pursue and eventually publish research of inferior quality. We sent a questionnaire to all 205 trainee anaesthetists in the North Western region and received 154 replies (response rate 75%).

Only three of the respondents (all from the same hospital) did not have library facilities in their hospital. Of the 151 trainees who had access to a library, 29 were dissatisfied with the selection of anaesthetic journals and 44 with the choice of anaesthetic textbooks available. Only 91 of the trainees used libraries with a computerised system for searching the medical literature. If trainees are to be expected to carry out research it is essential that hospital libraries become better equipped.

Critical appraisal of published research is vital if the quality of research is to improve. This survey showed, however, that journal club meetings were unpopular and organised regularly by only 60 of the 154 trainees' departments. It is unfortunate that so many anaesthetic departments do not regard such meetings as an important component of education.

Attendance at meetings oriented towards research may lead to improvement in the quality of research undertaken by many trainees. Twenty one of the respondents, however, had been denied study leave by their departments. Service commitment (nine cases) and refusal of funding (four) were the two most common reasons for this. The "penny pinching" attitude that is now common in the NHS must not be allowed to reduce educational standards, and therefore standards of research.

Our survey offers some fundamental and practical reasons why the scandal of poor medical research exists. Hospital libraries should be encouraged to expand their selection of textbooks and journals and encouraged to provide computerised systems for searching the medical literature. More departments should hold journal club meetings more frequently, and funding should be made available to allow trainees to attend meetings and conferences oriented towards research.

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1 Altman DG. The scandal of poor medical research. *BMJ* 1994;308:283-4. (29 January.)

Be positive about research

EDITOR,—Douglas G Altman's solution to the scandal of poor medical research (reducing the importance of the number of publications in a curriculum vitae) seems unduly negative.¹ The research and development initiative offers opportunities for a more positive approach. In the North Western region we are investing 30% of our budget for research and development (ultimately about £1 million) in developing skills. This will have three components: three or four fellowships a year for people who want to commit themselves full time to developing skill in health services training; support and development units to promote high quality health services research and provide accessible advice and support; and a tutor post, to evaluate the fellowship scheme and compile an inventory of locally available training in research and unmet needs for such training.

We hope that these measures will not only improve the quality of local health services research but will result in those working in the region gaining insight into what high quality research entails. Statistics are of prime importance in this; so are understanding of qualitative techniques and the management of research projects. Ultimately, this may lead to a less superficial assessment of a person's capability for research than a simple count of his or her publications. In addition, this constructive and educational

approach to providing an infrastructure for research should improve its quality.

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1 Altman DG. The scandal of poor medical research. *BMJ* 1994;308:283-4. (29 January.)

Wrong results should be withdrawn

EDITOR,—Douglas G Altman discusses the scandal of poor medical research.¹ A case in point is the notorious study of 1990, sponsored by the Imperial Cancer Research Fund and Cancer Research Campaign, of patients with breast cancer attending the Bristol Cancer Help Centre.² The paper is a prime example of the problems Altman highlights: many correspondence columns, including those of the *Lancet* and *BMJ*, drew attention to them.

It was not until May 1991, however, that the Imperial Cancer Research Fund's statisticians judged that the difference between the cases and the controls was "so small that no conclusion could be made." This fact has only recently come to light, in a radio discussion (*Woman's Hour*, BBC Radio 4, 21 Jan 1994) after the Charity Commission published a report censuring the cancer charities for their inadequate supervision of the study. So a discredited and erroneous paper remains in the medical literature, cited worldwide.

Not only is bad research "unethical in itself,"³ but in this case further ethical problems arise because of the damage done to the women who took part in the survey. Medical research can proceed only with the consent of patients, and the precept "first do no harm" should apply to researchers as well as clinicians.

The sensational manner in which the original report was publicised, both in the popular press and in medical journals (the *BMJ*'s article was particularly lurid⁴), meant that the women were extremely distressed to learn from the media the researchers' conclusions that they were "twice as likely to die" as patients with cancer seeking orthodox medicine alone.

