

Climate for Research in Family Practice

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The word "climate" has been defined in non-meteorological terms as a particular set of "prevailing attitudes, standards, or environmental conditions of a group, period, or place."¹ It is the premise of this paper that the climate within family practice in terms of attitudes, standards, and environmental conditions has an important bearing on the directions and success of its future development as an academic discipline and specialized pattern of practice. It is the further premise of this paper that the climate within its field of birth, general practice, was generally unsupportive of the kind of vigorous intellectual and investigative efforts required to establish any specialty discipline, and that this deficiency must be corrected if family practice is to prosper and survive as a specialty in its own right.

Earlier papers in this monograph have dealt with the relationship of research in family practice to patient care and education, as well as some of the research traditions of other disciplines which are likely to influence research directions and methods developing in family practice. Later papers will deal with more specific subjects, such as research design, analysis and interpretation of data, communication of results, and various approaches by which family physicians can become involved in research. Examination of the climate needed to support research in family practice is vital to all other considerations related to this subject.

The purpose of this paper is threefold: (1) to outline the climate which prevailed within general practice in the past; (2) to suggest the elements of a new climate in family practice which can nurture its continued development and maturation as a specialty; and (3) to discuss the implications of this new climate in terms of patient care, practice satisfaction, and related factors.

Past Climate within General Practice

In most countries of the world, and certainly in North America, there was little in the prevailing attitudes in general practice in previous years to nurture and facilitate research in the field. General practice has been known for its strong tradition of service through patient care, but with rare exceptions has lacked a commitment to scholarly work. The word "research" has often been viewed negatively by many general practitioners who have failed to appreciate its relevance to everyday practice. This attitude has frequently been reinforced by exposure, during one's medical education, to traditional biomedical research involving "esoteric" conditions and complex pathophysiological mechanisms not perceived as directly applicable to the work of the family physician. Without a research base or discipline of its own, general practice has drawn its content in a derivative way from portions of all of the other clinical disciplines. General practitioners have placed the highest value on the reduction of other fields to those areas of knowledge and skills which can be applied as a *practical* approach to the diagnosis and management of a wide spectrum of clinical problems encountered in a busy practice. The capacity to reduce *existing* clinical knowledge

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and procedures to readily understandable and recallable dimensions has therefore been central to the "mind set" of the general practitioner, which has left the responsibility for development of *new* knowledge to the other specialties within medicine and has prevented recognition of general practice itself as a legitimate object of critical inquiry.

Just as prevailing attitudes failed to support the value and need for research in general practice, the standards of practice and environmental conditions likewise failed to support original work in the field. The standards for "good" practice were drawn directly from other clinical disciplines without a scientific data base for an effective peer mechanism within general practice to set such standards within the field. The environmental conditions in general practice have featured heavy clinical responsibilities, an emphasis on solo or partnership practice, and lack of generally available tools which could allow investigative efforts to be carried out. Lacking a formal base in medical education, general practice has been an applied field with some distrust of its "academic" (ie, less practical) counterparts in the various specialties in the universities. Under these circumstances it is only natural that role models of effective clinician-researchers were rarely visible.

Three examples of this situation reveal the dimensions of the problem. The first is the traditional absence of general practitioners on the teaching faculties of postgraduate courses conducted for general practitioners, since they have usually not been seen as experts in any part of the applied field. The second is the emphasis on derivative literature from other fields, with most articles in the journals read by general practitioners being of a review nature and written by specialists in other fields. The third is illustrated by an incident which occurred at a recent postgraduate course for general/family physicians at the University of Washington on Office Urology. The urologist faculty member noted that the decreasing incidence of mumps orchitis has resulted in this problem becoming almost of historical interest. He asked how many of the physicians in attendance had seen this problem within the past year and was surprised to see the large number of hands go up. One of the physicians then asked the urologist his views on the effectiveness of corticosteroids in the treatment of mumps orchitis. The answer: "I don't know; ask your colleagues next to you."

Emergence of Family Practice as a Specialty

The emergence of family practice as a specialty during the last ten years in North America is an important event with major implications for change in both medical education and medical practice. This change is by no means limited to the United States and Canada, but is proceeding in various ways in many other countries of the world.

