The Pharmacist's Role in Tobacco Cessation

by Jamie L. McConaha, PharmD,
and Lauren Elizabeth Wolfe, PharmD

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Upon successful completion of this article, the pharmacist should be able to:

1. Describe the current status of tobacco use patterns within the United States.
2. Review the key components and spirit of motivational interviewing techniques.
3. Demonstrate the assessment techniques involved in tobacco cessation counseling appropriate for each of the stages of change.
4. Select appropriate pharmacologic tobacco cessation aids based on patient-specific factors.
5. Apply practical counseling skills through recommendation of lifestyle changes to manage nicotine withdrawal symptoms.

Upon successful completion of this article, the pharmacy technician should be able to:

1. Describe the current status of tobacco use patterns within the United States.
2. Review the key components and spirit of motivational interviewing techniques.
3. List each of the stages of change and identify pharmacy patients who are likely to be interested in tobacco cessation counseling.

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INTRODUCTION

More than 50 years have passed since the landmark release of the 1964 report of the Surgeon General's Advisory Committee on smoking and health. Since that time, the detrimental effects of tobacco use have become public knowledge. While this information contributed to a decline in cigarette smoking from 42 percent in 1965 to 18 percent in 2012, more than 42 million Americans still smoke. For the first time in U.S. history, however, former smokers outnumber current smokers. Unfortunately, the decline in smoking prevalence has slowed in recent years, and the burden of smoking-attributable mortality is expected to remain high for decades to come.

Health care professional involvement is vital to successful smoking cessation and treatment of tobacco use. Pharmacists are accessible in all fields of practice to educate patients on the long-term risks of smoking and to encourage them to avoid tobacco use initially or pursue cessation. Pharmacists are capable of developing cessation plans and providing recommendations for lifestyle changes and pharmacologic therapies. The Surgeon General's Report also identified key target populations for prevention of nicotine use initiation. First use of cigarettes occurs in 87 percent of tobacco users by age 18, and 98 percent of people by age 26. Preventing initiation of these behaviors through targeted education of youth and young adults is therefore essential.

With the positive decline in cigarette use comes a changing pattern of tobacco use that warrants attention. Following the availability of electronic cigarettes in the United States in 2007, their use has steadily increased in current and former cigarette users. Nearly 500 brands and 7,700 flavors of electronic cigarettes are available for purchasing, all without regulation from the Food and Drug Administration (FDA). As electronic cigarettes have been available for fewer than 10 years, the long-term safety data is unknown. With a lack of safety data and lack of regulation from the FDA, neither the FDA nor the American Lung Association (ALA) advocate for the use of electronic cigarettes as smoking cessation aids.

Despite the abundant evidence in support of the deleterious effects of tobacco, its use continues to be the greatest cause of preventable death in the world. Tobacco kills more than half of its users, equating to approximately 6 million people annually. While most of the tobacco-related deaths are due to its direct use, more than 600,000 of the deaths are caused by secondhand smoke exposure. Recognizing the importance of tobacco cessation on health, three of the Healthy People 2020 objectives address tobacco use in adults. Specifically, the objectives are to reduce tobacco use by adults (from 18.1 percent to 12 percent for cigarette smoking, from 2.3 percent to 0.3 percent for smokeless tobacco products, and from 5.4 percent to 0.2 percent for cigar use), increase smoking cessation attempts from 48.3 percent to 80 percent, and increase smoking cessation success from 6 percent to 8 percent.

In the most recent Centers for Disease Control and Prevention (CDC) Morbidity and Mortality Weekly Report (MMWR) on quitting smoking among adults, 68.8 percent of cigarette smokers expressed a desire to quit. However, only 48.3 percent of smokers interested in quitting received advice to quit smoking from a health care provider in the past year. This statistic points toward the need for increased training of health care professionals to assist patients with tobacco cessation attempts. The following sections of this article offer strategies and methods to incorporate when addressing the presence of tobacco use and formulating a patient-specific plan for cessation.

MOTIVATIONAL INTERVIEWING

Example scenario from practice

A patient presents to your pharmacy with instructions from his physician to start a nicotine replacement patch. He asks for your help with selecting the cheapest option and purchases a two-week supply. You provide counseling points for proper administration and use of the patch. When you ask the patient if he has any questions, he says "no" and thanks you for your help.

One month later, the same patient returns to your pharmacy for refills on his prescriptions. You remember your previous encounter with him, and ask how his cessation attempt has been going. The patient replies that he never started the patch because he "just isn't ready to quit." He says he knows the risks of smoking and the benefits of quitting, but feels overwhelmed by the thought of eliminating smoking from his life.

Recommendation

Offer to discuss the smoking cessation attempt with the patient if he has time, or schedule a time in the future. This patient has given thought to quitting, but still has personal concerns that need addressed. Utilizing the motivational interviewing techniques and core components detailed below, work with the patient to identify his personal motivators for quitting.

Explanation

"Motivational interviewing is a collaborative conversation style for strengthening a person's own motivation and commitment to change."

A significant portion of health care professionals' time is devoted to conversations about behavior and lifestyle change. While these conversations often begin with the best of intentions, the manner in which they are conducted may not result in optimal outcomes. Motivational interviewing (MI) is a technique that serves as a constructive way to handle conversations involving the decisions, attitudes, and emotions that affect clinical issues. The essential goal of MI is to allow for change through tailoring the conversation to enable the patient to use his/her own values and interests to initiate and maintain the process.

Returning to the example scenario, this patient is in a state of ambivalence toward change. He is aware of the risks of continuing his behavior, as well as the benefits of quitting. However, he is struggling with losing a significant aspect of his lifestyle. Taking the time to explore this patient's thoughts and concerns for tobacco cessation may allow him to strengthen his self-perspective and motivations for behavior implementation. The interaction should be focused on the patient and his motivations for change. Implementation of the following strategies can be applied to MI encounters: expressing empathy, developing discrepancy, avoiding argumentation, rolling with resistance, and supporting self-efficacy. Each of these five skills is described in more detail in Table 1.

Distinct from the common lecturing or monologue style found in many health care encounters, MI is a guided conversation that allows the patient to discuss and explore further his/her own motivation for change. Effective use of MI requires not only techniques to evoke change, but also encompassing the spirit of MI, which includes partnership, acceptance, compassion, and evocation. Partnership requires deviation from the traditional model of passive information being provided to the recipient from the expert, which is a common scenario in the health care setting. MI is done "for" and "with" the patient, as opposed to "to" or "on" the patient. Involving the patient as an active participant in the tobacco cessation discussion activates his/her motivation and resources for change, versus tricking the patient into change. The key to partnership in MI is to allow the patient to speak more than giving information or asking questions. This allows for the patient's full story and viewpoints to be expressed, versus superimposing the practitioner's viewpoints. Acceptance does not imply an approval of a patient's actions, but does involve a lack of judgment portrayal. This involves respect for the patient and active interest in understanding his/her perspectives and ultimate autonomy to make decisions. The compassion component of the spirit of MI involves advocating for the patient's well-being and prioritizing his/her own needs.

