tion, should wish to conceal from ethics committees all information regarding payments by the industry to a doctor taking part in a research project.

In our view such payments are unquestionably relevant to the proper consideration, from an ethical standpoint, of a research project involving drugs and should therefore be revealed to the ethics committee. We cannot accept that "financial relations between doctors and pharmaceutical companies in these circumstances are outside the remit of ethics committees."

Although we do not think that an ethics committee would wish "to discuss and rule on the exact amount that is appropriate for a particular study," it would clearly be a matter of concern for those guarding the welfare of patients if a proposed payment was grossly excessive, and at the very least further inquiries of the parties concerned would be justified. It must be wrong that the payer and recipient should be the sole arbiters of what constitutes a reasonable level of payment.

Finally, our attention has been drawn to the report of a working party on clinical trials, dated October 1974, which was set up by the Medico-Pharmaceutical Forum (comprising representatives of the royal colleges and the industry) and chaired by a prominent member of the pharmaceutical industry. Under the heading "Payments" the report states: "the level of payment is relevant and should . . . be approved by the ethics committee or equivalent." This recommendation echoes the finding of a WHO scientific group reporting six years earlier on the conduct of clinical trials.²

What has happened in the past 10 years to lead the industry to take a wholly opposite view? We earnestly hope that the ABPI and the BMA will revert to the earlier and far more socially responsible view expressed by prominent representatives of both the industry and the medical profession.

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¹ General Medical Council. *Professional conduct and discipline: fitness to practise*. London: GMC, 1983: 27.

² WHO scientific group. Principles for the clinical evaluation of drugs. *WHO Tech Rep Ser* 1968;403: para 4.5.

SIR,—As a lay member of an ethics committee I should like to take issue with Dr John G Ball and Dr Eric S Snell when they challenge the right of ethics committees to inquire about any payments made to doctors for clinical trials.

In my view it is far from "outside our remit" to review any private arrangement that could possibly cloud the doctor's prime commitment to the patient—however rare any abuse might be (section 17c of the Royal College of Physicians' working party draft report of March 1983 supports this view). Substantial payment might also influence the decision to instigate the research project in the first place. As it is quite impossible for a lay person to judge whether or not a trial should be undertaken at all (in relation to all existing research in that area), excessive rewards declared on the protocol might alert one to unjustifiable degress of self interest. Unnecessary trials would most certainly be an ethical issue.

It is also no bad thing that financial arrange-

ments between private pharmaceutical companies and employees of the public health service should be open to wider scrutiny. Those who have nothing to hide will no doubt be happy to declare any financial rewards as being entirely justifiable.

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Convaid: for anyone who is speech impaired?

SIR,—The *BMJ* (19 November, inside back cover), in common with other journals for the medical and paramedical professions and for the lay, has carried advertisements for Convaid, the speech aid developed by Professor Z M Albes of Watchme Ltd. With Convaid, it is said, "Anyone who is speech impaired can converse and be easily understood." This contention appears to derive from a belief that impairment of speech has no other cause than impairment of motor function in speech organs, and is oblivious of the whole of aphasiology.

Convaid is of potential value to the dysarthric or dysphonic patient who has intact language, perceptual, and other higher cerebral functions, relatively unimpaired vision, and full or nearly full use of at least one arm. It may have a place among other speech aids offered to patients after expert assessment of need—a service specifically for which the Department of Health and Social Security funds six Communication Aids Centres throughout the country.

It would be a great pity, and an ultimate disservice to these patients, if overenthusiastic marketing claims were to bring Convaid into disrepute. This seems likely to happen as patients, to whom it is advertised direct, buy it without the benefit of good advice. Unfortunately, Professor Albes herself seems to have difficulty understanding this.

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*.*The manufacturers reply below.—Ed,
BMJ.

SIR,—Professor Albes is currently working in the United States, but we are grateful for the opportunity to reply to Dr Steiner's letter.

We agree that our initial advertising was open to misinterpretation and apologise for the overenthusiasm of our advertising agents. We must point out, however, that so far we have advertised only in medical and paramedical journals and the response has been very positive. We have not advertised direct to patients as intimated in Dr Steiner's letter, and when we have inquiries from the general public after television coverage we have always suggested that the person inquiring consult his or her therapist or medical adviser. Even when this advice is not followed, Convaid will be supplied on a trial basis.

Dr Steiner and his colleagues state that

Convaid needs the full or nearly full use of at least one arm. Convaid's full capability is not yet understood; it is programmed to take external accessories and so far we have developed a key scanning device. Other accessories to suit people with limited movement may be able to be adapted to plug into Convaid. This is another aspect that we are currently researching.

Convaid has two related, but from the general public's viewpoint, different roles. Firstly, it was designed as an aid to the therapist and, secondly, simply as a means of communication.

