## The future

Despite its present problems academic general practice can look forward with cautious optimism. The major support for academic general practice must come from general practice itself — from general practitioners, the local medical committees and the Royal College of General Practitioners. Members of departments of general practice must strive to work hard to earn the good-will of those bodies whose support they seek. Equally those who wish to be critical should be sure that the grounds for their criticism are informed ones.

T.S. Murray Senior Lecturer, Department of General Practice, University of Glasgow

## References

- Harris CM. General practice teaching of undergraduates in British medical schools. Report from general practice 11. London: Royal College of General Practitioners, 1969.
- Howie JGR, Hannay DR, Stevenson JSK. General practice in the medical schools of the United Kingdom 1986. The Mackenzie report. Edinburgh: University Department of General Practice, 1986.
- Horder J. Academic general practice. Br Med J 1984; 289: 1117-1118.
- Marinker M. Should general practice be represented in the University Medical School? Br Med J 1983; 286: 855-859.
- 5. Richardson IM. The value of a university department of general practice. Br Med J 1975; 4: 740-742.
  6. Howie JGR. Research in general practice: pursuit of practice pursuit of the practice.
- Howie JGR. Research in general practice: pursuit of knowledge or defense of wisdom? Br Med J 1984; 289: 1770-1772.

## The problems of audit and research

ART from the intrepid explorers of the past, Vasco Da Gama and Christopher Colombus for example, few sailors would embark on a sea voyage without consulting the charts which are available. Yet that is what many general practitioners have done, not only embarking on a career without any formal training but also attempting to deal with many conditions that never presented in the hospital environment in which they were taught. The recognition of this omission is now enshrined in the Vocational Training Act 1980. The presence of new and enquiring minds in many of our practices forces us to question our everyday activities and to ask ourselves what we are doing and why. Faced with a young and clever colleague challenging a particular course of action, our temptation is to reply that experience tells us so. But experience may be no more than making the same mistake for 20 years.

The general public and the profession are increasingly aware of the wide variation in the performance of general practitioners differences in consulting, prescribing, investigation and referral rates that are not accounted for by the demographic or social class characteristics of our practices or by the range of conditions which have been seen. The recent policy statement from the Royal College of General Practitioners concludes that 'setting standards and assessing quality of care through performance review should become part of everyday clinical practice'.2 Many doctors are now seeking to monitor, evaluate and, if appropriate, modify their clinical behaviour or practice organization; accounts of these studies are often published under the heading of 'practice audit'. Criticism has been made of the shortcomings of audit when compared with research and, while medical audit and performance review should not be allowed to develop in an uncritical way, it is important to understand the different roles of audit and research.

Logical thought is common to both audit and research and so is the need to define the purpose of the study and control the field of observation. To a large degree we are still dependent in medicine on uncontrolled clinical experience. Thus, the difference between audit and research lies not in the critical approach to our activities but in the relevance of the findings to other situations. Research provides information which has relevance and value beyond the particular circumstances of the study. In contrast, audit aims to provide precise information in a particular setting which enables rational policy decisions to be made.

When reporting any audit review, a clear statement should be made about the conclusions which can be logically drawn from the data presented, and the assumptions which are made without a firm basis of evidence. Sources of error include insufficient knowledge of the spontaneous course of the disease under scrutiny, random variation within a small number of cases, placebo effects and clinicians' bias. The doctor's memory is also biased because he cannot easily forget a case which had novelty value, whereas he can easily overlook the mundane. An audit should attempt to record honestly what occurs, and recognize the limitations of the methods employed. In this way conclusions drawn from the evidence presented will be cautious but realistic. It is often the method employed in audit exercises which is of interest to others rather than the results of the study.

Audit is limited, audit is local, audit is parochial, nevertheless it should be carefully executed and honestly reported. Research on the other hand sets out to answer a specific question with some certainty and implicit in this is that the answer may be extrapolated to other similar situations. Research is therefore more formal and rigorous, more critical of denominators and hypotheses. Research requires care in the selection and randomization of subjects and controls. Clarity of purpose. avoidance of speculation and accurate recording are all necessary in research. The language is the same, it is only the syntax that differs. In audit we make comparisons, notice the difference, worry about protocols, recording methods and the use of definitions and record the results. So do researchers, but at a different level of resolution. Failure to recognize the different scale of rigour required is to confuse the two. Audit is more like a descriptive account of a journey between two points, research sets out to map that journey.

Trainee general practitioners are encouraged to undertake projects in audit because learning to think is as essential a component of a doctor's education and training as the acquisition of facts.<sup>3</sup> The trainee or student is not seeking to discover new treatments for disease but to observe and comment on the situation as he or she finds it. Frequently the methodology is imaginative or even flawed, but the presentations and debates which follow are always valuable and help to clarify questions about general practice.

If we regard audit as the starting point for generating questions rather than supplying answers then we shall see it in its true perspective. The message is: present the data as carefully as possible, draw reasoned and tentative conclusions and enjoy the discussion that follows. From this many research projects will grow.

H.R. PATTERSON General Practitioner, Leicester

## References

- Wilkin D, Metcalfe DHH. List size and patient contact in general practice. Br Med J 1984; 289: 1501-1505.
- Royal College of General Practitioners. Quality in general practice. Policy statement 2. London: Royal College of General Practitioners, 1985.
- 3. Anonymous. Trainee projects. J R Coll Gen Pract 1985; 35: 118.