The Functions of Medical Care

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MEDICAL CARE is a complex social phenomenon serving several distinct functions, only some of which benefit health. The diversity of functions relates in part to the variety of problems presented to the medical care system by society. Medical care deals not only with problems of disease and injury, but also with problems of birth, death, and living—problems that are separate from disease or injury. In addition, medical care helps maintain the society in other ways, complementing the functions of schools, courts, law enforcement, and other systems concerned with the abilities of individual persons to conduct their lives in society (1). My purpose is to demonstrate the diversity and complexity of the functions of medical care and to emphasize that the improvement of health is only one goal among several.

Medical care serves the advancement of health through curing or preventing illness. However, curing and prevention are not the only purposes intended by the provider or sought by the patient. Other functions important to society, functions that may, in fact, be more important to the patient than those that benefit health, are assessment of health status, separation of the ill from the well, and caring, which can also be described as helping to cope with illness (see box). Ex-

FUNCTIONS OF MEDICAL CARE

- Assessment of health status
 Determination of wellness or diagnosis of illness
 Certification of health status
 Prognostication
- 2. Separation of the ill from the well Limiting the communication of illness
- 3. Care—helping to cope with illness Demonstration of humane concern Palliation of symptoms Instruction in the sick role Assistance for the ill in activities of daily living
- 4. Curing of illness Prolongation of life Alleviation of morbidity Reduction of disability
- 5. Prevention of illness

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amples of medical care activities serving these functions are preemployment examinations, multiphasic health testing, custodial nursing care, care of self-limited illnesses, and care of terminal illnesses. These could be called the "paracurative" functions of medical care.

Medical care serving these paracurative functions may legitimately be given independently, without associated curing or preventive services. When that occurs, the product, or outcome, is something other than a benefit to health. In this paper I define a benefit to health as an extension of life, an improvement of ability to work or perform the activities of daily living, or the attainment of biochemical, physiological, or psychological normality (2, 3). The product of a paracurative service may be one or several other valued effects on the patient. Among these, for example, are satisfaction, comfort, achievement, or desired affective states-all expected outcomes of the caring function. These and other products of medical care may be achieved independently of changes in health status. Valued results of paracurative services may be gained even when curing efforts fail and health status deteriorates under treatment, as in the case of the dying patient. The dying patient may gain comfort or other affective benefits from skilled care (4-6).

I use the term "medical care" to mean services to patients by health professionals and by institutional providers such as hospitals, nursing homes, and home care programs. The term cannot be defined by the functions alone, since other agencies in society may serve similar functions. For example, the clergy help people to cope with the problems of illness and may provide services that are frankly therapeutic (7). I would not say, however, that pastoral services to ill persons are medical care services. Similarly, schools may help to prevent illness among students through health education activities, but the school is not a medical care institution.

Assessment of Health Status

The chief developers of a theoretical analysis of this paracurative function were Parsons (1) and Freidson (8). The assessment function has three components: diagnosis, certification of status, and prognostication. Based on an examination of the person before him, the physician or other professional empowered to perform these functions makes an authoritative determination of wellness or illness and, for illness, a diagnosis. Whether the person is determined to be well or ill, the assessment may include the care giver's official pronouncement or written document that certifies the health status. If illness is identified, the pronouncement or certificate excuses the patient, to some degree, from work or other social obligations (1). Prognostication makes an assertion about the future health status of the person and, in its classic form, a statement about expectancy of life.

The physician gives assessment functions first priority. Identifying illness—diagnosis—is salient among the subjects the medical student studies and the concerns of the practicing physician (8). Because of the importance of diagnosis among the functions of medical care, it is the central and even the identifying role of some specialists. For the patient also, the physician's authoritative judgement, whether the problem is or is not illness, has high value. The certification of illness confers a special social status and privilege, sometimes with profound influence on the patient's life (1).

Assessment also encompasses provision for access to medical care. To be admitted to the formal medical care system, the prospective patient ordinarily undergoes some sort of examination and diagnostic process as a first step. Assessment, therefore, is an entry point function. This function is illustrated by Garfield's model for a medical care system, which is an automated examination process leading to a programed decision for referral to either a "health-care center," a "sick-care center" or a "preventive-maintenance center" (9). He called the organizational component charged with assessment a health-testing and referral service. The function of this service in his model is "to separate the well from the sick and to establish entry priorities. In addition, it detects symptomless and early illness, provides a preliminary survey for the doctors, aids in the diagnostic process, (and) provides a basic health profile for future reference..." He viewed this procedure as ideally suited to be a "regulator of entry into medical care."

