death was identified by a medical panel using case notes and information from an interview with surviving relatives. Maternal mortality accounted for 23% of deaths, second only to the 28% caused by diseases of circulation. Of 385 maternal deaths, 241 were directly due to obstetric causes (haemorrhage, sepsis, toxaemia, and associated with caesarean section), 102 were indirectly obstetric, and 21 a result of abortion. The report concluded that many of the deaths could have been avoided if women had made use of the available facilities and relied less on traditional midwives.

The survey from Hong Kong strikes a more optimistic note. The maternal mortality rate fell from 0.45 per 1000 in 1961 to 0.05 per 1000 in 1985. Over the same period the birth rate fell and the number of legal abortions rose. The proportion of births to women over the age of 35 years fell from 16% to 9%. Other factors thought to have had an effect are the high population density of Hong Kong, ensuring easy access to services, and the rapidly rising gross domestic product in the study period.

Overall, high parity and increasing maternal age are seen as being the strongest predictors of maternal mortality. Next are the need for an improvement in the status of women and, more specifically, better and more widespread education. Educated women bear fewer children than the less educated: in the Egyptian study 76% of the maternal deaths were of illiterate women, and only 7% had had a secondary education. Modernization is the answer to this problem, and this can only proceed with universal education and a resolution of the debt crisis.

(D.J.)

Sources: Harrison KA. Maternal mortality in developing countries. *Br J Obstet Gynaecol* 1989; **96**: 1-3; Duthie SJ, Ghosh A, Ma HK. Maternal mortality in Hong Kong 1961–1985. *Br J Obstet Gynaecol* 1989; **96**: 4-8; El Kady AE, Saleh S, Gadalla S, *et al.* Obstetric deaths in Menoufia Governorate, Egypt. *Br J Obstet Gynaecol* 1989; **96**: 9-14.

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FILL THIS SPACE

Contributions to the Digest pages are welcome from all readers. These should be from recent papers in research journals which general practitioners might not normally read. Send to: The Editor, Journal of the Royal College of General Practitioners, 8 Queen Street, Edinburgh EH2 1JE. Please quote the full reference to the article (authors, title, journal, year, volume, page range).

INFECTIOUS DISEASES UPDATE

Staphylococcal endocarditis in intravenous drug users

While infection with the human immunodeficiency and hepatitis B viruses receives much important publicity, there are other infections to which intravenous drug users are particularly vulnerable. Special problems are caused by organisms being introduced from skin surfaces into the body though the act of injecting itself. Abscesses are frequently encountered as are thromboses of the veins which may be septic and especially serious when this involves deep veins such as the femoral. Infection can spread to distant parts of the body. A particularly common presentation of deep-seated infection is staphylococcal broncho-pneumonia secondary to tricuspid endocarditis. This can be of acute onset and complications include cardiac and renal failure. Because the infection is of the right side of the heart, septic emboli are lodged initially in the lungs and common features of bacterial endocarditis such as splinter haemorrhages and septic peripheral emboli are usually absent. The diagnosis is made by blood culture and echocardiography which confirms tricuspid valve vegetations. Response to treatment is often better than with other forms of bacterial endocarditis but recurrences are likely unless intravenous injecting is discontinued.

Rotavirus infections

At the time of writing we are at the height of this year's epidemic of rotaviral enteritis which presents most commonly with diarrhoea in young children. An associated coryzal illness is possibly the principal means of spread. It is unknown why such large epidemics of rotavirus infection occur every spring and summer with only sporadic cases at other times of the year. Apart from dehydration, one of the common reasons for hospital admission is continuing diarrhoea often owing to cows' milk sensitivity or disaccharidase deficiency precipitated by the effects of the infection on the gut mucosa. This is probably much more common than generally recognized but with the availability of soya-based cows-milk-free substitutes the management has been simplified. Once the causes of persistent diarrhoea, such as giardiasis, have been excluded a trial of one of these substitute milks is often worthwhile. Cows milk preparations can be cautiously re-introduced after six weeks or so. The life-threatening complication of hypernatraemia is nowadays infrequently seen since infant milk preparations and proprietary electrolyte solutions for rehydration have their salt content carefully regulated.

Travel to Turkey

Turkey has recently become a common destination for package tourists. Although malaria is present in Turkey it is predominantly of the benign vivax type and restricted largely to the eastern end of the country. Most authorities agree that for the usual tourist destinations along the north, west or south coasts, malaria prophylaxis is inappropriate and that the side effects of the drugs outweigh the risks of disease. However, because a very small risk exists, travellers should be advised to seek urgent attention if fever occurs while abroad or during the month after return. Many package tours include bed and breakfast but other meals are taken at local restaurants. Hygiene is therefore unpredictable and there is a risk of faecal/oral infections. Poliomyelitis immunization is important and typhoid generally advised (see DHSS leaflet SA40). Last year a number of tourists contracted hepatitis A. The need for protection against this infection is greater for the longer term tourist and those unwilling or unable to be scrupulous about taking only clean water or drinks, well-cooked food, avoiding salads and so on. Immunoglobulin should be especially considered for non-immune travellers, who already have intestinal or other disabilities and for those who are pregnant.

Meningococcal vaccination

Merieux UK Ltd have recently made available through ordinary prescription their single dose vaccine against meningococcal (types A and C) infection. This is not normally used in Britain but is advised for travellers to epidemic regions such as the central belt of Africa. In these circumstances, the vaccine is chargeable (cost less than £10) and should be issued on a private prescription.

Suggestions for topics to include in future updates are welcomed and should be passed to the contributor, Dr E. Walker, Communicable Diseases (Scotland) Unit, Ruchill Hospital, Glasgow G20 9NB (041-946-7120), from whom further information about the current topics can be obtained.