Nursing Practice
Discussion
Teenage smoking

Adolescents’ motives to start and quit smoking differ from adults’, and their vulnerability to dependence makes prevention and refusal skills priorities

Strategies to help adolescents stop smoking

In this article...

- Why adolescents take up smoking
- The role of the media in teenage smoking
- Smoking cessation interventions for adolescents

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Abstract

Since most people who smoke begin doing so during adolescence, there is a need for an effective intervention aimed at this age group. This article looks at the factors that increase the probability of smoking and tobacco addiction during adolescence, and concludes with some useful approaches to smoking cessation.

Keywords: Smoking cessation/Teenagers/Education/Prevention/Intervention

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5 key points

1. Adolescents’ smoking habits are influenced by peer pressure and socioeconomic status
2. Adolescents know the health risks of smoking; they need help with refusal skills to resist smoking the first cigarette
3. Smoking cessation interventions need to be more complex than those aimed at adults
4. Adolescents can be addicted to nicotine without smoking every day
5. Brief and persistent interventional by nurses can be successful

Smoking can damage adolescents’ lungs (Bush, 2008) so that they may never achieve normal adult lung volumes and function. The belief that forced expiratory volume at one second (FEV1) is at its 100% predicted peak at the age of 25 is wrong; FEV1 may already be reduced at age 25, and this may be due to a range of factors such as low birthweight as well as smoking since adolescence (Calverley, 2000).

Starting to smoke in adolescence

Put simply, adolescence is the process of developing from a child to an adult. It comprises physical developments associated with puberty as well as psychological developments including that of an adult identity.

Peer and social influence

Adolescence is a period when an individual becomes more influenced by their peers. This point is especially important when considering the reasons why adolescents start smoking. According to several surveys and studies, a major factor that increases the probability of adolescents taking up smoking is the influence of their peers and role models, both in their immediate social circle and in the media (Box 1).

Droomers et al (2005) studied adolescents’ self-reported smoking behaviour and potential predictors of smoking. They found children were more than three times more likely to smoke if their friends smoked. Those who “preferred” smoking to non-smoking friends were more than six times more likely to smoke. Children’s attitudes to and health beliefs about smoking were also important.

Similarly, Snow and Bruce (2003) examined self-reported cigarette smoking status among adolescent girls. The study
was particularly concerned with the role of peer reputations, coping and self-concept as influences on teenage girls’ decision making with respect to smoking. They found that some adolescents used cigarette smoking as a way of achieving status among their peers.

Lucas and Lloyd (1999) surveyed children aged 11–16 and also organised focus groups for the girls surveyed (because more girls smoked in their sample). All participants were aware of the health risks of smoking. When smokers described their own smoking initiation, they often spoke of peer pressure, and described predatory instigators who were known to the new smoker but may not have been among their closest friends. Also important were the instigators’ claims that smoking just one cigarette would not hurt, that new smokers would not get addicted and that smoking was pleasant once you got used to it. Smokers were seen by their peers as fun-loving and nonconformist and cigarettes as a passport to an exciting and popular lifestyle.

A study by Epstein et al (1999) produced similar findings. They found that social influences from friends and family members predicted smoking and that anti-smoking attitudes and refusal skills lowered the odds of smoking. They concluded that it would be useful to increase the adolescents’ awareness of social pressures and to teach relevant psychosocial skills.

Rugka et al (2001) also identified peers as important and added that participants indicated that adolescent smoking is motivated by attempts to be seen as “cool” and “hard”, and to gain group membership. While adolescent smoking was seen to be oriented around social relations, the participants saw adult smoking differently. They saw adults as addicted and believed adults lacked control and used smoking to help them cope with life. The authors concluded that these ideas leave adolescents vulnerable to nicotine addiction.

**Guidance on peer pressure**

The influence of adolescent peers is reflected in National Institute for Health and Clinical Excellence (2010) guidance, which advises schools to develop smoke-free policies, crucially in consultation with young people, and indicates this should involve prevention activities that may be led by young people.

To mitigate the impact of peer pressure, NICE advocates interventions should aim to develop decision-making skills through active learning techniques, including strategies for resisting the pressure to smoke from the media, family members and peers.

**Films and the media**

Adolescents’ exposure to smoking is not restricted to their immediate social group. For example, Sargent et al (2001) hypothesised that greater exposure to smoking in films is associated with trying smoking among adolescents. They surveyed 4,919 children aged 9–15 years, and assessed the occurrence of smoking in 601 films. They found the prevalence of ever trying smoking increased with a higher exposure to smoking depicted in films. Of the participants who saw 0–50 occurrences, 4.9% had tried smoking, rising to 31.3% of those who had seen more than 150 occurrences. In this sample there was a strong, direct and independent association between seeing tobacco use in films and trying cigarettes.

NICE (2008) acknowledges the media can place pressure on children to start smoking. Its recommendations are aimed directly at mass media and include point-of-sales measures to prevent the uptake of smoking by children and young people.

In later guidance, NICE (2010) recommends that schools should develop strategies to resist media pressure to smoke.

**Culture and socioeconomic status**

While the role of peers and adolescent role models is of paramount importance, it is vital to remember the role of other factors, such as culture and socioeconomic status. Droomers et al (2005) found that adolescents whose fathers were classified in the lowest-status occupational group were twice as likely to smoke as those whose fathers occupied the highest status. The high risk of daily smoking was largely predicted by lower intelligence scores and by the higher prevalence of smoking among fathers and friends.

**Developing dependence**

In the Dandy study, DiFranza et al (2002) asked if there was a minimum duration, frequency or quantity of tobacco used before an adolescent developed symptoms of dependence. To establish if an adolescent was displaying signs of addiction, the Hooked on Nicotine Checklist (HONC) was used (Box 2). Focus group testing has established that youths understand the HONC items in the same way as adults.

