Feature Article

Research, is it necessary for the GP?*

— G S Fehrsen

Summary
As General Practitioners we need to know enough about research to be able to read the medical literature with discernment. We further need to do our own research if we wish the best for our patients and discipline. We need to make up our own minds about the literature and what is optimal for our patients as we are the only people who see our kind of patients. The practice profiles and populations of other disciplines often vary greatly from ours. Research is born out of excitement about, or some challenge, or difficulty we face. It can only flourish if we go on to use our imagination in a disciplined way. There is a wide range of research strategies, from those of the controlled experiment through to that of the participant observer. Very few general practitioners lack ideas to be researched but we can all benefit from extensive help from epidemiologists and methodologists before we actually embark on a study.


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Curriculum vitae
Prof Sam Fehrsen is Head of the Department of Family Medicine at Medunsa. He is Editor of the SA Family Practice and Vice-Chairman of the SA Academy of Family Practice. He is a graduate of the University of Cape Town and worked in mission hospitals in the Transkei for ten years and the Student Health Service at the University of Pretoria before taking up his present post in 1977. He is President of the Transkei and Ciskei Research Society and has a strong interest in medical missions. Prof Fehrsen has publications to his credit on subjects ranging from healing to nutrition, tuberculosis and the requirements for training in Family Medicine.

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I say a resounding yes. I say yes, for socio-political and for clinical reasons. Some may say "yes, but not me".

Research is part of being human as well as part of being a discipline. Where there is no research there is no life. We only have to watch children to understand this. I hope those of us who are parents or grandparents occasionally stop working to observe this exciting industry. Fox1 has eloquently written how the true spirit of research is to be found in the child who explores, asks, imagines, uses his intuition and dreams.

The basis of research is asking questions and then re-asking them at ever increasing levels of skill. Not

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the questions that blame and control so much (ideological ones) but those of an excited observer and an excited learner. Sometimes even the questions of a desperate and determined struggler. My first reason for saying yes to research, then, is to demonstrate that we are still human and alive. That we are still asking questions and not just doing things. There are very few of us who actually get to doing and completing
a research project. And I mean getting it as far as being published after peer review of its quality. I am sure on the other hand that GPs are not all dead already. We have many questions.

Education and growing up however, destroy our youthful enthusiasm. Instead of going on an exploration that we must do ourselves at all costs, we now ask questions of others and books for the right answer. We no longer see the possibility of finding our own answers. We ask the questions that will please those who are supposed to answer. We apologise for our questions before we ask them. You only have to open your eyes to see ourselves at CME and other meetings virtually saying “Yes Sir! No Sir! Three bags full Sir!” It is only when we do our own research that we can demonstrate that we also are human, alive and well. Fox gives the following advice: He says we should let our ideas and questions grow before we strangle them by exposing them to others. Do not let them be dampened by the so-called realities of past experience and practicalities. Just like ourselves, our ideas are UNIQUE, and we may just be onto something. Let it grow; think and dream about it; and then test it; perhaps even gingerly, and in stages, with friends and eventually even test it with foes! Don’t read first and then formulate your question according to someone else’s mind. Please don’t hear me the wrong way round, and rush into a research project with undue haste. I am saying: Start with your own unique insight and contributions and let them grow to some maturity. Only then test them against the often discouraging outside opinion.

In this way we may be enabled to go beyond the very conservative boundaries set by medical practice and medical education of today.

There is another principle for many of us in life, which gives a reason for doing research. Each of us have an explicit or implicit belief system. I guess many of us will claim varying degrees of allegiance to the Judeo-Christian tradition. I think there is a very strong motivation in this tradition to do research. Other religious traditions of which I know less, provide differing research emphases. In the Genesis story, God instructs man to care for, and subdue the earth. I see this as a fundamental reason to be in a caring profession (as we can sometimes be) and for us, to do research. We are to extend our ability to subdue nature without destroying it. We need to find increasingly better ways of preventing and controlling disease in an ecological way. To, in fact, produce health (shalom) without creating new iatrogenic disease.