Gordon McVie of the Cancer Research Campaign has admitted: "It was bad manners that participants in the trial weren't given the results before publication."⁵ Surely it was even worse manners that these results were not immediately retracted, with equal publicity, as soon as they were found to be erroneous.

The editor of the *Lancet* has said that retraction should be reserved for cases of fraud. This will serve only to perpetuate error, as few will wish to seek to prove fraud. We suggest that, when a serious mistake is acknowledged, retraction should follow as a matter of course, as it does in other journals (*Nature*, for example).

Bristol Survey Support Group represents the women whose records were used in this study. We call on the study's authors to retract their paper, and on the scientific community to support us.

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Number of patients who had attacks of asthma while taking angiotensin converting enzyme (ACE) inhibitor or one of 26 other drugs during six months' observation, and mean monthly rate/1000 patients

	No of patients in study	No of patient months of observation	No of patients with asthma	Mean rate/1000/month
ACE inhibitor:				
Enalapril	15 361	89 153	62	0.70
Lisinopril	12 438	63 681	46	0.72
Ramipril	1 371	8 226	9	1.09
Total	29 170	161 060	117	0.73
26 Other drugs*	278 615	1 656 118	1 183	0.71

*Other drugs were: neuropsychiatric—fluvoxamine, fluoxetine, paroxetine, buspirone, flunitrazepam, zopiclone, sumatriptan; cardiovascular (excluding ACE inhibitors)—diltiazem, nicardipine, amlodipine, isradipine, doxazosin, betaxolol, xamoterol; non-steroidal anti-inflammatory drugs—etodolac, nabumetone, tenoxicam; gastrointestinal—nizatidine, famotidine, omeprazole, cisapride, misoprostol; miscellaneous—terodiline, acyclovir, fluconazole, itraconazole.

1 Altman DG. The scandal of poor medical research. *BMJ* 1994;308:283-4. (29 January.)

2 Bagenal FS, Easton DF, Harris E, Chilvers CED, McElwain TJ. Survival of patients with breast cancer attending Bristol Cancer Help Centre. *Lancet* 1990;336:606-10.

3 Vines G. How far should we go? *New Scientist* 1994;Feb 12:12-3.

4 Richards T. Death from complementary medicine. *BMJ* 1990;301:510.

5 Smith R. Charity Commission censures British cancer charities. *BMJ* 1994;308:155-6. (15 January.)

Cancer study controversy

EDITOR,—I wish to protest at Richard Smith's implication that problems with the infamous study of the Bristol Cancer Help Centre were causally related to Professor Tim McElwain's suicide.¹ I do not wish to rehearse the controversy surrounding the study, but I am unhappy that Professor McElwain's name and death are linked continually with what was a badly conceived piece of research. Tim made enormous contributions to oncology and was a firm supporter and ally to those of us engaged in psychosocial aspects of research in cancer care. I wish that those important contributions were his memorial and mentioned more often. "The doctor who committed suicide because of the Bristol study" is a scurrilous epitaph for such a fine, caring clinician.

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1 Smith R. Charity Commission censures British cancer charities. *BMJ* 1994;308:155-6. (15 January.)

Angiotensin converting enzyme inhibitors and asthma

EDITOR,—Helen Lunde and colleagues have reported a potential hazard of angiotensin converting enzyme inhibitors.¹ They concluded, from 36 spontaneous reports of asthma, bronchospasm, or dyspnoea received by the Swedish Adverse Drug Reactions Committee and 834 received by the World Health Organisation's monitoring centre, that symptoms of airway obstruction might be a rare but potentially serious reaction to this group of drugs. They calculated that there might have been one report in Sweden for every 6200 new prescriptions but accepted that such an estimate, based on anecdotal reports, is speculative.

