POVERTY THEORY AND NATIONAL HEALTH INSURANCE

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INTRODUCTION

National Health insurance programs have been debated in this country for decades (Coe, 1970, p. 357). Public policy research can contribute to the debate by estimating the changes in Americans' health that will result from such a program. We will outline three theories of poverty that offer ideas about the relationships between poverty and ill-health. Some gains could flow from a national health insurance program. In 1974, several proposals to enact a national health insurance program were debated seriously in Congress (*Time*, 1974: 741-2; Kotelchuck and Bodenheimer, 1974: 26; Rivlin, 1974: 8-9). Then national health insurance assumed a much lower priority on the national agenda. It has repeatedly resurfaced as an issue, but there is no likelihood that the present government will institute such a program since President Reagan opposes it and is reducing social services.

POVERTY CULTURE THEORY

This theory suggests that poor people develop a set of attitudes and behaviors that are adaptive for living in poverty, that prevent escape from poverty. The attitudes and behaviors supposedly include, among others, inability to defer gratification, the use of violence to settle disputes, fatalism, and matriarchal families. Poor people use violence to settle disputes, the theory says, because they have no other means; this behavior leads to an arrest and conviction record, which in turn makes getting a good job very difficult. The theory claims that the behaviors and attitudes are passed from one generation to the next, thus trapping children in their parents' poverty. The social policies the theory gives rise to include attempts to change the attitudes and some of the behaviors of the poor, particularly the attitudes and behaviors of poor children — because adults are presumably so completely socialized that they cannot change. The federal government's Head Start program is an example of such a policy.

The theory is especially associated with Oscar Lewis, a cultural anthropologist who extensively documented the plight of poor people (Lewis, 1966). Subsequently, Lewis' version of the theory was expanded and elaborated by a number of other writers, but the theory became vulnerable. On one level, the theory tended to become a condescending version of lower-class life concocted by upper-middle-class people, and used by the latter to justify palliative measures that often created quite a few jobs for upper-middle-class and middle-class professional care-workers. On another level, when deductions from the theory were put to empirical test, they often failed, suggesting that the theory has serious limitations (Vanfossen, 1979: 357-365).

SITUATION THEORY

This theory denies that the poor have attitudes fundamentally different from those of other classes. It denies that the children of the poor are doomed irrevocably to poverty because of their socialization to a particular set of attitudes and behaviors. Instead, it claims that poverty compels people to act differently than they would if they held stable middle-class status. For example, the poor may neglect their own ill-health because they don't have the money to pay for good care, and they don't have the middle-class jobs that almost always include extensive medical insurance as a fringe benefit. This theory would deny the types of predictions one would make using a culture of poverty perspective, namely that the poor have been deeply socialized to use inexpensive but ineffectual home remedies, or have been deeply socialized to rely on amateur but untrained and unlicensed health care workers. Instead, the situational theory would predict that poor people will readily turn away from home remedies and amateur health care workers when they have a better choice.

The situational theory tends to be optimistic. It suggests that poverty can be temporary, and can be alleviated if a nation commits itself to a full-employment economy and to educational opportunity for all. The reasoning is that if a person gets an adequate education and obtains a steady job, the security the person has then found will readily enable him to cast aside one set of behaviors (of the poor) and take up another (of the middle-class). It provided the rationale of many of the federally funded social programs of the 1960's.

This theory cannot explain very well what the culture of poverty theory at least tries to understand: the persistence of poverty for generations among a good-sized fraction of the poor. Second, it overlooks the fact that many of

the poor are elderly or are in single-parent families. Educational opportunities or employment changes are unlikely.

STRUCTURAL THEORY

This theory derives from Marx' analysis of society, and from conflict theory. It claims that poverty is inevitable in capitalist societies. According to the theory, the higher classes try to sieze and control all the wealth and power that they can, in part because inherent problems of capitalist economies force the upper classes to make vast reinvestments in their enterprises. It points out a variety of ways in which the very existence of a large number of impoverished people serves the interests of the higher classes. For example, the poor perform undesirable jobs, consume unwanted (second-hand) goods, and provide the psychological benefit of allowing others to feel smug and satisfied with themselves.

