

Public Health Asks of Sociology . . .

Can the health sciences resolve society's problems in the absence of a science of human values and goals?

Edward S. Rogers

In the 17 years since the field of medical sociology was formally recognized by the American Sociological Association, the work that has been done by sociologists in applying their skills to health problems, by sociologists and health researchers working jointly, and by health researchers applying newfound sociological insights has had a very great impact on public health research, practice, and education. These developments have been competently summarized in a number of recent reviews (1, 2) which leave no doubt that sociology has established its position as a science basic to the theory and practice of public health. It has, for example, improved our understanding of attitudes toward health and illness, and toward the utilization of medical care and other health services; it has enlarged our concept of the dynamic nature of health problems; it has provided the background and the means for studying health institutions as complex interacting systems, both internally and within the wider context of social organization; and through a multitude of social epidemiological studies, it has thrown new light on the environmental characteristics associated with disease and disability.

Kendall and Merton (3) divide medical sociology into four categories: the social etiology and ecology of disease, the social components in therapy and rehabilitation, medicine and health care as an institution, and the sociology of medical education. Although, in general, the knowledge gained from studies in each of these categories has proved useful, there have been some disappointments. Among these, probably

none has been greater than that occasioned by the combined inability of sociology and public health to solve the riddle of the major chronic diseases, and of mental illness. Yet, the reasons to believe that these conditions may be precipitated, or even directly caused, by factors in the social environment remain persuasive. Our sense of frustration is heightened, no doubt, by the inevitable comparison with the continued dramatic successes of medical science and public health in discovering the causes and instituting highly effective control measures for major infectious diseases such as poliomyelitis.

This continued failure most likely can be attributed either to insufficient diagnosis of the etiological factors or to inability to alter the probable etiological situation effectively, or to both. These possible problem sources appear to belong in categories one and three, respectively, in Kendall and Merton's classification, and we may explore them readily in that context.

The Social Etiology and Ecology of Disease

From a public health viewpoint, the practical output of studies in this area ought to be improvement in programs of disease control. Viewed in this light, one of the most striking things about the large number of studies of the etiology of the chronic diseases and mental illness is the virtual impossibility of transforming the study findings into public health program form. This difficulty suggests either that the sociological approach to etiology may be very different from that of public health, or that public health may not be asking the right questions of sociology.

The interests of public health, first

and foremost, lie in obtaining the most exact information possible concerning the etiological agents of disease, with emphasis on the proximal end of the causative chain. Its interest in broader, ecological studies of the natural history of disease is, by comparison, quite secondary. Sociology, on the other hand, is most interested in the whole pattern of the disease causal sequence as a social process—of which the proximal events are only a part (4). Any focus on specific etiology, as such, tends to be secondary. If my appraisal is correct, it should be quite evident that the interests of the two fields in the etiology and ecology of disease are, indeed, different, and probably not many persons in either field have been successful in hybridizing the divergent, though surely related, concepts and outlooks in these two areas.

As to whether public health has been asking the right questions or not, this is a more difficult question. Regardless of the fact that most medical sociologists and most epidemiologists today have abandoned the specificity model of disease causation in favor of a multiple cause model, the fact remains that in public health practice the approach of choice seeks a directly acting agent or, at least, its immediate precursors or intermediaries. Disease-control programs tend to be most successful when the attack can be focused clearly and directly, with a minimum of involvement in remote events, attention to which tends to reduce program effectiveness, complicate program management, and invite unwanted secondary consequences of the control measures. It is, then, more out of necessity than justifiable optimism that public health asks medical sociology for social etiological explanations in terms of isolable and accessible factors.