The activity of Garfield's diagnostic center exemplifies what Hasenfeld called a people-processing function in contrast to a people-changing function (10). Hasenfeld's people-processing organizations are those employing classification-disposition systems to achieve changes in their clients by "conferring on them a public status and relocating them in a new set of social circumstances." For the client of the medical care system, the public status and new set of social circumstances conferred through the assessment functions are those of a "patient." One product or end result of assessment is this conferment.

Prognostication, another element of the assessment function, contributes significantly to the mystique surrounding the physician, since the ability to predict the future suggests the supernatural and infers a degree of control over that future. Even when medical prognostication is founded on rational and technical grounds, it may be viewed by the patient as evidence of special powers. Because of the usefulness of knowledge of the future, this element of assessment has special social value and ranks high among the functions of medical care. This value is illustrated by an example from the practice of primitive medicine in rural Rajasthan described by Carstairs (11). There the pronouncement of a prognosis is the physician's most important act, since people view the assertion, "he will recover," not as a statement of professional opinion but as a means of cure through the exercise of supernatural power. The Rajasthani healer who fails to state that cure is certain commits malpractice.

Prognostication is a primary professional activity for some specialists in preventive medicine. Through the application of probability theory and the automatic processing of the results of multiphasic screening examinations, risk factors for various diseases are assessed and the future health status of the person predicted (12-14). This prediction then aids the physician to induce his patient to adopt changes in his behavior that will modify the probabilities in a favorable direction.

Separation of the III from the Well

Isolation of the sick prevents communication of illness, either contagious disease or behavioral disturbance, by reducing physical contacts or opportunities for well persons to observe and adopt undesirable behavior (1). Separation, therefore, is a preventive measure for the community, but it has little effect on the patient's health status. Medical care institutions are the predominant means of segregating the ill, but confinement to home or other means may be used to limit communication. Separating the patient from his usual environment constitutes a major purpose of that service called custodial care. This isolation function is performed most commonly by the mental institution or nursing home, where the segregation may be amplified by the location of the facility some distance from the community it serves. The short-term general hospital also separates the inpatient from his usual social environment and sharply limits his social contacts. Illustrative of this function of the general hospital is the American custom of using the hospital as a place for dying (15).

Separation may be imposed by the police power of the State when an illness is considered a serious threat to the community. Methods of isolation sanctioned by statute include quarantine and commitment. In ordinary illness, however, confinement is voluntary and accepted as a matter of course, prescribed and supervised by the attending physician, either in hospital or home. Applying sanctions against resistance to confinement is an ordinary funciton of the physician. Positive sanctions for acceptance of confinement include social approval, awarding of monetary benefits for illness or disability, ordinary sick leave from employment, and others. Possible negative sanctions for failure to follow the physician's directions include manifestations of disapproval by family or therapists, withholding of treatment, or withdrawal by the physician from the therapeutic relationship.

Care—Helping to Cope with Illness

Medical care encompasses a demonstration of humane concern, palliative treatment for discomfort, a set of rules for the conduct of the sick role with instructions for their application, necessary assistance with activities of daily living, and other elements that manifest caring (1). These caring activities help the ill person cope with his affliction, provide succor, and relieve pain and suffering.

It is especially in the conduct of the caring function that the physician, nurse, or other therapist is guided by ethical principles more than scientific ones. Caring means respect, service, and devotion to the patient. These are emphasized in the American Medical Association's first principle of medical ethics (16):

The principal objective of the medical profession is to render service to humanity with full respect for the dignity of man. Physicians should merit the confidence of patients entrusted to their care, rendering to each a full measure of service and devotion.

The emphasis on humane respect and devotion in the first ethical principle reflects the centrality of caring among the functions of the physician. Caring also is emphasized in the name of the service—medical care. Caring remains the core function of medical care, a function independent of applications of science but basic to the physician's art.

