

This is the first of a series of occasional reviews which will survey recent research in various fields and endeavor to indicate their possible usefulness to the public health practitioner. We begin with a study of sociological analyses and their practical relationship to public health practice.

Sociology and Public Health: Perspectives for Application

Introduction

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Much of the content of sociology directly concerns man's adaptation to his changing environment and, thus, this field has important implications for public health practice. No such review can do justice to the variety of perspectives and recent research efforts that can be useful to the public health practitioner, but it is possible to review briefly some major perspectives and some examples of research that illustrate how an appreciation of sociological variables can assist the public health practitioner.

Initially, it is helpful to note how the perspectives of sociology and public health differ. While public health is an applied endeavor that imposes normative criteria which it then attempts to implement, the sociologist's major concern is with understanding social phenomena independently of the immediate value of such understanding. This difference in perspective was made clear by Edward Rogers' challenge to sociology¹ to present its findings in a fashion that allow transformation in the form of public health programs. But if the sociologist restricted or even concentrated his efforts on those causes where intervention seems possible, his horizons would be limited indeed. The pervasive belief that all public health problems are dysfunctions, which can and must be remedied, rather than part of a complex pattern of adaptation to changing life conditions and social patterns is in itself a value² that tells us more about the public health practitioner and his priorities than about the nature of social life.

The issue of values is fundamental to the entire question of sociological knowledge and application. As Elinson and Herr³ suggested in their reply to Rogers' challenge, much of the difficulty in bringing sociological knowledge to bear in public health efforts may be the product of the limited way in which the practitioner poses the issue. It may be the practitioner himself who is part of the problem—by defining certain relatively “benign” behaviors of others as problems, by projecting responsibility to clients rather than to the social institutions that serve them, or by allowing his values to limit considering the real range of options for improving the life and health of people.

The general problem can be illustrated by reviewing the current ferment concerning abortion reform. In the State of Wisconsin, like elsewhere, sexual attitudes and patterns have radically changed over the generations, but the law continues to define contraceptives as lewd and indecent articles, and forbids physicians to prescribe contra-

ceptives to unmarried women for the purpose of birth control. Many women who do not wish to bear a child become pregnant, yet find it difficult to obtain an abortion despite a recent ruling of the Federal District Court to the effect that forbidding an abortion is an abridgement of women's constitutional rights. The medical profession—including those affiliated with public health—has, at best, sat on its hands, and some organized medical groups and hospitals have continued to resist change in traditional approaches to the problem. Here one might see a variety of public health problems implicit in the situation depending on one's perspective. Is the problem one of promiscuity and a growing lack of responsibility among the young, or is it the intransigence of the State Medical Society and the physicians in the State? Should our major concern be the growing rate of illegitimacy and dependency, or the failure of the Legislature and the system of medical care to respond more expeditiously to people's concerns and self-defined needs? The practice of public health embodies some system of morality, and part of the sociological effort must be devoted to examining this morality and its priorities relative to competing definitions. It may be that our concept of public health constitutes part of our problem.

Despite such issues, there are circumstances where considerable consensus exists as to the undesirability of particular conditions prevalent in the community. Although values come into play in a wide variety of ways, as I proceed in this discussion I shall work on the assumption that there is substantial agreement on certain basic values relevant to problems of public health; and I will develop particular themes that may be of assistance to the practitioner.

Population Distribution and Selection

Basic to public health is an understanding of the significance of the distribution of populations over time and the various factors affecting fertility, mortality, migration, and social and genetic selection. Public health practitioners, however, sometimes seem less aware that social selectivity is a continuing and persistent process that affects

such varied matters as organizational participation, health maintenance behavior, utilization of medical and other institutional facilities, educational achievement, and almost every other aspect of social and community life. Any practitioner will tend to observe such selection processes from a particular vantage point, and he tends to form images of behavior that are constructions from a particular selected population.⁴⁻⁶ By the nature of his position he is more likely to come into contact with people who take advantage of a particular program or those who seek a service, and such contacts are likely to influence his perceptions more than the actual patterns of behavior existing in the population at large. The constructions the practitioner develops guide him in the options he adopts and those he neglects, and influence profoundly his perceptions of situations.

