

## Dealing with Uncertainty in Family Medicine

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Young physicians, when they enter practice, think that there should be concrete answers, indeed, concrete problems to solve, and that medical practice is clear-cut: patients present definable problems which they, as students, have been prepared to discern and for which they have ready solutions. However, upon entering practice, they leave the artificial environment of the university and are immediately presented with problems they have never encountered, problems that offer no easy solution.<sup>1</sup>

In Western culture, there is an almost universal propensity to avoid ambiguity and uncertainty.<sup>2</sup> There is a need for closure. The physician who has a low tolerance for risk-taking or has not learned to handle uncertain or ambiguous situations is at a considerable disadvantage.<sup>3</sup> Medical schools are the major source and must accept the blame for this; it is disturbing that they have failed to recognize it.

It is useful to look at the kinds of uncertainty that family physicians encounter, and then explore the reasons and strategies used by physicians to reduce the uncertainties and risks of practice. There are probably three basic types of uncertainty:<sup>4</sup> (1) incomplete or imperfect mastery of available knowledge, (2) limitation in current medical knowledge, and (3) the difficulty in distinguishing between personal ignorance or ineptitude and the limitations of present medical knowledge. To this, one should add a fourth: (4) inadequate data to solve a clinical problem and act.

*Incomplete or imperfect mastery* is due largely to the failure of the

medical school and not the student. Universities have neglected the simple fact that you must be exposed to that which you are to become, in the appropriate setting. In our province, for example, out of every 1,000 people who are sick today, only 20 are in a hospital and of that number only 0.4 are in a university hospital; yet this is where almost all the undergraduate and graduate teaching takes place. Until very recently, training for family medicine has been virtually ignored. We know that somewhere between 80 and 90 percent of our clinical work is on an outpatient basis, both in our office and on the telephone, yet nowhere has the student been trained to handle this.

*Limitation in current knowledge* is a problem less for family physicians than for our sub-specialist colleagues who usually handle the very difficult diagnostic and therapeutic problems. There is one important group here that we must not overlook, however, and that is the broad spectrum of emotional illnesses. Numerous examples spring to mind, the inadequate knowledge we possess in prescribing antidepressants to potential suicides probably being the most uncertain.

*Personal ignorance* should not be considered basic; it is derived from the first two types of uncertainty and cannot be separated from them. It cannot be separated from career choice either. We, as family physicians, know our limits; we know that we do not have mastery of all available medical knowledge and have learned to live with it. Those who feel secure only when they have that mastery will leave family practice and go into a sub-specialty. Then they can say, "Well, I may not always be right, but nobody knows more than I." Again I find universities at fault. Rational

decisions for career choice are almost never made; students drift and bounce through medical school and fall into family practice by pure chance. Dr. Hilliard Jason<sup>2</sup> suggests that as part of career choice, one must learn in the clinical setting to effectively manage one's own inevitable level of incompetence. Some people will never be comfortable in a career in family medicine and should not enter.

*Inadequate data to solve a clinical problem* is the one family physicians are all familiar with and probably handle best. We have all learned techniques to handle the situation where it is too early in the disease to really have a diagnosis, or in fact, know if there really is a disease. We learn not to jump to conclusions and not to jump headlong into over-treatment or over-investigation. Medical students, on the other hand, seem to have been taught to rush into massive investigations which, of course, are safe for the student but not necessarily safe for the patient. The matter of economy or efficiency may not enter their minds. One of my favorite questions for medical students is "Why?". Why not wait and see? We play the odds, for the benefit of the patient, the doctor, and the system, and also manage the whole patient, but not necessarily at one point in time. In fact, family physicians are often unjustly criticized for deliberately withholding extensive investigations and treatment when actually this is often the result of a definite, correct, intellectual decision.

If we accept these four hypotheses regarding risk-taking, what can we do about them? How can we reduce the risk and still deal effectively and efficiently with the whole patient?

