Smoking Cessation Counseling by Family Physicians

Joseph R. DiFranza, MD, Barbara E. Moser, MD, and Judith K. Ockene, PhD
Fitchburg, Massachusetts

DR. JOSEPH DIFRANZA (*Assistant Professor of Family and Community Medicine, University of Massachusetts Medical Center*): Smoking is the most common cause of preventable illness and death in this country.[1] Responsible for approximately 500,000 deaths annually, smoking is the cause of one of every four deaths. Smoking is clearly a public health problem of enormous magnitude, rivaling in morbidity and mortality any of the infectious disease epidemics of the preantibiotic era. Yet the response of both the public and the medical profession to this problem has been far less than would seem warranted. One reason the response has been muted is that smoking was well established as a social custom long before the devastating health consequences of tobacco use were clearly documented. Since that time the tobacco industry has worked diligently to maintain and promote the image of smoking as a socially acceptable custom. Two billion dollars a year is now spent in the United States promoting an image of smoking as a fashionable and rewarding social activity.[2] Given the tremendous impact of smoking on the health of the US population, physicians must expand their role in smoking intervention and must consciously reject the concept of smoking as a social habit, and should instead consider it a disease.[3] Indeed, smoking is the cause of death in over 50 percent of smokers.

In many cases smoking is a manifestation of nicotine addiction. When measured by the proportion of users who lose control of their intake, nicotine is six to eight times more addictive than alcohol.[4] The addictive power of nicotine is manifested clinically in that 90 percent of current smokers report that they would like to quit but have been unsuccessful in their attempts to do so.[4]

Submitted, revised, August 25, 1987.

From the Department of Family and Community Medicine, and the Department of Medicine, Division of Preventive and Behavioral Medicine, University of Massachusetts Medical Center, Fitchburg, Massachusetts. Requests for reprints should be addressed to Dr. Joseph R. DiFranza, 47 Ashby State Road, Fitchburg, MA 01420.

THE PHYSICIAN'S ROLE

Compared with most other diseases, smoking can be diagnosed easily by any physician. Every patient should be screened for this disease with the simple question, "Do you smoke?" Once the diagnosis is made, the physician should pursue a cure with the same vigor as he or she would any other disease having a 50 percent mortality rate. This is where we as physicians often fail.

Some studies have found that over 94 percent of physicians believe it is "very important" for patients to stop smoking, yet a recent study revealed that among smokers who had ten or more visits with a physician during the previous year, only 53 percent could recall being advised to stop smoking.[5–7] Smokers who were hypertensive, obese, diabetic, sedentary, or users of oral contraceptives were no more likely to have been told to quit than smokers without these additional cardiovascular risk factors. Of all smokers surveyed, 56 percent said they had *never* been advised to quit by a physician. Although these results are based on patients' recall, they are consistent with the proportion of physicians who report routinely counseling nondiseased smokers to quit.[7]

Excuses that are offered for a physician's failure to treat appropriately patients who smoke include, "I'm afraid of offending my smoking patients by telling them to quit." However, health advice when delivered in a respectful, caring, and professional manner should not be offensive. I even had one patient say of her previous physician, "What a poor doctor, he didn't even tell me to stop smoking!" Then there is the excuse, "Almost everyone already knows smoking is bad for them, they don't need me to tell them." It may be true that many people are informed about the dangers of smoking; however, smokers often do not hear the available information, or they believe that somehow it is not applicable to them. Information regarding the health effects of smoking can be more effective coming from the patient's personal physician during a medical encounter when the focus is on the patient's health. A British study demonstrated that general prac-

continued on page 380

continued from page 377

titioners who advised their patients to stop smoking and gave them a pamphlet increased the percentage of patients quitting from a spontaneous rate of 0.3 to a rate of 5.1 percent. The authors extrapolated that if all general practitioners in the United Kingdom did likewise, the yield would exceed a half-million ex-smokers a year.[8] Another study involving British general practitioners demonstrated a 60 percent increase in the number of successful quit attempts among patients receiving advice from their physicians.[9] Twenty-one percent of those receiving counseling were still not smoking one year later.

