COMMUNITY MEDICINE

An American Concept of Comprehensive Care

WILLIAM H. STEWART, M.D.

IN MANY PARTS of the world today, medicine as a social institution is experiencing changes as startling as those occurring in medicine as a science and an art. In a Canadian Province, some physicians accept a system of state medicine for the whole population, while others refuse to treat patients covered by that system. In America, some medical and hospital associations oppose social insurance for medical care of the aged, while all health professional schools and many voluntary hospitals seek Federal funds for research and training. Many American voluntary hospitals recruit interns from foreign medical schools as a means of obtaining sufficient resident staffs.

In the United States, public health and preventive medicine are emerging into roles entirely different from those defined by their apostles. These roles are the subject of my discussion.

Primarily, the roles of preventive medicine and public health embrace medicine as a social institution. They comprise those functions which relate medicine as a science and art to society, in contrast with those medical functions related to the individual patient and those associational functions related to the practitioners of the art as a learned profession.

Dr. Stewart, formerly chief of the Division of Community Health Services, Public Health Service, is now assistant to the Assistant Secretary for Health and Medical Affairs, Department of Health, Education, and Welfare. *This paper was presented at the annual meeting of the North Carolina Academy of Preventive Medicine, Raleigh, N.C., September 26, 1962.*

At present, the social functions of medicine are expanding in scope and volume at a rapid rate. Medicine is called upon to deliver judgments affecting critical issues in public policy, such as the effects on human life of manmade radiation, new drugs, and chemical contamination of the environment. In the United States, medicine is expected to provide guidance for thousands of voluntary health agencies which hold large sums of money as a public trust. Medicine is also expected to establish standards for an incredible variety of services which now comprise comprehensive health care. These services must also be so planned, organized, financed, and operated as to insure comprehensive care for each individual in the population.

Public health as we know it in the United States has inherited the major responsibility for the development of these new functions, as preventive medicine has inherited the teaching of them in our medical schools. It would be difficult to determine whether this inheritance has been won by virtue or by default. Certain it is, however, that public health has served as a rallying point in American medicine for those physicians whose professional preoccupation is the social role of medicine. And they have been allied with certain clinical practitioners to establish a medical specialty: preventive medicine.

When in 1948 the charter members applied for recognition as an American Specialty Board, the terms "public health" and "preventive medicine" already were inadequate to identify the social functions of medicine in the United States. For cultural and political reasons well known to all of us, the definitive term "social medicine," freely used by our col-

leagues in the United Kingdom, Ireland, and Western Europe, could not be employed.

As a result, we are now at a semantic impasse. We need a term to identify the specialized knowledge and skills required in our emerging system of medical services, a system which is neither "state medicine," nor "socialized medicine," nor "private medicine," but a combined public and private effort for comprehensive health care in every American community.

"Community medicine" may be the most acceptable term at the present time. For the purposes of my discussion it has certain advantages. It eliminates that overused abstraction "health," which, despite many efforts to define it otherwise, remains a state of being rather than an institution.

"Community medicine" also permits us to entertain a concept of the social functions of medicine at once broader and more precise than is implied in "preventive medicine." The latter is, indeed, merely one of three approaches to patient care which emphasize the nature of the patient's need at given times. Preventive, curative, and restorative medicine may be called points of view or areas of emphasis, but they are not distinctive medical specialties to be practiced exclusively by physicians with three different types of training and experience.

Prevention, however, became the battle cry of public health physicians more than a century ago. Its preeminence in public health today is deeply rooted in both the medical and social history of our country. We need then to examine those roots as guides to community medicine.

Historical Perspective

Future historians may well describe this era in American medicine as one of effort to find a conceptual basis for a long overdue marriage of public health and medical care. Since prevention has had first priority in American public health, this marriage would require a philosophical basis for eliminating the dichotomy of preventive medicine and curative medicine, the latter comprising primarily care of the sick.

