Smoking cessation 1: best practice and treatment and support options for patients

An outline of the public health risks posed by smoking, its addictive qualities, recent guidance on cessation and different treatment options available

INTRODUCTION
Tobacco is the leading preventable cause of death in the world today. Over 5 million people die from its effects every year – more than from HIV/Aids, malaria and tuberculosis combined.

Half of all lifelong cigarette smokers die from smoking, typically losing 10 years of life (World Health Organization, 2008).

In the UK, smoking is the biggest public health problem, killing 104,000 people every year. Despite the much publicised evidence of the dangers, around 22% of adults (10 million people) still smoke (Royal College of Physicians, 2008). Many smokers describe tobacco use as simply a “bad habit”, ignoring its extreme addictiveness and the wide range of health problems it causes.

SMOKING AND ADDICTION
While cigarettes look like simple rolls of tobacco encased in paper, they are highly engineered products that ensure nicotine, the addictive substance found in tobacco, reaches smokers’ brains seconds after they inhale the cigarette.

Smokers rapidly form dependence on the “hit” they receive from nicotine, which makes it hard for them to stop. While people smoke to get nicotine into their blood, it is the other constituents of smoke – the chemicals, toxins, tar and carbon monoxide – that damage their health.

As well as physiological dependence, the habit of smoking is reinforced and sustained by a range of behavioural factors, including sensory, behavioural and social conditioning.

For example, many smokers are prompted to light up by cues, such as seeing others smoke, having an alcoholic drink, ending a meal or talking on the phone. Others use cigarettes to take a break, help them relax or as a reward at the end of a task. These stimuli will continue to be present when smokers decide to stop and are often responsible for relapse. New habits have to be established, which can take time.

When smokers try to stop they are also affected by an unpleasant withdrawal syndrome. Dependence on nicotine is classified as an addiction, as these strong withdrawal symptoms make stopping extremely difficult. Table 1 shows the main withdrawal symptoms and their likely duration (RCP, 2000).

Withdrawal symptoms begin within a few hours after having a cigarette. If they are not relieved by another cigarette, they worsen. Smokers therefore tend to smoke regularly to feel “normal” and prevent these symptoms.

Stopping is difficult because people need to overcome their addiction to nicotine, break a long established habit and cope with physical withdrawal symptoms simultaneously. These combined challenges explain why only 3% of smokers who try to quit using willpower alone succeed. When smokers are given

<table>
<thead>
<tr>
<th>Withdrawal effect</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Night-time waking</td>
<td>&lt;1 week</td>
</tr>
<tr>
<td>Poor concentration</td>
<td>&lt;1 week</td>
</tr>
<tr>
<td>Anxiety</td>
<td>&lt;2 weeks</td>
</tr>
<tr>
<td>Restlessness</td>
<td>&lt;2 weeks</td>
</tr>
<tr>
<td>Decreased adrenalin</td>
<td>&lt;2 weeks</td>
</tr>
<tr>
<td>Urges to smoke</td>
<td>&gt;2 weeks</td>
</tr>
<tr>
<td>Irritability/aggression</td>
<td>&lt;4 weeks</td>
</tr>
<tr>
<td>Depression</td>
<td>&lt;4 weeks</td>
</tr>
<tr>
<td>Decreased heart rate</td>
<td>&gt;10 weeks</td>
</tr>
<tr>
<td>Increased appetite</td>
<td>&gt;10 weeks</td>
</tr>
</tbody>
</table>

Source: Royal College of Physicians (2000)

Keywords: Smoking cessation | Tobacco addiction | Behavioural support

AUTHOR Jennifer Percival, FETC, DipCouns, HV Cert, RM, RGN, is RCN tobacco policy adviser and National Stop Smoking trainer.


This first in a two-part unit on smoking cessation examines why smoking is so addictive and how healthcare professionals can support patients to quit. It outlines treatment options such as pharmacotherapy and behavioural support.
ongoing motivational support, treatment and follow up, the percentage who quit for 12 months without relapsing increases to 20% (RCP, 2000; West et al, 2000).