The development of family practice represents a needed reemphasis of the role of the generalist in medicine with particular concern for the family as the object of care, for comprehensiveness and continuity of personal care, and for ready access to care. This specialty involves an increased concern for health maintenance, prevention of disease, long-term care of chronic illness, rehabilitation, and counseling for common health problems. In contrast, its predecessor, general practice, as well as many other disciplines in medicine, has focused more strongly on episodic care of acute problems.

In 1966, McWhinney proposed four essential criteria required for the definition and development of any specialty: (1) a distinguishable body of knowledge; (2) a unique field of action; (3) an active area of research; and (4) training which is intellectually rigorous.² Although there were some initial efforts to define family medicine in terms of its *unique* content not held by any other clinical disciplines, it has become clear that a *functional* definition is required.³ The term "family medicine" has evolved to designate that body of knowledge and skills applied by the family physician as he/she provides primary, continuing, and comprehensive health care to patients and their families regardless of their age, sex, or presenting complaint. Family medicine thereby cuts across the territorial boundaries of all of the traditional clinical specialties and will add its own "unique" content as the research base develops in the field through the study of its patient care population in the context of the family.

Three broad areas of needed research relate to clinical strategies, health care services, and educational methods. Much of the medical literature to date has been derived from the study of patients admitted to university hospitals. Yet, these patients represent only one out of 250 patients seen by physicians and one out of 1,000 patients at risk each month.⁴ Since 90 to 95 percent of all

physician-patient contacts occur at the primary care level,⁵ family medicine has both the opportunity and responsibility to add to our knowledge of health and disease from the unique perspective of the family physician.

By dealing with the everyday problems of patients and their families, the family physician has several inherent advantages relating to research on a patient care level: (1) contact with all members of the family of all ages and both sexes; (2) direct experience with primary care of unselected patients; (3) opportunity for long-term follow-up of patients; (4) multidisciplinary approach to care; and (5) contact with patients in all stages of disease. Family physicians thus have a wider perspective of health and disease on the family and community level than anyone else in medicine.

Climate Favoring Research in Family Practice

Following up on the original definition of the word "climate," it is useful to consider the needed elements of a suitable climate favoring research in family practice under three categories: (1) attitudes, (2) standards, and (3) environmental conditions.

Attitudes

It is most appropriate to consider attitudes as the first among the requisites for research in this specialty, for the attitudinal barriers to research in general practice have already been described and no significant research can develop without the development of a new "mind set" by family physicians.

Eight attitudes are proposed as important ingredients of this new "mind set" for the family physician.

1. Curiosity

The origin of any research project is the asking of a question. This cannot occur without the observer having curiosity, which Byrne encourages us to organize in the pursuit of a question.⁶ In this process of critical inquiry, the most productive question is, "Why?"

2. Skepticism

Closely related to curiosity is the capacity to be skeptical of existing knowledge and medical practices, to believe, for example, that there may be a better way to approach or manage clinical problems.

3. Honesty

Intellectual honesty is likewise required for the investigator to confirm the validity of existing knowledge or methods. One must be rigorous in rejecting or being skeptical of that which lacks supporting evidence, and resist acceptance of an idea or method because of habit or "ego-investment."

4. Awareness of limited knowledge

One cannot learn what one already knows. Medical practice abounds in uncertainty where the clinician must rely on "clinical judgment." The physician must be able to sort out that which is "known" (ie, based on adequate evidence) from

that which is practiced from the basis of insufficient knowledge.

5. Interest in learning something from every patient

The family physician, who is privileged to know and follow the patient over long periods of time, can reasonably expect to learn *something*, however slight, from every patient seen. One's success in doing this clearly depends on one's level of inquiry and keenness of observation.

6. Appreciation of the role of the family physician in research

It is clearly important to appreciate the unique opportunities in family practice for research and accept the key role held by the family physician in identifying researchable questions which are important and worth study.

7. Valuing of own observations over time

McWhinney argues that "observation of the natural history of disease is *the* basic science of medicine," and further suggests that clinical observations are fundamental to prognosis and to rational therapeutics.⁷ The family physician has opportunities to make significant observations within his/her practice which are not available to anyone else in medicine.

8. Acceptance of responsibility for advancing the field

Asking the negative side of this attitude makes the point adequately: if not the family physician, who else is to take the major responsibility for contributing to advancements in the specialty?

