government is not prepared to provide adequate funds for the training of future social workers (21 May, p 1475).

It is generally agreed that three years' basic training is necessary in place of the present one and two year courses. A little over £30m would provide for this, and the derisory offer of £1m can do no more than marginally improve the existing courses.

Social workers are increasingly expected to take serious decisions—for example, in child abuse and Mental Health Act cases—and it will be difficult for them to do so satisfactorily if they have been inadequately trained. At a time when there are moves towards providing more care in the community and relying more on social workers it is particularly regrettable that they will continue to be poorly trained.

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The Biopsy cut procedure for renal biopsies

SIR,—The Biopsy cut procedure for ultrasound guided biopsy has been used in our hospital for over 18 months, with successful biopsy specimens being taken of 265 kidneys (148 in transplant recipients) and of other abdominal viscera in 119 patients. We agree with Dr J C Mackenzie and others (16 April, p 1128) on its value and present our experience of 64 consecutive native renal biopsies in adult patients and 148 biopsies of renal transplants.

The transplant biopsy specimens were taken with an 18 gauge needle (14 gauge in 10 procedures) and those from native kidneys with a 14 gauge needle (18 gauge in 16 procedures) by a radiologist (HI) or one of three other doctors, who were assisted with the ultrasound imaging by a radiographer.¹ All of the transplant biopsies resulted in adequate tissue for a histological diagnosis with no complications other than macroscopic haematuria for less than 24 hours in one patient. Fifty nine of the native kidney biopsies performed by non-radiologists were successful at the first attempt, with an average of 12 glomeruli being obtained from an average of 2.7 passes for each patient. The procedure had to be abandoned in one patient who became agitated, and in the remaining four failures biopsy specimens were obtained by the radiologist.

There were complications in four patients. Macroscopic haematuria occurred in three and palpable perirenal haematoma in one. None required transfusion. The four failures occurred during the first 20 procedures attempted by each operator. In one the failure was because the kidney was small and in another because of the need for biopsy in a lateral position. At least six patients would not have been considered for conventional closed biopsy, three because of small kidney size, one because of bilateral lower pole cysts, and two because of the presence of a single functioning kidney.

Two situations which sometimes cause difficulty have become apparent. In obese patients it may be difficult to identify the needle tip as it approaches the kidney surface, but displacement of the kidney can usually be observed. Recoil of the needle may occur if the capsule is fibrotic, but this can be avoided by exerting additional pressure when the gun is triggered.

The number of glomeruli obtained from each procedure was disappointing, but all needle passes have been included in the figures and full cores were not always obtained. Nevertheless, we think that this technique has advantages over conven-

tional biopsy techniques. It is safer because of the accurate placement of the needle in the lower pole of the kidney under vision. It is more likely to be successful when the kidney is small or mobile or the capsule thickened, and it is quicker. The disadvantage of expense can be minimised by reuse (once) of the needles, which has been our practice for the past 18 months without problem. After initial instruction from a radiologist and with subsequent support from an experienced radiographer a non-radiologist will become confident and consistent with the use of the Biopsy device under ultrasound guidance after five to 10 procedures. This would be unlikely with conventional techniques.

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1 Ubhi CS, Irving HC, Guillou PJ, *et al*. A new technique for a renal allograft biopsy. *Br J Radiol* 1987;60:599-600.

After the horror

SIR,—Professor Beverley Raphael and Dr Warwick Middleton (23 April, p 1142) are uncertain why some people are more vulnerable to severe trauma than others. As they mention, the degree of exposure to the threat of trauma is probably most important—it accounted for 60% of the variance in vulnerability to post-traumatic stress disorder after a night club fire.¹ The degree of exposure, however, contains a number of different variables: in Vietnam veterans the intensity of exposure to atrocities² and length of exposure to combat were important, and other variables not specific to the trauma, such as isolation, boredom, poor diet, physical discomfort, and exhaustion, may all influence the development of post-traumatic stress disorder.

