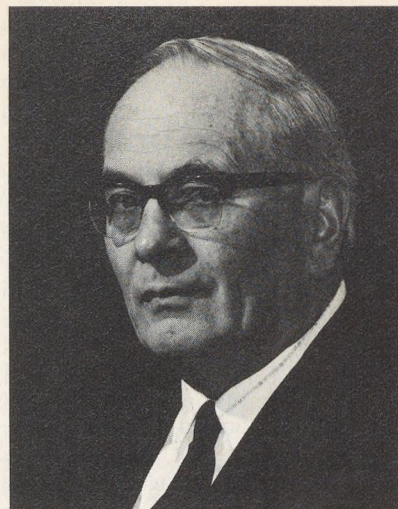


Why Not Organize Your Curiosity?

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Primary care represents an untouched field of research potential. It is important for all of us engaged in this exciting method of providing health care to our communities to seize the advantages constantly provided through Eimerl's¹ "organized curiosity," which is perhaps as good a euphemism for "research" as we will find. We might reflect, with Jean Piaget, that the broad goal of education is to create men capable of doing new things, not merely replicating that which previous generations have done. McWhinney² has told us, too, that family practice is not in danger of becoming too academic, but is in grave danger of not becoming academic enough. This is a situation which we must avoid. If we consider the definition of a discipline, perhaps of medicine in the global sense of the term, it

must first have a demonstrable body of knowledge. It must then be seen to be able to teach that knowledge within itself while it must constantly research into its advancing fringe, so that it can increase, keep contemporary, and even look into the future of its body of knowledge. We should consider further the continuum of learning in medicine, particularly for family medicine. We commence in primary schools, in high schools, in pre-medical college, in undergraduate medicine. Then in residency programs and then, in the sense which Osler preached so long and fervently, our own personal continuing education lasting to the grave.

We might also reflect that we require a definition of what the primary care physician may do. We in Europe have produced and have had accepted by the relevant body of the European

Economic Community, a body called UEMO, a document entitled the "General Practitioner in Europe."³ This sets out a brief description of the tasks of the general practitioner (I may be forgiven if I use what is to me a more familiar term than primary care physician). The document lays out, based on its description of the tasks, a series of educational aims. Consequently, we have a rough but reasonably accurate definition of the person, and his or her activities, whom we will graduate at the end of the residency program. During this time we will be teaching from the basis of contemporary wisdom and from ongoing research. It is fundamental that education, learning, and research not be separated. For if we are not researching, we are reduced to merely replicating what other people in previous

generations have done. There is also a salutary personal discipline contained within the methodology of research and its content. The results of research may be exciting, but the pursuit may be tedious and require a long slog.

How do we undertake research? There are certain essential processes which cannot be avoided. The first is to conceive of the question which we desire to attempt to answer. Then we must refine the question, conduct a search of the literature, find out what other people have done, what they achieved, and further refine the question so that it may be answerable within the limits of the time and the resource which we propose to apply to the inquiry. We have also to consider the methodology, the methods of analysis and presentation of the data, and the medium in which we intend to publish. It must be remembered that unpublished research has never been undertaken as far as anybody else is concerned. At a very early stage in discussions of the methodology and the plan for research, it is essential to consult our colleague, our friendly neighborhood statistician, who can advise on research design and strategy, and built-in methods for data processing.

What areas may we, as primary care physicians, inquire into? One is the whole wide range of clinical research. We know that research requires a laboratory but not always a bench. We have the laboratory of our practice, its population, and all the illnesses and diseases from which that population may suffer. Our clinical observations can be most important. The second area will be that of the organization of our practice, inquiries into our relationships and functioning with other members of the primary health-care team, into the physical structure and running of premises, into recording systems, and the like. The third area is the behavioral area. We are in a position to undertake sociological and psychological studies into those facets of patient illness which contain behavioral problems. Most importantly, perhaps, is the opportunity which we have for epidemiological study. After all the primary care physicians and the primary health-care team work at the grass roots, and as such, are the people best enabled to look at the natural history of disease and illness.

Who may undertake the research?