A further necessity for research I find in reading the Psalms of King David and others. There is repeated expression of wonder and surprise about the magnificent creation of God that we are and live in. I am sure you can see the link with children. The incessant interest and enthrallment with things around them. Can you picture a child in a garden puddle in the clear sun after rain? Sitting there; just look at her face, squeezing the mud through her fingers. Gurgling with joy! — Wonderment! This wonderment or surprised enjoyment of the beauty and complexity of creation produces awe in us. This can be a powerful stimulus to research. A stimulus in a sense, that makes research in some way a religious response to life, a form of worship. To explore the wonderful ways in which we function and are interconnected with the whole cosmos. This cannot be so if we allow our education to destroy this sense of wonderment, of awe.

I am sure all of us have heard the sick joke in which the clinical training years are called the “cynical years”. If research activity is a basic requirement for being human and of religious life, it is also a political necessity. I am talking about politics in the sense of how we organise our society and medical system.

Where there is no research, there is no life.

Ian McWhinney says that “general practice in its most typical and highest form has a distinct clinical method”. He also points out how difficult it has been, and still is, for family medicine to make this clinical approach understood in the medical community. He feels this is due to the difference in the assumptions and research base in the rest of the medical community. One can argue that those who do not experience this feeling of “not being properly understood”, are still captives of the deceitful wisdom of the present medical model — being handed down from one generation to the next in our medical schools. Joseph Levenstein toured the country last year as the Boz Fehler/Lennon Fellow. He showed very convincingly how this wisdom belongs properly to the last century and is bad for the practice of the generalist, the family practitioner.

To deal with this situation, we will have to do our own research based on our own assumptions. To be accepted and understood by the rest of the medical fraternity, we will have to also rigorously validate our research; in terms that can be grasped also by those who live solely by the bio-medical paradigm.
Research and the GP

At the moment too many of us allow others to make the rules for us. Too easily we condemn ourselves for not practising what we perceive to be the superior tenants of subspecialists.

One thing the Family Medicine movement has, over the last 25 years, brought us is self-respect; the confidence to do our own thing. Many still practice however, as though they are mini specialists or specialoids. We are starting to gain acceptance in the medical world. Where this is due to a re-enslavement to the traditional model, it is of no value. Where it is due to a demonstration of a convincing research base to our work, it is worth pursuing. Beyond the level of acceptance we also need research results for negotiation and bargaining power. We cannot negotiate more relevant and effective ways of training doctors or delivering health care on ideas only. We need to base our claims on the available resources of research that shows we can produce better outcomes by means of a different clinical method.

So much for the socio-political reasons for research. This brings me to the Clinical Reasons for doing research. I'll start by saying there is a great deal we can learn from the research of other medical and non-medical disciplines. There are, however, many things unique to generalist clinical practice in the community. These very things compel us to do our own research. In many instances they are neither opportunities nor problems to anyone else but us. Our medicine is characterised by such things as the smaller populations that we serve; the lower technology and cost of our practices. People see us with early disease or only discomforts, unestablished and unorganised disease. People even see us when they are well. We hope to keep our patients well rather than only cure their ills. We see our patients in the context of their own life history and their complex inclusion in the web of life around them. We claim to focus on the whole, rather than only on the parts of the person or merely on the disease.

Let me give you some kinds of questions recently asked by practising doctors on our post-graduate course. In most cases people wanted to know if better clinical outcomes could be achieved.

1. Can I achieve better results by improving the Dr/interpreter relationship? Those who are practising in situations where interpreters are constantly changed by the Matron, will appreciate a clear answer to this!
2. What takes more time: a patient-centred interview, or systematic interrogation of the patient? What is the most cost effective consulting method?
3. What is the effect on a person and a community of liberal versus sparing use of antibiotics? What are the short and long term cost and ecological consequences?
4. Is it possible to work together in a team-context with a traditional healer?
5. In an endemic bilharzia area — is it necessary to do urine microscopy for Schistosoma ova in children presenting only with haematuria?

