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Teaching the Principles of Family Medicine

SUMMARY

Nine principles of family medicine can be described: an open-ended commitment to patients; an understanding of the context of illness; the use of all visits for preventive purposes; the view of the practice as a population at risk; the use of a community-wide network of supports; the sharing with patients of the same habitat; the care of patients in office, home and hospital; a recognition of the subjective aspects of medicine; and an awareness of the need to manage resources. (Can Fam Physician 1981; 27:801-804).

SOMMAIRE

On peut décrire neuf principes en médecine familiale: une ouverture aux patients, une compréhension du contexte de la maladie, l'utilisation de chacune des visites dans un but préventif, une optique de pratique sensibilisée à la détection des groupes à risque, l'utilisation de tous les moyens de support qui peuvent être fournis par la communauté, le partage avec les patients du même espace vital, le soin aux patients au bureau, à la maison et à l'hôpital, la reconnaissance des aspects subjectifs de la médecine et la conscience de la nécessité de superviser globalement les ressources disponibles.

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GOOD EDUCATION", wrote William Walsh,¹ "persists not as a collection of information, an arrangement of intellectual bric-àbrac, but as a certain unity of self... and a certain method of thinking and feeling..." Education is more than the learning of subject matter. It is, of course, important to be well informed, but facts without principles are so much mental clutter. "To be educated", wrote Walsh again, "is to have a principled, not a cluttered mind."

In any clinical discipline, it is the principles that make it distinctive rather than its body of knowledge in the limited sense. A surgeon, for ex-

ample, is identifiable more by his skill in diagnosing and treating 'surgical' diseases than by any particular knowledge of anatomy, pathology or clinical medicine. The mastery of family medicine also is more than the learning of a certain core of information. The things that make family physicians different are their values, attitudes, and methods—the principles that govern their actions.

The purpose of undergraduate education in family medicine is of course different from that of residency training. The reason for educating medical students in family practice is that certain principles of family medicine are important general principles for all students, not only for those who are going to make their career in family practice. The role of the Department of Family Medicine in undergraduate education is therefore the same as that of other clinical departments. With undergraduate students, a deep understanding of the principles and a full mastery of the skills cannot be expected. These must

await the more prolonged and intensive period of vocational training.

What then, are the principles of family medicine? I will describe nine. None are unique to family medicine; not all family physicians exemplify the whole nine; nevertheless, when taken together, they do represent a distinctive world view—a system of values and an approach to problems which is identifiably different from that of other disciplines.

The Person, Not the Problem

1. The family physician is committed to the person, rather than to a particular body of knowledge, group of diseases or special technique. The commitment is open-ended in two senses. First, it is not limited by the type of health problem. The family physician is available for any health problem in a person of either sex and any age. His practice is not even limited to strictly defined health problems: the patient defines the problem. Second, the commitment has no de-

fined end point. It is not terminated by cure of an illness, or by the end of a course of treatment, or by the incurability of an illness. In many cases the commitment is made while the person is healthy, before any problem has developed.

This open-ended commitment to the person and his or her problem, whatever it may be, has several important implications. First, it means continuing responsibility for patients over long periods of time. It enables doctor and patient to form relationships which are deepened and strengthened by time. These relationships we believe to be an important element in the healing process. The knowledge which the physician derives from the relationship enables him to understand how the patient's problem is related to his personality and life experience. The continuing relationship also provides the physician with methods of diagnosis and therapy that are not available to other types of physicians.

Second, it means that family physicians deal with all age groups and therefore tend to care for family units. This enables the physician to acquire knowledge of a family's relationships which can enrich his understanding of an individual's problems and increase his therapeutic range. Third, the fact that the family physician is available for all types of problems means that the assessment of undifferentiated problems is one of his most important skills.

This principle of family practice, with all its implications, is one of the most difficult to teach and learn. Relationships of the kind we are discussing take years to mature. They are not possible in the few weeks a student may have to spend in a practice. Nor is it possible for him to use background knowledge of patients as a help to understanding their problems. Every patient is a new patient. How then can we teach this principle to students? One approach is to lengthen the experience by making it an intermittent one rather than a block rotation. A student or resident may then attend the practice on one day a week over a two or three year period rather than full-time for a shorter period. This solves one problem, but produces another one. It provides a longer time for relationships to form, but reduces the number of opportunities for contact with a particular patient. An intermittent experience tends to be limited to the care of chronic problems and to reduce the opportunity of dealing with crises and acute problems. Since relationships are deepened not only by the passage of time, but also by the intensity of experience, this is an important consideration.

Another approach is to make the experience both a block rotation and a longer intermittent experience. There are many ways of combining the two. The problem is usually a more difficult one in the undergraduate curriculum, when less time is available, than in the postgraduate curriculum. The truth is, however, that there is no completely satisfactory solution. However we approach it, we face the dilemma of teaching attitudes that take years to develop within a time period that is always limited.