First, the research may be of a single discipline or it may be multidisciplinary. It may be conducted by individuals, by small or large groups, and sometimes may be studies by national or even international cooperative groups involving many people. Several examples will illustrate these points. A study was undertaken in a general practice on the identification, at an early stage, of alcoholics or people with drinking problems. A study was directed by another individual into the potential correlations between low back pain and depression. In the organizational area, and also as one example of a sociological study, an inquiry was made into the decision-making process in the general office. Another of a sociological nature was called "Doctors Talking to Patients." This was a study of the verbal behaviors exhibited by approximately a hundred general practitioners in over 2,500 real-life doctor-patient consultations ethically recorded on audio tape.⁴ Of epidemiological studies, major examples were in the national morbidity studies undertaken in 1955⁵ and 1971⁶ in the United Kingdom.

We have one particular advantage in the United Kingdom which I am quite certain was not considered or thought of by the founding fathers of the National Health Service. That is, the aggregation of "lists" of patients of individual general practitioners, which enable us to have a more accurate and swift identification of the incidence and prevalence of diseases than would otherwise be available. This is always conditioned by the accuracy of diagnoses. Most of the epidemiological studies have a fail-safe mechanism, whereby if an original diagnosis is made and later has to be changed, it can be quite easily done without invalidating the data.

There also exists in several countries a great expansion of teaching departments of family medicine. This is a growth industry at the moment and, because there were no blueprints for the setting-up of such departments, it is essential that we should constantly research our teachers, our students, the content of our teaching, and the methods of our teaching.

Much is being and has been written for some time now about competence to practice. Some people wish to have certification and recertification as in

the American Board of Family Practice. What perhaps is even more important is that we build into our teaching programs not only the resident's capacity but his/her motivation to conduct self-audit. We can reflect with Donabedian that our activities as primary care physicians can be regarded as being composed of task, process, and outcome.⁷ One example of task is to make a diagnosis based on the patient's history, physical signs, etc. The "process" is the method by which, having identified the problem, we proceed to treat, manage, and refer, following whatever method of support or solution to the problem we propose, knowing the "outcome" will be reflected in both short and long-term clinical care, maintenance, or other sequelae. It is essential, therefore, that the dynamic, on-going task, constantly updated, of determining clinical criteria for the wide range of conditions with which we are faced should commence and continue. There is work here for all primary care physicians and their many colleagues now and forever. It is important to remember that people are very much more likely to implement criteria in whose creation they believe they themselves played a part, than they are to accept or implement criteria which they feel are being imposed on them from without.

There is a particular need in many of our inquiries to agree that we must discover first what the "as is" situation may be, what is happening in a particular area, before we start to construct hypotheses. We may operate scientifically on the simple hypothesis that while we are aware that a great deal of activity is being conducted, we do not know what its results may be. This does not mean that we put some form of scanner over the area; it does mean that we obey the scientific principles of research protocol by focusing on certain defined areas, instead of just vaguely looking across the board.

We can see so many examples of the feedback of research into education. The work, for example, of Mackenzie⁸ into the functioning of the heart in his own patients in an industrial practice in Britain enabled him to become known as the "father of modern cardiology." William Pickles⁹ was able to work out from clinical observations the incubation period, clinical picture, and abnormalities of

diseases like Bornholm disease and infectious hepatitis.

In Britain we have undertaken two large national studies. The one, the Oral Contraceptive Study, for which 1,400 UK general practitioners have been recording, with high quality and consistency for eight years, the clinical effects of the oral contraceptive pill. So far 46,000 women years have been reported together with an aliquot number of controls.¹⁰ The other study, which started in October 1976, has recruited 2,000 UK general practitioners to participate in an "attitudes to pregnancy" study. It is in fact an examination of the psychosocial effects of abortion under our laws.

One study which we have just

started in the Department of General Practice in Manchester looks into various aspects of the menopause. This is a multidisciplinary study, bringing together the departments of obstetrics and gynecology, psychiatry, medicine, endocrinology, biochemistry, and general practice. It will go on for three years, and it is hoped that it will be a successful pilot for a subsequent large-scale, national, multidisciplinary study. Our educational studies have researched into an assessment of our postgraduate training programs, ie, residency programs, for general practice. We have compared theoretical assessments of behavior with observations of overt behavior in trainers and trainees while performing their daily

professional tasks.

Here then are some examples. There is a fundamental need and duty for us to research into all aspects of our activity. No one person or unit can do this. We need a coordinating system to avoid too much overlap. At the same time, it would be wise to examine the same question in different environments so that we do not get an environmental or study bias. I conclude with words ascribed to one of the noblest minds that ever lived, Plato: "Many things I have said of which I am not altogether confident, but that we would be wiser and braver and less frightened if we believed that we ought to inquire, that is a theme upon which I am prepared to fight."

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