



Synopsis

Readers will have noticed that we introduced a feature some time ago that provides a synopsis of a pick of some of the world's medical literature. In this issue Fred Sanders selected three articles (p. 100).

The first deals with the common problem of **depression**. Although the US Preventive Services endorsed screening for depression, a specific screening tool was not recommended. Many of the screening questionnaires for depression are too cumbersome and time-consuming for general use. The authors evaluated two questions as a screening tool in general practice, namely: 'During the past month have you often been bothered by feeling down, depressed or hopeless?' and, 'During the past month have you often been bothered by little interest or pleasure in doing things?' They concluded that the screening tool was a good compromise between the time required to administer the screen and the likelihood of a positive diagnosis.

The second deals with the question of **whether breast-feeding affects blood pressure in later life**. The systematic review sought to determine whether breast-feeding in infancy compared with bottle-feeding formula milk is associated with lower mean blood pressure at different ages. The authors conclude that the results of larger studies suggest that feeding in infancy has at most a modest effect on blood pressure, which is of limited clinical or public health importance. They emphasise however that blood pressure is not the only relevant outcome of breast-feeding and that benefits include improved neural and psychological development, potential protection against obesity and allergic disease and lower cholesterol in later life.

Thirdly, **virtual colonoscopy is compared with optical colonoscopy**. To perform virtual colonoscopy a small rectal catheter is inserted and a pneumocolon created immediately before a computed tomography scan (CT). The authors concluded that CT virtual colonoscopy is an accurate method for the detection of colorectal neoplasia in asymptomatic average-risk adults and compares favourably with optical colonoscopy in terms of the detection of clinically relevant lesions. Virtual colonoscopy is a rapidly evolving minimally invasive technique and could provide an attractive alternative to optical colonoscopy.

Paediatric health care and the risks of HIV transmission

Mothers who are HIV-positive can transmit the infection to their children and it is assumed that this vertical infection affects about 35% of children in this way (20% at birth and 15% from breast-feeding). Gisselquist, Potterat and Brody report on the risks and evidence for HIV transmission during paediatric health care in sub-Saharan Africa (p. 109). They note that the overwhelming majority of HIV-infected African children are never tested for HIV. Most infected children die with symptoms such as failure to thrive, malnutrition, and respiratory infection that are common to all children, so that parents and health care workers may suspect but do not know

if a child is infected. In several studies the proportion of children with HIV infection was higher than HIV prevalence among children from vertical infection.

Infected children characteristically have HIV viral loads 10 - 100 times higher than those found in adults. HIV and high viral loads are associated with efficient HIV transmission. Injections of antibiotics to treat respiratory illness and childhood fevers are common in Africa, as is administration of intravenous saline for rehydration of patients with diarrhoea. Intravenous catheters also deliver drugs to many children for suspected malaria. The WHO have estimated that as many as 50% of medical injections in Africa are administered with equipment re-used without sterilisation and that 25% of blood transfused regionally during 2001 was not screened for HIV.

In addition to iatrogenic exposures, several other explanations have been supposed and/or demonstrated to account for non-vertical paediatric infections, including transmission by an infected wet nurse, accidental switching of babies at birth, sexual abuse and precocious sexual activity. Iatrogenic transmission would seem to be the best explanation for most cases.

These findings call for new initiatives to strengthen infection control in formal and informal health care settings and to test transfused blood. Because health care workers in paediatric wards are at risk from needlestick accidents in settings with high HIV prevalence and high viral load among patients, training and providing equipment for consistent implementation of universal precautions, are reasonable steps to protect health care workers.

Does this transmission occur in good quality health care settings in SA? — watch this space.

HIV in workforces

Several major industries in South Africa have recognised that HIV/AIDS, which affects many of their workers, has potentially serious implications for their productivity. Companies such as Anglo American and Mercedes Benz have instituted well-publicised programmes to deal with this problem, including the provision of antiretroviral treatment long before the government announced its plans to provide such treatment to infected members of the population. How serious is the problem in workforces in southern Africa? Evian *et al.* present data on HIV prevalence in 34 private sector workplaces in South Africa, Botswana, and Zambia (p. 125). This study is important, as it provides new information on an important economic sector that has not previously been studied as extensively.

Across all countries, sectors, job levels and age groups, HIV prevalence averaged nearly 17%. Contract (non-permanent) employees have the highest infection rates in most companies surveyed. Firms in the mining and metal processing sectors averaged nearly 1 in 5 employees infected with HIV. High prevalence rates among the 40 - 49-year age group may reflect the effect of male infection rates 'catching up' to females as men get older. Further evidence that urgent action is needed!

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