Peabody's statement summarizes the point (17):

... the physician who attempts to take care of a patient while he neglects this factor is as unscientific as the investigator who neglects to control all the conditions that may affect his experiment. The good physician knows his patient through and through, and his knowledge is bought dearly. Time, sympathy and understanding must be lavishly dispensed, but the reward is to be found in that personal bond which forms the greatest satisfaction of the practice of medicine. One of the essential qualities of the clinician is interest in humanity, for the secret of the care of the patient is in caring for the patient.

A demonstration of caring by the therapist may be the prescribing of drugs. Nonspecific remedies such as sedatives, tranquilizers, and analgesics, all commonly prescribed drugs, probably serve more to palliate symptoms and help the patient to cope with illness than to cure or otherwise alter the natural course of events. A large part of total drug use, therefore, may be considered as serving the paracurative rather than the curing functions of medical care (18, 19). In addition, a significant fraction of prescribed specific drugs, such as antibiotics or vitamins, may be intended by the physician to be more a sign of caring than a specific curative. In a study of nosocomial infections and antibiotic usage, Scheckler and Bennett found that two-thirds of the patients given prescriptions for antibiotics had no recorded evidence of infection (20). It may be inferred that the effect, if not the intent, of many prescriptions for antibiotics is to serve functions other than cure.

The therapist who chooses to demonstrate caring by prescribing a drug rather than by some alternative action may be choosing a less desirable course, because an adverse drug reaction, perhaps with fatal outcome, may result. A prescription written for purely symbolic purposes probably should be for a placebo, in order to avoid such hazards.

Intangible benefits to states of feeling such as satisfaction, comfort, happiness, and benefits such as achievement may be viewed as gains in mental health or social well-being. These are among the benefits of care and may be attained by a patient independently of any biologic changes resulting from treatment. The patient receiving good care may have incurable disease or permanent handicaps, but he may gain satisfaction and other affective benefits from learning how to cope with illness, how best to perform the role of invalid, or how to die (4-6).

Curing of Illness

Prolongation of life and alleviation of morbidity constitute the chief health-related functions of medical care. The results are observable as survival or reduction of disability for the patient and are attributable to the application of therapeutic measures. I also include correction of biochemical, physiological, or psychological abnormality, whether or not it is associated with present or anticipated mortality or morbidity, among the elements of curing. Inclusion of this sometimes subtle element does not, I believe, invalidate the usefulness of the concept of cure in this discussion. I exclude spontaneous recovery from illness coincidental with medical care, recovery that would have occurred without that care.

Curing is an undisputed function of medical care, but one that has been exaggerated in the expectations of the public. Medicine's abilities to cure disease fall short of the popular conception. Exaggeration of the health output of medical care services probably stems, at least in part, from a production orientation in an industrial society; human services are valued for the economic benefits that result (21). The measurable economic benefit of medical services is a gain in manpower resources that results from curing illness (22). Quantitative studies of such benefits from care indicate, however, that the measurable gains in indices of health that result from an increment of medical care services to a community are modest at best (23-25). Even the most sophisticated systems, despite enthusiastic promotion, produce only marginal benefits among clients (26).

Despite these limitations, curing remains a basic function of a medical care system in modern society. The capacity to cure is the characteristic that most distinguishes the modern physician from the traditional healer and is advanced as the justification for large and expanding expenditures for services and research.

Prevention

Medical care includes preventive medical services such as immunization, health education, genetic counseling, and nutritional services to individual persons. Prevention reduces the probability of death or illness in individuals and the rates of these in a community. Preventive services consume but a small part of the total resources applied to medical care, although they make a large contribution to the health benefits that may result. Their economical use of resources makes preventive services particularly attractive to planners of health programs and has led to Government policies that encourage these services (27). The promotion of health maintenance organizations is an example of such policies.

Discussion

The functions I have discussed are those ordinarily intended and recognized by participants in the process—patients, physicians, and others—and therefore they are what Merton classes as manifest functions (28). I expect that most persons will agree that medical care involves these functions, although some might add others or group them differently. Insofar as they may be disputed, they should be taken as a set of hypotheses about medical care and subjected to further testing. My focus on manifest functions stems from practical concerns about providing medicial care to individuals and to communities. Manifest functions form the basis for planning and evaluation of services and programs.

