The authors emphasize that the cultural "ethnocentricity" of health professionals and organizations often tends to work against the achievement of public health goals. They urge the need to seek a better congruence between the behavior of recipients of health services and professional behavior and organizational practice.

UNRAVELLING TECHNOLOGY AND CULTURE IN PUBLIC HEALTH

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IN the past few years, it has become I increasingly clear that the concepts, the findings, and the research technology of the behavioral sciences have a definite relevance for the field of public health in general, and for public health administration in particular. The literature reflects the growing relationship between the two disciplines. A number of papers at various professional meetings have already been given on this very topic and, in general, it does not appear unwarranted to infer that the field of public health has not only been receptive but rather hospitable to the behavioral sciences. This is witnessed by the various positions behavioral scientists occupy on the faculties of schools of public health, and the roles they play as permanent personnel of-or as consultants topublic health agencies.

One major way in which behavioral science is helpful to professionals in the field of public health and medical care administration is by directly focusing on health care recipients and by making administrators more aware of the values, attitudes, and behavior of their target populations. Thus, for example, be-

havioral scientists have emphasized that lower-class people, with a value orientation stressing the present, may not as readily accept public health measures that involve daily scheduling, budgeting, and planning for tomorrow. Social scientists have also demonstrated how ethnic groups and persons from different socioeconomic groups may vary in their perception of pain and illness.1 Such individuals and groups will differ in the kinds of assurances or help they seek from physicians or other medical personnel, and they may be more reticent than their middle-class counterparts in asking questions of the physician, or even in simply relating to the physician. In fact, these people may find it more instructive to turn to the nurse or to the pharmacist for specific medical advice. The field of the behavioral sciences, in short, provides a number of empirical descriptions about the beliefs and behavior of the recipients of public health programs. This body of knowledge may constitute one major basis for forging and modifying some of these programs.

Whenever it is feasible and ethical to do so, public health agencies may find

themselves attempting to change the knowledge, attitudes, or behavior of public health recipients. According to a scholarly review by a psychologist, who has worked for a long time in the public health field, "With respect to the problem of inducing behavioral change, research on mass communication and personal influence methods needs to be extended to determine principles by which individuals, especially those in lower socioeconomic groups, can be persuaded to alter their health opinions, attitudes, and behavior. More extensive research in health settings is needed to resolve inconsistencies . . . between beliefs and behavior...."2

Behavior of the Target Population

While we believe that behavioral scientists will continue to contribute to public health administration by producing more knowledge of the beliefs, attitudes, and behavior of the recipient population, it is our feeling that, in relative terms, too much effort has been focused upon the health care recipient in general and the problems of the lower-class public health recipient in particular, while too little analytic attention has been paid to the professional public health personnel and public health organizations. To be sure, once the behavior of the target population is more thoroughly understood, a basis is provided for modifying the orientation, the behavior, and the training of public health personnel. Nevertheless, it seems to us that in the field of public health a general stance prevails which implies that there is something "wrong" or that there is some "shortcoming" with the target population, and that the public health professional will make some concessions for a period of time in the hope that, ultimately, the public health recipient will somehow "mature," become more knowledgeable, and will pursue a mode of behavior consistent with public

health prescriptions. It is our tentative view that while behavioral sciences have much to contribute to the understanding of the behavior of the target population, and while public health personnel and agencies can profit from this knowledge, there are many instances where it would be even more fruitful to focus upon the health professionals and the health organizations themselves.

As a general working hypothesis, we wish to propose that there are numerous instances when the culture and the practices of health professionals, as well as the needs, characteristics, and operations of health organizations constitute major impediments to the improvement of public health.

This may easily appear as a sweeping and unfair allegation. Certainly, the health professionals and health organizations are the major active agents involved in the improvement of the health of the people. Even more, it is to the credit of health professionals and health organizations that one feels free to take as critical a stance as that presented in this paper. In fact, a number of public health leaders themselves pointed out some of the major themes of this discussion. Only recently, one of the leading figures of public health, Lester Breslow, stated:

"The social attitudes of the health professionals reflect too frequently the notion still prevalent among medical teachers and administrators that the poor who obtain their care in public, especially teaching, institutions are 'clinical material.' The latter expression, and the tone in which it is usually uttered, betrays an attitude toward people which is destructive of that mutual respect which is necessary for good medical care. The long wait in uncomfortable surroundings, after a difficult trip, to receive care which is too brief, from a hurried doctor who is frustrated with the knowledge that he can make only a fragmented contribution and whose attitude says 'clinical material'-these aspects of care to those most in need of care have left deep scars. Is it remarkable that people do not like such experience and tend to avoid it? Compounding the difficulty, many health professionals have projected the responsibility for resistance to this kind of treatment onto the people themselves by calling them 'apathetic' or part of the 'hard core.' "3

In this statement, Dr. Breslow clearly emphasized that many of the public health problems reside in the behavior and needs of professionals, and that the "fault" often does not lie with the hard-core recipient upon whom the blame is displaced or projected.