Table 1: Motivational Interviewing Principles

Skill	Example	Explanation
Express Empathy	"It sounds like you are very devoted to your marriage and children. How do you think your smoking is affecting your family?"	As part of expressing empathy, the pharmacist should ask open-ended questions to explore the importance of smoking to the patient as well as his/her concerns with quitting. Then, the pharmacist should employ reflective listening skills to seek a shared understanding with the patient. The example to the left illustrates a summarizing statement of what the pharmacist learned through his/her conversation with the patient.
Develop Discrepancy	"What I have heard so far is that smoking is something you enjoy. On the other hand, your wife hates your smoking and is worried about your health."	Highlight the difference between present behavior and desired lifestyle change. Patients are more motivated to change when they see that what they are doing will lead them to a future goal.
Avoid Argumentation	"I agree that quitting smoking is going to make your life more stressful."	Gently diffuse patient defensiveness. If you try to argue with a patient's point, it may create hostility. The goal of MI is to "walk" with the patient, not "drag" him/her.
Roll with Resistance	"You can see that there are some real problems here, but you're not willing to think about quitting altogether."	Rather than viewing resistance as a form of defiance, the pharmacist should consider resistance as the patient viewing the situation differently. Encountering resistance is a signal to the pharmacist to change direction or listen more carefully. Reframe the patient's thinking; invite him/her to examine new perspectives.
Support Self-Efficacy	"So you were fairly successful the last time you tried to quit."	Help the patient to identify and build on past successes. Provide hope and increase his/her self-confidence.

Evocation diverges from the standard education approach, which assumes knowledge or personal deficits that can be addressed through providing additional information. Evocation takes on the perspective that the patient has the knowledge, skills, and personal experiences to make the change, and that these inherent qualities need to be brought to attention. These four qualities encompass the spirit of MI and allow for achievement of the overall goal, which is identifying patients' pre-existing motivators for instituting the change process.

In summary, MI involves collaboration between a practitioner and patient to establish goals and identify individual motivators for change. When done correctly, MI should allow for strengthening of a patient's personal motivators for change, exploration of reasons for change, and development of commitment toward specific goals.

ASKING PATIENTS ABOUT THEIR SMOKING STATUS

Example scenario from practice

You are a pharmacist working within a primary care practice. Prior to an appointment for medication therapy management with an established patient of the practice, you review his past medical history, risk factors, and current medication regimen. You notice the patient has a problem of "tobacco dependence" listed in his chart; however, there does not seem to be a documented discussion of his use in previous office visits. When you discuss this with one of the physicians, he recalls that the patient has "smoked like a chimney for years" and is "a lost cause."

Recommendation

Patients may make the decision to quit using tobacco at any time, and having this topic addressed by all health care professionals can contribute to the discussion and potentially result in motivation to quit. Using MI techniques in coordination with questions about tobacco use can open discussion with this patient and may lead to positive lifestyle changes in the future.

TOBACCO CESSATION COUNSELING

Along with motivation interviewing tactics, an appropriate plan is also necessary for assisting patients with tobacco cessation attempts. Once the patient has identified his/her key motivators for quitting, development of a tailored, individualized plan is essential for cessation success and maintenance.

While the tendency at this point of the conversation for the health care professional may be to dive into a monologue detailing the detrimental health risk of tobacco use and treatment options, the likeliness of success will be increased by maintaining the key principles of motivational interviewing throughout the conversation. The two discussion techniques discussed below are tactics to address key areas in plan development while involving the patient actively in its design.

ASK, ADVISE, REFER (AAR)

The AAR process may be appropriate in situations with limited time or for patients who are not yet ready to fully discuss cessation. Step one of the three-step AAR model involves asking the patient about his or her smoking status. Some examples for opening this dialogue include:

"Please tell me about your tobacco use history."
"Do you ever smoke or use any forms of tobacco products?"

When a patient's response to the second question is "no," encouragement of continued abstinence is warranted. Another potential response could be a history of tobacco use, with current cessation. In this situation, it is important to identify the length of cessation. Patients that have been tobacco-free for less than six months are still in the "action" phase of their quit attempt and may need continued assistance to prevent relapse. For quit attempts that have continued for six months or longer, relapse prevention may still be warranted to ensure patients stay in the maintenance phase. Relapse prevention may not be required for patients who have been tobacco-free for many years.

If the patient answers positively for current tobacco use, utilization of open-ended questions can allow for additional information to be gained about smoking patterns, preferred product, and duration of tobacco use. At this point, it is appropriate to also ask if the patient has given any thought to tobacco cessation. If applicable, the discussion of worsening of current medical conditions or development of new conditions may also be relevant. An example of incorporating these discussion points in the conversation includes:

"High blood pressure is often caused or worsened by smoking. Have you given thought to quitting in the past?"

As a health care professional, the next step should involve advising the patient to quit. This information may or may not be something the patient is receptive to hearing. Examples of handling this next step in an attempt to avoid leading the patient to shut down or close the door to conversation include:

"I know you are aware of the health risks associated with smoking. Even occasional smoking can still be harmful. The best thing you can do for your health is to stop use of tobacco entirely. I am here to assist you now or in the future if you are ready to quit."

"Quitting smoking can be a difficult process; however, it is really the best thing you can do for your health and the health of those around you. If you are ready to quit, I am available to help you arrange a plan that works best for you."

If the patient is open to discussion at this point and time allows, a full discussion and design of treatment plan as appropriate can occur at this time. However, if time is limited or if the patient is unwilling to discuss cessation, referral to additional resources for the future is the next step. Referrals can be made to additional health care professionals for counseling services, community pharmacists for over-the-counter cessation aides, or to a behavior change program such as "1-800-QUIT-NOW." It may also be appropriate at this time to schedule a follow-up appointment with the patient to discuss cessation at a later date. Some examples to navigate this discussion piece include:

"It sounds like you have a busy schedule with the holidays coming up, and now may not be the best time for you to discuss a quit attempt. Would you be willing to discuss this further at an appointment in the next few months?"

"I know you have a busy schedule with working the night shift and that making appointments can be difficult. I am going to provide you with a national, toll-free quit line phone number if you decide this is something you would like to discuss on your own time in the future."

Following a referral recommendation, it is important to follow up with the patient to determine if he/she was able to take the next steps toward pursuing cessation. This may be completed through a telephone call or at subsequent appointments. The decision to quit may be made at any time, and addressing a patient's tobacco use is vital to increasing the likeliness of positive tobacco cessation outcomes.

