American Handbook of Psychiatry

THE TEACHING OF PSYCHOSOMATIC MEDICINE CONSULTATION-LIAISON PSYCHIATRY

F. Patrick McKegney

The Teaching of Psychosomatic Medicine Consultation-Liaison Psychiatry

F. Patrick McKegney

e-Book 2015 International Psychotherapy Institute

From *American Handbook of Psychiatry: Volume 4* edited by Silvano Arietti

Table of Contents

The Teaching Of Psychosomatic Medicine Consultation-Liaison Psychiatry

In this volume of the Handbook, the content of the field of "psychosomatic medicine" is impressively portrayed. It should be apparent that the brain and all other biological components of the human organism influence, and can be influenced by the psychological phenomena encompassed by the terms "mind," "personality," "interpersonal relationships," etc. It should also be apparent that the psychosomatic field can be discussed in terms of specific clinical disorders, normal basic mechanisms of psychosocial-physiological interactions, or specific known precipitating or causal factors. Amidst all of these approaches, one may lose sight of the fact that psychosomatic medicine also implies a broad statement of a philosophical position which directly relates to the practice of medicine. Meyer cited the principle of the American Psychosomatic Society formulated more than thirty years ago:

> . . . psychosomatic medicine is a way of approaching problems of health and disease. It is an approach which attempts to apply the best and most modern psychodynamic understanding of human personality function in all phases of medical practice, diagnosis, therapy and research ... It is emphasized that psychosomatic medicine is not a specialty in medicine but rather an elaboration of medical theory and practice which takes into account the role of psychological processes in the form and functions of the body in health and disease.

As we learn more about the "role of psychological processes in . . . health

and disease," we must also concern ourselves with the application of this knowledge to the improvement of health-care delivery to the sick and to the maintenance of health. Therefore, this chapter is intended as a transitional one, from the "What?" of psychosomatic medicine to the "Now What?" How can we ensure that the accumulating body of knowledge about psychosomatic medicine will be available to those who care for the disabled? How can the principles of psychosomatic medicine be finally expressed in the skills and attitudes of the "helping professions?"

Thus, this chapter will emphasize the pedagogy of psychosomatic medicine, particularly through the activity which has, somewhat ambiguously, become known as "consultation-liaison psychiatry." After presenting the need for such education, the aims and the objects of the effort will be discussed. Traditional teaching methods, their opportunities and apparent obstacles, will be contrasted with alternative educational approaches. The issues of evaluation of educational effectiveness, a frequently neglected subject, will be presented in a tentative fashion. In fact, many of the proposals in this chapter are tentative and speculative— reflecting the general neglect by psychosomatic medicine and the rest of education, to assess and improve its educational impact.

The Educational Need

From the time of Hippocrates, there has been little controversy about the need for a physician to recognize the intimate relationship between the *mind* and *body.* Even the surgeon, John Hunter (1728-1793) remarked, "He who chooses to anger me holds my life in his hands." Neurologists such as John Hughlings Jackson and Sigmund Freud pursued the "concomitant phenomena" of "brain" and "mind" and emphasized the need to take both into account in clinical practice. More recently, a wide range of laboratory and clinical researchers have identified a myriad of interactions between the biological and psychological aspects of the human organism and some of the clinical ramifications of such interactions.

Problem Incidence

Estimates of the prevalence of psychiatric illness in general or "medical populations" range from 15 to 85 percent. In a beautifully designed study by Zabarenko and co-workers, psychiatrists observed physicians in their actual office practices. They found that only 6 percent of these general-practice patients had a *primary* diagnosis of "mental disorder," if very strictly defined according to the International Classification of Diseases. However, they found that there was a need for intervention in psychological problems in more than 60 percent of these patients. In another study by Cross and Bjorn of their problem-oriented general practice in Maine, the five most common problems

of the patient population served were: (1) depression; (2) conversion reaction; (3) obesity; (4) acute bronchitis; and (5) anxiety. These problems were more frequent than infectious diseases, arteriosclerotic cardiovascular disease, diabetes mellitus, or any other physical or social problem.

In response to the educational needs highlighted by such incidence studies, there has been a revolution in the recognition of the role of psychiatry in medicine. Medical schools rarely had departments of psychiatry before 1945. All now have full-time departments with a major segment of the students' curriculum time being devoted to psychiatry. Courses in behavioral sciences and psychopathology are now offered in almost all medical schools, and considerable time is devoted to clinical clerkships on psychiatric services. Psychiatric units in general hospitals, postgraduate education courses in psychiatry for physicians, and the availability of special funding for residency training in consultation-liaison psychiatry have all become much more common since the early 1950s. It must be added that the teaching of the psychiatric aspects of medical illness has increased slightly but significantly in psychiatry departments. Werner Mendel has been quoted, referring to the teaching of psychiatric consultation in medical care: "It is like motherhood—everyone is for it."

Clinical Competence

With all of this increased emphasis on psychiatry in general and also in the psychiatric teaching about our general health-care problems, is there still a need for improvement of education? The study of Zabarenko et al., cited above, found that the general physician detected and responded to only a small fraction of the 60 percent of patients needing attention for psychological problems. Peterson's study demonstrated that few physicians in general practice were able to do something about the psychiatric problems of their patients, even when recognized. Mendel, who cited the general acceptance of psychiatric consultation in medical care, went on to say that "very little is being done" about the actual teaching of the psychiatric aspects of medical patients. In 1966, his nationwide survey found that only 25 percent of psychiatric training programs conducted formal lectures or seminars on the consultation process. The experience of consultation-liaison psychiatrists around the country would indicate that its acceptance or efficacy, as it has been traditionally pursued, still leaves much to be desired in terms of educational impact and influence on the change of medical care practice. Consultation and liaison psychiatry remains only a small component of general psychiatric training programs and represents a minor involvement in the actual practice of psychiatrists and other mental-health personnel in general. For example, the community mental-health-center movement was designed separately from general-health-care systems and is only now belatedly being considered in relationship to the growing movement toward

centralized and coordinated health-care programs.

New Technology

New developments in medical care have been accompanied by new psychological problems, creating a greater need for psychiatric consultation and teaching input into medical care. Some of these problems arise from the increased survival of chronically ill patients with major disabilities and complex rehabilitative needs. Other needs result from the newly developed treatment approaches themselves, such as intensive coronary care units, chronic dialysis, and organ transplantation. In the latter two situations, the needs of the family, as well as of the patient, and the complexities of the socioeconomic aspects demand new collaborative approaches between psychiatrists and the health team. Unfortunately, the new technology also hampers the effectiveness of the psychiatrist's teaching of psychosomatic issues. By demanding careful attention to mechanical or biological details, the new medical machines and techniques tend to distract the medical team, and even the psychiatrist, from attending to the patient and his world.

Therefore, the indications for the need for more education concerning psychological and psychosocial problems of general medical populations would seem obvious, based upon both the high incidence of such problems, the continuing low involvement of psychiatry in general-health-care systems

and the low level of expertise of health-care professionals in those fields. But what should be the specific educational objectives of consultation-liaison psychiatry?

