicators of differences in economic status and the standard of living of both national populations (Hauser, 1959; Stockwell, 1960; Yang and Pendleton, 1980) and the various subgroups within a single population. In the United States, for example, the existence of a general inverse association between infant mortality and socioeconomic status has been documented by studies based on individual level data (Shapiro et al., 1968; Shah and Abbey, 1971; Bendor et al., 1971; McMahon et al., 1972; Gortmaker, 1979; Bertoli et al., 1984; Wise et al., 1985), as well as by studies using the ecological approach (Markides and Barnes, 1977; Adamchak, 1979; Brooks, 1980; Stockwell and Wicks, 1981; Markides and McFarland, 1982; Wicks and Stockwell, 1984; Stockwell et al., 1986).

At the same time that research has documented the persistence of a general inverse differential, a number of studies have revealed that the precise nature

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and magnitude of the association between infant mortality and socioeconomic status is not stable but can vary over time (Antonovsky, 1967; Kitagawa and Hauser, 1973; Stockwell and Wicks, 1981). Such observations emphasize the need for continuous research to monitor any changes that may be occurring in this fundamental relationship so that the relevant social agencies, public as well as private, can adjust and plan their programs accordingly.

The present paper has a dual purpose. In the first section we present some results of a recently completed study of the association between infant mortality and socioeconomic status in metropolitan Ohio at three points in time. In the second section we examine current trends in public policy that have implications for the socioeconomic mortality differential.

I. Socioeconomic status and infant mortality

The Ohio study

The general design of the research reported here was an ecological one in which the primary analytical unit was the census tract of mother's usual residence. The independent variable is defined as the percentage of *low-income families* in each census tract at the time of the decennial censuses of 1960, 1970, and 1980. The low-income cut-off points, which were defined as roughly 50 percent of the median family income, were \$3,000 in 1960, \$5,000 in 1970, and \$10,000 in 1980. The dependent variable data consist of counts of the number of live births in each census tract during the census years and counts of the number of infant deaths in the three years centering on each census date. The analysis first used the income variable to aggregate the census tracts of the Ohio cities studied into five broad groups in such a way that, for each time period, approximately 20 percent of the tracts fell into each area. The resulting aggregates were then ranked and compared in terms of levels of infant mortality – total, neonatal and postneonatal.¹ These comparisons were carried out separately for the total, white and nonwhite segments of the population, generally by sex, and for broad cause-of-death categories. Two sets of comparisons were made: one based on a three-city aggregate for which comparable data were available for three points in time (1959–61, 1969–71, and 1979–81) and one based on an eight-city aggregate which permitted a more detailed analysis by broad cause-of-death categories for the most recent 1979–81 period.

General findings

The infant mortality rates in the five income areas for the three time periods covered by our data are presented in Table 1. These rates, which are based on pooled birth and death data from the several tracts comprising each aggregate, reveal that, in 1960, there was a very strong consistent inverse association between infant mortality and family income status: The infant mortality rate increased monotonically in near linear fashion from a low of 17.7 per 1,000 in Area I to 34.9 in Area V (a difference of nearly 100 percent), with the rate for the middle Area III being virtually the same as that characterizing all areas combined.

By 1970, perhaps reflecting the expansion of maternal and child health care facilities during the 1960s, the inverse nature of the association between infant mortality and area income status in Ohio had become less consistent. Although the difference between the highest- and lowest-income areas was slightly greater than it had been a decade earlier (e.g., the ratio of the infant mortality rate of Area V to that of Area I increased from 2.0 in 1960 to 2.5 in 1970), the infant mortality rates of the three middle areas tended to converge around the rate for all areas combined. These findings are fairly consistent with those of a number of existing studies at the time which showed that, in spite of a convergence among the higher-status levels, the lowest socio-economic group continued to be characterized by a substantially higher infant mortality rate than the general population (Antonovsky, 1967; MacMahon et al., 1972; Kitagawa and Hauser, 1973; Antonovsky and Bernstein, 1977; Markides and McFarland, 1982). This pattern clearly implies that various programs established to enhance the quantity and quality of maternal and infant health care had not been as successful in reaching the most needy members of the society. For example, in contrast to a 36 percent decline in infant mortality in Area I between 1960 and 1970, the corresponding decline in Area V was only 18 percent, or half as great as that which occurred in the highest income area.