HELPING SMOKERS TO QUIT
NICE (2008; 2006) guidance says that:
● All healthcare professionals should repeatedly and consistently deliver smoking cessation interventions or referrals;
● Patients who are planning to stop smoking should be offered nicotine replacement therapy (NRT), varenicline or bupropion, as appropriate;
● Individual behavioural counselling, group behaviour therapy and telephone counselling and quit lines have been proven to be effective, separately or combined with other treatments.

The DH (2009) confirms that combining behavioural support from a smoking cessation adviser with a pharmacotherapy product increases smokers’ chances of successfully stopping by up to four times.

A key message from this guidance is that all smokers should be advised to quit and offered evidence based support, regardless of whether they express a desire to stop. It adds: “A second key message is that evidence based NHS support to stop smoking is highly cost effective and clinically effective and should always be offered to people who express an interest in stopping” (DH, 2009).

Many healthcare professionals face time pressures so, taking this into account, the DH has launched a brief intervention guide called the 3As (Fig 1). This shows how to start a conversation with patients, taking just 30 seconds to record their smoking status, give advice and make a referral to an NHS Stop Smoking Service. This kind of intervention is referred to as “very brief advice” (DH, 2009).

More intensive interventions (although still referred to as brief) typically take 5-10 minutes and may include one or more of the following (NICE, 2006):
● Simple opportunistic advice to stop;
● An assessment of patients’ commitment to quit;
● An offer of pharmacotherapy and/or behavioural support;
● Provision of self-help material and referral for more intensive support such as NHS Stop Smoking Services.

TREATMENT PRODUCTS
The three smoking cessation medications approved by NICE (2008) are NRT, varenicline (Champix) and bupropion (Zyban). These are all safe, effective medications that significantly improve smokers’ chances of stopping. NICE says smoking cessation advisers and healthcare professionals may recommend and prescribe one of these three to help people quit smoking, along with giving advice, encouragement and support, or referral to a smoking cessation service.

Varenicline and bupropion are prescription-only medicines, NRT is available both on prescription and over the counter and some products – gum, patches and lozenges – are also sold in a number of supermarkets.

NICE (2008) recommends that one medication should not be favoured over another, and that practitioners and patients should choose the one most likely to succeed, taking into account a range of factors including contraindications.

NRT
There are six different types of NRT: patches (24 and 16 hour); gum; lozenges; microtabs; a nasal spray; and inhalators. There is no evidence to suggest that one type of NRT product is more effective than another, so product selection can be guided by individual preference.

General information for each type is given below for commonly used brands of NRT products, but prescribers should always check the British National Formulary as different brands of the same type of product may have different instructions for use.

● Transdermal patches: these release nicotine, which is slowly absorbed through the skin. Levels in the blood rise over a period of hours and provide a steady level of nicotine. There are 16 and 24 hour versions available. Unless people smoke fewer than 10 cigarettes per day, manufacturers recommend starting with the highest dose. Patches come in different strengths that allow users to wean themselves off them over 12 weeks (BNF, 2009).

● Nicotine gum: this releases nicotine through chewing, which is absorbed through the mucous membrane. There are 2mg and 4mg dosages (BNF, 2009). Adults use 10-15 pieces a day for up to three months; after this they should gradually reduce their usage.

● Nicotine nasal spray: nicotine in the spray is rapidly absorbed into the bloodstream from the nose. The spray mimics a cigarette in that smokers get a rapid increase in nicotine levels similar to that from cigarettes. This may help to relieve sudden surges of craving. Smokers who still experience severe craving and withdrawal with other NRT products should try a nasal spray.

● Nicotine microtabs and lozenges: tablets and lozenges are taken orally and need to dissolve in the mouth and not be swallowed. Nicotine is absorbed through the mouth into the bloodstream. These formulations deliver nicotine in the same way as gum.

● Nicotine inhalators: nicotine cartridges are inserted into a plastic device and patients inhale as they would with a cigarette. Each
cartridge provides up to three 20 minute sessions. These should be used with about 6-12 cartridges a day for up to eight weeks, then gradually reduced over a further four weeks (BNF, 2009). They are particularly suitable for smokers who are trying to change their behavioural pattern but miss the hand to mouth movement of smoking.