The continuing awareness that one's own perceptions are molded by the context within which one works is nonspecific, but it nevertheless can be helpful because it alerts the practitioner to preventable errors and promotes continuing and serious scrutiny of the important forces in the environment affecting his work. In dealing with clients, such awareness facilitates considering not only the manifest issue, or the client's presenting complaint, but also the larger context within which the problem occurs and how it can be dealt with. Such concern with populations and selectivity within populations has been basic to public health application, and the continuing development of this perspective will have even more relevance in the future than in the past.

Social and Cultural Aspects of Preventive Health and Illness Behavior

It is widely appreciated that there are cultural and social variations in the manner in which persons define health problems, participate in health maintenance programs, and utilize medical and other health services.⁷ For example, there is considerable evidence that socioeconomic factors are related to knowledge about disease, use of medical and dental services, acceptance of preventive health practices, purchase of voluntary health insurance, delay in seeking treatment, and use of folk remedies and self-medications.⁸⁻²³ Such socioeconomic variations encompass variations among populations in health values, understanding of disease processes, future and preventive planning, cultural expectations, and feelings of social distance between oneself and health practitioners.²⁴ The previously cited research also suggests that impoverished persons feel less at ease in medical settings than more affluent persons, have less understanding of how practitioners operate, and are less willing to question their treatment.

Underlying these observed relationships are various social psychological processes which have yet to be fully examined. In recent years various models have been suggested to explain processes underlying the relationship between socioeconomic factors and health and illness behavior. Rosenstock,²⁵ for example, giving emphasis to a motivational model, has argued that preventive health behavior relevant to a given problem is determined by the extent to which a person sees a problem as having both

serious consequences and a high probability of occurrence. He further believes that such behavior emerges from conflicting goals and motives, and that actions will follow those motives which are most salient and those goals which are perceived as most valuable. Similarly, Zola,²⁶ approaching the problem from a somewhat different perspective, has delineated five timing "triggers" in patients' decisions to seek medical care. The first pattern he calls "interpersonal crisis," where the situation calls attention to the symptoms and causes the patient to dwell on them. The second "trigger"—social interference—comes into play when symptoms threaten a valued social activity. Similarly, he argues, action is precipitated by social pressures of others, perceived threat, and the nature and quality of the symptoms. Zola reports the impression that these "triggers" have different degrees of importance in varying social strata and ethnic groups.

Both of the above theories of health behavior focus exclusively on the client, and give little attention to the manner in which characteristics of helping institutions affect the client's behavior and response. But the client's behavior may be strongly affected by the nature of services and how they are provided, and such factors as the availability and proximity of treatment resources, psychological and monetary costs of seeking treatment, stigma, social distance, and the like all may affect the client's orientation. While it is true that people's responses to health and illness are often conditioned responses to prior background and experience, the health services system has the capacity to modify such behavior patterns. It can foster dependency or encourage self-reliance. It can respect and enhance the dignity of persons or contribute to stigmatizing and humiliating them. As interesting as social and cultural precursors of health and illness behavior may be, we should not neglect the fact that considerable potential for making the delivery of services more congruent with need exists through the proper organization of health care services.

Barriers to medical and health care that are a product of the way health professionals and health care services function are more amenable to change than client attitudes and behavior. There is evidence that when cost and other barriers are removed from access to medical care, and a valuable service is offered, differential utilization of medical services by social class largely disappears. For example, socioeconomic differences in the use of medical services comparable to those traditionally found in the United States do not exist in Great Britain, where services are provided without cost and on the basis of need.²⁷ It is significant that in the United States, when public health and research programs offer a free service to a particular population such as in the National Health Examination Survey²⁸ or in the Baltimore Morbidity Survey,²⁹⁻³⁰ persons of lower socioeconomic status and nonwhites (the two groups with the lowest level of utilization of services on a national basis) are usually overrepresented in their participation as compared with other population groups. Finally, more recent data from the National Household Morbidity Survey shows that the unfavorable position of the lowest socioeconomic groups in respect to physician visits has improved.³¹ These data suggest that government

expenditures (particularly Medicare) have contributed toward the reduction of barriers to medical care.

