Smoking Cessation

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Purpose

The purpose of this course is to provide the healthcare provider with a review of smoking cessation, including the healthcare provider's role, benefits of smoking cessation, steps to cessation, medical approaches, support resources, and problems related to cessation.

Goals

Upon completion of this course, the healthcare provider should be able to:

- List at least 5 adverse effects of tobacco smoking.
- List and describe the 5 steps to the US Department of Health and Human Services Guidelines.

Describe at least 4 benefits from smoking cessation

• List and describe at least 5 steps in smoking cessation.

• Describe 5 types of nicotine replacement therapy.

- List and describe at least 3 other medicines used to control cravings or reduce withdrawal symptoms.
- Describe 3 types of complementary medicine used for smoking cessation.
- Discuss at least 5 motivational techniques to use with people unwilling to quit smoking.
- List and describe 5 types of support resources and 3 smoking cessation tools.

• Describe 5 problems associated with smoking and approaches to reducing these problems.

Introduction

By now, most people are aware that smoking is bad for them—even if they pointedly ignore the warning on the cigarette package. Many smokers have quit . . .over and over and over and over . . .

Therein lies the problem.

Despite the fact that smoking reduces life expectancy up to 15 years, is the leading cause of lung cancer and chronic obstructive lung disease (COPD), and increases risk of heart disease and stroke by up to 4 times, people keep smoking or resume smoking.



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According to the CDC, about 21% of Americans 18 or older still smoke (23% of males and 18% of females). The reality is: Smokers are addicts, and addicts are hard to treat. Nicotine is just as addictive as heroin or cocaine, and for some people even more so. For smoking cessation to be successful, people need support and a variety of different options to fit individual needs.

Healthcare provider's responsibility

Healthcare providers must take a proactive role in helping people quit smoking. Asking people if they smoke and recording information about smoking without responding to this information does a disservice to the smoker and misses an opportunity to help them quit. Simply reciting the negative effects of smoking often has little effect on smokers because most of them already know! What they are looking for is a plan that will help them do these things:

- Stop smoking.
- Ease cravings.
- Eliminate the effects of withdrawal.
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Not as simple as it sounds.

US Departm	ent of Health and Human Services Guidelines
Ask	Ask every adolescent/adult at every visit about smoking and record status.
Advise	Strongly advise all smokers to stop smoking and provide explanation of smoking's affect on health and benefits of quitting.
Assess	 Assess general readiness to quit smoking by questioning patient and if the patient is willing to try to quit, providing resources and information. If patient is not willing to stop smoking, provide support and try to motivate the patient to quit.
Assist	 Assist the smoker with a plan to quit smoking. This plan should include setting a target date (within 2 weeks), removing cigarettes, enlisting family and friends, reviewing past efforts at quitting, and anticipating challenges the person will face during withdrawal (nervousness, craving). Advise the smoker about the necessity for abstinence and the association between smoking and drinking. Provide aids, such as nicotine replacement products or other prescription drugs.
Follow-up	Monitor the person to provide encouragement and reinforcement and to determine progress.

The healthcare provider needs to have a plan in place to encourage and help smokers to quit and should be armed with facts about the benefits of smoking cessation. At an average cost of \$5 per pack, a one-pack-a-day smoker burns up about \$1825 annually and a two-pack-a day smoker, \$3650. This is not small change.

Smoking is increasingly less socially acceptable and is now effectively banned or restricted in many public gathering places, such as theaters, as well as (in some states) restaurants and bars. Smoking is also banned in many work places. As the effects of environmental (secondhand) tobacco smoke have become better understood, non-smokers have demanded a smoke-free environment for themselves and their children.

Women who smoke are more likely to have babies with low-birth weight, and the child is at increased risk of childhood asthma. Children exposed to environmental tobacco smoke have increased respiratory infections and ear infections. Smoke may also cause eye irritation, nausea, dizziness, and headaches. Infants are at increased risk of sudden infant death syndrome (SIDS). Additionally, children who grow up in households where a parent smokes are more likely to start smoking.

Benefits of sm	Benefits of smoking cessation over time		
20 minutes	Heart rate and blood pressure decrease.		
12 hours	Carbon monoxide level in blood falls to normal.		
2-12 weeks	General circulation and lung function improve.		
1-9 months	Respiratory symptoms (cough, shortness of breath)		
	decrease and lung function improves. Damaged tissue		
	regenerates.		
1 year	Risk of coronary heart disease drops 50% from the		
	risk of smokers.		
5-15 years	Risk of stroke drops to the same as non-smokers.		
10 years	Risk of lung cancer drops to 50% the rate for those		
	who continue smoking.		
15 years	Risk of coronary heart disease drops to the same rate		
	as non-smokers.		

