Helping patients to stop smoking tobacco will become more important when mental health inpatient units adopt smoke-free zones. But a change in the law should not be the driver to address this huge public health problem. Mental health nurses are in an ideal position to support patients seeking to abstain from or reduce their use of nicotine while they are in hospital, and to encourage continued abstinence following discharge. This article examines the number of fatal conditions associated with nicotine use and how mental health nurses can use prescriptive authority to support nicotine reduction programmes. We argue that nurse prescribers, suitably trained and skilled to administer behavioural and pharmacological interventions, will support efforts to help patients stop smoking.

The road to nurse prescribing
Nurse prescribing began in the 1980s, pioneered by district nurses. They were first able to prescribe from a limited formulary, but over the past four years prescriptive authority has been extended and changed to include supplementary and independent prescribing (SP and IP) (Department of Health (DH) 2006). With SP, the nurse can prescribe medications from a clinical management plan (CMP) agreed with the psychiatrist. Mental health nurses can also use IP. There will be no need for a CMP, so IP will make it less bureaucratic for nurses to prescribe medication (Jones and Jones 2005).

There have been examples of nurses using SP on acute psychiatric units to good effect (Jones 2006, Jones et al 2007). SP helps patients to exercise choice (Jones and Jones 2007a, 2007b), provides a framework for medication management and supports new ways of working (Jones and Harborne 2005). Research evidence backs the suggestion that patients like to have their medication needs overseen by nursing staff (Jones et al 2007). Nurses and psychiatrists also see promise of SP being used to good effect on psychiatric units (Jones 2006). Nurse prescribing, whether through SP or IP, may therefore support smoking cessation.

Smoking and people with mental health problems
Up to 35 per cent of people in the UK smoke cigarettes, rising to 50 per cent for people with depression. Up to 88 per cent of people with schizophrenia smoke (Hughes et al 1986).
and Glassman (1993) found that they usually use high-tar cigarettes. McCreadie (2003) noted that 54 per cent of people diagnosed with schizophrenia and who smoked had a desire to stop. This gives services a clear obligation to help people stop.

The biggest cause of death in the UK is health conditions caused by smoking (Bentley and Bennett 2007). The problems associated with smoking lead to coronary heart disease, respiratory conditions and cancers (Rigotti et al 2001). People who have mental health problems double their likelihood of dying from cardiovascular disease and quadruple their chances of dying from respiratory problems (Brown et al 2000). However, these people are less likely to be offered assessment or intervention to help them stop smoking and improve their physical health status (Phelan et al 2001).

A number of studies have found that nurses and patients actually reinforce each other’s desire to smoke. Nurses believe that it helps patients to calm down and that smoking helps establish a rapport (Jochelson and Majrowski 2006). Patients think that nurses should smoke with them (Stubbs et al 2004). This finding may be a throwback to the institutional way of thinking about providing care and it must stop if we are to promote smoking cessation in hospital settings.

Relationship between dopamine and nicotine

The incidence of smoking in people with schizophrenia has puzzled mental health workers for decades. Examination of the dopamine hypothesis and schizophrenia may provide some clues. Nicotine activates many of the pathways associated with schizophrenia. It is thought to modulate the amount of dopamine and therefore has a different effect on positive and negative symptoms of schizophrenia compared with people who do not smoke (Brown et al 2000). A part of the brain believed to be associated with this mechanism is the nucleus accumbens where nicotine increases dopamine synthesis (Carr et al 1989). Some suggest that patients with negative symptoms of schizophrenia are more likely to smoke (Patkar et al 2002).

A theory has been put forward that nicotine may alleviate some of the symptoms of schizophrenia. Zeidonis et al (1994) argued that nicotine helps to improve concentration and, importantly, to filter out peripheral noises. This effect is believed to take place in the hippocampus pathway. This theory helps to explain why the negative symptoms of schizophrenia may improve in patients who smoke.

