number of criteria including general fitness and performance on an exercise treadmill test. Of the eligible males, 32% underwent an exercise test, compared with only 9% of the women. Of these, 69% of men and 68% of women went on to participate in the outpatient cardiac rehabilitation programme. Because of the low uptake of women for an exercise test, however, the final figures for the percentage of patients who received outpatient cardiac rehabilitation were 35% for men and 17% for women. It would seem that failure to participate in outpatient cardiac rehabilitation arises at the time of the exercise treadmill test.

We matched women for age and next of kin. The mean age of women who underwent the exercise test was 60.6 years, compared with 72.4 years for those who did not. The mean age of those who had the test and went on to participate in the outpatient programme was 61.6 years, compared with 60.0 years for those who had a test but failed to go on to the outpatient programme. A total of 77% of women who underwent the test had a partner who was alive, compared with 37% of those who did not. In addition, 86% of women who went on to participate in the outpatient programme had a partner who was alive, compared with only 38% of women who took the test and then discontinued treatment.

Our initial findings suggest that age is a factor in determining which female patients undertake an assessment exercise test but not necessarily whether or not they go on to further rehabilitation. The support and encouragement of a partner, however, during assessment and treatment may be crucial in determining whether or not a patient continues with cardiac rehabilitation.

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Preschool screening for cryptorchidism

EDITOR,—James A Morecroft and Roger J Brereton¹ seem to have missed the point we made, which was to have early detection of undescended testes through the already existing screening programme (at birth, 6 weeks, 8 months, 18 months, and 3 years) and offer treatment of orchidopexy. What we believe is alarming is that among those operated, only 39% were below 6 years of age. There seems to be unacceptable delay in offering surgical treatment to those diagnosed as having undescended testes.

Morecroft and Brereton also misquote us by saying that 39.1% of boys underwent orchidopexy before the age of 2. Our letter refers to age below 6 and not 2.

Their suggestion of orchidectomy after puberty totally disregards the psychological effect it might have on those boys presenting after puberty. Moreover, diagnosing this condition for the first time after puberty only reflects on the quality of the screening programme and defeats the purpose of screening.

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Dispensing doctors

EDITOR,—The arguments for dispensing by general practitioners put forward by David Roberts are less than convincing, but pharmacist Gordon Geddes, and A J Morton-Jones and M A L Pringle, fail to address the fundamental issue since any comparison between doctors' and pharmacy dispensing does not compare like with like.¹⁻³

General practitioners cannot charge a fee for any service, drug, or appliance, but chemists are allowed to charge fees and sell an ever increasing number of medicines on the GSL or P list over the counter.⁴ As Morton-Jones and Pringle indicate, there would seem to be considerable differences between the prescribing habits of dispensing and prescribing doctors.⁵ This difference is illusory and can wholly be attributed to over the counter sales by chemists of the cheaper preparations, which are not available to the patients of dispensing doctors.

The prescription charge is an unfair and inefficient tax which encourages self treatment. It is quite legal for chemists to sell prescribed preparations over the counter and in doing so it deprives the taxpayer of the prescription tax that would otherwise be paid. If the patient is exempt or the preparation costs more than the prescription tax the patient is unlikely to pay for it privately. The loss of these cheaper items from a prescribing doctor's prescribing analysis and cost (PACT) data increases the average net ingredient costs of medicines actually dispensed for the NHS and allows a further increase in the prescription charge to be introduced, a self perpetuating trend. Each increase in the prescription charge results in more patients purchasing keenly priced and heavily promoted "quality" medicines rather than the inferior generic preparations now available from the NHS at £3.75 per item.

In their survey of general practitioners' views of their extended role Spencer and Edwards failed to discuss the considerable disquiet felt by many doctors over the increasingly ambiguous position occupied by pharmacists.⁶ Primarily business people motivated by profit, chemists sit apart from other members of primary health care teams, whose first allegiance is to the patient whether as employees of the health authority or of general practitioners.

If, as stated in the recent debate in the House of Lords,⁶ pharmacists do provide a wider range of service more economically than any doctor, the government should forthwith relax the regulations and allow all general practitioners to provide the same service; but I fear the dispensing regulations will remain in their present form intentionally because depriving doctors of their medicines prevents them from practising medicine. This role is reserved for the new (private) apothecaries.

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Back testing devices

EDITOR,—I agree with Malcom I V Jayson that back testing devices are by no means lie detectors and should not be taken as final arbiters.¹ I believe, however, that by focusing solely on malingering Jayson has missed an important point about the use of these devices in compensation cases. True malingering is rare, and even patients who greatly amplify their symptoms are a minority. Most

patients involved in medicolegal cases do have some impairment that deserves fair compensation, and the main problem is to quantify this handicap. Dynamometers for testing backs are useful for this.