Table 1. Infant mortality rates for income areas in 3-city aggregate: Ohio, 1960, 1970 and 1980.*

Income areas	1960	1970	1980
All areas	25.6	19.3	14.3
I	17.7	11.4	8.8
II	21.6	19.3	10.1
III	25.7	18.9	14.2
IV	31.7	21.4	16.8
V	34.9	28.7	19.9

As of 1980, the “blurring” tendency that had emerged in 1970 had disappeared, and once again there was a strong and consistent inverse association between infant mortality and socioeconomic status across all five status levels. Although all areas had experienced mortality declines, the pattern that emerged in 1980 was much like the one that had prevailed in 1960: The infant mortality rate rose steadily from 8.8 in Area I to 19.9 in Area V (a difference of 126 percent), with the rate for the middle area being nearly identical to that for all areas combined. This most recent trend (the eradication of the blurring observed in 1970 and a return to a pronounced and consistent inverse relationship) may be due to the deterioration of the U.S. economy in the late 1970s and may reflect an associated decline in the relative standard of living of the lower middle-class population. Whatever the reason, it is clear that, despite marked declines in infant mortality at all income levels since 1960, the nature and magnitude of the pronounced socioeconomic differential in infant mortality is generally the same in 1980 as it was 20 years earlier.

Neonatal mortality trends

To understand infant mortality trends and differentials in the United States today, one must focus primarily on neonatal mortality, or deaths during the first 28 days of life. Paralleling the national trend, which reflects both advances in hospital-based perinatal care programs (McCormick, 1985) and the legalization of abortion, especially for blacks (Grossman, 1984/85), the findings of the present study show that the proportion of infant deaths occurring in the neonatal period has declined considerably in recent years – down from roughly three-fourths in 1970 to less than 65 percent in the early 1980s (Table 2). Moreover, the data also show that the magnitude of the neonatal fraction is directly associated with economic status: As the overall economic status of residential areas goes down, the proportion of neonatal deaths declines. However, these findings should not be interpreted as signifying that those programs that have contributed to the overall decline in neonatal mortality have had a greater success among the lower income groups. Rather, the smaller neonatal fraction in the low-income areas simply means that these areas experience a disproportionately greater incidence of death at the post-neonatal ages due to causes, generally seen as more amenable to social control, that are associated with unfavorable characteristics of the external environment, such as poor and overcrowded housing, lack of sanitation, and nutritionally inadequate diets.

In the past, infectious diseases and postneonatal mortality played such a dominant role in contributing to the socioeconomic differential that some experts speculated that continued progress in controlling environmentally-

related (exogenous) infectious diseases would lead to an ever-increasing proportion of neonatal infant deaths attributed to "non-infectious" (endogenous) causes and, further, that this trend might be accompanied by a gradual disappearance of the socioeconomic differential (Stockwell, 1962). However, this has not happened. Rather, increasing control over infectious diseases and the resulting decline in postneonatal mortality, along with the accompanying shift to dominance of neonatal mortality, has revealed the increased importance of a variable that, at an earlier time, contributed very little to overall infant mortality, namely, low birth weight (McCormick, 1985). It is now well established that low birth weight is a major cause of neonatal mortality (Shah and Abbey, 1971; Thind, 1979; McCormick, 1985). Perhaps more important, it is equally well established that low birth weight is largely a function of social factors, such as the frequency of prenatal visits, mother's weight, smoking, drug use, inadequate hygiene, and poor nutrition (Thind, 1979; Horon, et al., 1983; Zuckerman, et al., 1983). Thus, the major determinant of neonatal mortality today, low birth weight, is seen to be closely associated with exogenous variables that, as in the case of environmentally-related infectious causes of postneonatal deaths, should be subject to societal control. Therefore, the persistence of a socioeconomic differential in neonatal mortality rates indicates that there is a similar differential with respect to the incidence of low birth weight babies.²

Although detailed tables are not presented here (for reasons of space

Table 2. Neonatal and postneonatal mortality rates for income areas in 3-city aggregate: Ohio, 1960, 1970 and 1980

