

Smoking Cessation: Theory and Practice of Behavior Change

(Lecture)

OBJECTIVES

- Provide estimates of smoking prevalence and trends in the US including demographic characteristics associated with smoking.
- Apply the five stages of change (precontemplation, contemplation, preparation, action, maintenance) to smoking cessation.
- Identify the five components of effective tobacco cessation counseling: Ask, Advise, Assess, Assist, Arrange follow up.
- Be familiar with the first-line pharmacotherapies effective for smoking cessation and aware of patient selection characteristics for each of them.
- List five methods for motivating patients to quit who are not currently ready to do so: Relevance, Risks, Rewards, Roadblocks, Repetition.
- Understand the importance of secondhand smoke and environmental change as a motivator for reducing or quitting smoking
- Be able to integrate behavioral counseling and instruction on the use of approved medications for smoking cessation.
- Be familiar with telephone quitlines, how they work, and their efficacy.
- Describe the Clinical Practice Guidelines for Treating Tobacco Use and Dependence and explain how physicians can successfully implement them.
- Recognize that at a minimum every physician has the responsibility to ask, advise, assess, and refer their patients who smoke to appropriate tobacco treatment resources.

KEY WORDS

Clinical Practice Guidelines for Treating	Tobacco Use and Dependence
Five “A”s	Pharmacotherapy
Five “R”s	Secondhand smoke
Lung cancer	Stages of change model
Nicotine replacement therapy (NRT)	Tobacco dependence
Passive smoking	

REQUIRED READING (Available through UC e-links)

Schroeder SA. What to do with a patient who smokes. *JAMA*, 2005;294:482-487.

A Clinical Practice Guideline for Treating Tobacco Use and Dependence: A U.S. Public Health Service Report. *JAMA* **283**: 3244-3254, 2000.

Prokhorov AV, Hudmon KS, Gritz ER. (1997). Promoting smoking cessation among cancer patients: A behavioral model. *Oncology* **11**(12):1807-1813.

Rx For Change Ancillary handouts (included in syllabus).

ADDITIONAL MATERIALS:

(Links available on iRocket).

Tobacco Repository: The online tobacco repository houses all of the UCSF SOM tobacco-related content and has links to the tobacco-related ILMs, links to UCSF researchers in tobacco control, and referral resources for helping patients quit smoking.

<http://missinglink.ucsf.edu/restricted/tobacco/repository.htm>

Nicotine Replacement Therapy (NRT) ILM Module:

<http://missinglink.ucsf.edu/restricted/tobacco/default.htm>

I. HISTORY OF SMOKING

Lung cancer is a 20th century phenomenon caused by cigarette smoking. The dangers of cigarette smoking had been debated since its introduction into European society in the 1500's, but it wasn't until the 1880's and the invention of the Bonsack machine that cigarettes were factory manufactured and mass produced. Sir William Osler wrote a century ago in his classic text *Principles and Practice of Medicine* that lung "primary tumors are rare". Smokers increased their average consumption from 40 hand rolled cigarettes/ year in 1880 to 12,850 cigarettes/year in 1977- the peak of American consumption per individual. Massive upswings in cigarette smoking occurred after World War I and World War II, and soldiers went off to war with military rations that included cigarettes. This epidemic of smoking was fueled by extraordinarily successful advertising campaigns, persuasive Hollywood imagery and government subsidy of tobacco farming leading to a readily available, cheap and highly addictive product.

Epidemiological studies firmly linked smoking to lung cancer in the 1950's, and the 1st U.S. Surgeon General's report of 1964 began to warn of the dangers of lung cancer at a time that 52% of American men and 34% of women were smokers. Due to an average 20-40 year lag time from onset of regular smoking to diagnosis of lung cancer, cancer rates have continued to climb despite an overall reduction in adult smoking rates to approximately 21% in 2004.

While most discussion of smoking has concentrated on lung cancer, **heart disease** is also an important outcome from smoking (and exposure to secondhand smoke). Of the 404,000 deaths annually attributed to active smoking, 142,600 are due to heart and vascular disease and of the 53,000 nonsmoker deaths due to secondhand smoke about 40,000 are due to heart disease. In contrast to cancer, where the risks develop and resolves slowly over time when people start and stop smoking, much of the heart disease risk

smoking imposes are due to the acute toxicity (within minutes) on platelets and endothelial function.