The importance of client response is evident, but such differential client response tends to operate within limits. Various studies show that social and cultural influences have maximal impact on utilization behavior when the condition has a mild or moderate impact on the person and when the symptoms are identifiable, familiar, and easily explained. As the impact of the symptoms becomes more dramatic—and to the extent that the symptoms are unfamiliar, unpredictable, and threatening—the effect of social and cultural factors on help seeking appears to be very limited.³²⁻³⁴ Social and cultural patterns, as they affect health and illness behavior, are particularly important in the case of serious conditions that do not have a dramatic onset and have early symptoms which are common to a wide variety of more familiar and self-limited conditions.

Consequences of Medical Labeling and Response

Practitioners frequently think of their activities as purely medical and sometimes fail to consider the social and other practical consequences of medical decisions and clinical judgments. Although such risks have always been evident in the practitioner's work, they are very much exacerbated as medicine becomes a more highly organized activity under growing bureaucratic sponsorship.

Medical judgments and decisions affect the fate of people by influencing their social opportunities and potentialities.³⁵ Such influences occur in two ways: through affecting the patient's attitudes, self-perceptions, confidence in his capacities and, therefore, his degree of activity; or through defining the patient in such a fashion so that he is systematically discriminated against or excluded from various community opportunities. Obvious cases such as mental patients or epileptics immediately come to mind, but the relevant processes far transcend these particular groups of patients and have persistent effects on the rehabilitation and community functioning of many kinds of patients, including persons with heart disease, renal disease, cancer, and other conditions as well.

In situations where patients have had continuing relationships over time with a personal doctor, such patients were usually protected from obvious discrimination because of medical reasons, although they might have suffered iatrogenic disease as a consequence of the doctor's failure to consider social factors as part of his clinical assessment. But as medical contexts become more bureaucratic, and as knowledge of the patient's difficulties is shared by a wide variety of people, the possibilities and dangers of communication of medical judgments and their misuse increase, and the need to develop new protections grows.

It is essential to appreciate the extensive variation in disability and community adjustment among patients with comparable disease. The patient's definition of his condition and the social resources available to him affect the extent of his adjustment to work, social relations, and family life, and condition his productivity, life satisfaction, and the demands he makes on the health care system.³⁶⁻³⁷

The frequently heard complaint of physicians to the effect that too many of their patients present trivial complaints or that they are hypochondriacs is a manifestation, in part, of the practice of medicine itself. Modern medical practice is characterized by growing demand on limited manpower and increasing specialization of medical functions. As doctors become more specialized, they are less interested in and less capable of meeting the more diffuse needs of patients, particularly those suffering from psychological distress and those with physical conditions vastly complicated by psychological and social factors. Such patients are difficult to treat under the best of conditions, but there are indications that they do well in a continuing supporting relationship with a physician who demonstrates concern and interest in their life situations.³⁸

However, in accommodating to technological change and growing patient demand, medicine is increasingly more bureaucratized, resulting in greater frustration of such patients' needs. Bureaucratic organization of medicine is essential in insuring a high level of technical care that is distributed efficiently, but it is a poor instrument for dealing with the psychological needs of difficult patients. As doctors continue to become even more specialized and more occupied by growing patient demand for services, they tend to insist more than ever before that their patients' illnesses fall within the narrow limits of the medical disease model.³⁹

These difficulties in medical care are frequently recognized, but one of the major problems we face is how to rationalize and organize medical services so that they are more efficiently distributed and, at the same time, responsive to the personal needs of particular groups of patients. Some health organizations have attempted to develop new roles for social workers and nurses who take on important responsibilities for various aspects of personal care.⁴⁰ Such mechanisms, thus far, have been less than fully effective, for many people wish to have the doctor rather than other professionals deal with their problems.⁴¹ It is likely that attacking this problem will involve not only the transfer of functions to workers well-trained to deal with specific tasks, but also concerted efforts to legitimize such role distributions from the perspective of clients. The latter task may turn out to be more difficult than the former.

Interactions, Communication, and Inducements

The suggestive powers of the physician are very substantial, and doctors and other health workers are in a position to substantially reduce the stress their patients experience by small gestures and behaviors that show an awareness and concern for the patient.

