Relationship Between Comprehensive and Environmental Health Planning

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A TOPIC of much conversation in public health circles today is comprehensive health planning. What does it mean? What does it include? Will it work? What activities are affected? Questions like these are being asked. One may also ask what the relationship is between comprehensive health and environmental health planning.

Environmental health is an important component of comprehensive health planning because of several fundamental concepts of the health of man. One is the notion that health is an individual right, just as elementary education has rightfully been considered. Another is the ecological approach in dealing with health problems of the whole man.

In 1968 the Department of Health, Education, and Welfare was reorganized. One major entity is now called the Consumer Protection and Environmental Health Service. Thus the public's concern about the environment has received greater recognition—another indication that the environment is an important component in man's health and well-being and is considered highly significant in comprehensive health planning.

Comprehensive health planning may be the beginning of a process that if directed toward

Mr. Metts is a sanitarian, formerly with the Los Angeles County Health Department, Los Angeles, Calif. major problems will yield the greatest returns in health benefits with the least expenditure of resources. Agencies that have some interest in health, but not necessarily a primary one, perhaps will coordinate their efforts with others for more effective and efficient results. For the professional health worker, the challenge is new but the concepts are old. They have not yet been used effectively in our society.

Planning Defined

The health professional now is reading and hearing more about planning than ever before; therefore, definitions of planning, comprehensive health planning, environmental health planning, and environmental planning may be useful.

Planning. According to Gist and Halbert (1), planning is "a means of directing social change and social relationships toward the ultimate objective of orderly and harmonious community processes." In explaining the classic model, Bolan (2) takes more of a Braybrooke-Lindblom (3) incremental approach, claiming that planning is now viewed as a process, still largely undefined, and the master plan is a flexible guide to public policy. This view presents planning not as a static, closed system but as a process in which goals are changed; decision making (predicting the future) is based on incomplete or faulty information, resulting in inaccuracies; and "new values, new opportuni-

ties, and unforeseen side effects keep cropping up" (\mathcal{D}) .

A short but good definition of planning is "devising or projecting a method or course of action, procedure, or arrangement" (4). Fox (5) stated his views of planning by explaining what he understands to be the "planning process" or what it involves; namely, dealing "on the one hand with goals and on the other hand with the assessment or evaluation of ways of meeting specific goals." Briefly, a planner (anyone) first defines that which needs to be accomplished and then evaluates alternative ways of achieving the accomplishment. Not only may the alternatives change in time but the objectives also may change owing to costs, new information, values, and so on.

Comprehensive health planning. Recognizing a truly comprehensive health plan is difficult; it depends on variables, definitions, and persons viewing the plan. Michael and co-workers (6) define it as "a formal written commitment by the properly designated authorities for future action designed to elevate or maintain the health of all persons within the legal jurisdiction of the said authorities." These authors claim that the plan must be comprehensive geographically in population coverage and should "include comprehensive plans of action for all agencies engaged in mitigating any of the causes of death or illness or the multiple factors related to any of these causes." The goal should be stated in terms of the population's health status, and the plan should list the health objectives, which should be quantified in terms of morbidity (in its broadest sense) and mortality and projected over a specified period.

Environmental health planning. According to the Department of Health, Education, and Welfare, environmental health planning is defined as "the process of surveying and analyzing both present and anticipated future external conditions and influences affecting the physical, mental, and social well-being of the individual or community and then developing a method or course of action for environmental control to promote such well-being" (4).

B. L. Driver, of the School of Natural Resources, University of Michigan, claimed that the planner is primarily an information proces-

sor. He defined environmental health planning as "the gathering, organization, and processing of information to facilitate decisions that will totally or partially resolve problems associated with sources of stimuli that require man's adaption to retain and/or maintain a healthy condition." He viewed environmental planning as something more than health but related to it, the totality of stimuli, future and team (rather than discipline) oriented. Driver defined environmental planning as "the planning of environments that are of such design and composition that they are both efficient and compatible with man's psycho-physiological makeup and provide the real opportunity to exercise individual choice."

The reason for planning is expressed simply by Ingraham (7), who contends that planning is a means to an end, the end point being a quality environment.

All these definitions depend on further definitions of terms like "health," "environmental," "comprehensive," and so forth; but to undertake a broad intellectual discussion of these terms would result in an unwieldy paper.

Even though these definitions are not universally accepted by everyone in the varied fields of health planning, there is every indication that we all look in the same general direction. Each sees essentially the same thing but from a somewhat different point of view.