Arguing from basic principles, one is sure in a consultant practice to miss many other causes of haematuria. This is less likely in the community. Only the GP is in a position to want to know an answer to such a question; or to answer it!

One can add many more questions. Some will be unique to our situation others overlap with the research fields of other disciplines. Even with overlap we need to do research from our own perspective and our own bias. We have our own clinical method and our own clinical reasons for doing research.

Lastly, to update and maintain our clinical knowledge, we need to know enough about research methodology to be able to interpret the medical literature. This skill at least, should be as widespread as possible in our ranks. We must be able to read and apply what we read with discrimination. It sounds ridiculous, but I still meet people from our ranks who believe almost anything in print because it is printed!

There is a good reason for us to be careful about what we read. Many of the journals that we receive, and sometimes even pay for, are published for pure, often international, business concerns. They do not make their money out of subscriptions, but from advertising. Their articles therefore have to serve two masters: the readers and the advertisers. If the readers do not know the good from the mediocre, or the bad, the business manager of the journal has only to please the advertiser.
Readership surveys show that GPs in South Africa regularly place such commercial journals at the top of the popularity list!

Other journals represent different scientific disciplines such as the SAMJ, published for Medicine as a whole in South Africa, and SAFP, published by the Academy specifically as its mouthpiece for general practice in SA. In reading such journals, one again has to be careful. Universities are subsidised on journal articles and there is therefore much pressure to publish. One has to continually ask whether the research question and the methodology will stand up to scrutiny, and whether it has any applicability to general practice.

Even if we do not wish to do research, there is a strong argument for us to know enough to become connoisseurs of the literature. Else we shall be led by the nose by both medical and non-medical people who are interested that we behave in a way that suits their purposes.

There is another reason for doing research: For the sake of the future of research itself. We have to move out of the medical school into ordinary practices to do research, that will bring us to a new future.

I have now spent 13 years back in the university environment and am becoming convinced that there are probably few institutions in society that are more conservative than a university. As an undergraduate I left with the idea (or myth!) that it is the place where research and innovation flourishes. This is so for some exceptional people. On the whole however it's a place where research and innovation resist and so change and scientific revolution or advance. But, to return to Fox, he says “... history teaches that close contact with life has been responsible for some impressive advances, far less likely to have been made by those who live in ivory towers”.

We must not allow our horizons to be narrowed by the educational and health care systems that have spawned us. Dennis Burkitt serves as a very good example of this. At a time when researchers were looking at smaller and smaller sub-cellular elements down a microscope (now, there is nothing wrong with that!), he turned the microscope around and made it into a telescope. He looked at the world from a busy real life situation in a central African practice and counted the things that were absent in various places. In this way he postulated several associations and counted the things that were absent in various places. In this way he postulated several associations between lifestyle and disease. Some of these are today established by further work; such as the connection between constipation and diverticulitis, haemorrhoids or cancer of the large bowel.

We might learn much about research from the universities, but I put it to you that every practicing GP should also be in the ideal situation for research. It is in the community where we see health and disease in their natural habitat. In contrast, the university hospital wards see almost exclusively severely ill people in isolation from their life situation. We see people in continuity and start to get a feeling for each person's life story as we follow them from health through illness back to health over time. Who better can then study health than us?

Sir James McKenzie who is acclaimed as the father of cardiology, did his main research by observing his patients in his general practice in Burnleigh. His fame led him to consultant practice in London but after some years he returned to general practice in disgust, and the reason he gave was that true research was not possible for a consultant. For certain kinds of research one has to be in contact with real life.

Jubilee Kgomo said in his Seidat Memorial lecture “The Family Practitioner is inescapably involved with all the aspects of man’s encounter with disease-generating phenomena in society”.

I want to repeat two very important things:

1. Let the lively inquisitive child be our example.
2. The basis of research is asking questions; and re-as-king them at every increasing levels of skill and sophistication. Paradoxically this often means that we have to simplify our questions. Most of us aim too high at first.

For general practitioners there is no option. We are the only experts in our work. To demonstrate our life, our right to exist and to grow, research is not an option but mandatory.

References
2. Psalm 8. The Bible.