Two predictions can be made on the basis of this theory. 1) there will generally be a mass of people too poor to afford adequate health care: 2) the greater amount of ill-health suffered by the poor as a result of neglect will help to lock them into poverty, by making it harder for them to retain jobs.

The structural theory of poverty overlooks some of the evidence detailing what gains the poor have made in the post-war era. It also offers few policy recommendations and less hope. It often condemns the social welfare measures such as housing subsidies, job training programs that poor people willingly and gladly accept. It suggests only major reconstruction of the society, at some vague point in the future. This is no comfort to the elderly retiree eking by on a low social security pension.

Dutton (1978) tries to weigh the relative explanatory power of some of these theories. She tries to understand causes of the *use* of health-care facilities, and points out that many studies have tried to explain use of health-care facilities from a culture of poverty perspective. Still other studies have tried to test the idea that lack of financial coverage explains differential use rates. This idea is probably closest to the situational theory of poverty. The notion is to have the government provide health insurance. Dutton's own argument is that, even taken together, these two approaches do not fully explain differentials in health care use. She prefers an explanation that combines the factors already mentioned with a third: the organizational nature of the health care services. This third factor reflects in part the situational

theory and in part the structural theory of poverty. Dutton notes that the entire system for delivering health care to the poor is different from and inferior to those which deliver health care to other classes.

One solution has been to measure the amount of time that person's activities are limited because of ill-health; this time is often termed restricted activity days. Aday's research (1976) exemplifies this; she used this measure as an indicator of need for medical services. Aday has shown, as would be expected, that persons with health insurance coverage, of whatever kind, see a doctor more frequently in terms of their need than do those persons who lack coverage. Second, Aday showed that lack of a regular "contact" with the health care delivery system disadvantages people, whether they have insurance or not.

THE DATA

A second solution taken here, is to examine aggregated data: Morbidity and mortality rates for large groups of the population. Disease and early death can often be avoided if a person can get timely and adequate medical care. Persons with health insurance are much more likely to receive early and full care than pesons who lack such coverage.

Data on the dependent variable, namely, the crude death rate, were provided by the Department of Health of the City of Detroit (New Detroit, Inc., 1974). The department collected information from private physicians and from public health sources on mortality and causes of mortality within the city, and calculated crude death rates for these phenomena for each of sixteen census areas within the city. Errors of reporting, were probably not serious enough to discredit our estimates. The census areas varied in population size from 62,000 to 190,000.

From the Michigan Health Survey (Michigan Department of Health, 1972), we were able to determine the proportion of people in each census area of Detroit covered by various forms of health insurance. We used this information to construct a key variable: proportion of people in an area covered by all forms of health insurance, including both Medicare and Medicaid.

Finally, from census date (Detroit City Plan Commission Research Division, 1970), we calculated the median income, racial composition, and a measure of the age structure of each census area. The measure of race is simply proportion non-white. For Detroit, this largely means proportion Black.

CAVEATS

1) The data come from a large and heterogeneous city, but unfortunately are not based on a national sample, so inferences to the entire nation do not rest on a firm statistical foundation. 2) For a more fine-grained analysis, a smaller unit than the census area would have been desirable. Unfortunately, the available data did not permit this. In some of our regressions, we pushed the limits of the technique by running equations with three or four independent variables for a relatively small number of cases. 3) Because we are dealing with aggregated data, we need to emphasize that the seemingly large size of some of the coefficients we report is artifactual, because of the ecologicial analysis we are doing. We caution readers here, as well as in the analysis section, that the analysis consists of relationships on an areal, not an individual, level.

THE MODEL

Figure 1 presents a model of the variables used in this analysis. The rationale and hypotheses follow.

We began with the hypothesis that health insurance coverage and mortality rates should be negatively related. Operationally, this meant the higher the proportion of people having health insurance coverage in a census area, the lower would be the death rate. 1) Persons with health insurance should simply be more likely to obtain medical treatment for illness, because such treatment is more affordable for them than for those lacking coverage. 2) Such persons may also be more likely to get early or prompt treatment, in part because they can afford it.