II. SMOKING PREVALENCE IN THE UNITED STATES

- Smoking prevalence has declined in U.S. adults over the past several decades, from 52% to 23% in men and from 34% to 19% in women.
- In 2004, among adult smokers, 81% smoked every day and 19% smoked some days. An estimated 70% of all smokers want to quit.
- Most adult smokers (89%) began smoking by age 18. 70% of all adolescent smokers wish they had never started smoking.
- In 2005, an estimated 23.2% of 12th graders (24.8% of males and 20.7% of females) had smoked one or more cigarettes in the past 30 days. Rates were highest among non-Hispanic White teens (28%) compared to non-Hispanic Black teens (11%), and Hispanic teens (17%).
- Smoking prevalence varies dramatically by geographic area within the United States. In 2004, it was highest in Kentucky (28%) and lowest in Utah (11%). In California, it is now down to 14%.
- Smoking prevalence is inversely related to socioeconomic status. It is now much more common in blue-collar workers and individuals with less education. For example, in 2004 only 8% of persons with graduate degrees were current smokers, compared with 26% of persons no high school diploma. In 2004, the highest smoking prevalence, by educational group, was 40% in persons with a General Educational Development (GED) diploma.
- Smoking prevalence varies by race/ethnicity. In 2004, smoking prevalence was 22% for non-Hispanic White, 20% for non-Hispanic Black, 15% for Hispanic, 33% for American Indian/Alaska Native, and 11% for Asian (not including Native Hawaiians and other Pacific Islanders).
- About 12% of women smoke during pregnancy.
- Physicians have responded dramatically in terms of their individual behavior. In 1976, 21% of American physicians reported themselves as cigarette smokers. Now, only 3 to 5% report smoking. Among current medical students, the prevalence of smoking appears to be even lower, suggesting that almost all future physicians will be nonsmokers.

III. SMOKING MORBIDITY AND MORTALITY

Tobacco is the number one preventable cause of morbidity and mortality in the US. One in every six deaths is related to smoking. Smoking also tends to kill people in middle age, leading to decades of life lost. Claims that obesity would soon overtake tobacco as the leading cause of death in the US have been retracted by the Centers for Disease Control. (Obesity accounts for about 112,000 premature deaths, compared to 404,000 from active smoking and 53,000 from passive smoking.)

One in two long term smokers will die of a tobacco-related disease. Approximately 10% of long term smokers will develop lung cancer. This year 170,000 American adults will die from lung cancer. The mean age at symptomatic presentation is 55-65. Ethnic and gender differences in lung cancer rates also exist. Lung cancer incidence rates are 50% higher in African-American than in Caucasian men, but similar between Black and White women. These differences are smaller after adjustment for socioeconomic indicators (i.e.

level of income, education). Lung cancer is in an accelerating phase for women, with a 600% increase from 1965-85. Deaths from lung cancer surpassed breast cancer deaths in 1987, and more women die from lung cancer each year than breast, uterine, ovarian and cervical cancer combined. Interestingly, women may develop lung cancer after a lower average pack-per-year history than men (54 vs. 77).

While smoking cessation is beneficial at all ages, the sooner one quits the greater the benefits. A smoker who quits by age 35 gains an estimated 8 years of life. Smoking cessation yields rapid benefits in terms of heart disease; cardiac function starts to improve within a day and half the excess risk of myocardial infarction is done in 1 year.

