In the wake of this controversy, in a recent bulletin sent fortnightly to doctors,⁵ an article appeared over the names of Accept, Al-Anon, Alcoholics Anonymous, the Medical Council on Alcoholism, and the National Council on Alcoholism, which included the following statement: "Treatment goals must be realistic and tailored to the individual. Whether to advise total abstinence or limited consumption depends on the risks of continued drinking and on what the patient is prepared to accept. It is pointless, even harmful, to impose limits which the patient will not contemplate, but such limits can be proposed and negotiated."

This statement represents a charter for controlled drinking, which not only re-echoes the first Rand report but goes much further in suggesting that a drinking limit should be arrived at by negotiation with the doctor. The propagation of this dangerous doctrine will produce alcohol-related casualties among the approximately 2-5% of the population who are at risk when medical practitioners disseminate this advice, more especially when it apparently bears the stamp of authority. The article⁵ in question also sounds a nihilistic note to any intensive specialised treatment on the assumption that only the few who suffer withdrawal symptoms require it; so both the article and by implication its stated doctrine entirely negate Dr Brewer's suggestion about disulfiram therapy.

In the latter context, the Conservation of Manpower Unit (COMU) has for a quarter century very effectively used disulfiram and citrated calcium carbimide, and latterly cyanamide in liquid form, to maintain continued sobriety (total abstinence) in its alcohol-dependent patients. This has been done under conditions of daily medically supervised and controlled compliance⁶ and COMU can unequivocally confirm the value of Dr Brewer's suggestion.

It needs to be emphasised that the continued maintenance of sobriety must remain a therapeutic objective in a very difficult and frustrating area of medical practice, in which the doctor has not only to deal with the results of the disruption of the various components of personality⁷ leading to excessive drinking but also with the various apparently fixed and stabilised habits productive of alcoholism. When personality, as defined by Wolpe,^{8,9} is the totality of habits, and for good measure the genetic element is added to it,⁷ then can it be seen that medicine and its related disciplines have a therapeutic challenge to meet.

BORIS SEREBRO

Conservation of Manpower Unit,
London EC4N 8AD

¹ Davies DL. *Quart J Stud Alc* 1962;23:94-104.

² Heather N, Robertson I. *Controlled drinking*. London: Methuen, 1981.

³ Armor DJ, Polich JM, Stambul HB. *Alcoholism and treatment*. Santa Monica: The Rand Corporation, 1976.

⁴ De Luca JR. *Information Features Service* (US National Institute on Alcohol Abuse and Alcoholism) 1980; No 71:April 24.

⁵ Anonymous. *Drugs and Therapeutics Bulletin* 1981; 19:89-91.

⁶ Serebro B. *J Int Med Res* 1979;7:165-7.

⁷ Serebro B. *R Soc Health J* 1981;3:109-13.

⁸ Wolpe J. *The practice of behaviour therapy*. Oxford: Pergamon Press, 1969:ch 14.

⁹ Wolpe J. *Our useless fears*. Boston: Houghton Mifflin Company, 1981:ch 10.

SIR,—I have found your series "ABC of Alcohol" most stimulating. Dr R C Peveler has highlighted (2 January, p 51) that 1945 was a year of very low consumption of alcoholic beverages in the United Kingdom and is not, therefore, a good starting point for examining trends in the consumption of alcohol. He kindly referred to the review of this topic published by Dr Buss and myself.¹ I would like to confirm his view and point out in

addition that the consumption statistics for the period 1914-45 are atypical, as they are greatly affected by two world wars and a major economic depression. A better perspective of alcohol consumption may be gained if the period from 1900 to the present day is examined.

Social factors, as Dr Peveler mentions, also affect consumption. These include the acceptability of drunkenness in a society, the enforcement of laws on drinking and driving, and a person's occupation. Moreover, leisure activities and the acquisition of consumer goods compete with alcohol for an individual's spending money.