We have compared data from prescription event monitoring studies of 29 170 patients treated with enalapril, lisinopril, or ramipril with those of 278 615 patients treated with 26 other drugs. The table shows the mean monthly rate of attacks of asthma per 1000 patients over six months of observation. We have excluded from the comparison several antihistamines and antibiotics that are commonly prescribed for patients with asthma and also nedocromil and salmeterol for similar reasons. We have also discarded reports of dyspnoea, which is common in patients with heart failure.

The mean monthly rate of attacks of asthma in the group treated with angiotensin converting enzyme inhibitors was 0.73/1000 patients (a case rate of approximately 0.4% during the six months). In the comparative group, which was observed for more than 1.6 million patient months, the corresponding rate was 0.71/1000. Clearly, these data provide no epidemiological evidence that asthma occurs much more commonly with angiotensin converting enzyme inhibitors than with other classes of drugs. It is always, however, necessary to examine individual records to assess associations between drugs and adverse events, and we therefore studied the 117 reports of asthma and related conditions in the group treated with angiotensin converting enzyme inhibitors.

With regard to the characteristic dry cough associated with angiotensin converting inhibitors, our experience suggests that (unlike most drug reactions) it may first appear at any time during the first six months of treatment. It persists throughout treatment and disappears soon after treatment is stopped. It has also been noticeably more common in female patients. If, as has been suggested, bronchoconstriction has a similar aetiology a similar pattern of asthma might be expected. This has not been the case. There was no evidence that most of the patients who reported asthma were experiencing anything more than episodes of their usual asthma. In fact, a 65 year old man was the only patient in whom asthma occurred for the first time during treatment with an angiotensin converting enzyme inhibitor; this attack occurred three months after he started enalapril. Four further patients complained that their bronchospasm seemed worse when they took angiotensin converting enzyme inhibitors or improved when these drugs were withdrawn; only one of these reactions was considered by the general practitioner to be a possible side effect. Female patients accounted for 54% of the patients with asthma (expected proportion 57%). There were no reports of results of challenge that might have supported the hypothesis.

Our results do not exclude the possibility that angiotensin converting enzyme inhibitors may cause bronchospasm but suggest that such occurrences are rare.

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1 Lunde H, Hedner T, Samuelsson O, Lötvall J, Andrén L, Lundholm L, *et al.* Dyspnoea, asthma, and bronchospasm in relation to treatment with angiotensin converting enzyme inhibitors. *BMJ* 1994;308:18-21. (1 January.)

Charges for educational visits

EDITOR,—We are surprised at P J H Venn's thinly veiled criticism of this trust and its inaccuracy.¹ At Central Middlesex trust we are acknowledged experts in managed care and the use of clinical protocols. Many people ask to visit the hospital to learn from our experience, and we are happy to share our skill. The demands on our time are considerable, and we have to manage this particular demand responsibly. We do so by running a monthly seminar, for which we make a nominal charge (£35) to cover our administrative and other expenses. It could be argued that this charge is unrealistically low.

We were asked to arrange a visit for Venn and four others from his hospital and offered them the opportunity to attend one of our seminars. They were unable to do so and asked us to arrange a special visit: in addition to a standard presentation they requested a meeting with the trust's chairman and sessions with a consultant orthopaedic surgeon and a consultant anaesthetist. The surgeon had to rearrange his clinical schedules to make himself

available to meet the group. For an entire day, including the participation of these members of staff, we suggested a fee of £300. We do not see how this can be described as a "dangerous precedent."

There are costs to the provision of information. Even learned journals are not expected to be distributed free of charge. Our proposed fee falls far short of the true cost of sharing our knowledge and does not match even the direct loss to our resources for patient care. We believe that Venn's specific criticisms of this hospital and the more general comments are unjustified.

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1 Venn PJH. Trust charged for information. *BMJ* 1994;308:63. (1 January.)