Comprehensive-Environmental Health

Environmental health planning as part of comprehensive health planning is not a new concept but has been practiced to some extent since the earliest recorded civilizations. The Minoans and the Cretans (3000-1000 B.C.) constructed drainage systems, water closets, and water flushing systems (8). Such facilities required planning then just as they do today. The more advanced and sophisticated Roman Empire built numerous public baths and provided for an adequate water supply through magnificent aqueducts and tunnels. Laws were enacted for the supervision of public bars, taverns, and houses of ill fame and for the regulation of building construction.

It does not seem unreasonable that these activities were considered at the time to be part of greater and more encompassing efforts to improve the health and general welfare of at least a part of the community. Our modern society is considerably more complex and our health needs have somewhat changed, but environmental health planning remains very much a part of the total health planning concept.

Consideration of the whole man. The concept that has probably done more to bring comprehensive health planning to the forefront in public health than any other is the notion that health is an individual right (9). If comprehensive health planning is to be successful, the nation will have to accept this idea. Until now, health services have been compartmentalized, fragmented, and often wasteful, with few plans made that consider man as a whole person in a complex environment. Mattison (9) claims that man must be viewed as a whole man because those things that made him ill can be many and arise from "shifting balances of multiple causes."

Viewing man as a whole person leads to an ecological approach to environmental health planning. Atkisson (10) claims that the ecological approach is an attempt to "restore and maintain the quality of the environment without disrupting the economy and the culture. . . ." The ecological approach is an attempt to overcome not only fragmentation in planning but also other problems that have persisted.

Some professionals (10) claim that because we have not followed the ecological approach in planning and managing urban environments "we have failed to achieve the level of environmental quality and human health of which we are scientifically, technologically, and economically capable." Several views are given on how best to deal with urban problems by means of the ecological approach. One suggested method is the university-based environmental health management center, which apparently is an attempt to gain greater freedom and break away from traditional policies in health planning (10).

Allan Blackman, associate specialist in comprehensive health planning, University of California School of Public Health, Berkeley, in an unpublished paper claimed that in the past the health professionals have had a tendency to focus on physical health and ignore other aspects of "life and human concern." He suggested that setting goals by classifications (for example, age groups, racial or ethnic groups, income groups, geographic units, aloneness, and education) will eliminate fragmentation. This method, he said, is a better way to identify the agencies providing the services to various age, ethnic, income, and geographic groups. Then, instead of having a program of health, education, and welfare, we would have a program of Negroes, teenagers, the poor, or Watts.

To take an ecological approach to the problems of man it is necessary, for efficiency alone, that the planning agency be concerned with the total spectrum of health activities. Effective liaison with other specialized planning groups health and welfare councils, areawide health facility planning agencies, water pollution control boards, and others—should be maintained (11).

On November 3, 1966, Congress declared that "fulfillment of our national purpose depends on promoting and assuring the highest level of health attainable for every person, in an environment which contributes positively to healthful individual and family living. . . ." This statement is a portion of section 2(a) of Public Law 89-749 (12). According to this law, there is no question of whether environmental health planning should be considered in making health plans. To receive Federal grants-inaid it must be included, and the plans must show how the person's health will be improved, not just his environment.

Michael and associates (6) stated: "In evaluating community programs, all assessment of problems and all planning should be conducted from the standpoint of the individual person in his total environment, even though this consideration will make it more difficult to pinpoint results to specific programs." Thus we must remember that man in his environment is the primary consideration, not pinpointing results to specific programs—even though such procedures are important to planning and administration.

Environmental health as a factor in preventing diseases and accidents. According to the American Public Health Association, the intent of comprehensive health planning is to "improve

the quality, availability, and efficiency of providing health services" (11). Even though this statement has a personal health service ring, it stands to reason that environmental health planning would of necessity be included. Every health department (Federal, State, and local) should engage in some environmental health planning activities that are fully coordinated with personal health services planning for physical and mental health in the framework of comprehensive health planning. But until comprehensive health planning, as defined here, really gets off the ground, environmental health planning can be organized on the basis of cooperation among health agencies, the staffs of other agencies dealing with environmental health, and local physical development planners (4).

Gordon (13) declares that the environmentalists have an opportunity to contribute a great deal to comprehensive health planning but that they may be overlooked. With continued emphasis on health facilities and personal health affairs, environmental health problems may not be properly evaluated and dealt with if the experienced environmentalists are not being appointed to State and areawide comprehensive health planning councils. To receive a planning grant from the Department of Health, Education, and Welfare, the councils must have an environmental health capability or must contract for this service; however, representation of environmentalists on the councils is not likely to be as great as that of other health professionals. This may be a costly mistake.