In some studies personal factors preceding the trauma have proved to be more important than the severity of the trauma itself. In a group of Australian fire fighters no association was found between the intensity of exposure or perception of threat and the development of post-traumatic stress disorder, but personality factors of introversion and neuroticism were predisposing factors.³ Other predisposing factors include a family or personal history of psychiatric disorder and a history of a disturbed childhood environment.^{4,6}

The importance of the social context in determining the development and natural course of post-traumatic stress disorder is often underrated. Environmental conditions may interact with personal coping strategies for dealing with the traumatic event. After a cyclone group cohesiveness and feelings of community tended to delay the manifestation of post-traumatic stress disorder, but realisation of losses, family needs, and continued habitation in damaged homes acted as reminders and reinforcers.⁷ Social influences may also modify the symptom pattern. Different patterns of symptoms have been observed in Israeli combat veterans and American Vietnam veterans, and Bleich *et al* speculated that these might be related to the more supportive public attitude to the military and its casualties in Israel.⁸

What is still uncertain is whether post-traumatic stress disorder is an independent psychiatric disorder or a mélange of anxiety state, depressive illness, and phobic disorder. Further examination of its aetiology, particularly taking into account the interaction of social and personal factors, may clarify this. The identification of general vulnerability to post-traumatic stress disorder

might also help in targeting scarce therapeutic resources after massive trauma.

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Nurses' pay

SIR,—While I share Dr Tony Delamothe's enthusiasm in congratulating the nurses' pay review body (14 May, p 1344) I question his assertion that the problems of implementation have been exaggerated. Implementation will be far from simple and is the key issue concerning the success or otherwise of the recommendations.

The Department of Health and Social Security has yet to publish complete guidelines about the criteria for regrading. The media suggested that nurses would be regraded according to their personal experience, postbasic qualifications, and clinical responsibilities, and an initial study of the recommendations supports this view. Unfortunately it is not so straightforward.

Nurse managers are already indicating that there is insufficient funding to finance this approach, and most staff will be regraded at the lowest scale for their grade irrespective of their experience and postbasic qualifications. Only a limited number of nurses in certain units who have considerable clinical or management responsibilities in addition to experience and postbasic qualifications are expected to be on a higher grade.

The profession is to be kept waiting until October. A lengthy appeals procedure will probably follow, which, in the present economic climate, will have little chance of success. It is vital that the recommendations are implemented with sensitivity, participation, and negotiation by nurse managers and doctors. Otherwise, they may cause more harm to an already demoralised profession.

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Treatment for mild hyperparathyroidism

SIR,—We agree with Dr John C Stevenson and Mr John A Lynn (9 April, p 1016), who recommend parathyroidectomy for all patients with asymptomatic primary hyperparathyroidism, especially if an experienced surgeon performs the exploration. This is particularly important because parathyroidectomy can eventually reduce the increased risk of death from cardiovascular disease.¹ Among the reasons for parathyroidectomy is an increased risk of bone loss, which may have devastating

effects, particularly in older women. In this respect, however, two points have to be considered.

A recent investigation in a limited number of patients seems to support the view of the authors,² but another study in 171 patients shows that the prevalence of vertebral deformities on radiographs is no greater than that found in a sample of age matched normal subjects.³ In that study no increased trabecular bone loss was detected in iliac bone biopsy specimens. In patients with mild primary hyperparathyroidism bone mineral content did not decline with time in accordance with the hypothesis that this may be a disease of set point abnormality.⁴

On the basis of these conflicting results we suggest that, until controlled prospective clinical studies are performed, bone loss should not be considered as the criterion of choice to advise immediate surgery in patients with mild asymptomatic primary hyperparathyroidism.

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Deaths from injury

SIR,—Mr I D Anderson and others (7 May, p 1305) advise consideration of the place of trauma centres in the management of severe injury.

The deficiencies in trauma care in Britain arise from lack of organisation of trauma services. Certain concepts will undoubtedly change in time, but a sound organisation must be based on three immutable principles—total care of the patient by the same team, continuity of care by that team, and participation of the experienced trauma surgeon at an early stage.

Deaths after injury occur primarily because of missed diagnosis, failure to control haemorrhage or hypoxia, and inadequate, delayed, or non-existent surgical intervention. The development of trauma centres seems ideal provided that the following errors are not repeated.

Doctors and administrators of every teaching and district general hospital must be aware that not all can or should have a specialised trauma unit. Such designation should not be made, as was done in the past, by simply changing the name of any department. A multidisciplinary medical committee approach causes only fragmentation in the management and is inefficient and costly. People will continue to die unnecessarily as long as all hospitals are allowed to admit trauma patients. Many are not treating major injuries adequately. Trauma is a surgical specialty and demands the constant sensitive judgment of a surgeon and an anaesthetist who oversee the continuing care of the patient. Care of the trauma victim in many hospitals in the United Kingdom, however, is delegated to doctors who have no, or very little,

experience. There is no career structure in the surgery of trauma, and the care of severely injured patients is entrusted to many disciplines without any formal training or skill.