Income areas	1960	1970	1980
<i>Neonatal mortality rates</i>			
All areas	19.6	14.4	8.6
I	14.2	9.5	5.4
II	17.5	14.8	7.4
III	19.3	14.1	7.7
IV	23.4	15.6	10.7
V	25.6	20.2	11.3
<i>Postneonatal mortality rates</i>			
All areas	6.0	4.9	5.5
I	3.5	2.0	3.4
II	4.1	4.4	2.7
III	6.4	4.7	6.5
IV	8.0	5.9	6.1
V	9.4	8.6	8.6

conservation), the same general conclusion is applicable for all major subgroups in the population: The traditional inverse association between infant mortality and family income status in 1980 is as strong as it was in 1960, if not stronger, and it characterizes both the neonatal and postneonatal components of infant mortality for all sex-color classes.³

Cause-specific findings

To explore more fully some of the age-cause relationships and related trends discussed in the preceding section, the pattern with respect to broad cause-of-death categories was examined. This section of the analysis utilized the larger eight-city aggregate described earlier and grouped infant deaths into the two conventional broad categories of causes: *exogenous* causes, or those whose origin is located in the external environment (e.g., pneumonia, infectious and parasitic diseases, accidents), and *endogenous* causes, or those most directly associated with the physiological processes of gestation and birth (e.g., congenital anomalies, birth injury, immaturity, and low birth weight). Infant mortality rates based on these two cause groupings are presented in Table 3. Inspection of these rates reveals that the previously described general pattern of the basic association with economic status is characteristic of both exogenous and endogenous causes of death. Furthermore, although space considerations again limit the presentation of all data, this general conclusion is applicable to all race-sex subgroups.

At one time, it was common place to explain the relationship between economic status and infant mortality in terms of economic variations in the incidence of environmentally related exogenous causes of death, particularly infectious diseases, and of a pronounced differential with respect to postneonatal mortality (Stockwell, 1962). Today, however, where roughly two thirds of all infant deaths occur in the neonatal period, and where only a small minority of all deaths can be attributed to exogenous causes (14 percent in the present study), such an explanation is inadequate. In order to explain the socioeconomic differential today one must focus on endogenous causes of death. Although there is a clear and pronounced inverse association between income levels and the minority of deaths due to exogenous causes, by far the greatest influence is exerted by endogenous conditions, which include the major causes of death at *both* the neonatal and postneonatal ages and that bear a strong inverse association to income status for both segments of infant mortality.

Although both the exogenous and endogenous cause-specific death rates are inversely related to income status, the two similar patterns have markedly different underlying causes and, therefore, represent markedly different pub-

lic health problems. On the one hand, the persistence of a wide exogenous disease differential indicates that developments relating to such things as environmental sanitation, improved housing, child immunization programs, and advances in chemotherapy – all of which enhance our ability to prevent and cure infectious conditions – have not diffused sufficiently to provide equitable benefits for the more economically disadvantaged members of the society. On the other hand, the strong inverse relationship between income status and mortality from the major endogenous causes (many of which are associated with low birth weight) reveals that the lower economic status

*Table 3. Infant mortality rates, by exogenous and endogenous causes, for income areas in 8-city aggregate: Ohio, 1980**

Income areas	Infant mortality rates		
	All causes	Exogenous causes ^a	Endogenous causes ^b
<i>Total</i>			
All areas	16.6	2.3	14.3
I	8.9	0.7	8.2
II	14.3	1.9	12.3
III	16.4	1.9	14.5
IV	19.7	2.9	16.8
V	24.3	4.1	20.2
<i>Neonatal</i>			
All areas	10.6	0.7	9.9
I	6.3	0.3	5.9
II	9.2	0.6	8.6
III	10.8	0.6	10.2
IV	12.6	0.7	11.9
V	14.4	1.2	13.2
<i>Postneonatal</i>			
All areas	6.0	1.6	4.4
I	2.6	0.3	2.3
II	5.1	1.3	3.8
III	5.6	1.3	4.3
IV	7.1	2.2	5.0
V	9.9	2.9	7.0

* Akron, Cincinnati, Cleveland, Columbus, Dayton, Lima, Toledo and Youngstown

(a) Ninth International List Codes 001–139, 320–323, 460–466, 480–487, 500–508, 771, and 800–999.

(b) Includes all causes not classified as exogenous.

groups are more likely to be characterized by harmful behavioral patterns, such as nutritionally inadequate diets, higher rates of smoking and other drug use, childbearing at a younger age, and other correlates of low birth weight that are not so often characteristic of more affluent members of the society.