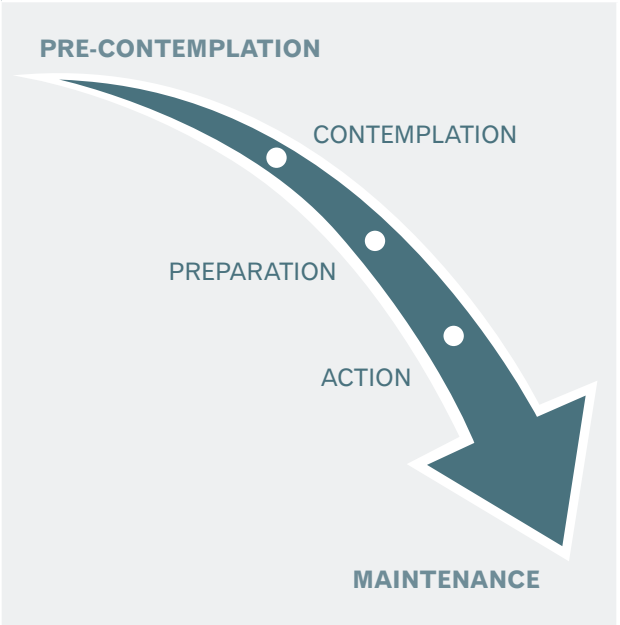
ASK, ADVISE, ASSESS, ASSIST, ARRANGE ("FIVE A'S")

If time allows during a patient encounter and the patient is open to discussing a cessation attempt, a more comprehensive approach may be taken to the discussion. The "Five A's" is a structured approach to tobacco cessation dialogue that includes the following elements: ask, advise, assess, assist, and arrange. The initial elements, "ask and advise," are also included in the AAR approach, and are addressed in the above section.

Once the initial steps of asking a patient about tobacco use and advising to pursue cessation are completed, assessing the patient's readiness to quit allows for proper guidance for the remainder of the conversation. During a smoking cessation attempt, or any type of change, it is essential to determine the stage of change a patient is in. The Transtheoretical Model (TTM) (Figure 1) integrates the stages of change with readiness to act toward a new behavior. Depending on the stage of change a patient is in, certain counseling approaches may or may not be appropriate to utilize.

Questioning the patient's readiness to quit within the next 30 days or next six months can provide information as to the current stage of change. For instance, if a patient is considering quitting tobacco use but is not ready to take action in the next 30 days or even in six months, the patient is still in a state of pre-contemplation. Pre-contemplation is categorized by the viewpoint that pros of continued tobacco use outweigh the cons of continued use. Patients may be aware of the health risks associated with tobacco use, but are not ready to think about quitting in the next six months. Patients who can see themselves quitting within the next six months but not as soon as 30 days are in the contemplation phase of change. Contemplation involves ambivalence, which is a simultaneous desire for two incompatible things. The contemplation stage is a common place for patients to remain in the change cycle. Patients in this phase know the benefits of tobacco cessation very well, but remain resistant to change due to various reasons, including fear of past failures, desire to keep things the same, or lack of confidence in their ability change. Motivational interviewing techniques are beneficial at both the pre-contemplation and contemplation stages and may be employed to progress patients toward readiness to quit.

Figure 1. Transtheoretical Model of Change



Example scenario from practice

(Part 1 of 2) You are a pharmacist conducting group tobacco cessation classes, which consist of five one-hour long sessions occurring once weekly. All members of the group enrolled voluntarily in response to an advertisement for the class except for one participant, Kevin Smith, who came to the class with his wife. The initial session of your course involves an introductory portion where each participant introduces him/herself and his/her reason for attending the class. All of the participants, not including the aforementioned man, express a desire to quit for various reasons. He states that he is attending the class because "his wife drug him here."

Recommendation

This patient is most likely in the pre-contemplation stage of change. Asking him about his readiness to quit in the next six months may provide a more accurate assessment of his current stage of change. If he is not ready to quit within the next 30 days and is truly just present because of his wife, he may still benefit from motivational interviewing techniques to explore his personal motivators toward quitting in the future. It would not be appropriate at this point to develop a cessation plan, as the patient needs to have a personal desire to quit.

Explanation

The goal for any stage of change a patient may be in is for progression to the final stage, maintenance, which involves

Table 2. Strategies for Stage of Change Progression

Stage	Do	Do not
Pre-contemplation	Strongly advise to quit Provide information Identify reasons for tobacco use Raise awareness of health consequences Demonstrate empathy Leave decision to patient	Persuade patient toward change "Cheerlead" Inform patient of detrimental effects in a judgmental manner Provide a treatment plan
Contemplation	Strongly advise to quit Provide information Identify reasons for tobacco use Demonstrate empathy and enhance motivation Encourage re-evaluation of concerns Offer encouragement	Persuade patient toward change "Cheerlead" Inform patient of detrimental effects in a judgmental manner Provide a treatment plan
Preparation	Discuss key issues Review methods for quitting Set a quit date Implement a tobacco use log Discuss coping strategies Offer assistance for quit attempt Congratulate patient	Fail to create a treatment plan Utilize a monologue approach to design of plan
Action	Evaluate the quit attempt • Slips or relapses • Support system • Triggers and withdrawal • Treatment utilized Encourage continued abstinence Congratulate successes	Convey judgment for slips or relapses Fail to follow up with patient
Maintenance	Evaluate status of quit attempt Assess medication adherence and determine a termination plan as necessary Continue to review relapse prevention and healthy lifestyle alternatives Congratulate successes	Assume a lack of risk for relapse Fail to address plan for medication discontinuation

permanent avoidance of the adverse health behavior. For our patient in the pre-contemplation phase, the goal is to use motivational interviewing techniques to assist him with identifying and exploring his personal motivators for cessation. Strongly advising him to quit is still appropriate, as is providing information that may be applicable to the patient, such as concurrent disease states that may be worsened by tobacco use. Opening the lines of communication through displaying empathy and providing contact information for referral if the patient becomes ready to quit can be useful if he decides to quit in the future. However, the choice is optimally up to the patient. Developing treatment plans, persuasion, or judgmental statements may turn him away from considering smoking cessation and make him less likely to utilize you as a resource in the future. Table 2 provides additional recommendations for progressing patients to the next stage of change.

Patients who can visualize themselves quitting within the next 30 days are said to be in the "preparation" phase of change. If a patient has expressed a readiness to quit in the near future, assisting with the quit attempt through the development of a treatment plan is critical to cessation success. At this stage, it is also important to address concerns the patient has for the upcoming quit attempt, such as weight gain and withdrawal symptoms. Non-pharmacologic coping strategies may be employed for use in development of the treatment plan, which will be discussed later in this article. Pertinent information to obtain from the patient includes current type(s) of tobacco product, amount of tobacco product, duration of use, and past quit attempts. Quantity of nicotine derived from the tobacco product currently in use is necessary to determine appropriate strengths and time of administration for nicotine replacement therapy (NRT), which will be discussed later in this article. Obtaining this information in advance can allow for optimal therapeutic decision making and preventing of suboptimal dosing, which is a frequent cause of treatment failure.

Information derived from past cessation attempts may also be useful to designing the treatment plan. Find out if past therapies have or have not been tolerated or successful for the patient. For treatment therapies that were not effective in the past, questions concerning the administration, dosing, and use of medication may allow for identification of inappropriate treatment use. Pertinent questions to ask in relation to past quit attempts may include number of quit attempts, most recent quit attempt, duration of attempts, and previous methods used. Pharmacologic and non-pharmacologic treatment options and strategies will be reviewed in this article.

