Targeting smokers in the hospital setting

Smoking cessation is a government priority to reduce the future burden of smoking-related disease. Targeting smokers in the secondary care setting is often overlooked, and should be part of a hospital doctor's role in treating these patients.

As most people are aware, smoking remains a significant threat, not only to the individual but also to health service budgets. Although smoking rates have dropped over the last 30 years, it still remains the single biggest health-care problem in the UK today and the slowing down in the reduction in the number of smokers over the past decade is of great concern. With 12 million adult smokers (Action on Smoking and Health, 2005) in the UK and 120 000 people dying from smoking-related diseases every year (Department of Health, 1998), health-care professionals need to act to further reduce the number of smokers, ultimately reducing the burden to individuals, as well as the NHS.

Treating the premature illness and disease caused by smoking is estimated to cost the NHS between £1.4 and £1.7 billion a year in England (Department of Health, 2004a). Not surprisingly, smoking is now a government priority, with the health improvement targets for the UK aiming to reduce adult smoking rates from 26% in 2002 to 21% or less in 2010 (Department of Health, 2004b).

The problem spans many different medical disciplines and an effective approach needs to be implemented across the whole NHS to achieve successful reduction in the number of smokers. While the government has a strategy in place to provide more effective smoking cessation services within primary care, there is also the opportunity to identify smokers in the secondary care setting, such as those who have suffered heart attacks or strokes, possibly linked to smoking, and offer them advice and direction on giving up. This approach is particularly important for those who work in specialities involved with cardiovascular diseases, such as cardiology and vascular surgery, as well as those in respiratory medicine and oncology.

Goals for smoking cessation

Since 1978 the prevalence of cigarette smoking among adults has dropped substantially, although this decline has levelled out since the 1990s (National Institute for Clinical Excellence, 2002) to a reduction of at best 0.4% per year (Jarvis, 2003). The government has laid out plans to further lower the number of adult smokers in the UK to 21% (Department of Health, 2005) – meaning 2 million fewer smokers (Fowler, 2000). However, it has been recognized that current strategies are unlikely to be sufficient to achieve this and new strategies must be developed to help meet the targets (Milne, 2005).

Smoking cessation is now clearly established as a central component of 'best medical therapy' for a wide range of conditions (Ferguson et al, 2005; Judge et al, 2005), and comfortably meets the benchmark of £20 000 per quality adjusted life-year (QALY) saved set by the National Institute for Health and Clinical Excellence (NICE) (Godfrey et al, 2005). Just as doctors in secondary care who deal with smoking-related conditions need to understand the treatments of the diseases themselves, it should also be part of the curricula relating to specialist training to understand strategies to aid smoking cessation, the range and use of nicotine replacement therapy (NRT), as well as something of the psychology of addiction and approaches to counselling (Raw et al, 2005).

Targeting smokers in the secondary care setting

There is no doubt that the majority of secondary care physicians recognize the importance of smoking cessation. However, there is often a perception that it is unrealistic for secondary care to provide the intensive support required for a successful stop attempt using counselling and NRT or other interventions. Previous targets set within the National Service Frameworks focused on improving standards of acute care in the secondary care setting. The onus is now shifting on improving disease prevention such as smoking cessation, and this focus spans all levels of the health-care system.

Research has shown that smokers are more likely to succeed with help and support from health-care professionals (Fowler, 2000), and that combining NRT and brief advice can improve long-term cessation rates by 9% (Parrott, 1998). Although guidance should be provided within local integrated care pathways, at present there are no specific secondary care-wide directives setting a required standard of care for smoking cessation or monitoring of any local strategies. The authors regard this as a major failing in the system. Secondary care physicians are in fact perfectly placed to target those smokers who may, for the first time in their lives, be considering a stop smoking attempt following a major health scare from a heart attack or similar serious medical event. In addition, these patients often require a period of inpatient treatment making them available for intensive support. This is particularly relevant since most hospitals have strict no smoking policies for patients. A study by Ong et al showed that hospital admission for a smoking-related disease was among the predictors for continued abstinence after secondary-care cessation advice (Ong et al, 2005). Successful stop attempt rates after hospitalization are often significantly higher even in lighter smokers as, understandably, this is a point where the effects of their smoking have noticeably impacted on the individual (Rigotti et al, 1991).

The effect of stopping smoking on the secondary care arena

A problem for health-care professionals remains that, despite knowing that smoking may kill them, 50% of smokers continue to smoke after a heart attack (Hasdai et al, 1998). This is a common pattern seen across Europe as demonstrated in a European survey of 5500 patients in 15 countries, which looked at people who had experienced heart attacks, blocked or narrowed arteries and angina (Scholte op Reimer et al, 2006). Researchers found fewer than half of smokers gave up smoking after a life-threatening heart problem and one out of five did not quit smoking, despite being advised to do so. Yet it is known that smoking cessation results in a 35% reduction in relative risk of mortality (Critchley et al, 2003), with inpatient smoking cessation advice decreasing immediate and long-term mortality in patients following myocardial infarction (Houston et al, 2005).