"I've had so little success in getting my patients to quit that I've just about given up on trying." Actually, the cure rate for smoking is considerably higher than for many other diseases that physicians treat. One should not approach smoking intervention, however, with the expectation that 100 percent of the smokers counseled will be cured. An analogy to the treatment of cancer can be made. Many cancer patients receive therapy with a curative intent even though their physicians realize that only a fraction of these patients will actually be cured. Similarly, although physicians will not cure every smoker, each smoking patient deserves the effort to produce a cure.

Although it may sometimes feel as though counseling patients to quit smoking is a futile endeavor, many studies have demonstrated that a physician's advice does help patients to quit. Simply telling a patient to stop smoking, as was done in the two British studies, will help motivate some smokers to quit. Much higher success rates are attainable, however, if a physician takes the time to counsel patients on how to quit. One study found that smokers who were counseled for three to five minutes with specific advice on how to quit had a cessation rate twice that of smokers who were only warned that smoking is harmful.[10] The 1979 Surgeon General's report on smoking and health concluded that 10 to 25 percent of smokers who were advised to quit by their physicians may quit smoking or reduce the amount they smoke.[11]

"After telling my patients they should stop smoking, I don't know how to help them do so." If you feel this way, you are not alone. Only 12 percent of physicians in a recent survey felt that they were effective at counseling patients.[12] The remainder of this Grand Rounds will be devoted to describing a quick-and-easy counseling technique with which you can help your patients to quit smoking.

A PATIENT-ORIENTED COUNSELING TECHNIQUE

DR. JUDITH OCKENE (*Associate Professor of Medicine, University of Massachusetts Medical School*): We have developed a patient-oriented counseling technique that

the primary care physician can use to help smokers develop a plan to stop smoking. The technique is easily learned and takes only a few minutes to apply. We have trained all of our primary care residents in both family practice and internal medicine at the University of Massachusetts Medical Center in this technique.[13]

This physician-delivered intervention consists of a series of open-ended questions designed to help the patient delineate his or her own reasons for quitting, resources for change, and plans on how to proceed with cessation. This approach differs from what physicians traditionally do, which is to provide information and advice: a physician-centered approach.

Dr. DiFranza, will you give us an example of the physician-centered approach?

DR. DiFRANZA: I see that you smoke, and there is a history of heart disease in your family. Since heart disease runs in your family, you are at a higher risk of having a heart attack than the average person. Smoking cigarettes doubles your already elevated chance of having a heart attack. Given this, you need to stop smoking, and you can do this if you really try.

DR. OCKENE: This advice-giving, physician-centered approach is one with which physicians are most comfortable, and of course, it is their responsibility to advise smokers of the need to stop smoking. It often ignores, however, that patients are individuals who have their own personal reasons to quit smoking. In the previous example, from the physician's standpoint, the patient should quit because of cardiovascular concerns. This reason to stop smoking is important, but the patient may be more worried about his decreased exercise ability, which could provide a strong motivation for him to stop smoking. Using the physician-centered, information-giving model, we might never learn what motivates the patient.

When physicians use open-ended questions, patients may come up with a number of reasons to stop smoking, such as health, cost, concerns about their children, their athletic ability, or their self-image. Discussion of the patient's personal reasons for cessation can help motivate him or her to consider quitting smoking.

By using this patient-centered approach throughout the interview, the physician is able to help the smoker recognize his or her own resources for quitting, barriers to change, and realistic approaches to change. In the interview, the following topics should be addressed:

1. Desire and motivation to change smoking behavior
2. Past experience with attempts to quit
3. Resources for change
4. Factors that inhibit change
5. Coping with potential barriers
6. Plan for change
7. Plan for follow-up

Dr. Barbara Moser will demonstrate the counseling technique.

ROLE-PLAY ILLUSTRATION

DR. BARBARA MOSER (*Third-year Family Practice Resident, Fitchburg Family Practice Residency Program*): This patient is a 33-year-old divorced woman who lives with her 12-year-old daughter. The patient currently smokes two packs of cigarettes per day. She was seen in the office today for her third episode of bronchitis.

Desire and Motivation to Quit Smoking

DR. MOSER: While we are dealing with your bronchitis, I'd like to take a few minutes to talk to you about your smoking. Do you think there is any connection between your cough and your smoking?