Evaluation of a patient's quit attempt through follow-up allows for enhanced success rates over time. Patients who have been tobacco-free for less than six months are considered to be in the "action" stage of change, and are at risk for returning to tobacco use. An important discussion to have prior to and during the quit attempt as appropriate is the difference between a slip and a relapse. A slip is defined as a temporary return to a behavior, such as tobacco use. Having a slip may be a normal part of the quitting process, and does not imply that the individual has failed. Discussing the importance of not returning to the behavior following a slip may prevent a relapse, which involves a full return to the previous behavior.

A plan for follow-up that is convenient for the patient should be established during the "assist" phase and carried out during the final stage, "arrange." The ideal contact modality for follow-up may be unique to each patient and should be identified to allow for continuous and efficacious follow-up as necessary. Patient progress should be monitored during the first week of a quit attempt, as well as a second follow-up attempt within the first month. Patients are most at risk for slips and relapses during the first two weeks following a quit attempt due to heightened withdrawal symptoms. Having a support system in place and a plan to handle withdrawal symptoms may prevent a full relapse and increase the likelihood of success. For patients who have continued success with the attempt, congratulations are warranted and can contribute to sustained motivation to quit.

It is important to note that an individual can transition to any stage at any time. For instance, following a failed quit attempt (action), a patient may regress to contemplation or even pre-contemplation due to feelings of discouragement. The ultimate goal of a cessation attempt is to progress to and stay in the "maintenance" stage of change, which is defined as cessation from tobacco for six months or greater.

PHARMACOLOGY

Example scenario from practice

Mr. Jones, a 55-year-old male, is a patient of your pharmacy. He underwent stent placement for his coronary artery disease, and is coming to your pharmacy today to pick up his medication refills. You know that Mr. Jones quit smoking after his surgery, which was nearly three months ago, so you ask him today how it has been going. Mr. Jones responds with, "Awful! The patches didn't work at all, and I was completely miserable. I'm back to my old ways." He continues to tell you that he is currently smoking at least 25 cigarettes a day, and he smokes his first cigarette within the first 10 minutes of waking up. During his last quit attempt, he used 14 mg nicotine patches daily. Despite his failed attempt, Mr. Jones states that he is ready to quit again, but that he needs a "stronger" medication.

Recommendation

Nicotine replacement therapy patches 21 mg applied daily beginning on his quit date with nicotine replacement therapy gum 2 mg as needed to control cravings. In addition, recommend support for Mr. Jones during his quit attempt in the form of a smoking cessation group, telephone quit line, or other trained smoking cessation specialist.

Explanation

Evidence shows that a multicomponent approach of pharmacotherapy plus counseling is more effective than either alone in terms of long-term tobacco abstinence. Therefore, when appropriate, encourage all patients to utilize a form of pharmacotherapy in combination with counseling when quitting smoking. Pharmacotherapy is appropriate in most individuals; however, when selecting an agent, individual patient characteristics, such as preference, cost, and prior success should all play a role. Additionally, the pharmacist must also consider the patient's current smoking status (number of cigarettes, time to first cigarette upon waking, form of tobacco use), concomitant medications, and co-morbid medical conditions. Based on Mr. Jones' description of his quit attempt, it is clear that the 14 mg patches were inadequate in controlling his nicotine cravings. Mr. Jones can be categorized as a highly dependent smoker given that he smokes more than one pack per day (PPD) and smokes his first cigarette within 30 minutes of waking. At a minimum, he should have been using the 21 mg patches instead of the 14 mg patches.

The U.S. Public Health Service (USPHS) Clinical Practice Guidelines for Treating Tobacco Use and Dependence identify seven first-line medications for tobacco cessation. First-line medications are those that have been found to be safe and effective for tobacco dependence treatment and have been approved by the FDA for this use. These include five "nicotine medications" (gum, patch, lozenge, nasal spray, and inhaler) and two non-nicotine products, bupropion (Zyban) and varenicline (Chantix).

Nicotine replacement therapy (NRT) is the most widely used pharmacologic therapy for smoking cessation. The FDA first approved nicotine gum and patches as prescription products between 1984 and 1992, which were subsequently transitioned to over-the-counter (OTC) status between 1996 and 2002 based on research showing that they were safe for use without a prescription. The nicotine lozenge and mini-lozenge were approved directly for OTC use in 2002 and 2009, respectively. As the name suggests, these forms of therapy partially replace the nicotine formally obtained from smoking, with the intention to reduce the physiological and psychomotor withdrawal symptoms associated with smoking cessation. While most sources estimate that NRT roughly doubles the quitting success rate, one meta-analysis indicated that the long-term benefit of NRT may be modest, and that tobacco dependence should be viewed as a chronic, relapsing disorder requiring repeated episodes of treatment. Nicotine undergoes first-pass metabolism in the liver. As such, NRT products are formulated to be absorbed through the oral (gum, lozenge, inhaler) or nasal (nasal spray) mucosa, or through the skin (patch).

The nicotine patch is available in strengths of 21 mg, 14 mg, and 7 mg. It provides a slow, constant release of nicotine throughout the day. Patients who smoke 10 or more cigarettes a day should begin therapy with the 21 mg patch. Those smoking 10 or fewer cigarettes per day should begin with the 14 mg patch. Package labeling indicates that the first patch used (either 21 mg or 14 mg) should be used daily for six weeks, following which the patient would begin to taper down his/her dose by using each remaining strength(s) for two weeks. Recent research, however, suggests that smokers should consider using nicotine replacement therapy even more aggressively than package instructions recommend. In light of this and other mounting evidence, in 2013 the FDA modified product labeling with regard to duration of use and concomitant use with other nicotine products. The new labeling removes the statement of "stop using the [NRT product] at the end of [X] weeks" and replaces it with "It is important to complete treatment. If you feel you need to use [the NRT product] for a longer period to keep you from smoking, talk to your health care provider." In addition, previous labeling read, "Do not use if you continue to smoke, chew tobacco, use snuff, or use [a different NRT product] or other nicotine containing products." However, the "do not use" statement has been removed. Since NRT is delivering the same medication (nicotine) as cigarettes, without the added harmful chemicals, it is a better alternative to keep patients on these products longer if it will help them become successful in quitting smoking.

Two additional nicotine replacement therapy products available over-the-counter include the nicotine gum and lozenge. Both products are available in the U.S. in strengths of 4 mg and 2 mg, and are marketed in a variety of flavors. In addition, a nicotine mini lozenge is available in strengths of 2 mg and 4 mg. The primary difference between the lozenge and mini lozenge is the time they take to dissolve—approximately 20-30 minutes for the lozenge as compared to 10-13 minutes for the mini lozenge. In addition, the mini lozenge is marketed as being a more discreet method to smoking cessation contained in a smaller, more portable, and convenient package.