Thus today we find such students of the subject as René Dubos tracing the dichotomy to the mythical period of ancient Greece. "The myths of Hygeia and Asclepius," Dubos writes, "symbolize the never-ending oscillation between two different points of view of medicine. For the worshippers of Hygeia, health is the natural order of things, a positive attribute to which men are entitled if they govern their lives wisely. According to them, the most important function of medicine is to discover and teach the natural laws which will ensure to man a healthy mind in a healthy body. More skeptical or wiser in the ways of the world, the followers of Asclepius believe that the chief role of the physician is to treat disease, to restore health by correcting any imperfection caused by accidents of birth or of life" (*1*).

The philosophy of public health in which we 20th century disciples have been trained does not derive from the classics but from a much more recent philosophy, that is, from romanticism. Dubos supports this opinion both in "Mirage of Health" and in subsequent papers. For example, in 1961, he told a group of public health workers that they "face a peculiar intellectual dilemma. On the one hand, they are professionally committed to the doctrine that it is possible to create a world free of disease; they must function as if they believe in a medical Utopia. On the other hand, experience teaches them that as soon as one disease is rooted out, another one springs up to take its place." And again, ". . . public health workers know that the 'positive health' evoked by the World Health Organization definition is at best a mirage that can never be reached, and perhaps nothing more than a will-o'-the-wisp that may lead its followers into the swamps of unreality" (*2*).

Let us shorten our historical perspective and look at a period not unlike our own: the 19th century. In it we may find the origins of our romantic philosophy. It is true that men like John Simon and William Osler sought to base modern medicine on the contributions of the Greeks of ancient times. That was in the tradition of a classical education in which they had been trained. An appeal to the classics was an afterthought, however, as it is today. The Greeks were realists; there is good reason to believe that their 19th century disciples saw in classical Greece the ideal world described and sought by Jean Jacques Rousseau and his followers.

The 19th century found the Western World in ferment. Hard on the heels of the American and French revolutions, the Napoleonic wars set off a period of intense nationalism, based on concepts of democracy unknown to the Greeks. New nations were emerging in Europe and the Americas as rapidly as they are now emerging in Africa and Asia.

Romanticism held sway, not only in the arts, but also in politics, education, and social relations. An educated youth was trained in Greek and Latin, but he also read Rousseau's "Social Contract" and "Emile." From the literature of his period, he visualized an ideal world to be created by a return to nature and natural laws under a democratic order.

In the same period, technological advances set off a new industrial revolution. In particular, the advent of steam and iron in water and land transport revolutionized communications. It assured new industries economical access to raw materials and more efficient distribution of their products. In our young country, steamships and railroads also assured an ample supply of cheap labor. Political and economic collapse in Europe had set off one of the largest migrations in world history. Some 40 million Europeans entered this country as new citizens in the hundred years from 1800 to 1900.

Nineteenth century youth thus found new frontiers in America—the vast physical frontier in the opening of the West, the exhilarating frontier of new industries, and the great philosophical frontier centered on the idea of a free society in a natural setting of beauty and grandeur, offering opportunity for all.

But there was another side to this coin. American communities were not prepared to absorb the rapid changes. In the older settled areas, local government remained as in the colonial period, based on English law of the middle ages and the 16th century. States and territories asserted a minimum of authority in the protection of natural and human resources. In the new settlements, local government was rudimentary, and on the frontier, nonexistent.

There were no laws reflecting current knowledge and technology for the provision of urban water supplies and sewage disposal. There was no administrative machinery to cope with the problems of communal living. Yet villages became crowded towns almost overnight, and towns became slum-infested cities within 5 years. The half dozen cities with populations of 100,000 or more in 1850 were not much better off than the burgeoning small communities. Further, the great migration via rapid transport facilitated the transmission of devastating epidemics which no country, no community was prepared to control.

The American health movement sprang from these problems of an expanding and changing society. But the movement developed in two separate streams during the 19th century: one based on the romantic concept of creating an environment free of disease; the other based on the concept of meeting the urgent needs of sick and suffering people. As early as 1850, the dichotomy was evident: prevention versus cure, public health versus medical care.

What were the issues that divided America's health forces so long ago? What groups were involved?