IV. NICOTINE ADDICTION IS A DISEASE: CIGARETTE SMOKING IS THE SYMPTOM

It is now widely accepted that nicotine is as addictive as heroin and causes release of the “pleasure chemical” dopamine and other neurotransmitters in the brain within minutes of the first puff. Nicotine Withdrawal Syndrome is a well-studied disorder in psychiatry and is characterized by anxiety, irritability, restlessness, cravings and in some cases depression - even in those without a prior history of depression. Put another way, smokers that are quitting and experience this syndrome have developed an acute psychiatric disorder and should receive medications (nicotine replacement therapy, bupropion, and varenicline) to ease this discomfort just as any other patient with temporary acute symptoms would. If patients and physicians recognize this simple fact and act accordingly it will ease the burden of this problem and speed smokers toward successful quitting. Unfortunately, less than 10% of medical schools have a dedicated tobacco-related disease curriculum and many physicians subsequently do not feel comfortable using these medications. A “cold turkey” attempt at quitting is only likely to be 5% successful at 1 year - medications increase this success rate 5-7 fold or more and are safe. Why struggle without medications that are proven to be of benefit?

V. THE CLINICAL PRACTICE GUIDELINE FOR TREATING TOBACCO USE AND DEPENDENCE

Through behavioral counseling and appropriate use of medications, patients can enhance their chances for quitting. Compared to two decades ago, tobacco users now are able to select from many treatment options for quitting. An analysis of over 6,000 published articles revealed two clear treatment-related themes: 1) the use of approved medications for cessation at least doubles the likelihood of quitting, and 2) the effects of medications for cessation are substantially increased when coupled with behavioral interventions. Behavioral interventions include, but are not limited to, counseling from a physician or other health care provider.

Key to every physician’s practice should be implementation of the “Clinical Practice Guideline for Treating Tobacco Use and Dependence.” This involves asking patients about tobacco use, strongly advising tobacco users to quit, assessing readiness to quit, assisting patients with quitting, and arranging follow-up care. When time is limited, at a minimum, every physician has the

responsibility to ask, advise, assess, and refer their patients who smoke to appropriate tobacco treatment resources.

Some key points:

- A. Tobacco dependence is a chronic condition that warrants repeated treatment until long-term or permanent abstinence is achieved.
- B. Effective treatments for tobacco dependence exist and all tobacco users should be offered those treatments.
- C. Clinicians and health care delivery systems must institutionalize the consistent identification, documentation, and treatment of every tobacco user at every visit.
- D. Brief tobacco dependence treatment is effective, and every tobacco user should be offered at least brief treatment.
- E. There is a strong dose-response relationship between the intensity of tobacco dependence counseling and its effectiveness.
- F. Three types of counseling were found to be especially effective—practical counseling, social support as part of treatment, and social support arranged outside of treatment.
- G. Five first-line **pharmacotherapies** for tobacco dependence—sustained release bupropion hydrochloride, nicotine gum, nicotine inhaler, nicotine nasal spray, and nicotine patch, and nicotine lozenge—are effective, and at least 1 of these medications should be prescribed in the absence of contraindications. A seventh medication, varenicline, marketed as Chantix, received FDA approval in May 2006 and appears potentially more efficacious than bupropion in head-on-head industry trials and with fewer side effects.
- H. Tobacco dependence treatments are cost-effective relative to other medical and disease prevention interventions; as such, all health insurance plans should include as a reimbursed benefit the counseling and pharmacotherapeutic treatments identified as effective in the updated guideline. In 2005, Medicare added benefits for tobacco cessation counseling for patients with tobacco-related illnesses or who are taking medications affected by smoking. In California, Medi-Cal covers the costs of pharmacotherapy for smokers enrolled in a cessation program, including the toll-free California quitline (1-800-NO-BUTTS).
- I. **Many smokers are very concerned about the effects of the secondhand smoke that they put into the air on other people, including family members, friends and coworkers.** Educating patients about the effects of their secondhand smoke on others is a powerful motivator for reducing or stopping smoking. Suggesting that people who are not ready to stop smoking entirely go outdoors to smoke can lead to lower consumption and eventual cessation.