It is important that patients wishing to utilize these options understand their proper usage. The nicotine gum should be

used following the "chew and park" method. In this manner, the patient begins to slowly chew the gum which releases a peppery taste. When this occurs, the gum should be parked between the gums and cheek until the peppery sensation subsides. The patient would then repeat the process until most of the nicotine is gone (when the taste or tingle does not return). Each piece of gum lasts approximately 15-30 minutes. The nicotine lozenge is used by being placed in the mouth and allowed to dissolve slowly. It should not be chewed, crushed, or swallowed. Patients should be instructed to occasionally rotate the lozenge to different areas of the mouth. When using either the nicotine gum or lozenge, patients should be instructed not to eat or drink anything for 15 minutes prior to use, or while using the product. This is because acidic foods, such as coffee, juice, or soda, can alter the pH of the mouth and decrease absorption of the nicotine. Dosing for both the gum and lozenge is based on the "time to first cigarette" upon waking. If the patient smokes within 30 minutes of waking, they should begin therapy with the 4 mg dose. As with the nicotine patch, a tapering dose schedule is recommended with the gum and lozenge. For the gum, patients should chew one piece of gum every 1-2 hours for the first six weeks. After that, the time between doses is increased. At a minimum, patients should use nine pieces per day, but should not exceed 24 pieces per day. The nicotine lozenge follows a similar dosing schedule, one piece every 1-2 hours for the first six weeks, and a minimum of nine pieces per day. The difference is that the maximum number of lozenges per day is 20.

The last two forms of nicotine replacement therapy are available only by prescription and include the nicotine inhaler and nicotine nasal spray. The nicotine inhaler is not a true pulmonary inhaler, but instead deposits nicotine in the oropharynx, from which it is absorbed across the mucosa. While the inhaler was intended to assist with smoking cessation by leveraging the sensory/ritual components of smoking (handling and "puffing" on the inhaler), the proper dosing technique does not mimic the deep inhalation that many smokers associate with conventional cigarette smoking. One inhaler cartridge contains 10 mg of nicotine (and 1 mg of menthol), of which 4 mg of nicotine can be extracted and 2 mg are systemically absorbed. A single inhaler can be used for one 20-minute period of continuous puffing, or periodic use of up to 400 puffs per inhaler. Patients should use 6-16 cartridges per day. As the majority of the nicotine is delivered to the oral cavity, patients should refrain from eating or drinking 15 minutes prior to, or during, use with this product. The nicotine nasal spray contains an aqueous solution of nicotine (10 mg/mL). Each spray contains 0.5 mg of nicotine, and two sprays equal one dose (1 mg nicotine). Patients should begin therapy with 1-2 doses per hour, with a maximum of 40 doses per day. Each 10 mL bottle delivers 200 sprays per bottle (or 100 doses). Of all of the available cessation products, the nicotine nasal spray provides the fastest delivery and highest nicotine levels. For this reason, it is often the best choice for highly dependent smokers or those needing to control urgent withdrawal symptoms. Recommended duration of treatment with the nasal spray is three months. This is due to the potential dependence to this medication as a result of its speed of onset of action, greater capacity for self-titration of dose, and frequent and rapid fluctuations in plasma nicotine concentration.

Nicotine replacement therapy does not completely eliminate all symptoms of withdrawal because the available delivery systems do not reproduce the rapid and high levels of nicotine achieved through inhalation of cigarette smoke. For example, nicotine from cigarette smoking reaches the brain within 10 seconds of inhalation. Nicotine absorbed through the mucosa, such as by cigar or pipe smokers, is much slower. For these reasons, the type of tobacco product the patient is using should be taken into consideration when selecting a form of nicotine replacement therapy for cessation. Despite the differences in onset of action of the NRT products, studies have found all produced similar quit rates and were equally effective at reducing the frequency, duration, and severity of urges to smoke.

In addition to nicotine replacement therapy, two non-nicotine products are also considered first-line agents for smoking cessation. These medications, varenicline and sustained-release (SR) bupropion, work by differing mechanisms of action. Bupropion SR was the first non-nicotine medication shown to be effective for smoking cessation and was approved by the FDA for this use in 1997. Bupropion is an atypical antidepressant that inhibits the reuptake of dopamine, noradrenaline, and serotonin in the central nervous system. Although it is not entirely clear by which mechanism bupropion works as a smoking cessation aid, increases in these neurotransmitters is believed to play an important role due to the reductions that occur as a result of nicotine withdrawal. Bupropion SR therapy should be started prior to the patient's quit date. Dosing begins at 150 mg daily for six days, titrated to 150 mg twice daily for 7-9 weeks. Bupropion SR used for smoking cessation has a boxed warning for neuropsychiatric symptoms and suicide risk. The label states that serious "changes in mood (including depression and mania), psychosis, hallucinations, paranoia, delusions, homicidal ideation, hostility, agitation, aggression, anxiety, and panic, as well as suicidal ideation, suicide attempt, and completed suicide" have been reported.

Varenicline, which was approved in 2006, is the newest FDA-approved agent for smoking cessation. Varenicline is

a partial agonist of $\alpha_4\beta_2$ nicotonic acetylcholine receptors. This receptor type is believed to have the highest sensitivity to nicotine and is thought to play a mediating role in dopamine release. Like other partial agonists, varenicline has both agonist and antagonist effects. Binding at the receptor increases dopamine release, decreases nicotine cravings, and alleviates withdrawal symptoms (agonist effects). In addition, blocking of nicotine's binding at these receptors reduces nicotine-induced dopamine release and, consequently, its rewarding/reinforcing effects (antagonistic effects). Varenicline studies have shown improved cessation rates at study weeks 9-12, and follow-up weeks thereafter when compared to placebo and, in certain instances, bupropion SR. Psychiatric adverse events such as depression, anxiety, and suicidal ideation have been noted in clinical trials with varenicline and have been reported in postmarketing surveillance. Varenicline also carries a boxed warning for neuropsychiatric symptoms and suicidality. The label states "postmarketing reports have included changes in mood (including depression and mania), psychosis, hallucinations, paranoia, delusions, homicidal ideation, hostility, agitation, anxiety, and panic, as well as suicidal ideation, suicide attempt, and completed suicide" and that symptoms may appear as worsening of a pre-existing psychiatric disease or in patients with no history of psychiatric disease. However, other studies have found no increased risk of self-harm in patients treated with varenicline, and still others have postulated that patients attempting to abstain from smoking may already be experiencing anxiety and depression, and therefore be at a higher risk for suicidal ideation. Varenicline therapy should be started one week prior to the patient's quit date. Recommended dosing follows a one-week titration schedule of 0.5mg once daily for days 1 – 3, then 0.5 mg twice daily on days 4 – 7, culminating in 1 mg twice daily from day eight through the end of treatment.

