



A PHARMACY CONTINUING EDUCATION PROGRAM

W-F Professional Associates, Inc. 400 Lake Cook Rd., Suite 207 Deerfield, IL 60015 847-945-8050

Nov/Dec 2007 "Update on Smoking Cessation" 707-000-07-011-H01



THIS MONTH--
"Smoking
Cessation"

CREDIT STATEMENTS FOR THIS YEAR WILL BE MAILED IN DECEMBER. DEADLINE FOR US TO RECEIVE QUIZZES & HAVE THEM APPEAR ON THIS CREDIT STATEMENT IS NOVEMBER 30, 2007.

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QUIZ DEADLINE FOR THIS YEAR IS NOVEMBER 30, 2007.

This is the double lesson for November & December, and it provides 2.50 hours (0.25 CEUs) of credit. This topic is continuously one that is near the top of suggestions from participants. Disease impact & economic impact from smoking is staggering. This topic & lesson is intended to provide information that can be conveniently shared with patients, and it is intended for pharmacists in all practice settings. The goal is to provide the latest information that seems to be successful—which implies a combination of behavioral modification & drug therapy.

The program ID # for this lesson is 707-000-07-011-H01.

Pharmacists completing this lesson by November 30, 2010 may receive full credit.

To obtain continuing education credit for this lesson, you must answer the questions on the quiz (70% correct required), and return the quiz. Should you score less than 70%, you will be asked to repeat the quiz. Computerized records are maintained for each participant.

If you have any comments, suggestions or questions, contact us at the above address, or call toll free 1-800-323-4305. (In Illinois, Alaska and Hawaii phone 1-847-945-8050). **Please write your ID Number (the number that is on the top of the mailing label) in the indicated space on the quiz page (for continuous participants only).**

The objectives of this lesson are such that upon completion the participant will be able to:

1. List the negative health consequences of tobacco use.
2. Describe the role of healthcare providers in smoking cessation.
3. Discuss the benefits of non-drug therapy in smoking cessation.
4. Compare & contrast the forms of pharmacotherapy that are available.

All opinions expressed by the author/authors are strictly their own and are not necessarily approved or endorsed by W-F Professional Associates, Inc. Consult full prescribing information on any drugs or devices discussed.

EPIDEMIOLOGY AND PHARMACOLOGY OF SMOKING

Tobacco use is the leading cause of preventable deaths in the United States, accounting for 1 out of every 5 deaths.^{1,2} There are currently 44.5 million adult smokers which accounts for approximately 20% of the adult population. Of people who smoke, men account for the largest percentage. Certain ethnic groups have a higher reported incidence. American Indians and native Alaskans account for 33% of adult smokers, while Hispanics and Asians have a much lower incidence of 15% and 11.3% respectively. Currently, 3.75 million (22%) high school students smoke. One of the goals of Healthy People 2010 is to decrease the total number of adult smokers to 12% and adolescent smokers to 16%.³

Tobacco use has a major financial impact on Americans. A total of 75.5 billion dollars is spent on direct medical care for smokers, and almost 82 billion dollars in lost productivity.^{1,2}

Although cigarette smoking is the most common form of tobacco use, other forms include cigars, pipes, bidis and smokeless tobacco. Bidis are small hand-wrapped cigarettes, and are popular with younger Americans. They are imported from Southeast Asia and India and are available in a variety of flavors, such as chocolate, cherry and strawberry. Studies have shown that bidis contain 3 times the amount of nicotine and carbon monoxide, and up to 5 times the amount of tar compared to conventional cigarettes.¹

Nicotine is a ganglionic cholinergic receptor. The effects of nicotine are dose dependant. Nicotine increases alertness and improves cognitive function. It also increases blood pressure, heart rate and oxygen consumption. Following inhalation, the half life of nicotine is 2 hours. It is metabolized primarily by the liver. The primary inactive metabolite of nicotine is cotinine. Cotinine's half life is 18-20 hours. Cotinine is the primary measurement of tobacco exposure both in smokers and those exposed to second-hand smoke. Nicotine and its metabolites are excreted primarily in the urine, although some is excreted in the breast milk. Chronic use of nicotine may lead to physical and psychologic dependence. Individuals who abruptly discontinue smoking may develop signs and symptoms of withdrawal such as craving for cigarettes, restlessness, irritability, difficulty concentrating, drowsiness and headache.^{1,4,5}