Beginning at the undergraduate level, students must be exposed to family physicians in the physician's office. It is only fair to the student. In addition, there must be continuing exposure throughout the undergraduate years. A one-shot exposure is almost useless. Medical schools must wake up to the fact — and they are beginning to do so — that if they want to produce family physicians, they must provide three essential ingredients: *experience* in the *proper setting* with the *correct teachers* as role models. Then students will have an opportunity to make a rational decision as to career choice.

In the graduate setting, it is my

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contention that a rotating internship is not what is necessary for family practice. What is necessary is a judicious mixture of inpatient and outpatient experiences, using the family physician in his office as a primary teacher. Inhospital training does not equip the student for the uncertainties of family practice. The student taught in a hospital setting sees only an efficient, well-organized team dealing with episodic illness, with immediate referral available. This neglects much of the care done in family medicine. Further, the student's ambulatory care experiences must not be restricted to a hospital nor exclusively to an urban setting, but must extend to rural and remote settings. We must force an awareness of actual practice conditions

in the community at large.

At the postgraduate level, what can we do to reduce risk? The practitioner's role is somewhat reversed from that of medical students. We have the experience, we have developed strategies to deal with ambiguous and uncertain situations, but we are not always up-to-date in our knowledge. To rectify this situation, we must perceive our own needs (where we are deficient) and consider how we can efficiently reduce our levels of uncertainty. This involves active participation in our own continuing medical education. Much is being done in this important field now, such as developing practice profiles, and the medical audit, and studying motivating factors and methods of learning. The

issue of dealing with uncertainty by physicians has broad implications; in my view it is a specific determinant both of career choice and of distribution of medical manpower — wherever a physician practices, urban, rural, or remote.

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## The Nurse Practitioner in a Private Family Practice

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The extension of the nurse into the physician extender field is a logical progression of nursing responsibility. Initially a deliverer of inpatient care only, the nurse has gradually broadened her field to include a wide spectrum of outpatient programs. A combination of nurses' training and hospital experience gives the nurse excellent basic preparation for becoming a physician extender.

Postgraduate nurse practitioner programs are aimed at teaching the nurse basic skills in diagnosis and therapeutics. A graduate of such a program is quite capable of assuming many responsibilities of direct patient care under the supervision of a physician.<sup>1-5</sup>

Exactly how a nurse practitioner, or nurse clinician, as some prefer to be known, will fit into a physician's office or clinic depends on the need of that facility and on the attitude of the physician. However, basic functions will remain the same regardless of the setting. The nurse should be able to screen patients, separate the ill from the not ill, recognize certain common illnesses such as tonsillitis, and recommend basic therapy. She may prescribe

such therapy only after specific approval by a physician. Approval may be given individually, with the physician checking her findings in each case, or by written protocol, where she is allowed to give directed therapy if predetermined diagnostic criteria are met. In addition, she is expected to assume direct responsibility for such things as patient counseling and chronic care follow-up. If this approach is utilized, the nurse is doing what she has been trained to do and her duties fall within the confines of her nursing certificate. No new licensure or certification is required.

In our office the nurse practitioner has both inpatient and outpatient responsibilities. In the hospital she is expected to perform and record basic physical examinations on selected patients. She makes rounds with the physician, sees that the hospital record is complete and current, and encourages the physician to maintain adequate documentation, a necessity in this day of utilization review and record audit. She is available for patient counseling and education if needed, and often serves as an invaluable liaison between the physician and the nursing staff of the hospital. These inpatient responsibilities enable the nurse practitioner to understand more fully the hospitalized patient and to

serve more adequately as a post-hospital therapist.

Her outpatient duties include making home calls, where she serves as a diagnostic arm of the physician, reporting her findings to him and ensuring that suggested therapy is carried out. In the office she does routine required physicals (school, camp, pre-employment, etc), screens patients for common illnesses, applies casts, infiltrates local anesthesia, and performs basic lab tests and eye and ear screening. Acceptance by patients has been extremely good. Many even ask to see "that other doctor."

If one remembers that the nurse practitioner is an extender and not an associate, she becomes an invaluable addition to the practice of medicine. It is the responsibility of the physician to see that duties are properly delegated and that the nurse practitioner is adequately supervised and utilized.

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