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# **Overview of Office-Based Smoking Cessation Assistance**

David M. Burns

**INTRODUCTION** The burden of premature death and avoidable disability caused by tobacco use in the United States (US DHHS, 1989) and the benefits of cessation (US DHHS, 1990) are well documented. Despite the widespread acceptance of this information by the public and the high frequency with which physicians report that they advise their patients to quit smoking, almost one-half of smokers report never having been told to quit by their physician. Patients do report that they would be likely to try to quit if told by their physician to quit. Because 70 percent of smokers see a physician each year and 60 percent visit a dentist, the potential for the health care community to affect smoking prevalence in the United States is both large and substantially underutilized.

> To increase the effectiveness of the health care community in promoting smoking cessation, the National Cancer Institute has funded research efforts to develop more effective intervention methods for use by physicians and dentists and to facilitate the adoption of these methods. This monograph distills from those projects a clear picture of what interventions work, how to recruit and motivate clinicians to provide advice, and how to institutionalize the delivery of smoking cessation assistance within the health care delivery system.

> The outcome results of the studies in this report have been published in the peer-reviewed literature. The purpose of this monograph goes beyond a review of the cessation outcome literature to include detailed descriptions of the program content and strategies. In addition, the investigators who drafted the descriptions of their programs were asked to assess which approaches were effective, which were ineffective, and what they would do differently if they could repeat their projects. This departure from the traditional scientific and data-based approach is intentional. It was the experience with what worked and did not work at the program level that formed the core of the interventions tested in the trials described here. It should therefore be no surprise that current concepts of effective approaches to clinician-provided smoking cessation assistance have evolved beyond those that were used to design these research trials, which were funded in the early 1980's. The long delay from the design of a trial and request for funding to publication of the results in the peer-reviewed literature means that the current knowledge of how to implement practice-based smoking cessation assistance frequently has advanced beyond that documented in the literature. This monograph presents the current best judgment of how to implement and sustain an effective office-based cessation effort, by combining the knowledge from both controlled scientific investigation and trial-and-error experience.

#### COMPREHENSIVE TOBACCO CONTROL STRATEGIES

The current state of the art in comprehensive tobacco control strategies combines multiple environmental changes with multiple programs directed at individuals in different stages on and cessation processes (US DHHS, 1991). No single

of the initiation and cessation processes (US DHHS, 1991). No single approach is best for all smokers, and different smokers are most attracted to and most affected by different programs. Perhaps more importantly, no single channel reaches all smokers and no single time is best for all smokers to make a quit attempt. Persistent and inescapable messages to quit, or to not start, coupled with continuous support for individual cessation efforts provided through multiple channels reinforced by environmental incentives to be a nonsmoker currently characterize comprehensive tobacco control strategies.

An essential corollary of this understanding of tobacco control is that smoking cessation assistance provided by physicians and dentists represents only one channel in a multichannel effort and that cessation efforts supported by clinicians are likely to be most effective when they draw on and are integrated with other forces promoting smoking cessation. The traditional therapeutic model, in which treatment is designed to be effective regardless of the factors in the patient's environment, is unlikely to be successful in stopping cigarette smoking when environmental factors determine both the personal, psychological, and sociological utility of smoking and the motivation for cessation. Rather than perceiving the clinician as the provider of a clinically proven "magic bullet" that will cure a patient forever, it may be more realistic to see the physician's or dentist's function as that of focusing and magnifying the forces promoting cessation. This change in perspective may help to reduce the frustration and futility that many practitioners have when working with their smoking patients.

To understand the role of the physician or dentist in smoking cessation, it is useful to have an understanding of the processes of smoking initiation and cessation and of the interventions that can influence the stages in that process. One formulation of the influences involved in cigarette initiation and cessation is presented in Figure 1. Exploration and initiation of regular use of cigarettes are largely confined to adolescence, with regular use and dependence occurring during late adolescence and early adulthood. Experimentation with cigarettes and initial cigarette use are influenced by the factors that affect adolescent development, whereas dependency develops when the psychological and sociological utility of smoking is incorporated into the approaches used by the smoker to function in and cope with the adult world. Many adolescents experiment with tobacco use but never become regular smokers; some adolescent regular smokers stop before they develop dependence on cigarette use.