Patients who smoke may also experience a reduction in their drug side effects. Ereshefsky et al (1985) suggest that nicotine leads to an increased clearance of up to 67 per cent for drugs like haloperidol and fluphenazine. Evidence to support this theory is presented by Zeidonis et al (1994) who found that only 21 per cent of smokers had movement disorders compared with 32 per cent of people with schizophrenia who did not smoke. Binder et al (1987) and Goff et al (1992) have also suggested that people who do not smoke have an increased tendency to develop tardive dyskinesia, an involuntary movement associated with high-potency antipsychotic drugs.

Typical and atypical neuroleptic medication

Smoking cigarettes causes an interaction with some types of medication prescribed for schizophrenia. This is because smoke contains polycyclic aromatic hydrocarbons that then stimulate the P450 group of enzymes, specifically CYP1A2, which is involved in the metabolism of some psychiatric drugs such as benzodiazepines and neuroleptics (Lyon 1999). Other drugs such as beta blockers, warfarin and insulin are also involved in this form of metabolism. Nicotine has the effect of lowering the plasma level of antipsychotic medication by up to 50 per cent for typical neuroleptics (Perry et al 1993). That is why nurses may find people with schizophrenia prescribed higher doses of medication. Table 1 shows common drug interactions with nicotine.

Acute psychiatric wards – opportunities for nurse prescribers

Admissions to hospital for people experiencing mental health problems can be traumatic. First onset symptoms or a relapse state can make patients feel anxious. People smoke to control these feelings of anxiety. However, admission to hospital may mark a period in people’s lives when they are receptive to health interventions to curb or cease smoking. This is known as a ‘teachable moment’ (Rigotti et al 2001).

When people smoke in familiar environments, or in social contexts, smoking helps to complement the pleasurable experience. Hospital environments, because hospitals are smoke-free zones, a person’s ability to derive comfort from smoking will be limited. The physicality of a non-smoking zone helps to reinforce the cues for smoking cessation (Rigotti et al 2001).

Table 1. Common drug interactions with nicotine

<table>
<thead>
<tr>
<th>Drug</th>
<th>Action of smoking</th>
<th>Effect of smoking cessation on serum concentrations</th>
<th>What to do with current medication if giving nicotine replacement therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzodiazepine</td>
<td>Smoking stimulates central nervous system, hence reduced hypnotic effect</td>
<td>Patients may report increased sedation</td>
<td>Reduce the dose</td>
</tr>
<tr>
<td>Chlorpromazine</td>
<td>Reduces serum concentrations</td>
<td>Increased side effects such as extra-pyramidal side effects (EPSEs), sedation</td>
<td>Reduce the dose</td>
</tr>
<tr>
<td>Clozapine</td>
<td>Reduces serum concentrations</td>
<td>Increased sedation and hypotensive effect</td>
<td>Reduce the dose</td>
</tr>
<tr>
<td>Haloperidol</td>
<td>Reduces serum concentrations</td>
<td>Increased EPSEs</td>
<td>Reduce the dose</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>Reduces serum concentrations</td>
<td>Increased risk of metabolic syndrome</td>
<td>Reduce the dose</td>
</tr>
</tbody>
</table>

Adapted from North West Medicines Information Centre, Liverpool (2006)
Nurse prescribers need to be aware whether patients smoke when prescribing antipsychotic medication. Simply telling the patient to stop is likely to be ineffective and potentially harmful, given that nicotine is associated with control of symptoms, drug clearance from the body and side effect modulation (Dalack and Meador-Woodruff 1996). Interventions should not advocate abrupt withdrawal of nicotine, so services need to promote nicotine reduction.

Assessment
Anecdotal experience suggests that mental health nurses do not routinely ask their patients about the frequency of their smoking habits and their motivation to cut down. Recording the smoking status of the patient on admission and his or her readiness to stop should be the first step (Jochelson 2006). We believe that mental health nurses are ideally placed to collect this smoking-status information, while nurse prescribers could outline behavioural and pharmacological options to reduce nicotine intake (Jochelson 2006). Box 1 lists a number of relevant areas that nurses need to explore if they are to prescribe medication to support smoking cessation.