Having said this, we can at least expect that a student will understand this principle even if he is not able to apply it fully himself. To help him to attain this understanding, it is necessary for the teacher to make it explicit. Suppose that the student has seen a patient and is presenting his findings to his supervisor. The teacher can demonstrate how his personal knowledge of the patient deepens his understanding of the problem and helps him to arrive at management decisions.

Other aspects of the principle may be available to the student only if he observes his teacher in action with patients. This applies especially to the therapeutic aspects of the relationship. This does confront the teacher with another dilemma. How can he introduce a third party into a private relationship without altering it? At the postgraduate level, there is an even more difficult problem. If a resident is to have a good learning experience in his practice, the teacher has to allow him to take over patients with whom he has already established a relationship. He must also do it in such a way that the resident can feel a real responsibility for the patient. These are problems for which there is no simple solution, for they arise from conflicting obligations. They cannot be solved, but only transcended in the context of caring relationships with both students and pa-

As well as trying to demonstrate for students the implications of continuity of care, the teacher can recommend books which have explored this aspect

of family practice. One particular favorite of mine is A Fortunate Man, by John Berger, now re-issued by Writers and Readers Publishing Cooperative, 1976. Another of particular interest to Canadian students is William V. Johnston's book, Before the Age of Miracles.

The Patient's Context

2. The family physician seeks to understand the context of illness. "To understand a thing rightly," wrote William James,4 "we need to see it both out of its environment and in it, and to have acquaintance with the whole range of its variations." Many of the illnesses seen in family practice cannot be fully understood unless they are seen in their personal, family and social context. When a patient is admitted to hospital, much of the context of his illness is removed or obscured. Attention is focused on the foreground, rather than the background. The result in many cases is a limited picture of the illness.

Here again, the physician's personal knowledge, acquired over the years, helps him to understand the context of illness. His attitudes and skills in this area may have become so intuitive that it is very difficult for him to conceptualize them in such a way that the student can learn them.

It is useful, therefore, to provide for the student some simple conceptual tools to assist his understanding. One of these is a series of questions to ask himself about a patient:

Why did the patient come?

Why did the patient come at this time?

What does the patient think is wrong? How does the illness fit with his life situation and stage of development?

Another is the simple classification system of the patient's reason for attendance which I have described elsewhere.⁵

The Preventive Attitude

3. The family physician sees every contact with his patients as an opportunity for prevention or health education. Since the family physician, on the average, sees each of his patients about four times a year, this is a rich source of opportunities for practicing preventive medicine.

These opportunities, however, can be used only by someone who has a preventive attitude. Some visits are intentionally for preventive purposes—prenatal and well-baby care. It is more difficult to teach the kind of tactical preventive medicine that family physicians practice in the course of managing illness. Here again, the attitude may be encouraged by asking the student at every consultation: "What are this patient's risks?" "What can I do at this visit to promote his health or prevent disease?"

The Population at Risk

4. The family physician views his practice as a population at risk. Clinicians think normally in terms of single patients rather than population groups. Family physicians have to think in terms of both. This means that one of his patients who has not been immunized, or has not had his blood pressure checked, should be as much his concern as one who is attending for well-baby care or for the treatment of hypertension. It implies a commitment to maintain health in the members of his practice, whether or not they happen to be attending the office.

It is doubtful whether many practices are able to demonstrate this principle at the moment. To do so requires a record system that is able to identify groups of patients in the practice who are in need of special attention: adult patients whose blood pressure has never been recorded; children who have not been immunized; women who have not had a Pap smear; patients on maintenance therapy who have stopped attending. The tools for this approach to practice are age-sex registers, special risk registers and a system for flagging charts so that patients in special need can be readily recognized. The student will learn this method of practice only by working in a practice where these systems are functioning.

Community Resources

5. The family physician sees himself as part of a community-wide network of supportive and health care agencies. Medical education does not encourage this attitude. Working within the confines of a hospital, it is all too easy for physicians to remain unaware of the resources available in the community outside the hospital. Even when working in a teaching practice, it is possible for a student or resident to remain in his own water-tight compartment.

Learning may be enhanced in several ways. First, and perhaps most important, the student learns through his patient's problems. A pregnant adolescent, a battered child, a child with school problems, an alcoholic, an old person with senile dementia, may all bring the student into contact with a health agency or with a member of one of the allied health professions. As a learning experience, it will be all the better if the student meets the people involved himself. It may be necessary, however, for the supervisor to point to these learning opportunities. Students at an early stage of development are understandably preoccupied with learning clinical skills, so that their attention may not naturally be focused on other learning opportunities.

Secondly, the student can learn from allied health professionals who are members of, or attached to, the teaching practice. In the teaching centres of The University of Western Ontario, students can learn in this way from office nurses, public health nurses, social workers, clinical psychologists, a pharmacist, and a physiotherapist. Here again, one cannot assume that because people are working in the same building, learning will necessarily occur. The supervisor may have to ensure that certain experiences take place. The student may spend a half-day visiting patients with the public health nurse, or may attend a case conference. Although these opportunities may be more readily available in fulltime teaching units, the attachment of public health nurses to practices is sufficiently widespread to make them available in community teaching prac-

Thirdly, the student can learn from a planned experience with the community health agencies. This may consist of a series of visits to agencies and interviews with personnel. Alternatively, the student may carry out a project on some problem which puts him in touch with one or more community health agencies.