The process of stopping smoking is often a cyclical one, with the smoker making a number of attempts to quit before finally succeeding. Nationally, the vast majority of smokers would like to quit and approximately one-third of current smokers attempt to quit each year. Ninety percent or more of



Figure 1 The processes of smoking initiation and cessation

Source: US DHHS, 1991.

those quit attempts fail (Pierce and Hatziandreu, 1989). Smokers have been categorized into three groups:

- Those who are not thinking about quitting (in precontemplation);
- Those who are thinking about quitting (in contemplation); and
- Those who are in the act of quitting.

Clearly those who have attempted to quit and failed need motivation to make another attempt, and the cessation process is one in which smokers cycle through the stages of cessation, with a few more smokers succeeding in their cessation efforts each time. One goal of practice-based smoking interventions is moving smokers from one position in the cessation cycle to the next, rather than using long-term cessation as the only goal.

The cyclical pattern of precontemplation, contemplation, and attempting to quit generates a new set of nonsmokers each time a group of smokers passes around the cycle (Prochaska and DiClemente, 1986). One formulation of the process of cessation and the points at which the multiple channels of a comprehensive tobacco control effort can influence cessation is presented in Figure 2. This figure simplifies the effects of these tobacco control efforts but provides an overview of the possible interactions in a comprehensive tobacco control program.

Many of the environmental influences and tobacco control programs influence smokers at different points in this cycle. Public information



#### Figure 2 The process of cessation

Source: US DHHS, 1991.

campaigns and physician or dentist warnings about the risks associated with smoking move smokers from the precontemplation to the contemplation stage. However, there are other reasons why smokers think about quitting, including concerns about dependency and interest in setting a good example for others. Recently the negative image of the smoker and the social unacceptability of smoking have also provided strong reasons why smokers think about quitting. Individual tobacco control programs have been targeted at altering the frequency and intensity with which these motivational issues are presented to the smoker.

The move from thinking about quitting to trying to quit is often triggered by environmental stimuli. The cost of cigarettes can be a powerful trigger for cessation attempts. Physician advice to quit, particularly at the time of an acute illness, is also a powerful trigger for cessation activity, with up to half of the patients who are advised to quit making a cessation effort. Media campaigns, especially when coupled with cessation events such as the Great American Smokeout, are also able to trigger a large number of cessation attempts (Gunby, 1984). Changes in rules to restrict smoking in the workplace have been associated with quit attempts by substantial numbers of workers.

Triggering cessation efforts is an important tobacco control strategy because each round of cessation activity results in a few more nonsmokers. The large number of smokers who attempt to quit each year attests to the success of those components of the tobacco control effort that move smokers from precontemplation to contemplation and from contemplation to action. The major gap in current tobacco control efforts is in converting a cessation attempt into a long-term success.

Self-help programs, telephone hotlines, and nicotine replacement therapy enhance short-term cessation success, and clinic-based cessation programs have a substantial benefit for long-term cessation for those who participate (Schwartz, 1987). The recruitment of smokers into clinic-based cessation programs is one of the areas in which office-based effort can be particularly effective. However, the major barriers to long-term success remain difficult to alter and are, for the most part, in the smoker's environment. Barriers include social norms and workplace rules that promote smoking and facilitate relapse, the continued smoking behavior of peers and family members, tobacco advertising, and unusual episodes of personal or environmental stress that lead the smoker to fall back on old coping strategies, including smoking. Recognizing these influences and customizing advice for the smoker is one way that physicians and dentists can integrate their cessation assistance into a comprehensive tobacco control effort.

### DEVELOPMENT AND MAINTENANCE OF OFFICE-BASED ASSISTANCE

**IENT AND**Just as the process of smoking initiation and cessation can be<br/>thought of as a series of stages, so too the process of developing<br/>and sustaining an office-based smoking cessation program can<br/>be divided into stages with different forces acting at the different<br/>stages. Figure 3 diagrams this process and divides the factors acting at each<br/>stage into those components that act on a single clinician or within a practice<br/>and those that are part of the health care delivery environment.