VI. THE STAGES OF CHANGE APPLIED TO SMOKING

While 70% of smokers report wanting to quit smoking, only about 20% report intention to quit in the next 30 days. Since not all smokers are ready to quit, the goal of counseling interventions is to help patients move forward in the process of change, assisting them to develop “readiness” and skills for permanent cessation. Clinicians should view smoking cessation as a process, or a continuum of change, rather than an “all or none” phenomenon. The “**stages of change**,” also called the Transtheoretical Model of Change, provides a systematic framework to conceptualize the process of change. You have studied and applied this model previously in the Organs Block. According to the model, behavioral change is a process that involves making progress through a series of five stages. Using smoking cessation as an example, the five stages of change for quitting are:

- 1) *Precontemplation*: not thinking about quitting in the next 6 months.
- 2) *Contemplation*: thinking about quitting in the next 6 months, but not in the next 30 days.
- 3) *Preparation*: ready to quit in the next 30 days.
- 4) *Action*: quit less than 6 months ago.
- 5) *Maintenance*: quit more than 6 months ago.

Progress through these stages is not necessarily linear, and most often cyclical because relapses are almost inevitable in the process of behavioral change. Movement forward through the stages of change cycle is viewed as important progress in tobacco cessation, because it has been shown that helping smokers move forward one stage in one month doubles the chance that the patient will not be smoking six months later. As patients move “forward” in the continuum of stages, they will begin to have greater confidence in their ability to quit. They also will experience changes in their perceptions and attitudes and begin to see that the benefits associated with quitting outweigh their barriers to change. Prospective monitoring of a patient’s progress through the quit process involves repeated assessment of the patient’s “stage of change,” or readiness, for quitting.

Stages of change segment the process into meaningful and manageable steps and allow clinicians to tailor the intervention and set realistic goals matching patients’ readiness for changing a behavior. Below we discuss stage-appropriate interventions that can be used to assist patients with cessation.

Precontemplation: Patients in the precontemplation stage for cessation have no intention of quitting in the foreseeable future (i.e., in the next six months). Patients in this stage are either unaware of the need to quit, or they may be unwilling or too discouraged to change because of previous failed attempts. Patients in this group often are labeled as “difficult” or “unmotivated.” The problem lies in the fact that a significant change in behavior is being requested of a patient who is not ready for change. Clinicians working with patients in the precontemplation stage should attempt to move patients forward in the process of change, to the contemplation stage, before requesting full action. This involves raising the patient’s awareness of their health-related problem(s) and how smoking cessation might circumvent the onset of more serious health problems in the future. Because they have access to patient information regarding medication use and disease, clinicians are in a unique position to

work with patients in this stage, by (1) calling attention to interactions between medications and tobacco, and (2) raising patient awareness of how tobacco use can exacerbate existing medical conditions or induce early onset of medical conditions for which the patient may be at risk. It is not appropriate to apply action-oriented interventions (such as providing nicotine replacement therapy) at this stage.

Contemplation: Patients in the contemplation stage are thinking about taking steps towards quitting in the foreseeable future (in the next six months), but are not yet ready to take action. Contemplators are aware of the benefits of quitting and feel a need to quit but continue to struggle with the realities of actually implementing change. Patients in this stage may be seeking information about the different methods of quitting—in doing so, they often query clinicians about the available pharmaceutical aids for cessation. It is important to recognize that many patients who request information about quitting are not yet ready to quit. Some patients are “chronic contemplators,” in that they remain in the contemplation stage for quitting for years. Because a characteristic of many contemplators is that they actively seek health-related information as part of the process of considering behavior change, clinicians can help patients in this stage by serving as an educational resource. Clinicians should commend patients for considering quitting, discuss the pros and cons of quitting, increase patient awareness of the available aids for cessation, explore patients’ reasons for smoking and reasons for wanting to quit, and discuss potential barriers to quitting. It is important to note, however, that although patients in contemplation are closer to actual behavior change than are precontemplators, it is not yet appropriate to apply action-oriented strategies.

Preparation: In the preparation stage, patients are ready to quit using tobacco in the next month. Clinicians should assist patients in this stage by helping them to prepare for quitting. To do so, it is necessary to assess the patient’s tobacco use history, including determining levels of tobacco use, duration of use, methods used during previous quit attempts (what worked, what didn’t), and reasons for past relapses. Patients in this stage are ready to select a quitting method (e.g., pharmaceutical products, smoking cessation programs, etc.). Clinicians should facilitate the selection process, but the final decision must lie in the hands of the patient, because it is imperative that the patient has confidence in the method(s) chosen. Keep in mind that pharmaceutical agents may not be appropriate or affordable for all patients. It is crucial to emphasize the importance of receiving behavioral counseling throughout the quit attempt.