As Dr Richard Smith states (26 September, p 835), price, availability, and advertising also affect consumption. Fluctuations in the consumption of alcoholic beverages from 1855 closely follow the rise and fall of the general trade of the country. The economic depressions of 1855-60, 1894, 1909, and 1928-35 were years of modest consumption. Years of prosperity such as 1875 and 1899 were years of much drunkenness, as illustrated by police statistics. In addition, the price of alcoholic beverages relative to other goods is of significance. Tea replaced beer as the drink of the poor in the nineteenth century because it became cheaper and thus within their purchasing power. Reductions in the tax on tea and increased duty on beer facilitated this change. In recent years, however, beer and whisky have become relatively cheaper to purchase than bread when costed out as the number of minutes an average working man has to work to earn a fixed amount of each commodity. The cost of alcoholic beverages may be altered by the Government changing the duties levied on these goods. Dr Smith rightly stated that consumption increases when the duty is decreased. Consumption has, however, stabilised rather than decreased in recent years when the duty has been increased—for example, 1964 and 1974.

A recent review by Duffy² concludes that income has a marked effect on the demand for alcoholic drinks, whose price elasticities are low; however, he suggests that tax revenue could be increased and consumption reduced quite significantly by raising the rates of duty. He also concludes that advertising has a weak effect on the demand for beer and spirits but no effect on wine.

Finally, the concern about women with alcohol-related problems is not a recent phenomenon. Booth wrote about it in the 1880s. "All around London are growing up suburbs of small houses whose occupants have just enough to live on comfortably. Women are left at home, small ailments, that is how it begins." He related the increase in alcohol consumption in women in the 1880s to their emancipation and increasing financial independence.

JOSEPHINE A SPRING

Plymouth, Devon

¹ Spring JA, Buss DH. *Nature* 1977;270:567-72.

² Duffy M. *Br J Alcohol Alcoholism* 1981;16:200-8.

The radical solution to the drug problem

SIR,—The review of *Opium and the People* (23 January, p 262) by V Berridge and G Edwards and Dr Ann Dally's Personal View (26 September, p 857) raise issues about drug addiction which must be faced. The former points out

how professionalisation of "expertise" about drug addiction has arisen. The latter suggests that there is little problem if only doctors would prescribe drugs freely but not to those selling them, in reply to which Dr T Webb (5 December, p 1548) points out the economic effect on the drug scene and, quite rightly, how drugs are being prescribed and sold.

The radical solution that the drugs should be made freely available, with a warning on the packet, thus ridding ourselves of drug squads as well as pushers, much crime, and hepatitis, does not, however, seem to be very adequately aired. It would be strange that penicillin could not while heroin could be bought over the counter, and international effects must be considered; but would the situation be worse and are we so sure that our current "prohibition" is more realistic than previous attempts with alcohol elsewhere? Is our system making our problem worse?

F A JENNER

University Department of Psychiatry,
Royal Hallamshire Hospital,
Sheffield S10 2JF

Sponsorship of sport by tobacco companies

SIR,—The vagaries of our postal system prevented me from adding the signature of the President of the Faculty of Community Medicine to that of the other presidents who addressed the Minister for Sport on the subject of sports sponsorship by the tobacco companies (6 February, p 395). Lest it should be thought that community physicians have abandoned their commitment to social means for the preservation of health may I now add my support for the view that the commercial pressures on individuals to damage their health must be countered by at least equivalent publicly sanctioned resistance if the individual is to be truly free to decide his or her own fate in these matters? It is one-sided argument that limits the individual's freedom, and legislative action is the only practical way to control the immensely persuasive influence exerted by advertising in its increasingly subtle infiltration of all the media of communication.

ALWYN SMITH
President, Faculty of
Community Medicine

London W1N 4DE

Smiles about rickets, gloom over whooping cough

SIR,—I assume that Mr William Russell's Letter from Westminster (30 January, p 358) reflects the official view that the Asian rickets campaign is a relatively cheap way of forging community links and detecting other unsuspected medical conditions. But where, I ask, is the evidence that it is succeeding in its primary aim? We know that the incidence of Asian rickets was gradually falling long before the campaign began,¹⁻³ and therefore claims that specific intervention is speeding up this process must be treated with circumspection. Despite this improvement, 26% of children in a long-established community still have biochemical vitamin D depletion³ and exhortation to consume more vitamin-D-containing foods results in a discouragingly low rate of adaption within a community.⁴ Furthermore,

to increase vitamin D intake to a level which will influence the serum 25-hydroxy vitamin D concentration necessitates the consumption of amounts of vitamin D far in excess of the dietary content of the average white person.⁵

Health education schemes such as the "Stop Rickets" campaign are of very limited value in the control of vitamin D deficiency. They will be heeded only by those who want to hear, and my sympathy is with those Asians who decline the dangers of a Western-style diet and remain true to their religious precepts, which dictate a relatively secluded way of life. Historical precedent shows that the complete control of rickets depends on radical measures such as infantile vitamin D supplementation, fortification of food with vitamin D,⁶ or the Clean Air Act; and it is likely that similar major steps will be required to eradicate the problem in Asians.