If we scrutinize the crusaders of the 19th century, we realize that a strong motivation toward social reform links most of them. Iago Galdston writes: "The pioneers in public health were social reformers even when they were physicians. They were generally disciples of one or another of the social philosophers, or of the economists, whose theories enlisted the passionate partisanship of the 19th century intellectuals. The present day public health worker is primarily a professional worker who is little, if at all, schooled in philosophy, sociology, or economics. The pioneers were either voluntary workers or persons of means and position. They were unhampered by material considerations and could lash out against abuses and defects they witnessed without fear of the interests they might offend. The present day health worker is generally the paid employee of some corporate or official body, and his primary obligation is to perform certain specific tasks. He is neither inclined nor in a position to venture beyond his interest and duties. From all this it must not be gathered that courage, virtue, and honor died out with the pioneers. There are crusaders among our present day health workers. Their number, however, is small and the spirit of the movement is not theirs" (*3*).

Galdston and many other students of the sub-

ject have observed that the advent of bacteriology narrowed the scope of the public health movement. Actually, the dichotomy which concerns us had occurred before bacteriology had time to identify a single pathogenic organism. The discoveries of Pasteur, Koch, and their students merely served to implement progress toward an ideal of freedom from disease through preventive measures, "pure and undefiled" by care of the sick poor.

The rift in our American health services has a profound social and political source. The small group of physicians, lawyers, and city fathers who launched the public health movement here for the most part were native-born, Anglo-American, Protestant, and property owners. Confronted for the first time by mass poverty in their communities, they correctly perceived that the devastating epidemics emanated from the stinking holds of ships where poor refugees were stored on the ocean voyage and from the wretched dwellings of the poor in burgeoning cities. One gains the impression in their published reports that moral impulses stirred them but that they were motivated more by civic pride than by compassion for the unfortunate.

Moreover, they did not accurately assess the nature of the changes then taking place. In their cities scattered along the eastern seaboard and the Ohio River valley, they counted upon the frontier to absorb all the surplus poor arriving on their doorsteps. To them the industrial revolution, despite frequent panics, was a blessing to all right-minded citizens. In their view, the increase of dependent populations both before and after the Civil War was a temporary emergency, like an epidemic.

The mounting tide of dependency would subside, they believed, as the expanding American economy absorbed the surplus unemployed. Sanitary reform and regulatory control of epidemics would render the whole community free of disease. To build hospitals, to provide medical care for the sick poor would mean sacrificing long-range gains possible through public health measures for the sake of ineffective expedient action in care of the sick poor. Frequent epidemics of that period, spreading farther and faster than ever before, lent powerful public support to the sanitarians' viewpoint.

Some reformers, however, took a different view. Their concern was people, not business, nor civic pride, nor disease. Their motivation was charity, a forbidden word in its modern counterpart, the welfare movement. Their methods were not romantic but realistic, using the available resources to achieve their goal. Very simply, that goal was the relief of suffering, whether that of a neglected child, an impoverished mother, a sick or injured workman, an imprisoned felon, a mentally ill person, a refugee, or a soldier on the battlefield.

Basic Fabric of Community Medicine

Modern public health workers are usually taught that the voluntary health movement began after the turn of the 20th century. The reverse is true. Before 1900, the voluntary "charities" had laid the foundations of virtually the entire range of organized services believed necessary for the health of a community today. They had created, not an ideal of health, but the following concrete facilities and services:

The general hospital.
The training of skilled nurses.
Hospitals for the mentally ill.
Organized medical and nursing care in the home and in "dispensaries" for the poor.
Visiting nurse associations, combining instruction and bedside care.
Special hospitals for infants and children.
Preventive programs for pregnant women and their infants.
Sanatoriums and home care for the tuberculous.
Institutions for the aged and infirm.
Hospitals and medical care in some industries.
Insurance against sickness and sudden death.

The Civil War is regarded as the watershed dividing the periods of exploration and development in both public health and medical care. One of the salutary lessons taught by that national disaster was that all the States and territories were deficient in facilities and skills for care of the sick even as they were lacking in rudimentary sanitation and effective regulations for epidemic control.

