

## Editorials

## Helping people to stop smoking: the new smoking cessation guidelines

John Britton, Alan Knox

Cigarette smoking is probably the most damaging of all voluntary human behaviour. Half of all smokers die prematurely as a consequence of their own smoking,<sup>1</sup> and in 1995 in the UK alone smoking accounted for over 120 000 deaths, of which about 65 000 were due to respiratory disease.<sup>2</sup> In addition to the harm caused to smokers themselves, passive exposure of other adults to cigarette smoke is associated with increased respiratory morbidity<sup>3</sup> and an increased risk of lung cancer and heart disease,<sup>4,5</sup> whilst children brought up by parents who smoke are more likely to experience lower respiratory illness in infancy,<sup>6</sup> sudden infant death,<sup>7</sup> and middle ear disease, wheezy bronchitis and exacerbation of asthma in childhood.<sup>8-10</sup> In addition to these direct effects of tobacco smoke, cigarette smoking affects health indirectly through the cost to the individual of sustaining their smoking habit, which contributes to financial hardship and consequent deprivation of smokers and their dependents. The total social, economic, and health related cost to society of smoking is enormous, and prevention of smoking therefore deserves to be a major priority for all health professionals. Respiratory physicians should have a particular interest in smoking prevention because so much of the morbidity and mortality caused by smoking manifests as respiratory disease.

Preventing smoking, particularly at the primary level, is a major task and, as is often the case, the power to enact radical preventive public health measures lies with politicians more than doctors, though the medical profession certainly has its role to play in driving that political debate. At the level of secondary prevention, however, effective means of helping people to stop smoking have been available to the profession for many years, yet for various reasons it has failed to apply them. Part of the reason for this is perhaps that smoking has tended to be, and is still widely perceived to be, a matter of personal choice rather than an addictive behaviour. Today's doctors were not taught about the addictive nature of smoking or its treatment and, as other articles in this issue of *Thorax* point out,<sup>11,12</sup> nor is the current generation of medical students. Hence, despite the fact that it is now nearly 20 years since Russell and colleagues documented the effectiveness of simple advice from the primary physician to give up smoking,<sup>13</sup> relatively few doctors routinely apply even this simple intervention, let alone more intensive cessation support. Smoking cessation services have never been a high priority for National Health Service planners and managers and, despite established clinical evidence of efficacy,<sup>14-16</sup> nicotine replacement therapy (NRT) has not generally been available on the NHS. In fact, NRT approximately doubles the cessation rate achieved by non-pharmacological smoking cessation interventions,<sup>15,16</sup> a

level of efficacy which for most interventions in medicine would be more than sufficient to justify widespread use. Even if at an individual level the chance of successful smoking cessation after these or related interventions is modest, the effect across the population in terms of numbers of ex-smokers generated and morbidity and mortality avoided should be substantial. That, surely, is the justification for many other modestly effective and routinely used therapeutic interventions in medicine. Smoking cessation should be no exception.

As a supplement to the December issue of *Thorax* we published two documents that we hope will provide a major impetus to the development of smoking cessation services. The first, *Smoking Cessation Guidelines for Health Professionals*<sup>17</sup> summarises the background evidence for smoking cessation interventions and provides clear guidelines to various groups of health care professionals as to how they can influence smoking behaviour, and what they should be doing to achieve this. The fundamental themes are the systematic ascertainment of smoking status in all patients, the provision of advice and assistance to those who want to try to give up smoking, and recommendation of nicotine replacement therapy where appropriate. The basic structure of these interventions and references to further sources of practical information on service design and provision are provided within the document. Recognising that these are initiatives that cannot occur without the will and support of health authorities and primary care groups, the guideline also makes the appropriate recommendations for health commissioners as well as for health care professionals.