Educational Objectives

The teaching of psychosomatic medicine can be considered in terms of the three traditional pedagogical objectives: transmitting factual knowledge, developing skills, and influencing attitudes.

Consultation-liaison psychiatry, as a clinically based activity, concerns itself primarily with the last two objectives. However, many psychosomatic psychiatrists find themselves increasingly involved in teaching "content-oriented" behavioral science or psychopathology courses to first- and second-year medical students under the pressure to increase the "clinical relevance" of preclinical medical education. Thus, this chapter must touch upon the role of the consultation and liaison psychiatrist in all phases of medical- and health-care professional education.

Psychosomatic Knowledge

In terms of factual knowledge, the theory of psychosomatic medicine and its mechanismic base can be conveyed by assigned readings in the growing literature, lectures, and seminars. Yet, greater interest in and acquisition of such knowledge seems to accrue from a combination of clinical involvement of students and the transmittal of related facts. Such an approach can be used with students not involved in clinical responsibilities but it poses problems of finding appropriate patients, scheduling them and, finally, not

diverting the students from the psychobiological knowledge they are being asked to acquire.

Psychosomatic Skills

Because of these difficulties, most of the teaching of psychosomatic medicine has been traditionally based in the clinical phases of medical education, and combined with the objectives of developing psychosomatic skills. The usual mode of achieving these objectives is through exercises in medical interviewing or history-taking and the clinical practice of psychiatric consultation and liaison with nonpsychiatric patients. In this context the objectives can be simply stated but much more difficultly achieved or measured. They are:

1. The student should be able to *gather*, reliably, thoroughly and efficiently, the *observational* and *historical data base* about the patient *sufficient* to *understand* the patient and his problems and to *plan,* with a "sound analytical sense," the treatment approaches appropriate to these problems.

2. The student should be able to *develop a relationship* with the patient which will *enhance* objective and *provide the basis* for a *collaboration* between the *physician* and the *patient* in the ongoing treatment program.

3. The student should demonstrate the *abilities to synthesize the clinical data* which he gathers, independent of current

theories; *to critically examine the syntheses of others;* and *to hypothesize original explanations* for the data which he observes. These skills obviously have much interrelationship with student attitudes toward patients, disease, and their own roles.

Psychosomatic Attitudes

When one attempts to explicitly *teach* attitudes, the effect is frequently as if the action word were *preach.* Therefore, attitudes are usually conveyed implicitly by creating an example in the clinical situation. It is important, however, for a teacher to recognize that he has *two* roles in which modelling takes place: vis-a-vis the patient and vis-a-vis the student. The latter has been characterized as the "learning alliance" by Lazerson. In both roles, the teacher can influence the students' attitudes toward the following objectives:

1. The student (and teacher) should demonstrate an appreciation and respect for the patient (and student) as a person and for the relevance of the principles of psychosomatic medicine.

2. The student (and teacher) should demonstrate a dedication to completeness, which implies that a description, if not diagnosis, of a patient's personality and adaptational capacity is necessary in every case.

3. The student (and teacher) should demonstrate a capacity for empathy, by which the student can communicate emotionally with the patient and convey the presence of this

capacity to the patient. This objective critically interdigitates with the following one.

4. The student (and teacher) should demonstrate an ability to develop, and act according to professional standards, to achieve a “detached concern” or an “optimal distance,” to act in accordance with the needs of the patient and not in response to one’s own personal needs.

Though cast in operational terms, these objectives need subdefinitions in terms of actual behaviors which are ideally quantifiable. When this difficult and so far unaccomplished task is approached, the teacher must recognize there are different groups of potential learners of psychosomatic medicine, each with a distinctive background, professional role, and task-specific needs.

Types of Learners and Learning Problems

Student Physicians

Traditionally, the primary focus of educational efforts in psychosomatic medicine has been upon the medical students, interns, and residents in University teaching hospitals, usually on the nonpsychiatric services. These consumers of the *psychosomatic educational product* are a very heterogenous lot, yet are rather strikingly uniformly negative in their regard of psychiatry, the specialty with which psychosomatic medicine is usually associated. Data by Funkenstein indicate that the most recent freshmen medical student groups are changing rapidly in the direction of showing greater social concern. However, whether this will be accompanied by a greater receptivity to the learning of psychosomatic medicine remains to be seen.

Given these predisposed student attitudes, the consultation-liaison psychiatrist working in the nonpsychiatric setting meets another obstacle in the nonpsychiatric teaching staff— either the full-time faculty or practicing physicians.

Full-time Faculty Staff

The full-time clinical faculty of medical schools are usually chosen for an in-depth research competence in the biological mechanisms of disease. Often,

they see no patients. At most, and reluctantly, they may see a few outpatients and serve as "ward attending" six or eight weeks a year. The presence of a liaison psychiatrist or even the act of a psychiatric consultation complicates their teaching role, by asking them to look beyond the narrow field of their scholarly expertise in their role as physician in charge. Resistance to such involvement with the patient is reflected in the very small amounts of time Payson et al., found were spent discussing the "psychosomatic" aspects of patient care on teaching rounds, or in patient contact. This preselected or preconditioned characteristic of academic clinicians is a powerful obstacle to their and their students' learning, since these full-time faculty members are usually more powerful models for their students than their colleagues, the practicing physicians.

Practicing Physicians

Privately practicing physicians (or local medical doctors, LMD's) on the attending staffs of teaching hospitals spend much less time with the student physicians than do the full-time academic physicians. Furthermore, what exposure occurs is frequently in the context of the LMD's brief morning or evening visits with his patients, which conflict with the teaching schedule of the ward and prevent the students from participating in his visit. The student physician rarely has a meaningful involvement in the physician's daily practice of office visits, house calls, and phone contacts with his patients.

Finally, most University hospital staff members are specialists or even superspecialists, and hence tend to have a narrower perspective than the psychosomatic concept implies.

The practicing physician also presents problems as a *learner* of psychosomatic medicine. His small involvement within the University hospital reduces his potential contact with the psychosomatic psychiatrist. Only rarely, and then usually for research purposes, do psychiatrists spend significant time in physicians' practices. This has been one factor in the experience that continuing-education programs in psychiatry are not particularly successful. Other factors relate to economics, psychiatric capability, and the availability of manpower (see below), and the probably limited flexibility of practitioners with ten to thirty years of their own style of doing things.

Nurses and Other Health Professionals

Increasing attention to the *health team* in a variety of medical-care situations has led to increased involvement by the psychosomatic teacher with nurses, physical therapists, social workers, and others delivering patient care. Since they usually spend much more time with hospital patients than do physicians or student physicians, these health professionals have many immediate and pressing problems which relate to the psychosomatic sphere.

When able to ask a psychiatrist for help, they pose many pertinent and important questions about their particular role and activity in caring for and relating to the patient. Yet, this interest creates many problems for the psychosomatic teacher.