**People who can use NRT**

While NRT can be used by smokers aged 12-17 years, pregnant and breastfeeding women and patients with unstable cardiovascular disorders, NICE (2008) recommends its risks and benefits should be explained to these groups. To maximise the benefits of NRT, these patients should also be strongly encouraged to use behavioural support.

NRT is generally used for 8-12 weeks, and some forms can be used for up to nine months (BNF, 2009). Patients should be encouraged to stop using NRT as soon as possible. If they need to use it for longer than nine months, they can do so if advised by a healthcare professional (Medicines and Healthcare products Regulatory Agency and Committee on Safety of Medicines, 2005).

Using NRT can enable people to try to break the behavioural side of their smoking habit. Several forms are licensed to help people reduce the amount they smoke, and by doing this, they gain confidence in it before they stop smoking completely.

DH (2009) guidance says that combination therapy – that is, using two NRT products such as a patch plus an oral preparation concurrently – has been shown to have a “moderate advantage” over using just one. Offering combination therapy if smokers have found a single form of NRT inadequate can increase their confidence to try again.

**Bupropion**

Bupropion was first developed as an antidepressant but was subsequently found to help people quit smoking. It is thought to be equally as effective as NRT and can almost double the chances of long term abstinence from smoking (Roddy, 2004).

It is a prescription-only medication, in pill form, that should not be used with any other smoking cessation medication. It works by reducing the severity of nicotine cravings and withdrawal symptoms (Roddy, 2004).

Unlike NRT, which is used from the point of quitting smoking, bupropion is used for 1-2 weeks before the target stop date (BNF, 2009). It has a number of contraindications, such as a history of bipolar disorder and seizures. Side-effects include insomnia, dry mouth and gastrointestinal disturbances (BNF, 2009).

The decision to use bupropion must depend on client preference and consideration of contraindications and cautions for its use – see the BNF and NICE (2008) for more detail. It should not be used in people under 18 or pregnant or breastfeeding women (NICE, 2008).

**Varenicline**

Varenicline is the first drug to be specifically developed to help smokers quit. The drug is for adults aged 18 and over, available on prescription only and taken orally. It both reduces the urge to smoke and relieves withdrawal symptoms. It should normally be prescribed only as part of a programme of behavioural support (BNF, 2009).

Varenicline is not recommended for people under 18, or pregnant or breastfeeding women (NICE, 2008). According to the BNF (2009), it should be used with caution in those with renal impairment and a history of psychiatric illness. As suicidal thoughts and behaviour have been reported in patients taking varenicline, those with a history of psychiatric illness should be monitored closely while taking it (BNF, 2009).

Prescribers also need to be aware that patients trying to stop smoking may develop symptoms of depression (European Medicines Agency, 2007).

The most commonly reported side effect is nausea, according to the manufacturer’s summary of product characteristics. This is often mild and tolerable and can be reduced by taking tablets with meals.

**NHS STOP SMOKING SERVICES**

The UK has the world’s first network of free services, providing counselling and support to anyone wanting to quit. These services, established 10 years ago (West et al, 2000; Raw et al, 1998) are led by specialist advisers who deliver treatment over the course of quit attempts.

Staff can provide guidance on using medication, information and advice on withdrawal symptoms and support to boost self-confidence. Smokers who attend these services are up to four times more likely to quit smoking successfully than those who make unaided attempts to quit (DH, 2009).

**CONCLUSION**

Smoking is classified as a chronic relapsing dependency syndrome because the majority of smokers are addicted to nicotine. Many have tried to stop smoking by themselves and failed.

Healthcare professionals need to take the time to outline the ways in which the NHS can help people quit as, without support, many may continue to find it hard to stop smoking. By providing clear information on the support and treatments available, and offering a referral to NHS Stop Smoking Services, nurses can help to save lives.

Part 2 of this unit, to be published in next week’s issue, examines smoking cessation in hard to reach groups.

**REFERENCES**

BNF 57, 2009.


tinyurl.com/tobacco-advisory