For those who wish to see the numerical evidence on the size of the health gain likely to be achieved by smoking cessation intervention and the cost implications of providing these services, we have also published *Guidance for Commissioners on the Cost Effectiveness of Smoking Cessation Interventions*.<sup>18</sup> This document spells out the financial cost of smoking to our society, the expected cessation rate for different levels of intervention, the cost to commissioners of providing these interventions, and the estimated cost per life year saved. The basic messages are that the total cost to society of brief advice from a doctor with the provision of self help materials is approximately £260 per life year saved and, with the full costs of nicotine replacement therapy included, it is less than £700. Compared with the total societal costs of most other medical interventions<sup>19</sup> this represents extremely good value for money. It is time for the medical profession to start to take smoking cessation seriously and, as specialists in respiratory disease, we should be particularly proactive in ensuring that smoking

cessation support becomes a systematic and routine component of health care delivery.

J BRITTON  
A J KNOX

*Division of Respiratory Medicine,  
City Hospital,  
Nottingham NG5 1PB,  
UK*

- 1 Peto R. Smoking and death: The past 40 years and the next 40. *BMJ* 1994;**309**:937–9.
- 2 Callum C. *The UK smoking epidemic: deaths in 1995*. London: Health Education Authority, 1998.
- 3 Coultas DB. Passive smoking and risk of adult asthma and COPD: an update. *Thorax* 1998;**53**:381–7.
- 4 Hackshaw AK, Law MR, Wald NJ. The accumulated evidence on lung cancer and environmental tobacco smoke. *BMJ* 1997;**315**:980–8.
- 5 Law MR, Morris JK, Wald NJ. Environmental tobacco smoke exposure and ischaemic heart disease: an evaluation of the evidence. *BMJ* 1997;**315**:973–80.
- 6 Strachan DP, Cook DG. Health effects of passive smoking: 1. Parental smoking and lower respiratory illness in infancy and early childhood. *Thorax* 1997;**52**:905–14.

- 7 Anderson HR, Cook DG. Passive smoking and sudden infant death syndrome: review of the epidemiological evidence. *Thorax* 1997;**52**:1003–9.
- 8 Strachan DP, Cook DG. Parental smoking, middle ear disease and adenotonsillectomy in children. *Thorax* 1998;**53**:50–6.
- 9 Cook DG, Strachan DP. Parental smoking and prevalence of respiratory symptoms and asthma in school age children. *Thorax* 1997;**52**:1081–94.
- 10 Strachan DP, Cook DG. Parental smoking and childhood asthma: longitudinal and case-control studies. *Thorax* 1998;**53**:204–12.
- 11 Allen M. Medical students' knowledge of smoking. *Thorax* 1999;**54**:2.
- 12 Richmond R. Teaching medical students about tobacco. *Thorax* 1999;**54**:70–8.
- 13 Russell MAH, Wilson C, Taylor C, *et al*. Effect of general practitioners' advice against smoking. *BMJ* 1979;**2**:231–5.
- 14 Tang JL, Law M, Wald N. How effective is nicotine replacement therapy in helping people to stop smoking? *BMJ* 1994;**308**:21–6.
- 15 Silagy C, Mant D, Fowler G, *et al*. Meta-analysis on efficacy of nicotine replacement therapies in smoking cessation. *Lancet* 1994;**343**:139–42.
- 16 Fiore MC, Smith SS, Jorenby DE, *et al*. The effectiveness of the nicotine patch for smoking cessation: a meta-analysis. *JAMA* 1994;**271**:1940–7.
- 17 Raw M, McNeill A, West R. Smoking cessation guidelines for health professionals. *Thorax* 1998;**53**(Suppl 5, Part 1):S1–19.
- 18 Parrott S, Godfrey C, Raw M, *et al*. Guidance for commissioners on the cost effectiveness of smoking cessation interventions. *Thorax* 1998;**53**(Suppl 5, Part 2):S1–38.
- 19 Tengs TO, Adams ME, Pliskin JS, *et al*. Five hundred life saving interventions and their cost-effectiveness. *Risk Analysis* 1995;**15**:369–90.