Egbert and his colleagues,⁴² for example, selected a random group of patients undergoing surgery and gave them simple information, encouragement, and instruction concerning their impending surgery and means of alleviating postoperative pain. The researchers, however, were not involved in the medical care of the patients studied, and they did not participate in decisions concerning them. An

independent evaluation of the postoperative period and the length of stay of patients in the experimental and control groups showed that this communication and instruction made a real difference. This is consistent with the research of Janis,⁴³ which demonstrated that preoperative fear was correlated with postoperative reactions among surgical patients.

In a similar experimental study by Skipper and Leonard,⁴⁴ children admitted to a hospital for tonsillectomy were randomized into experimental and control groups. These groups differed in that in the experimental group patients and their mothers were admitted to the hospital by a specially trained nurse who "attempted to create an atmosphere which would facilitate the communication of information to the mother, maximize freedom to verbalize her fear, anxiety and special problems, and to ask any and all questions which were on her mind. The information given to the mother tried to paint an accurate picture of the reality of the situation. Mothers were told what routine events to expect and when they were likely to occur—including the actual time schedule for the operation." The investigators found that the emotional support reduced the mothers' stress and changed their definition of the hospital situation, which in turn had a beneficial effect on their children. Children in the experimental group experienced smaller changes in blood pressure, temperature, and other physiological measures; they were less likely to suffer from postoperative emesis and made a better adaptation to the hospital; and they made a more rapid recovery following hospitalization, displaying less fears, less crying, and less disturbed sleep than children in the control group.

In short, a little sympathy, support, and instruction can have great benefits. More frequently than not, those who endorse the idea that the doctor should provide sympathy and support to the patient do so on the belief that this is a noble and human thing to do. It is much less rarely appreciated, however, that establishing such relationships with patients facilitates the informational process between doctor and patient, and contributes in an important way to the management of the patient and his progress toward recovery. To neglect, therefore, important facts that have bearing on these processes because they are of a social or psychological sort increases errors in prediction on the part of physician and inefficacy in the management of his patients.

Another aspect of the same problem concerns the inducements and encouragement provided by health workers and health institutions that facilitate patient activity and motivation for mastering their problems. A substantial literature has accumulated that documents the way large impersonal hospitals allow inactivity, encourage dependency, and lead to various forms of skill deterioration and hopelessness.⁴⁵ The relationship between a health worker and patient can serve as a powerful instrument to facilitate or retard the patient's social functioning, his sense of potency and potential, and his willingness to struggle against his illness. The failure to use these inducements and supports as a rehabilitative technique is as serious as the failure to prescribe necessary medication or to initiate other necessary medical procedures.

Influence of Professionalization and Professional Controls on Treatment Values

We usually think of professionalization as a vehicle for improving the quality of health services. We assume that, as the health worker incorporates the values of his professional group and subjects himself to the evaluation of his colleagues, he is directed toward worthy goals and insulated from improprieties. One of the difficulties with this perspective is that professionals often become involved with their own subcultures which protect professional autonomy, define professional work in terms of the exercise of particular skills, and develop reward structures that tend to accord highest prestige and acclaim to those who excel by professional criteria.⁴⁶ Since medicine as an activity tends to give high priority to technical and scientific skills, and defines tasks associated with such skills as most interesting, it is not surprising that doctors develop such orientations.

The development of technical skills is extremely valuable but, if overemphasized, it may lead to neglect of more important social priorities which doctors may recognize, but define as uninteresting opportunities from a professional point of view. While doctors may objectively recognize that many of the efforts devoted, for example, to heart transplantation if rechanneled to other problems, such as differentials in infant mortality, might yield large relative benefits, the technical problems in heart transplantation are defined as professionally exciting, while routine primary care is seen as mundane and uninteresting. Similarly, in psychiatry, rehabilitation is defined as intellectually unexciting and routine while psychotherapy, which is of questionable efficacy, is seen as interesting, thus justifying the tremendous imbalance of resources between these two fields.⁴⁷

Given the ways doctors and other professionals are trained, it is not surprising that they seek opportunities that allow them to exercise and develop their technical skills and to avoid tasks, no matter how important, that are seen as mundane and unchallenging.⁴⁸ This problem is particularly exacerbated where primary care functions are not structurally differentiated from more specialized medical activities. In countries where such separation is enforced by the nature of medical organization, those performing what are viewed as lesser skills are often dissatisfied, in part, by their lower status, but the tasks are more likely to be met.⁴⁹ One way of approaching this problem would be to functionally separate tasks requiring lower levels of skill and assign them to other health personnel, but this too raises problems of the segmentation of care, the acceptability of new health workers, coordination of services, licensing difficulties, and the like.