In order to convey accurate and useful opinions, the psychiatrist needs a modicum of data about the patient. The medical record is usually inadequate, and the data from the individual nurse, for example, are narrow in perspective. If not requested to do so by the patient's physician, the psychiatrist cannot easily gather that data himself from the patient. Furthermore, the concern about a given patient may come independently from several sources, since the usual hospital administrative structure separates nursing, social service, physical therapy, etc., and the physician staff. The psychiatrist frequently finds himself repeating his opinions four or five times, to different professional groups, about one patient situation. Finally, any recommendation, and the learning which might accrue to the health professionals, depends in effectiveness upon the degree to which the health professionals are a *team* which *must* involve the patient's physician. The *subculture* of patient care, which operates independently of the physician, may have short-term value but has little long-range, postdischarge impact on patient and staff learning. Working solely with this subculture may be a waste of psychiatrists' teaching efforts. This nonteam aspect of health care is a major frustration for the psychiatrist or psychiatric resident in the

consultation-liaison field.

The Psychiatric Resident

The psychiatrist in training is, on occasion, both a consumer of education in psychosomatic medicine and a teacher of such. Perhaps most significant is the fact that the future career teachers and practitioners of consultation-liaison psychiatry will come from the pool of psychiatric residents. Although nurses and social workers can develop many psychosomatic teaching skills and functions, the psychosomatically oriented physician should still be the main resource for the diagnostic and therapeutic planning, and management functions.

The traditional role of the psychiatric resident in consultation-liaison psychiatry and its many learning opportunities will be discussed in a later section. Even after more than thirty years' experience, consultation-liaison psychiatry is not well represented in most residency training programs. Mendel's nationwide survey in 1966 showed that only 25 percent of programs offer even formal lectures or seminars on the subject. Training residents to teach psychosomatic medicine above and beyond psychiatric consultations, is even less common. Some liaison services do not regularly involve psychiatric residents but rather train residents with primarily internal medicine backgrounds. This low emphasis is, at least in part, related

to the characteristics of psychiatric residents. Kardener et al., for example, found that nonpsychiatric patients seen for psychiatric consultation are very low in psychiatric residents' preferences.

What are the learner characteristics which limit participation in furthering psychosomatic education? Many residents are attracted to psychiatry as a specialty for reasons which have little to do with the practice of medicine. These may include (1) a history of personal or family emotional problems; (2) a major interest in people which may not be satisfied in other medical specialties; (3) strong social concerns which seem to be best served in psychiatry; (4) a reaction-formation to anxiety about physical disease; and (5) a wish to avoid the apparent competitiveness, pace, or responsibilities of other types of medical practice. Any of these reasons may make it more difficult for a psychiatric resident to function in the medical setting, to work with dirty, smelly, or seriously sick persons, or to identify with nonpsychiatric physicians.

As *elective* programs comprise a larger segment of medical school curricula, a student disposed toward psychiatry for such reasons can more and more avoid "medical experience." The elimination, by the National Board of Psychiatry and Neurology, of the requirements of an internship can result in a loss of valuable training for the future consultation and liaison resident. Finally, the psychiatric resident in his training is increasingly exposed to the

continuing departure from the *medical model* in psychiatry, which may divert him from the psychosomatic context, despite some exposure to consultation and liaison training.

Traditional Educational Techniques of Consultation-Liaison Psychiatry

The most common current model of consultation-liaison teaching dates back at least forty years to the goals of Franklin Ebaugh's Colorado program, described by Billings:

1. To sensitize the physicians and students to the opportunities offered them by every patient, no matter what complaint or ailment was present, for the utilization of a common sense psychiatric approach for the betterment of the patient's condition, and for making that patient better fitted to handle his problems, somatic or personality-determined or both.

2. To establish psychobiology as an integral working part of the professional thinking of physicians and students of all branches of medicine.

3. To instill in the minds of physicians and students the need the patient-public has for tangible and practical conceptions of personality and sociological functioning.

The general strategies of a hospital consultation-liaison service fall into three categories. The following is an adaptation of Kaufman and Margolin's outline written in 1948. While these authors emphasize the primary professional needs of the institution, the goals are equally applicable to any healthcare setting:

1. *Psychiatric services,* i.e., the diagnosis and treatment of the hospital

population (*consultation*).

2. *Teaching* involving the training of the psychiatric staff and the indoctrination and teaching of every member of the hospital staff in the principles of psychosomatic medicine *(liaison).*

3. *Research* in the field of psychosomatic medicine *and* in the process of both the consultation and liaison functions.

Margolin and Kaufman went on to add the important guiding concept that, "these three functions should be regarded as *separate, chronological phases* in the development of a psychiatric service in a general hospital" (emphasis added).

In terms of specific educational tactics, a staff consultation-liaison psychiatrist is given a major assignment to one or more specific nonpsychiatric services. He usually attends the work and teaching rounds of that service and may hold special psychosomatic conferences. He sees patients upon request, and may generate the referral himself on the basis of the patient's history or his own observation of the patient on rounds. Every consultation is followed by often extensive communication with those caring for the patient in which he includes relevant concepts of psychosomatic medicine. In certain cases, the psychiatrist may assume major responsibility for the direction of patient management and aftercare, but usually he collaborates with the other health professionals, who retain their primary

roles in the continuing care of the patient.

Traditional Psychiatric Resident Role

Of course, almost all training programs in psychiatry have residents assigned to see patients in the general hospital who are referred for psychiatric consultation, usually on an emergency basis. In a minority of psychiatric training programs, a few residents have consultation-liaison duties, with the additional tasks of establishing collaborative relationships, teaching, and research, as defined by Kaufman and Margolin. Not all residents in a given program may have this rotation, it being either completely elective, or required for only a certain number of residents. As in the original Colorado program, the psychiatric resident usually becomes involved at first as an *assistant* to the liaison staff psychiatrist, on a *part-time* basis and for brief rotations of three to six months. This resident may participate in the nonpsychiatric service's work rounds, may generate consultations, and initially evaluate all patients for whom consultation is requested. The psychiatric resident may also lead, or participate in, conferences about comprehensive patient care which are, incidentally, frequently called "social service rounds"—implying nonmedical and dispositional, as well as comprehensive-care purposes. The psychiatric resident may also hold regular or ad hoc conferences for nurses about patient care.

Certain psychiatric residents may elect longer and more advanced levels of training in consultation-liaison work. This seems to be an only occasionally exercised option; exact figures are not available. An advanced resident usually functions in a semisupervisory role, performing many of the tasks of the staff psychiatrist. He may organize and coordinate the seminars or lectures in psychosomatic medicine offered in some programs, and may also have the opportunity to pursue research activities.