At the close of the 19th century, scientific advances and shifts in the pattern of diseases still had no significant impact on our official health agencies. As late as 1909, Homer Folks, executive director of the State Charities Aid

Association of New York, named tuberculosis, venereal diseases, infant mortality, and alcoholism "among the conspicuous causes of dependency from which public health authorities cannot much longer hold aloof" (*4*). Speaking for welfare workers who had made the first efforts in those fields during the 19th century, Folks urged a broadening in the scope of public health work as it was then "interpreted by public health commissions, boards, and departments." That broadening means, he said, "getting local government to establish and maintain hospitals, sanatoria, visiting nurses, and other agencies for . . . the treatment and prevention of preventable diseases."

Our official health agencies eventually assimilated to their functions some of the concepts of service inherent in the voluntary movement. From the 1880's onward, the public health movement always included rebels: men and women ready to strike out with new approaches to the roots of evil; crusaders who never lost faith that the movement possessed the breadth of vision, as well as the spirit and competence, to meet the health needs of a growing and changing society.

Need for New Concepts

More than once in the past, public health has been saved as a social institution because some of its leaders were willing to respond affirmatively to long-neglected demands from the people. The maternal and child health program, for example, was in response to the sorrow inflicted by shockingly high mortality rates among mothers and infants. Industrial hygiene, venereal disease control, and the later campaigns against chronic diseases represent the same response.

We must concede, however, that each of these responses has contained a compromise in favor of our early 19th-century dream of disease prevention. As public health advanced into the second half of the 20th century, the line between preventive medicine and curative medicine tightened. At the present time, the majority of public health workers in the United States cling to the concept that they may provide only preventive services.

However, it has been necessary under public pressure to revise the definition of prevention several times in the past 25 years. Thomas Parran, for example, set hundreds of young public health physicians to rendering curative services to syphilis patients by calling the national program "a chemical quarantine" against venereal disease. After World War II, new chronic disease control programs were justified under such terms as secondary and tertiary prevention.

Meanwhile, the classical concept of preventive medicine as a specialized discipline for the maintenance and promotion of personal health has been absorbed into the stream of medical care and our social mores. Of course, certain groups in each community require indoctrination in personal health practices and child care. Usually, these are the underprivileged families who need education, jobs, decent housing, and medical care far more than they need specialized health advice. For the vast majority of the population, personal hygiene and good nutrition are part of daily living. Immunization and health supervision have passed into the hands of family physicians, pediatricians, and obstetricians. Low- and middle-income families alike in most parts of the country turn to private physicians or community hospitals for health protection rather than to health agencies.

True, the classical concepts of public health were justified by the role their application played in our evolving American society. The victories over infectious and nutritional deficiency diseases could not have been won without advances in science and their application by organized health work in our communities. The new problems that emerged, however, have not proved amenable to our classical concepts of preventive medicine and public health. Nevertheless, health workers have been reluctant to abandon old concepts and practices with which they feel comfortable.

G. K. Chesterton once quipped, "Classical is something that cannot be eliminated but may be safely ignored." Our society cannot eliminate the victories won by organized health action, but it may and does safely ignore outmoded concepts of community medical services. Is it not up to us in preventive medicine and public health to create and apply new concepts for new circumstances?

Community Medicine and Comprehensive Care

The place to begin, I believe, is with a concept of community medicine which admits no separation of prevention and cure. It focuses on the social functions of medicine, rather than on the specific actions intended to prevent or cure disease in the individual patient.

In community medicine we are concerned with all the organized services required to prevent illness, to heal, to restore, and to sustain the individual in the best state of health of which he is capable with the aid of modern medicine. This concept of community medicine implies that all these organized services and the individual services of practitioners are mutually dependent one upon the other. The physician cannot serve without hospitals. An insurance program cannot function without physicians.