An important source of professional values is the training experience itself and the models of practice available to students within the training context. Practice consistent with values will depend, of course, on the situational aspects of the health worker's practice once his training is completed.⁵⁰ Medical education and the more professionalized nurses training programs emphasized the acquisition of technical skill and capacities in contrast to giving

focus to meeting community needs and goals. It would be unrealistic to expect educational institutions, which have very special functions, to forego the development of their students' technical skills, but it is essential that such institutions provide realistic and acceptable models of practice as part of their training to allow their students to respond in meaningful ways to the health care needs of the community once they graduate.

The Influence of the Medical Care System on the Quality of Health

Every public health practitioner realizes that the medical care system, as more narrowly defined, has only a peripheral role on the quality of health in populations. The quality of a population's health is a response to the overall nature of the environment, and medical care is only a small part of the larger picture. Much of the vast progress in health status in the past century is a product of a higher standard of living, better sanitation, and improved nutrition; and many of the risks to health in the present are a product of man's constructed environments. Although good medical care—and in particular good preventive care—can be brought to bear at particular points in the life cycle so that it has impact, much of the necessary health action required involves larger social and political considerations and the development of new patterns of community behavior.

The system of medical care in any country reflects the traditions of the past and the social priorities for the future. Health care is a vast industry and subsumes many groups with conflicting perspectives and interests. How these interests are weighed, negotiated, and resolved determines, in part, the organization and provision of health services and the various priorities given to different aspects of health care. But certain limits on the nature of medical activity are also determined by the technical development of medicine and the character of population demands, and nations having vastly different political ideologies face many similar organizational problems in medical care.

The growing complexity of health care and the increasing specialization of the health occupations and treatment and rehabilitation procedures pose similar problems for such highly diverse medical systems as those in the Soviet Union, England, and the United States. There are the physical needs of providing ample facilities for the populations concerned in some reasonably economic fashion and in accord with technological changes. There is also the requirement to have a large and functionally differentiated health manpower force and associated needs for recruitment, training, and the development of effective distribution mechanisms.⁵¹ All medical systems have problems in insuring the stability and effectiveness of the manpower force, and this is particularly true in those areas of the economy where there is high dependence on women. As part of its medical system, all countries must organize around certain invariant functions of health care regardless of what names are given to these functions. Among them are public health, initial screening and primary care, specialized treatment, and rehabilitation. Although national ideologies and value systems may prescribe priorities, modes of organ-

izing personnel and patients, and the character of professional and other work incentives, the basic organizational problems are very similar from one medical setting to another.⁵² These problems are largely associated with the adjustments demanded by changes in the character of medical technology and the need for special skills on the one hand and the human problems inherent in organizational functioning within bureaucratic contexts on the other.

Health and the Environment

In the final analysis, the health and vitality of populations are dependent on the ability to make successful adaptations to the environments within which man must survive. Man's ability to adapt depends on his capacities and skills, and his psychological orientations. To a large extent, man constructs his own environment depending on the models and norms that his culture and society provide.⁵³ His skills and effectiveness depend on the preparatory institutions his community provides for dealing with the problems he is likely to face as an individual and as a member of a group. His motivation and the direction of his interests and aspirations will depend on the incentives the community promotes. His psychological capacities and strengths are influenced by the human resources and social supports the environment can provide. Although men can do a great deal to promote their own health within rather narrow limits, in the larger context life and health are substantially dependent on community decisions and social forces which are often outside any single individual's control. It is the appreciation of such facts that should direct the profession of public health as it faces the future.