Appropriately, residents with either a minor or major time commitment to consultation-liaison work usually reserve a certain amount of time for seeing outpatients. This arrangement serves two functions: it ensures the resident's being able to continue seeing psychotherapy patients for an extensive period of time throughout his residency, and it also allows him the flexibility of being able to follow certain patients initially seen in consultation. However rational, this follow-up capability frequently causes difficulty, in terms of discontinuity and/or contradiction in the resident's supervision. Should this patient be considered an "outpatient" or a "consultation patient," for administrative and supervisory purposes? Most departments have separate organizational divisions for these outpatient populations. Some programs, such as that at Johns Hopkins in the 1960s, avoided this area of potential conflict by establishing a separate outpatient service under the aegis of the psychosomatic service. Others, such as that at the University of Rochester from 1959 to 1962, considered outpatient care as crossing all

departmental divisional lines and the resident continued to be supervised by the liaison staff for those outpatients originally seen in consultation. However, this scheme does add to the supervisory time per resident.

In such psychiatric residency training experiences, there are many unique learning opportunities. By being required to communicate with nonpsychiatric personnel, the resident can sharpen his psychological concepts and recognize their limitations, as he goes through the necessary process of adapting his psychiatric observations and opinions to everyday English from the jargon used so loosely among psychiatrists. However, the resident can become aware of the fact that a clear transmittal of his ideas, in and of itself, does not constitute their validation. For example, our scientific forebearers used deductive logic to precisely and irrefutably describe a large number of nonexistent creatures, such as the unicorn.

Another opportunity for the psychiatric resident may present itself when he may be obliged to utilize Adolf Meyer's "life chart" concept, taking into account the biological, social, economic, and situational influences on behavior, as well as the interpersonal and intrapsychic factors emphasized in traditional psychiatric training. He may be called upon to deal with the interface between the behavioral and the somatic, and—quoting Meyerowitz — "to approach problems as a physician, but a physician who is simultaneously a behavioral expert." Meyerowitz goes on to point out another

learning task for the resident. “The resident as consultant frequently experiences an uncomfortable sense of time pressure, crisis and distance from his own familiar setting. He has to make practical decisions based upon relatively inadequate data and without indulgence in careful longitudinal observation. The increasing capacity to act effectively under these circumstances is a measure of his further development as a psychiatric physician.”

In consultation-liaison work, the resident has an opportunity to see a much larger number of patients with neurological syndromes than he would in traditional psychiatric settings. Kligerman and McKegney found in a four-year survey of 2835 inpatients seen in consultation, 14.2 percent had an acute brain syndrome, 16.8 percent a chronic brain syndrome, and 10.8 percent other neurological diseases. By examining a large number of physically ill patients, the resident becomes atuned to the subtle manifestations of biological disease which, in his future patients, may initially present as a psychiatric syndrome.

Another important benefit of a consultation-liaison experience for a psychiatric resident is the opportunity of developing a sense of humility. As a consultant, the resident is considered an “expert” and is expected to contribute something of value to the medical staff and, usually, to also solve the clinical problem to everyone’s satisfaction. However, frequently the

psychiatric resident neither can add anything of significance, nor can he substantially affect the problem. In these situations, any consultant is liable to the temptation of trying to live up to the "expert" label, by theorizing or focusing on the minutiae of the clinical problems, usually at considerable length. As a result, the consultant bores and aggravates his busy consultees, making it less likely he will be called upon again, and may actually interfere with optimal patient care.

The psychiatric resident must learn to say in situations, in which pressing questions about complex problems are beyond his own or anyone else's expertise, "I don't know, but I will try to find out," or "I agree with what you have done and can add nothing." He must do this regardless of criticism from others and without a sense of inadequacy. As McKegney stated: "The real world of the sick does not afford completely satisfactory solutions. For example, a major problem in consultation-liaison work involves the dying patient and the reactions of the medical staff. This situation highlights the relative helplessness of the psychiatrist and that of the medical staff in many other medical situations. The psychiatrist must learn, and convey the attitude to the others, that possible goals may fall far short of the optimal ones, and that all of our medical interventions may have limited efficacy."

Finally, the consultation-liaison psychiatric resident has an opportunity to learn about the *ethos* and social systems of a foreign "turf." This experience

can clearly aid him in many other areas of psychiatric involvement, such as community, forensic, and military psychiatry. In contact with such conflicting value systems, the psychiatrist can learn a great deal about "countertransference" problems, complementing the learning about them in individual psychotherapy.

Although this training in psychosomatic medicine has been effective for the few psychiatric residents so exposed, it hardly effects the vast potential learner population of student physicians and other health professionals. Toward this end, another major teaching effort of consultation and liaison psychiatry has been in the curricular time devoted to *interviewing* or *history taking.*

Teaching Medical Interviewing

As Kimball has stated, "interviewing may be considered the basic science of clinical medicine. It is the vehicle through which all data and evaluations regarding the patient's condition are obtained, whether these be for the purpose of research or therapy." This classical position of the psychosomatic physician has never been refuted, but is rarely recognized or implemented in medical school curricula or medical practice. Consultation-liaison psychiatrists are usually highly involved in teaching medical interviewing to medical students. Yet, their small numbers, the small amount

of curriculum time so assigned, and the large classes of 100-200 medical students seem to preclude any significant impact of such interview teaching. Interns and residents are rarely, if ever, supervised by anyone in their contact with patients, and thus have little further opportunity for corrective feedback about their interviewing.

In a school which puts a large emphasis on teaching interviewing and clinical observation, Engel, at the University of Rochester, found that 88 percent of its graduates felt better prepared than their colleagues in the ". . . overall clinical approach to the patient: .... This included the ability to make accurate observations and to elicit information; greater comfort in dealing with difficult patients; the capability to consider the patient as a whole and to identify, define, and respond to the patient's problems; more understanding of the implications of the psychological and social dimensions of the illness; greater skill in working with the family; and better appreciation of the vicissitudes of the doctor-patient relationship." These data indicate that such educational goals can be approached, but only by a very strong commitment to both the preclinical teaching of interviewing-observation, coupled with the clinical teaching of psychosomatic medicine via a medicine-psychiatry liaison service. Yet, very few medical schools currently make such a strong commitment to preclinical teaching. Furthermore, the shortening of the undergraduate medical curriculum may well truncate the time spent toward achieving these goals. In that case, more attention may need to be directed to

the student physicians, particularly those medical students and house officers in training on nonpsychiatric clinical services.

Student Physician Education

The teaching of psychosomatic medicine to student physicians in *nonpsychiatric* settings *seems* to have several strategic advantages toward achieving the goals cited by Billings and Engel. These advantages are proposed as hypotheses, without documentation as being educationally valid. Medical education has met the tasks of goal setting and evaluation no better than other educational fields, though it has recently begun to change.

The advantages of teaching psychosomatic medicine to student physicians in nonpsychiatric settings derive from at least four factors:

1. The student's role on the nonpsychiatric service is different from his position on a psychiatric service. On the latter, residents, clinical directors, nursing personnel, in fact everyone is concentrating on the psychological factors and understanding them more completely than the student because of an early level of sophistication and training. As a result of his "bottom-rung" role on a psychiatric service, the student often retreats from competition with the others, and neglects observing and understanding the psychological factors operating in his patients. On a nonpsychiatric service, however, and with medical or surgical patients, the student often finds he can assume an unique role among the clinical

staff and achieve recognition, by emphasizing the same psychological factors he ignored or deprecated in the patient in the psychiatric setting. This "backing into" dealing with such psychological factors and concepts seems nonetheless to be an effective learning approach to these problems for the student 011 the nonpsychiatric service.

