

# BEHAVIORAL SCIENCE IN THE FACULTY OF MEDICINE

University of Alberta

DONALD E. LARSEN

This paper provides a brief description of the behavioral science subjects that are formally offered in the curriculum of the Faculty of Medicine at the University of Alberta and a discussion of the problems and issues that behavioral scientists have faced in attempting to participate in the education of medical students at this institution.

As background information, it should be noted that during the past year the behavioral scientists in the Faculty of Medicine consisted of three sociologists and two psychologists who had appointments in the Department of Community Medicine and the Department of Psychiatry, respectively, in addition to having appointments in departments of their parent discipline. Other behavioral scientists, including an anthropologist, have served as guest lecturers. The actual teaching of behavioral science topics, which broadly speaking cover normal and abnormal psychologic and group functioning as they relate to the practice of medicine, has been carried out by both behavioral scientists and physicians, the latter being specialists in psychiatry and in community medicine.

In comparative terms, physicians have played the major role in planning and teaching of behavioral science topics. Thus, although behavioral scientists at the University of Alberta have achieved formal recognition as having a role to play in the

teaching of social and behavioral aspects of medicine, they do not, as one might ideally expect, play a role that is equal to that of physicians. However, inasmuch as the role of the behavioral scientist in medical education at the University has been subject to frequent review and change in recent years, it will probably grow still farther beyond its present state of development.

A second item of background information is that medical students are encouraged, but not required, to take behavioral science courses before they enter medical school. Consequently, some medical students have had no courses in the behavioral sciences, others have had only an introductory sociology or psychology course and still others have had additional courses in sociology or psychology. The preparation of first-year medical students in this broad subject area is thus uneven and not adequate for dealing immediately with more advanced problems in the behavioral aspects of medicine.

#### BEHAVIORAL SCIENCE COURSES

Undergraduate medical students at the University of Alberta take one course dealing with behavioral science topics in each of their first three years of training. The first course, which is offered by the Department of Psychiatry and consists of 64 hours of classroom instruction, deals primarily with normal psychological and sociologic behavior, especially as it relates to a medical context. During the past year the general topics covered in this course included: normal psychological functioning; personality development; problems of adjustment at different stages in the life cycle; interpersonal relations; group structure and dynamics; the family; and ethnic groups.

Approximately one-half of the class topics in this course were presented by means of the standard lecture method. The remaining topics were assigned to small groups of students, who studied the literature and some real-life examples or situations related to their topic. The students later made a report to the class and a special panel of "experts," all of whom participated

in a discussion of the topic. This approach, which was introduced this year to provide greater student involvement in the learning process, appeared to stimulate considerable student interest in the topics covered. However, it is not known whether the same material could have been presented more effectively by means of some other approach.

The second-year behavioral science course offered this year consisted of 51 hours of classroom instruction in psychopathology. It was taught exclusively by psychiatrists and covered all the standard psychophysiologic and personality disorders.

The third-year course dealing with behavioral science topics was offered by the Department of Community Medicine and comprised 34 hours of classroom instruction. The content of the course was oriented toward the social and group aspects of medicine and covered such topics as the epidemiology of different diseases, preventive medicine, public health problems, the organization of the health care delivery system, health professions, selected social problems and the conduct of sociomedical research.

The only teaching of behavioral science at the graduate level in the Faculty of Medicine is carried out in the Department of Psychiatry for residents in each of their three years of specialty training. In addition to seminars that have a direct clinical content, such as those dealing with diagnosis or psychotherapy, seminars with the following titles are also provided: General Psychology, Personality Theory, Developmental Psychology, and Social Sciences Basic to Psychiatry. Included in two seminars on the social sciences in the past year were sessions on research methodology, social psychiatry, the family, criminology, small groups, roles, attitudes and cultural patterns and personality.

