

injected temazepam tablets. Since temazepam is such a popular drug of misuse, I fear that injection of tablets will become more commonplace as liquid and gel filled capsules become harder to obtain. Injecting tablets is likely to be much more dangerous than injecting the liquid from capsules; injecting gel filled capsules is known to be dangerous.<sup>2</sup> Probably the only way to prevent misuse of temazepam is not to prescribe it in any formulation.

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## Unite against violence

EDITOR,—We welcome the fact that a Working Group on Violence Against Doctors has been established.<sup>1</sup> Violence is directed against medical staff in all areas of clinical medicine, and any attempt to raise awareness of the issue and to improve training is to be applauded.

Violence against doctors is, however, only one aspect of a daily burden of verbal abuse and physical assault faced by all health care staff.<sup>2,3</sup> Many other organisations in the public sector experience similar problems, including lack of recognition of the extent of violence, underfunding of training, and little acceptance of the role of management in addressing the problem.<sup>4</sup>

The Multisectoral Interest Group in Violence and Aggression Management Training has functioned in Scotland for the past year. It brings together trainers and researchers from the social services, health care, education, and the prison service and allows them to exchange experience, ideas, and training strategies. While not replacing bodies such as the Working Group on Violence Against Doctors, it allows workers from all disciplines to collaborate.

Many attempts have been made to improve security in the health service. Despite this, many of the problems described by the Confederation of Health Service Employees in 1977—lack of training, inadequate guidelines, understaffing, and lack of liaison between different disciplines—are still evident in the NHS today.<sup>5</sup> Lasting change will require sustained and coordinated efforts from many different organisations in the public sector. Doctors should not be hesitant about working with other disciplines and agencies.

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- 1 Schneiden V, Maguire J, Bath A. Learning to cope with violence in the workplace. *BMJ* 1993;307:65. (3 July.)
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- 5 Confederation of Health Service Employees. *The management of violent or potentially violent patients*. London: COHSE, 1977.

## Inappropriate use of photograph

EDITOR,—Clare Dyer's report accurately reflects my present predicament and that of my colleague.<sup>1</sup> I am disappointed, however, to find that it is accompanied by a photograph of only my colleague, with comments made by the parents only about him. This gives the wrong impression that the two of us may be treated differently.

The BMA, which represents both of us, is fully

aware that both of us have been equally badly treated by the region and have been affected similarly. The sympathy and the response we have received from the parents and colleagues have also been similar.

The *BMJ* was therefore insensitive to use the photograph of only one of us, with an inappropriate caption beneath it. This was unfair and unbalanced.

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- 1 Dyer C. Doctors go to high courts to save jobs. *BMJ* 1993;307:86. (10 July.)

## Employment practices in NHS trusts

EDITOR,—John Appleby reports the survey by Industrial Relations Services of the employment practices of 33 first and second wave NHS trusts.<sup>1</sup> Unfortunately, he does not give a reference to the survey: I am sure that the full results will be of wide interest to readers, especially those working in trusts that intend to develop single pay spines for all (medical and non-medical) staff. The results of the survey are contained in the journal *IRS Employment Trends* (No 537), which is available from IRS subscriptions department (tel 071 354 5858).

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- 1 Appleby J. NHS trusts slow to use freedoms in employment contracts. *BMJ* 1993;306:1635. (19 June.)

## Fluoridation of drinking water

### It's safe and it reduces dental decay

EDITOR,—Although Liz Vaughan calls for a "review of the latest medical papers" on fluoridation, she has concluded in advance that fluoridation of water is "a serious medical problem" with "enough medical evidence to justify the cessation of fluoridation."<sup>1</sup> In so doing, she ignores the opposite conclusions of the numerous authoritative and searching reviews conducted before and since fluoridation was started nearly 50 years ago. For example, the Committee on Carcinogenicity of Chemicals in Food, Consumer Products, and the Environment, which consists of independent experts and which advises the Department of Health, reviewed the data on osteosarcoma in 1990 and concluded that "there was no evidence for carcinogenic risk to humans from exposure to fluoride" (unpublished report). In 1991, a workshop convened by the United States National Institutes of Health considered the studies on hip fractures and advised that "there is no basis for altering current public health policy."<sup>2</sup> Another extensive review<sup>3</sup> incorporated evaluations of fluoridation and bone (including hip fracture), cancer (including osteosarcoma), and the immune system: it recommended in 1991 that "the US Public Health Service should continue to support optimal fluoridation of drinking water."<sup>4</sup> The revised World Health Organisation guidelines for drinking water quality, to be published later this year, will endorse the previous guideline value of 1.5 mg fluoride per litre,<sup>4</sup> a concentration higher than the optimal concentration used in fluoridation of water to reduce dental caries.

The process of research and evaluation continues. Another extensive review, this time by the United States National Academy of Sciences, is nearing completion. Of course it is right that the safety of the fluoride which is in everyone's diet,

and the consequences of fluoridation of water supplies, should be kept under open minded scrutiny. At the same time, it is important to recognise the essential message from the experience to date: the one sure health effect of fluoridation of drinking water is a marked reduction in dental decay.

