Smoking and the young

A blot on the health of the nation

In 1962 the Royal College of Physicians' report on smoking and health brought the risks of smoking to public attention.¹ Further reports followed,^{2,4} but it is the college's fifth report, published this week, that in many ways is the most disturbing. Not only does *Smoking and the Young* remind us of the very limited progress of the past 30 years but it also draws attention to the fact that in Britain the fall in smoking's prevalence results more from people giving up smoking than from fewer people taking it up.⁵ Indeed, one in four 15 year olds (who may, of course, not be legally sold cigarettes) are already regular smokers; in Britain 450 children start smoking every day. *Smoking and the Young* considers how this has arisen (and persisted), describes the effects of active and passive smoking on the health of young people, and discusses what action should be taken to improve the outlook for future generations.

The tobacco industry spends £72m on advertising in Britain each year; it would be nice to have some of this to disseminate the facts in this report. For example, cigarette smoking makes subarachnoid haemorrhage six times more likely in young smokers than non-smokers and doubles or trebles the chance of female infertility. The journalists who have been keen to blame asthma's increasing prevalence on antiasthma drugs have seemed less interested in publicising the role of maternal smoking in asthma. Although the report quotes the work of Weitzman and colleagues on maternal smoking and asthma,⁶ it was printed before publication of work confirming parental smoking's substantial contribution to the development of allergic diseases during infancy.⁷ The presence of one or more smokers in the household of asthmatic children increased by 63% the number of emergency room visits by the children⁸; and parental smoking accounted for one in three cases of middle ear effusion in those aged 6-7.⁹

In Britain a lower proportion of schoolteachers and doctors smoke than in any other country of the European Community yet, as this report describes, their influence on the young is mitigated by the effects of peer pressure, the easy availability of the drug, and successful advertising, which is clearly aimed at young people.¹⁰ Presumably this is why the prevalence of smoking among young people has not changed in the past decade. More girls than boys now smoke, and the prevalence of maternal smoking during pregnancy is high. This results in more miscarriages and cases of premature labour and higher perinatal mortality and has effects extending beyond infancy,

with a reduction in growth and educational achievement.

If the royal college has to produce a sixth report on smoking then this generation of adults will have completely failed its successors. What should be done? *Smoking and the Young* describes clearly how young people begin to smoke and the effects of personal and social factors on both the initiation and continuation of the habit. It summarises the responsibilities of parents, teachers, and doctors and gives a clear pointer towards a greater role for local government and local health authorities. Trading standards officers should more vigorously enforce the laws on the sale and advertising of tobacco, and local councils should set an example by banning smoking in all their premises visited by young people. They should also encourage others to introduce policies to control smoking. Purchasers of health services should demand from providers a commitment for health professionals to give special attention to this problem—especially among children, parents, and pregnant women. The prevalence of smoking during pregnancy should be monitored.

None of these initiatives alone are likely to achieve the desired effect, and this latest report will similarly have little impact unless accompanied by firm and decisive leadership from the government. Let us hope that this report acts as the final catalyst for government action. We need comprehensive legislation banning tobacco advertising and sponsorship and progressively more expensive cigarettes—these measures would have the most impact on smoking by young people. Anything short of this makes a mockery of any commitment to the health of the nation.

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- 1 Royal College of Physicians. *Smoking and health. A report on smoking in relation to lung cancer and other disease*. London: Pitman Medical, 1962.
- 2 Royal College of Physicians. *Smoking and health now. A new report on smoking and its effects on health*. London: Pitman Medical, 1971.
- 3 Royal College of Physicians. *Smoking or health*. London: Pitman Medical, 1977.
- 4 Royal College of Physicians. *Health or smoking. A follow-up report*. London: Pitman Medical, 1983.
- 5 Royal College of Physicians. *Smoking and the young*. London: Royal College of Physicians, 1992.
- 6 Weitzman M, Gortmaker SL, Walker DK, Sobol A. Maternal smoking and childhood asthma. *Pediatrics* 1990;85:505-11.
- 7 Arshad SH, Matthews S, Gant C, Hide DW. Effect of allergen avoidance on development of allergic disorders in infancy. *Lancet* 1992;339:1493-7.
- 8 Evans D, Levison MJ, Feldman CH, Clark NM, Waflewski Y, Levin B, et al. The impact of passive smoking on emergency room visits of urban children with asthma. *Am Rev Respir Dis* 1987;135:567-72.
- 9 Iverson M, Birch L, Lundqvist GR, Elbrond O. Middle ear effusion in children and the indoor environment. *Arch Environ Health* 1985;40:74-9.
- 10 Vickers A. Why cigarette advertising should be banned. *BMJ* 1992;304:1195-6.

Reducing home accidents in elderly people

Everybody's challenge—but general practitioners can lead the way

Over 300 000 people aged over 65 attend accident and emergency departments annually in England and Wales after accidents in the home, with falls being the most important.¹ Direct questioning during systematic evaluation after elderly people have been admitted to hospital shows that most falls go unreported. They are simply accepted as a "normal" accompaniment of "old age."² The intermingling of the various

factors leading to accidents often makes diagnosis difficult. Indeed, the lack of a simple cause and effect relation commonly provides too great a challenge for some doctors. Under these circumstances, the diagnostic dustbin of "it's just your age, m'dear" can be quickly provided.