CONSEQUENCES OF SMOKING

It is commonly understood that cigarette smoking is primarily associated with lung cancer. However, tobacco use affects all organs. Of all smoking related deaths, 31% are due to cardiovascular disease, 23% are due to respiratory disease, 28% are due to lung cancer, while 8% are due to other cancers. An interesting statistic is that 9% of smoking related deaths are due to second-hand smoke exposure. In addition to these effects, smoking can contribute to a number of other diseases or health problems. Table 1 provides some examples.^{1,2}

CARDIAC REHABILITATION/SECONDARY PREVENTION PROGRAMS

The American Heart Association and the American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR) have updated the core requirements of cardiac rehabilitation/secondary prevention programs (CR/SPP) in 2007. Well-designed CR/SPP that include smoking cessation programs have demonstrated positive benefits in patients with cardiovascular diseases including coronary artery disease and heart failure. In order for a CR/SPP to receive certification from AACVPR, they must provide a multidisciplinary approach to all core components, including smoking cessation.⁶

Hospitals and healthcare organizations have identified smoking cessation programs as a key component in improving the overall health outcomes of their patients. Since smoking is the largest preventable cause of

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November 2007

Table 1-Health problems related to smoking 1,2,5

Cardiovascular disease	Stroke Myocardial infarction Coronary artery disease
Pulmonary disease	Emphysema Asthma Chronic bronchitis Chronic obstructive pulmonary disease Acute respiratory infection Pneumonia
Cancer	Oral Esophagus Stomach Pancreas Uterus Cervix Kidney Bladder
Pregnancy effects	Low birth weight infant Preterm delivery Sudden infant death syndrome
Other effects	Periodontal infection Osteoporosis Peptic ulcer disease Poor wound healing

disease in the United States today, hospitals can no longer afford to treat the complications of smoking, but must take a proactive approach to improve the smoking cessation rates. It is well documented that when a health professional discusses the benefits of smoking cessation with a patient, however brief the interaction is, cessation rates increase substantially.⁶

Quality groups such as the Joint Commission as well as governmental agencies such as Central Management Services (CMS), require smoking cessation programs as part of their core performance measures. In 2003, CMS updated their care-guidelines for pneumonia, heart failure and myocardial infarction to require a smoking cessation program for all patients admitted with these conditions as part of the terms of reimbursement. The Joint Commission initiated a similar requirement in 2005 for hospitals as a specific requirement for excellence. As a result of these requirements, hospitals and healthcare organizations must implement processes that ensure all smokers receive appropriate information about smoking cessation and that appropriate interventions are taken in order for reimbursement to be available. It is important that these programs be made available to all populations of smokers, including specialty groups such as adolescent smokers, pregnant smokers and those with concomitant mental illness.^{6,7}

COMPONENTS OF SMOKING CESSATION PROGRAMS

Drug therapy or direct advice by a healthcare professional has both been shown to help individuals quit smoking; however, their impact on long term quit rates has been modest. When practitioners have combined drug therapy with behavioral counseling, there can be significant improvement in quit rates. Although many physicians do not have the resources available to provide both drug therapy and behavioral counseling, it is critical for physicians to advise patients about smoking. Studies have shown that even a short session of 5 minutes can have an impact on cessation rates.⁸

BEHAVIORAL INTERVENTIONS

Behavioral interventions for smoking cessation are often provided by nurses or pharmacists. These interventions are designed to help smokers improve their coping skills, identify triggers and prevent relapse. Behavioral counseling that incorporates 4 or more counseling sessions have demonstrated the best results. These sessions assist the smoker in understanding previous failures to stop smoking, identifying coping mechanisms for smoking triggers, establishing a quit smoking date and managing withdrawal symptoms. Behavioral interventions can be provided as individual therapy or as group therapy. The use of group therapy can also provide a support system to the smoker and allow for networking with others trying to quit.⁸

The first step in determining if an individual is a candidate for smoking cessation is to determine their willingness to quit. Since tobacco use is a national concern, one approach to identify these individuals is to have physicians or their staff members ask about cigarette smoking at each office visit. The process that is recommended is to:

- *Ask* at each visit about smoking
- *Advise* anyone who smokes to stop
- *Assess* the patient's motivation to stop smoking
- *Assist* those who are ready to stop
- *Arrange* contact with a smoking cessation provider.

As these individuals are identified, physicians or other healthcare providers can then determine their willingness to quit. It is important when identifying smokers, to include questions that identify all forms of tobacco use, not just cigarettes, since the use of smokeless tobacco is on the rise. Many practitioners use the stages of change model when assessing a smoker's willingness to stop.⁹ Table 2 summarizes the quit stages in this model.