### Figure 3 Development and maintenance of office-based smoking cessation assistance

Because individual clinicians may be at different points on this continuum, the strategies to change behavior and the behavioral changes expected will differ. For clinicians who do not perceive cessation advice as part of their practice, the offer of training in the skills to counsel smokers to quit may be less effective than a grand rounds that defines the importance and success rates of clinician-based cessation programs. Conversely, it is unlikely that clinicians interested in improving the effectiveness of cessation advice can get the skills training needed in a single 45-minute grand-rounds-type session. The need to devote time and energy to both short and long training sessions can be confusing unless one recognizes that they are directed at different practitioners with different levels of interest and experience.

The first change needed in clinicians is the recognition that they have a responsibility to every patient who smokes to present the risks associated with smoking and to urge them to quit at an appropriate point in their care. This responsibility goes beyond providing advice to quit to those who have smoking-related disease processes, where cessation may be of therapeutic importance; it includes that larger segment of the smoking population for whom cessation advice is provided exclusively for preventive benefits. Interactions with peers and the example of peers are a major part of the process by which clinicians define standards of care and evaluate their performance relative to those standards. As more physicians and dentists deliver routine cessation assistance, the standards shift and performance pressure mounts on those practitioners who lag behind. One of the tools used to define and advance practice standards is publication of the results of studies and consensus positions. This tool can be effective, albeit slowly, in influencing that vast majority of clinicians who are committed to high-quality care.

Physicians and dentists are in a service delivery profession and are, therefore, influenced by patient expectations and demands. The introduction of nicotine gum, and now the transdermal nicotine patch, both of which require physician or dentist prescriptions, mandates physician and dentist involvement with patients' efforts to quit smoking. The wide recognition of these products by the general public has led to patients' requesting prescriptions from their physicians or dentists. Such requests have led some practitioners to incorporate cessation assistance into their practice; without the need to write a prescription, they might not have done so.

Reimbursement is a significant motivator in health care delivery, and many health care structures now include preventive services in their contracts with physicians. As the standards of care shift to include cessation as a mandatory component of preventive services, and as payers reimburse clinicians on the basis of documentation of the delivery of these services, practitioners who had not considered smoking assistance as part of their role will be obligated to reconsider.

Those practitioners who are committed to cessation assistance will need the training and skills to deliver cessation advice. Many medical school, dental school, and residency curricula are beginning to provide this training (see Chapter 3). Efforts to provide training to those practitioners who have already completed their training are described in Chapter 2, and it is likely that these training efforts are, at least in part, responsible for the increase in the proportion of smokers who report having received advice to quit from their physician or dentist.

Training of the practitioner has a limited effect on the actual office practice. Almost universally, the programs described in this monograph stress the importance of changing the patient intake process and information flow in the office and the training and participation of the office staff. Similarly, the integration of physician or dentist advice with cessation advice and assistance provided by nurses, hygienists, or other office staff facilitates the effectiveness of the advice and the likelihood that it will be offered consistently. The identification and tracking of smokers also are critical to the consistent delivery of advice and, perhaps more importantly, to followup of that advice on subsequent visits.

The most difficult barrier to the successful long-term change in an office practice is the maintenance of that change once the initial enthusiasm of instituting change dissipates. Changes in the office personnel and members of the practice, alterations in the volume of patient visits, and time available for counseling can lead to the failure to sustain a change in office practice, even without a conscious decision to go back to prior procedures. The need to orient new professional and administrative staff members to the smoking cessation assistance approaches used in the practice can create an educational burden that the practice cannot sustain. The identification of individuals in the office who accept the responsibility for the continuity of the cessation approach and the availability of "academic detail" personnel who can come into the office periodically to provide and upgrade training are two of the approaches discussed in Chapter 5.

Building smoking cessation assistance into the continuous quality improvement or audit mechanisms that are a part of the quality assurance programs both within the practice setting and by those agencies responsible for reimbursement is a powerful tool to promote cessation advice in health care. A computer-based system for tracking smokers in a practice and for generating the summary data needed to incorporate cessation assistance in a quality assurance program is also described in Chapter 5.