We are sure that the aid centres, which will shortly all receive a number of Convaids funded by the DHSS, will be able to advise us as to the program requirements of the patients brought to them for assessment, as indeed they advise the patients on the most suitable aids. This feedback and cooperation is essential if the full potential and understanding of reprogrammable electronic aids is to be developed.

FRANK WOLFF
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Head injuries in adults

SIR,—It is now being proposed that a negative rather than a positive appearance on a skull x ray film may be the more important finding because negative appearances will help to reduce unnecessary admissions after mild head injury. Dr G J de Lacey and Dr B K Wignall (19 November, p 1546) suggest that all patients with mild head injury should undergo x ray examination (this presumably will include the 40% who do not undergo this examination at present) and that those with a skull fracture should be admitted for observation and those without should be sent home. There are major obstacles to this proposal.

Firstly, there is a widespread assumption that all skull fractures can be detected by radiography, but most radiologists know that this is not so. A carefully controlled study using skull x ray films to locate 18 previously induced occipital and temporoparietal fractures found that six radiologists (three with more than 10 years' experience) failed to detect a fracture in 41 (38%) of 108 instances where a fracture was known to be present.¹ The problem is further complicated because the casualty officers in the Royal College of Radiologists' multicentre study failed to identify 30% of skull fractures detected by the radiologist.²

Secondly, we have looked at the savings that might be achieved if a normal skull radiograph were used to "avoid" the unnecessary admission for overnight observation of a patient with mild head injury.² We found that 3328 patient radiographs were required to "avoid" 196 admissions at a cost of £254 per admission avoided (skull x ray examination £15 per patient). The cost of overnight observation is unlikely to be more than £75.

Thirdly, one quarter of adults,³ and an even higher proportion of children,⁴ who develop intracranial haematoma do not have a skull fracture. If the skull radiograph is thought to show no fracture such patients may be falsely reassured that everything is normal.

There are clearly clinical, technical, and

logistic limits to the diagnostic capability of skull radiography in the accident and emergency setting. We believe that the proposal to use findings of skull x ray examinations in preference to careful clinical assessment as the arbiter of admission for patients with mild head injury is both clinically and economically unsound.

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on behalf of Royal College of
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¹ Webber RL, Folio J. Radiographic detectability of occipital and temporo-parietal fractures induced in cadaver heads. *J Trauma* 1976;16:115-24.

² National Study by the Royal College of Radiologists. Costs and benefits of skull radiography for head injury. *Lancet* 1981;iii:791-5.

³ Mendelow AD, Teasdale G, Jennett B, Bryden J, Hessel C, Murray G. Risks of intracranial haematoma in head injured adults. *Br Med J* 1983;287:1173-6.

⁴ Harwood-Nash DC, Hendrick EB, Hudson AR. The significance of skull fractures in children. *Paediatric Radiology* 1971;101:151-6.

SIR,—Your correspondents on the subject of head injuries, as many others before them, preach what we all know to be true—that x ray examinations of the skull are, in almost every case of head injury, a waste of time. All of them, however, evaded one issue—who will take responsibility if it is not carried out? Will any of your correspondents accept the blame for the unfortunate casualty officer who does not order the x ray examination. I am sure they will not, and until someone else does, it would be a very foolish casualty doctor who did not order it.

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*.*This correspondence is now closed.—Ed,
BMJ.

Professionals' attitude to childbirth

SIR,—Dr Rosemary Macdonald (19 November, p 1544) trots out a series of familiar old canards about pregnant women that I would recommend all obstetric professionals to make a firm New Year resolution to banish from their thinking.

The first is that women who have carried a baby for nine months, often in sickness and discomfort, are quite happy to risk its life for the sake of trendy ideas and a good experience (last sighting, Michael O'Donnell (*Guardian* 19 October, p 13): "I can understand why women are attracted to natural childbirth . . . though not why some . . . are prepared to run risks with their own life and the life of their child rather than admit that human ingenuity has devised ways of averting some obstetrical catastrophes. . ."). Advocates of active childbirth have been wearily replying for years that their main aim was a better outcome for both mother and baby; and indeed obstetricians now recognise (I gather) that unnecessary inductions have caused a lot of iatrogenic problems in neonates and mothers, that electronic monitoring often makes labour more slow and painful without improving its management, and so on. Yet the mildest attempt to question the technology of birth is

still treated as callous disregard of the baby's safety.

The second canard is that women who have prepared for a natural childbirth are "guilt ridden" if they have to have recourse to analgesia. They may be disappointed, yes, but life brings its hopes and disappointments, and women are adults who can deal with such disappointment—not mental defectives who live in a world of unrealistic expectations and unreasonable guilt. This particular figment of the obstetric imagination derives from a view of the National Childbirth Trust as a group of rigid monomaniacs who can only envisage and cater for natural, problem free labour. The truth is that many women feel that the National Childbirth Trust is almost too uncritically pragmatic in preparing women for the whole range of procedures that may be used on them in hospital.