A further deficiency of the "Stop Rickets" campaign is that it deflects attention from the dangers of osteomalacia in Asian females. The incidence of this condition shows no evidence of a decrease^{1, 2}; 33% of Asian adults have very low serum 25-hydroxy vitamin D concentrations, and there exists the potential for an epidemic of osteomalacia in future years as a large cohort of now middle-aged vitamin-D-depleted Asians enters the "geriatric" age group.

Additional fortification of food has been rejected as a prophylactic policy, but the alternative approach of supplementation with vitamin D preparations need not entail the labour-intensive and relatively inefficient consumption of a tablet a day.⁸ Inadequate attention has been given to the ability of the body to store vitamin D and there is evidence that autumnal high-dose prophylaxis with vitamin D can render an individual free from risk of clinical disease for the following 12 months.⁹ This cheap and efficient approach to the prevention of Asian vitamin-D deficiency deserves further exploration.

W P STEPHENS

Manchester Royal Infirmary,
Manchester M13 9WL

¹ Department of Health and Social Security. *Rickets and osteomalacia*. London: HMSO, 1980. (Reports on Health and Social Subjects No 19.)

² Goel KM, Sweet EM, Cambell S, Attenburrow A, Logan RW, Arneil GC. *Lancet* 1981;ii:405-6.

³ Stephens WP, Klimiuk PS, Warrington S, Taylor JL, Berry Mawer EB. *Q J Med* (in press).

⁴ Stephens WP, Klimiuk PS, Warrington S. *Lancet* 1981;ii:945-6.

⁵ Poskitt EME, Cole TJ, Lawson DEM. *Br Med J* 1979;ii:221-3.

⁶ Harrison HE. *Am J Publ Health* 1966;56:734-7.

⁷ Stamp TCB, Walker PG, Perry W, Jenkins MV. *Clin Endocrinol Metab* 1980;9:81-105.

⁸ Dunnigan MG, McIntosh WB, Sutherland GR, et al. *Br Med J* 1981;282:357-66.

⁹ Stephens WP, Klimiuk PS, Berry JL, Mawer EB. *Lancet* 1981;ii:1199-201.

Hepatitis B virus infection in medical and health care personnel

SIR,—I read with interest the paper by Dr M E Callender and others (30 January, p 324) in which they say that there is little evidence for the transmission of hepatitis B virus to patients during the incubation period of hepatitis B. I wish to put on record that I transmitted hepatitis B to a patient during the incubation of my own infection. I performed a cholecystectomy operation on a patient some four weeks before I became jaundiced but when I was feeling slightly below par—in retrospect presumably the viraemic phase. She developed a typical acute hepatitis B infection about four

months after the cholecystectomy. Fortunately both she and I had an uncomplicated acute hepatic illness with complete disappearance of the hepatitis B surface antigen and the development of antibody.

My own infection was almost certainly from operating on a known high-titre carrier, taking the full precautions advocated apart from wearing goggles, although there was no obvious pricking or gross contamination. The conjunctiva must remain the most likely point of entry from an aerosol effect. For obvious reasons I prefer not to sign my name.

CONSULTANT GENERAL SURGEON

Hepatitis B carriage and dental treatment

SIR,—Dr A M A Abbas and colleagues (21 November, p 1400), after screening 40 Indo-Chinese refugees for the hepatitis B surface antigen and finding 10% of them to be positive, suggest that it seems reasonable to advocate routine screening for hepatitis B surface antigen for such refugees prior to dental treatment.

One of the references given was to a study of 80 Vietnamese refugees admitted to Canada, 11.2% of whom were found to be hepatitis B surface antigen positive.¹ Even if this figure represented all Indo-Chinese refugees it would mean that the number of hepatitis B surface antigen-positive individuals in Canada increased by 4%, from 135 000 to 141 000.