This department has used an isoinertial device since 1988, in daily clinical practice and in more than 300 medicolegal cases. Careful observation and examination must remain an important part of the assessment as the physician's brain is still one of the most useful tools available. In low back disorders, however, a precise anatomical source of nociception cannot be recognised in most patients²; the physician will be guided by objective tests like Schöber's test or the fingers to floor distance and by his or her subjective impression, which may be influenced by the empathy between physician and patient. The back testing devices allow trunk function to be quantified more precisely, but this is possible only if the patient makes the maximum effort; thus the machines could be better described as truth detectors than lie detectors.

If patients do not make the maximum effort this does not mean that they are deliberately malingering or amplifying their symptoms. We can conclude only that, for some reasons a physiological maximal effort was not achieved, that we are not able to quantify the impairment, and that a more complete psychological assessment is needed.

Regarding the identification of maximal effort, it has been established that true maximum effort yields extremely reproducible results while deliberate submaximal efforts do not.^{3,5} In the case of trunk testing, excessive illness behaviour correlates not only with poor performance but also with a higher variance.⁶ Moreover, reproducibility is not the only criterion for assessing maximal performance; inconsistent performances suggest poor effort, for example when involuntary secondary axis torque in a given axis exceeds the voluntary performance when asked to demonstrate torque in the same axis.^{7,8} Finally, observation during the test is important, and in medicolegal cases the examination must be performed by the physician who will write the conclusions and not by a technician.

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Doctors' legal position in medical emergencies

EDITOR,—Daniel Peckham raises the possibility that doctors who use common law to treat a life threatening drug overdose against the patient's wishes might subsequently face charges of assault.¹ A booklet prepared for members of the Medical Protection Society offers clear advice on this²:

In the case of a genuine emergency the practitioner may safely proceed to do what is reasonably necessary

to save life or prevent a deterioration in the patient's health without formal consent. Medical and not legal considerations are of greater importance in life-threatening situations and the courts are most unlikely to censure a practitioner for proceeding to provide essential treatment in an emergency. . . . The guiding principle is to act in good faith and in the immediate best interests of the patient's health and safety. If there is any doubt there should be no hesitation in seeking the advice and opinion of one or more colleagues.

The legal arguments used in the recent court cases to which Peckham refers do not seem to be directly relevant to the emergency treatment of life threatening drug overdoses.^{3,4} In the current legal climate, it is suggested that the risk of treating such patients and being charged with assault is less than the risk of facing charges of medical negligence from the patient's family if treatment is withheld and the patient dies.

As a psychiatric registrar, I have been contacted on several occasions by medical staff who are uncertain of the circumstances in which common law and the Mental Health Act can be applied. The first aim must be to avoid using such powers by persuading patients to accept treatment voluntarily. If the patient continues to refuse treatment, however, common law allows the practitioner all necessary powers to detain and treat patients in life threatening medical emergencies.

The Mental Health Act is for the treatment of mental disorders⁵ and cannot be extended to the treatment of medical emergencies even if they arise as a direct consequence of a mental disorder. If a patient is mentally ill and takes a life threatening drug overdose the first priority is for the medical emergency to be treated, if necessary under common law. The need for psychiatric treatment can be assessed after medical treatment has been completed.

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Eradication of poliomyelitis

EDITOR,—Andrew J Hall's editorial points to three elements in the eradication of poliomyelitis—namely, immunisation days, mopping up operations, and high quality surveillance—and rightly recommends the availability of laboratory support.¹

For global eradication of poliomyelitis two tier laboratory support would be essential to carry out, at least in industrialised countries, investigations like the in situ polymerase chain reaction² or in situ transcription³ to identify and characterise poliovirus genomes both in clinical specimens and in postmortem material from suspected cases. The developing countries where poliomyelitis is hyper-endemic would require simplified, one or two step test procedures that did not depend on tissue cultures to measure poliovirus antibody levels and screen for polioviruses in clinical specimens. That should not be an insurmountable technological issue if rapid diagnostic techniques like liposome immunoassays were to be adapted to polioviruses. Liposome immunoassays, which use antibodies conjugated to liposomes (artificial phospholipids) containing a dye (rhodamine sulphate), are available for detecting antigens in clinical specimens. They do not require a solid phase for the antibody-conjugate to generate a signal since the signal is

generated by release of rhodamine sulphate dye during the antigen-antibody reaction.⁴