Our society has established numerous medically oriented social institutions to meet its health needs—medical schools; hospitals; insurance plans to underwrite the risks of sickness, accidents, and death; professional organizations; official and voluntary health agencies; group health associations to provide comprehensive care under prepayment systems. Society and science are changing rapidly; hence these social institutions must be adapted to changing circumstances. For example, medical and sociological studies have shown that the large, isolated, understaffed public mental hospital is not a satisfactory social institution for care of the mentally ill. As a result, some health insurance companies are providing benefits for out-of-hospital psychiatric care, and more community general hospitals are setting up psychiatric services for diagnosis and intensive therapy.

In the main, however, the process of adaption has not kept pace with society's expectations. Our health and medical institutions are having difficulty in meeting the demands at a level satisfying to an educated, urban, and affluent society. There is wide agreement that the aged should have the full range of medical services requisite to make their declining years worth living. Yet there is disagreement on how the services shall be financed, and there is no assurance that the needed service will be available at the right time in the right place for all our older people.

The same may be said of services for all other age groups. Many parts of the country are lacking in the increasing variety of medically oriented services required for prevention, cure, and restoration. Furthermore, communities with ample resources have not discovered the way to assure comprehensive health care for all its members. There is much overlapping, with official and voluntary agencies competing for one segment of the population or another. There are large gaps both in kind and quantity of services, and there are countless restrictions on availability of existing services. In one community, for example, home care services may be available to the dependent aged but not to independent families; in another, to stroke patients but not to persons with other chronic disabilities.

Despite the long-recognized inefficiency inherent in such a situation, health and medical organizations continue to develop their separatist approaches. What appears to be necessary is the development of a system of interrelated social institutions so that all needed services are available wherever they are needed and so that patients of every category receive the needed services when and where they can do the most good. The Surgeon General of the Public Health Service, Dr. Luther L. Terry, states this concept as follows: "I assume comprehensive care to mean *a continuum of health services* available to each individual when he needs them and where he needs them, without diminution of quality or disruption of delivery. Care in any one setting—the home, the private practitioner's office, the public clinic, the hospital or other institution—is not an isolated experience. Differentiation of preventive, curative, and rehabilitative aims in the organization of services is less sharp. Ideally it would disappear" (*5*).

Our existing institutions have the opportunity to shape the future system of health and medical services which comprises what I would call community medicine. It presents a new area of scientific investigation, teaching, and application. Basically, it involves the organizational and functional relationships of the professional and technical groups, the facilities,

and the financial resources through which comprehensive health care may become a reality in every community.

As a body of knowledge and practice, community medicine is as yet undifferentiated and somewhat vague in concept, but it is not romantic in philosophy nor utopian in ideal. It contemplates a rational order of existing and future resources for application to human needs. Many aspects implicit in the emerging concept of community medicine are studied, taught, and practiced under such labels as administrative medicine, social medicine, public health administration, and medical care administration, to name a few.

Community medicine lends itself to systematic study, using the methodologies of the social sciences, epidemiology, behavioral science, and perhaps other methods not yet devised. There is a growing body of knowledge applicable in this emerging field of medicine. In my opinion, physicians trained in preventive medicine and public health have a tremendous contribution to make to community medicine in each of the three major functions of any medical group—teaching, research, and service.

Teaching Community Medicine

The future of community medicine depends on progress in each of these functions, but, to paraphrase a well-known precept, "the greatest of these is teaching." For without the continuing refreshment of young minds and new ideas, community medicine will not emerge as a social institution serving a changing and growing society.

We are obliged, then, to turn first to medical education for the development of men and women learned and skilled in the social functions of medicine. The undergraduate curriculum in our medical schools has been divided into two main parts since the reform movement of 1910. The first is concentrated on anatomy, physiology, biochemistry, bacteriology, and pathology, subjects now termed "the basic medical sciences." The second part, clinical training, is devoted to technical skills in diagnosis and therapy, again divided into two main fields, surgery and medicine.

Somewhere in the 4-year course, there is some exposure to preventive medicine and psychiatry. The student is rarely exposed, however, to the sciences basic to community medicine and psychiatry, the social and behavioral sciences. Moreover, his premedical training usually is so overwhelmed with the physical sciences and biology that he reaches medical school with nothing more than a high school view of the society he is to work in and the people whom he is to treat.