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- 3 Ad Hoc Subcommittee on Fluoride of the Committee to Coordinate Environmental Health and Related Programs. *Review of fluoride benefits and risks*. Washington, DC: Public Health Service, Department of Health and Human Services, 1991.
- 4 World Health Organisation. *Guidelines for drinking-water quality*. Vol 1. *Recommendations*. Geneva: World Health Organisation, 1984.

## No evidence of increased risk of cancer

EDITOR,—Recent radio and television programmes about the fluoridation of public water supplies have featured an American, Dr John Yiamouyiannis, who claims that fluoridation increases the risk of cancer generally and that there is new evidence that it specifically causes osteosarcoma in young males.

The article in which Dr Yiamouyiannis sets out his views misrepresents work reported by others.<sup>1</sup> In fact, extensive analyses carried out by the National Cancer Institute in the United States have shown no evidence of any general increase that could be attributed to fluoridation,<sup>2</sup> and detailed analyses relating specifically to osteosarcomas have led to the same conclusion.<sup>3</sup> Data on temporal trends in the risk of bone and joint cancer have shown no increase associated with fluoridation in Canada, Europe, Australia, or New Zealand.<sup>4</sup> Geographical comparisons between fluoridated and unfluoridated areas have shown no difference in the incidence of osteosarcoma or bone cancer in males aged under 30 in New York,<sup>5</sup> a higher rate in males aged 10-19 in the fluoridated areas of New Jersey, and a lower rate in males under 20 in the fluoridated areas in the west midlands of England (G Lawrence, personal communication).

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- 1 Yiamouyiannis JA. Fluoridation and cancer. *Fluoride* 1993;26: 83-96.
- 2 Hoover RN, Devesa S, Cantor K, Lubin JH, Fraumeni JF Jr. Fluoridation of drinking water and subsequent cancer incidence and mortality. In: *Review of fluoride: benefits and risks*. Washington, DC: US Department of Health and Human Services, Public Health Service, 1991: appendix E.
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## Health in the developing world

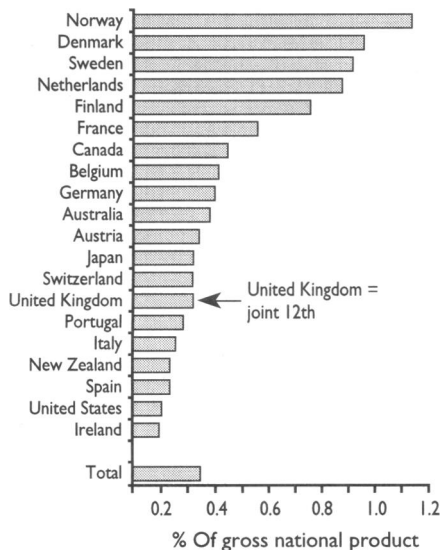
### G7 summit fails Africa

EDITOR,—At their summit meeting in Tokyo last month the leaders of the group of seven leading

industrial nations failed to make any appreciable progress towards relieving the South's crippling debt burden, which now exceeds £1000bn. For the poorest countries of the world this failure is a cause for real despair.<sup>1</sup> The lethal interaction between deepening poverty and environmental degradation is set to continue, especially in Africa. Political will to find a solution is lacking as the British government offered little resistance to Japanese objections. The summit ended weakly with an affirmation of the 1989 Trinidad Terms, which have been so diluted that they have contributed little to the tiny amount of debt cancellation in 17 countries.

Plummeting commodity prices and rising interest rates mean that sub-Saharan Africa now owes more than it earns. Over the past decade debt has almost quadrupled from 28% to 109% of gross national product, bleeding the continent of \$10bn in annual interest repayments alone—four times as much as it spends on its health service. With infrastructure collapsing and the average living standards (already the lowest in the world) falling, the leaders at the summit made no commitment to respond to Africa's special needs. They ignored the fact that African debt can never realistically be repaid in the present climate of unfair trading conditions and the International Monetary Fund's monetarist policies which dominate the continent's economies.

Despite media hype about a breakthrough in the general agreement on tariffs and trade the progress on trade will benefit rich countries more than poor. Agreements on textiles, clothes, and agricultural products, which are important to the Third World, were glossed over. Very poor countries will be forced to open their markets to foreign competition as they watch the relative value of their current trade practices diminish. The summit also failed to tackle the crisis in commodity prices, which is at the heart of Africa's deepening economic problems.



Overseas development aid as percentage of gross national product in 1991, by country<sup>2</sup>

On aid the summit agreed to enhance development assistance, but Britain made no commitment to increase its share of aid, which has fallen sharply over the past decade. Britain now gives less than half the 0.7% of gross national product suggested by the UN and stands twelfth in the league table (figure).<sup>2</sup>

This ought to be a time of hope for Africa as democracies tentatively grow and decades of armed conflict gradually resolve. Peace and democracy, however, remain fragile. As Mary Robinson, the president of the Republic of Ireland, said, "the fact that one billion people in the world simply do

not have the means to exist from day to day diminishes us all.<sup>2</sup>

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1 Logie DE, Woodruffe J. Structural adjustment: the wrong prescription for Africa? *BMJ* 1993;307:41-4. (3 July.)