No apparent source of poliovirus infection was established in three of the cases reported by Rachel Joce and colleagues.⁵ Any possibility, albeit rare, of reactivation of poliovirus in the host nervous system after its acquisition decades earlier merits exclusion. A study of the intrathecal immune response of 36 patients with the postpolio syndrome reported oligoclonal IgM bands in 31 patients, significantly raised cerebrospinal fluid levels of IL-2 and s-IL-2R, and a correlation between intrathecal synthesis of IgM antibody synthesis and the cerebrospinal fluid IL-2 and s-IL-2R levels.⁶ Post-mortem tissue from the 41 year old man reported on by Joce and colleagues could be subjected to an in situ polymerase chain reaction with poliovirus specific primers.⁷

The acquisition of poliomyelitis by a 62 year old previously healthy man during a holiday in a beach resort in Morocco⁸ is similar to a case in a 65 year old man with type 1 poliovirus in Morocco itself.⁸ Indeed, both these cases are a grim reminder of the continuing rise in the number of tritypic antibody negative people among those aged 50 and over in industrialised countries. As polio vaccine was not available before the 1950s people now aged over 50 would not have been routinely vaccinated.⁹ A simplified test procedure to screen such people for antibodies to poliovirus would be invaluable. Regular screening of travellers to endemic areas would ensure that otherwise healthy people in this age group were adequately vaccinated against polio before departure. Furthermore, such screening would also ensure that there were not any tritypic antibody negative people and that the possibility of an outbreak of polio was minimal.

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Nurses' access to subjects for research

EDITOR,—I would like, through your column, to raise a serious concern in relation to nurses' access to patients for their inclusion in nursing research. It has often been drawn to my attention that nurses have been required by local ethics committees to seek access to patients through their medical colleagues even though the studies related directly to nursing matters. Occasionally such access has been refused even when ethical approval has been given.

This raises several questions. Firstly, it would seem that it is the patients themselves who should be offered the opportunity to decide whether or not they wish to participate in nursing research, provided that they are fully informed of the nature

of the study. It has been the custom to admit patients to hospital under the care of a named medical consultant, or to access community care through a general practitioners' register, but this does not imply that patients should be denied the right to make personal decisions about their involvement in research. Protecting them by denying them such choice does not seem to be in line with an acknowledgment of their right to choose.

Secondly, there is an important question about whether one professional group has the right to gatekeep research activities initiated by colleagues working in a complementary but different profession. While multidisciplinary work will always have a vital role to play there is also an urgent need for each profession to deepen its own understanding of practice. Without the opportunity to explore nursing matters through rigorous, well controlled research our understanding of the contribution that nurses and nursing can make to health care would be severely hampered. It is both worrying and sad that nurses could be restricted in this activity by colleagues who are not always familiar with either the areas of work which they would like to explore or the methods which they may employ.

I would be interested to hear how widespread this practice is and the rationale for such action.

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Congenital toxoplasmosis

EDITOR,—Susan Hall's review article stated that those in favour of screening for toxoplasmosis "have held the limelight."¹ This is odd as her article, a recent editorial,² and a report from a multidisciplinary working group set up by the Royal College of Obstetricians and Gynaecologists³ have all been against screening. Unfortunately, the thinking in these publications is inconclusive: there is not enough information, so we do nothing. Our approach is that if there is not enough information, this information should be obtained.⁴ We first made this suggestion in January 1990. A problem has been identified and an obvious solution is available,⁴ yet we wait.

We have reviewed published epidemiological information, including our study over 10 years in which 16 000 women were prospectively screened.⁴ We have dealt with false positive results and their reduction at least a hundredfold, and emphasised the importance of counselling.⁴ Our position is that studies such as ours cannot yield more information. An acceptable study should be dealing with 50 000 pregnancies a year, so a multicentre trial may be more appropriate than smallscale studies. The review article may have been unable to prove the case for a national screening programme, but it clearly shows the need for a government funded, pilot screening programme.⁴ Our position is therefore that there is not enough information for national screening, but a pilot programme should be instigated now.

The difference between actively seeking information as opposed to analysing available data is seen in the British Paediatric Surveillance Study.¹ Fourteen cases a year may be substantially less than the expected number but is more than twice the incidence previously calculated by Susan Hall in 1983.⁵ Her previous figure was from analysis of laboratory reports, and the current figure is also from clinicians dealing with the problem.

As professionals deliberate and multidisciplinary bodies produce reports, life goes on. Many women are now demanding to be tested, and one medical defence organisation has advised members that they may face litigation if they refuse to screen such women.⁴ Patients are now expected to be seen