The third is that most couples who try to take an intelligent interest in childbirth are loonies; this point is conveyed in the supposedly typical anecdote of the woman who wanted to eat her placenta. In my profession (librarianship), as in all others, there is a cosy temptation to assume that the professional is right and sensible and the customer wrong and ludicrous. Good professionals resist this temptation and remain open and ready to learn, philosophically accepting the occasional unreasonable or abusive client. Labour is a strange and fascinating process, different in every woman, and health professionals should be able to learn from it as well as to contribute their own skills in a thoughtful and appropriate way. The mother's interest, and any preparation she has undertaken—however amateurish—should be regarded as helpful in building up her confidence, helping her to relax, and offering a range of possibly useful self help measures. A reaction of scorn and patronising dismissal of her contributions will send her blood pressure up, raise her anxiety level, and possibly inhibit her labour, which seems clinically undesirable as well as rude and cruel.

Dr Rosemary Macdonald's article comes to a fittingly depressing end with a plea to "defuse all the emotion surrounding the actual birth" because "much of the emotional satisfaction of having children surely stems from seeing them grow up." This is like saying "much of the satisfaction of falling in love stems from the contemplation of the long years of contented marriage ahead." Both things are good, but one is no reason to denigrate the other. I was prepared for whatever feelings might come after the birth of my first child last January, including anticlimax and disappointment. In fact the birth itself and the weeks afterwards were filled with overwhelming joy. I wonder how Rosemary Macdonald would defuse that—and why?

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Did the Mad Hatter have mercury poisoning?

SIR,—May I suggest that Dr H A Waldron is too dogmatic when he states that the Mad Hatter "certainly was not poisoned with mercury" (24-31 December, p 1961). Erethism and hatters' shakes are surely in evidence when he appears as a witness at the trial of the Knave of Hearts. He shakes so much that both his shoes fall off, and he certainly shows

excessive timidity, diffidence, loss of confidence, and anxiety, to such an extent that he bites a piece out of his cup instead of the bread and butter. He makes remarks like "I'm a poor man, your Majesty" and, when the King tells him he may stand down, "I can't go no lower, I'm on the floor as it is." He was certainly quarrelsome at the tea party, which might well be a manifestation of erethism with "explosive loss of temper when criticised."

Lewis Carroll was very interested in medicine and had a large enough medical library for these books to be specifically mentioned in his will when he left them to one of his nephews who was a medical student.¹ He was also a friend of Sir James Paget, with whom he corresponded for many years, often on medical matters.²

There does not seem to be a single model for any of the characters. Carroll's imagination was so fertile that the Hatter can at the same time be an eccentric local tradesman—Theophilus Carter, well known to all the Liddell children—a vehicle for a philosophical discussion on the implications and meaning of time, a little man at the mercy of tyrants, a description of a case of mercury poisoning, and probably a lot else as well.

I am not suggesting that Carroll knew that hatters were in danger from mercury poisoning, but he may well have seen a mad hatter. With his extraordinary ability to observe and portray the oddities of human behaviour and his interest in clinical matters I would expect him to describe with great accuracy the type of madness found in these unfortunate people, which he seems to me to have done.

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¹ Collingwood SD. *Life and letters of Lewis Carroll*. London: Thomas Nelson and Sons, 1898:128.

² Collingwood SD. *Life and letters of Lewis Carroll*. London: Thomas Nelson and Sons, 1898:708.

SIR,—I agree with Dr H A Waldron (24-31 December, p 1961) that the Mad Hatter did not have mercury poisoning, but for quite a different reason from the one Dr Waldron gave. Mercury is still used for top hats and policemen's helmets, which are made of rabbit fur. With doormen's hats today and the policeman's helmet there is no risk of poisoning because even when the hat is wet a doorman touches the brim instead of dipping his fingers inside its brim. The policeman's helmet has no brim and if he licks anything it will be his pencil; he could not get lead poisoning as pencils do not contain lead.

This is the question. Did the Mad Hatter have lead poisoning? At that time lead lotion was often applied to a sore nipple and lead shields were sometimes used over the nipples. Perhaps the Mad Hatter's symptoms are explained by lead poisoning from infancy, which can cause permanent mental impairment.

As to the Mad Hatter's watch, butter would have lubricated its works and caused it to gain rather than to lose time. However, butter dries up and the watch would then stop and he would shake it to get it going again.

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SIR,—Dr H A Waldron is confusing two separate issues (24-31 December, p 1961)