References

1. Rogers, Edward. Public Health Asks of Sociology . . . , *Science*, 159:506-508 (Feb., 1968).
2. Dubos, René. *Mirage of Health*, New York: Harper, 1959.
3. Elinson, Jack, and Herr, Conrad. A Sociomedical Response to Edward S. Rogers: Public Health Asks of Sociology . . . , Paper presented at the Annual Meetings of the Amer. Soc. Assoc., September 1, 1969.
4. Scheff, Thomas J. Typification in the Diagnostic Practices of Rehabilitation Agencies, in Marvin Sussman (ed.). *Sociology and Rehabilitation*, Washington, D.C.: Amer. Soc. Assoc., 1966, 139-147.
5. Sudnow, David. Normal Crimes: Sociological Features of the Penal Code in a Public Defender's Office. *Social Problems*, 12: 255-276 (Winter 1965).
6. Mechanic, David. Some Implications of Illness Behavior for Medical Sampling. *New Eng. J. Med.*, 269:244-247 (Aug., 1963).
7. For a review of these studies, see David Mechanic, *Medical Sociology: A Selective View*. New York: Free Press, 1968, 115-157.
8. See United States National Health Survey, *Medical Care, Health Status, and Family Income*, Series 10, Number 9 (May, 1964), Washington, D.C.: Public Health Service.
9. Koos, Earl. *The Health of Regionville: What the People Thought and Did About It*. New York: Columbia University Press, 1954.
10. Samora, Julian et al. *Medical Vocabulary Knowledge Among*