In most medical schools, the curriculum has been adjusted to permit early introduction of the students to patients. The older, well-established basic medical sciences, however, offer stiff competition for precious curriculum time. A few schools also are offering curriculums which permit a student to break away from clinical medicine and pursue a doctorate in laboratory research. Nowhere, however, is there an opportunity for a young person attracted to medicine as a social institution to come out of his training as a doctor of medical economics or of community medicine. Should the premedical qualifications be modified to require early instruction in the basic concepts of sociology, economics, and psychology? Or should the preclinical medical curriculum be modified to balance instruction in the basic medical, social, and behavioral sciences? Should a choice be offered at the end of the second year in medical school to obtain a doctorate in medical research, clinical medicine, psychiatry, or community medicine? Medical education as a whole has not faced these questions in earnest.

Regardless of whether a physician is to devote his career to the medical needs of individuals or to community needs, he cannot function in modern medicine without some knowledge of the social action needed to cope with disease. Our present concepts of preventive medicine, however, are not broad enough. They are based on limited theories of the origins of disease and on limited techniques of manipulation of the environment or on advice to individuals to seek medical care.

These concepts have little or no appeal to the typical medical student. At his best, he is motivated to save lives in peril, relieve suffering, and allay anxiety. He knows that advice, without medical care, will not ease the pain of arthritis, save the cancer patient, or keep the asthma sufferer in school or on the job. Only after he

has been exposed to the facts of social life in hospital or private practice does the 1 medical student in 200 turn to community medicine as a career.

How can we capture the imagination of more young people in their undergraduate years? I am convinced that we cannot do so on the basis of preventive medicine as it is now conceived and taught.

We must teach the social sciences on an equal basis with anatomy and biochemistry, taking advantage of early introduction of clinical subjects to teach the concept of comprehensive care. As the student's course advances, let him have the opportunity to elect community medicine. This new area of medicine would require further studies in economics, mathematics, behavioral science, and epidemiology as well as clinical instruction. Its field of practice would be the community.

The community might be a rural town or a large metropolitan city. It might be a region involving many small communities. It might be an artificial community: the employees of a mining company and their families or the students of a college. In any case, the community physician would be concerned with the means for providing comprehensive health care to each individual rather than with direct delivery of care. He would be competent to cope with that complex of organizational and functional relationships involved in modern medicine: the variously trained personnel, the facilities, the financial resources, and the institutions through which the community attains its health goals.

Summary

I have presented a concept of community medicine as an area in American medicine ready for scientific investigation, teaching, and service. The concept is very much broader than preventive medicine and public health as they are conceived and taught today.

The concept of community medicine needs further development and considerably more application. Hence it offers to every physician concerned with medicine as a social institution rich opportunities for study, teaching, and practice. It would eliminate the division of preventive, curative, and restorative medicine, as well as the search for medical utopias. Instead, it would concentrate thought and effort on the practical means for providing comprehensive health care to each individual throughout his lifetime in every American community.

We physicians who are engaged in preventive medicine careers today can be crusaders for community medicine, as our professional ancestors were crusaders for sanitary reform and care of the sick. To do so we must recapture their eagerness to innovate, to create and test new ideas for service to our communities "in sickness and in health."

REFERENCES

(1) Dubos, R. J.: Mirage of health. (World perspectives, vol. 22.) Harper & Brothers, New York, 1959, pp. 110–111.

(2) Dubos, R. J.: Social determinants of health practices. Paper presented at Annual Health Conference, New York State Department of Health, Albany, N.Y., 1961. Mimeographed.

(3) Galdston, I.: Progress in medicine. Alfred A. Knopf, New York, 1940, p. 310.

(4) Folks, H.: Public health and welfare: selected papers, edited by Savel Zimand. The Macmillan Co., New York, 1958, p. 82.

(5) Terry, L. L.: Community health services. Delta Omega Lecture. American Public Health Association, New York, 1961. Mimeographed.