Medical Interviewing and the Biopsychosocial Model

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More than 20 years ago, George Engel first challenged biomedicine to be more scientific and to include psychosocial data as part of the clinical process. He wrote

> The dominant model of disease today is biomedical, with molecular biology its basic scientific discipline. It assumes disease to be fully accounted for by deviations from the norm of measurable biological (somatic) variables. It leaves no room within its framework for the social, psychological, and behavioral dimensions of illness.[1]

He further argued that

> the existing biomedical model does not suffice. To provide a basis for understanding the determinants of disease and arriving at rational treatments and patterns of health care, a medical model must also take into account the patient, the social context in which he lives and the complementary system devised by society to deal with the disruptive effects of illness, that is, the physician role and the health care system. This requires a biopsychosocial model.[1]

Engel contended that the biopsychosocial model represented a more scientific approach to health care.

Since the publication of his seminal article, the biopsychosocial model has been widely accepted in medicine, particularly within family medicine, where it has become the dominant clinical paradigm. A large body of research supporting connections between psychosocial and biomedical processes has been published, most notably in the field of psychoimmunology.[2]

Family medicine has been in the forefront of education regarding the biopsychosocial model, communication skills, and the doctor-patient relationship. Every family practice residency program is required to have a comprehensive psychosocial curriculum and a behavioral scientist on its faculty. Videotaping, live supervision, and Balint groups are commonly used. In many medical schools, the department of family medicine is responsible for teaching interviewing and communication skills to all medical students.

Until recently, medical interviewing was considered an art. Physicians observed the skills used by other practitioners and then practiced them with their own patients. There was little science in medical interviewing, and there was no clear support for any specific skill set. Research on medical interviewing has burgeoned, however, since the pioneering work of pediatrician Barbara Korsch,[3] and an evidence-based approach to teaching communication skills is now possible.[4]

Although family physicians in the United States have led the way in implementing a biopsychosocial model and teaching medical interviewing skills, we have made only a small contribution to research on medical communication. With the notable exception of our family medicine colleagues in Canada, especially at the University of Western Ontario,[5] there have been few major family medicine contributions to research in this field.

The study by Marvel and colleagues[6] on medical interviewing by exemplary family physicians in this issue of the *Journal* is a welcome addition to the research on clinical communication. As the authors point out, little is known about how ideal models of doctor-patient communication are practiced. They compared the transcripts of family physicians who have received postgraduate training in family therapy (exemplary family physicians) with community family physicians who have not had additional training, using a previously validated instrument, the Level of Physician Involvement (LPI) model.

Marvel and coworkers found that the exemplary family physicians were more psychosocially involved with their patients, without having lengthier routine visits. Specifically, the exemplars involved the patients and their families more in the interview and offered more emotional support. In approximately one half of the interviews, the community physicians interacted with their patients at LPI level 1, which was defined as physician-centered and limited to biomedical problems. The exemplars were twice as likely to make collaborative, patient-centered statements or inquiries than were the community physicians, and the exemplars were four times more likely to provide emotional support.

Several conclusions may be drawn from these results. First, it is possible to use a collaborative, patient-centered, family-oriented approach in a busy family practice. This is an important finding, since a major criticism of both patient-centered and family-oriented approaches is that they take too much time and are not practical in a busy practice, particularly with the recent constraints created in response to managed care. The results are consistent with the work by Stewart and colleagues,[7] who found that a patient-centered approach takes no longer than physician-centered interviews. However, recent evidence suggests that shortening the medical interview to less than 15 minutes may have adverse effects.[8,9]

Community physicians in the study by Marvel et al used a purely biomedical or physician-centered approach (LPI level 1) in more than half of their inter-

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views (compared with 20% of the exemplars' interviews). Proponents of the patient-centered approach argue that it is a new paradigm that is appropriate for all interviews, regardless of the nature of the presenting problem. They cite studies that demonstrate better outcomes associated with the use of this approach.[9] Whether different patients or presenting problems require different LPI levels (including level 1), or whether patient- or physician-centered interviewing is more beneficial, are research questions that must be investigated further.

As noted by the authors, their study had several limitations. Although the exemplary physicians had advanced training in family therapy and were chosen by colleagues, one cannot assume that they practice ideal interviewing. We know little about the overall quality of the interviews (as assessed by a standardized rating scale) or any patient outcomes (other than patient satisfaction). The exemplary physicians may see a different patient population with different presenting problems and expectations, which might explain some of the differences in interviewing styles; the exemplary physicians' patients may be more comfortable and more willing to discuss psychosocial information and share emotions. Finally, one cannot conclude that the exemplars' interviewing style resulted from their additional training. Most physicians who elect to receive training in family therapy have a strong interest in the biopsychosocial model and possess superior interviewing skills. This is the disadvantage of using voluntary continuing medical education to improve communication skills: Those physicians who already have the greatest interest in and skills for medical interviewing are the ones most likely to attend.

The teaching of communication skills in medical schools and primary care residencies has improved dramatically over the past decade, and there is some evidence that medical students' skills in this area are improving.[10] There is a growing body of research on how to teach the medical interview. It should be skills-based (as opposed to attitudinal) and experiential (as opposed to observational), and it should occur in small groups or one-on-one. Essential ingredients include: systematic delineation and definition of the necessary skills, observation of these skills, constructive and detailed feedback from the instructor, and rehearsal and practice.[4] Unfortunately, this process takes an enormous amount of time, and there are not enough trained faculty to do the teaching. The next major challenge will be to expand faculty development programs to provide training on how to teach medical interviewing skills.

One of the most important steps for improving communication skills in medicine is to assess them in certifying examinations, such as the national and family practice boards. Family practices in Canada have considerable experience with this, and their system could be used as a model. For almost 10 years, the College of Family Physicians of Canada has used simulated patient evaluators in their certifying examinations, to assess candidates' communication skills. Influenced by the work of Ian McWhinney and colleagues[5] at the University of Western Ontario, the college has based its examinations on the patient-centered method, which is now taught across Canadian family practice programs. The National Board of Medical Examiners and some of the specialty boards are making plans to include objective, standardized clinical evaluations in their examinations as a way to assess communication skills. The American Board of Family Practice should begin to develop methods for assessing interviewing skills for both certification and recertification. When practitioners and educators consider communication skills as important as medical knowledge and physical examination skills, and when proficiency in interviewing must be demonstrated for licensing and board certification, the quality of doctor-patient communication may approach or even surpass what Marvel and his colleagues observed in their sample of exemplary family physicians.

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