We added to the model three other variables; the first of these was income. Until the advent of Medicare and Medicaid, it was likely that the higher the income a person had, the more likely he would be to have health insurance coverage, because he could afford it more readily, and because, in recent decades, almost all middle and upper status occupations include some health insurance coverage as a fringe benefit.

It is important today to explore the effect of income. Advocates of Medicare and Medicaid often state that the people who lack health insurance do so primarily because of poverty. However, if income and *private forms* of health insurance are not extremely strongly related, then there are some middle and upper-income Americans who do not have health insurance. Medicare and Medicaid, under this possibility, would not solve the problem of extending

FIGURE 1: PATH DIAGRAM FOR EFFECTS ON CRUDE DEATH RATE
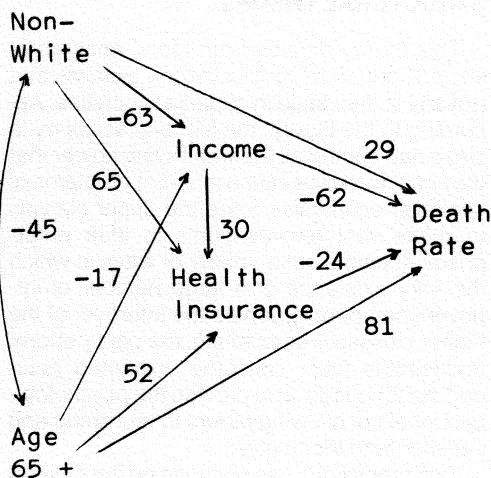(2 decimal places)

TABLE 1: DESCRIPTIVE STATISTICS

Variable	Mean	S.D.
Death Rate	12.4	3.0
Insured	89.8%	21.8%
Income (1000)	$10.4	$2.2 .
Non-White	38.8%	28.9%
Age 65	11.9%	2.3%

TABLE 2: CORRELATION: RACE, AGE, INCOME, INSURANCE & DEATH RATE

	1	2	3	4
1. Non-White	1	2	3	4
2. Aged 65	-.49			
3. Income	-.55	.14		
4. Insured	.23	.24	.02	
5. Death Rate	.19	.52	-.67	.02

health insurance to all citizens, but a national health insurance system could. Second, it is important to examine the partial relationships between health insurance and mortality rates, while controlling for income. If the partial relationships are quite small, then it would seem that health insurance coverage is not as important as widely believed in assuring health, and that wealth or income may be quite important. A small partial relationship might indicate that improvements in Americans' health might come from income redistribution plans as well as from national health insurance.

Two other variables were included in the model. Age was added as a variable prior to the variables already discussed. 1) Aging itself

is a major cause of ill health, and it should have a direct effect on mortality rates. 2) It may have an effect on health insurance. Because ill-health assumes great importance for the aged population, it might be expected that everything else being equal, older Americans would be more likely to make sure they had health insurance than other age groups of Americans. 3) Age should have a negative relationship with income; generally, older Americans exist in modest circumstances. Finally, 4) Age should be related to racial composition; the non-white population in Detroit and nationally is younger than the white population, on the average.

The other exogenous variable is racial composition. Non-whites have different diseases and death rates than do whites, so it is important to estimate the direct effect of racial composition of a census area on its desease and death rates. It is likely that race had some effect on health insurance. Blacks for example may find it more difficult than whites to get health insurance — this at least seems to be the pattern for insurance on real property. Race does have a strong relationship with income, and it seems important to estimate that relationship for the populated at hand. In addition, it may be that after the differences in income between the two racial groups are taken into account, differences between them in terms of proportion covered by health insurance or in terms of disease or death rates will greatly diminish. This could justify additional efforts to aid non-whites to overcome occupational discrimination.