Discussion of findings

Two significant conclusions are suggested by our findings. First, all socioeconomic groups have experienced major reductions in infant mortality due to progress in preventing and treating various diseases. Second, despite truly remarkable success in reducing mortality levels for all classes, little progress has been made in closing the mortality gaps that separate the different socioeconomic groups in society. The continued persistence over time of a marked and relatively constant socioeconomic mortality differential in infancy is a powerful example of a profound inequality in a nation that has long prided itself on being an equal opportunity society. Developing policies and implementing programs to achieve a narrowing of this differential poses a major challenge for professionals in the field of maternal and child health care.

Efforts to meet this challenge must be guided by the knowledge that a wide variety of factors associated with low socioeconomic status contribute to class differences in mortality and that each of these factors will require very different kinds of programs to bring them under control. In the past, major control efforts focused on factors that exerted a *direct* influence on the survival chances of infants (e.g., nutritional adequacy of their diet; quality of housing, water, and home sanitation facilities; and immunization status). The influence of these factors, which operate through exogenous causes (such as parasitic diseases and respiratory infections), has been brought fairly well under control by various public health programs, and what were once the major killers of infants and young children now account for a very small fraction of the total deaths under 1 year of age. Nevertheless, the fact that exogenous disease death rates continue to vary inversely with economic status indicates that progress made in the prevention and treatment of these diseases has not benefited all groups equally and that we need to continue – and even step up – activities to extend the full benefits of past advances in medical knowledge and health care practices to the more economically deprived segments of the population.

By far the biggest challenge today, however, concerns the endogenous conditions, which account for roughly four fifths of all infant deaths. These causes, which traditionally have been regarded as less amenable to societal control, reflect such things as social class differences in reproductive behavior (age at childbearing, length of interval between pregnancies), differences in the amount and quality of prenatal care (timing of first prenatal examination,

frequency of visits), and other maternal characteristics, such as adequacy of diet during pregnancy, amount of weight gain, smoking habits, and the use of drugs and/or alcohol. These are factors that generally have an *indirect* impact on infant mortality through their influence on pregnancy outcome, particularly on birth weight. The major policy goal here, therefore, should be one of preventing low birth weights, and recent evidence suggests that efforts to prevent low birth weight need to get away from simply providing more and better prenatal care services and concentrate on enhancing the overall quality of life of low-income mothers (Wise et al., 1985).⁴ Although this may be viewed more as general social and economic policy rather than specific maternal and child health policy, the fact is that efforts to increase access to hospital-based prenatal services have not had much effect on reducing the proportion of low birth weight infants (McCormick, 1985); neither are they likely to have such an effect as long as profound socioeconomic inequities persist. In this respect, we suggest the need for a major reconceptualization of poverty and related welfare policies in our society.

II. Present concepts and related policy trends

During the nineteenth century, poor people were referred to as paupers and thought of as lazy, incompetent, and responsible for their own poverty. Supported by the writings of Spencer and other social Darwinists, public attitudes toward the poor were based on the belief that the poor could find work if they really wanted it. From this blame-the-victim perspective, government policy was shaped such that it made aid to the poor as disagreeable and difficult to obtain as possible in order to discourage dependence (Joe and Rogers, 1985:15). However, applying this "pauper" model to programs that aid women and children is inappropriate. It also reveals a deeper inequity than simply social Darwinism, that is, the assumption that childbearing and childrearing are not really "work" and that impoverished women and children are not among the "deserving poor" (Folbre, 1985:24). Reflecting this conceptualization, many national policy decisions in recent years have had a major adverse impact on welfare programs in general and on maternal and infant care programs in particular.

Recent policy trends

The major component of our welfare system, Aid to Families with Dependent Children (AFDC), remains the only federal cash-assistance program that is *not* indexed to keep pace with inflation. Indeed, according to the House

Committee on Ways and Means, AFDC benefit levels have been seriously devalued by inflation; for example, between 1975 and 1983 the real value of median state monthly benefits declined by 24 percent (U.S. House of Representatives, 1984). Moreover, since 1981, repeated reductions in social programs aimed at ameliorating poverty have exacerbated this situation further. In fiscal years 1982 and 1983 alone, 365,000 families were dropped from the AFDC rolls, and benefits were reduced for another 260,000 families. Loss of AFDC eligibility usually means loss of Medicaid coverage as well (Stallard, et al., 1983; Joe & Rogers, 1985; Kessel, 1985).