Integrating Life and Work

6. The family physician shares the same habitat as his patients. In our mobile society, this may seem to be an impossible ideal. Nevertheless, it is almost solely in family practice that a student can learn what it is like for a physician to be a living presence in his or her community. For obvious rea-

sons, the links between family physician and community will be more apparent to the student in rural and small town practices. Even in urban practices, however, a clinical clerkship should be an opportunity for a student to learn how one family physician integrates his or her work and personal, family and social life. Awed by the example of physicians who are slaves to their work, some students resolve to separate work from life in watertight compartments. Working with a family physician can teach him or her how the creative integration of life and work can lead to the enrichment of both. If the student can actually live in the doctor's home, as a member of his or her family, the experience will be all the

7. The family physician sees patients at the office, at home and in the hospital. There is hardly any other place in the curriculum where a student can see a patient in all three situations. In the course of a family practice experience, the student will probably see some patients who need admission to hospital. His learning from the experience can be enhanced if his supervisor draws his attention to all the patient's and the family's needs when he is admitted to hospital. Reaching a decision about the need for hospital admission is itself an important exercise, for it is one the student may not have encountered very often in other clinical rotations. The family medicine rotation is probably the only one to give the student the experience of seeing patients in the home. The experience is important for several reasons. First, it can teach him how much background information about patient and family can be obtained from a home visit. Secondly, it can show him how many illnesses can be very satisfactorily diagnosed and managed at home, using very simple methods. It is often necessary for the student or resident to overcome a feeling of insecurity when separated from the resources of the hospital. Thirdly, it can teach him how seeing the patient at home can help in the decision about admission to hospital and help to monitor recovery after discharge.

Subjective Aspects of Medicine

8. The family physician attaches importance to the subjective aspects of medicine. For most of this century,

medicine has been dominated by a strictly objective approach to health problems. For family physicians, this has always had to be reconciled with a sensitivity to feelings and an insight into relationships. This includes an awareness of self: the family physician understands that his own values, attitudes and feelings are important determinants of how he practices medicine.

Medical education does not encourage physicians to be reflective. Yet it is only by being reflective that we gain insight into our own values, attitudes and feelings. In family practice, the student will certainly encounter problems that will give him food for reflection. Some of these may raise ethical issues he has never encountered before. Unfortunately, they may not even be recognized as issues unless his instructor makes him aware of them.

Just as the family physician is aware of the subjective aspects of medicine, he is also aware of the subjective aspects of teaching. His sensitivity to students' feelings can provide a model for the student of a caring relationship.

Resource Management

9. The family physician is a manager of resources. As a generalist and first-contact physician, he has control of large resources. He is able, within certain limits, to control admission to hospital, use of investigations, prescription of treatment and referral to specialists. In most parts of the world, resources are now limited—sometimes severely limited. It is, therefore, the family physician's responsibility to manage these resources for the maximum benefit of his patients.

How can the family physician teach the principles of resource management? One method is to bring the issue of resource allocation into decisions about management. The resources in question are not only those of the health care system and the community, but also the resources of the physician and the practice. In a decision about embarking on family therapy, the question may be whether this is a good use of family physician's time, or whether referral to a psychologist would be a more appropriate use of resources. Another way in which resource allocation can be brought into management is to ask the student the

cost of his investigations and prescriptions and then to justify these in terms of benefit gained.

Conclusion

In this discussion of the principles of family medicine and how they can be taught, I hope I have conveyed something of the importance, complexity and depth of the subject. As the profession becomes more fragmented and specialized, the task of transmitting some of medicine's greatest principles will, I believe, fall increasingly to family practice. One of the strengths of family practice as a learning environment is the opportunity it gives for close relationships between teacher and learner. It is often said that Abraham Flexner,6 in his report on medical education, deplored the apprenticeship system. The opposite is true: he criticized medical education in North America for having abandoned the apprenticeship system. To restore the apprenticeship system, however, is not in itself sufficient. To use the system effectively calls for deep reflection and careful planning by both teacher and learner. I hope that my discussion of the "nine principles" will have assisted in this process.

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References

- 1. Walsh W: The Use of Imagination, Educational Thought and the Literary Mind. London, Chatto and Windus, 1959.
- 2. Berger J, Mohr J: A Fortunate Man. The Story of a Country Doctor. London, Writers and Readers Publishing Cooperative 1976.
- 3. Johnston WV: Before the Age of Miracles. Toronto, Fitzhenry and Whiteside, 1972.
- 4. James W: The Varieties of Religious Experience. New York, Signet Classics, New American Library, 1958.
- 5. McWhinney IR: Beyond diagnosis: An approach to the integration of behavioral science and clinical medicine. N Engl J Med 1972; 287:384-387.
- 6. Flexner A: Medical Education in the United States. Boston, Updike, Merrymount Press, 1910.

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- achieves rapid, high urine and blood levels
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