The most significant barrier to behavioral therapy counseling is its availability to smokers wanting to quit. Programs are not widely available in all areas or at times that are convenient for smokers. Additional resources have been directed towards other forms of intervention that can provide behavioral change with a more widespread access. These interventions include telephone quit-lines and web-based programs. Studies have shown that smokers will contact a telephone quit-line more frequently than they will seek out personal counseling. Telephone quit-lines are available in every state and are linked through a single toll free number (**1-800 QUITNOW**). Counselors at the quit-lines work directly with smokers to develop a stop smoking plan for them. Healthcare providers can provide access to the toll free number, or can request that the smoker be contacted directly, using a fax referral process.⁸

Websites have also been developed to aid smokers in stopping smoking. These websites may be able

Table 2-Stages of Change Model for Smoking Cessation⁹

Stage of Change	Time Frame for Quitting
Precontemplation	Not in the next 6 months
Contemplation	Within the next 6 months
Preparation	Within the next 30 days

to assist smokers in developing personal care plans, with emails sent to the smoker to assist in support. In addition these sites may offer access to 24 hour chat rooms and provide anonymity. Some patients may benefit from this technology, and combined with drug therapy, may result in success. At this time, however, individual or group interventions, and telephone quit-lines remain first-line for behavioral therapy.⁸

PHARMACOLOGIC INTERVENTIONS

The first step in determining appropriate pharmacologic treatment for smoking cessation is to determine

the degree of nicotine dependence. When determining if a patient has a dependence on nicotine, practitioners may employ the Fagerstrom Test for Nicotine Dependence (FTND). This test is a series of 6 questions. The FTND can be found at the following website: www.ww2.heartandstroke.ca/DownloadDocs/PDF/Fagerstrom_Test.pdf. This screening tool can be a valuable resource to pharmacists who are developing smoking cessation programs in their pharmacies.¹

NICOTINE REPLACEMENT THERAPY

Nicotine replacement therapy (NRT) became available in 1984 in the form of nicotine polacrilex gum. The transdermal patch formulation of nicotine was marketed in 1991.¹⁰

In 1996, the Food and Drug Administration (FDA) moved NRT to non-prescription status. This move allowed consumers to self-prescribe NRT for smoking cessation. By 1998, almost 75% of individuals attempting to quit smoking used NRT in their attempt. Silagy et al¹¹ reviewed over 100 trials to determine the effectiveness of NRT. This review found that use of NRT increased smoking cessation rates 1.5 to 2 times. Studies have not shown a clinical difference between types of NRT used. Currently there are 5 forms of NRT commercially available. All NRTs work by reducing the cravings and withdrawal symptoms by replacing the nicotine in smoking.¹⁰ These agents are listed in Table 3.

Table 3- Nicotine Replacement Therapy^{10,12}

Dosage Form	Brand Name	Strength	Supplied
Nicotine gum	Nicorette Various generics	2, 4 mg	48, 108, 168
Nicotine patch	Nicoderm Nicotrol & various generics	7, 14, 21 mg/day 5, 10, 15 mg/day	7, 14 and 30 systems /box
Nicotine lozenge	Commit	2, 4 mg	72
Nicotine nasal spray*	Nicotrol NS	0.5 mg/actuation	10 ml
Nicotine inhaler*	Nicotrol Inhaler	4 mf/inhalation	42, 168

* Requires prescription

NICOTINE PATCH^{5,8,10,12}

Dosage

The nicotine patch is applied daily to the skin. The patch should be applied to a non-hairy area of the upper body or arm. For patients who smoke more than 10 cigarettes per day, begin with the highest strength patch (15 or 21 mg/day) for 6 weeks. The dose is then decreased to the second strength (10 or 14 mg/day) for 2 weeks, then the dose is stepped down to the lowest strength patch (5 or 7 mg/day) for 2 weeks, and then discontinued.

It is important to counsel patients about the proper use of nicotine patches. The patch should be applied to a dry, clean area of the skin each morning. The patch can be worn for 24 hours; however, if the patient experiences problems sleeping or complains of nightmares, the patch can be removed at bedtime. For those patients who have strong cravings for cigarettes in the morning, keeping the patch on overnight is beneficial. The patch should be applied whole, do not cut them. When applying the patch, patients should be instructed to wash their hands after handling the patch. Patients should be instructed to dispose of the patch in the trays that are provided, as the amount of nicotine remaining in the patch may be dangerous to children and pets.

