The Potential of Health Education in Health Services Delivery

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THE WORDS "health education" are variously used to refer to a broad spectrum of activities ranging from the simple provision of public information to elaborate programs for the training of highly specialized health manpower. In this paper I will use the definition adopted by the President's Committee on Health Education: "Health education is a process that bridges the gap between health information and health practices" (*1*).

Within the broad spectrum of health education my specific concern is with patient education. This process begins with the imparting of factual information to patients, but it also includes interpretation and integration of the information in such a manner as to bring about attitudinal or behavioral changes which benefit the person's health status. Thus, patient education not only involves the world of medical scientific facts, but in its process it is also closely interwoven with psychology, sociology, behavioral science, and cultural anthropology.

An organized program for patient education requires a systematic effort by one or more health professionals in a health service delivery setting. It consists of a number of orderly steps which include assessing the patient's knowledge about his health, determining the patient's health educational needs, the provision of information in a manner most understandable and acceptable by the patient, assuring as much as possible that this information is integrated into the patient's attitudes and, finally, followup to assure that the new information has indeed produced behavioral changes with beneficial effect upon the person.

This process frequently must be directed not only to the patient himself but also to other per-

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sons of key significance in the patient's life pattern. Not only scientific facts, but also an understanding of human motivation and behavior, as well as information concerning the cultural setting and background of the patient, must all be incorporated in the process for successful communication. Furthermore, it is often true that those who deliver health services need to participate in health education themselves before they can design and implement a successful organized program for patient education.

Importance of Patient Education

Increased emphasis upon prevention. A major thrust in the evolution of our contemporary health service delivery system appears to be an increased emphasis upon the prevention of disease processes, illnesses, and impairments. Prevention includes primary prevention, the prevention of the occurrence of disease; secondary prevention, early recognition and intervention in disease processes, even when they may be unrecognized by the patient; and tertiary prevention, which requires highly specialized medical and surgical care including rehabilitation services. Our nation is becoming increasingly sensitized to the enormous human and resource costs of chronic and catastrophic illness, with increasing attention on "what might have been, if only" these problems could have been prevented.

In the first half of this century in the United States we have achieved increasingly effective control of the infectious and communicable diseases. Control was attained through primary prevention of these diseases by the mechanisms of immunization and environmental control. The development of antibiotics in the 1930s and 1940s contributed to this control.

Attention is now increasingly centered on the prevention of chronic diseases and catastrophic illness. Although scientific information is lacking for primary prevention of many of these problems, think for a moment how much it means, not only to a patient and his family but also to society as a whole, to be able to prevent the human and resource costs of these diseases. Think of what it means to prevent a stroke through the sometimes simple approach of controlling hypertension. Think of what it means to prevent the personal catastrophe of paraplegia resulting from a spinal cord injured in an accident caused by a drunk driver. Think what it means to prevent the painful death of a man in his prime from cancer of the lungs through control of smoking. Think what it means to prevent the amputation of a gangrenous leg of an elderly diabetic through good personal hygiene and health care. Think what it means to prevent overcrowding and malnutrition through thoughtful and compassionate family planning.

Success in all of these endeavors must include well-organized patient education programs.

Increasing incidence and prevalence of problems of chronic illness and the aged. As the incidence and prevalence of communicable diseases have been brought largely under control, the problems of birth defects, accidents, chronic illnesses, and of the aged have come to the fore. With the exception of traumatic accidents, these health problems have slow insidious onset, tend to be of long duration, tend to disable many months or years before they kill, tend to require continuing care, sometimes for life, because of their long-term nature and, finally, tend to have enormous psychosocial and financial impact upon the patient, his family, and society as a whole, because of the long-term need for complex services.

Another feature of chronic illness of special importance to those who are interested in patient education is that the low-grade, long-term features of chronic illness mean that the major portion of the management of a chronic illness rests in the hands of the patient himself or his family, rather than in the hands of health professionals. Of course, the intervention of health professionals and health facilities, such as hospitals, is essential to make proper diagnoses and to elaborate plans for management. However, most of the day-to-day management of such problems is in the patient's own hands.