ANALYSIS

The zero-order correlation coefficients presented in Table Two show no real relationship between income and health insurance, or between health insurance and the crude death rate. The standardized regression coefficients from a path analysis of our variables are presented in Figure One; these help us to understand the zero-order correlations. To repeat, the dependent variable employed was the crude death rate for census areas in Detroit, and the insurance variable measured all forms of health insurance, including Medicare and Medicaid. This model explains 90 percent of the variation in the dependent variable. First, the partial coefficients do provide support for the initial hypothesis that the higher the proportion of people having health insurance coverage in a census area, the lower is the death rate. When race, age, and income are controlled, the relationship is -.24 This suggests that the background variables are

acting as suppressor variables, masking the relationship between health insurance and the crude death rate.

Second, the analysis supports the hypothesis that income is positively related to health insurance coverage, once age and race are controlled; the coefficient is .30. This is true *despite* the availability of Medicare and Medicaid. This suggests that the financially less advantaged are not as well covered by health insurance as other Americans, and provides support for the argument that any form of national health insurance should be established with the needs of the poor receiving special attention.

Income has a fairly strong direct negative effect on the crude death rate (coefficient of -.62). This has two implications. 1) It means that those who are financially advantaged may both engage in more health-seeking behavior than the poor, and in addition, have better access to medical care when they do get ill than the poor. 2) The provision of national health insurance will not of itself change these factors. Because income has such a strong direct effect on the death rate, even when, as the model indicates, variables such as race, age, and the possession of health insurance are controlled, further reductions in the death rate will in part depend on providing the poor with the health care advantages the well-off enjoy. This means a long-run commitment to improving the health environment of the poor. It also means enabling the poor to get access to medical care.

The relationships between the two exogenous variables — race and age — and the other variables in the model are as predicted. 1) The death rate for the census areas increases as the proportion of older citizens increases. 2) Age does have a positive direct effect on insurance; the path coefficient is .52. One interpretation is that in part older citizens have reason to be much more concerned about their health than younger citizens, hence they probably are more careful about making sure they have coverage. In part, however, the positive effect may be due to the ease of purchasing Medicare and to the fact that older Americans have had decades to become convinced of the idea that health insurance is one of those possessions that all Americans should have. 3) Age is negatively related to race; the path coefficient is -.49. As hypothesized, the non-white population in Detroit is younger than the white population. 4) Age does have a negative direct effect on income, though it is not large; the path coefficient is -.17. Because older citizens have

lower incomes than younger citizens, they are at a moderate disadvantage when it comes to obtaining insurance; the model demonstrates a positive effect of income on insurance. Older Americans do have quite high rates of insurance coverage.

We can trace another effect of age on the death rate through the income variable. Because age has a negative effect on income, and income a negative effect on the death rate, we see that to some extent the higher death rates of older Americans are due to their impoverished circumstances. Given the close size of this indirect effect (.105) to the one implied above (age-health insurance-crude death rate: -.125), it is probable that the death rates of older Americans could be reduced by alleviating their penury as much as by making sure they have adequate health insurance. As predicted, there is a positive net effect of the proportion non-white in an area on the death rate; the more non-whites there are, the higher is the death rate. The path coefficient is .29. As predicted, race has a strong negative effect on income. The path coefficient is -.63. Thus the non-white death rate must be higher than the white death rate in part because of the negative direct effect of income on death rates, and because low income people are less likely to have health insurance coverage.

The most surprising relationship in the model involves the effect of race on insurance. Non-whites, when contrasted to whites of the same age and similar income, are much more likely to have health insurance coverage. In an attempt to understand this relationship, the path coefficient was recalculated, employing another health insurance variable; this variable measured the proportion of a census area's population with health insurance of any kind, except for Medicaid. This reduced the path coefficient from the .65 depicted in Figure 2 to .30. What this indicates is that, for whatever reasons, non-whites are more likely to be covered in part because they are more likely than whites to have Medicaid. The implication is that the health of whites could be improved by locating those whites eligible for, but not taking advantage of, Medicaid. Nevertheless, even after this adjustment in the health insurance variable was made, it seemed that certain whites were less likely than non-whites to have health insurance. There is no obvious explanation for this.

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