

assessment of the so called "avoidable factors" as in the Confidential Inquiry into Maternal Deaths.¹⁴ This raises two problems. Firstly, the concept of avoidability, like that of causality, is highly subjective. Secondly, no one can know whether the absence of the "avoidable" factor would have prevented the death; indeed, the Northern region working party abandoned its search for "avoidable" factors. Other studies, including those in Exeter¹² and Leicestershire,¹³ have avoided this dilemma by doing a case-control study.¹⁵

The spate of perinatal mortality surveys which took place in NHS areas and districts in the late 1970s seems now to be subsiding. In some cases local surveys acted as pilot studies for regional surveys which have now superseded them. In others, the funding ran out, or the key person moved to another job. So what is the future? In Scotland, the perinatal mortality survey begun in 1977¹⁶ has now developed so that it has been linked to the SMR2 maternity discharge data system and become part of that country's routine data collection system.¹⁷ The regions of England and Wales might profitably follow this example when they too have a maternity data system—based either on the Standard Maternity Information System or the system proposed by the Steering Group on Health Services Information.¹⁸ Basing a survey on a system containing data about all births both reduces duplication of effort and increases the potential for selecting controls for case-control studies.

Attention also needs to be given to the question of an appropriate cut off point for perinatal mortality surveys. Unlike perinatal mortality rates, late neonatal and post-neonatal mortality rates are not falling,⁴ and the principal factors behind many late neonatal and postneonatal deaths are determined at or around the time of birth (p 1511).¹⁹ Some surveys cover only the perinatal period, while others cover the late neonatal period as well, but even these miss some relevant deaths.

Calls have been made from time to time for a single national inquiry to be mounted in England and Wales as is done for maternal deaths. The consensus seems to be, however, that local and regional surveys are more flexible and allow attention to be directed to local problems. At the same time the local surveys would be more powerful if they had a common core of data.^{20,21} At present the Scottish and Northern region survey teams are pooling their experience and making recommendations about how to collect data in a comparable way. Neither of these surveys include interviews with parents, so those who do such interviews will need to consider how to improve the comparability of such data.

Whatever data are collected and systems are used to process and analyse them, we need to keep the fundamental issues in sight (L S Bakketeig, A Oakley, unpublished observations). Some of the factors which lead to perinatal and infant deaths stem from less than optimal care of mothers and babies, while others are deeply rooted in the fabric of our society, and these two strands interact in unpredictable ways.

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How hard do general practitioners work?

General practitioners vary enormously in their consulting, home visiting, and referral rates,^{1,2} but there has been little reliable explanation for such wide variations.^{1,3} Furthermore, although there have been many studies of the quantity of care, there have been few of the quality of care; this is mainly due to the difficulty of defining quality of care in general practice.³

The study by Dr David Wilkin and Professor David Metcalfe (p 1501) shows how difficult it is to measure even workload in general practice. One hundred and ninety nine doctors (38% of general practitioners in five health districts in Manchester) recorded information about face to face patient contact on three working weeks selected from three four month periods. The methods used have been fully described.⁴ The results not surprisingly show that the larger a doctor's list the more consultations he undertakes and the more time overall he spends with patients. There were considerable variations in time spent in direct patient contact, and the range of consultation times (four to 15 minutes for each patient) is similar to previous findings.^{1,5}

Wilkin and Metcalfe draw our attention to the findings that 16% of doctors spent less than 12 hours a week in direct contact with patients and that 62% of doctors with list sizes of less than 2000 spent no more than 16 hours with patients. In contrast, 35% of the sample were providing care for over 2500 patients, and 30% of these doctors spent more than 24 hours a week in face to face contact with patients.

Although the doctors studied are claimed to be representative of all general practitioners in the area, detailed characteristics of subgroups and their practices are not available. There are no specific details about general practitioners with smaller lists, and the differences in their clinical behaviour suggest that doctors with lists under 2000 are a very heterogeneous group. In addition, characteristics of their patients are unknown. We must interpret the results with caution because activity analysis was limited to 15 days

and information is lacking on the proportion of the practice population cared for by each doctor.

Wilkin and Metcalfe point out that their study was not designed to measure total workload, but we must consider the wider aspects of general practitioners' clinical activities. Working by telephone, reading and dictating letters and reports, writing repeat prescriptions, communicating with others in the practice, attending meetings, and reading circulars and journals are all part of the general practitioner's working day. Durno and Fleming have calculated that indirect care is about one third of a general practitioner's workload.^{6,7} Many doctors also teach undergraduates and postgraduates and the "hidden time" of on call responsibilities should not be discounted when attempting to discuss the effectiveness of care.

