Support for Patients Who Have Difficulty Quitting Smoking: A Review

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Abstract:
Smoking cessation plays a crucial role in reducing preventable morbidity and mortality. However, some smokers find smoking cessation difficult, despite receiving treatment. This includes heavy smokers with chronic obstructive pulmonary disease, smokers with a psychiatric disorder, and female and underage smokers. This review article describes smoking cessation approaches for patients who find it difficult to quit smoking.

Key words: smoking cessation, support, treatment

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Introduction
Smoking is a leading cause of morbidity and mortality worldwide (1). The life expectancy of a smoker is at least 10 years shorter than that of a non-smoker, and two thirds of smokers die from a smoking-related illness (2). Although smoking cessation is crucial, 90-95% of smokers who try to quit smoking on their own resume smoking within a year (3, 4). Smoking cessation treatment is widely used, and smokers have many more opportunities to try to quit smoking than they did before. Smokers who undergo smoking cessation treatment, which is a combination of behavioral and drug therapies, are five times more successful in quitting smoking than smokers who attempt to quit on their own (4). Nevertheless, some smokers find smoking cessation difficult, despite receiving treatment. This includes heavy smokers with chronic obstructive pulmonary disease (COPD), smokers with a psychiatric disorder, female smokers, and underage smokers. This review examined smoking cessation approaches for patients who have difficulty quitting smoking with the aim of devising a better smoking cessation protocol.

Smokers with COPD
Smoking is a direct cause of COPD, and quitting smoking limits the progression of the condition (5, 6). As such, smokers should promptly quit smoking. However, smokers with COPD are typically highly dependent on nicotine because they smoke heavily. They repeatedly try to quit smoking but fail, which diminishes their self-efficacy and leads to guilt and depressive tendencies (7, 8). Furthermore, they often have concomitant psychiatric disorders. Smokers with COPD may be visually shocked to see computer tomography images of their lungs, which can spur them to try to quit smoking. In addition, there is clear evidence that a combination of behavioral and drug therapies is an effective form of smoking cessation support for patients with COPD. Specific beneficial forms of behavioral therapy and adjuncts are yet to be identified; nevertheless, one-on-one behavioral therapy lasting for at least 10 minutes per session is considered effective (9). For patients who want to quit smoking but have difficulty in doing so because they are heavy smokers with severe nicotine withdrawal symptoms, hospitalization may be a way to help them quit smoking while managing their condition. Symptoms of nicotine withdrawal

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are most severe in the first 2 weeks of smoking cessation. Support provided by others in a setting where the smoker is precluded from smoking may help them to successfully quit. In the case of heavy smokers, an increase in the dose of smoking cessation medication may be needed according to the patient’s smoking status.

**Smokers with Psychiatric Disorders**

Patients with psychiatric disorders are known to have a high rate of smoking and a low rate of success in quitting cessation (10-12). Smoking typically affects the action of neurotransmitters, such as dopamine and norepinephrine, and the action of metabolic enzymes of the liver (13). In patients who are being treated for a psychiatric disorder, such as depression or schizophrenia, smoking cessation causes changes in the symptoms of their primary illness and in the development of adverse reactions (14). Such patients may need dose adjustment for the medication(s) administered for their primary illness (15), which is why smoking cessation treatment must proceed in close collaboration with an attending psychiatrist. In addition, smoking cessation treatment needs to be delayed if the patient’s mental condition worsens. However, emphasizing that the patient should attempt to quit smoking again once their condition allows, may be crucial for sustaining their motivation. During smoking cessation treatment, the use of a nicotine replacement therapy for a sufficient period of time may help to reduce depressive symptoms (16). The efficacy of varenicline, nicotine patches, and bupropion in terms of the rate at which smokers successfully quit smoking (17) and the frequency of adverse psychiatric reactions, such as depression and self-harm (18, 19), do not differ to a statistically significant extent. The frequency of smoking cessation interventions must be increased by more frequent clinic visits, longer counseling sessions, or repeating treatment. In addition, support from people around the patient, such as their family members, is vital. Several approaches to smoking cessation, such as devising ways to relieve stress during behavioral therapy, allowing patients to experience the positive effects of quitting smoking for themselves, and commending patients who have successfully quit smoking, are effective.