#### PROBLEMS AND ISSUES

In the relatively few years that behavioral scientists have been involved in medical education at the University of Alberta they have experienced, as one might expect of those who play a new

role in a new setting, a number of problems related to teaching and to administrative matters. It is worthwhile to discuss these here for these problems also confront behavioral scientists in other medical schools and it is only by making these problems explicit that they can be discussed and resolved by all persons concerned with them.<sup>1</sup>

One of the persistent problems is that of making the subject matter of the behavioral sciences relevant to the medical students' experiences and future practice of medicine. Although today many complaints are heard from students in the Faculty of Arts about the irrelevancy of their courses, similar complaints have been voiced for a far longer time by the practical-minded medical students, probably whenever a new basic science course or topic has been introduced into the medical curriculum. The most recent target of these complaints has been the behavioral scientist, and I believe that the criticism of a lack of relevancy in his teaching is, generally speaking, a valid one. All behavioral scientists who have lectured to medical students have experienced the feeling at one time or another that the message is not seen by the student as meaningful or important. This is a frustrating experience, for the social scientist is sincere in his desire to make his material relevant. A few of the causes and cures for this situation will be considered here.

An important reason why behavioral scientists have difficulty in making their subject matter relevant to medical students is that they are not well informed about a major segment of their subject matter. That is, although they may be well grounded in behavioral science theory, methodology and research findings, behavioral scientists know relatively little about the facts of life that are known to and experienced by a physician: his daily encounters with disease and illness, with patients and families and with other physicians and health personnel. Because behavioral scientists have so little understanding of what actually occurs in the clinical setting they have difficulty in relating theories, concepts and findings to the clinical experience of medical students. It is only a slight exaggeration to say that

all they know about the clinical setting is what they read in the *Journal of Health and Social Behaviour*—and that is hardly a fully adequate source of information about what goes on in the world of health and illness.

To try to overcome this problem of failing to make the subject matter meaningful to medical students, it will be necessary for behavioral scientists to become more immersed and thereby acquainted with the life and culture of medical schools and medical practice. This can be done on two fronts. First, graduate students in the behavioral sciences must obtain greater exposure to and appreciation for the events that take place in medical schools, hospitals, health settings in the community and families that experience illness. This will require that part of their education take place outside of the traditional setting of the classroom and library.

Second, those who already labor in the field must spend more time with their colleagues and students in the medical school. To play an effective role as teachers of behavioral science, and to reduce the social and intellectual distance that traditionally separates the behavioral scientist from the faculty and students in medicine, it is necessary to commit a good proportion of time and physical presence to the Faculty of Medicine. It is only by being on the scene, “where the action is,” that the behavioral scientist can learn more fully about the problems and experiences of medical students and they can learn about the efficacy of the behavioral sciences.

This may be a difficult thing to do for it will require that the behavioral scientist leave the security of his department in the Faculty of Arts and begin to mingle with the people who speak a strange tongue and who may believe that he is either a socialist or social worker, or are dubious of what he has to offer. But the practice of “dropping over” to the medical school for an occasional lecture simply does not do justice either to the behavioral sciences or to the medical student and undermines the effort to play a meaningful role in medical education.

Getting better acquainted with the substance of medical edu-

cation and practice is only part of the answer to achieving relevancy in the teaching efforts. The standard pedagogic device, namely, the lecture, a teaching technique used for so long in the Faculty of Arts, can no longer be relied upon so much. The sole use of the lecture method is an ineffective approach to linking behavioral science to clinical practice. A whole battery of other teaching approaches and devices will have to be employed and tested in regard to their effectiveness. Included in this battery are all the audio-visual machines currently available, including closed-circuit television, in addition to seminars, field trips, research projects and discussions around real-life cases and situations. Enlarging teaching strategy in this way will require greater time and ingenuity, but the rewards, both to the students and to the behavioral scientists, surely will be increased many fold over those obtained through the usual approach of lecturing for hours, often in an abstract or theoretical vein.

The foregoing critical comments about the relevancy of behavioral scientists' teaching in medicine should be tempered by keeping in mind two facts. First, most behavioral scientists are not trained to engage in clinical work; therefore, they can not be expected to be fully aware of the clinical implications of the theoretical and empirical material in their particular discipline. Perhaps a long-term solution to this problem is to urge selected medical students to obtain advanced degrees in one of the behavioral sciences and to devote their careers to teaching and research in the behavioral science aspects of medicine.

A second fact that should be borne in mind is that the current state of behavioral science knowledge applicable to medicine is still relatively limited. Unlike their colleagues in the biologic sciences, behavioral scientists do not have a storehouse of theory and facts to draw upon in teaching medical students. This situation provides still another obstacle in any attempt to present meaningful material to students.