PATIENT: Maybe. Everyone says smoking is bad for your lungs, but my grandparents lived to be in their 80s, and they smoked heavily all their lives. I don't care if I live beyond my 80s. Do you think there's a connection?

DR. MOSER: Yes, I do. People who smoke are more prone to lung infections than people who don't smoke. Once they get lung infections, smokers are slower to clear the infection because the lining of their airways have been damaged. Also, there's a strong connection between smoking and both heart disease and lung cancer.

I think your bronchitis would clear up completely if you quit smoking and you would probably notice that you didn't get sick so often.

PATIENT: I didn't realize it was already affecting my health.

DR. MOSER: Have you ever thought about quitting before?

PATIENT: Sometimes I think about it, but I have never really wanted to quit. I still don't. I enjoy smoking.

DR. MOSER: Do you have any reasons other than your health to make you think about quitting?

PATIENT: It's getting to be an expensive habit. I guess that's about it.

Past Experience With Quitting

DR. MOSER: Have you ever tried to quit before?

PATIENT: Off and on. One time I quit for a whole week.

DR. MOSER: The time you quit for a week, how did you do it?

PATIENT: Cold turkey, I just quit. I felt so awful that week that I couldn't stand it, and started to smoke again.

DR. MOSER: What do you mean by awful?

PATIENT: Shaky, jittery, sweaty, nervous.

DR. MOSER: I understand. It's great that you were able to stop smoking for even a week. Was there anything else that made you start smoking again?

PATIENT: Well, all of my friends smoke, so it was tough to be around them.

Resources for Change

DR. MOSER: Let's go back again to the time that you quit for a week. What kept you from smoking?

PATIENT: I thought about all the money I was saving. I paced a lot. Actually my daughter gave me a lot of support. She kept reminding me not to smoke.

DR. MOSER: Anything else?

PATIENT: No, that's about it.

DR. MOSER: So you did have a few things that helped to keep you from smoking. If you were to try to quit again, do you think your daughter would still be supportive?

PATIENT: She's on my case all the time to quit. She'd be ecstatic if I did it. I guess that's another reason for quitting, to get her off my back.

DR. MOSER: Are you still concerned about the cost of smoking?

PATIENT: Sure, I must spend $15 a week on cigarettes. I could buy myself some nice clothes with that money. That's not a bad idea.

Factors That Inhibit Change

DR. MOSER: What made it difficult for you to stay off cigarettes?

PATIENT: I'm so used to smoking. It's a real habit. All of my friends smoke, which doesn't help. And I was feeling so lousy, so nervous and jumpy.

Coping With Potential Barriers

DR. MOSER: How did you overcome these problems while you were not smoking?

PATIENT: I seem to remember substituting the cigarettes with a glass of water. When I had the urge to smoke, I drank a glass of water. I also stayed away from my friends who smoke that week.

DR. MOSER: Usually the first week is the most difficult. You might want to quit at the beginning of the week so that you would have some time off the cigarettes before you go out with your friends on the weekend. Another thing you could do is ask your friends who smoke to help you quit. Do you think they would be supportive if you told them this was a goal that is important to you?

PATIENT: Sure. Actually, I was exaggerating. I know people who don't smoke. I could go out with them for the first week or two. I know my friends who smoke would be supportive because most of them want to quit. But I'm still worried about the jitteriness. I was a basket case the last time I tried to quit.

DR. MOSER: When you quit, if you find yourself getting nervous or having a strong craving for cigarettes, taking a walk or doing deep-breathing exercises can help. You might also want to try some nicotine-containing chewing gum. If used correctly, it can ease the cravings and help take away those jittery feelings.

PATIENT: It sounds like all of those things could help, but one of my friends got headaches and sick to her stomach from using the nicotine gum.

DR. MOSER: That can happen if you don't chew the gum correctly. If you chew it correctly, which includes chewing it slowly, that shouldn't happen.

Plan for Change

DR. MOSER: You have some good reasons to quit smoking. We've discussed how you've quit in the past, what made it difficult, and how you might deal with these difficulties this time. What are your thoughts about quitting now?

PATIENT: All I can do is try. I can't promise you anything, but I'd like to stop coughing.

DR. MOSER: How are you going to quit?

PATIENT: I guess I did pretty good going cold turkey the last time, so I think I'll try that again.