Professionals have a culture which is quite distinctive from their technology. The technology of medicine, for example, involves such factors as the ability to diagnose a case, the ability to employ the proper therapy, the use of surgery, antibiotics, drugs, and so on. Its culture, on the other hand, involves such practices as meeting and seeing the patient in private (i.e., rather than with family present), charging a fee prior to results of treatment, speaking to the patient in a certain way, wearing a white coat, and requiring certain types of deference. A major point, emphasized by social scientists, is that the culture of the physician or other health professional may not only differ from-but may be directly at odds with—the culture or the needs and behavior of the recipient. It is interesting, for example, that studies have shown that psychiatrists feel less at home when they treat working-class recipients; that they tend to employ organic therapy, or therapy involving drugs or shock, more often with lower-class patients than they do with middle-class patients.4 Psychotherapy, as in other professional disciplines, does not operate in a neutral or universalistic manner; rather, in many crucial aspects, it reflects the middleclass culture and orientation of most of its members.

This is not only true of the health field. It is also found in the field of education, where many lower-class children are subjected to the demands and prescriptions of a middle-class culture and

where the structure, the climate, and the orientation of the school system tend to work against the practices, abilities, and inclinations of the lower-class child.⁵ In the field of medical social work, too, there is a tendency to rely on a number of professional practices that are part of the professional culture, yet may not serve the health needs of the recipient. This is evidenced in the rigid adherence to the classical referral practice, based upon notions of self-reliance, that requires individuals to "go on their own" from one agency to another. This orientation frequently fails to take into consideration the fact that persons unfamiliar with the organizational structure of the health world may find it a baffling labyrinth and a very unusual world indeed.

Some studies in which we have been engaged point out that a considerable number of people fail to complete their referrals because they experience a sense of confusion and uncertainty in going from one agency to another. The culture of professionals, then, looms as one major factor which may have negative consequences for the achievement of the professional's own goals. It is not sufficient, therefore, to focus only upon the deficiencies of the recipient, real and important as they may be. It is equally essential to realize the dyadic relationship between the culture of the professional on the one side and the culture of the recipient on the other, and to focus upon inappropriate approaches that stem from the culture of the professional as they are employed in meeting the problems of the recipient.

There is, perhaps, an even more basic barrier which professionals sometimes present toward the achievement of their own goals. Typically, or at least in a large proportion, they tend to perceive, define, and approach problems in terms of how they can best use their skills, and not necessarily in terms of how the given problems could be solved. Professionals

are often less receptive to skills and approaches that may be relatively alien to them, but in reality may be more relevant and effective in a particular problem at hand. How else can one explain the fact that such simple but relatively innovational and, by all appearances, potentially effective methods in dealing with alcoholics and drug addicts, as those of Alcoholics Anonymous and Synanon, have developed and in large part have remained outside the public health professions? It is clearly one thing for a profession to be practicing its specific trained skills, and quite another thing for the same profession to be "doing good" in achieving the larger public health goals it espouses.

Making Maximum Use of Personnel

In view of the clearly acknowledged shortage of qualified personnel, the failure of professionals to work aggressively for a large-scale training and deployment of nonprofessionals, paraprofessionals, auxiliaries or indigenous workers—or whatever other name they are assigned—is certainly conspicuous. One is reminded of the informal comment by Cecil Sheps⁶ that it is strange that even the most innovational group practice plans have not experimented sufficiently or made successful headway in the use of nonprofessionals, or have given active consideration to more effective deployment of other kinds of personnel. The tendency of professionals to think in terms of solving problems by using exclusively their own skills or, at most, the skills of other professionals may almost assume the level of a type of "trained incapacity" which sociologists written about in describing rigid bureaucrats.7 This, of course, again does not hold only for public health personnel but also for other types of professionals, including social scientists. Public health administrators, for example, who have consulted social scientists on research

projects, at times have been impressed by the fact that the latter often tend to define or conceptualize the project in terms of the kinds of skills *they* have. Thus, a person with ability in factor analysis or survey research or participant observation may tend to formulate a research problem or to develop a research design particularly consistent with his skills.