Think of the diabetic who must daily manage his own food intake and medication. Think of the patient with healing tuberculosis who now spends

an average of only 90 days in the hospital and must then carry through another 21 months of daily therapy himself—with only intermittent contact with health professionals—to assure that reactivation does not occur. Think of the cardiac or the hypertensive patient who must manage his own medications and pace himself, perhaps with major changes in life pattern, in order to maintain his health. Think of the person with an amputation or a spinal cord injury due to a traumatic event, who then must live with, adjust to, and manage his impairment every day of his life. Think of the family that cares daily for a child with cerebral palsy. The staggering increase in the importance of the patient and his family in the management of individual health problems demands effective patient education services.

Increasing costs of health services. Another social force which is prompting an increased emphasis upon patient education is the escalation of costs for health services. In 1972 more than $75 billion were spent on health care, approximately 7.5 percent of the gross national product (*2*). The public is generally aware that hospitalization, which only a few years ago averaged $50 to $75 per day in large cities, may now average $100 to $150 a day. The health industry employs more than 4.5 million persons including both professionals and support personnel and, in terms of manpower, is the third largest industry in the United States.

This phenomenon in our society is forcing both consumers and providers of health services to be increasingly thoughtful about maintenance of health and the efficient utilization of the health service system. Many health problems which are cared for on an inpatient basis could be, at least in part, managed through ambulatory services. In many instances, more effective compliance with a health regimen would prevent costly readmissions to hospitals.

Problems of health manpower. Another major problem in the delivery of health services consists of the deficits and maldistribution of health manpower. Our society is earnestly attempting to meet this problem through a variety of channels, including the training of new categories of health personnel and reallocation of responsibility for health tasks. However, an important factor not to be overlooked is that, because of the responsibility of the individual citizen in the maintenance of his own health and the increasing role of the patient in the management of his own long-term illness, the citizens of our country can be said to be our greatest source of untapped health manpower. Patient education can make it possible to tap this enormous pool of health manpower effectively.

Implementing Patient Education Programs

Within the context of the concept that patient education must move beyond the acquiring of factual information to the changing of actual behavior, the implementation of patient education programs can be discussed from the viewpoint of target populations, objectives, and process.

Target populations. Nationwide, several special populations can be identified as having unique health needs requiring special emphasis on patient education. These target populations include those to whom preventive services or long-term management are of special significance. These are women of childbearing age, pregnant women, middle-aged persons at high risk for chronic diseases, low-income groups, and those already chronically ill or suffering from the problems of aging.

Objectives. Patient and public education are increasingly critical to the efficient and effective operation of the health service system in at least four broad areas.

1. There is increasing public awareness and concern about the pollution of air and water, about the presence of hazardous agents such as radiation, pesticides, and toxic inhalants, and about the relationship between exposure and the causation of disease and disability. Society is making serious strides forward in this area.

2. In the field of personal health maintenance, we intrude into personal and cultural behavior patterns of nutrition, exercise, and the use of intoxicants including alcohol, drugs, and tobacco, and we must change a relaxed and unrealistic attitude toward the hazards of accidents.

3. Knowledge of the consumer public about its rights and the benefit packages of various health care systems is essential if consumers are to use health services efficiently and effectively rather than wastefully.

4. The compliance of patients in carrying through with health service advice is often critical for favorable outcomes. The literature on patient compliance with health professionals' instructions is enormous, and many studies in many types of settings have examined the accuracy with which patients understand the directions given them by health personnel and the conscientiousness with which they carry out the advice. Some studies are shocking in their demonstration of the insensitivity of health personnel to the personal and intellectual needs of patients for understanding. Some studies are frightening because of their reports of the frequency with which critical medications are omitted or taken incorrectly.

Process of patient education. The process of patient education must, at a minimum, be concerned with the site, the responsible personnel, and the interrelationships between consumers and health personnel.

Patient education can go on in any health delivery setting. Because of the usual frequency of hospital visits for health care, the hospital is a natural setting. In the United States there are more than 7,000 hospitals, and yet only about 50 have what could be called organized patient education services. The President's Committee on Health Education has urged that patient education services be available not only in inpatient settings, but also in ambulatory care settings, including the physician's office. The sensitive, thoughtful physician automatically carries out good patient education, but in the future it may be necessary for both individual physicians and those practicing in an organized setting to develop more varied and systematic methods of patient education. For example, a group of internists might set up a series of group sessions for patients concerning hypertension and its management. The President's Committee has also recommended that both industry and labor become concerned with health education as a way of maintaining the health of the working population.