DR. MOSER: What will you do if you get a craving for a cigarette?

PATIENT: I'll drink water. Pace. Talk to my daughter. Maybe I'll try that nicotine gum.

DR. MOSER: When do you plan on quitting?

PATIENT: I just bought two packs on the way over here. I think I'll make those last through the weekend, then quit when I go to bed on Sunday. That way I'll have five days before the next weekend, and I'll be busy with work to keep my mind occupied.

DR. MOSER: You said your friends might be able to help you?

PATIENT: Yes, I think I'll tell everyone this week that I'll be quitting next week. I'll tell them they better be nice to me.

Plan for Follow-up

DR. MOSER: It sounds like you have a well-thought-out plan for quitting. I can give you a prescription for the nicotine gum and explain how to use it properly. I'd like to give you as much support as I can with your plan. Would you be willing to come back in two weeks to talk about how you're doing?

PATIENT: I think that would be helpful. I'll make an appointment to see you in two weeks.

DR. OCKENE: Patient-oriented counseling can help

patients develop their own plan for quitting smoking. The physician helps the patient to discover his or her personal reasons for quitting, the special obstacles that might be encountered, and the unique combination of strengths and support available to overcome those obstacles. If the patient has difficulty coming up with a plan, then the physician can offer information or advice.

The role play introduced two subjects that deserve further comment: follow-up and nicotine-containing gum.

Arranging for a follow-up visit shows the patient that you consider smoking to be a legitimate medical problem. Also, knowing that he will be talking to you again soon makes it more likely that the patient will go ahead with a plan to quit. If the patient cannot return for an office visit, arrangements for telephone follow-up should be made.

The importance of arranging for follow-up contact has been demonstrated experimentally. When family physicians made follow-up contacts with patients whom they had counseled about smoking, the patients were twice as successful at quitting compared with patients who did not have follow-up.[14]

DR. DiFRANZA: Are there any questions about the patient-centered approach to smoking intervention?

DR. ELIZABETH NOONAN (*Second-year Family Practice Resident*): What do you do with the patient who has no desire to quit?

DR. DiFRANZA: When dealing with a patient who has no desire to quit, it would be appropriate for the physician to begin with the information-and-advice model to suggest reasons why the patient might want to quit. The patient can also be asked whether he has quit in the past. If the patient has tried to quit before, there must have been a reason, and that reason may still be relevant. If the patient still has no desire to quit, the physician should explain his concern about the patient's smoking and then reintroduce the subject of smoking during subsequent office visits. I show my patients that I include smoking on their medical problem list in our problem-oriented charts. One advantage of family practice is the opportunity to provide continuity of care. Typically we will have repeat occasions to offer help to the smoking patient.

DR. JOSEPH HORAN (*Second-year Family Practice Resident*): What do you do with a patient who wants to quit but doesn't feel he can do it cold turkey?

DR. OCKENE: If a patient wants to quit but doesn't want to commit himself to quitting completely at the first visit, I would suggest that he may want to taper his cigarette intake. I would have the patient develop a plan for tapering that would include a daily goal for the number of cigarettes permitted, the time course over which tapering will occur, which cigarettes out of the day will be eliminated, and how he will eliminate them. As with quitting cold turkey, it is important to arrange for follow-up when a patient agrees to taper. Tapering often gives smokers an increased feeling of control over their smoking. At the time of follow-up, the physician should try to capitalize on this feeling by helping the patient to formulate a plan for complete cessation. Tapering is often a very good approach for heavy or more physiologically dependent smokers or for smokers who are anxious about the idea of stopping. When a smoker tapers his cigarette intake, he must be instructed not to change his regular pattern of smoking, such as the depth of inhalation or the amount of the cigarette that is smoked.

NICOTINE CHEWING GUM

Nicotine-containing gum has been used for many years in Europe but has only recently been approved for use in the United States. Hughs and Miller[15] recently reviewed randomized controlled trials of the efficacy of nicotine-

containing gum, and found that its use increased one-year quit rates by 5 to 20 percent in most studies and can be a useful resource for the smoker with a physiologic dependence on nicotine. It is not for every smoker, but if the smoker experiences nicotine withdrawal syndrome, for example, jitteriness, irritability, and inability to concentrate, then the gum may be useful.[16] Nicotine-containing gum cannot be used, however, as a substitute for counseling.