**Female Smokers**

Female smokers are often highly dependent on nicotine despite smoking fewer cigarettes and often have depression. They may have more difficulty in quitting smoking than male smokers (20, 21). Behavioral therapy is a powerful tool for women who want to quit smoking (22). In addition, counseling and psychological support on a group rather than individual basis are effective forms of smoking cessation support, and support approaches in collaboration with a psychologist are likely to have added benefits (23). Starting to quit smoking in the early follicular phase may be helpful because nicotine withdrawal symptoms are often intensified in the late luteal phase (24). Smoking in pregnant women has been related to multiple adverse effects, and the negative impact of maternal smoking during pregnancy is immeasurable (25-27). Women should be advised to quit smoking before conceiving. There is insufficient evidence of the safety of smoking cessation support in the form of drug therapy for pregnant women. Typically, smoking cessation support for pregnant women primarily consists of cognitive behavioral therapy and counseling (28, 29). Including the woman’s partner in smoking cessation interventions is crucial (30). The mother-to-be needs to be informed that passive smoking can affect her child and she needs to be advised to refrain from resuming smoking (31).

**Underage Smokers**

Nearly 90% of all adult smokers begin smoking before leaving their teens, when they are not fully aware of the harmful effects of tobacco and dependence on nicotine (31). Most smokers begin smoking for trivial reasons, such as curiosity and encouragement by friends. Underage smokers can readily develop nicotine dependence in a short period of time; they can become dependent within 2-3 days (32, 33). Children and juveniles are often highly dependent on nicotine despite smoking few cigarettes and often have difficulty quitting smoking. Starting smoking at an earlier age increases the risk of developing physical and mental diseases. Not starting smoking in the first place is vital. Underage smokers have people around them, such as friends who are smokers, and this can hamper smoking cessation treatment. Moreover, their self-reports of smoking, including quitting, are often false. Nicotine replacement therapy is highly effective for underage smokers (34). Children need to be earnestly commended for quitting smoking, even if they do so for less than 1 week. Underage smokers also need to be given scientifically accurate information on tobacco through easy-to-understand illustrations and photographs. They benefit further when they are encouraged and supported by hospitals, parents, and schools acting in concert.

**Multi-faceted Support Strategies**

Multi-faceted support from various professionals is effective for helping smokers to quit smoking (such support has been given an A ranking in the standard treatment guidelines in the United States) (35). Brief advice (lasting 3 minutes) on quitting smoking given to smokers has proven effective, regardless of their stage of change (36-38). Medical personnel play an important role in various settings, such as primary prevention and the early detection of smoking, patient education, and ongoing support (39). Patients who have difficulty quitting smoking need behavioral therapy and smoking cessation aids; depression (where it exists) needs to be assessed and treated in collaboration with a psychiatrist; ways to relieve stress need to be devised; the advantages of quitting smoking need to be communicated; and patients...
need to be shown a brighter, more positive view of the future (7). Simultaneously, close providers of support need to be educated; the smoking status needs to be assessed; support measures need to be formulated in collaboration with professionals; and medical personnel need to provide interventions, repeated treatment, and long-term management (7). Collaboration between medical facilities, schools, and workplaces is crucial for helping patients who find smoking cessation difficult to quit smoking. With regard to smokers in the workplace, more intensive support facilitates smoking cessation through collaboration with public health nurses or workplace health supervisors. The interruption of hospital visits, because of business or unintentionally forgetting consultation dates, often trigger the abandonment of smoking cessation therapy. The motivation to continue smoking cessation will be boosted by timely consultation and positive encouragement when difficulties are encountered. It is recommended that brief advice on quitting smoking be provided repeatedly to all smokers, with the utilization of various settings, including consultations held during workplace inspections, specific health guidance sessions, and aftercare following health screening. This could lead to increased interest in quitting smoking and offer the opportunity to try again. People who work may need to visit a smoking cessation clinic during evening hours; however, they could be encouraged to receive smoking cessation treatment if it was offered by a health clinic at their workplace. Repeatedly providing smokers with brief advice on quitting smoking in multiple settings is crucial for supporting smokers as they progress to the next stage of behavioral change.

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