DiFranza et al (2002) employed the autonomy theory of tobacco dependence to establish if the symptoms described by HONC are indeed indicative of addiction in adolescents. The autonomy theory states that the appearance of a single symptom of dependence indicates a loss of autonomy over tobacco use.

A sample of 679 adolescents aged 12–13 were interviewed to establish if they experienced any of the HONC symptoms. About half (332) had used tobacco and 40% of these reported symptoms. It was established that the number of HONC symptoms correlates strongly with the maximum amount smoked and the maximum frequency of smoking in adolescence.

The development of a single symptom strongly predicted continued use, supporting the theory that the loss of autonomy over tobacco use begins with the first symptom of dependence.

This study concludes that the symptoms of tobacco dependence develop rapidly after the onset of intermittent smoking, although individuals differ widely in this regard. Adolescents may begin to report symptoms when smoking as little as one day per month, and the reporting of sympotms strongly predicts continued use. Clearly, adolescents need to be equipped with the ability to avoid the first cigarette.

**Box 1. FACTORS IN UPTAKE**

- Peer pressure
- Role models
- Seeing actors smoking in films
- Low socioeconomic status
- Low intelligence scores

**Box 2. HOOKED ON NICOTINE QUESTIONS**

- Have you ever tried to quit, but couldn’t?
- Do you smoke now because it is really hard to quit?
- Have you ever felt like you were addicted to tobacco?
- Do you ever have strong cravings to smoke?
- Have you ever felt like you really needed a cigarette?
- Is it hard to keep from smoking in places where you are not supposed to, like school?
- When you tried to stop smoking, or when you haven’t used tobacco for a while: did you find it hard to concentrate because you couldn’t smoke?
- Did you feel more irritable because you couldn’t smoke?
- Did you feel a strong need or urge to smoke?
- Did you feel nervous, restless or anxious because you couldn’t smoke? DiFranza et al (2002)
Discussion

Smoking cessation approaches

The studies that explore the reasons adolescents start to smoke suggest that smoking cessation interventions have to differ from those aimed at adults.

Lucas and Lloyd (1999) concluded smokers were seen by their peers as fun-loving and nonconformist, and cigarettes as a passport to an exciting and popular lifestyle. When encouraging cessation, it may prove difficult to create an alternative that has the same appeal as the social representation of the smoker identity.

Similarly, Snow and Bruce (2001) found that some adolescents use cigarette smoking as a way to achieve a particular status among their peers, and asked what behaviour such young people might substitute for cigarette smoking to achieve their desired reputation.

Droomers et al (2005) concluded smoking cessation programmes need to be more complex than those aimed at adults, and suggested they provide positive, non-smoking role models consistent with the culture and norms of high-status groups. They also concluded that adolescents should acquire resistance skills and protective behaviours against social pressure and influences. These suggestions imply that interventions have to be individualised.

Few interventions have been shown to increase quit rates among young smokers. Branstetter et al (2009) examined psychosocial characteristics and smoking histories of 5,892 teenage smokers who participated in the American Lung Association’s Not On Tobacco (NOT) cessation programme. It was found those who did less well or even increased smoking following the programme were those who were heavier smokers at the start, more addicted and more likely to have parents, siblings and peers who smoked. This reinforces the message that prevention is important, and that teenagers need to be equipped with the ability to avoid smoking the first cigarette.

Smoking cessation programmes trialled with teenagers are wide ranging and can be complex. Mermelstein’s (2003) literature review described eight theoretical frameworks within 66 studies. Six approaches are listed in Box 3. Many people involved with smoking cessation will be familiar with the stages of change or transtheoretical model (TTM), which has six stages (Box 4).

A recent Cochrane review (Grimshaw and Stanton, 2010) of trials of smoking cessation in adolescence also acknowledged the complexity of many smoking cessation approaches, which combine components from various theoretical backgrounds. They indicated that most used some form of motivational enhancement combined with psychological support such as cognitive behavioural therapy (CBT) and some were tailored to the stages of change found in the TTM. The authors drew attention to the definition of cessation adopted by some trials, such as “one day or more”. These definitions must be challenged when considering young people’s episodic smoking patterns, which might involve, for example, smoking only at weekends. This goes some way to explaining why some reviewers deem trials to have positive outcomes, and others have a different interpretation of their claims.

The authors concluded there is not yet sufficient evidence to recommend widespread implementation of any one model. Trials of nicotine replacement products or bupropion did not give statistically significant effects.

In some respects, Grimshaw and Stanton’s (2010) conclusion is similar to that of Mermelstein (2003). The review found that interventions with positive outcomes were complex and designed to respond to the many issues that characterise young persons’ smoking. Complex interventions often contain components requiring one-to-one (or one-to-few) input.

Similarly, Mermelstein indicated it is vital to understand that considerable changes occur throughout the adolescent years and this has implications for whether we can ever have a one-size-fits-all intervention for all of the teen years.

Conclusion

Adolescence is a process that is profoundly influenced by peer pressure. Approaches designed for adults are less successful for younger people, and further research is urgently needed.

NICE (2008) recommends that nurses advise everyone who smokes to stop, and to refer them to an intensive support service. The smoking status of those who are not ready to stop should be recorded and reviewed with the individual once a year. This remains one of the most cost-effective and potentially rewarding things that health professionals can do.

References


BOX 4. STAGES OF CHANGE MODEL

1 Precontemplation, in which people are not intending to quit
2 Contemplation, in which people are thinking about quitting
3 Preparation, in which people are intending to quit and are making preparatory steps
4 Action, in which people modify their behaviour
5 Maintenance, in which people maintain efforts to quit
6 Termination, in which there is no temptation to return to smoking.

DiClemente et al (1985)