Patients should be encouraged to select a quit date that is more than 3 days but less than 14 days away (unless the patient has been prescribed bupropion, in which case the date should be 1-2 weeks post-initiation of therapy).

Action: Patients in the action stage recently quit using tobacco (less than 6 months ago). They may be attending smoking cessation group meetings or taking nicotine replacement or bupropion medications. During this stage, patients face very difficult challenges in countering withdrawal symptoms and other temptations to use tobacco. It is important to help these patients identify situations that may trigger a relapse and suggest appropriate coping strategies.

Because smoking is a habitual behavior, it is important to encourage patients to alter their daily routines, which helps to disassociate related behaviors.

For many behaviors, experts believe that patients must remain vigilant for at least six months before they can consider their behavior to be fully adopted. Often, patients expect that they can change their unhealthy lifestyles over a short period of time (weeks to months), and as a result, they ease up on their efforts prematurely. This often leads to relapse.

Maintenance: Patients in the maintenance stage have remained off tobacco for more than six months. Although patients in this stage have been successful in quitting, they remain vulnerable to relapse. Thus, relapse prevention should be part of encounters with patients who recently have quit smoking.

The challenge during the maintenance stage is to continue healthy behaviors in the face of ongoing situations that may lead to relapse. For example, many patients will be prone to relapse during times of emotional stress and distress (anger, anxiety, or depression). Adequate coping strategies are critical for success with remaining in the maintenance stage. Most patients attempting to change a long-standing behavior will experience at least one episode of relapse. It is important that patients know the difference between a “slip” and a full relapse. A slip is a situation in which a person smokes one, or just a few, cigarettes. Although this can lead to a full relapse, this is not a complete “failure,” and it should be considered part of the learning process. If this occurs, the patient should be encouraged to think through the scenario and determine the trigger for smoking. The clinician can suggest coping strategies that will enable the patient to avoid smoking in similar situations. It is important that patients be educated about the possibility of relapse and be advised not to become discouraged if relapse occurs. Identifying triggers for relapse provides valuable information that will be helpful with future change attempts.

After identifying the patient’s stage of change for quitting, clinicians should work with the patient in an attempt to move them to the next stage, and in the case of patients in action and maintenance stages, help them to remain smoke-free. It is important to remember that because quitting smoking is a process, patient follow-up is an essential component of care, as is developing a patient-provider relationship that is based on bi-directional communication, mutual respect, and understanding.

VII. KEY COMPONENTS OF COMPREHENSIVE TOBACCO CESSATION COUNSELING

Helping Patients to Quit: Five Key Counseling Components

According to the Clinical Practice Guideline for Treating Tobacco Use and Dependence, five key components of tobacco cessation counseling are:

- 1) Ask patients whether they use tobacco,
- 2) Advise tobacco users to quit,
- 3) Assess patients' interest in quitting,
- 4) Assist patients with quitting, and
- 5) Arrange follow-up care.

These five components, referred to as the **Five “A”s**, are described below.

Ask: An important initial step in providing tobacco cessation treatment is to identify tobacco users. Because smoking interacts with multiple medications and contributes to the onset and exacerbation of a wide variety of medical conditions, it is appropriate for clinicians to ask each of their patients about tobacco use. Tobacco use status (current, former, never) and level of use (e.g., number of cigarettes smoked per day) should be documented in the patient profile.

Advise: Clinicians should strongly advise all tobacco users to quit. The advice should be clear and compelling, yet delivered sensitively with tone conveying concern for the patient's health as well as a commitment to help with quitting. When possible, messages should be linked to current health status, medication usage, motivation for quitting, tobacco's social and economic costs, and/or the effects of tobacco use (secondhand smoke) on others. Strongly urge smoke-free homes to limit secondhand smoke exposure to other family members and increase the likelihood that the smoker will decide to quit and be successful with quitting. Unfortunately, providers discuss smoking cessation with their patients less than 50% of the time (see Appendix).