2. A major determinant in the student's reluctance to recognize, accept, or understand psychological factors in his patient is, of course, his own anxiety about himself. Experience suggests that such anxiety is less prominent and more readily dealt with on the nonpsychiatric service than on a psychiatric service. On the nonpsychiatric service, the primary focus of attention is on the anatomic-physiological aspects of the patients' illnesses. These aspects are less threatening and anxiety-provoking than the psychological ones and permit the student to recognize some of his own neurotic involvements, acting-out or "blind spots," without becoming overwhelmed by the additive effects of both sources of anxiety. If such recognition is a major element in the physician's educative process, both to increase his personal efficiency and to enable him to recognize and deal with similar psychological factors in his patients, such learning may be enhanced on a nonpsychiatric service.

3. The student has an opportunity to see, in a nonpsychiatric setting, patients in whom the organic factors have been "ruled out," in whom there is no conceivable physiological explanation for symptoms, or in whom the symptoms contrast clearly with those he finds in other patients due to organic disease.

Because of this contrast, the impact on the student of the presence and importance of these psychological factors is greater than it may be in a psychiatric setting, where psychopathology is more common and, therefore, less outstanding by contrast. The *surprise value* of this contrast lends another advantage to the teaching of certain principles of psychological medicine in a medical setting rather than a psychiatric one.

4. The *relevance* of the nonpsychiatric setting and patient population to the future career goals of the student physician heighten his acceptance and learning of psychosomatic medicine. Most student physicians will not be psychiatrists. Students constantly contrast their learning experiences with their sophisticated or unsophisticated expectations of their future challenges as medical specialists or generalists. Therefore, on a nonpsychiatric service, most student physicians rightly feel *these* are the patient problems he will face as a surgeon, obstetrician, pediatrician, etc. As we broaden the clinical settings of medical student education to other than acute hospitals, the *relevance* of psychosomatic factors in medical care should become even more apparent, as the students recognize the psychosomatic nature of all patient problems and the knowledge and skills demanded for their care. However, the teaching of these student physicians on nonpsychiatric services implies a commitment of educational resources not very common in psychiatric education.

Though perhaps not because of these advantages, many of the new

schools of medicine are shifting their basic teaching of psychiatry to nonpsychiatric services. For example, McMaster University's basic medical curriculum does not include the free-standing *clerkship* on a psychiatric service. The core of clinical teaching of psychiatry is done in a three-month combined family practice-psychiatry clerkship using the students' experience with *nonpsychiatric* patients as a means of teaching psychiatry.

Such a shift can have serious implications for the traditional education of psychiatrists. If students do not work with psychiatrists and psychiatric patients in psychiatric settings, they will have a limited opportunity to gain experience with psychiatry as a specialty. As a result, their career choices may be made in comparative ignorance about psychiatry. The specialty field might then attract fewer and less qualified students than in the past, with a consequent detrimental impact on the large number of clearly psychiatric patients who need specialized care. This is only one of the problems related to consultation-liaison psychiatric teaching.

Obstacles to Psychosomatic Teaching

Among the obstacles to consultation-liaison teaching, the career motivation factors of psychiatric residents and psychiatrists have already been cited. Psychiatry has for some time been "riding madly in all directions," resulting in a major diffusion of psychiatry into areas outside of medicine or even of health-care systems. Indeed, "psychiatric consultation" today can refer to a psychiatrist's meeting with a group of teachers, police, or industrial managers. This departure from the "medical model" of psychiatry imposes serious limitations upon student physicians' and psychiatric residents' receptiveness to traditional consultation-liaison practice.

Economic factors also limit the practice of consultation-liaison psychiatry. Since the bulk of the liaison-staff psychiatrist's activity is spent in teaching, it is not compensated by patient-care fees on an hourly basis, as in office psychotherapy. The amount of time necessary for a staff psychiatrist to perform an adequate teaching role on one nonpsychiatric inpatient unit seems to approximate ten hours per week. At the current average hourly rate for psychotherapy, $50, this primary educational service could cost at least $15,000-$20,000 per year per inpatient unit, if it were not for either the academic pressures forcing the voluntary contribution of clinical faculty time, or the lower salaries paid full-time faculty. Federal funding, however munificent in the past, has never approached this figure in supporting

consultation-liaison psychiatry, nor can most medical institutions underwrite such expensive teaching programs. Governmental funding of psychosomatic education of nonpsychiatrists is, paradoxically, being phased out in the face of the data increasingly substantiating the psychological needs of the general medical patient population.

Even most national legislation concerning national health-insurance plans or health-maintenance organizations (HMO) specifically excludes payment for treatment of psychological or psychosomatic disorders. Thus, any efforts of academic institutions to maintain or expand the *teaching* of psychosomatic medicine will meet the obstacles of combined learner-consumer resistance, patient nonacceptance, scarcity of teachers, and economic constraints. These defined obstacles would seem to indicate a need for new and different approaches to the strategies and tactics of teaching psychosomatic medicine. The areas for potential modification will be discussed in terms of curricular change and administrative-organizational change.

Educational Approaches—Curricular Change

The Definition of Minimum Objectives

The emphasis on defining objectives of educational programs has some very practical implications for the future teaching of psychosomatic medicine. Traditional approaches have involved spending approximately the same amount of teaching time with *every* student, attempting to teach the *broad* range of psychosomatic medicine, without consideration of essential *core* material/abilities or differing individual student capabilities. Faculty time and curriculum hours are very precious commodities. If the *minimum* psychosomatic knowledge, skills, and attitudes needed for *all* physicians could be defined, and found acceptable even within one medical school, substantial savings could accrue in both faculty effort and student-exposure time.

Once the bare essentials for *all physicians* are defined, knowledge, skills, and attitudinal goals would be more narrowly defined for *all students* than heretofore. For example, not all medical students might need to hear a lecture or read (or more operationally, to know specific facts) about the possible psychophysiological mechanisms involving the hypothalamic-pituitary axis, however important such material may be for our future understanding of the human organism. In essence, we would not spend the faculty's and students' precious time in attempting to teach a bit about *everything* in psychosomatic

medicine.

The second type of saving from goal setting would accrue from measuring *individual* student abilities for comparison with the criteria for *minimum* objectives *for all students.* It has long been recognized that students vary tremendously in their abilities and motivations to learn different things and in different amounts of time. Once *minimum* objectives are set, certain students may be able to achieve these in a very short time, if they have not already done so. These students would then be freed to pursue other sets of core objectives or to select more advanced objectives in any field. These fast learners would not be required to spend their time, nor would they continue to take up faculty effort, once they had achieved the minimum psychosomatic educational goals.