Despite many home accidents being associated with personal injury and falls, more than three quarters of them

occurring in the over 65s are unreported to medical services.³ This is important because the estimated annual rates of total home accidents for this group (840/1000 (645/1000 unreported)) and falls (564/1000) are also high. Moreover, the incidence of home accidents rises markedly with age—from 6% at 65-74 years to 11% for the over 85s (p 30).³

It is common sense to reduce the risk of accidents and illness by prevention whenever possible. Screening by general practitioners of those aged over 75 years and opportunistic screening of younger elderly patients for vision, hearing, mobility, mental state, inappropriate drug treatment, and social difficulties are useful starting points. To assist this the elements associated with accidents and ill health in elderly people need to be more widely understood. Top of the list here for all ages must be adverse environmental factors including poor lighting, inadequate handrails on stairs, and loose objects on the floor, including mats.⁴

In elderly people personal factors are also important. Reduced body reserve (due to impaired elasticity in tissues and disuse atrophy of striped muscle—to name but two causes) affects the body's ability to compensate quickly enough to avoid impending accidents. Illnesses may present atypically in older patients—doctors have come to expect that patients of all ages will present with symptoms as described in medical texts first written when most patients were younger than they are today.³ There are interactive problems of multiple pathology⁵; iatrogenic ill health caused by poly-pharmacy⁶ (even in those aged over 50 years⁷); and socially adverse factors, which may compound the problems of daily living for elderly people. These include the loss of esteem because of problems arising from agism, grief, lack of social mobility, inadequate house design for indoor safety, the threat of living in a potentially violent community, and financial and other unrecognised anxieties.

Finally, who has the responsibility for reducing home accidents in elderly people? In a nutshell, we all do. Elderly people are not merely housebound opportunities for bigger armchairs or remote controlled television sets. People's

abilities to respond effectively to the challenges of their environment depend on their physical and mental fitness. During the years of retirement the cumulative effect of physical, mental, and social disuse may result in increased frailty that may eventually predispose to accidents in the home. As one eminent but now also elderly person recently said to me, "When you have retired they no longer ask or expect you to do anything."

There is no doubt that general practitioners are in the key position³ and can alert society to the value of elderly people. A meaningful older age can enhance the interest and determination of elderly people to find personal opportunities for their own wellbeing within a more active lifestyle. This necessarily includes an awareness of the environment, its hazards as well as its comforts. Positive attitudes from general practitioners can be quickly mirrored by paraclinical and other carers. Repeated home accidents, and certainly repeated falls in elderly people, may then be recognised for what they represent—signs of ill health requiring specific attention. At present the more usually accepted alternative is to increase the elderly person's dependency by merely seeking the provision of often inappropriate "social support services" rather than using the opportunity for a proper check on health and lifestyle.

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- 1 Department of Trade and Industry. *Home and leisure accidents report*. London: Department of Trade and Industry, 1988.
- 2 Livesley B. "Funny turns", episodic loss of consciousness, and falls. In Tallis R, ed. *The clinical neurology of old age*. Chichester: Wiley, 1989:433-42.
- 3 Graham HJ, Firth J. Home accidents in older people: role of primary health care team. *BMJ* 1992;305:30-2.
- 4 Gloag D. Strategies for accident prevention: a review of the present position. In: *Strategies for accident prevention: a colloquium*. London: HMSO, 1988:74-7.
- 5 Livesley B. *Caring for the elderly in the 1990s: the opportunities and challenges resulting from the fallibility of existing theories. Inaugural Lecture*. London: Research for Ageing Trust, 1989.
- 6 Cartwright A, Smith C. *Elderly people, their medicines, and their doctors*. London: Routledge, 1988:30-6.
- 7 Grymonpre RE, Mitenko PA, Sitar DS, Aoki FY, Montgomery PR. Drug-associated hospital admissions in older medical patients. *J Am Geriatr Soc* 1988;36:1092-8.

Adenosine and cardiac arrhythmias

The preferred treatment for supraventricular tachycardia

Adenosine is an endogenous purine nucleoside that is capable of causing atrioventricular nodal conduction block in humans.¹ It is approved by the United States Food and Drug Administration for terminating paroxysmal supraventricular tachycardia, and it has recently gained a product licence in the United Kingdom for use as both a therapeutic agent for supraventricular tachycardia and a diagnostic agent in broad or narrow complex regular tachycardia of uncertain cause.^{1,2} If adenosine does terminate a tachycardia the strong presumption is that the tachycardia was due to an arrhythmia involving the atrioventricular node,³ whereas if the tachycardia continues unaffected it is highly likely to be of ventricular origin. Atrial arrhythmias (such as atrial flutter) will not be terminated, but the diagnosis should become apparent because of transient atrioventricular nodal block. The half life of adenosine in human plasma is as short as 0.6-1.5 seconds⁴ so that any unwanted effects are transient.

The diagnostic information provided by atrioventricular nodal blockade in a patient with a broad complex tachycardia is independent of that provided by the patient's history and

the electrocardiographic appearances—and, indeed, in the two studies in which the information was given the diagnostic value of adenosine compared favourably with the use of standard electrocardiographic criteria.^{2,5} Adenosine is easy to administer, and in cases of diagnostic difficulty the interpretation of the response (termination or non-termination) is likely to be simpler for junior doctors than the use of complicated electrocardiographic rules.

The atrioventricular nodal blocking actions of adenosine have been known since 1929, so it may seem strange that the agent has taken so long to be used widely in Britain.⁶ Part of the reason for the delay may have been the initial unsuccessful attempts to use it to terminate atrial fibrillation.⁷ A related compound, adenosine triphosphate, has been widely used in France for many years, but its evaluation has been poorly documented even in the French literature. Another possible reason for the delay may have been pharmaceutical companies' lack of enthusiasm for development—for adenosine itself cannot be patented because it is a naturally occurring compound. Furthermore, there is no stable oral form of