Assess: Using the flowchart presented in Step 3 of the Tobacco Cessation Counseling Guidesheet, a clinician quickly can assess a patient's stage of change (precontemplation, contemplation, preparation, action, or maintenance); this defines the clinician's next course of action, which is providing an appropriate counseling intervention tailored to the patient's stage of change (as defined above).

Assist: When interacting with tobacco users, the focus of a clinician's interventions should be to move patients forward in the process of change, with the ultimate goal being prolonged cessation. Because many patients will not be ready to quit, an important part of the “assist” component of treatment is helping patients to make the decision and commitment to quit.

In assisting patients with quitting, there are two general approaches that clinicians can recommend: (1) pharmacologic methods (described below) and (2) nonpharmacologic methods. Use of these methods in combination yields higher quit rates than those produced by either method alone. Nonpharmacologic methods commonly focus on promoting behavior change. Methods include

quitting cold turkey, tapering, self-help materials, formal smoking cessation counseling or programs (face-to-face counseling, telephone counseling, and group programs), and aversion therapy, which involves guided sessions of intensive smoking in which the patient experiences physical discomfort caused by excessive nicotine levels. Massage, acupuncture, and hypnosis also are nonpharmacologic methods, although limited data currently exist to support their efficacy as aids for cessation. Key aspects of counseling include: 1) helping patients to develop effective problem solving capabilities and skills, 2) providing social support as part of treatment, and 3) helping patients to secure social support outside of treatment [Fiore et al., *Treating Tobacco Use and Dependence. Clinical Practice Guideline*. Rockville, MD: U.S. Department of Health and Human Service. Public Health Service. June 2000].

Arrange: Arranging follow-up counseling is an important element of tobacco dependence treatment. Patients' ability to quit increase substantially when multiple counseling interactions are provided: one or less session leads to a quit rate (at 5 or more months post-cessation) of 12.4%; 2 to 3 sessions, 4 to 8 sessions, and more than 8 sessions yield estimated quit rates of 16.3%, 20.9%, and 24.7%, respectively. Clinicians should maintain patient progress records; these could be as simple as notes in the patient record, an index card filing system or a computerized profile detailing recommendations, treatment methods, dosing regimens, and key dates such as quit dates and tobacco-free anniversaries. Follow-up can be conducted in person, by telephone, by mail, and/or by Web or e-mail. Follow-up should occur soon after the quit date, during the first week. A second follow-up contact is recommended within the first month after quitting. Additional contacts should occur periodically in order to monitor patient progress and to provide continued support for prolonged abstinence.

VIII. PHARMACOLOGIC AGENTS FOR CESSATION

FDA-approved first-line agents for smoking cessation include:

- 1) Nicotine replacement therapy (NRT)
 - Nicotine gum (nonprescription)
 - Nicotine transdermal patch (nonprescription and prescription)
 - Nicotine nasal spray (prescription)
 - Nicotine inhaler (prescription)
 - Nicotine lozenge (nonprescription)
- 2) Sustained-release bupropion (prescription)
- 3) Varenicline (prescription)

For a summary of these products and their dosing regimens, complete the nicotine ILM and refer to the attached Pharmacologic Product Guide.

Pharmacologic agents that have not received FDA approval for smoking cessation but have been recommended as second-line agents include clonidine and nortriptyline.

IX. REFERRAL RESOURCES: QUIT LINES & WEBSITES

In California, the State Department of Health Services maintains a toll-free quit line that provides counseling in several languages (English, Cantonese, Korean, Mandarin, Spanish, Vietnamese, and TDD/TTY Hearing Impaired): 1-800-NO-BUTTS. Research of the California quitline indicates a doubling of cessation rates resulting from use of telephone counseling compared with use of self-help materials alone. In addition, many insurance plans, including Medi-Cal, will pay for the nicotine patch for those enrolled in a quit smoking program, such as the California Smokers' Helpline. While you should match your referrals to patient preferences, studies indicate that many smokers prefer calling a quitline to attending an individual or group cessation session.