Areawide boards for planning health facilities have increased from five or six just 5 years ago to more than 50 today, spurred by the growing public concern over rising hospital costs and by the studies and recommendations of the American Hospital Association and the Public Health Service. For the most part, area facility planning boards have not been involved in other areas of community health planning. This situation is unlikely to continue, however, owing to (a) recommendations of the National Commission on Community Health Services, (b) legislation establishing the Regional Medical Programs that heavily stresses regional planning for coordinated programs; and (c) comprehensive health planning that provides formula grants for comprehensive planning (11).

P.L. 89-749, 89-239, and 89-754. An unprecedented number of Federal laws have been enacted relating to the health and environment of man, which suggests to many that not only have some health problems been identified but that the traditional methods of coping with them have not been entirely satisfactory. Previous attempts to manage our environment have been "characterized by randomness, short-term orientation, irrationality, segmental properties, and lack of system" (10).

Because almost three-fourths of our population lives in metropolitan areas, the Cities Demonstration Program and the Planned Metropolitan Development Program are inherently bound together by comprehensive health care. According to Sox (14), both Public Law 89-754 and Public Law 89-749 emphasize the environment of man and provisions for improving the quality of urban life. Cooperation, enlistment of participation, and use of official and nonofficial agencies and other organizations are necessary. As part of Public Law 89-749, the consumerconsidered by some to mean the poor-for the first time is included in the planning and his needs, hopefully, will be determined with greater lucidity. The law, however, is related primarily to the planning phase of health programs. The planning agency has no operational powers or local authority except the authority to allocate within the State formula grants for public health programs and project grants. Like any planning organization, the real power is its influence, competence, and ability to process information for decision making.

Willard (15) describes the Partnership for Health Program as follows.

The Partnership for Health Program provides a mechanism for relating planning involving public medical care programs; conventional public and environmental health; for relating federal, state and local planning; and for developing a focus for efforts of a variety of federal programs as they apply to specific regions—programs such as urban redevelopment, public housing and public health.

Both Public Law 89–749 and Public Law 89–239 provide for training of personnel. Many persons, including Willard, claim that the two programs complement each other and that more will be accomplished with both than with only one. Both are considered important since many health resources will be combined that up to this time have been notoriously fragmented. It is only fair to say that Public Law 89-749 is permissive, has relatively no mandated behavior, is experimental in its approach, and "serves to make difficult the fast and forceful implementation of its aims" (16). It allows large latitude for innovation within the realities of the American political and social system and permits problem solving at the local level, but makes cooperation and coordination a prerequisite for Federal financial assistance.

Resources. If our ultimate goal is "... the highest level of health attainable for every person ...," few rational people will doubt the wisdom of organizing all available health and health-related resources to function as efficiently as possible. This goal seems to be especially important because of fragmented health services and the lack of a defined health system (17).

We should keep in mind that health is only part of a larger social system. If every American accepted the World Health Organization's definition of health, all else would be subordinated to this endeavor; however, only the more idealistic health professional really views it that way. For this reason the health professional cannot expect to be blessed with unlimited resources designed to fulfill our health aspirations ("highest level of health attainable"). Because resources are limited, we must devise ways to use most efficiently what we have. Many enlightened people are studying ways to obtain the best use of all available resources. One good method, although old, is to seek ways to keep people well so that fewer people actually need personal health services (18). Investing in environmental controls may be more economical in the long run depending, of course, on circumstances.

In comprehensive health services we must not be unduly concerned about what is personal or environmental health but attack the problems in a way that maximum results can be realized with the least expenditure of resources. This concept has caused several people to restudy the classifications of health programs. Hilleboe and Schaefer have made a rather traditional classification including six items each under personal health and environmental health (19).

Michael and co-workers (20) have developed a classification of health activities as part of an information system that can be used to facilitate decision making. In this system all health services are grouped into four categories or health-service areas. The categories are normal development, repair, containment, and basic research. Each category includes services that may be related to both personal health and environmental health programs; for example, normal development includes such activities as air pollution control, multiphasic screening, and accident prevention.

It is becoming more apparent that all planning and services affecting man's health and well-being must be coordinated for efficiency, if for no other reasons. We can no longer afford the luxury of allowing everyone to go his separate way and have no coordination with other groups. All efforts must be coordinated, resources properly used, and new ones sought. The problems are great, and resources are hard to find (14).