Steps to quitting

Some people are able to make the decision to quit smoking and just throw away the cigarettes and never smoke again, but it's unrealistic to believe that this is an option for most people. Nicotine is addictive. It provides a sense of pleasure, but the body develops a tolerance to nicotine after a time, and the person needs more and more nicotine to feed the body's need. This is the essence of addiction. It's also the reason that people who think they can quit by "cutting down" are rarely successful. It's almost impossible to treat addiction by continuing to use the addictive substance. Most people need a plan to help them quit. They need to know what to do when they wake up that first morning with an overwhelming need for a cigarette—and all the mornings afterward.

Get ready, get set, STOP SMOKING				
Make	• Set a quit date.			
preparations: START	Tell family, friends, and co-workers.Anticipate challenges and make a plan to deal			
START	with them.			
	 Remove all cigarettes and cigarette products 			
	(ashtrays, lighters) from the environment at			
	home, at work, and in motor vehicles.			
	Talk to a physician about getting help to quit.			
Deal with quit	Make use of support systems. Keep busy (Eversise, go to a movie, take a walk			
day	 Keep busy (Exercise, go to a movie, take a walk, visit with friends). If possible, go to places where 			
	no smoking is allowed.			
	• Compensate: Hold something, suck on candy,			
	chew on a toothpick, and drink plenty of fluids			
	(but avoid alcohol).			
Reduce temptation	 Avoid situations that trigger the habit of smoking (most helpful). If, for example, eating is followed 			
temptation	by smoking, get up from the table and take a			
	walk.			
	If drinking and smoking are always done			
	together, stop drinking.			
	 Go to smoke-free environments as often as 			
	possible.Stick with non-smokers.			
Control	 Wait out the urge—it may pass. 			
cravings	• Substitute other things (carrots, candy, gum) for			
_	cigarettes.			
	• Do something or go somewhere—wash clothes,			
	mow the lawn, take a walk.			
Find new	Practice relaxation exercises.Take up hobbies.			
activities	 Exercise. 			
	Take classes.			
	Learn a new skill.			
	Keep hands busy.			
Review	Focus on fresh breath, improved sense of smell and tasts, sense better beath			
benefits	and taste, social acceptance, better health.			

	Hang in t	there	•	Remember	that	it ge	ets easie	r!
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Medical approaches

Many smokers find that they need medication in order to stop smoking. The primary types of drugs for smoking cessation include nicotine replacement, nicotine blocker, and antidepressant. During withdrawal, patients may experience irritability and anxiety as well as severe nicotine craving. Nicotine replacement therapy (the treatment most commonly used), such as the nicotine patch, releases nicotine more slowly so that people don't get the immediate nicotine "rush" they get from smoking cigarettes. While people still may suffer some negative effects from nicotine, they avoid irritation to the lining of the lungs and such toxins as tar and carbon monoxide, so nicotine replacement therapy is a better health choice than smoking.

Nicotine replacement therapy					
Medication	Use				
Nicotine gum (OTC)	 Available in 2 mg and 4 mg dosages and is intended for use ≤12 weeks. People who smoke ≤24 cigarettes daily can use ≤ 24 pieces of 2 mg gum daily. People who smoke ≥25 cigarettes daily can use ≤24 pieces of 4 mg gum. Side effects include mouth irritation, jaw pain, and indigestion 				
Nicotine notek	indigestion.				
Nicotine patch (OTC & prescription)	 The patch is used for about 8 weeks in decreasing doses: 21mg/24 hours for 4 weeks 14 mg/24 hours for 2 weeks 				
	• 7 mg/24 hours for 2 weeks.				
	Side effects include insomnia, abnormal dreams, agitation, and local dermatitis.				
Nicotine inhaler	 Six to 16 cartridges of nicotine may be used daily for ≤6 months. 				
(Prescription)	Side effects include mouth and throat irritation.				
Nicotine lozenge (OTC)	 Available in 2 and 4 mg doses for use ≤12 weeks. People who smoke >30 minutes after awakening can use ≥10 2-mg lozenges in 24 hours. People who smoke <30 minutes after awakening can use 5 4-mg lozenges in 24 hours. Side effects include local irritation to the throat, hiccups, nausea, indigestion, and heartburn. 				
Nicotine nasal	 Intended for 3 to 6 month of use with 8-40 nasal sprays 				



Some people are not able to quit smoking by using nicotine replacement products, so a different approach may be needed. The two other primary drugs used are bupropion and varenicline. Studies show that bupropion has approximately the same success rate as nicotine replacement drugs, but varenicline is about 60% more effective than both nicotine replacement therapy and bupropion. However, varenicline may cause severe neuropsychiatric symptoms and has been associated with suicide, so patients should be carefully monitored. Some patients benefit from a combination of medical treatments, such as the nicotine patch as well as nicotine nasal spray or gum and bupropion. Treatment should be tailored to the individual.