Adverse Effects

Side effects reported with the nicotine patch include skin irritation and rash. These effects can be minimized by rotating the application site. Patients should not smoke while using nicotine patches as it can result in nicotine toxicity. Some signs of nicotine toxicity include severe nausea, diarrhea, confusion, weakness, palpitations, dizziness, flushing and hypotension.

NICOTINE GUM^{5,8,10,12}

Dosage

The initial dose of nicotine gum is 4 mg in patients who smoke more than 25 cigarettes, or who have a Fagerstrom score ≥ 7 . For the best effect, patients should chew at least 9 pieces of gum each day during the first 6 weeks of quitting. The maximum amount of gum that should be chewed in a day is 20 to 30 pieces. The gum should be chewed until the patient feels a peppery taste or a tingle. Then the gum should be parked in between the cheek and the gum. When the tingle stops, the patient should start to chew the gum again for a few minutes until the tingling or peppery taste returns. This chewing, parking routine continues for 30 minutes or until the tingle is gone. The gum is most effective if a patient avoids eating or drinking for 15 minutes prior to using the gum. Although the nicotine gum can be effective, patients cannot achieve blood levels similar to that with smoking. The gum is often used in combination with other forms of NRT on an "as needed" basis for breakthrough cravings or withdrawal symptoms.

Adverse Effects

Patients will complain that use of the nicotine gum may result in headache, jaw fatigue or mouth pain. Other side effects include heartburn, hiccups and nausea. Many patients complain of the taste of the gum, although newer fruit flavors may have more appeal.

NICOTINE LOZENGE^{5,8,10,12}

The nicotine lozenges offer an alternative for those patients who cannot use the gum because of adverse effects associated with chewing (jaw fatigue, muscle soreness). It is also an alternative for patients with dental problems where gum chewing would be contraindicated.

Dosage

The nicotine lozenge is used in a manner very similar to the gum. The dose is similar in that individuals who smoke more than 25 cigarettes per day should start with a 4 mg lozenge. Patients should place the lozenge in the mouth and allow it to slowly dissolve, moving it from one side of the mouth to the other. The lozenge should not be chewed or swallowed. Patients may feel a warm or tingling sensation in the mouth. No more than 5 lozenges should be used in a 6-hour period, and no more than 20 lozenges in 24 hours. As with the nicotine gum, patients should avoid eating or drinking 15 minutes before using the lozenge.

Adverse Effects

Side effects reported with the nicotine lozenge include heartburn, hiccups and nausea.

NICOTINE NASAL SPRAY^{5,8,10,12}

Nicotine nasal spray can provide an equivalent to 50% of blood nicotine levels achieved through smoking. Peak concentrations of nicotine are more rapid than that seen with the gum or the patch, and occur within 5 to 10 minutes. The nasal spray is often used in combination with the patches to improve cessation rates.

Dosage

The initial dose of the nicotine nasal spray is 2 sprays into each nostril. Patients use 1 to 2 doses per hour with a maximum dose of 80 sprays per 24 hours. Patients appear to have the greatest success when 8 doses a day are used initially. When discontinuing use of the nasal spray, tapering is generally recommended. Patients may choose to use $\frac{1}{2}$ of the dose (1 spray in each nostril), or may skip a dose every other hour. Some patients may be able to abruptly discontinue the nasal spray. Nicotine nasal spray requires a prescription.

Adverse Effects

The most frequent side effects reported with the nasal spray include local irritation of the nose and throat, watery eyes, runny nose, coughing and sneezing. Other side effects include anxiety, restlessness, heartburn, constipation, and a change in smell.

NICOTINE INHALER^{5,8,10,12}

The nicotine inhaler was designed for use specifically in those individuals who identify the hand to mouth ritual of cigarette smoking as a behavior that they struggle with. The inhaler looks like a cigarette and provides patients with the comfort of holding a product that mimics the cigarette. The inhaler has been used successfully in combination with nicotine patches to achieve higher rates of smoking cessation. The combination of nicotine patches and inhaler can result in good success in some patients.

Dosage

Patients are instructed to place a nicotine cartridge in the inhaler device and puff continuously for about 20 minutes. The dose is individualized; however, most patients require at least 6 cartridges a day. The maximum dose of the inhaler is 16 cartridges per day. After an initial 12 week period, the patient should be tapered off the inhaler for the next 12 weeks. The nicotine inhaler requires a prescription.

