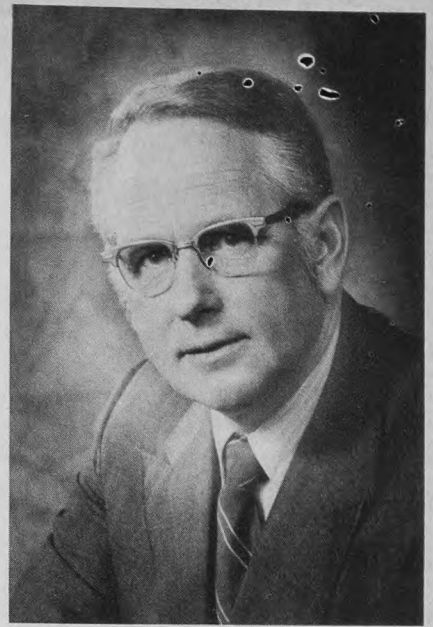


A Perspective of Research in Practice and Academia

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The historical development of general practice research from the days of William Wethering's introduction of digitalis in 1776, Edward Jenner's discovery of smallpox vaccine in 1796, the discovery of anthrax bacillus and tubercle bacillus by Robert Koch in the late 1800's, James MacKenzie's study of rheumatic heart disease in the early years of this century, and Will Pickles' contribution to epidemiological studies during the period from the end of World War II until his death in 1969 — all serve to place general practice research into proper perspective, and provide a historical background for present day family practice research — not only in Britain, but throughout the world.

In the United States and Canada, family practice research has received its major "boost" from the acknowledgment that family medicine has come of age as an accepted academic discipline. This is not surprising when one realizes that an essential ingredient of any academic discipline is a strong research component.

The difference between family practice research and that of other academic disciplines is that, by its particular nature, research conducted by family physician researchers can and must bridge the potential gap between the academic and practice community. This is one of the great challenges that faces anyone engaged in family practice research. While a challenge, it also provides an opportunity to prevent the town-gown split that has characterized the more established and traditional medical disciplines of the past.

While there are numerous classifications of family practice research, one that I feel most comfortable with distinguishes among clinical, therapeutic, epidemiological, operational, and educational research. Within this classification, the opportunities for anyone

interested in research are virtually unlimited, but the resources, particularly human resources, up to the present at least, have been woefully inadequate. Hence the need to intelligently share these resources among family physicians in both the academic and practice communities. This requires coordination, a sharing of physical, human, and financial resources, and, most important, a sharing of research know-how, that is, research methodology. While individual research interests may vary between clinical, epidemiological, or educational research, the basic principles governing all research are essentially the same.

If family practice research is to strengthen the relatively new discipline of family medicine, six major ingredients must be incorporated into our research activities.

1. *People* represent the major ingredient of any effective research program. The average family physician in the United States and Canada has not in the past been turned on by research. This is rapidly changing as more and more family physicians, both in practice and in training programs, acknowl-

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edge that one's practice, whether teaching or non-teaching, is in every respect a research laboratory. More effort must be directed toward encouraging our residents in family medicine and established family physicians to think of research as a "way of professional life." We must somehow change the philosophy of more family physicians regarding research; we must encourage them to be more inquisitive, more questioning, more curious about their day-to-day activities.

2. *Organization* is a second essential ingredient of family practice research. The pundits frequently refer to research in terms of organized curiosity, an apt description, but I am thinking more in terms of organizing a program of research activity, either within teaching units or in associations such as the Society of Teachers, Academies and Colleges of Family Physicians, international organizations such as WONCA, the WHO, and others. Successful research is more often than not the product of individual or small group effort, but this effort must be supported by an appropriate organizational structure.

The research program of the College of Family Physicians of Canada received a major boost resulting from a period of re-organization several years ago. Organized at both the national and provincial levels into the three major areas of clinical, epidemiological, and operational research, and supported by frequent workshops for the purpose of training family practice researchers, the tempo of College research activity has been markedly increased. A fourth major area has recently been added, that of educational research. A further development has been the completion of a pilot project as a prelude to developing a national recording service, a mechanism whereby a register of family physician recorders will report information relative to "selected indicators" on a weekly basis.

3. *Coordination* naturally follows the organization of a research program at either a local, state, or national level. It seems essential to me that we develop a mechanism whereby the right hand knows what the left hand is doing — a system whereby we complement rather than duplicate essential research activity — a system that utilizes in the most effective and efficient

manner all of the resources available to family practice research.

We have a tremendous opportunity within the discipline of family medicine to avoid many of the pitfalls that have beset most of the more senior medical disciplines. Again, I refer to my major obsession — the danger of driving a wedge between the practice oriented and academically oriented family physician. A legitimate criticism that has been levelled at medical educators in the past is that they have lost sight of the true needs of the community, and as a result, have produced medical graduates improperly trained to assume responsibilities appropriate to these needs.

The contribution being made by the Canadian College to coordinate research activity in family medicine is the creation of a National Research Unit, a facility with the necessary staff and equipment to provide the technical and advisory services needed for statistically valid medical research, and to provide these services to anyone whose research interests bring him in contact with problems in family practice. While still in the planning stage, the National Research Unit will hopefully serve to coordinate Canadian family practice research.

4. *Records* are the raw material of research, and an essential prerequisite of any research program. While a pencil and notebook are still important instruments in record-keeping, they no longer suffice for the collection, storage, and retrieval of the essential data required for present day family practice research. With the acknowledgment that the medical record is in large part the laboratory for the researcher in family practice a great deal of attention is being directed toward record-keeping techniques. Since much of the data collected by one family physician is only applicable when combined with the data collected from other family physicians, it is essential that we have some acceptable standard of record-keeping that has a common denominator insofar as interpretation is concerned. While applauding the potential of the problem-oriented record as an instrument for recording research data, one must be concerned that the many modifications in the problem-oriented approach to record-keeping designed for purposes other than research are rendering these records less

effective as instruments for recording research data.

5. An adequate *library service* is a further essential requirement of any research worker. Again, the rapid development of family medicine has resulted in a dramatic increase in the number of articles, periodicals, and, to a degree, new journals and books relating to family medicine.

It is rewarding to observe that the utilization of the services provided by the relatively new Canadian Library in Family Medicine is in direct proportion to the number of persons involved in family practice research. The College librarian can provide a list of existing references on any subject, photocopies of articles from most medical journals in the world, and offer advice to researchers on the use of other medical libraries that may be more convenient to them.

6. And finally, the appropriate *funding* of family practice research is a must if we are to encourage an adequate number of researchers to become involved in research activity. Research costs money as well as time, and we must do what we can to find the necessary funds to support legitimate investigations in family practice. Here the practicing family doctor interested in research is at a distinct disadvantage vis-à-vis his confrere with an academic appointment.

Major funding bodies must accept that family practice research will play an increasingly important part in determining the future direction of health care in our respective countries, and they must be encouraged to invest the necessary research money to ensure that adequate numbers of family physician researchers are being trained and that appropriate investigations are being carried out.

Interest in research is contagious; one who is motivated can be taught the necessary skills. Learning and teaching — education and research — are indistinguishable, and all health professionals with a responsibility for patient care must share in the search for more knowledge and better methods of applying this knowledge, if we are to provide *better* patient care. When our teachers and the literature cannot provide us with satisfactory answers, one of the few opportunities available to us is to involve ourselves in a search for these answers.