Effective health care

Cochrane database accessible in Scotland

EDITOR,—It is a pity that Sara Paterson-Brown and colleagues confined their review of the dissemination of the Cochrane database of randomised controlled trials to England,¹ for in Scotland the situation is different. All 23 consultant obstetric maternity units in Scotland had access to the Cochrane database by the end of 1993. The database is on a specially installed personal computer in the work station of each labour ward. Thus both doctors and midwives have access to it not only for personal study but to assist in clinical decision making at the point where decisions are being made. A printer has also been provided to allow output to be taken home and used in lectures or other situations. This initiative, funded by the Scottish Office Home and Health Department and supported by the Scottish executive of the Royal College of Obstetricians and Gynaecologists, is part of an audit of caesarean sections, in which we are looking prospectively at the decision making process for caesarean sections.

The Cochrane database has been well accepted by both midwives and obstetricians and is being referred to frequently. The main obstacle to its use seems to be the lack of computer skills among most doctors and midwives, with less than 15% of the 122 junior doctors working in obstetrics whom we surveyed having had any formal computer training. A lack of familiarity with some of the statistics used in the database, such as odds ratios, also creates a barrier to its ready use. We tried to overcome these barriers by providing lectures and practical demonstrations of the database for every unit as the database was installed as well as by providing a comprehensive user manual. The implication in Paterson-Brown and colleagues' paper that clinicians in obstetrics and midwifery are not interested in up to date reviews of effective care is not true.

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1 Paterson-Brown S, Wyatt JC, Fisk NM. Are clinicians interested in up to date reviews of effective care? *BMJ* 1993;307:1464. (4 December.)

Effectiveness concerns both purchasers and providers

EDITOR,—Sara Paterson-Brown and colleagues' survey showed that the existence of the Oxford Database of Perinatal Trials is not widely known.¹ If its content of up to date reviews and overviews of the evidence for effective care is to become part of

the scientific basis for clinical (perinatal) practice, as advocated in the recent advisory report *Changing Childbirth*,² then dissemination of the database requires urgent attention. This should be as much the responsibility of purchasers as of providers, and we believe that the most appropriate way of achieving this is through each district's maternity services liaison committee.

The maternity services liaison committee may be unique within the new purchaser-provider arrangement. It is the only forum in which purchasers and providers meet directly to determine and audit the quality and standard of provision of maternity services and has appreciable input from representatives of consumers and other advisory groups. In Camden and Islington the database is in active use by all groups concerned and provides essential background information when guidelines for clinical management are being considered. The maternity services liaison committee is an important forum for auditing outcomes after such guidelines have been introduced into practice, and the one in Camden and Islington is now poised to consider the relevance of the recommendations made in *Changing Childbirth* to the quality and standard of current maternity services.

The database is now easily available on a single disk, which will be updated twice a year. The annual subscription for institutions is £99, which should not be beyond the means of purchasers of maternity care.

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1 Paterson-Brown S, Wyatt JC, Fisk NM. Are clinicians interested in up to date reviews of effective care? *BMJ* 1993;307:1464.
2 Expert Maternity Group. *Changing childbirth*. London: HMSO, 1993.

Local research ethics committees

Fail community research

EDITOR,—An increasing amount of research is being conducted in primary care and the community. The evaluation of this research by local research ethics committees is widely seen as problematic. Ethics committees, which are often already overloaded, generally see little community research; much community research does not receive ethical evaluation. When work does reach the ethics committees it is often rejected as unscientific: this is particularly the case with regard to proposals for research submitted by professionals other than doctors.¹ The Department of Health recommends that ethics committees should consider the quality of the methods used.² Ethics committees based in hospitals, however, are perhaps not always best qualified to assess the quality of community research. They are largely composed of people who are skilled in evaluating randomised controlled trials but less well versed in the design of surveys and qualitative methods.

Community research poses some specific ethical problems, including post marketing surveillance of drugs by general practitioners—described by Neuberger as often "a thinly disguised marketing exercise"³—and consumer surveys performed by health authorities, which often use unsound methods and are not usually subject to ethical assessment.³ Any ethics committee monitoring community research must define what is within its remit.