It is no surprise, then, that physicians and other public health professionals often have employed and been guided by medical models in attempting to solve the particular public health problems they have encountered. One impression we have gained, for example, is that when physicians are in charge of population control programs they too frequently define the problem exclusively in terms of the use of medical services or medical technology or medical contraception, as distinct from other less medical ways of modifying population structure. Other alternative measures or nonmedical approaches which could be used in combination with medical contraception—such as raising the age of marriage, providing employment opportunities for women, or changing the methods of agriculture—appear to command less attention in population control programs directed by medical personnel. Nevertheless, nonmedical approaches such as these might be crucial to the success of any population control program in some developing societies. This is not to suggest naively that these alternatives are readily available or easily employed or that medical professionals should themselves be directly engaged in them, but to point out that, like all professionals, public health professionals tend to be somewhat "culturally ethnocentric," i.e., to be far less attuned to alternative mechanisms and modes of procedure that do not stem from their own technology or their own profession.

A simpler illustration of the point we are raising is the fact that the problem

of getting people to stop smoking does not appear to have sufficiently excited public health professionals and the practicing physicians. It does not permit them to bring to bear the full range of their technology and their more developed and sophisticated skills. And yet, as George James has emphasized, physicians might make a tremendous contribution to the health of Americans if they could make maximum use of their unusually high status and authority by engaging in a full and vigorous effort to get people to cut down on smoking.

A similar point has been made in another context by Edward Suchman and his colleagues. In discussing accident research, they point out that a very small proportion of money is being spent on accident prevention research in the United States as opposed to other kinds of medical research, despite the fact that accidents comprise the leading cause of death among people 34 years of age and below, and the cause of almost 15 million injuries, annually.9

It seems that the same type of variable tends to operate here: accident prevention does not permit public health persons to utilize their familiar and wellestablished skills; because of this, it does not receive the same priority and the same sharpness of focus as other problems—perhaps more esoteric and more inconsequential—receive.

Impediments to Health Services

The needs and habits of health and welfare organizations also may present impediments to the provisions of health services. It is often taken for granted that the needs of the whole community will be met automatically as each agency independently serves its own particular goal and domain. However, various investigations, including our own studies of interorganizational relationships and of services rendered by child guidance agencies, suggest that because agencies

do tend to specialize, at least in part, on the basis of their own particular needs, interests, and capacities, unfortunate gaps often develop between the services provided on the one hand and the acute needs of various segments of the population on the other. For example, in studies of factors affecting the admission of clients to child guidance clinics, it was found that most of the children who seek aid from these clinics fail to obtain service and, even more, that admission to the clinic is not related to the severity of illness of the child. However, being referred to the clinic by a professional, regardless of severity of illness, is significantly associated with admission to the clinic. There is also some indication that children, whose symptoms are of interest to the research and training activities of the agency, are more likely to be admitted to the clinic. The following observation by Rudolph and Cumming is most appropriate:

"... the higher the agency is in the hierarchy, the less flexible it appears to be in regarding its method of operation, the qualification of its clients, and the kinds of problems appropriate for treatment. The concept of the 'unmotivated client' or 'the client who is not ready for service' originates with agencies with qualified workers. These agencies tend to define their role in the terms of the special skills of their workers rather than in terms of the needs to be met."11

Although many health and welfare agencies are quite autonomous and free to pursue their own interests, they do subscribe to and share in the general value that all people are entitled to care and that none should be deprived of help. Given the pluralism in the health and welfare system and the simultaneous adherence to the general value of care being available to all, agencies engage in various efforts and maneuvers to enlist other agencies to provide the services that they themselves cannot or will not offer. Unfortunately, clients often find that the agencies to which they are

sent are not willing to accept them, either, or at least are not willing to give them the kind of service they were led to expect. The irony of the "revolving door" phenomenon is clearly manifest, once again, in the case of child guidance agencies which have many delinquent children coming to them for help. Most child guidance agencies report that they are only slightly successful with delinquent children, especially when compared with their relative success with children who have other types of problems. Child guidance agencies also indicate that they refer many children with delinquent problems to other agencies, including other child guidance agencies, and that they experience difficulty in getting these agencies to accept their referrals. What becomes apparent is a plaguing circularity in the career of the delinquents, as they make their way through the agency world. 12 As Breslow has indicated, out of this type of disappointing experience between clients and agencies there develops much of the loudly deplored negative reaction toward seeking service.13