Several combinations of over-the-counter and prescription pharmacotherapy smoking cessation aids can be safely used. According to the USPHS guidelines, effective combinations are as follows: long-term (more than 14 weeks) nicotine patch with another form of NRT (gum or spray); the nicotine patch with the nicotine inhaler; and the nicotine patch with bupropion SR. These three medication combinations have been shown to produce a significantly greater likelihood of maintaining long-term abstinence than the nicotine patch used alone. Only the nicotine patch plus bupropion SR has been FDA approved for combined use. However, as mentioned earlier, the FDA has removed labeling on OTC products that previously stated that combinations of the gum, patch, and lozenge could not be used together.

Guidelines currently do not recommend the combination of varenicline with NRT due to the antagonistic properties of varenicline which could increase the risk of adverse events. In a large, multicenter, randomized clinical trial that compared the combination of varenicline plus the patch versus varenicline alone, researchers found that varenicline plus the patch was associated with a higher abstinence rate at 12 weeks and at six months than the patch used alone. However, there was a higher incidence of adverse effects such as nausea, sleep disturbances, skin reactions, constipation, and depression in the combination therapy group. Another study tested the combination of varenicline plus bupropion versus varenicline alone. A randomized, double-blinded clinical trial showed that varenicline plus bupropion produced significantly higher prolonged abstinence rates at 12 weeks and 26 weeks versus varenicline alone. However, at 52 weeks the difference in abstinence rates was no longer significant. Furthermore, adverse events such as anxiety and depression were significantly more common in the combination therapy group than in the varenicline alone group. Therefore, this combination does not appear to be as effective as other approved combinations.

A summary of the first-line smoking cessation medications is provided in Table 3.

NONPHARMACOLOGIC

Example scenario from practice

(Part 2 of 2) During your group smoking cessation class, you ask each participant to share their experiences with quit attempts in the past. The majority of the patients reveal that they have quit at some point in their lifetime, for varying amounts of time. Each patient stated that they used various forms of NRT to control their cravings, yet every patient in the class relapsed for a variety of reasons—family members smoking, stressful life events, or health setbacks.

Recommendation

During this quit attempt, the patients need to focus on not only the physical symptoms of nicotine withdrawal, but on the social aspects as well. Lifestyle changes and nonpharmacologic smoking cessation strategies should be discussed during the class to equip patients with the tools they need to face various situations and to remain smoke-free.

Explanation

To assist patients in becoming smoke-free, the pharmacist should provide two specific types of counseling: supportive and practical counseling advice. Supportive counseling is a therapeutic approach aimed at facilitating optimal adjustment. This type of counseling can be provided by pharmacists, but may be best provided by those specifically trained in this

Table 3: Pharmacologic Treatment Options for Tobacco Cessation				
Drug	**Dosing**	**Administration**	**Contraindications**	**Counseling Points**
Nicotine patch	• 21 mg for >10 cigarettes/day • 14 mg for ≤10 cigarettes/day • 7 mg used when tapering	• Apply 1 new patch daily • Remove patch at night and adhere a new one in the morning	• Caution with hypertensive patients	• Rotate application site • Do not apply on irritated skin • May cause vivid dreams • D/C use and contact health care provider if redness does not resolve within 4 days or if rash occurs
Nicotine gum	• 2 mg for <25 cigarettes/day • 4 mg for ≥25 cigarettes/day	• 1 piece every hr • Maximum: ≤24 pieces/day	• Caution with patients with peptic ulcer disease; may delay healing	• Use proper chewing technique (i.e., chew and park) • D/C if any jaw, teeth, or mouth problems occur • Do not eat or drink for 30 min before and during use
Nicotine lozenge	• 2 mg if first cigarette ≥30 min after waking • 4 mg if first cigarette <30 min after waking	• 1 piece every 1 to 2 hrs • Maximum: 5 lozenges/6 hrs 20 lozenges/day	• D/C if mouth problems, persistent indigestion, or severe sore throat occurs. • Consult medical provider for sodium restricted patients	• May cause unpleasant taste • Do not eat or drink for 30 min before and during use
Nicotine inhaler	• 10 mg per cartridge	• Inhale as needed (eg, every 1 to 2 hours) • Maximum: 16 cartridges/day	• May cause bronchospasms in COPD and asthma patients	
Nicotine nasal spray	• 0.5 mg per spray (10 mg/mL)	• Apply one spray into each nostril every 1 to 2 hrs • Maximum: 10 sprays/hr 80 sprays/day	• Avoid use in patients with chronic nasal problems (i.e. ,allergic rhinitis) • May cause bronchospasms in COPD and asthma patients	• Do not use for more than 6 months
Varenicline	• 0.5 mg tablet • CrCl <30 mL/minute: 0.5 mg /day; maximum dose: 0.5 mg twice daily • End stage renal disease: 0.5mg once daily.	• 0.5 mg/day for 3 days, then 0.5 mg twice a day for 4 days, then 1 mg twice a day	• Black Box Warning: Serious neuropsychiatric events have been reported with use • Caution with CVD; may increase major CV events	• Start 1 to 2 weeks before quit date • May be started up to 4 weeks prior to quit date
Bupropion SR	• 150 mg tablet	• 150 mg/day for 3 days, then 150 mg twice a day • Start 1 to 2 weeks before quit date	• C/I in seizure disorders, history of anorexia/bulimia • Abrupt discontinuation of ethanol or sedatives • Use of MAO inhibitors (concurrently or within 14 days of discontinuing either bupropion or the MAO inhibitor) • Patient receiving linezolid, intravenous methylene blue, or other dosage forms of bupropion	• May cause insomnia

field, such as those services provided through the quit line. Practical counseling is a form of problem-solving that involves generating solutions, evaluating, and selecting a solution.

One common strategy used to find ways to cope with triggers is "ACE: Avoid, Change, or Escape." In this strategy, the smoker identifies times when they would be most likely to smoke (such as in the car, during breaks at work, when drinking coffee, when socializing with certain friends, or in particular situations). One way to identify these situations is to have the smoker use a cravings or trigger journal. For at least one to two weeks before their quit date, the smoker could write down every time he/she craved or smoked a cigarette. He/she should note the time of day, intensity of the craving (on a scale of 1-10), if and how much he/she smoked, and any contributing factors. This journal can then help the patient identify his/her smoking and/or craving patterns. Once these high-risk behaviors are identified, the pharmacist would work with the patient on a plan to avoid the situation (such as certain social situations), change the circumstances (alter their routines), or escape (if put into the situation, a plan to remove themselves from temptation). A sample cravings journal can be found in Figure 2.

Having taught group smoking cessation classes for several years, the authors of this article wish to share some practical counseling tips that have been successful in helping patients avoid tobacco use in various situations.

Avoiding tobacco while driving in the car

- Ask the patient to take an alternate route to work.
- Remove ashtrays, cigarettes, and any smoking paraphernalia from the vehicle.
- On the patient's quit date, have the vehicle cleaned and/or detailed to remove smells of smoke; from this point forward, the patient and/or any passenger should not smoke in the car.
- Put the cigarettes in the trunk of the car so that they are not easily accessible.

