Saturday 2 January 1999

BMJ

Being strategic about smoking

Measures to curb it need to be multifaceted

In 1996 adult smoking rates in Britain rose for the first time since the 1970s.[1] No longer could it be assumed that the slow but steady decline in smoking prevalence which had occurred for the past 25 years would continue. Stronger policy measures to control the use of tobacco, prevent children from starting to smoke, and help smokers to give up were urgently required. Last month, in its white paper on tobacco, *Smoking Kills*, the government set out a wide range of policy measures in a carefully thought out strategy for the United Kingdom. It aims to re-establish the downward trend in adult smoking, to result in 1.5 million fewer smokers by 2010 and to save around 3000 lives a year.[2]

Most significant is the commitment to implement the European directive on tobacco advertising ahead of the union's timetable. By 2000 tobacco advertising on billboards and in printed media should have ended. However, tobacco sponsorship of sports and arts will continue for a further three years and global sports such as international football and Formula 1 motor racing can receive tobacco sponsorship in diminishing amounts until 2006. As yet no targets for reduction have been agreed. For a country where female deaths from smoking related diseases are among the highest in the European Union, and more than three times the union average,[3] this timescale is slow. Sporting bodies have already had two years to replace tobacco sponsorship, and some were ready as early as 1991.[4]

During this interim period children will continue to be exposed to extensive television coverage of tobacco sponsored sports. A single grand prix provides the equivalent of about fifty 30-second cigarette advertisements,[5] and children's recall of brand imagery is high.[6] A further risk is that the tobacco industry will mount a coordinated effort to increase sponsorship before the full ban comes into effect, as happened in New Zealand and California.

The rights and choices of smokers and non-smokers are emphasised throughout this white paper but there is no new legislation to enforce smoke free areas. Instead the government proposes a charter to encourage pubs, restaurants, and hotels to provide well ventilated smoking and non-smoking areas. So far progress towards smoke free food and entertainment has been slow.[7] Many restauranteurs and publicans believe that a complete ban on smoking would harm their businesses when they compete with those who provide a choice. Without the consistency of legislation and powers of inspection, such measures are little more than good intent.

Well funded media campaigns to raise awareness and motivate smokers to quit are a crucial part of a comprehensive strategy.[8] During the early years of California's tobacco control programme, which included extensive media campaigns, the rate of decline in smoking prevalence was significantly greater (1.06% per year) than in the rest of the United States (0.57% per year),[9] but the initial effects did not persist after a reduction in programme funding and an increase in promotion and lobbying by the tobacco industry. The UK government proposes to invest up to £110m over the next three years in public education targeted on children, young people, pregnant women, and working class smokers and direct support for smoking cessation. This is generous compared with previous expenditure, but only a third of that spent per head in California. Clear leadership, proper coordination, management and accountability for different elements of this programme, including unpaid publicity, will be crucial—otherwise there could be a serious risk of fragmentation. Establishing a national multi-agency steering group and a small, dedicated task force of experienced staff seconded from leading agencies, such as the Health Education Authority, Action on Smoking and Health (ASH), and the NHS Confederation would be one way to address this. Another could be to ensure that all NHS senior executives have local targets for tobacco control incorporated into their personal objectives and annual appraisals.

The intention to help smokers in the lowest income groups by providing them with one week starter packs of nicotine replacement therapy through referral to specialist clinics is welcome. Nicotine replacement nearly doubles the rate of smoking cessation achieved by simple advice from general practitioners or more intensive clinic interventions.[10] Although in the first year such schemes will be available only to smokers in health action areas, this measure favours the less well off. Twenty seven per cent of smokers are concentrated in the lowest 10% income group.[11] Not only are they likely to be more nicotine dependent[12] but around 70% have no serious intention to quit.[13] For this measure to help the most disadvantaged smokers the approach to behaviour change will need to be carefully tailored to meet their needs and preparedness for change.[14] National media campaigns should be designed to play a complementary role.