Interestingly, the Manchester doctors who spend up to three hours a week in activities outside their practice spend more time in patient contact than those without those responsibilities. While I accept the statement of Wilkin and Metcalfe that this study is not about standards of care, they do state that information on workload is important if time is assumed to be a constraining factor in achieving quality. But the breadth of clinical demands leads to conflicts in allocating time, and there is little evidence that time spent with a patient is *of itself* an index of quality.⁵

Workload must be studied but presents predicaments in "definition, measurement, interpretation, bias, prejudice, and appreciation."⁸ Statistics alone cannot tell us much about quality of care, and patient contact data cannot tell us about total workload. Those seeking to study content and quality of care are faced with the problem that operational objectives are hard to define and often lacking. The setting of standards in general practice can be achieved only if accompanied by a clearer description of goals and methods of assessing outcome.

Who should be at the forefront of research into the activities of general practitioners? Doctors obviously wish to study their own subject, and specialists in epidemiology, statistics, and sociology have also made contributions. If traditional research methods fail, however, to provide sufficient evidence on which to make decisions about improving medical care then the time might be ripe to look at techniques used by others—for instance, management consultants.

The Acheson report on inner London practices,⁸ the recent Office of Health Economics' publication *A New NHS Act for 1996?*,⁹ the anticipated independence of family practitioner committees, and the forthcoming Green Paper (13 November, p 1237) all provide a stimulus to take a good look at primary medical care. Now that the residue of disappointments experienced by general practice in the early 1960s has drained away there is no need for complacency. Cartwright and Anderson have provided evidence that between 1964 and 1977 the scope of general practice did not widen and may even have contracted.¹⁰ Investment in the training of new general practitioners and the continuing education of those in post has to be matched with a willingness to explore alternative ways of providing care in urban areas. The evidence from the Manchester study cannot be ignored, but it is insufficient to deflect the General Medical Services Committee from its aim of reducing list sizes to 1700. But we do need a commitment to encourage experiments in providing and evaluating primary care.

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The rules of the game

Some of the results of the study by Dr David Wilkin and Professor David Metcalfe (p 1501) have already been published in national media^{1,2} and a medical newspaper,³ and this provides us with an opportunity to recapitulate the rules on publication elsewhere of papers that we are about to publish. In the United States the *New England Journal of Medicine's* Ingelfinger rule, which "discourages dissemination of research reports in the medical newspapers and popular media before they are published in the *Journal*,"⁴ has led to some high minded debate over whether it helps or hinders the flow of medical information.^{4,7} We follow a similar policy, and this recent episode (described in full on p 1529) raises the issues again.

Generally, like the *New England Journal of Medicine*, we will not publish papers that are published in large part elsewhere. Even if we have gone as far as preparing the proof (at a cost of much time and money) the article will be rejected if much of its content appears, say, in *The Times* or on television. Again, like the *New England Journal of Medicine*, we do not oppose press reports based on formal presentations of the papers at conferences and meetings, nor do we mind the author clarifying points to a journalist. But publication elsewhere of the major contents of the paper (and particularly tables and figures) leads to the possibility of parallel publication, which is in nobody's interests. Following these rules, we would not have rejected Wilkin and Metcalfe's paper because only a small part of it was reported, and misreported at that.

We have two main reasons for following the Ingelfinger rule. Firstly, the *BMJ* is as keen as any other publication to be the first. It is only human to resent seeing your thunder stolen by a newspaper which takes all the exciting results, leaving the scientific publication to limp in afterwards with the full data and all the "ifs and buts."

The second and major reason hinges round these ifs and buts of science. The paper of Wilkin and Metcalfe has been through extensive modifications since it was first submitted in the summer. In the light of almost 10 pages of statistical and expert criticism of the paper Wilkin and Metcalfe modified their article considerably, and we also commissioned a leading article from Professor John Bain, in which he sets their findings in perspective, pointing out some of the problems in the methods and interpretation of the paper. Virtually 90% of the articles accepted by the *BMJ* for publication are similarly revised in the light of referees' comments, and the resulting paper then allows an informed start to what may be an important debate. By contrast, the superficial treatment elsewhere could only give rise to uninformed comment and extrapolation.