In addition to cuts in AFDC, the Comprehensive Employment and Training Act (CETA), was terminated altogether. CETA employed 300,000 low-income persons, 60 percent of whom were women (Stallard, et al., 1983). Subsidized housing also was reduced by one third, and there were substantial reductions in child nutrition programs, particularly in the school lunch programs, that affected 3 million poor children. Finally, in 1982 and 1983 the federal Food Stamp program was cut by \$5 billion.

In addition to reductions in general welfare programs, major cuts have been made in programs specifically related to maternal and infant health. In 1982, for example, the Women, Infant, and Child (WIC) nutrition program, which provides nutritional supplements to women with high-risk pregnancies before and after the birth of their children, was cut by \$24 million. Further expansion of the WIC program, which now reaches only one third of those who are eligible and in need, also has been curtailed (OMB Watch, 1986). Failure to fund these programs adequately could have a serious detrimental impact on infant mortality levels among those affected. In the Boston study cited earlier, for example, Wise et al., (1985) concluded that the real reason for differences in infant mortality is not so much the availability of, and access to, hospital-based services as it is the existence of other profound inequities, such as inadequate nutrition, that are major corollaries of poverty.

It is worth noting that the United States is the only industrialized Western nation that does not provide both national health insurance and maternity leave policies that guarantee medical care, seniority, and pension rights to working women who become pregnant (Cook, 1978). Quality child care for all working mothers remains a serious policy dilemma in general, but a particularly difficult problem for impoverished women, and it has led at least one scholar to describe the effects of U.S. public policy on maternal and child well-being as leading to "the pauperization of motherhood" (Folbre, 1985).

Current proposals and their implications

As noted in Section I above, the inverse socioeconomic differential in infant

mortality widened during the 1970s, probably as a result of the worsening economic climate of the time. Moreover, perhaps reflecting recent policy trends, indirect evidence suggests that the differential may have widened more since 1980. In the nation as a whole, for example, there has been a definite slowing down in the rate of decline in infant mortality for all persons in recent years, most noticeably for the black population. The result has been a slight widening of the infant mortality gap between whites and blacks; that is, the 1982 black infant mortality rate was 93 percent greater than that of the white population, but by 1984 this difference had risen to 111 percent.

Furthermore, it is entirely possible that the differential could widen even more during the last half of the 1980 decade, especially if legislative and budget proposals for fiscal year 1987 are enacted. Many of these proposals call for further cuts in programs that benefit poor women and children. Workfare (work in exchange for welfare checks) is proposed for all employable AFDC and Food Stamp recipients, and the Food Stamp program will be reduced. Further reductions in the cash and commodity subsidies for meals under the School Lunch, School Breakfast, and Child Care Food Program also are called for, and the Special Milk Program will be eliminated entirely (OMB Watch, 1986).

The Head Start Program would lose \$10 million under President Reagan's proposed budget for Fiscal Year 1987. Family Planning programs and Migrant Health programs would be terminated and "folded" into the existing primary care health block grant, which is scheduled for a \$7.4 million cut. Indian Health Services is targeted for a 12 percent reduction in funding and a termination of long-term activities, such as sanitation construction, community outreach, and counseling. Child abuse programs would be terminated and replaced with smaller "Family Crisis-Protective Service" state grants—essentially representing a 24 percent cut in funding—and child welfare services and training would be frozen at fiscal year 1986 levels (OMB Watch, 1986:27–28).

The President also has called for a \$1.3 billion cut in Medicaid and provisions that would give states greater freedom to switch or abolish health services. A proposed freeze on the federal share of state administrative costs of Medicaid at 50 percent would have the effect of cutting that program by another \$200 million. The budget proposes that Title XX Social Services be maintained but that states fund the Community Services portion, which totalled \$370 million in Fiscal Year 1986. A 4 percent increase in the WIC program has been proposed, but rather than extend services to eligible women on the long waiting lists for nutritional supplements, states would target their limited resources on those at greatest risk only.

Although infant mortality, particularly its postneonatal component, is especially high among populations that have substandard housing and poor sanitation (Miller, 1985), low-income housing assistance has been targeted for

massive cuts, several pollution control programs face termination, and sewage treatment grants and loans are to be phased out. Energy assistance for low-income households will be frozen at the 1986 level. These reductions can only be expected to bring about a further deterioration of living conditions for poor families. Substantial cutbacks in funding for transportation also have been proposed, which would reduce access to needed services for those who rely on public transportation (OMB Watch, 1986).