Finally, the white paper recognises that affordability of cigarettes is a major determinant of smoking and commits to increasing tobacco taxation by an average of

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5% a year in real terms. It also promised a major offensive against tobacco smuggling and fraud, which should place Britain in a good position to argue the case for increasing prices throughout the European Union and reducing the large differentials in tobacco prices.

Only time will tell whether the policy measures described in the white paper will help reverse the rising trend in smoking prevalence. Government action alone can only achieve so much. Doctors and others who campaigned so vigorously to end tobacco advertising must now direct their efforts towards revitalising professional interest, publicly debating the part health professionals can play, and regaining momentum. There is much, much more to do.

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Low plasma vitamin D in Asian toddlers in Britain

If in doubt give vitamins; consider iron too, and remember other vulnerable children

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Although frank rickets is now uncommon, a steady (some think increasing) trickle of new cases remains, and many local studies have shown high prevalences of suboptimal plasma vitamin 25-OH cholecalciferol (≤25 nmol/l) concentrations, particularly in winter. A paper this week by Lawson and Thomas (p 28) confirms a high prevalence (20-34%) in a representative sample of 618 Asian toddlers aged 1½-2½ years.[1] Does this matter and what can we do about it?

Whether a low concentration of vitamin D itself is harmful is not known. The appearance of radiological abnormalities may depend on other factors affecting the availability of dietary calcium as well as vitamin D. We should be wary of chasing biochemical normality without evidence of clinical benefit, particularly if substances which are toxic in high doses have to be used. The overenthusiastic use of vitamin D supplements and fortified infant foods led to an epidemic of infant hypercalcaemia 40 years ago, with significant mortality and neurological deficit.[2]

The association of low plasma vitamin D and iron deficiency anaemia shown by Lawson and Thomas confirms a previous smaller study in which a third of Asian children with anaemia were also vitamin D deficient and half those with D deficiency were anaemic.[3] Is this association merely two effects of diets providing little of both nutrients? Or are the two deficiencies causal—for example, via an effect of iron deficiency on vitamin D absorption[4] or an effect of vitamin D deficiency on the bone marrow?[5] Whatever the causes of the association, if one deficiency is suspected the other should be considered too.

How can we improve the vitamin D status of children without undue risk? There are five approaches to preventing a nutrient deficiency.

Screening (by estimating plasma vitamin D or wrist radiographs) is hardly feasible.

Health education should encourage the value of playing out of doors and eating foods containing vitamin D. In Cincinnati (lat 38°N) 20 minutes a day out of doors with exposed hands and face were enough to maintain satisfactory vitamin D levels in older infants[6]; the necessary exposure times in Britain (lat 50-58°N) have not been determined. Natural dietary sources of vitamin D are egg yolk and fatty fish (salmon, sardines, pilchards), but greater intakes are obtained from fortified foods and supplements (see below).

Fiscal measures—Families receiving some state benefits may receive free vitamin D fortified infant formula (during infancy only) and free vitamin supplements for children up to the age of 5.

Food fortification—Fortified breakfast cereals and margarine provide some extra vitamin D. Toddlers will not usually be drinking vitamin D fortified infant formulas or follow on formulas but, as with iron, if there are concerns about vitamin D there are arguments for toddlers using them too.[7] The fortification of "doorstep" milk for children might be reconsidered; some evaporated milks are fortified with vitamin D. Foods available under the Welfare Food Regulations should include follow on formulas fortified with vitamin D and iron for toddlers, not cows' milk alone as at present.

Supplementation (through the provision of vitamin drops)—Despite our uncertainty about how many children with low plasma vitamin D values proceed to frank rickets, a modest supplement of vitamin D (the Department of Health drops provide 7 μg/day) is safe and effective in preventing rickets.[8] The aim is that all pregnant women and children up to the age of 5 should receive a vitamin D supplement unless their

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