Traditionally, patient education has been assumed to be the responsibility of the physician. However, with the changing roles and responsibilities of various health personnel, it has become increasingly clear that patient education is the responsibility of all who have direct patient contacts. This is especially true, for example, in chronic illnesses, such as stroke. In this situation the physician plays a less important role once the diagnosis and treatment plan are established—much less important than do the nurses and nurses' aides who spend many hours each day with the patient. In this situation, it is the nursing and rehabilitation personnel who bear the major responsibility for patient and family education.

In 1959 Szasz and Hollander described three categories of physician-patient relationships (*3*). Magraw has elaborated the concept, which is relevant to the field of patient education (*4*). These three types of physician-patient relationships follow:

1. *Activity-passivity.* In this situation the patient is partially or completely helpless and is unable to make a major contribution to his own care or to decisions concerning it. The physician does something to or for the patient with little participation by the patient. Examples of such problems are coma, delirium, severe traumatic accidents, and shock. In these instances, the physician's relationship to the patient resembles somewhat that of a parent to a helpless young infant.

2. *Guidance-cooperation.* In this model of the physician-patient relationship the illness may be acute, but it is not as overwhelming or as desperate as in the first model. The patient may be keenly aware of what is going on, able to exercise some judgment, and capable of following some directions. However, the situation is usually still serious enough so that the physician's advice is paramount, and the patient is expected to accept this advice and follow through on it appropriately. In this model, the prototype is the relationship of a parent to a child, youth, or adolescent.

3. *Mutual participation.* This model of the physician-patient relationship is most characteristic of the management of chronic illnesses and the problems of aging. In this situation the major portion of the management of the condition is carried out by the patient himself, with only occasional consultation or direct contact with a physician. The prototype of this type of relationship is that of consenting adult to adult. One has specialized knowledge to give, but the other uses it voluntarily with understanding, agreement, and acceptance.

Constraints

Simonds, a member of the President's Committee on Health Education, has pointed out that any new major development in the health field takes an average of 25–30 years before fruition. Health education has a few more years to reach this time limit for general acceptance, but he feels that it is well along the way (*5*).

An important inhibiting factor has been the lack of a central Federal agency with authority for development of health education. The President's Committee has therefore recommended that a national center for health education be established at the Federal level for this purpose.

Another constraint in the development of patient education programs has been the lack of manpower trained in health education. It is my understanding that at present in the United States there are only about 25,000 professionally trained health educators. More are needed. Furthermore, ways must be found to increase the participation of all health personnel in the health education and patient education processes.

Still another deterrent has been the lack of funding for health education programs. Many third-party payors do not include health education or patient education costs in their reimbursement formulas.

Conclusions

In the context of the many social forces contributing to the present rapid evolution of the system for the development of health services in the United States, professional, systematic patient education must play an increasingly larger role. This assumption of responsibility will help to assure more efficient and effective utilization of health services, more efficient use of health manpower, increased cost control, and closer cooperation between consumers and the deliverers of health services. In President Nixon's health message to the 92d Congress in February 1971, he said (*6*):

> In the final analysis, each individual bears the major responsibility for his own health. Unfortunately, too many of us fail to meet that responsibility. Too many Americans eat too much, drink too much, work too hard, and exercise too little. Too many are careless drivers.
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> These are personal questions, to be sure, but they are also public questions. For the whole society has a stake in the health of the individual. Ultimately, everyone shares in the cost of his illnesses or accidents. Through tax payments and through insurance premiums, the careful subsidize the careless, the nonsmokers subsidize those who smoke, the physically fit subsidize the rundown and the overweight, the knowledgeable subsidize the ignorant and vulnerable.

Greater understanding of patient education as a process and broader implementation of its principles by all health service personnel will increase the thrust toward considering each patient as an individual human being, with a unique psychosocial, family, and cultural background, who deserves the right to information concerning his health and to guidance in using that information to his greatest advantage.

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