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**Springer Series on MEDICAL EDUCATION**

# **THE INTERPERSONAL DIMENSION IN MEDICAL EDUCATION**

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**Agnes G. Rezler, Ph.D.**  
**Joseph A. Flaherty, M.D.**

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Joseph A. Flaherty, M.D.**



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### **The Interpersonal Dimension in Medical Education**

Agnes G. Rezler, Ph.D. and Joseph A. Flaherty, M.D.

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# Preface

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The following conversation was overheard in the cafeteria of our medical center:

Dr. A.: "Do you think they can talk to each other?"

Dr. B.: "They speak different languages but it is possible for them to share information."

Dr. A.: "Then they are compatible and we can proceed as planned?"

Dr. B.: "It may take an interpreter, but ultimately they can interact by phone."

What were they discussing? A patient who doesn't speak English? There are many Hispanic patients in our medical center. Compatibility? Perhaps a psychotherapy relationship? By phone? Perhaps obtaining consultation from a colleague in another country? Wrong. The remainder of the conversation revealed the truth.

Dr. A.: "Both your Apple-III [computer] and my IBM-PC [computer] speak a slightly different form of BASIC, but they can both connect the main frame through a telephone modem. If we put our data in the same format, such as SAS, there should be no problem merging our files."

Computers of course. *Time* Magazine's "man" of the year, 1982. Computer literacy is now a requirement at many colleges. Students and residents are required to spend a few hours learning how to place orders on the computer at the University Hospital. Soon we will become more proficient in "talking" to computers than with people. The former are easier to converse with: their feelings cannot be hurt; their attention is constant; they don't ask difficult questions; they don't present with atypical symptoms

which don't fit neatly into diagnostic categories; and they never complain. They can also be turned off at will. Computers also have the virtue of helping us deal with hard facts; humans have a tendency to let their feelings interfere with the hardest of facts.

As important as computers will be in the future of medicine, they should not be allowed to overshadow the personal aspects of medicine and medical education. Young physicians are needed who will practice primary care not only in name but in substance. They should be skilled in human relations. They should be able and willing to deal with their patients' "problems in living." They should not get tired of seeing the same patient over a long period of time but welcome the opportunity for repeated contacts. They should have patience for teaching patients and use simple words patients can understand.

The authors believe that these qualities depend in part on the selection of medical students and in part on their education. This book is written for medical educators who wish to foster the development of the above qualities in their students. The "interpersonal dimension in medical education" refers to nurturing these qualities.

Each chapter in this book gives a wide perspective from the literature and discusses the educational implications of pertinent research with suggested actions for application. Chapters are organized around the following broad areas:

1. *Personal Qualities and Admission.* Affective characteristics considered important in applicants to medical school and the association between these characteristics and clinical performance are discussed, with special regard to interpersonal skills. Methods capable of assessing interpersonal skills are reviewed to inform readers about their strengths and limitations.
2. *Career Choice.* The influence of both personal and environmental factors upon career and specialty choices are reviewed with special attention to those factors which predispose students to selecting primary-care careers. Stability and shift in career goals are discussed in relation to medical students, residents, and practicing physicians.
3. *Interpersonal Skills.* The large body of literature on interviewing skills of students and house officers is reviewed with recommendations as to how these skills can

be reinforced and maintained beyond the basic interviewing course offered in most schools. The need to develop curricular and evaluative models for other interpersonal skills is discussed.

4. *Attitudinal Development in Medical Education.* The values and attitudes of medical students are examined with respect to four questions: (a) How do they change from matriculation to graduation? (b) Have they changed across generations? (c) What factors induce the changes? (d) How do specific attitudes affect interpersonal skills and other behaviors?
5. *Interprofessional Relations.* Relations among physicians, nurses, social workers, and allied health workers are discussed with reference to how they work together in different health-care settings. The impact of role conflict, leadership, changes in the health professions, and manpower trends on interprofessional relations are analyzed.

Agnes G. Rezler, Ph.D.  
Joseph A. Flaherty, M.D.



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Agnes G. Rezler

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Joseph A. Flaherty

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# Personal Qualities and Admission

AGNES G. REZLER

Suppose you are a member of the admission committee of a medical school and there is only one place left in the incoming class with five applicants to choose from. The grade point averages of all five applicants are between 4.50 and 4.75 ( $4 = B$ ) and their Medical College Aptitude Test Scores range from 10 to 14 (15 is the top score). If your choice is governed by considering which applicant would be able to complete the rigorous academic requirements of medical school, the answer is all of them. If your choice is governed by wanting to select the applicant who is likely to relate well to patients, who will be able to cope with stress and emergencies, who will have the integrity to admit if he or she made a mistake, in short who has the "right" attitudes and values that a physician ought to have, then the above data do not help you to select the best candidate. Even the letters of recommendation and the interviews have told you only that all of them are upright citizens and are highly motivated to become physicians.

