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Letters to the Editor

Steps are required to improve pre-hospital care

Deakin and Hicks[1] suggest that efforts are required to improve the pre-hospital care of trauma victims, with which I would agree. I do, however, question some of the statistics.

The number of fatalities as a result of road traffic accidents (RTAs) in England and Wales was 4229 in 1992, and fell below four thousand in 1993. The erroneous figure of 14 500 quoted by the authors was an estimate of the total number of annual trauma deaths published in a 1988 document.[2] This same document included a retrospective analysis of 1000 trauma deaths in 11 districts across England and Wales, where 486 (49%) died at the scene or were pronounced 'dead on arrival' at hospital (the range was 23–74% across the districts). The figure that the authors quote of '60%' (actually 58%) of RTA victims dying at scene comes from a smaller study of 434 trauma deaths,[3] and the difference probably reflects poor local pre-hospital care in the more limited area studied (South West Thames). The effect that improving hospital treatment has on survival is therefore conservatively estimated by the authors at 15%, as it is calculated with data from the nationwide survey using the '60%' mortality rate from the local survey.

The second issue is, 'Who should we be educating?' Hussain and Redmond[4] have found that 39% of pre-hospital trauma deaths are preventable, although many of these occur within minutes of the incident. Further extended ambulance service training is unlikely to help this group. The initial responsibility for the management of trauma victims rests with the bystander, and the need for training the public in basic trauma life support skills, whether in an urban or a rural environment, has been recognized in the United Kingdom and in Australia[2,5] (Australia shares a similar epidemiology of trauma to the United Kingdom, with the majority of trauma fatalities following RTAs). Such training should encompass scene safety and control, early mobilization of appropriate emergency services, casualty assessment and casualty treatment. Recommended target groups for training include all vehicle licencees, and children in secondary school.[5] Similar training in video format is currently available for the emergency services[6] (as it may not be the ambulance service who respond first, the police and fire service also require basic trauma life support skills), and these principles are now being adapted for the general public in Australia.

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Pre-hospital ABCs: getting the right message across!

Deakin and Hicks[1] provide a biased and, we would respectfully suggest, inaccurate review of the complexities and usefulness of pre-hospital circulatory support in trauma patients. We would like to make three points.

Firstly, the article contains a number of inaccuracies which may be misleading. Pons *et al.*[2] did not 'fail to show any advantage of pre-hospital fluid administration in multiple trauma'. Instead, and to the contrary, they showed that IV access could be achieved within 90 s and that' these data support the judicious application of fluid resuscitation in pre-hospital trauma care'. Kaweski *et al.*[3] did not find that 'any advantage of early fluid replacement was outweighed by the resultant on-scene delay from initiating an infusion'. Neither does the paper

support the statement that 'Many trauma centres in the US subsequently changed their policies to one of scoop and run'. The main finding of the paper was that mortality rate following trauma was not influenced by the pre-hospital administration of intravenous fluid. To suggest that pre-hospital activity is the only variable influencing outcome is simplistic and assumes that all patients have received the 'gold standard' in-hospital definitive care, an assumption that is unfortunately far from the truth.[4] Jacobs *et al*.[5] produced one of the rare papers that used a change in Trauma Score to identify the benefits of ALS procedures specific to the pre-hospital setting.

Most of the studies quoted had penetrating trauma as a significant component in their aetiology, a group in which there is a good body of evidence to support a calculated 'scoop and run' policy. It becomes more difficult in blunt trauma, predominant in the UK, to apply such principles or to identify the benefits of individual ALS skills. At present, appropriate use of pre-hospital skills in conjunction with expeditious transfer to hospital comes with experience gained by the pre-hospital care personnel. It should not be forgotten that these personnel must be able to perform procedures regularly in order to maintain the necessary skill levels.

The complexities of advising pre-hospital care personnel on the appropriateness of applying individual skills requires a close working relationship and understanding supported by regular feedback allied to good medical control. Being critical without being constructive risks undermining such relationships. Control and audit mechanisms for such personnel in the UK are still being developed but there should be little doubt that it is the responsibility of specialists in accident and emergency medicine to foster and support such processes.

We would suggest that **audit** and **analysis** of the use of pre-hospital ALS skills allied with **building bridges** with the emergency services leading to better **communication** and **continuing** education for pre-hospital personnel will help, not only in clarifying the appropriate use of these skills, but also hopefully lead to better outcomes.

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Reduction of inappropriate attendances

I would be grateful if, through the *Journal of Accident and Emergency Medicine*, I could make a plea which may help to reduce some of the inappropriate attendances at accident and emergency (A&E) departments. This letter is written on a Sunday morning and I have just seen a child with a superficial burn to the arm. The burn was sustained 1 day previously and had been quite adequately assessed and treated at another hospital. The child had been referred and was told to come to hospital as soon as they got to Edinburgh for further treatment.

This visit is completely unnecessary. It is not our policy to review burns patients within a week unless something drastic has happened to change the situation. It would have been much simpler if the parents had been told to contact our department or their general practitioner (GP) who would be able to recommend follow-up on their return to Edinburgh.

This is not a single occurrence. We regularly see patients who have been told to attend when they return home to Edinburgh. As people often return from holiday in the evening or at weekends they naturally assume that they have to come to the A&E department as soon as they return. I would like to think that patients could be asked to contact the department or their GP by telephone so that appropriate arrangements for follow-up can be made.

There is little we can do in the A&E department at the weekend for fractures, wounds dressings or burns that could not be done over the telephone. Appointments can be made for the out-patient clinics if appropriate. Patients can then be seen by senior members of staff at a time when the staff and facilities are available for them and they can be dealt with in a much more appropriate manner.