The Definition of Differential Objectives

As there is clear evidence that students vary in their abilities to learn, there is evidence that different tasks in medicine require different professional aptitudes. In the case of the physician, most of the technical skills required of the cardiac surgeon are qualitatively different from those of the family physician, who may assume overall medical responsibility for a three-generation family over forty years. Given the fact of increasing specialization within medicine, the teachers of psychosomatic medicine must attempt to

differentiate the educational goals in their field for the wide range of health professional roles. This setting of different objectives obviously must consider the different role-models and practice of all types of health professionals, most of which have not well defined themselves, especially vis a vis other types.

In this process of defining professional roles, many hard questions are raised, some of which confront the mythologies gradually developed through the history of medicine. For example, are all physicians expected to completely observe, define, and plan for the complete range of patient problems? Clearly, medical practice has been specialized to the point where the answer to this question is unequivocally negative. Dermatologists, anesthesiologists, surgeons, psychiatrists, neurologists, or obstetricians rarely gather a complete data base or assume primary medical managerial responsibility for the patient and his life situation. However, to explicitly remove this expertise from the responsibility of the physician-specialist is to painfully confront the mystique of the physician modeled upon Hippocrates and Osier.

Nonetheless, the teachers of psychosomatic medicine must, for efficacy and therefore maximal effectiveness, work with other medical-curriculum planners in determining the role requirements for psychosomatic education in each type of health-care practice. For example, the diagnostic role of the

primary physician may require a great deal more teaching emphasis on basic psychological-physiological mechanisms than does the role of the cardiac surgeon or family psychotherapist. The emergency-room nurse needs knowledge, attitudes, and skills quite different from the rehabilitation-unit nurse since their patient-responsibility roles are so different. The teacher of psychosomatic medicine must be able to define and to teach, according to the different task requirements of the different health professionals. In fact, the psychosomatic psychiatrist may be a most appropriate source of educational expertise for the different health professionals in their distinguishing their own roles and educational needs.

The Problem-Oriented Approach to Care

Alvan Feinstein's conceptual approach to clinical problems and Lawrence Weed's problem-oriented approach to medical records and the management of patient care are among the most innovative and radical contributions to medical care in this century. Each complements the other in demanding precise definitions of diagnoses, treatments, and follow-up. The concepts of Weed and Feinstein have vast implications for all medical teaching, including psychosomatic medicine. Global diagnoses such as *rheumatic fever* or *depression* are no longer acceptable. The patient's problems must be defined according to the specific clinical phenomena of the patient, the laboratory data, and his environment. The treatment plan must

include the specific approaches to the patient's behaviors, including *patient education*. Each element of the patient's situation must be isolated and defined, together with its appropriate treatment.

If these approaches to medical care are valid, then psychosomatic teaching must work in accord with such principles. Grant has begun adapting the problem-oriented approach to psychiatric services, but the actual psychosomatic input to the problem-oriented approach needs to be further developed. This input is needed in the screening process, the data analysis, the patient-management decision-making process—especially in the involvement of the patient and his family at each stage of care—and the evaluation of the outcome of treatment.

If such a *patient-problem oriented approach* is in operation in medical centers, the teacher of psychosomatic medicine has a clear responsibility. He must assist the staff to be efficient, reliable, thorough, and soundly analytical in the (1) collection of the data base; (2) construction of an appropriate problem list; (3) decision about a relevant treatment plan; and (4) implementation of an *appropriate follow-through* treatment and evaluation program. In the problem-oriented system, the teacher of psychosomatic medicine can help the staff to develop a clear set of objectives. He can assist in the assignment of appropriate patient care and learning responsibilities to the various members of the health-care team. This teaching function can be

extended to students, irrespective of a specific health-care discipline, to the degree that the student is actually involved in the *useful work* of patient care.

The mechanisms of such psychosomatic teaching could be varied. The most efficient would seem to be in the *audit* of the problem-oriented patient-care medical record. The thorough, reliable, efficient, and analytical problem solving of the student, house officer, or attending physician can be maintained by *peer review,* according to consensually developed criteria, with the input of the psychosomatic teacher. This educational role necessarily involves the psychosomatic teacher in the actual patient-care situation, as a participant auditor and source of feedback, especially regarding the data base, rather than as a theoretical critic or second-hand reviewer. This teaching role of the psychosomaticist requires that he be a responsible member of the patient-care team, a patient advocate, and a self-critical commentator about the treatment process. This complex, *triple-agent* role has been described by McKegney in the hemodialysis unit and is not substantively different from many traditional consultation-liaison roles. The *problem-oriented approach,* however, does change the context of the psychiatrist's participation and makes new demands on him, as well as upon all other members of the health-care team.

Specific Learning Techniques

Several recently developed educational techniques can well be used by the teacher of psychosomatic medicine. The *patient-management-problem approach* developed by McGuire et al., has shown considerable promise in teaching clinical care and in the evaluation of its learning. Methodological problems have arisen because clinicians frequently do not agree on criteria for optimal result of care, or even for appropriate sequences of diagnostic and therapeutic procedures. Other problems derive from the mechanics of the patient-management-problem learning-evaluation process. An random access-and-retrieval computer program is needed for best results which is frequently not readily available.

Another rather similar learning technique concerns *critical incidents.* In this approach, specific decision-making points of clinical care are presented. The student is asked to choose from among alternative courses of action and his decisions are compared to the criteria established by a panel of expert clinicians. This approach suffers from the same consensus difficulty as does the patient-management-problem technique. In addition, many clinical problems, especially those involving the psychosocial sphere, are not readily presented in either the critical-incident or patient-management-problem format. Some of these difficulties arise from the admitted complexities of human behavior but others may eventually yield an improved definition of patients' problems by the psychiatrist.

Administrative-Organizational Approaches

Overall Curriculum Planning

The psychiatrist should be considered as a behavioral scientist resource to general curriculum planning, although other health professionals may also be able to have such a function. A psychiatrist may be important in general curriculum planning because he is more aware of behaviorally defined characteristics of different students and health practitioners. In addition, he may be able to help curriculum planners to recognize the interpersonal phenomena which distract, or at least distort, their pursuit of well-defined objectives. This role of the psychiatrist in admissions committees has already been recognized. A national NIMH-sponsored conference was held in October, 1972, to examine this role. The eventual impact of this conference, entitled "The Psychiatrist as a Teacher," is still to be realized but its thrust emphasized the potential central role of the *behavioral clinician* in medical education.

Planning for New Patterns of Health-Care Delivery

Health is coming to be recognized as a "right," rather than a privilege, of every citizen. As a result, those responsible for health care are under increasing pressure to improve the effectiveness of the prevention and treatment of illness in every geographic and economic segment of the population. At the same time, the expense of medical care as currently

practiced is giving rise to demands for improved efficiency in health-care delivery. Most approaches to these problems generally suggest greater coordination among the traditionally independent professional disciplines, as *teams* or groups. Furthermore, these approaches imply a more *comprehensive* approach to the patient and his problems than heretofore present in medical practice.