Avoiding tobacco while drinking coffee

- Have the patient switch to decaffeinated coffee or tea.
  - Cigarette smoke is an inducer of CYP1A2, the pathway by which caffeine is metabolized. Smoke therefore increases the clearance of caffeine by 56 percent. Therefore, if a patient successfully quits smoking, continuing the same amount of caffeine intake can result in jitteriness, anxiety, palpitations, and other symptoms of increased caffeine. These symptoms may mimic or worsen the symptoms of nicotine withdrawal.
- The patient can have his/her morning coffee while in the car on the way to work.

Avoiding tobacco while talking on the phone

- Doodle while on the phone (to keep the hands busy).
- Use the hand you typically smoke with to hold the phone.
- Pace or walk while on the phone.

Avoiding tobacco while drinking

This is one of the most difficult situations for patients, as many associate smoking and drinking as two social activities that are done together. In addition, alcohol lowers the patient's inhibition, thus increasing the risk for a slip.

- Avoid drinking while quitting smoking.
- Switch to non-alcoholic drinks.
- Go only to smoke-free bars or restaurants, and avoid going outside for a smoke break. Ask a friend to help assist you in moments of weakness.
- If possible, include a non-smoker or friend also attempting to quit in your group when going out.

When employing practical counseling strategies, it is important to note that there is not a one-size-fits-all approach. Each solution must be individualized for the patient. One patient may be able to alter his/her routine in ways that another cannot. For example, a patient who typically smokes with his/her morning coffee may decide to switch to tea in order to break themselves of the routine. For another patient, giving up his/her morning coffee could be non-negotiable. Group settings, such as the one described in the scenario above, are a great opportunity to have patients help each other come up with ideas of ways to avoid triggers, manage cravings, and avoid slips and relapses. Often, patients have

Figure 2: Cravings Journal

Craving Time		Intensity of Craving (1-10)	Cigarette?/Amount	Situation
1				
2				
3				
4				

been successful at quitting smoking before they experienced a relapse. Having them share what worked for them during their successful quit attempt may help another patient who is just beginning the quitting journey.

CONCLUSION

In summary, tobacco cessation is a difficult process that requires multiple, patient-specific interventions by various health care providers to motivate patients and ensure their success. This article touches on just some of the interviewing and counseling techniques that can be utilized in practice. While tobacco cessation is a difficult, and sometimes uncomfortable, topic to address, repeated interventions by health care professionals can result in higher patient quit rates. The authors, therefore, encourage all pharmacists to ask every patient about their tobacco use status at every visit utilizing the "Ask, Advise, Refer" method. This counseling technique takes minimal time but can significantly influence a patient's desire to think about quitting.

The authors encourage review of the current USPHS Clinical Practice Guidelines for a comprehensive representation of all recommendations for current and recent tobacco users. Copies of this guideline can be obtained through the Agency for Healthcare Research and Quality (www.ahrq.gov). In addition, health care providers wishing to gain additional training and experience in assisting patients with tobacco cessation should consider the Tobacco Treatment Specialist (TTS) training and certification course. This is an intensive training program available at various institutions throughout the country. A listing of accredited TTS training programs can be found on the Association for the Treatment of Tobacco Use and Dependence (ATTUD) website (www.attud.org). ■

Jamie L. McConaha, PharmD, CGP, TTS, BCACP, CDE, is with the Duquesne University Mylan School of Pharmacy as an assistant professor of pharmacy practice in the division of clinical, social and administrative sciences, and maintains a clinical practice site with the family practice group Preferred Primary Care Physicians in Pittsburgh.

Lauren Elizabeth Wolfe, PharmD, TTS, is currently a PGY-2 ambulatory care resident with Duquesne University Mylan School of Pharmacy, and the family practice group Preferred Primary Care Physicians in Pittsburgh.

Editor's Note: For the list of references used in this article, please contact *America's Pharmacist* Managing Editor Chris Linville at 703-838-2680, or at chris.linville@ncpanet.org.

Continuing Education Quiz

Select the correct answer.

1. According to the most recent Surgeon General's Report regarding tobacco use patterns, which of the following best describes the status of tobacco use in the U.S.?
a. Higher number of current smokers than former smokers
b. First use of cigarettes is typically seen in patients over the age of 30
c. Most people use only one form of tobacco product.
d. While cigarette use is declining, e-cigarette use is increasing.

2. While over half of current smokers have a personal desire to quit, less than half report receipt of counseling from health care providers.
a. True
b. False

Questions 3-5 pertain to the following case:

3. A patient presents to your clinic to pick up her son's albuterol inhaler. She mentions that he seems to be using it more often and is concerned that it is due to her recent relapse and return to smoking. Her relapse resulted following a new, stressful job where most of her co-workers smoke. You respond, "It sounds like you enjoy smoking because it's a way for you to de-stress at work, yet you're concerned about the effects it's having on your son." You gave this response because it involves:
a. Rolling with resistance
b. Developing discrepancies
c. Partnership
d. Acceptance

4. As this patient has agreed to talk with you about her tobacco use status, you ask her about her previous quit attempt. She states she was successful for six months following instruction from her physician to begin nicotine patch therapy once daily. When questioned further about the encounter, she mentions that her conversation with her physician was brief, and involved lecturing on the negative health risks of tobacco use. She stated she felt as if she didn't have a say in the plan, but was nervous about the health risks described. Which of the following key characteristics of the spirit of motivational interviewing was not utilized in this encounter?
a. Rolling with resistance
b. Developing discrepancies
c. Partnership
d. Acceptance

5. The patient goes on further to state that the lecturing from her physician made her feel judged and ashamed of her habit. These feelings could have potentially been avoided by use of the following motivational interviewing spirit characteristics:
a. Rolling with resistance
b. Partnership
c. Expressing empathy
d. Acceptance

For questions 6 through 10, match the given definition to the most appropriate term. Answers may be used once, more than once, or not at all.

6. Advocating for the well-being and prioritization of patient needs

7. Acknowledging the skills, experiences, and knowledge patients already have

8. A brief process used to appropriately address and triage patients in need of cessation assistance

9. A stage of readiness to make a behavioral change within the next six months

10. A stage of change that calls for setting a quit date and development of a treatment plan
a. Ask, Advise, Refer (AAR)
b. Ask, Advise, Assess, Assist, Arrange (AAAAA)
c. Compassion
d. Contemplation
e. Evocation
f. Expressing empathy
g. Preparation

11. A 32-year-old man presents to your pharmacy with a question about over-the-counter nicotine replacement therapies (NRT). He is concerned about the cost of these agents, but his wife has been bothered by his smoking for years. He has given a great deal of thought to quitting the past few months and wants to quit in a month so he can start the new year smoke-free. This is his first quit attempt and wants more information about his options. Which of the following best represents the patient's current stage of change?
a. Pre-contemplation
b. Contemplation
c. Preparation
d. Action

12. To assist the patient in progression to the next stage of change, the following technique is most appropriate:
a. Provide an informational brochure on the benefits of smoking cessation
b. Use motivational interviewing techniques to explore his motivators for cessation
c. Refer him to the national quit-line and provide the phone number
d. Set a quit date and review treatment options

Questions 13-16 pertain to the following case:

Patient H.L. is a 42 year-old female who comes to the pharmacy to purchase nicotine replacement therapy. She has smoked 1-1/2 packs per day (PPD) for the past 21 years, but over the last two months has successfully cut down to nine cigarettes/day. She believes that she has reached a plateau with her quit attempt and needs additional help in the form of nicotine replacement therapy. Her goal is to be completely smoke-free by the end of the month (in two weeks). After talking more with H.L., you both agree that the nicotine patch would be the preferred product for her to use.