Standards

It has been traditional in general practice in the past, and to a large degree in family practice today, to accept and adopt as standards for "good practice" those derived from the other clinical specialties. This pattern has undoubtedly developed due to the relative lack of research in general/family practice compared to the effort directed to the validation of new knowledge or rejection of existing knowledge through research in the other specialties.

Since research in the other clinical specialties has been focused mainly on secondary and tertiary care settings, it is likely that more relevant standards to the primary care setting can be developed through family practice research. As this takes place, opportunities will increase for family practice to take greater responsibility for establishing standards of acceptable practice within the field based on supporting evidence. Such standards should relate to cost, morbidity, and patient care outcomes from diagnostic and therapeutic interventions.

In the hospital, *clinical* (not administrative) departments of family practice can play a vital role in applying reasonable standards of care in collaboration with other clinical departments. In office practice, family physicians in partnership and group practice can establish similar standards acceptable to their colleagues and subject to periodic audit.

Environment

Six kinds of environmental conditions are necessary to facilitate research in family practice.

1. The practice itself

The laboratory of the family physician is the

practice itself. Clinical research by the family physician will be based on the "new epidemiology" as Sir James MacKenzie predicted,⁸ and will involve patients in all stages of disease in a continuing care relationship with the physician.

2. Research tools

Some of the basic research tools in family practice, in addition to clinical observation itself, include the problem-oriented record,⁸ an accepted coding system,^{9,10} an effective data retrieval system,¹¹⁻¹⁵ and audit. Access to computer facilities may be needed for some research projects, but many clinical studies in family practice can be effectively conducted without use of a computer.¹¹

3. Stimulation by colleagues

The value of an atmosphere of questioning and informal give-and-take among colleagues cannot be underestimated. The clinical investigator needs feedback and critique from colleagues in all stages of a research project, including that delicate first stage where a potential researchable idea is being considered.

4. Consultation and collaboration

Consultation is important with colleagues who have done similar kinds of research and with consultants in such fields as epidemiology and biostatistics as will be discussed more fully in later papers in this monograph. Such consultation is more readily available than in the past, and with the development of family practice teaching programs throughout the country, the practicing family physician is no longer isolated from this kind of help.

5. Access to library services

Regionalization of improved library services in recent years has brought to all physicians ready access to the medical literature. Abridged Index Medicus is available by subscription at a nominal cost, and literature searches are provided on request by the nearest medical library.

6. Forum for communication

The opportunity to communicate the methods and results of one's research is likewise important. Fortunately, opportunities are greatly expanded for family physicians today. These include conferences in family practice teaching programs; regional and national meetings of organizations such as the American Academy of Family Physicians, the Society of Teachers of Family Medicine, and the North American Primary Care Research Group; and through publication in the literature.

Discussion

It is frequently argued that the time constraints and practice demands in the everyday work of the family physician prevent any meaningful investigative efforts. Yet similar arguments can be made for other clinical specialties which have collectively organized themselves in the study and intellectual development of their fields. In the same way, as one looks back at what research has occurred in general practice, one does not find physicians who were otherwise insulated from the pressures of time and clinical responsibilities. Sir James MacKenzie carried out his careful studies of pain and the symptoms of heart disease, which laid the foundation for modern cardiology, while actively engaged in a full general practice including obstetrics. Those few family physicians who

are making research contributions today, such as John Fry in the United Kingdom and Curtis Hames in the United States, are also involved in busy clinical practices. As McWhinney points out, these physicians exemplify the same principles of the past: "long-term observations carried out by individual physicians who share the same habitat as their patients."⁷

In my view, the single most important factor influencing the extent to which the family physician can be involved in investigative work is the "mind set" held by the physician toward his/her practice. There is enough flexibility in the practice of medicine, even today, that the family physician with the kinds of attitudes which have been de-

scribed can develop an approach and style of practice which permits investigative work in some area of interest.

While the numbers of family physicians willing to develop the clinician research style of practice may remain relatively small, many family physicians can make some kind of contribution to the field, and all can develop a more scholarly approach to their practices. The payoffs of such an approach are considerable—expansion of the body of knowledge which family physicians teach, an ongoing form of continuing medical education, increased practice satisfaction, and most importantly, improved quality of care for patients and their families.

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