## Medical students' knowledge of smoking

M B Allen

Smoking has a huge impact on health care provision, an estimated additional £1.4 billion being spent annually on smoking related diseases in Britain.<sup>1</sup> This will continue to rise with the suggested improvements in lung cancer care<sup>2</sup> and the estimated increased morbidity due to COPD.<sup>3</sup> Helping people to stop smoking will clearly reduce the impact of these and other smoking related diseases, but how is this best achieved? Evidence suggests that advice and support from the primary care doctor to individuals who are contemplating stopping is the simplest and most cost effective method,<sup>2,4,5</sup> though the newly published smoking cessation guidelines<sup>6</sup> also describe more intensive interventions. One factor which is, however, crucial to the success of most of the smoking cessation methods available is the opinions, training, and counselling skills of doctors.

The review on medical students' attitudes and knowledge of tobacco issues by Richmond published in this issue of *Thorax* is therefore cause for concern.<sup>7</sup> In UK medical schools between 11% and 35.7% of students use tobacco daily, while in North America single percentage figures are reported. This contrasts sharply with areas of Poland and Spain where 61% of medical students use tobacco daily. Many students start or increase their use of tobacco as they progress through medical school. The reasons for this are not obvious but may relate to inadequate knowledge of smoking related diseases and peer pressure/role models, not only from qualified doctors and more senior students but from other health care professionals.

Richmond also highlights deficiencies in the teaching of tobacco related diseases and methods of smoking cessation. Few medical schools include smoking related diseases as a distinct topic within the curriculum and the teaching that does occur is usually within the context of lectures on more general respiratory and cardiovascular systems. With the large amount of information to deliver, sufficient time and appropriate content within the curricula are essential. Formal lectures improve knowledge but not the counselling skills required for smoking cessation. More imaginative teaching methods such as role play and small group working probably have a great deal more to offer.

Several teaching programmes using these methods have been developed, although as yet there is little information on the quality of outcomes resulting from this approach. Fundamental to this teaching, however, is the concept of Stages of Change<sup>8</sup> which recognises that smokers pass through a cycle of continued tobacco use, pre-contemplation, contemplation, and actual smoking cessation. Advice and support to those considering stopping smoking is more likely to be successful than in those who are not, but this group may also be prepared to consider stopping if asked at a subsequent consultation.

What are the essential messages from the review? The worldwide burden of tobacco related problems will continue to rise as new markets are developed. To minimise the impact of this a series of measures will be necessary, including better programmes for smoking cessation. To be effective these require primary care doctors who are knowledgeable about the problems of smoking and have the appropriate counselling skills. With the current training many medical students will qualify unable to provide such a service. The undergraduate and postgraduate training of smoking related issues needs to be addressed urgently.

M B ALLEN

*Chairman, BTS Education Committee,  
British Thoracic Society,  
New Garden House,  
78 Hatton Garden,  
London EC1N 8JR, UK*

- 1 Parrott S, Godfrey C, Raw M, *et al*. Guidance for commissioners on the cost effectiveness of smoking cessation interventions. *Thorax* 1998;**53** (Suppl 5, Part 2):S1–38.
- 2 NHS Executive. *Improving outcomes in lung cancer: guidance on commissioning cancer services*. London: 1998.
- 3 Murray CJL, Lopez AD. Alternative projections of mortality and disability by cause 1990–2020: Global Burden of Disease Study. *Lancet* 1997;**349**:1498–504.
- 4 Russell MAH, Wilson C, Taylor C, *et al*. Effect of general practitioners' advice against smoking. *BMJ* 1979;**2**:231–5.
- 5 Agency for Health Care Policy and Research. *Smoking cessation*. Clinical Practice Guideline No 18, Agency for Health Care Policy and Research, 1996.
- 6 Raw M, McNeill A, West R. Smoking cessation guidelines for health professionals. *Thorax* 1998;**53**(Suppl 5, Part 1):S1–19.
- 7 Richmond R. Teaching medical students about tobacco. *Thorax* 1999;**54**:70–8.
- 8 Prochaska JO, DiClemente CC. Towards a comprehensive model of change. In: Miller WR, Heather N, eds. *Treating addictive behaviours: process of change*. New York: Plenum Press, 1986: 3–27.