The remainder of this first chapter discusses the roles that practitioners can play in a tobacco control effort and the actual smoking behavior and counseling practices of physicians and dentists. Subsequent chapters present detailed descriptions of what works in physician and dental practices (Chapter 2), in residency training programs (Chapter 3), and in special practice settings (Chapter 4). Chapter 5 describes the efforts to disseminate and maintain office-based smoking cessation assistance.

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# Trends in Physicians' Smoking Behavior and Patterns of Advice To Quit

John P. Pierce and Elizabeth Gilpin

**INTRODUCTION** In this section, we first discuss the smoking profile of patients in a medical practice. How many patients are smokers, and what do we know about them? How much work is involved for a physician to implement the National Cancer Institute guidelines? Next, we look at the prevalence of smoking among physicians and medical students. We address the issue of physicians advising smokers to quit, from the patient's perspective. Is there any evidence that physicians are advising more patients to quit? How many and what type of smokers perceive that they have been so advised?

#### HOW SMOKING FITS INTO A GENERAL-IST'S PRACTICE

#### Who Are The Smokers?

KING FITSIn two separate samples (rounds I and III) of Kottke and<br/>associates' Doctors Helping Smokers studies, approximately<br/>20 percent of those who visited the general practice were<br/>smokers (Kottke et al., 1989, and Chapter 2, this volume).<br/>This result is identical to that from the 1990 California Tobacco<br/>Survey, which identified 20 percent of all patients who had seen<br/>a physician in the last year as smokers (Burns and Pierce, 1992). Also, in the<br/>California Tobacco Survey, 20 percent of all patient visits in the year prior to<br/>the survey had been made by smokers.

The California Tobacco Survey also provides a demographic analysis of smokers who report visiting a physician in the last year (Table 1). Altogether 25.8 percent of the population who had not visited a physician in the previous 12 months were smokers, compared with 20.0 percent who visited a physician.

Among the population who visit a physician, the proportion of men who are smokers is slightly higher than the proportion of women (22.1 vs. 18.2 percent). Indeed, the proportion of smokers visiting a physician in most subgroups is about 20 percent, with the following exceptions: those over the age of 65 years (10.9 percent), Hispanics (16.5 percent), blacks (27.4 percent), Asians (15.5 percent), and those with a college degree (11.8 percent) (Burns and Pierce, 1992).

The self-reported level of health for those who visited a physician varied according to whether or not the patient was a smoker (Table 2). Nonsmokers are more likely to consider themselves to be in excellent health, whereas smokers are more likely to rate their health as poor, fair, or good. Approximately two-thirds of nonsmokers who visited a physician in the last year considered themselves to be in either excellent or very good health compared

	Visited Physician in Last Year		
	Percentage		
	Yes	No	Ratio
Total	20.0%	25.8%	0.76
Sex Male Female	22.1 18.2	28.8 21.0	0.77 0.86
Age 18 to 24 yr 25 to 44 45 to 64 65+	20.9 22.5 20.3 10.9	35.5 26.7 25.9 20.2	0.82 0.84 0.78 0.54
Ethnicity Hispanic Non-Hispanic	16.5 20.7	20.4 28.6	0.81 0.72
Race White Black Asian/Pacific Islander	19.8 27.9 12.0	25.8 34.0 19.7	0.76 0.81 0.61
Education < 12 yr 12 13 to 15 16+	24.5 23.1 19.8 11.8	28.5 29.2 25.1 15.5	0.86 0.79 0.79 0.76

# Table 1Demographics of smokers, by visit to physician in last 12 months, California, 1990

Source: 1990 California Tobacco Survey, as cited in Burns and Pierce, 1992.

with about 53 percent of smokers. About 18 percent of smokers indicated that they were in fair or poor health, compared with about 13 percent of nonsmokers. Nevertheless, the majority of smokers who visit a general practice will feel that they are in good health (Burns and Pierce, 1992).

Whom Can PhysiciansThe four principles for physician and dentist intervention<br/>outlined by NCI are *ask, advise, assist,* and *arrange*. From the<br/>studies reported in this monograph, we can estimate the likely percentages<br/>of smokers with whom a physician or dentist will be able to undertake<br/>each of these activities successfully.