Several websites offer excellent information on tobacco control and provide free tobacco treatment. The website www.californiasmokershelpline.org provides useful information for both smokers and health care providers, including referrals to community resources. The web site www.smokefree.gov, sponsored by the federal government, offers online advice and information on tobacco cessation. The website www.TobaccoFreeCA.com focuses on eliminating tobacco everywhere in our daily lives - from tobacco-related deaths, diseases, and addiction to our exposure to tobacco advertising and promotions. The site www.tobaccofreekids.org is focused on protecting children from tobacco addiction and exposure to secondhand smoker. The site www.no-smoke.org is focused on issues surrounding secondhand smoke, and www.kidslivesmokefree.org is a site developed by pediatricians to help parents make their homes smoke-free and protect their children from secondhand smoke.

X. COUNSELING PATIENTS WHO ARE NOT READY TO QUIT

Of over 18,000 current adult smokers surveyed at various locations in the U.S., approximately 40% were in precontemplation, 40% in contemplation, and 20% in preparation. Clinicians are likely to encounter many patients who are not ready to quit smoking.

Strategies to apply with patients who are not yet considering quitting include:

- 1) increasing patient awareness of the benefits of quitting and the available aids for cessation,
- 2) exploring patients' reasons for smoking and reasons for wanting to quit, and
- 3) discussing potential barriers to quitting and exploring strategies to overcome these barriers,
- 4) educating them about the harmful effects of secondhand smoke.

While it is useful to provide patients with information about the different methods for quitting, it is not appropriate to prescribe a treatment regimen (such as providing NRT) at this point. Motivation for quitting can be enhanced by applying the **Five "R"s**.

Relevance: Encourage patients to explore their own beliefs to determine reasons why quitting is important. Because information has increased impact if it takes on a personal meaning, messages should be framed such that they relate to the patient's disease status or risk, family or social situation (e.g., pregnancy or having children with asthma in the home), health concerns, age, and other patient characteristics such as previous quit attempts or barriers to quitting.

Risks: Ask patients to identify negative consequences of their tobacco use, such as acute risks (shortness of breath, harm to the fetus of pregnant women, worsening asthma symptoms, inability to conceive), long-term risks (chronic obstructive pulmonary disease, cardiovascular disease, cancer), and environmental risks (increased rates of smoking among children, effects of secondhand tobacco smoke). Highlight the risks that are most relevant to the patient.

Rewards: Ask patients to identify benefits of their quitting; highlight the rewards that are most relevant to the patient. Examples of benefits of quitting are improved health and physical performance, improved sense of taste and smell, reduced spending on cigarettes, reduced risk to others (including fetus/children), reduced aging of skin, and less time wasted smoking.

Roadblocks: Help patients to identify any barriers to quitting, and assist patients with developing strategies and skills for addressing or circumventing each barrier. Common barriers include nicotine withdrawal symptoms, fear of failure, weight gain, lack of support for quitting, depression, and a sense of loss or deprivation.

Repetition: Continue to work with patients who have been unable to quit, repeating interventions whenever possible. Help patients to learn from their

relapses by exploring reasons or triggers for relapse and applying this knowledge in future quit attempts.

XI. OVERCOMING BARRIERS TO PHYSICIAN CESSATION COUNSELING

Physician advice doubles the likelihood of patients quitting, and an estimated 80% of smokers visit a physician annually. Yet, most smokers are neither advised to quit nor provided with tobacco cessation treatment. Reported barriers to physician counseling include beliefs that patients cannot and do not want to quit, concerns about lack of reimbursement and time, limited provider knowledge and confidence in providing counseling, and concerns about harming patient-physician rapport. This lecture and the accompanying small group interaction are focused on addressing these barriers – to raising your awareness of the importance of treating tobacco dependence, increasing your confidence and skills for effectively treating patients at all stages of readiness to quit, and providing strategies and referral resources for when time is limited.

Why should physicians counsel their patients to quit smoking?

- It is the right thing to do.
- Continued smoking compromises the effectiveness of therapies to make patients healthier.
- Increasingly doctors and hospitals are being graded on performance, and smoking cessation is one of the measures on which they are graded.
- In terms of lives saved, quality of life, and cost-effectiveness, treating smoking is one of the most important activities a clinician can do.