How important are attitudes, values, and interests in a physician? How much weight should they be given in the selection of applicants to medical school? Patients certainly think that they are very important, judging from their complaints about physi-

cians who neglect the interpersonal aspects of the doctor-patient relationship. Prominent spokesmen from academic medicine share patients' concerns and urge changes in admission policies to include the assessment of personal qualities. Dimond (1974) warned that "the selection procedures by their very nature would not admit students with those warmer, more passionate, more involved, more people-oriented qualities that are necessary to a life of professional health service. The system practically guarantees the resultant product as a highly skilled, superspecialized, heavily certified physician, who is not too readily available." Gelhorn (1976) protested that using only academic indicators selects candidates who are more interested in science than people. Funkenstein (1979) stated that medical admission policies are geared to admit bioscientific students rather than biosocial students. The marked increase in grade point averages and MCAT scores needed for admission means that more bioscientific students qualify and fewer students are admitted with career interests in primary medicine. Finally, it has been observed by an AAMC National Task Force (*Medical College*, 1973) that one of the reasons that medical students are not selecting primary care or family practice in nonurban areas may be the overemphasis on cognitive criteria in selection for medical school.

Gough (1978) presents evidence that unusually high standing in regard to scientific attainment and preference is a mixed blessing. Students with these qualifications appear to have narrow interests, lack social presence, and are constricted. Students with very high scientific ability and interest do superior work in the early years of medical school, but by the senior year they are likely to be surpassed by students with less scientific ability but better interpersonal skills.

The importance of interpersonal skills is also evident from a survey of resident training program directors in internal medicine, family medicine, surgery, and pediatrics. The most important selection factors cited by 197 program directors are interpersonal skills and interest in people's problems (Wagoner & Gray, 1979). Applicants to medical school who don't have such interests and don't possess interpersonal skills rarely develop them in medical school.

The voice of Gough and other critiques are heard but not heeded. Policy makers in medical school maintain that

1. Performance in medical school depends mainly on intellect and prior achievement in the sciences;

2. Personal qualities, attitudes, and values are important in patient care but making a correct diagnosis is more important;
3. Personal qualities cannot be objectively assessed;
4. Personal qualities change during medical school and assessment prior to entrance would have no predictive value.

It is understood that intellect, academic achievement, and scientific background are very important for success in medical school. But is their exclusive or primary use for selecting applicants warranted? We hope to document in this chapter that

1. Basing admission exclusively or primarily on intellectual and academic qualifications helps to predict some outcomes, but not others and that the unpredicted outcomes are very important for the medical profession as well as for society;
2. Personal qualities, values, and interests help to predict clinical performance and specialty choice not predicted by academic indicators;
3. Personal qualities, values, and interests can be objectively assessed;
4. There is more stability than change in personality;
5. Desirable variety in medical students has been restricted by undue concentration on applicants' intellect and scientific achievement;
6. Alternative admission policies and procedures, which incorporate assessment of personal qualities, have worked satisfactorily in some medical schools.

### **The Criterion Problem**

Before discussing selection procedures we must face the criterion problem. Too often it has been taken for granted that a selection procedure works if those applicants are admitted who will get the highest grades. This way of thinking is not unique to medical school, which does not make it more acceptable. Equating high grades with excellence in applied medicine may be questioned on several grounds. First, medical faculty know from experience that students may get high grades in basic science courses and do poorly later, during the clinical years. The opposite may also occur. Both in fact were documented by Rhoads and

colleagues (1974), who found that about half of the students excelled either during the first two or the last two years, but did not perform consistently throughout. If admission practices are validated *only* against grades in the basic sciences, this discriminates against students whose best performance occurs later.

Differences in student performance in the basic science versus the clinical years can be easily explained by considering the nature of the clinical criterion. Clinical performance has been shown to embrace academic achievement, utilization of knowledge, and effectiveness with patients. It is this last component which can *not* be predicted by academic ability and previous achievement.