According to Miller (1985), senior officials of the Department of Health and Human Services (DHHS) deny any connection between the slowdown in the decline of infant mortality rate and the administration's reductions in programs for children, mothers of young children, and pregnant women. Instead, DHHS officials cite such factors as the high rate of teen pregnancy, and the use of tobacco, alcohol, and drugs by many pregnant women. Although these factors are known to be associated with increased rates of infant mortality, this is not a sufficient explanation for either the slowdown in the decline of infant mortality or the strong and consistent inverse association between infant mortality and socioeconomic status noted in Section I.

In fact, teen pregnancy has declined substantially since 1970 and is predicted to continue declining, even among very young teens who are at greatest risk for problem pregnancies and births. For example, in 1970, there were 11,752 births to women under age 15. In 1980, that figure dropped to 10,169, and in 1983 it declined even further to 9,752. A similar decline was seen in births to the 15 to 17 age group. In 1970, there were 223,590 births to women in that age group. By 1980, that figure had dropped to 198,222, and by 1983 it had declined to 172,673. Furthermore, the overall birth rate for women under 20 has been declining steadily from 356 births per 1,000 women ages 14 to 19 in 1970 to only 256 per 1,000 in 1983, an overall decline of 28 percent (Adolescent Pregnancy and Childbearing, 1985).

Even if the slowdown in the decline in infant mortality *was* due to teen pregnancy, and to the use of tobacco, alcohol, and drugs, we must question recent reductions in many programs designed to ameliorate these risk factors, as well as the targeting of those and related programs for further reductions in the proposed 1987 budget (OMB Watch, 1986). For example, research indicates that, for most young adolescents, pregnancies are unplanned and/or unwanted (Adolescent Pregnancy and Childbearing, 1985), yet family planning programs aimed at preventing unwanted pregnancies have been cut by \$40 million since 1981, and the President committed himself (publicly in his 1986 State of the Union address) to make abortion illegal before he leaves office. Given that legalized abortion has been found to be the single most important factor in reducing neonatal mortality and that family planning services have been found to be the second most important factor (Miller, 1985), the administration's actions seem to contradict its statement that teen

pregnancy is one of the primary causes of a slowdown in the decline of infant mortality rates. Similarly, if the use of tobacco, alcohol, and drugs by pregnant women truly is of concern, then one should question why the Smoking and Health Program has been cut by \$9 million since 1980, why the Alcohol Abuse Program is targeted for a \$1.2 million cut in fiscal year 1987, and why the Drug Abuse Program faces an \$8.6 million cut (OMB Watch, 1986).

Some policy recommendations

All societies, past and present, have developed systems for ensuring that young people and other vulnerable members of society receive some sort of care and nurture. However, the nature of such systems varies considerably over time and from one society to another. Indeed, it is such variation that largely accounts for variations in morbidity and mortality, both between and within societies. Evidence of the inverse association between infant mortality and socioeconomic status juxtaposed with proposals for additional cuts in programs for poor women has important implications for public policy debates and the future of infant mortality. From existing data, one could predict that a further slowdown in the decline of infant mortality rates is likely. Several recent policy suggestions would help to avoid this, however, and could contribute to a narrowing of the inverse socioeconomic differential that adversely affects maternal and child health and, therefore, infant mortality in the United States.

First, we must reaffirm our national commitment to equal opportunity and affirmative action programs for women if we are to reverse the current trend toward the feminization of poverty (Stallard, et al., 1983). Better enforcement of existing nondiscrimination and pay equity laws would reduce significantly the dependence of poor families, particularly female-headed families, on AFDC, food stamps, and Medicaid. Active enforcement of child support laws and adequate child support payments also would reduce considerably both poverty and welfare dependency (Corcoran et al., 1984).

In a lengthy resolution expressing concern over recent infant mortality trends and the persistence of long-standing socioeconomic and racial differentials, the American Public Health Association recently recommended that states remove existing barriers and enhance access to several maternal and child health programs, such as Medicaid and the WIC Supplemental Food Program; it also recommended that state legislatures either create or augment public health home nursing programs for mothers and infants in high social or medical risk categories (APHA, 1985).

