From the journals

Some key health related indicators of Sri Lanka

A few health related indicators given in the Annual Health Bulletin, 1998, are reproduced below for the information of readers.

The mid-year population of Sri Lanka for 1998 as estimated by the Registrar General is 18.8 million and the growth rate 1.2%. Over half this population is concentrated in the Western, Central and Southern provinces which together make up about 22.8% of the land area. The population living in urban areas is increasing. One of the most clearly visible features in Sri Lanka's age composition is the increase of people of older age groups. The proportion of the population age 30 to 59 has increased from 29.0% in 1981 to 35.3% in 1994. The elderly population (60 and over) has increased from 6.7% in 1981 to 8.4% in 1994. The provisional Crude Birth Rate for 1998 was 17.3 per 1000 population and the provisional Crude Death Rate is 5.9 per 1000 population. The Maternal Mortality Rate for 1998 based on hospital statistics is 3.6 per 10000 hospital live births. The Infant Mortality Rate in 1998 was 17.3 per 1000 live births. The life expectancy at birth was 69.5 years for males and 74.2 years for females in 1991. *Annual Health Bulletin, Ministry of Health, Sri Lanka* 1998; 1-8.

Load of anticholinergic side effects in the elderly

Anticholinergic drugs (eg. antiemetics, antivertigo drugs, antiparkinson, antispasmodics, bronchodilators, mydriatics etc) and drugs with anticholinergic side-effects (eg. antidysrrhythmics, antidiarrhoeals, antihistamines, antidepressants, antiulcer drugs, muscle relaxants, antipsychotics etc) are commonly used in the elderly. These drugs cause several problems which can be serious in the elderly. Dry mouth causes speech difficulties, dental decay and trouble with dentures. Chewing and swallowing may be painful, and the patient can refuse solid food. Some get pain in the mouth. Ocular effects will impair vision, increase the risk of accidents and falls, and worsen glaucoma. Those with constipation could get paralytic ileus and faecal impaction. Drug-induced tachycardia is known to worsen angina. Those with urinary hesitancy or prostatism could go into retention. Anticholinergics are the commonest drug group causing delirium.

Physicians often attribute these symptoms in the elderly to ageing or age-related illnesses rather than to the drugs. Even when it is appreciated that these effects are drug-induced, they are regarded as inevitable, simply because they are so common. Remedial measures include selection of drugs which do not have these side-effects or to select only those with minimal anticholinergic effects from the beginning of therapy. Combining drugs with anticholinergic effects should be avoided. Informing and discussing these side-effects with the patients and carers is known to reduce distress and anxiety. *Journal of the Royal Society of Medicine* 2000; **93**: 457-62.

Prevention of paracetamol poisoning

Paracetamol poisoning is the commonest cause of deliberate self harm in the UK. This high incidence was thought to be due to its free availability rather than ignorance of the complications of overdosage. In September 1998 legislation was introduced which limited the amount of paracetamol available at a single purchase without a prescription to 100 tablets. Also, the tablet packaging was changed to blister packs. These steps have produced a significant reduction in frequency of referrals for liver transplantation following severe paracetamol poisoning. *Lancet* 2000; **355**: 2009, 2047-8. A few months ago several paediatric cases of suspected paracetamol poisoning were seen in Sri Lanka. These cases were thought to be due to use of multiple brands of paracetamol in the same patient or use of higher doses than those recommended for children. A concomitant virus infection may also have had a role. This problem was addressed by education of practitioners, patients, parents and the public. These cases illustrate the point that there is no drug that can be considered as absolutely safe. Even for drugs where we have experience of over 100 years, problems may occur. Practitioners should not give paracetamol for fever for more than three successive days and should not exceed recommended doses. The dose should be based on weight, and not guesses based on age. Always be vigilant to detect possible hepatotoxicity.

Tuberculosis in travellers

The risks of getting tuberculosis (TB) for long-term travellers to endemic areas, even if not engaged in health care work, are substantial. In a recent survey among Dutch people who spent a median of 23 weeks in countries highly endemic for TB, the reported incidence rate of acquiring TB was 7.9/1000 person-months of travel for health care workers and 2.8/1000 person-months for others. The investigators recommend considering BCG vaccination or post-travel tuberculin skin testing of high-risk travellers. The increasing prevalence of drug resistant TB remains a concern in treating latent infection detected by skin testing. *Lancet* 2000; **356**: 442, 461-5.

Variation in couple fecundity and time to pregnancy

Infertility was traditionally defined as failure to conceive during a 12-month period of regular unprotected intercourse. Demographic studies have shown that the distribution of monthly fertility of couples trying to conceive is heterogeneous and follows a beta distribution. Each couple has a constant monthly probability of conceiving which varies widely from 0 to 60%. True infertility occurs only in 3 to 5% couples. If monthly fertility is high the average time to pregnancy is short and vice versa. How long couples have been unsuccessful in conceiving is an essential estimate of the degree of subfertility. If the unproductive period is short (eg. 12 months) the probability of success is still considerable. Half of such couples are likely to conceive during the following year. The traditional definition of infertility is thus an oversimplification, and it probably results in premature resort to assisted reproductive techniques, with their associated risks. *Lancet* 2000; **355**: 1961, 1928-9.

Corporal punishment of children

Research over the past 40 years has consistently shown that corporal punishment of children increases the chances of aggression, delinquency and later criminal behaviour in adult life. In a Canadian survey of approximately 5000 adults it was found that about a third has been slapped or spanked "sometimes", and 5.5% "often" in their childhood. They also found that those who had been punished are one and a half times more likely to have anxiety disorders, twice more likely to abuse or be dependant on alcohol or drugs, or to exhibit antisocial behaviour, compared to "never been slapped or spanked" counterparts. Nine European countries have banned smacking and four more are moving towards a ban. In Sweden where the ban started 78% adults now support it. In UK the law allows legal defence of "reasonable chastisement" of children. Being a signatory of the European Convention for Protection of Human Rights, the government is now considering its legal position before new enactments. However a recent consultation document issued by the Department of Health outlines the government's position, viz. "It would be quite unacceptable to outlaw all physical punishment of a child by its parent. Nor, we believe, would the majority of parents support such a measure". We will have to see how Government reconciles the above position with the requirements of the European Convention. *Lancet* 2000; **356**: 1.

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Drug efficacy

How is it, that guidelines for treatment often seem unrelated to the patient sitting in front of the doctor? Guidelines are mostly based on evidence gathered from randomised controlled trials. These trials are very good at assessing efficacy – that is, can a tretment work? Despite this, trials are not without substantial biases. Many people may be screened before a few are chosen to be included in a study, yet the results of the study will be applied to the very people who were excluded. The population studied in trials tends to be young, male, white, suffering from a single condition and using a single treatment. Most patients, at least in general practice, do not fit this description. They often have multiple illnesses, take multiple medications and are either too young or too old to have been included in trials. Perhaps we should accept a proposal to define efficacy in relation to medications as 'the extent to which a drug has the ability to bring about its intended effect under ideal circumstances, such as in a randomised clinical trial.'

Marley J. Efficacy, effectiveness, efficiency. *Australian Prescriber* 2000: **23**:114-5 (Editorial).