Lest I seem apologetic about this position, allow me to point out that the exact determination of the nature of the factor or factors, whether material or abstract, that makes the disease-inducing passage across the interface between the environment and man is still a matter of major scientific importance. Although we are accustomed to think of such factors as being material agents (for example, bacterial, viral, chemical, physical) and of the social environment as playing only an indirect, facilitating role, there is more than a little evidence that the social environment can produce nonmaterial conditions which act as direct agents. The work done by investigators such

The author is professor of public health and medical administration at the School of Public Health, University of California, Berkeley. This article was presented before the Medical Sociology Section, American Sociological Association, San Francisco, 28 August 1967.

as Wolff, Hinkle, King, Hollingshead and Redlich, and Levine and Scotch (5) strongly suggests that the psychosocial environment can act directly on the host as a disease-inducing agent. In the area of mental illness, where the major phenomena are all abstract to begin with, what could be more reasonable than to look for the proximal causative factors in the abstract (psychosocial) environment?

Part of the responsibility for the disappointing results, thus far, and for the tendency to turn more to the ecological end of the causative spectrum, must be assigned to the limited character of the environmental variables so often studied (6). There appears to be an absence of imagination in this area and the general approach is to use demographic data and other similar data because they are available, or in the accustomed pattern. It may be that the present lively national interest in the subject of so-called "social indicators" (7) will be productive of new approaches. I hope that medical sociologists will have some say in this movement, although I have no knowledge that this has been so thus far. Moreover, in the absence of well-established and comprehensive (holistic) ecological theory, it seems unlikely that a widely useful, unified, analytical framework will evolve (8).

Another type of problem arises, especially in studies of the psychosocial environment, when, although there may be no lack of imagination in selecting the variables to be studied, the variables turn out to be impossible to isolate or to get at in an action sense. A sample of the factors that have been variously implicated in recent studies will serve to illustrate the nature of this problem. If public health were to act upon the information thus obtained, it would, among other things, have to upgrade social class, eliminate status incongruity and occupational stress, selectively control both geographic and social mobility, make cities into country farms, improve family incomes, shepherd groups through culture change, maximize the individual's acceptance of his life situation, prevent social isolation, and provide a value basis for choosing whether one's parents should or should not be church-going people.

It is no condemnation of public health to note that it simply is not up to such tasks. Indeed, no existing social program of any kind would be. The problem here is that the composite

abstractions, such as the term *social class*, employed to describe clusters of interacting social variables, either are too diffuse and probably not real, or they are too remote in the causal chain and too deeply imbedded in the social-cultural situation to be accessible to control measures. The practical question is whether or not there might be other more precise, identifiable, and, hopefully, isolable elements contained within these more diffuse categories. For example, while there is nothing very much that public health could be expected to do about the phenomenon of social stratification, or about "social class" as a causative element, there might be a good deal it could do about some of the characteristics of social class which serve to cause disease or to facilitate its occurrence, were they but pinpointed.

On the other hand, it is important to avoid giving the impression that sociologically or psychosociologically oriented findings such as the above are not justified simply because of their limited usefulness in solving immediate problems at the direct action levels to which our society is accustomed. Quite the contrary, such studies add importantly to our awareness of the dynamics and complexity of the social interactions around health problems. They should serve to put us on notice that we either shall have to learn to reduce the truths such findings contain to simple action terms, or we shall have to develop new concepts and methods to cope with problem-solving at new levels of complexity. Indeed, every time sociology comes up with a complex causal explanation that can be reduced no further, it is liable to force public health into a more anomalous situation.

Thus, public health, in common with the other major institutions in our society that are broadly concerned with human welfare, is at a conceptual and methodological crossroads. It is to the grave problems and sociological considerations that this situation represents that I next wish to turn your attention.

Medicine and Health Care as an Institution

My concern here is not with the many interesting and useful studies that sociology has made, and should continue to make, of the nature and workings of health organizations as such but, rather, with what sociology can do to

illuminate the place of health institutions and values in the context of the total society of which they are a part. When public health is confronted with the reality that the causes of disease and disability can no longer be successfully isolated and dealt with quite directly, when the health values concerned may no longer be the dominant value consideration, at that point in time public health either must cross over into the new, uncharted territory of the molar, organismic administration of human affairs, or cease to be useful.