National health insurance, which would guarantee all women access to quality prenatal and postnatal care, also has been called for, as has a solid

commitment by both government and industry to the provision of quality, affordable child care for working mothers. For those women remaining on welfare, the indexing of AFDC benefits to keep pace with inflation seems to be a necessity, as does the restoration of funding to programs for the needy, particularly those that are directly related to maternal and child health (Joe & Rogers, 1985). Adequate funding of the Family Planning Program and subsidized abortions for low-income women also should be restored to prevent unplanned and unwanted pregnancies.⁵

To continue to ignore the impact of poverty on maternal and child health is to deny that the future of our country depends upon the health and well-being of the nation's children. Our ultimate goal must be to create public policy that embodies an ethic of care and that affirms a national commitment to provide increased opportunities for poor women in the short term and to eradicate poverty entirely in the long term (Joe & Rogers, 1985). Otherwise, our public policy will be inconsistent with the fundamental premises of a democratic society and will contradict the massive body of research knowledge we have accumulated on the relationship between poverty and infant mortality.

Conclusions

In spite of significant progress in maternal and infant health care and associated substantial declines in the overall level of infant mortality in the United States since 1960, the data presented in this paper point to the existence of a strong and persistent inverse association between economic status and the probability that a new born infant will not survive the first year of life. Although there were occasional exceptions to the rule and/or varying degrees of deviation from the general pattern for specific subgroups in the population, the overriding conclusion to be derived from the research reported here is that groups in lower income areas of society have long been and continue to be characterized by infant mortality rates that are substantially above those in higher income areas.

The fact that infant mortality rates have declined at all income levels indicates that the benefits of new and/or improved infant health care programs do reach all segments of the population eventually. However, the persistence of such a strong inverse association between infant mortality and income status also indicates the existence of a social class differential in access to health care services and facilities; that is, the first to benefit from advances in medical technology and other health care improvements are those in the highest income areas, and only gradually do the fruits of such progress filter down to the groups in economically deprived areas. Such a situation reflects what can only be characterized as an elitist approach to the delivery of health care in the

United States. In a nation where we like to think that adequate health care is a basic right for all citizens, not just an expensive privilege for those who can afford it, such a situation must be viewed as a major social problem.

Notes

1. It should be noted that the census tracts included in each year's test are independent over time. Thus, although there is a fairly high degree of consistency, especially among the lower status groups, the tract composition of the several income aggregates is not constant from one census to another. This is not only because of changes over time in the economic characteristics of tract populations, but also because of changes in the definition of some tract boundaries.
2. Data generated during the course of the present study show, for example, that the percentage of low birth weight babies in Ohio in 1980 rose from a low of 4 percent among college educated women to 11 percent among women with less than a high school education. See also McCormick et al. (1983) and Wise et al. (1985).
3. A copy of the larger report on which this paper is based, and which contains more detailed data and analyses, may be obtained by writing directly to the senior author c/o The Department of Sociology at Bowling Green State University, Bowling Green, OH 43403.
4. It should be noted that a major factor behind recent declines in neonatal mortality among low socioeconomic status groups, particularly for the black population, has been the legalization of abortion (Grossman, 1984/85). If efforts to reverse the 1973 Supreme Court decision governing legal abortion are successful, neonatal mortality could increase significantly among these groups, leading to an even wider socioeconomic differential.
5. Between the time this article was written and the date of publication, it is possible that specific programs targeted for cuts could disappear entirely or that funding could be restored in one or more areas. What is significant, however, is the *direction* of policy changes under the current administration and the *implications* of this trend for infant mortality. Therefore, the specific programs and cuts proposed should be regarded as *examples* of a major shift in public policy and not as a definitive analysis of the entire policy picture. As this article is going to press, early analyses of the FY 88 presidential budget proposals indicate still further drastic cuts in programs that benefit impoverished families, women and children in particular.¹ Some examples of domestic program cuts proposed for FY 88 when adjusted for inflation are: Special Milk Program (-89%); Child Nutrition (-14%); AFDC (-11%); Child Support Enforcement (-76%); Health Care Services (-11%); Indian Health Facilities (-31%); Alcohol, Drug Abuse, and Mental Health (-13%); Low-Income Energy Assistance (-32%); Work Incentive Program (-90%); Family Social Services (-19%); Community Services Block Grant (-14%); WIC Supplemental Food Program (-4%); Medicaid (-3%); and Food Stamps (-6%) (OMB Watch, 1987:3, A-1, A-2).

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