Nurses should be mindful that patients may stop taking their medication abruptly. They should observe for increased positive and negative symptoms, and side effects, which may increase. The emergence of chronic disease management is well suited to cardiac and respiratory conditions. Smoking cessation should be viewed in the same light (Anderson et al 2002).

Mental health nurses should not view smoking cessation as a single-entity intervention, but as a pragmatic long-term approach that emphasises phased reduction rather than abrupt discontinuation. Advice has been published on the role of nicotine-replacement therapy (NRT) for patients with co-existing medical conditions (Medicines and Healthcare Products Regulatory Agency 2005). For example, patients who have experienced a recent myocardial infarct should be encouraged to stop smoking and to use non-pharmacological interventions to help them quit.

Box 1. Factors to consider when prescribing smoking-cessation medication
- Nicotine intake
- Interaction between nicotine and prescribed medication
- Metabolism of drugs
- Health expectations
- Interaction with other drugs
- Use of nicotine to control symptoms

Mental health nurses have a duty to monitor and treat physical health conditions

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Mental health nurses need to be able to assess potential patients for smoking cessation. Patients should be offered a counselling service that includes intensive one-to-one sessions, and steps should be taken to develop group smoking-cessation sessions so that patients can be offered peer support. Those who are offered combined pharmacological and psychosocial approaches to smoking cessation may benefit the most.

Treatment
There are two types of pharmacological treatment to support smoking cessation: bupropion and NRT (British National Formulary (BNF) 2008). Both are recommended treatments to support smoking cessation (National Institute for Health and Clinical Excellence 2006), although the mode of action of bupropion is unknown. NRT works by replacing a certain proportion of the nicotine in cigarettes. The aim is to reduce the withdrawal effects from nicotine. NRT is one of the most popular pharmaco-therapy aids to support people to stop smoking (Benowitz et al 2002) and should be prescribed as part of a smoking cessation programme. Treatment should only be administered when the patient has been assessed fully and where the risks of treatment have been carefully documented in the patient’s record. There are different NRT options, and one that meets the needs of the patient should be chosen (Box 2).

NRT therapy using patches
NRT patches come in different strengths. For those who smoke fewer than 20 cigarettes per day, the nurse can prescribe a 14mg patch to be applied to the trunk or arm and which will last the patient for 24 hours. After each 24-hour period, the patch is removed and a new one applied to a different area on the arm. This treatment should be reviewed every three to four weeks and then a lower strength 7mg patch prescribed for a further three to four weeks. The aim is to reduce the dose to zero (BNF 2008).

If the patient smokes more than 20 cigarettes a day, the nurse prescriber could start by prescribing a 21mg patch and review it in three to four weeks. Again, the aim of treatment is to reduce the dose to zero (BNF 2008).

There have been a number of trials to test smoking-cessation programmes that use behavioural and pharmacological interventions singularly or together. Zeidonis and George (1997) found that more than half of their sample completed the programme and 40 per cent reduced their smoking intake by 40 per cent, 13 per cent were abstinent for six months. Riggotti et al (2002) concluded in their Cochrane review of interventions to help patients hospitalised for physical reasons to stop smoking that brief interventions on their own are ineffective. NRT is required alongside specific addiction interventions provided both in hospital and following the patient’s discharge (West 2002).

Conclusion
The ban on smoking in acute inpatient units requires a systematic approach to help patients abstain or gradually withdraw from their nicotine habit. Simply expecting patients to stop is likely to fail, but stopping suddenly may increase side effects and symptom profile. Notwithstanding the shortened life expectancy of people with schizophrenia and those who smoke, mental health nurses have a duty to monitor and treat physical health conditions (DH 2006). Nurses are the largest professional group working in mental health and have the most frequent patient contact on a day-to-day basis. They are in an ideal position to deliver these interventions. But for this strategy to succeed, mental health nurses should strive to remove what Jochelson (2006) labels the ‘smoking culture’ evident in acute units.

Mental health services need to acquire the advanced skills that sit alongside prescriptive authority and tackle this urgent public health issue. We hope the advice and evidence that have been presented in this article will propel mental health nurses towards taking a lead in addressing this agenda.

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