Other medications (Prescription only)			
Medication	Use		
Bupropion	This antidepressant helps to alleviate the side effects		
SR	associated with nicotine withdrawal.		
(Zyban®)	 Initially used for 7 to 12 weeks with maintenance dose ≤6 		

	 months. Patient begins taking medications t weeks prior to smoking cessation with 150 mg each AM for 3 days, increasing to 150 mg BID. Contraindications include history of seizures, eating disorders, and MAO inhibitor use within 2 weeks. Side effects include insomnia, anxiety, headache, irritability, dry mouth, and seizures (rare). 		
Varenicline (Chantix®)	 Intended for use for 12 to 24 weeks with maintenance ≤6 months. Treatment begins with 5 to 7 days prior to quitting at 0.5 mg daily, increased to 0.5mg BID 1-4 days before quitting. On the day of quitting smoking, the dose is increased to 1 mg daily. Side effects include nausea, flatulence, constipation, abnormal dreams, insomnia, and headache. Neuropsychiatric symptoms such as changes in behavior, hostility, agitation, depressed mood, and suicide-related events, including ideation, behavior, and attempted suicide may occur. 		
Clonidine (Catapres®)	 Studies show that clonidine (a drug normally used to treat hypertension) can help reduce withdrawal symptoms and craving for nicotine. Start drug (oral or transdermal) ≤3 days before quit date. Dosage varies. Side effects include dizziness and drowsiness. 		
Nortriptyline	 This second-line drug may help decrease tobacco dependency: 25mg day initially increasing to 75-100 mg daily for 12 weeks although may be extended to 6 months if necessary. Side effects include sedation, dry mouth, blurred vision, urinary retention, lightheadedness, and hand tremors. Must not be given with MAO inhibitors. 		

While medications help many people to quite smoking, the combination of medications and support is most effective, so healthcare providers should always provide information about support services.

Complementary medicine

Some people turn to complementary medicine to help them stop smoking. While there is a variety of different vitamin and herb preparations that purport to help people stop smoking, most of these have no evidence to support claims, and some herbal preparations contain drugs that may be harmful, especially if combined with other medications, Some complementary medical approaches have gained in popularity.

Complementa	Complementary medicine		
Hypnosis	Hypnotherapy usually involves a series of treatments in which the patient is educated about the dangers of smoking and then hypnotized to break the emotional attachment to cigarettes and to provide alternatives to smoking.		
Acupuncture	Acupuncture treatments involve the insertion of fine needles into the ear lobes and/or other parts of the body to reduce craving and symptoms of withdrawal. In some cases, pellets are taped over acupoints so that the patient can apply pressure manually if craving develops.		
Meditation	Various meditation techniques help the patient to be aware of the body and sensations and to change though processes and behavior.		

Support

While some people are able to make the decision to quit and stick with it without support, most people benefit from a support system that can help them resist the urge to resume smoking. Studies show a correlation between the number of counseling sessions combined with medications and abstinence, so the more counseling sessions the better. People often respond to motivational techniques, so strongly encouraging people to quit may be effective, especially for light smokers. Healthcare providers should be persistent with those who are unwilling to quit smoking.

Motivational te	Motivational techniques for those unwilling to quit		
Empathize	Use reflective listening ("You think that smoking isn't		
	hurting you" and open-ended rather than yes/no		
	questions to elicit feelings. Support the right to		
	choose while stating availability to help if the person		
	decides to quit.		
Highlight	Patients often express a wish for good health but		
discrepancies	continue to smoke or express devotion to children		
	while exposing them to environmental smoke.		
Deal with	Avoid pushing, express empathy, and ask permission		
resistance	to provide educational materials.		
Support self-	Point out past efforts. Suggest steps toward change,		

efficacy	such as avoiding smoking within the home.
Question	Ask the patient to indicate why smoking cessation is
relevance	personally important.
Identify risk	Ask the patient to identify risks associated with
	continued smoking.
Identify	Make suggestions regarding those most relevant to
benefits	the patient, such as better health.
Identify	Explore the patient's concerns and barriers to quitting
barriers	(fear of failure, withdrawal symptoms, weight gain).
Remain	Try again at every contact with patient.
persistent	

Patients must be apprised of available support systems, including those in the real and virtual communities. Many programs are available to assist people to stop smoking. Much information is available on the Internet. Patient should be provided with lists of support programs before stopping as part of the plan they make for quitting. Not everyone is comfortable with the same type of support program, so the healthcare provider should provide a number of options.