To obtain additional resources for environmental health services, O. L. Deniston, department of community health services, University of Michigan School of Public Health, thinks it may be necessary to look beyond government. Industry has been seriously considered. Adams (21) contends that industry is a large resource in environmental health and should be further involved by (a) helping to define environmental problems jointly with government-cooperation has been obtained to some extent in air pollution problems involving sulfur dioxide and fluorides, (b) contributing to efforts in developing technical methods of studying properties of products and residual materials (waste) and development of new industrial processes for waste treatment, (c) working directly on problems of environmental pollution by developing appropriate policies and procedures for pollution control-industry could develop the same procedures for dealing with the total environment as it has for safety, industrial toxicology and hygiene, and occupational health, and (d)participating in environmental management. The scope of industrial interests must be

widened to take into consideration the overall interests of the public. Further release of information on private research is of paramount importance.

Limits of Comprehensive Health Planning

High hopes are held for comprehensive health planning, but it is not a panacea. Expectations are great perhaps because of the almost chaotic conditions that have prevailed in the past. However, one can readily detect limitations in planning; some are naturally related to decision making, such as (3):

1. Man's limited problem-solving capabilities

2. Costliness of comprehensive analysis

3. Lack of truly comprehensive information

4. Inability to construct a satisfactory method for evaluating values or goals

5. Closeness of observed relationships between fact and value

6. Openness of systems of variables

7. Analyst's need for strategic sequences of analytical moves

8. Diverse forms in which policy problems arise

At least two very important shortcomings of comprehensive health planning also are claimed to exist: (a) there are too few people trained in health planning and (b) extensive administrative leadership will be required from health officers (16, 22).

Another important consideration in comprehensive health planning limitations is the fact that we lack national goals. At best, what may be proclaimed as national goals, but may prove to be only policies, are confusing or conflicting. In an unpublished paper, entitled Three Views of Economic Goals, by Peter Senn, professor of economics, Chicago City College, the point is made that "the discussion of national goals has been notoriously barren. Recent decades have been distinguished by a paucity of either radical alternatives or creative conservative constuction."

Although these claims are well founded, this state of affairs should represent a challenge to the health professional, not a pessimistic concept, of the comprehensive health planning idea. Pragmatic qualities are the hallmarks of a worthy plan. To borrow from Bolan (2), "...

Outlook for Health Planning

If in any health planning activity that even suggests comprehensiveness we start with the premise that health is an individual right, it is much easier to forecast with accuracy the direction that comprehensive health planning will take in the future.

Disease and accident prevention may be emphasized and bring environmental control to the forefront. The ecological approach is likely to become the generally accepted approach to solving complex health problems. Institutes of urban ecology in the university setting may become more numerous and prominent, facilitating planned environmental changes that require cooperation, coordination of efforts, and assignment of priorities. Organizations with similar goals but other names are also likely to appear.

Area facility planning boards may become more involved in community health planning owing to recent Federal legislation and recommendations of the National Commission on Community Health Services. Greater cooperative actions are foreseen not only among the traditional health agencies but among the planning groups as well.

Planning (health included) conducted by more than one organization is another promising concept that allows for more alternatives, made possible by different value standards in society. Fox (5) sees the value of competition among ideas and proposals rather than trying to function through single planning and action organizations. Duplication of efforts, in this instance, would not necessarily mean wasted efforts.

Conclusion

By assuming in our society that health is an individual right, the health professional is now required to look at the whole man and the environment in which he lives rather than to take a partial or fragmented view. This approach allows planning that guides the actions to bring about changes needed for providing an optimum level of health for the individual. Recent Federal legislation and recommendations from influential groups have given great impetus to this new approach, which is envisioned by some to be a great improvement over traditional efforts. Others say it is an insurmountable task.

Comprehensive health planning, regardless of the degree of comprehensiveness, is here to stay, and environmental control is very much a part of it as a means of effecting better health for man.

Emerging information systems in the field of health will allow for better decision making by those concerned with health problems in the community. It is now possible to identify with greater accuracy the principal health problems of a community, to have values expressed by the health consumers that hopefully will affect the services received, and to take actions having the greatest effect on the problem with the least expenditure of resources. Wherever environmental control is the most economical way of controlling or partially controlling health problems, as it has been in many instances, it will undoubtedly receive serious consideration.

Occasionally, it may be difficult to evaluate the efforts and effectiveness of environmental health inputs. Doing this accurately is desirable but of secondary importance; the first consideration must be the accomplishment of the predetermined objectives. What real difference does it make whether the results obtained are from environmental control, personal health services, or a packaged interwoven combination of the two-the most likely in many instances. As more comprehensive health planning is conducted and we gain maturity in this activity, it probably will be more and more difficult to distinguish one effort or accomplishment from another. To quote Michael (23): "Health care and a healthy environment—the two go hand in hand; no dichotomy can breach them. Both contribute to each other's strength."

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