Actually, although we may cling to the old, we are already more deeply committed to this new course than we may realize. For example, public health can hardly be expected—and has not seriously tried—to eliminate the manufacturing of cigarettes as a means of reducing the incidence of lung cancer. But if the present efforts of public health to modify smoking habits or to isolate the causative agent more directly fail, as they well may, the eventual question will have to be asked: Are we willing and able to make the cultural, socio-economic, and other adjustments that would be entailed in the necessary control measures? We are inescapably confronted with the determining role of human values.

All societies value health, it seems, but for planning programs in a complex society it is necessary to know more than just this. It is necessary to know why, and in relation to what, health is valued. To whom can we turn for the answer? Gordon Allport, speaking for the efforts of his field, says, "No psychologist has succeeded in telling us why man ought to seek good health rather than ill, or why normality should be our goal for all men, not just for some" (9). He goes on to relegate this task to the moral philosophers, but it seems to me to be a proper sociological question. Parsons (10) and others have suggested that man values health in a relational setting—as a means to an end. This seems highly probable, but the important question for public health planning is: As a means toward *what* end? The absence of any clear answer to this question makes inevitable the circularity and conflict-inducing output of short-range decisions which are so evident in our present behavior and which, extended to other fields as well, gives validity to the dire warnings of the neo-humanists with respect to the future of mankind (11).

Although I have called upon only one, quite simple, illustration—that with reference to cigarette smoking—there is an accumulating list of unresolved problems of equal or greater concern. For example, decisions are overdue with respect to the social purposes served by the outputs of medical science and public health in terms of such things as the size and age composition of the population; the increased number of elderly people in a society unprepared for them; the use of body organ replacements and other, at times almost inhumane, means of prolonging human life; the relentless pursuit of prenatal mortality of all kinds; the application of genetic selection and the manipulation of human genes. All for what? Certainly, as Allport suggests, these are matters of interest to moral philosophy. But if there ever is to be such a thing as a science of man, we need it now—and I do not expect it soon from the philosophers.

To be sure, sociology has, somewhat sporadically, studied the problem of human values, but it has not gotten to the bottom of the question and, I judge, is torn by controversy over whether values and goals are scientific or ethical questions (12). Somehow this seems trivial in the light of today's need for every possible insight into the process of societal planning. Consider, for example, the problem of racial adjustments to life in an integrated society, or in one world. Only two premises are tenable: either (i) all mankind, regardless of race, share at root identical basic goals involving such things as species survival, personal dignity, and self-fulfillment or (ii) they are different in these respects. If it can be established that they are identical, and the nature of these goals confirmed—a sociological problem—then society will have a working basis from which to move in recognizing and adjusting for the cultural and individual variations which may be expected to exist in the manner of attaining these goals. It can move toward the greatest good for all. If, on the other hand, it were found that races, and probably individuals too, have different fundamental goals, it surely would be equally important

to know this. The problem then would be one of working out the best possible compromises and balances of power among essentially competing common-interest groups—or of alternative action which seems unattractive.

In order for our society to provide a rational answer to questions of such magnitude and complexity through its political and other decision-making mechanisms, it must be able to assess the particular liabilities at issue and the probable "costs" (both immediate, secondary, and beyond) of each proposed course of action in terms of some master conceptualization of the nature of human goals and the various alternative ways of attaining them (13). This would provide the chart for the organismic administration of human affairs referred to above.

I know this leaves one breathless, but I think it clear enough that we are being relentlessly forced in the direction of this necessity and I really can see no advantage in continuing to pretend that it can be avoided. For example, to return to the immediate problems of public health, we now hear a great deal about a new approach referred to as "comprehensive health planning." In fact, Congress has recently appropriated appreciable sums of money to support such planning as a means of pulling together the splintering activities of the health field. What is not quite recognized, of course, is that they were splintering for a reason. The reason is that, as the nature of public health concerns reached into such problems as water and air pollution, occupational health, pesticides, chemical contaminants in food, health problems of poverty, medical care for the aged, the construction and quality of health facilities, and the multiple factors suspected of playing a role in the causation of chronic diseases and mental illness—it had to splinter. What possible choice could it have? No single, specialized field could hope to possess such widespread jurisdictional controls in our society. The point to be made is that neither this well-intended action of Congress nor any amount of money and effort allocated to this purpose can be expected to produce any-

thing but frustration and further confusion in the absence of a holistic ecological concept of human organization.