Smoking cessation support resources			
Stop smoking	Numerous programs are available, but		
programs	successful programs usually involve at least 4		
	sessions of 15 to 30 minutes and last ≥ 2		
	weeks or longer. Programs that promise quick		
	results, "secret" miracle medications, and/or		
	charge a high fee are generally suspect.		
Telephone hotlines	All states and the District of Columbia offer		
and help-lines	free telephone support to people trying to quit		
-	smoking. Many state helplines are only		
	available if the person is calling from an in-		
	state phone. A partial listing of state helplines		
	is found at the Center for Social Gerontology		
	website:		
	http://www.tcsg.org/tobacco/hotline.htm		
	<u> </u>		
	National helplines include:		
	American Cancer Society: 1-800-227-2345		
	National Cancer Institute: 1-800-422-6237		
	National Quitline: 1-800-QUIT-NOW		
Online support	A variety of web-based online support groups		
groups	are available. Examples include:		
giodpa	Quitnet.com		
	Quincticon		

	Quitsmokingjournals.com
Support groups	Numerous support groups are available, such
	as Nicotine Anonymous [®] , a 12-step national
	support program, and Smart Recovery®, an
	addiction recovery support group. National
	groups, such as The American Lung
	Association and the American Cancer Society
	also sponsor support groups.
Family/Friends/Co-	A community support system may include
workers	family, friends, or co-workers.

Despite medical and support treatments available, some people feel the need for additional tools, and the market has responded with a variety of different devices that people can use to help them quit smoking. Whether or not these have real valuable is unclear, but if people think something helps, it may do so. For the most part, these devices appear to pose no risk to the user.

Tools	
Artificial	E-Z Quit [™] are plastic "cigarettes" that contain
cigarettes	peppermint-menthol flavored capsules allow people
	with oral cravings to substitute a harmless item for
	the cigarette. South Beach Smoke [™] and Firelight [™]
	are electronic cigarettes that emit flavored water
	vapor.
Rubber bands	Some people find that wearing a rubber band about
	the wrist and snapping it whenever they want a
	cigarette provides a form of negative reinforcement.
Computerized	Handheld computerized devices, such as QuitKey [™]
devices	create a personalized smoking cessation program
	once information is programmed into the device. It
	emits an alarm to let the person know when he/she
	is allowed to have a cigarette.
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Problems associated with cessation

The healthcare provider should be knowledgeable about common problems faced by those trying to quit smoking and should be prepared to deal with those issues.

Common concerns/problems associated with quitting	
Depression	Provide counseling and/or refer to psychologist or
	psychiatrist as indicated Some patients may need
	medications to elevate mood.

Severe	Patient may need extended medical treatment or a
withdrawal	combination of medications.
Weight gain	Weight gain is common but usually does not exceed 10 pounds. Encourage exercise regimen, refer to nutritional counselor, maintain patient on medications that delay weight gain (bupropion, nicotine replacement therapy), and suggest low-calorie foods/ food substitutes.
Relapse	Encourage patient to try again and reassure patient that relapses are common. Help the patient to determine the trigger that brought about the relapse. Continue medications. Refer for counseling if necessary.
Inadequate support system	Schedule follow-up visits and/or make telephone contact. Suggest support groups and telephone quitlines. Help patient to identify family, friends, or co-workers who might be supportive.
	co workers who might be supportive.

Summary

Healthcare providers have a responsibility to help people guit smoking, ease cravings and eliminate effects of withdrawal. The US Department of Health and Human Services provides guidelines: Ask, advise, assess, assist, and follow-up. Steps to quitting include making preparations (START), dealing with guit day, reducing temptation, controlling cravings, finding new activities, reviewing benefits, and hanging in there. Medical approaches vary but may include nicotine replacement therapy (such as nicotine patches and gum), other medications (bupropion, varenicline, clonidine, and nortriptyline), and complementary medicine (hypnosis, acupuncture, and meditation). Support systems are especially important to encourage people to smoke and to prevent relapse. Support resources may include stop smoking programs, telephone hotlines and help-lines, online support groups, support groups, and family, friends, and co-workers. Some people benefit from tools, such as artificial cigarettes, rubber bands, and computerized devices. The healthcare provider should be prepared to deal with common problems and concerns associated with guitting: depression, severe withdrawal, weight gain, relapse, and inadequate support system.

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