

Price of fatigue

The long periods over which people concerned with health care and medical emergencies are expected to work without adequate sleep have long been a worry and a scandal. One problem seems to be that working for long hours without a break has become traditional among doctors and nurses, and any attempt to improve the situation is frowned upon as an unprofessional idea, labelling the complainant as weak and letting down professional standards. Yet there are real hazards in the habit.

A reappraisal of sleep loss and fatigue in medical residency training has been published in *The Journal of the American Medical Association* for 4 September. It reports that, even in healthy young adults, loss of proper sleep results in impairment of nervous function. And another article, published in *The New England Journal of Medicine* for 17 October, comments that harmful habits such as working excessive hours without a proper break for relaxation endanger the safety of patients. It points out that, in the United States at least, the levels of continuous duty and work for health care professionals much exceed those allowed in the transport and nuclear power industries, and the situation is serious. Working for 100 to 120 hours a week is not uncommon, and a duty period lasting 24 to 36 hours or longer is often expected. Some 40 per cent of medical trainees admit to having made clinical errors attributable to fatigue.



Serious sleep deprivation has been shown to produce an effect equivalent to that of alcohol intoxication when it comes to capacity to manage a motor vehicle. Fatigue-related depression and even anger have been found to cause detachment and loss of compassion when facing a patient.

The real solution is a regular period of uninterrupted sleep, but even an occasional brief snooze is better than nothing. Resort to potent stimulants such as amphetamines is not regarded as permissible as a means of combating fatigue, since such drugs carry distinct risks, especially if their use is repeated. Caffeine, usually in the form of tea or coffee, is commonly employed, but then

there is the problem that caffeine will impair ability to fall asleep if the opportunity should arise too early. Resort to such solutions poses occupational health risks and is no reasonable substitute for sound working practices and adequate sleep.

Another aspect to consider is that patients should be persuaded to adjust their expectations of clinical treatment when a rigid adherence to a prearranged schedule would demand the services of a surgeon who through no fault of his own has been obliged to undertake a heavy session of work without having had enough sleep.

The healthy life

In "World Health Report 2002: Reducing risks to health, promoting healthy life", the director general of the World Health Organization, Gro Harlem Brundtland, asserts in her usual forthright style that the world is living dangerously, "either because it has too little choice or because it is making the wrong choices". She contrasts the burden of malnutrition, unsafe water, lack of hygiene and exposure to smoke from fuels suffered by developing countries with the overconsumption in developed ones and the risks of hypertension, high blood cholesterol, tobacco and alcohol abuse, and obesity that go with it.

What is particularly alarming is that risk factors for health in wealthy countries are

becoming prevalent in developing ones and adding to their already heavy burden, thanks to the advertising activity of international corporate business concerns.

Some 30 per cent of the total burden of disease in developing countries where mortality is high can be attributed to the five factors of underweight, unsafe sex, deficiency of micronutrients, unsafe water supplies and indoor smoke exposure. One sixth of the disease burden in China, Central America

and South America can be put down to alcohol and tobacco abuse, hypertension, obesity and malnutrition. In the industrialised areas of North America, Europe and the Asian Pacific, one third must be attributed to tobacco, alcohol, hypertension, hypercholesterolaemia and obesity. Tobacco alone kills some 2.4 million people annually in these countries.

Simple measures such as restricting salt and cholesterol consumption can reduce cardiovascular disease. Antihypertensives, statins and simple aspirin may be expected to reduce the incidence of stroke and ischaemic heart disease. As regards tobacco abuse, more taxation, bans on advertising and

dissemination of warning information are affordable and cost-effective in most circumstances. "Governments are the stewards of health resources and the careful and responsible management of population well-being is the very essence of good government." One wonders whether governments, in their arrogance, will heed the warnings and the exhortations.

Drugs and aboriginals

In any sector of society in the United States one can meet the problems of drug abuse and violence in the home. Yet there is, it seems, a disproportionately high incidence of these among Native American Indian and native Alaskan communities, according to a commentary published in the *Journal of the American Medical Association* for 16 October. These problems have persisted in spite of numerous attempts to intervene in these communities, whether in reservations or in cities. The reasons for failure may include loss of cultural identity, prejudice and poverty.

A lack of cultural awareness on the part of physicians and other concerned health care practitioners may prevent them uncovering situations in which patients abuse alcohol and other drugs or are subjected to physical abuse in the home. Moreover, the lack of insight into the patient's particular cultural background, even if the care practitioner is aware of a social problem, may lead to interventions that are ineffective because the patient cannot incorporate them into daily practice. Things are further complicated by the fact that there are many patterns of abuse and violence and also many different types of approach attempted by the organisations concerned.

To address the problem, a special national resource centre for substance abuse services is to be set up to disseminate evidence-based information on prevention and treatment methods, in accordance with culturally appropriate practices. At present, illicit drug use concerns some 9.9 per cent of Alaskans and Native Americans compared with 7.2 per cent of white Americans. Cigarette smoking among person aged 12 or older is 23.9 per cent of Blacks, 26.1 per cent of Whites and 38 per cent of Native Americans.

The effects of domestic violence can take the forms of depression, chronic pain or drug addiction, and medical providers are being trained to question women in particular about such symptoms. Little is known at the moment about how people react to domestic violence in terms of culturally determined criteria, and more understanding is required before methods of treatment and prevention based upon a patient's cultural background can be devised so as to be acceptable.