We also know that more than two-thirds of smokers would like to quit, but only a tiny fraction (3%) are successful each year (Benowitz, 1999). Thus giving appropriate help in an appropriate setting provides the individual with a greater chance of successful cessation. Stopping smoking using willpower alone can achieve 3% successful cessation at 1 year, however, this can be doubled if pharmacotherapy such as NRT is used and a far greater success (up to 20%) is achieved if both behavioural and treatment support are provided (Fowler, 2000). Therefore, advice alone in the secondary care setting is beneficial (Rigotti et al, 2002) but may be insufficient for the quit attempt to be sustained (Hennrikus et al, 2005), particularly in the absence of NRT.

Another problem is the assumption made by many smokers who have just had a major vascular event; a commonly asked question is 'Is it too late for stopping to do any good now?' It is important to respond (or even pre-empt) this question in a strong positive fashion, using key facts to disabuse the patient of this view. For example, the risk of developing coronary heart disease is reduced by half after 1 year of abstinence, and after 2 years is nearly equal to that of non-smokers (Rosenberg et al, 1985).

Improving chances of success through referral programmes

Even brief, opportunistic and unsolicited smoking cessation advice delivered by physicians can prompt quit attempts in up to 40% of patients receiving such advice (Russell et al, 1979; Cokkinides et al, 2005; Puska et al, 2005) and this can be further increased by referral to a local stop smoking service.

One way of reinforcing this is the use of AMORE (Ask MOtivate and REfer) (McRobbie, 2005) in secondary care. An alternative is to consider the five As to aid smoking cessation (*Table 1*) (Anderson et al, 2002). Referring patients to their local smoking cessation service in primary care can help ensure the treatment advice issued in secondary care is followed and provides an opportunity for patients to receive additional behavioural support. Unfortunately, in the current system such referrals are not usually made directly but often require the patient to go through the intermediate (and perhaps unnecessary) step of seeing their GP.

Behavioural support and advice from a clinic run by smoking cessation specialists is effective in helping smokers quit. In smokers motivated to quit, a programme of support involving multiple contacts for a period of 4 weeks or more, given by specialists employed and trained for the purpose, approximately doubles success rates even in smokers not using NRT or bupropion (West et al, 2000).

In patients using these medications the odds ratio of smoking cessation using NRT *vs* placebo is 1.74 (National Institute for Clinical Excellence, 2002). NICE has endorsed NRT as the most cost-effective of any health intervention. However, the authors believe that there is often a fundamental problem in providing NRT to hospitalized patients in the UK. Referral for smoking cessation counselling is often not initiated early, missing opportunities when the patient's motivation may be at its highest. Those specialities dealing with large numbers of patients with smoking-related diseases ideally need a 'package' approach to lifestyle modification, which includes smoking cessation advice delivered at an early stage. Simply referring back to primary care for this may not always be appropriate.

One of the situations that the authors frequently witness is that of a patient hospitalized after a major smok-

Table 1. The 5 As for smoking cessation

Ask	Systematically identify smokers at each consultation
Advise	Clear, strong, personalized and unequivocal advice to quit
Assess	Assess patient's current or future willingness to make a quit attempt
Assist	Help the patient stop, e.g. smoking cessation counselling, setting a quit date, nicotine replacement therapy
Arrange	Arrange follow ups to occur around the time of the quit date or shortly after

Based on Anderson et al (2002)

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ing-related disease event, who actually stops smoking during and immediately after their period of time in hospital. This is much more common now since the advent of smoking restrictions in most hospitals. Unfortunately, many patients are not given any back-up counselling or NRT at discharge to help them continue the quit event. Not surprisingly many of them relapse immediately or within a short time. Simple training in smoking cessation counselling and NRT has been shown to be an effective means of equipping the secondary care physician with the necessary knowledge to support patients in the early period of a quit attempt (Steinemann et al, 2005).

Conclusions

A combination of pharmacotherapy and multi-session behavioural support produces the best outcomes in smoking cessation and, for the best chances of success, all health-care professionals should refer smokers on to the NHS Stop Smoking Service, which provides effective treatment for smokers who want to give up. Physicians in the hospital setting are in an ideal situation to focus on those patients already suffering from a smoking-related illness, and take responsibility for directing them to appropriate stopping smoking care, thus reducing the likelihood of further events. Knowledge about smoking cessation should be part of speciality training programmes and intensive support should be provided for those strongly motivated to quit at an early stage after a major acute event. BJHM

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KEY POINTS

- Smoking cessation is a government priority.
- The focus on improving disease prevention spans all levels of the health-care system.
- Targeting smokers in the secondary care setting is often overlooked, but there are many opportunities to help smokers stop during their stay in hospital.
- Patients may be more motivated to stop smoking at an early stage after an acute event, whether this is smoking-related or not.
- For the best chances of success, all health-care professionals should refer smokers on to the NHS Stop Smoking Service.

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