2 Christian Aid. *British overseas aid*. London: Christian Aid, 1993. (Aid report No 8.)

### Health loses out to the arms trade

EDITOR,—Dorothy E Logie and Jessica Woodruffe give a cogent analysis of the devastating impact on health, and the social fabric on which this depends, of Western financial institutions' structural adjustment policies in Third World countries.<sup>1</sup> I wish to point to another element of this crisis.

Average spending on arms per capita in the Third World is \$38, compared with average spending on health of \$12; much of the weaponry is wielded by entrenched elites against the deprived masses of their own countries.<sup>2</sup> While structural adjustment has meant a systematic slashing of budgets for health, education, and social services, there has been no insistence that military expenditure should likewise be reduced. This telling omission reflects the enormous profits that the global arms industry generates in the West and also the tacit insistence of Western governments that the alliances they choose with those in power in the Third World are not to be deflected by human rights considerations.

Ten years ago the Brandt report noted that the most dynamic transfer of sophisticated equipment and technology from rich to poor countries was arms. Three quarters of British exports of arms in 1991 went to the Third World. In 1985 world military expenditure topped \$1000bn, a sum greater than the combined gross national products of China, India, and all African countries south of the Sahara.<sup>3</sup> The annual budget of the World Health Organisation amounts to only three hours of spending on arms. And despite the rhetoric about restraint after the Gulf war the United States earned \$41bn from arms in 1991 (10% of all exports). Half of all scientists in the developed world are involved, directly or indirectly, in arms technology.

We have scarcely begun to count the costs for the poorest people on earth of this malign interaction between militarism and structural adjustment. We can hope that articles like Logie and Woodruffe's will stimulate health professionals to testify to what they witness in their clinics worldwide and thus help pressurise Western policymakers to confront the human consequences of their philosophies.

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### Traditional medicine has much to offer

EDITOR,—Dorothy E Logie and Jessica Woodruffe conclude that dogmatic persistence with certain economic ideologies is the wrong prescription for Africa: "structural adjustment" is resulting in a serious erosion of health care services in Zimbabwe, and the resulting "brain drain" of health staff is raising fears that the health service is in danger of collapse.<sup>1</sup> It is surprising that the authors do not mention African traditional medicine; this has been providing preventive and, occasionally, curative health care for over 1000 years and in Zimbabwe has achieved formal recognition by the government as a provider of health care (the Zimbabwe National Traditional Healers Associa-

tion is the local equivalent of the General Medical Council).<sup>2</sup>

Traditional medicine is the principal, and often the only, form of health care for most Africans; up to 80% of all episodes of illness are treated mainly by traditional healers.<sup>3</sup> Traditional healers, like general practitioners in the United Kingdom, are ideally placed to treat the psychosocial problems that afflict most people seen in primary care, not least because provision of health care is inseparable from people's religion and philosophy of life.<sup>4</sup> Furthermore, for some health problems traditional health care is more cost effective than official health care.<sup>5</sup> Thus further collaboration between traditional and modern medicine is vital if Africa is to achieve the World Health Organisation's goal of health for all by 2000.

I and colleagues in Zimbabwe are engaged in an epidemiological study of primary care in Zimbabwe (including primary care centres and faith and traditional healers); descriptive studies of explanatory models will lead on to epidemiological and outcome studies of different types of care, and we hope that we will identify which patients benefit from the different services.

Doctors should reconsider the flaw in their attitudes to the developing world—that everything developed in the West is inherently preferable to the local alternatives—and should be less dismissive of things non-scientific or traditional.

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### Overpopulation and overconsumption

EDITOR,—In his editorial on overpopulation and overconsumption Richard Smith fails to look beyond the appearance of the global problems.<sup>1</sup> Discussions of these issues usually start from the assumption that there are too many people and not enough resources to go around and proceed to the conclusion that the population must be smaller.

Overpopulation and overconsumption have become overused and ill defined terms. As with so many social concepts today, their meaning has become more implicit than literal and the assumptions therein are subjected to little critical investigation. For instance, certain areas of the world are relatively overcrowded, which places serious strains on the existing infrastructure, but this does not mean that the world is overpopulated. Certain population groups consume a proportionately larger share of resources, but this does not lead to the conclusion that overconsumption is the main problem.

A population may or may not place strains on the economy. The inability of an economy to provide a certain standard of living may be due to an absolute shortage of realisable resources—in which case the population becomes unsustainable—or to the structural faults of that economy—in which case the ability of that society to change its economic organisation becomes the deciding factor.

Though I agree that "deforestation, soil erosion, water shortages, and desertification" are typical of many Third World areas today, I disagree that the main cause is population growth. Population growth is not the single determinant of a society's wellbeing. The starvation visited on some of the richest rice growing areas in Asia during the colonial years was more to do with their harsh