Up to this point the discussion has focussed on the difficulty behavioral scientists have had in making their subject matter relevant to medical students. Another type of problem some

behavioral scientists have faced is in relation to team teaching; that is, the delegation of various parts of one course to several instructors. This teaching strategy is commonly used in medical schools, but behavioral scientists have had little experience with team teaching in the Faculty of Arts. This approach offers the advantage of drawing upon a number of experts to cover different aspects of a course. However, it also poses the difficult problem of coordinating the subject matter covered by the different lecturers in the course. The professor in charge of the course should make explicit the objectives of the course and its various components and to some extent exert control over the material that is covered. Although this control is necessary to provide a coherent course, it is also resented by some professors who object to any interference from others with their teaching.

Another aspect of team teaching that is troublesome to some behavioral scientists is that they have relatively little time to cover a particular topic. Typically, only a few hours are available to cover a broad topic such as the family, attitudes or motivation, which is considerably less time than is usually available to cover that topic in a course in the Faculty of Arts. This situation arises, of course, because medical students must study material from a wide range of academic disciplines in a short period of time. Consequently, the behavioral scientist must learn to use his classroom time efficiently and recognize that he may not be able to go into his subject matter in as great a detail as he may wish. This restriction is made even more onerous if students have little or no background in the behavioral sciences.

A final problem that will be mentioned in regard to the teaching of behavioral science in the medical school is that of specifying a relatively clear and potent teaching role for the behavioral scientist. The problem consists of identifying his area of expertise, especially as it is differentiated from that of psychiatrists, physicians in community medicine and social workers, and then integrating that role with that of persons from other health sciences and professions. This is a problem

that confronts behavioral scientists in most medical schools and is one without an easy solution. Undoubtedly, it will require many years of trial and error experimentation to work out a mutually satisfying division of labor in medical education between members of these various disciplines. Hopefully, the participants in this endeavor will not hold narrow disciplinary perspectives and will be receptive to ideas about teaching behavioral science, no matter what the source of these ideas.

Finally, a general problem of an administrative nature should be mentioned. As stated earlier, behavioral scientists in the Faculty of Medicine have appointments in the Departments of Community Medicine and Psychiatry. It is the feeling of some behavioral scientists, based on many tangible and not-so-tangible experiences, that this administrative arrangement tends to produce the following problems: a reduction in the behavioral scientists' autonomy as a result of being under the administrative control of physicians; a confusion in or blurring of their professional identity, both in their own eyes and those of others, as a consequence of being linked to psychiatry or to community medicine; and a lowering of their morale as a result of both of these problems and to the fact that behavioral scientists tend to be physically dispersed throughout the medical school and do not work closely together. Again, no simple solution exists to these somewhat nebulous but real difficulties that have confronted behavioral scientists in many medical schools. However, perhaps future workshops such as this might give attention to these problems and consider, for example, the question of whether separate departmental status for behavioral scientists in the Faculty of Medicine would contribute toward making their position more personally and professionally productive and secure in relation to medical education.



## REFERENCES

<sup>1</sup> A number of the problems and issues confronting behavioral scientists that are reported in this case study are similar to those noted by behavioral scientists in the United States. *See*, for instance, Straus, R., The Nature and Status of Medical Sociology, *American Sociological Review*, 22, 200-204, April, 1957; Merton, R. K., Some Preliminaries to a Sociology of Medical Education, in Merton, R. K., Reader, G. G. and Kendall, P.L. (Editors), *THE STUDENT PHYSICIAN*, Cambridge, Harvard University Press, 1957, pp. 3-79; Reader, G. G., Contributions of Sociology to Medicine, in Freeman, H. E., Levine, S. and Reeder, L. G. (Editors), *HANDBOOK OF MEDICAL SOCIOLOGY*, Englewood Cliffs, New Jersey, Prentice-Hall, Inc., 1963, pp. 1-15; Freeman, H. E., Levine, S. and Reeder, L. G., Present Status of Medical Sociology, in Freeman, Levine and Reeder, *op. cit.*, pp. 473-491.

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