Adverse Effects

The most frequent side effects reported with the nicotine inhaler include a burning feeling in the throat and mouth, coughing, rhinitis, heartburn and headache. Other adverse effects include changes in taste, hiccups, dizziness, anxiety and chest discomfort.

BUPROPION, EXTENDED RELEASE^{5,8,10,12}

Extended release bupropion (Zyban[®]) was approved as an aid in smoking cessation in 1998. Although originally used as an atypical antidepressant, bupropion decreases cravings and withdrawal symptoms associated with smoking cessation. Bupropion may be an effective addition in patients who have not been successful with NRT alone, or who are concerned about weight gain. Bupropion use appears to reduce weight gain. The exact mechanism of action is unclear; however, bupropion has both dopaminergic and adrenergic effects. Bupropion does appear to block nicotine receptors.

Dosage

The initial dose of bupropion is 150 mg once daily for 3 to 5 days. The dose is then increased to 150 mg twice daily for 12 weeks, although studies have reported successful use for 12 months.

Adverse Effects

The most common side effects reported with bupropion include insomnia, headache, and dry mouth. Other side effects include tremors and skin rash.

Contraindications

Bupropion should not be used in patients with seizure disorder, those with an eating disorder such as bulimia or anorexia nervosa, or patients taking monoamine oxidase inhibitors. Since bupropion may be prescribed for patients with a diagnosis of depression, it is important to counsel patients so they do not combine Zyban[®] and Wellbutrin[®]. Bupropion should also be avoided in patients who are undergoing abrupt discontinuation of alcohol or sedatives. Since bupropion is associated with an increased risk of suicide in individuals with major depressive disorder, it should be used with caution in adolescents and adults attempting to stop smoking with this co-morbidity.

VARENICLINE¹³⁻¹⁵

Varenicline (Chantix[®]) is the first partial agonist of the nicotine acetylcholine receptor (NAChR) approved by the FDA. It was approved on May 11, 2006. The addictive nature of nicotine is due in part to its action on this receptor. When nicotine activates the NAChR, dopamine is released in the nucleus accumbens, the pleasure or reward center of the brain. Varenicline acts as a partial agonist of the NAChR, reducing the withdrawal symptoms and diminishing the pleasure associated with smoking. Currently there are no trials published using varenicline in combination with other smoking cessation drug therapy. It is currently only approved for use as monotherapy.

Dosage

Therapy should begin 1 week prior to a patient's established quit date. The initial dose of varenicline is 0.5 mg daily on day 1 to 3, then 0.5 mg twice daily on days 4 to 7, then 1 mg twice a day for 12 weeks. Patients

may continue for an additional 12 weeks. Patients on hemodialysis should receive 0.5 mg daily. Varenicline is only approved for use in adults.

Adverse Effects

The side effects most often reported with varenicline include nausea, insomnia, headache and abnormal dreams. Other side effects include flatulence, vomiting, and constipation. The nausea reported with varenicline can be lessened by the dose titration schedule. In patients who continue to complain of nausea, the dose can be reduced to 0.5 mg twice daily.

ROLE OF THE PHARMACIST

Since CMS and the Joint Commission now require smoking cessation programs be incorporated into the care of patients with pneumonia, heart failure and myocardial infarction, community pharmacists can work with healthcare organizations to develop smoking cessation programs for patients to participate in as they leave the hospital. Community pharmacists are in a unique position to educate and counsel smokers and receive reimbursement for this service. Physicians may refer patients to specific community-based smoking cessation programs managed by the pharmacist. Pharmacists may develop joint programs with local hospitals or physician practice groups. This may result in a significant new revenue stream for community pharmacists as reimbursement models are now in place.

When initiating a smoking cessation program, the pharmacist will need to establish a plan for managing patients. During an initial meeting with a patient, the pharmacist should complete a smoking cessation assessment plan. This assessment should include a smoking history, the number of previous attempts to stop smoking, a stage of change questionnaire, a Fagerstrom Score and a complete medication history.

Once the assessment is completed and the patient is ready to stop smoking, the pharmacist can then design a pharmacotherapy care plan that best suits the individual patient. As part of the smoking cessation program, the pharmacist may incorporate smoking behavior counseling as part of the service and develop a process to receive reimbursement for the service.

Behavior counseling should include:

- Discussion of the barriers to successful smoking cessation for the patient.
- Individual smoking triggers (eating a meal, drinking in a bar, driving a car).
- Coping strategies for the patient.
- Establishment of a quit date and removal of tobacco products from the home.
- Follow-up to determine adverse effects or other issues.