I do not expect, nor do I suggest, that from a public health point of view health values will, or should, emerge as the primary goal of man. But those of us in the medical and health sciences who see our roles as providers of health services can hardly be expected to plan and effectuate our programs comprehensively unless we can find a rational pattern for so doing. The problem of developing such a plan is, of course, multidisciplinary, but the most fundamental part of it, the discovery of the underlying and guiding structure, is a challenge to sociology.

References and Notes

1. J. A. Clausen and R. Straus, Eds., "Medicine and Society," *Ann. Amer. Acad. Political and Social Sci.*, vol. 346 (March 1963); P. L. Kendall, "Medical Sociology in the United States," *Intern. Social Sci. Council Inform.* 2, 20-34 (Jan. 1963); E. A. Suchman, *Sociology and the Field of Public Health* (Russell Sage Foundation, New York, 1963).
2. H. E. Freeman, S. Levine, L. G. Reeder, Eds., *Handbook of Medical Sociology* (Prentice-Hall, Englewood Cliffs, N.J., 1963).
3. P. L. Kendall and R. K. Merton, in *Patients, Physicians, and Illness*, E. G. Jaco, Ed. (Free Press, Glencoe, Ill., 1958), pp. 321-322.
4. E. A. Suchman, in "Social Stress and Cardiovascular Disease," S. L. Syme and L. G. Reeder, Eds., *Milbank Mem. Fund Quart.* 45, part 2, 110-111 (April 1967).
5. H. G. Wolff, *Stress and Disease* (Thomas, Springfield, Ill., 1953); L. E. Hinkle, Jr., and H. G. Wolff, *Arch. Internal Med.* 99, 442-460 (1957); S. H. King, in ref. 2, pp. 99-111; A. B. Hollingshead and F. C. Redlich, *Social Class and Mental Illness: A Community Study* (Wiley, New York, 1958); S. Levine and N. A. Scotch, in Syme and Reeder (ref. 4, pp. 163-174).
6. E. A. Suchman, in Syme and Reeder (ref. 4, p. 110).
7. R. E. Bauer, Ed., *Social Indicators* (M.I.T. Press, Cambridge, Mass., 1966).
8. E. S. Rogers and H. B. Messinger, "Human ecology: toward a holistic method," in *Milbank Mem. Fund Quart.* 45, 25-42 (January 1967).
9. G. Allport, *Personality and Social Encounter* (Beacon, Boston, 1960), pp. 155-168.
10. T. Parsons in *Patients, Physicians, and Illness*, E. G. Jaco, Ed. (Free Press, Glencoe, Ill., 1958), pp. 165-187.
11. W. L. Thomas, Jr., Ed., *Man's Role in Changing the Face of the Earth* (Univ. of Chicago Press, Chicago, 1956).
12. D. A. Parker, "On values and value judgments in sociology," *Amer. Sociolog. Rev.* 32, 463 (1967).
13. The recent work of R. M. Williams, Jr., is most encouraging evidence of an awakening of interest in this general concept. See his article in "Social Goals and Indicators for American Society," vol. 1, B. M. Gross, Ed., *Ann. Amer. Acad. Political and Social Sci.* 371, 20-37 (May 1967). See also W. Buckley, *Sociology and Modern Systems Theory*, H. Blumer, Ed. (Prentice-Hall, Englewood Cliffs, N.J., 1967).
14. I gratefully acknowledge the assistance of Mrs. Patricia Wood in reference research.