13. Which of the following is the proper dose and duration for the initial step therapy for H.L. with the nicotine transdermal patch?
a. Apply the 21 mg/day patch once daily for four weeks.
b. Apply the 14 mg/day patch once daily for six weeks.
c. Apply the 7 mg/day patch once daily for six weeks.
d. Apply one-half of the 21 mg/day patch once daily for four weeks.

14. Which of the following counseling points below would also be appropriate for L.H. regarding the nicotine transdermal patch?
a. The patch should be worn for 24 hours, but may be removed before bedtime if it causes insomnia.
b. The patch may be cut in half if she experiences side effects from excessive nicotine influx.
c. The patch should be applied every morning, and removed within 12 hours.
d. The patch should be placed in the same area each day to help increase absorption of the nicotine.

Patient H.L. returns to your pharmacy a week later. She states that the transdermal patch irritated her skin. You offer to show her other brands of the patch. However, she is not interested in trying the patch again. After talking with her friends, she tells you that she is now considering the nicotine gum.

15. What is the minimal number of pieces of the nicotine gum H.L. should use per day to prevent nicotine withdrawal symptoms?
a. 6
b. 9
c. 16
d. 20

16. When counseling H.L. on the proper use of the nicotine gum, which of the following is the most appropriate counseling tip?
a. Chew the gum until it tastes peppery, and then park it between the gum and cheek.
b. Do not eat or drink for at least 30 minutes prior to using the gum.
c. Chew the gum continuously while it tastes peppery, and then park it between the gum and cheek.
d. Do not eat or drink for at least 30 minutes after using the gum.

Please use the following case to answer questions 17-18.

Patient S.W. is a 51-year-old female who is admitted to the hospital due to complaints of exacerbated asthma and difficulty breathing. She currently smokes 1-1/2 packs per day, and drinks four cups of caffeine daily in the form of coffee. Current medications include salmeterol/fluticasone 250/50; lisinopril/hydrochlorothiazide 20/12.5 mg; metformin 1,000 mg; atorvastatin 80 mg; and zolpidem 10 mg.

17. S.W. is admitted to a non-smoking hospital. What type of nicotine replacement therapy would be appropriate for this patient to receive while in the hospital to help avoid nicotine withdrawal?
a. Nicotine transdermal patch 21 mg/day
b. Nicotine transdermal patch 14 mg/day
c. Varenicline 1 mg daily
d. Bupropion SR 150 mg daily

18. Which of the following statements regarding S.W.'s smoking cessation while in the hospital is true?
a. Cigarette smoke induces the metabolism of atorvastatin; therefore, her dose should be decreased when she is not smoking.
b. Nicotine withdrawal elevates blood pressure; therefore, her lisinopril/hydrochlorothiazide medication can be discontinued.
c. Cigarette smoke impairs the metabolism of zolpidem; therefore, the dose of zolpidem should be increased when she is not smoking.
d. Cigarette smoke induces the metabolism of caffeine; therefore, she should decrease her caffeine consumption when she is not smoking.

19. Which of the following medication combinations is FDA-approved for smoking cessation?
a. varenicline + nicotine gum
b. varenicline + nicotine inhaler
c. bupropion SR + nicotine patch
d. bupropion SR + nicotine nasal spray

20. Which of the following statements regarding varenicline is true?
a. Sleep disturbances such as abnormal dreams are a common adverse event.
b. Patients should be tapered off of varenicline when it is time to discontinue the drug.
c. The starting dose for varenicline is 0.5 mg twice daily.
d. Varenicline contains a black box warning due to its risk of serious nephrotoxicity.

21. Which of the following statements best represents a practical counseling approach?
a. "I hear you saying that you are used to handling a cigarette. Do you think that using a stress ball would help to keep your hands busy and avoid you from reaching for a cigarette?"
b. "On a scale of 1-10, how ready would you say you are today to quit smoking?"
c. "My best advice for you and your health is to quit smoking."
d. "Do you currently use tobacco products?"

Cigarette Diary	Time	Environment	Activity	Craving (1-10)	Notes
Monday					
1	7:35 a.m.	Home	Morning Coffee	9	
2	8:20 a.m.	Car	Driving to Work	6	
3	10:10 a.m.	Work	Smoke Break	5	
4	12:45 p.m.	Work	Lunch Break	6	
5	3:15 p.m.	Work	Smoke Break	4	
6	5:20 p.m.	Car	Drive Home	4	
7	7:00 p.m.	Home	After Dinner	7	
8	8:25 p.m.	Home	Watching TV	6	
9	9:00 p.m.	Home	Before Bed	8	Fight with husband
Tuesday					
1	7:20 a.m.	Home	Morning Coffee	9	
2	8:00 a.m.	Car	Driving to Work	7	
3 & 4	9:45 a.m.	Work	Smoke Break	10	Stressful meeting
5	11:15 a.m.	Work	Smoke Break	8	
6	1:00 p.m.	Work	Lunch Break	7	
7	2:10 p.m.	Work	Smoke Break	5	Went on break with friends
8	4:45 p.m.	Car	Driving Home	3	
9	5:35 p.m.	Home	Cooking Dinner	3	
10	6:15 p.m.	Home	After Dinner	6	
11	8:20 p.m.	Home	Watching TV	6	
12	9:10 p.m.	Home	Before Bed	4	

22. True or False: Practical counseling is a form of problem-solving that involves generating and selecting solutions.
a. True
b. False

Patient Case: Patient L.Y. is a 43-year old female who wishes to stop smoking. She has significantly cut down her smoking habits to approximately half a pack per day, but is still struggling to fully eliminate smoking. At your suggestion, she has kept a cravings journal for the past week. A two-day sample of her journal is shown above.

23. Based on L.Y.'s journal entries, what would be the best practical counseling recommendation at this time?
a. "It appears that your work friends peer-pressured you to smoke. You should avoid seeing these friends while you attempt to quit smoking."
b. "Your biggest nicotine cravings occur in the morning when you have your cigarette with your morning coffee. If you can give up this cigarette, the rest should be a breeze!"
c. "Looking at your journal, what do you feel is one cigarette a day that you can eliminate from your routine?"
d. "It appears that some of your lowest cravings times occur during your work smoke breaks. Can you go for a walk instead of smoking a cigarette during those times?"