It is easy to understand why psychiatric personnel in charge of child guidance clinics may prefer to work with children other than those with delinguent problems, and to feel that the latter are less amenable to the technology of psychotherapy. Psychiatric personnel may also feel that they can use the scarce resources most effectively if they carefully select the cases that enter their networks. In our view, however, the problem resides in the fact that the child guidance clinics have not explicitly relinquished the domain of delinquent children, and that no other type of agency is taking the lead in assuming responsibility for dealing with delinquency on the community level, i.e., for experimenting and for developing innovational approaches, for serving as a catalyst among other agencies, and for attempting to coordinate their work. It

would appear desirable to admit that there is indeed a deep gap in the delinquency field, and to reach clear agreement charging some agency or group of agencies with the responsibility and the authority to assume leadership in this area.

The same lack of explicitly recognized leadership exists in a number of public health areas. Although the public health officer is the legally constituted authority in the public health realm, there is reason to believe that most other health and welfare agencies are not as yet ready to invest in the public health administrator the task of assessing community needs and, even more, of stimulating and coordinating their efforts. It would appear that the health officer's future influence with these agencies largely will depend upon the degree to which he can command the vital resources that they require, such as personnel, funds, space, and licensing.

Summary

We have tried to extract examples from our general experience and from some research findings to illustrate that the culture of professions, as well as the needs, the characteristics, and the procedures of health organizations, often tend to work against the achievement of public health goals. We have pointed out how this somewhat paradoxical factor operates in a variety of ways, including the tendency of professionals to limit themselves to the use of their own specific skills and to ignore less "sophisticated" approaches that may make an even greater contribution to the attainment of public health goals. We have tried to point out, too, that professionals have not given sufficient attention to such very crucial areas of activities as smoking and accidents. We have also indicated that, by and large, professionals have not displayed a very high degree of aggressiveness in developing

and deploying auxiliary types of personnel. At this point, it may be important to add that even with regard to the highly valuable services offered by physicians, which stem from the core of their medical technology, there has been insufficient attention to the mundane but crucial public health question why many people in need fail to receive these vital services.

We do not propose, of course, that each individual public health professional abandon his highly developed skills and employ, instead, approaches for which he has no special interest or expertise. We do, however, suggest that the individual health practitioner display greater awareness in regard to the limits of his own skills and greater appreciation of the approaches and potential contributions of others toward the achievement of major public health goals. We also suggest that the established health professionals employ their traditional position of prestige and influence to encourage the innovations and nontraditional approaches that may be necessary, including the use of new types of personnel. Finally, we are hoping that the public health profession as a body will heed its own maxims and assume responsibility for the unmet health needs of the community, whether this entails the use of traditional skills and approaches or whether it means that new ones must be added; whether, too, this requires the use of the established health professions, nonprofessionals, or laymen. The crucial point is to assure that health problems are not overlooked merely because their solution may require skills, approaches, or mechanisms that are unchallenging or unfamiliar to those of the established health professions.

We are aware, of course, that a good number of public health administrators have been experimenting with ways of improving organizational approaches and arrangements for a long time. We

know, too, that in the real world it is much easier to prescribe and suggest solutions than to implement them. It is no easy task to modify the established ways of professional persons or to reorient health organizations. Introducing new types of personnel or subprofessionals, for example, may be a source of organizational strain, and may produce serious problems for other personnel in the system. Still, we feel that we shall have made an important stride in our way of thinking if we acknowledge the need to seek a better fit, or a higher degree of congruence, between recipient behavior on the one hand, and professional behavior and organizational practice on the other.

A crucial question is how to structure organizational change, so that professional behavior, in turn, may be modified. As Rosenstock has indicated, recent federal legislation may make it possible and even require the development of new approaches or organizational arrangements for providing services. New organizational structures could be established not only to increase the efficiency of day-to-day operations but also to:

"stimulate behavior change in health professionals. For example, it should be possible to combine preventive and curative services in one facility where various specialists' services would be available under one roof. This would minimize the losses that traditionally occur when people are referred from place to place. Moreover, the increasing national focus on serving the range of needs of a whole group rather than one age group or one part of the body may also be expected to humanize the medical care process..." 14

Certainly, it is not enough to plead with professionals to modify their behavior. It is vital to provide suitable rewards or incentives to foster desirable behavior among professional personnel. In thinking of ways to develop new approaches or introduce change, and to provide professionals with proper incentives, as well as to measure the im-

pact of these incentives, we hope that the behavioral scientist may prove helpful to the public health administrator.

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