The community pharmacist also provides additional benefit in that they can conduct smoking cessation education at times that are convenient for the patient such as in the evening or on the weekends in the pharmacy.

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16. Useful websites for Smoking Cessation Programs

<http://www.americanheart.org/presenter.jhtml?identifier=4731>

<http://www.lungusa.org/site/pp.asp?c=dvLUK9O0E&b=39240>

http://www.cancer.org/docroot/PED/content/PED_10_13X_Guide_for_Quitting_Smoking.asp

<http://www.americanheart.org/downloadable/heart/1137710851265SmokeCessProcess.pdf>

<http://www.trytostop.org/>

THIS IS THE FINAL DOUBLE LESSON FOR 2007.
DEADLINE FOR US TO RECEIVE QUIZZES & HAVE THEM APPEAR ON THE DECEMBER
2007 CREDIT STATEMENT IS NOVEMBER 30, 2007.
QUIZZES RECEIVED BETWEEN DECEMBER 1, 2007 & DECEMBER 31, 2007 WILL COUNT
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Fill in the information below, answer questions and return **Quiz Only** for certification of participation to:
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CHECK IF NEW ADDRESS **ARE YOU LICENSED IN FLORIDA? IF YES FL LIC** _____

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LESSON EVALUATION

Please fill out this section as a means of evaluating this lesson. The information will aid us in improving future efforts. Either circle the appropriate evaluation answer, or rate the item from 1 to 7 (1 is the lowest rating; 7 is the highest).

1. Does the program meet the learning objectives?

- | | | |
|--|-----|----|
| List the negative health consequences of tobacco use | Yes | No |
| Describe the role of healthcare providers in smoking cessation | Yes | No |
| Discuss the benefits of non-drug therapy in smoking cessation | Yes | No |
| Compare & contrast the forms of pharmacotherapy available | Yes | No |

2. Was the program independent & non-commercial Yes No

	Poor		Average		Excellent
3. Relevance of topic	1 2	3	4	5	6 7

4. What did you like most about this lesson? _____

5. What did you like least about this lesson? _____

Please Select the Most Correct Answer

- | | |
|---|--|
| <p>1. Second hand smoke accounts for what percent of all smoking related deaths?
 A. 4
 B. 9
 C. 22
 D. 14</p> <p>2. When a health professional discusses the benefits of smoking cessation, there is an increase in cessation rates, even if it's only discussed for 5 minutes.
 A. True
 B. False</p> <p>3. How many preventable deaths are accounted for by tobacco use in the U.S.?
 A. 1 out of 3
 B. 1 out of 6
 C. 2 out of 7
 D. 1 out of 5</p> <p>4. Which ethnic group accounts for the highest incidence of smoking in the U.S.?
 A. African Americans
 B. Hispanics
 C. American Indians, Native Alaskans
 D. Asians</p> <p>5. If a patient complains about sleep disturbances from NRT patch, the pharmacist should:
 A. Recommend discontinue treatment
 B. Suggest remove patch at bedtime
 C. Use nicotine lozenge at bedtime
 D. None of these</p> | <p>6. Bupropion should not be used in which of the following patient types?
 A. Patients with history of seizures
 B. Patients taking MAO inhibitors
 C. Patients with eating disorders
 D. All of these</p> <p>7. Varenicline is the first drug in which class to be marketed?
 A. Partial NAChR agonist
 B. Complete NAChR agonist
 C. NAChR antagonist
 D. Nicotine replacement therapy</p> <p>8. What hospital care guidelines now specifically incorporate smoking cessation?
 A. Heart failure
 B. Pneumonia
 C. Myocardial infarction
 D. All of these</p> <p>9. The benefits of behavioral therapy for smoking cessation include:
 A. Identifies triggers for smoking
 B. Assists to identify coping skills
 C. Identifies barriers to success
 D. All of these are benefits</p> <p>10. When dosing varenicline in patients with renal disease, the dose for hemodialysis patients is:
 A. 1 mg twice daily
 B. 0.5 mg twice daily
 C. 0.5 mg once daily
 D. None of these</p> |
|---|--|

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Pharmacists completing this course by November 30, 2010 may receive full credit.

This program has been approved by the State Boards of Pharmacy in Alabama and Oklahoma.

This lesson furnishes 2.5 hours (0.25 CEUs) of credit.

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