Mere exposure to material containing hepatitis B surface antigen does not guarantee subsequent infection, and the most important factor is probably the amount of infectious virus carried in the blood. The best serological marker of this infectivity is the hepatitis B e antigen,² and the risk of developing hepatitis B infection is 10 times higher in those persons exposed to blood positive for e antigen than in those exposed to e-antigen-negative blood.³ It is noted that only one of the Indo-Chinese refugees in the Rotherham study was positive for the hepatitis B e antigen.

While there is no doubt that dentists are occupationally at risk of infection with the hepatitis B virus,⁴ other subgroups of their patient population are more likely to pose a risk to them than Indo-Chinese refugees—for example, patients with Down's syndrome, users of illicit intravenous drugs, male homosexuals, and dialysis patients.⁵

Rather than suggesting screening of Indo-Chinese refugees for hepatitis B surface antigen, it would be more appropriate to suggest that certain precautions should be taken in the dental office when treating any high-risk patient of any ethnic group—the use of face masks and glasses when engaging in any procedure which generates an aerosol (for example, high-speed drill, ultrasonic scaler), high-velocity suction equipment with proper disinfection of collecting bottles, and autoclaving of all instruments and handpieces at 120°C for 15 minutes after mechanical removal of contaminants; spills of blood or other potentially infectious material should first be cleaned with soap and water, followed by the application of 2% alkaline glutaraldehyde for at least 10 minutes. It may be assumed that scrupulous aseptic techniques will always be practised; that the wearing of gloves will protect against hand injuries; and that care will be taken when handling needles,

syringes, and instruments contaminated with blood. These precautions are more likely to be efficacious than screening one particular ethnic group for hepatitis B surface antigen.

T JOHNSTONE

Boundary Health Unit,
Surrey, British Columbia,
Canada

¹ Anonymous. *Canada Diseases Weekly Report* 1979;5:157-62.

² Francis DP, Maynard JE. *Epidemiologic Reviews* 1979;1:17-31.

³ Seeff LB, Wright EC, Zimmerman HK, et al. *Ann Intern Med* 1978;88:285-93.

⁴ Mosley JW, Edwards VM, Casey G, Redeker AG, White E. *N Engl J Med* 1975;293:729-34.

⁵ Szmuness W, Neurath AR, Stevens CE, Strick N, Harley EJ. *Am J Epidemiol* 1981;113:113-21.

Dental anaesthesia and mortality

SIR,—We were most interested in the report of the Inter-faculty Working Party on Training in Dental Anaesthesia (Seward Report) and are largely in agreement with its recommendations.

Our interest in some of the problems that stem from dental anaesthesia extends over a number of years and during that time we have been analysing data on mortality. In this connection we pointed out previously that conclusions drawn from previously published mortality statistics in dental anaesthesia should be viewed with great caution.¹ Since then we have completed a 10-year study (1970-9) of the problem, which is awaiting publication. Our investigations were greatly assisted by the survey published by Dinsdale and Dixon,² but it is with some dismay that we note that many of the conclusions drawn by Sykes³ from the data of Dinsdale and Dixon appear to be at variance with our own conclusions derived from the same source.

Sykes claims that, according to Dinsdale and Dixon, in 1976 dentists were responsible for administering 64% and doctors 36% of all general anaesthetic and "intermediate" techniques given for dental operations. We find the proportions to be the reverse—that is, 39.3% by dentists and 60.7% by doctors. He also claims that operator anaesthetists were responsible for 43.1% of the administrations. We make the proportion 13.4%. The figures in all instances refer solely to dental practice and the community dental service, all hospital administrations being excluded. The discrepancy between our figures and those of Sykes seems to be due to a fundamental error in Sykes's interpretation of the contents of table X in the paper by Dinsdale and Dixon; so many of his subsequent arguments and conclusions must be invalidated.

Since these matters continue to give rise to so much speculation, we feel that it might be helpful to state our findings regarding mortality rates for general anaesthesia administered in dental practice and the community dental service during the period 1970-9. They are set out in the accompanying table and show that, taken together, all administrations by doctors

Death rate associated with general anaesthesia in dental practice and the community dental service, 1970-9

Anaesthesia given by:	Death rate
Doctors	1:263 000
Dentists (all dentists taken together)	1:260 000
Second dentist	1:449 000
Operator anaesthetists	1:143 000