The psychosomatic concept and the thrust of consultation-liaison psychiatry have long advocated these goals of comprehensive and coordinated care, now being mandated by economic, social, and political forces. Psychosomatic psychiatrists may possess a unique expertise by having an overview of medical practice and an interest in the broadest definition of patient problems. They have usually become more familiar with the ranges of health-care settings, types of patient problems, medical-care practices, and abilities of different health-care professionals than any other group of physicians. As a result, psychosomatic clinicians may be able to make a unique contribution to the current demands for a revolution of medical care and health education.

Despite this historical emphasis and long clinical experience, however, psychosomatic medicine should not pretend to have answers to these complex problems. Yet, it may be able to lead in their elucidation. For example, one particular patient need, long recognized and taught in

psychosomatic medicine, is that of a therapeutic relationship between the patient and physician. The traditional focus of consultation-liaison teaching about relationships has been on the student or practicing physician, since medical tradition has placed the primary patient care upon the physician.

Yet, general medical care in the future is almost surely to be delivered by a multiprofessional team, each member of which will assume responsibility for certain components of the patient-care plan. For efficiency, not all team members will do the same thing or their "own thing." The responsibility for the primary, ongoing, and general therapeutic relationship will usually be given to one member of the team. Will this person be the physician member? Present time-cost considerations would indicate not. While cost-effectiveness must also be considered, effectiveness should be a function of goal-directed education. The intensively trained general physician, with his broad biological knowledge, and expertise in the diagnosis of pathology and disease, may well come to function primarily as the initial diagnostician and long-term patient-care-plan manager. As such, he will need to know a great deal about psychophysiological and psychological manifestations of disease in the general population, a clear educational role for consultation-liaison psychiatry. If this role of the physician emerges, the task of developing the primary relationship with the patient may become the responsibility of the nurse or social worker, or the *physician assistant* on the team. In this case, the teaching efforts concerning the development and use of

psychotherapeutic relationships in a general health-care program should be directed at nurses, social workers, or physician assistants, both as students and practitioners.

If these health professionals, other than physicians, assume major responsibilities for tasks in the health-care plan currently assumed, rightly or wrongly, to be the physicians,' who will prepare them for these tasks? Health-profession schools have regrettably ignored other professions in many ways. Faculty composition and student teaching are almost always homogeneous to the profession. Specifically, the importance of the psychotherapeutic aspects of patient care is neglected in the curricula of most professional schools, such as nursing, social work, psychology, physical therapy, etc., as it is in medicine. In the future, the same efficiency considerations forcing changes in health-care-delivery patterns should also break down these traditional educational walls. The consultation-liaison psychiatrist should be asked, or perhaps invite himself, to participate centrally in the education of other health professionals, who need to learn the knowledge, skills, and attitudes of psychosomatic medicine. Similarly, medical education should be forced to assign certain educational roles to nonphysicians. For example, many coronary-care nurses are better able to administer emergency cardiac measures than most physicians. They should teach these skills to those health-care students who need those skills—irrespective of "profession of designation." The extent to which we are in a "crisis of health care delivery," we are also in a crisis of

health-care education, in which the broad concepts and concerns of psychosomatic medicine should be essential.

Determining Medical School Priorities

The changes in the political, economic, and social climate are challenging the traditional priorities of all education. A specific question is raised for psychiatry departments vis-a-vis medical school priorities. Should all schools continue to try to teach all things in medicine? If not, some schools might concentrate, for example, on developing research in basic biological mechanisms. Psychiatry departments in those schools would, consistently, need to set their highest priorities on gathering faculty with complementary expertise' in basic psychobiological relationships.

Other schools may decide to put their highest priorities on teaching the physicians to be involved in the general practice of health care and not many narrow and highly trained specialist physicians, such as surgeons or psychiatrists. In such schools, the departments of psychiatry might attempt to assume a *departmental task* of consultation-liaison, in which all members make a significant contribution by participating as teacher-clinicians in nonpsychiatric health-care settings. These departments could assume a primary role of collectively learning and teaching those attitudes, skills, and facts which will enable *all* health professionals to observe, understand, and

respond appropriately to the behavior of the human beings for whom they have professional responsibility.

These reorganizations of medical schools and departments of psychiatry will take place, if at all, over many years. In the near future, changes can be made in the organization of academic departments of psychiatry in such a way as to reduce the subspecialization connotations of consultation and liaison psychiatry. The traditional designation of a separate psychosomatically oriented "service" or "division" gave teaching responsibilities to a few select members. This designation often diminishes the departmental effectiveness in psychosomatic teaching by isolating the task from the rest of the psychiatry department. Traditionally, consultation-liaison services seem to float somewhere between departments of psychiatry and, for instance, departments of medicine, leading to a diffusion of roles only heightened by joint appointments, which are usually only titular ties between departments in two different worlds.

Many departments of psychiatry could move to broadening the teaching of psychosomatic medicine to medical students, house officers, and other health professions by increasing the commitment of most, if not all, faculty members to that educational task. New faculty members would be recruited on the basis of their interest, among other interests, in consultation-liaison work. Departmental composition would have to remain sufficiently diverse in

interests and skills to provide a solid-core psychiatric-residency program. Senior psychiatric residents would go elsewhere for subspecialty areas of psychiatry not represented in depth by the particular department's faculty. Others who wished to gain more experience in the consultation-liaison field could, of course, remain. This definition of narrowed focus at advanced levels of training would presumably have a preselection effect on resident applicants and might actually reduce the identity crises found in most psychiatric residency programs.

Some very large medical school psychiatry departments may feel they are able to accept greater responsibilities for psychosomatic education of all health professionals and maintain an in-depth expertise in the many fields within psychiatry. However, with increasing limitations on growth, all departments will have to reexamine their priorities and cut back some programs to allow for expansion in others. The teaching of psychosomatic medicine has not been a high priority of psychiatry in the past. As a group of leading psychiatric educators emphasized, it must be in the future.

Bibliography

Adsett, A. "Psychiatric Education in New Medical Schools—Undergraduate Programs." Paper presented at Conference on Psychiatric Education in New Medical Schools, Airlee House, Warrenton, Virginia, February 21-23, 1972.

Billings, E. G. "The Psychiatric Liaison Department of the University of Colorado Medical Schools and Hospitals," *Am. J. Psychiatry,* 122 (1966), 28-33.

Branch, C. H. "Psychiatric Education of Physicians: What Are Our Goals?" *Am. J. Psychiatry,* 125 (1968), 237-241.

Bjorn, J. and H. Cross. *The Problem Oriented Private Practice of Medicine.* Chicago: Modem Hospital Press, 1970.

Bruhn, J. G. and O. A. Parsons. "Attitudes toward Medical Specialties: Two Follow-up Studies," *J. Med. Educ.,* 40 (1965), 273-280.

Dohbs, H. I. and D. L. Carek. "The Conceptualization and Teaching of Medical Interviewing," *J. Med. Educ.,* 47 (1972), 272-276.