- Hospital Patients, *Journal of Health and Human Behavior*, 2:83-92 (Summer 1961).
11. Pratt, Lois, et al. Physicians' Views on the Level of Medical Information Among Patients. *A.J.P.H.*, 47:1277-1283 (Oct., 1957).
 12. Rosenstock, Irwin. Why People Fail to Seek Poliomyelitis Vaccination, *Public Health Reports*, 74:98-103 (Feb., 1959).
 13. Deasy, Leila. Socioeconomic Status and Participation in the Poliomyelitis Vaccine Trail. *Amer. Soc. Rev.*, 21:185-191 (Apr., 1956).
 14. Suchman, Edward. Stages of Illness and Medical Care, *Journal of Health and Human Behavior*, 6:114-128 (Fall 1965).
 15. Cobb, Beatrix, et al. Patient-Responsible Delay of Treatment in Cancer. *Cancer*, 7:920-926 (Sept., 1954).
 16. Goldsen, Rose, et al. Some Factors Related to Patient Delay in Seeking Diagnosis for Cancer Symptoms. *Cancer* 10:17 (Jan.-Feb., 1957).
 17. Blackwell, Barbara. The Literature on Delay in Seeking Medical Care for Chronic Illness. *Health Education Monographs*, 16 (1963).
 18. Kutner, Bernard, and Gordon, Gerald. Seeking Care for Cancer. *Journal of Health and Human Behavior*, 2:171-178 (Fall 1961).
 19. Goldsen, Rose. Patient Delay in Seeking Cancer Diagnosis: Behavioral Aspects. *Journal of Chronic Diseases*, 16:427-436 (May, 1963).
 20. Levine, Gene. Anxiety About Illness: Psychological and Social Bases. *Journal of Health and Human Behavior*, 3:30-34 (Spring 1962).
 21. Brill, Norman and Storrow, Hugh. Social Class and Psychiatric Treatment, *Arch. Gen. Psych.*, 3:340-344 (Oct., 1960).
 22. Lewis, Lionel and Lopreato, Joseph. Arationality, Ignorance, and Perceived Danger in Medical Practices, *Amer. Soc. Rev.*, 27:508-514 (Aug., 1962).
 23. Cornely, Paul B. and Bigman, Stanley K. Acquaintance with Municipal Government Health Services in a Low-Income Urban Population, *A.J.P.H.* 1877-1886 (Nov., 1962).
 24. Mechanic, David. Illness and Cure. In J. Kosa et al. (eds.). *Poverty and Health: A Sociological Analysis*. Cambridge: Harvard University Press, 1969.
 25. Rosenstock, Irwin. What Research in Motivation Suggests for Public Health. *A.J.P.H.*, 50:295-302 (Mar., 1960).
 26. Zola, Irving. Illness Behavior of the Working Class. In A. Shostak and W. Gomberg (eds.). *Blue Collar World: Studies of the American Worker*. Englewood Cliffs: Prentice Hall, 1964.
 27. Cartwright, Ann. *Patients and Their Doctors: A Study of General Practice*, London: Routledge and Kegan Paul, 1967, 32-35.
 28. National Center for Health Statistics, Cycle 1 of the Health Examination Survey: Sample and Response, Series 11, No. 1 (Apr., 1964), Washington, D.C.: Public Health Service.
 29. Roberts, Dean and Wylie, Charles. Multiple Screening in the Baltimore Study of Chronic Illness. *J.A.M.A.*, 161:1442-1446 (Aug. 11, 1956).
 30. Wylie, C. M. Participation in a Multiple Screening Clinic with Five-Year Follow-up. *Public Health Reports*, 76:596-602 (1961).
 31. National Center for Health Statistics. Volume of Physician Visits—United States—July 1966—June 1967. Series 10, No. 49 (Nov., 1968), Washington, D.C.: Public Health Service.
 32. Mechanic, David and Volkart, Edmund. Illness Behavior and Medical Diagnoses. *Journal of Health and Human Behavior*, 1:86-94 (Summer 1960).
 33. Suchman, Edward. Stages of Illness and Medical Care. *Journal of Health and Human Behavior*, 6:114-128 (Fall 1965).
 34. Dinitz, Simon, et al. The Posthospital Psychological Functioning of Former Mental Hospital Patients. *Mental Hygiene*, 45:579-588 (Oct., 1961).
 35. Scheff, Thomas. Decision Rules, Types of Error, and Their Consequences in Medical Diagnosis. *Behavioral Science*, 8:97-107 (Apr., 1963).
 36. For an example of an excellent study illustrating such processes as they occur through time, see Fred Davis, *Passage Through Crisis: Polio Victims and Their Families*, Indianapolis: Bobbs Merrill, 1963.
 37. Imboden, J. B., et al. Brucellosis: III Psychologic Aspects of Delayed Convalescence. *Archives of Internal Medicine*, 103:406-414 (Mar., 1959).
 38. For a review of this issue in detail, see David Mechanic, *Hypochondriasis: A Sociological Perspective*. *Psychiatric Opinion*, 6:12-24 (Aug., 1969).
 39. Mechanic, David. Correlates of Frustration Among British General Practitioners. *Journal of Health and Social Behavior*, 11:87-104 (June, 1970).
 40. See, for example, George Silver, *Family Medical Care*. Cambridge: Harvard University Press, 1963.
 41. Freidson, Eliot. Specialties Without Roots: The Utilization of New Services. *Human Organization*, 18:112-116 (Fall 1959).
 42. Egbert, L. D., et al. Reduction of Postoperative Pain by Encouragement and Instruction of Patients. *New Eng. J. Med.*, 270:825-827 (Apr. 16, 1964).
 43. Janis, Irving. *Psychological Stress*, New York: John Wiley, 1958.
 44. Skipper, James, Jr. and Leonard, Robert. Children, Stress, and Hospitalization: A Field Experiment, *Journal of Health and Social Behavior*, 9:275-287 (Dec., 1968).
 45. For a review of this literature, see Mechanic: *Medical Sociology*, op. cit., 366-385.
 46. Freidson, Eliot. *Profession of Medicine*, New York: Dodd Mead, 1970.
 47. See David Mechanic, *Mental Health and Social Policy*, Englewood Cliffs: Prentice Hall, 1969.
 48. For an excellent discussion of these issues, see Julius Richmond, *Currents in American Medicine: A Developmental View of Medical Care and Education*, Cambridge: Harvard University Press, 1969.
 49. Fry, John. *Medicine in Three Societies*, New York: American Elsevier, 1970.
 50. See Howard Becker et al. *Boys in White: Student Culture in a Medical School*, Chicago: University of Chicago Press, 1963.
 51. For proposals along these lines, see Eli Ginzberg with Miriam Ostow, *Men, Money and Medicine*, New York: Columbia University press, 1969.
 52. For a discussion of the complex variations in organizing basic medical services, see William Glaser, *Paying the Doctor: Systems of Remuneration and their Effects*. Baltimore: Johns Hopkins Press, 1970.
 53. For an elaboration of this framework, see David Mechanic, *Some Problems in Developing a Social Psychology of Adaptation to Stress*, in J. McGrath (ed.). *Social and Psychological Factors in Stress*, New York: Holt, Rinehart and Winston, 1970, 104-123.

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