Distinct from these manifest functions are those social functions not recognized or intended by the participants in the process—the latent functions (28). Three important latent functions of medical care are suggested by Sanders (29). First, medical care offsets the impersonality of mass society by giving people a chance to talk intimately with health personnel about matters that trouble them. Second, medical care introduces some degree of rationality into everyday life. The health system can often confront people with facts to which they must respond in terms of personal choice. Another latent function is the preservation of an efficient labor force. Other social functions of medical care formed the subject of Shuval and associates' study in Israel (30). They identified ways in which medical care served the nonmedical needs of new immigrants to their country.

The exquisite complexity of the medical care process and of the organizational arrangements to facilitate medical care is matched by a multiplicity of end products, products that include benefits for the individual patient as well as for society. Improvement of health represents only one among the diverse outcomes of medical care. This multiplicity of products has not received due attention from therapists and researchers. and many accept an assumption that the only useful product of medical care is health. Such an assumption may shape a physician's approach to patients. It also may affect cost-benefit analysis of health programs (21). appraisal of the quality of medical care (31), and the planning of national health policy (27). Recognition of other products of medical care will aid understanding of the physician's art and improve the planning and evaluation of medical care programs.

Much of that part of the physician's skill called the art of medicine might be explained by analysis of the social functions of medical care. Understanding of the methods and values of caring, for example, greatly aids the physician serving dying patients (5). Students of medicine can learn to accomplish much for the incurable patient. Analysis of the functions of medical care also should help us understand the psychological and social values of a diagnosis or prognosis alone, apart from any therapeutic intention.

Growing public concern about the evaluation and control of the quality of medical care, illustrated by the requirements for Professional Standards Review Organizations in the Social Security Amendments of 1972, may result in bureaucratic systems for judging the efficiency and effectiveness of services. Planners of such systems should take account of the multiple functions of medical care, because any judgment about the effectiveness of a service requires a prior assumption about its objective. Care that aims to cure or prevent illness may reasonably be evaluated by its impact on indices of health. Much legitimate medical care, however, does not have a curative or preventive outcome and must be judged by criteria other than its effect on individual or community health. Included among such services are diagnostic and casefinding activities, care of the incurable or of the self-limited illness, and custodial care in institutions.

Conclusion

The manifest functions of medical care include assessment of health status, separation of the ill from the well, care (helping to cope with illness), curing of illness, and prevention. Among these functions, only curing and prevention produce health benefits for the user of medical care services. The product or outcome of the other services, although valued by society, is not measurable as a gain in personal health status. Exaggeration of the curative or preventive capabilities of medical care services or undervaluation of the other functions may distort judgments of planners and evaluators as well as the expectations of patients.

References

- 1. Parsons, T.: The social system. Free Press, New York, 1951, pp. 428-479.
- 2. Hennes, J. D.: The measurement of health. Med Care Rev 29 : 1268-1288 (1972).
- 3. Fanshel, S., and Bush, J. W.: A health-status index and its application to health-services outcomes. Operations Res 18 : 1021-1066, November-December 1970.
- 4. Wahl, C. W.: Helping the dying patient and his family. Pastoral Care 26: 93-98, June 1972.
- 5. Artiss K. L., and Levine, A. S.: Doctor-patient relation in severe illness. N Engl J Med 288 : 1210-1214, June 7, 1973.
- Ross, E. K.: The dying patient's point of view. In The dying patient, edited by O. G. Brim, H. E. Freemen, S. Levine, and N. A. Scotch. Russell Sage Foundation, New York, 1970, pp. 156– 170.
- Pattison, E. M.: Systems pastoral care. J Pastoral Care 26 : 2-14, March 1972.
- Freidson, E.: Profession of medicine: a study of the sociology of applied knowledge. Dodd, Mead & Company, New York, 1970, pp. 205-223.
- 9. Garfield, S. R.: The delivery of medical care. Sci Am 222 : 15-23, April 1970.
- Hasenfeld, Y.: People processing organizations: an exchange approach. Am Sociol Rev 37: 256–263, June 1972.
- 11. Carstairs, G. M.: Medicine and faith in rural Rajasthan. In Health, culture and community: case studies of public reactions to health programs, edited by B. D. Paul. Russell Sage Foundation, New York, 1955, pp. 107-134.
- 12. Epstein, F. H.: Predicting coronary heart disease. JAMA 201 : 795-800, Sept. 11, 1967.
- Sadusk, J. F., and Robbins, L. C.: Proposal for health-hazard appraisal in comprehensive health care. JAMA 203 : 1108-1112, Mar. 25, 1968.
- 14. Thorner, R. M.: Whither multiphasic screening. N Eng J Med 280 : 1037-1042, May 8, 1969.
- 15. National Center for Health Statistics: Hospitalization in the last year of life, United States, 1961. Vital and health statistics: data from the national natality and mortality surveys. Ser. 22, No. 1. U.S. Government Printing Office, Washington, D.C., 1961.
- 16. American Medical Association, Judicial Council: Opinions and reports of the judicial council, including the principles of medical