Enelow, A. J. and V. H. Myers. "Post graduate Psychiatric Education: The Ethnography of a Failure," *Am. J. Psychiatry*, 125 (1968), 627-631.

Engel, G. L. "The Education of the Physician for Clinical Observation, the Role of the Psychosomatic (Liaison) Teacher," *J. Nerv. Ment. Dis.,* 154 (1972), 159-164.

Feinstein, A. R. *Clinical Judgement.* Baltimore: Williams & Wilkins, 1967.

Funkenstein, D. H. "Medical Students, Medical Schools, and Society during Three Eras," in R. H. Coombs and C. E. Vincent, eds., *Psychosocial Aspects of Medical Training,* pp. 229—281. Springfield: Charles C. Thomas, 1971.

Graham, J. R. "Measuring Psychiatric Competence and Curriculum in Undergraduate Medical Education," *Am. J. Psychiatry, 125* (1969), 213-219.

Grant, R. and B. M. Maletzky. "Application of the Weed System to Psychiatric Records," *Psychiatry Med.,* 3 (1972), 119-129.

Hamburg, D. A., ed. *Psychiatry as a Behavioral Science.* Engelwood Cliffs, N.J.: Prentice-Hall, 1970.

Hoffman, F. H. "The Psychiatrist on the Medical School Admissions Committee," Paper presented at 123rd Meeting Am. Psychiatr. Assoc., Detroit, May 8-12, 1967.

Jason, H. "Defining Objectives and Setting Priorities For Instruction in Psychiatry," Paper presented at Conference on Psychiatric Education in New Medical Schools, Airlee House, Warrenton, Virginia, February 21-23, 1972.

Kardener, S. H., M. Fuller, I. Mensh et al. "The Trainees' Viewpoint of Psychiatric Residency," *Am. J. Psychiatry,* 126 (1970), 1132-1143.

Kaufman, M. R. and S. G. Margolin. "Theory and Practice of Psychosomatic Medicine in a General Hospital," *Med. Clin. North Am.,* 32 (1948), 611-616.

Kimball, C. P. "Techniques of Interviewing: Interviewing and the Meaning of the Symptom," *Ann. Intern. Med.,* 71 (1969), 147-153'

Kligerman, M. J. and F. P. McKegney. "Patterns of Psychiatric Consultation in Two General Hospitals," *Psychiatry Med.,* 2 (1971), 126-132.

Lazerson, A. M. "The Learning Alliance and Its Relation to Psychiatric Teaching," *Psychiatry Med.,* 3 (1972), 81-91.

McGuire, C. H. and D. Babbott. "Simulation Technique in the Measurement of Problem Solving Skills," *J. Educ., Measur.,* 4 (1967), 1-10.

McKegney, F. P. "Emotional and Interpersonal Aspects of Rehabilitation," in S. Licht, ed., *Rehabilitation and Medicine,* pp. 229-251. New Haven: Elizabeth Licht, 1968.

----. "Consultation-Liaison Teaching of Psychosomatic Medicine: Opportunities and Obstacles," *J. Nerv. Ment. Dis.,* 154 (1972), 198-205.

McKegney, F. P. and P. F. Lange. "The Decision To No Longer Live on Hemodialysis," *Am. J. Psychiatry,* 128 (1971), 267-274.

Mager, R. F. *Preparing Instructional Objectives.* Palo Alto: Fearon, 1962.

Mandell, A. J. "Western Humanism, Liberal Politics and Psychiatric Training: Relatives, Friends or Enemies?" Paper presented 128th Annu. Meet. Am. Psychiatr. Assoc., Dallas, May 1-5, 1972.

Mendel, W. M. "Psychiatric Consultation Education—1966." *Am. J. Psychiatry,* 123 (1966), 150-155.

----. "A Prescription for Improving the Psychiatric Consultation," *Roche Rep.*, 4 (1966), 1-11.

Mendelson, M. and E. Meyer. "Countertransference Problems of the Liaison Psychiatrist," *Psychosom. Med.,* 23 (1961), 115-122.

Meyer, E. M. "The Psychosomatic Concept, Use and Abuse," *J. Chronic Dis.,* 9 (1959), 298-314.

Meyerowitz, S. "Consultation," Paper presented at Conference on Psychiatric Education, Rochester, New York, March 31, 1971.

Mowbray, R. M. and B. Davies. "Personality Factors in Choice of Medical Specialty," *Br. J. Med. Educ.,* 5 (1971), 110-117.

Osmond, H. "The Medical Model in Psychiatry," *Hosp. Community Psychiatry*, 21(1970), 275-281.

Payson, H. E. and J. D. Barchas. "A Time Study of Medical Teaching Rounds," *N. Engl. J. Med.,* 273 (1965), 1468-1471.

Payson, H. E., E. C. Gaenslen, and F. L. Stargardter. "Time Study of Internship on University Medical Service," *N. Engl. J. Med.,* 264 (1961), 439-443.

Pellegrino, E. D. "Research in Medical Education: The Views of a Friendly Philistine," *J. Med. Educ.,* 46 (1971), 750-756.

Peterson, O. L., L. P. Andrews, R. Spain et al. "An Analytical Study of North Carolina General Practice, 1953-54," *J. Med. Educ.,* 31 (1956), 1-165.

Reiser, M. F. "Psychiatry in the Undergraduate Medical Curriculum," Paper presented 128th Annu. Meet. Am. Psychiatr. Assoc., Dallas, May 1-5, 1972.

Romano, J. "The Teaching of Psychiatry to Medical Students: Past, Present, and Future," *Am. J. Psychiatry,* 126 (1970), 1115-1126.

----. "The Elimination of the Internship—An Act of Regression," *Am. J. Psychiatry,* 126 (1970), 1565-1576.

Schumacher, C. F. "Interest and Personality Factors as Related to Choice of Medical Career," *J. Med. Educ.,* 38 (1963), 932-942.

Sedlacek, W. E. and L. W. Natress. "A Technique for Determining the Validity of Patient Management Problems," *J. Med. Educ.,* 47 (1972), 263-266.

Stratas, N. E. "Training of Non-Psychiatric Physicians," *Am. J. Psychiatry,* 125 (1969), 1110-1111.

Webster, T. "The Behavioral Sciences in Medical Education and Practice," in R. Coombs and C. E. Vincent, eds., *Psychosocial Aspects of Medical Training,* pp. 285-348. Springfield: Charles C. Thomas, 1971.

Weed, L. *Medical Records, Medical Education, and Patient Care.* Cleveland: Press of Case Western Reserve University, 1970.

West, L. J. "The Future of Psychiatric Education," *Am. J. Psychiatry,* 130 (1973), 521-528.

White, T. H. *The Bestiary.* New York: Capricorn Books, 1954.

Zabarenko, L., R. A. Pittenger, and R. N. Zabarenko. *Primary Medical Practice, A Psychiatric Evaluation.* St. Louis: Warren Green, 1968.