DR. JOHN SCHNEEWEIS (*First-year Family Practice Resident*): Are there any contraindications to using nicotine-containing gum?

DR. MOSER: Yes, coronary artery disease, pregnancy, nursing, and temporomandibular joint disease.

DR. SCHNEEWEIS: How do you use the gum?

DR. MOSER: When the patient has an urge to smoke or has a craving for nicotine, he should place a piece of gum in his mouth. The gum should be chewed slowly until the peppery taste is evident. He should then stop chewing until the flavor disappears.

One piece of gum can be chewed for 20 to 30 minutes. The average smoker will use 6 to 10 pieces in a day and be able to taper off of the gum over a few weeks. The patient can use as many pieces as he or she needs. The gum is often underused. The advantage of the gum is that it allows the smoker to separate the psychologic dependence on cigarettes from the physical addiction to nicotine. It is sometimes easier to quit if these two problems can be overcome separately. Side effects such as nausea and dizziness are uncommon unless the patient chews the gum too quickly. Chewing the gum too quickly is the most common problem I've seen. I tell my patients that they should chew the gum in a manner analogous to the way they smoke. They don't smoke an entire cigarette in one continuous drag; they puff and then wait before puffing again. By analogy, they should chew the gum and then wait a minute before chewing again. When this analogy is made, patients readily understand how they should use the gum.

CONCLUSIONS

DR. DiFRANZA: I would like to conclude here by encouraging all of you to try the patient-centered approach with your patients. You may have noticed that a good deal of the research in the field of smoking cessation has been done in the offices of primary care physicians. There is no more appropriate place for smoking cessation counseling to take place than in a primary care physician's office. Every family physician should be proficient at smoking cessation counseling. Smoking patients deserve help, and their family physician should be ready to offer it.

References

1. Ravenholt RT: Addiction mortality in the United States 1980: Tobacco, alcohol, and other substances. Popul Dev Rev 1984; 10: 697–724
2. Davis RM: Current trends in cigarette advertising and marketing. N Engl J Med 1987; 316:725–732
3. Ockene JK: Smoking intervention, the expanding role of the physician. Am J Public Health (in press)
4. Pollin W: The role of the addictive process as a key step in causation of all tobacco related diseases. JAMA 1984; 252:2874
5. Anda RF, Remington PL, Sienko DG, Davis RM: Are physicians advising smokers to quit? The patient's perspective. JAMA 1987; 257:1916–1919
6. Wechsler H, Levine S, Idelson RK, et al: The physician's role in health promotion—A survey of primary-care practitioners. N Engl J Med 1983; 308:97–100
7. Wells KB, Lewis CE, Leake B, et al: The practices of general and subspecialty internists in counseling about smoking and exercise. Am J Public Health 1986; 76:1009–1013
8. Russell MAH, Wilson C, Taylor C, et al: Effect of general practitioner's advice against smoking. Br Med J 1979; 2:231–235
9. Jamrozik K, Vessey M, Fowler G, et al: Controlled trial of three different antismoking interventions in general practice. Br Med J 1984; 288:1499–1503
10. Ewart CK, Li VC, Coates TJ: Increasing physicians' antismoking influence by applying an inexpensive feedback technique. J Med Educ 1983; 58:468–473
11. Smoking and Health: A Report of the Surgeon General. Public Health Service, DHEW publication No. (PHS) 79-50066. Government Printing Office, 1979
12. Wells KB, Lewis CE, Leake B, Ware JE: Do physicians preach what they practice? A study of physicians' health habits and counseling practices. JAMA 1984; 252:2846–2848
13. Ockene JK, Quirk M, Goldberg R, et al: A smoking intervention training program for residents. Arch Intern Med (in press)
14. Wilson D, Wood G, Johnson N, Sicurella J: Randomized clinical trial of supportive follow-up for cigarette smokers in a family practice. Can Med Assoc J 1982; 126:127–129
15. Hughs JR, Miller SA: Nicotine gum to help stop smoking. JAMA 1984; 252:2855–2858
16. Diagnostic and Statistical Manual of Mental Disorders, ed 3. Washington, DC, American Psychiatric Association, 1980, pp 159–160