We believe in the concept of trauma centres but we must start training surgeons in the surgery of trauma as a distinct specialty; otherwise the establishment of trauma centres is doomed to failure.

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BMA council election results

SIR,—I have often argued—unsuccessfully—that the electoral system should be improved. But before we take seriously the concern of the Central Committee for Hospital Medical Services at the new council's imbalance (14 May, p 1418) turn back to the actual results (7 May, p 1342).

In 13 regions in England 12 general practitioners were returned to council for 1988-90, but no fewer than seven of these were returned unopposed. Surely the senior hospital doctors should do something about that lamentable fact in 1990? General practitioners predominate numerically, but in those regions where a consultant did stand he made a respectable showing. The percentage of members voting was so low that a little energetic "whipping" could go far to remedy such reverses. The one certain way not to win a contest is to fail to enter, and no amendment of the system can change that.

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Funding and patient care in Scotland

SIR,—I feel I must challenge Sir George Godber's original premise and the supporting statement made by Scrutator (21 May, p 1477) that much more of the tax payers' money is being spent on Scotland's health than is the case south of the border.

In a carefully researched paper Glen and Hulbert showed that the traditional method of making comparisons, by applying the Resource Allocation Working Party formula to the health budget of England, Scotland, Wales, and Northern Ireland, is flawed.¹ They argued that conclusions based on this oversimple calculation are untenable.

One of the main factors, apart from Scotland's significantly higher standardised mortality ratio, is the geography of the country. The density of population is five times lower than in England, yet a health service still has to be provided in all regions and in the larger islands. Another important factor is that in England a substantially higher proportion of patients in the mental handicap and geriatric sectors are in the care of local authorities and private institutions.

We would not deny that we are slightly better funded. Nevertheless, the recent survey on health service provision initiated by the BMA's Scottish council has shown significant problems in some areas and any comparative reduction in our health budget can only have a serious effect on facilities and standards of patient care in Scotland.

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1 Glen ACA, Hulbert JKM. Hospital and community health costs: England and Scotland compared. *Br Med J* 1987;295:707-10.

Euthanasia

SIR,—In the report of the recent council meeting (14 May, p 1408) I am quoted as saying during the euthanasia debate, "On occasions there would be no alternative but to take life." This is inaccurate. I was arguing against an amendment to a crucial paragraph in the conclusion of the working party's report. I quoted from the report saying, "In this paragraph the proposition that some might argue is that in certain hypothetical cases 'there appears to be no alternative but to take life'" and continued, "But this paragraph then proceeds quite rightly to refute this argument."

I can see no circumstances where a doctor is justified in actually killing a patient. We can and must relieve suffering in our patients, but this does not give us the right actually to kill them. I repeat my statement given in the debate that I consider the report to be a magnificent statement of ethics, a monument to the skill and compassion of the working party, and a report which reflects nothing but credit on the profession as a whole and the BMA in particular.

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SIR,—Dr Roger Higgs (14 May, p 1348) discusses the report of the BMA working party on voluntary euthanasia. The original working party included at least one doctor who represented the sizable minority of doctors and sizable majority of patients who favour legalisation. The BMA would have had no difficulty in finding a replacement with similar views when other commitments made it impossible for me to continue to sit on the working party.

Had I remained, I could not have put my signature to the muddled and evasive report that has emerged. A dissenting view would have emphasised that the profession is far from united on this issue. Is the BMA so different from its Dutch counterpart that it can neither acknowledge nor accommodate this divergence?

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**The Secretary writes: "Dr Miller was invited to be a member of the working party at the beginning of 1987 and accepted. Notice of the first meeting, on 15 April, was sent out in March, and we did not receive any indication that he would not attend. Only later, after extensive chasing of his secretary, did we discover that he would not be available until the end of the year."

"By then three meetings had taken place, and it was impossible to find a replacement for Dr Miller. The membership of the working party was established by council, whose next meeting was not until October. We did, however, take written and oral evidence from the Voluntary Euthanasia Society and other groups, including the Royal Dutch Medical Association. It is also important to note that the working party was studying 'euthanasia,' not 'voluntary euthanasia'—there is a difference."—ED, *BMJ*.

Drug points

Toxic epidermal necrolysis and trimethoprim

Messrs G DAS, M J BAILEY, and J E A WICKHAM (Institute of Urology, London WC2H 8JE) write: We support Dr C Nwokolo and others (2 April, p 970) in incriminating trimethoprim as a cause of toxic epidermal necrolysis. In August 1986 a woman was admitted to the London Stone Clinic for endoscopic