EDITORIAL

This issue of the journal contains abstracts from a unique and very important event: the first international meeting of specialists in emergency medicine. We must learn from each other's experiences, but adapt this knowledge to our local needs. I am very pleased to see papers from four continents in this issue, in particular a paper from the developing world. I have recently spent a short time working in India, and Dr Nundy's comments remind us in the West that the diseases of poverty and deprivation are still the biggest scourge of mankind. In keeping with the feeling of internationalism, I have given my editorial slot to India and Australia. Dr Nundy has recorded his personal views of Indian medicine in relation to the advances being made by Western medicine. The Editorial by Drs Phillips and Baggoley is the first article from Australasia to be published in this Journal. It gives a detailed and informed overview of the subject of pain relief in the emergency department and, in particular, details the scientific foundation all clinical work must be based on.

A. D. REDMOND
Editor

GUEST EDITORIAL

Indian medicine

I was asked recently to address a non-medical audience in Calcutta on the recent important advances in medicine and their implications for India. I wrote to the editors of the three major medical journals: the *British Medical Journal*, the *Lancet* and the *New England Journal of Medicine*, and to the Vice Chancellor of Cambridge University who had taught me medicine. I asked them their views and all gave a list surprisingly similar. Advances in medicine it seems can be grouped under three main headings: prevention, diagnosis and treatment.

When one thinks about prevention, probably the most important story of the century has been the prevention of smallpox. Within 12 years, working as an international community, the world—except for a small area in Somalia—has got rid of a terrible scourge. The World Health Organization has rightly deserved and taken for itself a lot of credit for this. However, smallpox is a disease which is fairly unique in that there is no animal vector. It is very easy for lay persons to diagnose and easy to prevent. Furthermore, in Western countries smallpox had been eliminated long before the World Health Organization was even thought of. The West is now interested in getting rid of all infections. The United States and Scandinavia have widespread immunization against measles, have almost eliminated polio and German measles, and are on their way

to eradicating most other infectious diseases. A good example of the systematic way in which the West has approached the eradication of infection is the concerted attack on serum hepatitis. Twenty years ago an American scientist named Blumberg discovered that children in a particular hospital who had leukaemia also carried a certain protein very similar to that obtained from the blood of an Australian Aborigine: the Australia antigen. He first thought he could use this protein to detect leukaemia in its early stages. When Blumberg and his crew published their results other people found the antigen was not only present in children with leukaemia but also in many other people all of whom had had blood transfusions. The Australia antigen was linked to hepatitis. The causal viruses have now been isolated and a vaccine produced which may well eliminate the disease in developed countries. These are great advances, but no more than that for which two Cambridge scientists recently received the Nobel prize for medicine. Kohler and Mislstein found that you can manufacture antibodies to order and you may soon be able to immunize people against any particular disease. In Delhi we have an epidemic of meningitis; using this monoclonal antibody technique we would be able to immunize all the children at risk.

We then come to the advances which have made diagnosis more simple. The first and second are, I suppose, the CAT scanner and ultrasound. Ultrasound is fairly cheap, but a CAT scan costs about 2000 rupees a time. Advances are rapid: 10 years ago when I was in Boston at the Massachusetts General Hospital the CAT scan had just been installed and they were using the ultrasound machine only for obstetrics. Now there are seven CAT scanners in Delhi and more than 100 ultrasound machines. We have made great advances in our diagnostic capabilities within the 10 years from Boston (supposedly the Mecca of medicine) to Delhi (which is not that far from Mecca). In a few years there will be a new technique which will make the CAT scanner obsolete: nuclear magnetic resonance.

Then we come to the advances in treatment. My correspondents did not choose heart transplants or the like. Instead, they saw the most important advance as the fact that 20 years ago two scientists found that if you add sugar to a solution of salt, then the sugar causes the salt to pass into a rabbit's intestine and be absorbed. The *Lancet* declared soon afterwards that this was the medical discovery of the century. It has been found in good, controlled trials that oral rehydration therapy is as good as intravenous therapy whether it is used in the US, India or the Philippines. Four out of five children who have diarrhoea—and infantile diarrhoea is the biggest killer of children under 5 in the world—can be saved by oral rehydration therapy. This is convenient, it can be done in villages and it is very cheap. Other discoveries and treatment are really very unimportant in comparison.

Where have all these advances taken us? Someone estimated that the amount of money spent on medical care in the US now, compared with 1960, is ten times greater. The life expectancy has only been increased by 2–3 years. What has happened is that the West has eradicated infectious diseases (which have not been very important anyway) and substituted the diseases of affluence: coronary artery disease, cancer, degenerative disease, marital breakup, loneliness and suicide. We must be aware that if we eradicate one group of diseases it is probable that we will get another group, especially if we completely change our social values and follow the Western system blindly.

In India we seem to be—on paper—on a very good wicket. We have 106 medical

colleges, producing 11 000 graduates every year. There are primary health centres, district hospitals and apex institutions: doctors and medicines everywhere. Why is it then that India usually comes just above Bangladesh and the Ruanda Burundi in health statistics, and why is it that infant mortality is so high? It is estimated that one in four village children die before the age of 5; 2% of the population have leprosy and tuberculosis. Why is this? It is because we are blindly following a Western model. We have very clever health planners who come up with a new scheme every 3 or 4 years. However, nothing seems to do any good. Infant mortality rate has only improved minutely from 140:1000 in 1947 to 120:1000 now. If health care is to be improved in India the models that we have to follow are not Western but those of China and Cuba. These countries have attained near western health statistics at a fraction of the cost that Westerners spend on health.

What, therefore, is to be done in a democracy? For what it is worth, I think there are two things we can start with: decentralization and accountability. It is stupid for a villager from Rajasthan to come to the All India Institute of Medical Sciences for a simple operation. When he arrives he wanders around. People shout at him. He has to wait in the out-patient department. He has to bribe a person to get into the hospital and it is simply awful for him. It has been estimated that the vast majority of illnesses, i.e. 80–90%, could be dealt with at a peripheral level by a non-doctor with only 6 months training. We in the medical profession know, of course, that it is very easy to diagnose and treat most illnesses. At this first level of care there need only be a health worker trained to the minimum level. At the next step we could have district physicians who would be able to do simple obstetrics, surgery and medicine and then refer the patient onto a specialist. We should also train our students very differently. I think the selection of students is very bad: we only select those who get high marks in their exams when we should choose our students much more for their motivation. We should not copy Western countries, but do research into our own problems and spend a little more money on health. We must make doctors accountable for their actions. The standards of both medicine and medical ethics are fairly low and I am afraid that they are deteriorating. What we must do is to make doctors accountable because we know that the age of clinical freedom is dead, that no-one believes only a doctor can decide and no one particular doctor can decide what is right for the patient at one particular time. I think that accountability works in Britain where there is a very strong General Medical Council and it is carried beyond reasonable limits in the US when every year at least one in ten doctors is the subject of litigation. I am sure we do not want to go this far, but we want our medical profession to have higher standards. It must be controlled from outside, not by the Government, but perhaps by the Courts, certainly not by the profession itself.

Indian health care is not good and we should try and improve it. We must all be a little more dynamic and ensure its clear and reasonable development.

S. NUNDY

Department of Gastro-enterological Surgery,
All India Institute of Medical Sciences,
New Delhi 110029,
India