diseases and their treatment and are given the opportunity to learn and practise alongside doctors and nurses. But pharmacy education is not yet geared to meet such demands. Pharmacists of the future will need their undergraduate courses revised and lengthened, and they will want graduate training programmes and provisions for continuing education and career structures for pharmacists in clinical services.

Like medicine and nursing, pharmacy is in transition. Both pharmacists and doctors need to remember that whatever problems there are in dispensing and prescribing in the NHS have not been created by any one group and are not going to be solved by any one group. Without the help of doctors the expanded role of pharmacists will not develop, nor will it develop if doctors feel threatened rather than recognising that future pharmacists could complement their services to their patients. In the future, pharmacists, doctors, and nurses should be less concerned with the protection of professional boundaries and territories and more concerned with patient care.

[1] Interim report of the Working Party on the Future of General Practice Pharmacy, *Pharmaceutical Journal*, 1978, **221**, 11.
[2] Evidence from the Pharmaceutical Society of Great Britain to the Royal Commission on the National Health Service, *Pharmaceutical Journal*, 1977, **218**, 72.
[3] Brodie, D C, Knoben, J E, and Wertheimer, A I, *American Journal of Pharmaceutical Education*, 1973, **37**, 591.
[4] Parish, P A, *Pharmaceutical Journal*, 1976, **217**, 241.
[5] Department of Health and Social Security, *Report of the Working Party on the Hospital Pharmaceutical Services* (chairman Noel Hall). London, HMSO, 1970.

Basics

Anyone struck down by sudden, serious illness or injury needs medical care in four phases—on the spot, during transport to hospital, in the hospital itself, and finally during rehabilitation. Experience in hospital accident and emergency centres and intensive care units has shown that immediate mortality and morbidity can be reduced if the right measures are taken in the right order before the patient reaches hospital. This immediate care includes resuscitation but extends beyond preserving life to preventing complications and relieving pain.

The concept is not totally new: it may be traced back to its embryo form in the Napoleonic wars. Obstetric flying squads have now had decades of experience of bringing skilled emergency treatment to the patient, and in more recent years teams have attended victims of road accidents. Pantridge and Geddes[1] have shown the value of schemes for mobile coronary care. Units of that kind, however, have been aimed at selected and relatively small groups of patients. Such an approach is less than ideal on economic grounds. The skills of immediate care may be applied to a wide variety of patients, whether they have had a serious postpartum haemorrhage, a myocardial infarction, or a major injury, or have taken an overdose of tablets. What is needed is a team trained to provide such care irrespective of the emergency.

The organisation of immediate care schemes is dictated by geographical factors. In rural areas primary attendance by a hospital-based service is impracticable owing to distance and time factors. In reality the local general practitioner is likely to be the first expert on the scene. In urban areas, however, where distances are less, the ambulance service can respond quickly, and the central location of the district general hospital provides a logical base for a mobile resuscitation unit.

Both types of service are now established in Britain after the pioneering work of Easton's original road accident after-care scheme.[2] Some 1200 general practitioners now belong to over 60 rural and semirural immediate-care schemes. Some schemes have the services of only one or two doctors working together with the local ambulance and emergency services. Others include well over 100 doctors covering large sectors of the country. These schemes are voluntary organisations set up in each community, with their money for equipment usually provided by local fund-raising activities and charity donations. Most are equipped with radio communication, usually linked to the local emergency services network. Typically, transport is by the doctor's own car and he carries full resuscitation and life-support equipment. Some of these schemes have concentrated on trauma incidents, but many are now attending to any patient who is in need of immediate care irrespective of the cause. Cover is less widespread in the urban areas, though hospital-based schemes are now increasing. Most are based on the ambulance service working in conjunction with the district general hospital medical and nursing staff.

The British Association of Immediate Care Schemes was established in 1977 under the chairmanship of Dr Kenneth Easton to co-ordinate and support all types of mobile resuscitation units. Advice is available from committees on fund raising, public relations, radiocommunications, disaster-planning insurance, research and data collection, emergency equipment, training, and scientific meetings. Included with the doctors on these committees are members of the emergency services and advisers from government departments and other interested organisations. Financial support for the association comes from membership subscriptions, donations, and a support grant from the DHSS.

The ambulance service is still, however, the backbone of immediate care in Britain. Ambulances attend virtually every single incident, whether a doctor is present or not. Experience in Britain and elsewhere has clearly shown that selected ambulancemen can be trained to a high level of skill in resuscitative techniques (an achievement not shared by every doctor).[3–6] Given a period of in-hospital training, paramedics can provide comprehensive care including techniques such as endotracheal intubation, intravenous cannulation and transfusion, the recognition of electrocardiographic abnormalities, and electrical defibrillation.[7] Interest in this topic is increasing in Britain and standards of emergency care from the ambulance service seem likely to rise progressively as the higher training schemes proliferate.

In 1978 the Association of Emergency Medical Technicians was formed for advanced-trained ambulancemen as a parallel body to the British Association of Immediate Care Schemes. The two groups have identical aims and have become affiliated to one another, so co-ordinating the major groups in the country providing advanced immediate care on site and during transport.[8]

[1] Pantridge, J F, and Geddes, J S, *Lancet*, 1967, **2**, 271.
[2] Easton, K, *Community Health*, 1970, **2**, 81.
[3] Nagel, E L, *et al*, *Journal of the American Medical Association*, 1970, **214**, 332.
[4] Gearty, G F, *et al*, *British Medical Journal*, 1971, **3**, 33.
[5] Chamberlain, D A, *et al*, *British Heart Journal*, 1973, **35**, 550.
[6] Baskett, P J F, Diamond, A W, and Cochrane, D F, *British Journal of Anaesthesia*, 1976, **48**, 377.
[7] Zorab, J S M, and Baskett, P J F, *Immediate Care*. London, W B Saunders, 1977.
[8] Further information about the two associations is available from the British Association of Immediate Care Schemes, c/o Royal College of General Practitioners, 14 Princes Gate, London SW7 1PU, and the Association of Emergency Medical Technicians, 19 Queens Road, Keynsham, Avon.