ethics and rules of the judical council. American Medical Association, Chicago, Ill., 1971, pp. vi - vii.

- 17. Peabody, F. W.: The care of the patient. JAMA 88 : 877-882, Mar. 19, 1927.
- 18. Muller, C.: The overmedicated society: forces in the market-place for medical care. Science 176 : 488-492, May 5, 1972.
- Maronde, R. F., Lee, P. V., McCarron, M. M., and Seibert, S.: A study of prescribing patterns. Med Care 9 : 383-395, September-October 1971.
- Scheckler, W. E., and Bennett, J. V.: Antibiotic usage in seven community hospitals. JAMA 213 : 264-267, July 13, 1970.
- Wiseman, J: Cost-benefit analysis and health service policy. In Investment in human capital, edited by B. F. Kiker. University of South Carolina Press, Columbia, 1971, pp. 433-451.
- Public Health Service: Economic benefits from public health services: objectives, methods, and examples of measurement. PHS Publication •No. 1178. U.S. Government Printing Office, Washington, D.C., 1964.
- 23. Auster, R., Leveson, I., and Sarachek, D.: The production of health, an exploratory study. J Human Resources 4 : 411-436, fall 1969.
- 24. Stewart, C. T.: Allocation of resources to health. J Human Resources 6 : 103-122, winter 1971.
- McDermott, W., Deuschle, K. W., and Barnett, C. R.: Health care experiment at Many Farms. Science 175 : 23-31, Jan. 7, 1972.
- Ramcharan, S., et al.: Multiphasic checkup evaluation study 2. Disability and chronic disease after seven years of multiphasic health checkups. Prev Med 2 : 207-220, February 1973.
- 27. U.S. Congress: Health message from the President of the United States relative to building a national health strategy. 92d Cong, 1st Sess., House Document 92-49, Feb. 18, 1971.
- Merton, R. K.: Social theory and social structure. Free Press, New York, 1968, pp. 73-138.
- Sanders, I. T.: Public health in the community. In Handbook of medical sociology, edited by H. E. Freeman, S. Levine, and L. G. Reeder: Prentice-Hall, Inc., Englewood Cliffs, N.J., 1972, pp. 407-434.
- Shuval, J. T. et al.: Social functions of medical practice. Jossey-Bass, Inc., San Francisco, 1970, pp. 184-190.
- Starfield, B.: Health services research: a working model. N Engl J Med 289: 132-136, July 19, 1973.

SYNOPSIS

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Medical care has several important functions other than restoring or maintaining health. These other functions are assessment and certification of health status, prognostication, segregation of the ill to limit communication of illness, and helping to cope with the problems of illness—the caring function. Medical care serving these "paracurative" functions may legitimately be given independently, without associated curing or preventive intent of the provider of care.

Although such services do not result in benefits to health, such as extension of life or reduction of disability, they do have other valued outcomes, outcomes not measurable as a gain in personal health status. For example, caring activities may result in satisfaction, comfort, or desirable affective states, even while the patient's health status deteriorates during an incurable illness. The physician's approach to patients, the economist's analysis of the benefits of health services, the planner's decisions about health programs, the evaluator's judgments about the quality of care, or the patient's expectations about treatment are strongly influenced by his assumptions about the purpose of medical care or the proper outcome of the process.

When the health worker assumes that the only useful outcome is health, he may consider the paracurative services to be ineffective, inefficient, or undesirable. In contrast, when he recognizes and understands the paracurative functions of medical care, he may better perform his function in the medical care system.