The validity of grades as criterion measures is also questionable in the light of their lack of relationship to future practice. Wingard and Williamson (1973) reviewed the literature and demonstrated little or no correlation between grades in medical school and medical performance in practice. The authors state that even clinical grades reflect mainly the ability to memorize isolated facts whereas career performance measures include observations of medical practice and review of clinical records. How many medical schools validate their selection procedures against *observed* clinical performance or record audits? Proving that selected medical students can get high grades is hardly relevant when the relationship between medical practice and grades is minimal or nonexistent. Furthermore, those aspects of medical practice which have been most criticized by patients, and which depend largely on attitudes and values, are inadequately evaluated. The authors surveyed 50 medical schools in 1975 asking them to list what kinds of noncognitive characteristics were assessed in students and how students were evaluated. Dependability, empathy with patients, and relations with faculty and peers were most often assessed on clinical rating forms. The following candid statement by one Dean illustrates how clinical evaluation occurs:

Affective characteristics are not systematically evaluated for all students. Each teacher has his own concept of expectations for medical students. For example we expect all students to be able to cope with stress to a reasonable degree, to be reasonably flexible and independent. All students are presumed to have a high level of intellectual curiosity, openmindedness, self-control, etc. Special note may be made of one or more of these characteristics if the student shows exceptional and remarkable strength. If deficiencies or strengths are noted they may

or may not be included in written evaluations. Individual instructors may or may not wish to comment on one or more of these characteristics when they prepare letters of recommendation for residency.

Under these circumstances it seems that clinical grades are influenced only haphazardly and to a minor extent by interpersonal effectiveness and other behaviors reflecting personality and attitudes, if the behaviors are not excessive or deviant.

The usual practice of rating students from memory at the end of the clerkship contributes to incomplete and sometimes invalid evaluations. Systematic and focused observations would make more valid and reliable criterion measures, but they require the expenditure of considerable amounts of time and thought by clinical instructors. This will occur only if clinical instructors are convinced of the importance of the contribution they are making when they carefully monitor the clinical work of students. For this to occur at least three steps are needed: (1) identification of those instructors having both the interest and opportunity to make clinical observations; (2) providing enhanced opportunities for student contact; and (3) developing training programs for clinical instructor-observers.

Apart from clinical observations, other kinds of criteria could also be utilized. Choice of specialty and choice of location and type of practice are important goals to predict, particularly when certain specialties are overcrowded and in others too few physicians are unable to meet patients' needs. Although choice of specialty is a long-range criterion, at least it does not suffer from lack of validity and is very important for society.

Admission committees have the difficult task to select among many highly qualified applicants those few who can be accepted, which is only 39.4 percent nationwide (Gordon, 1979). The question is on what basis should students be selected? Is health care really best served by favoring the highest achievers in the sciences?

### **What Is Predicted by Academic Qualifications?**

#### *The Medical College Aptitude Test (MCAT)*

Applicants' academic qualifications have been assessed by their grade point average and Medical School Aptitude Test (MCAT) scores. The old MCAT was designed to predict performance in the



basic science courses where attrition rates used to be high. One of the main purposes of the old MCAT was to identify the marginal applicant rather than the individuals likely to perform at the top level. Nevertheless it appears that medical schools have utilized old MCAT data in such a way that individuals with higher scores were more likely to be accepted for admission than individuals with lower scores (Funkenstein, 1966; Hamberg, Swanson, & Dohner, 1971; Stefanu & Farmer, 1971; Williams et al., 1977).

The relationship between the old MCAT scores, entry GPA, and grades during the preclinical years has been repeatedly studied (Edwards, 1978; Erdman et al., 1971; Friedman, 1979). Results have been mixed but, in general, low correlations have been found between old MCAT scores and performance in medical school during the first two years.

Varied criticisms and suggestions led to the construction of the new MCAT. Since the old test was criticized for emphasizing factual information rather than principles and analytical skills, it was decided that the new MCAT should consist of achievement measures to determine levels of competence attained in reading, quantitative skills, biology, chemistry, physics, and scientific problem-solving ability. The American Association of Medical Colleges National Task Force, which made the above recommendations, recognized that personal characteristics of physicians greatly affect application of medical knowledge and that methods to assess relevant personal characteristics in applicants should also be developed (*Medical College*, 1973). The latter recommendation was not translated into action, and the new MCAT replaced the old one as the major selection device.

Molidor and Elstein (1979) factor analyzed both MCATs to identify similarities and differences in their content. The old MCAT measured mainly verbal ability; the new MCAT measures to a great extent scientific knowledge, the application of scientific facts, and quantitative skills. The authors arrived at the following conclusion:

The message of the new test seems to be unmistakable: if a student wishes to enter a medical school, achievements in biology, chemistry, physics, and quantitative skills are more important than ever. The lack of emphasis upon comparable academic achievement in the social sciences and humanities is striking, especially in view of repeated calls for broadening premedical education beyond the biological sciences. The underlying conception of the complete physician is narrow and