Ask If an effective smoking-advice system is to be achieved in a general practice, each patient's smoking status must be known and the medical or dental charts must be flagged to prompt the physician or dentist to discuss smoking with the appropriate patients. As described earlier, this system

	Percentage of Smokers	Percentage of Nonsmokers	
Self-Reported Status			
Excellent health	19.6%	30.4%	
Very good health	33.2	33.4	
Good health	29.3	23.3	
Fair health	14.6	10.6	
Poor health	3.3	2.3	

# Table 2Health status of patients who visited a physician in the last year, California, 1990

Source: 1990 California Tobacco Survey, as cited in Burns and Pierce, 1992.

should result in flags on about 20 percent of all charts from any particular day. Two methods have been popular for determining whether a patient is a smoker: (1) the receptionist obtains the information at the front desk or (2) the nurse or dental hygienist asks the patient while recording vital signs. With either approach, determination of smoking status requires a slight change in the practice's system. Elsewhere in this monograph, researchers discuss various methods to implement this change.

Advise

Anecdotal experience from physician and dentist trials suggests that, if a comprehensive program is used, nearly all smokers who visit a physician or dentist can be counseled to quit (T. Kottke, personal communication;
A. Christen, personal communication). Generally, there are two situations in which patients are not counseled to quit: when the patient is too distraught to concentrate and when the clinician is too far behind schedule to be completely in control of the patient encounter. Experience in the Nokomis Clinic in Minnesota suggests that these situations arise in about 15 percent of all physician visits (T. Kottke, personal communication).

Assist The level of assistance that the health care provider can offer varies considerably, including assessing whether the smoker is ready to quit, discussing quitting, eliciting barriers and fears about making a quit attempt, helping to set a quit date, and in some cases prescribing a nicotine substitute. With an aggressive approach, physicians, dentists, or their smoking cessation coordinators can get many of their smoking patients to set a quit date (see Cummings et al., Chapter 2, this volume). Prescribing of a nicotine supplement as an aid to quitting has been studied extensively.

> The most successful systems for smoking advice include designation of a smoking advice coordinator who first discusses smoking with the patient. Then, the physician or dentist gives 1 to 2 minutes of strong advice to encourage the patient to quit. Because this system involves

minimum physician or dentist time to urge the patient to set a quit date, approximately 90 percent of clinicians are comfortable complying with this smoking advice strategy. More than 80 percent of patients seem prepared to discuss their smoking further with the designated smoking coordinator, and about 30 percent are prepared to negotiate a quit date (see Hollis et al., Chapter 2, this volume).

Arrange

The majority of smoking cessation attempts are not successful. Nationally, approximately 30 percent of smokers reported that they had tried to quit in any given year (Hatziandreu et al., 1990), but very few of those smokers sought any external aid to help them succeed (Fiore et al., 1990). In the Nokomis Clinic in Minnesota, researchers estimate that approximately 1 in 1,000 smokers actively seek information on programs to help them quit.

Arranging for help to quit and for followup has been the most difficult step in the comprehensive smoking-advice system. As described in Chapter 2 (Hollis et al.), only 10 percent of smokers attended a scheduled followup visit to review their progress.

**SMOKING BEHAVIOR** The smoking behavior of U.S. physicians has been surveyed **OF PHYSICIANS** regularly since 1949. In that year, some 60 percent of physicians smoked. This percentage declined, and by 1964, at the time of the first Surgeon General's report detailing the health consequences of smoking (US DHEW, 1964), the percentage of physicians who smoked had decreased to around 30 percent (Garfinkel and Stellman, 1976). Smoking prevalence among physicians continued to decline, and by the early 1980's, only 5 to 10 percent of physicians were smoking (Buechner et al., 1986; Sachs, 1983). The most recent data come from an anonymous, self-report survey conducted in 1989 to 1990, involving responses from 5,426 physicians (Hughes et al., 1992). In this survey, 51.1 percent of respondents reported ever using tobacco, 13.7 percent reported tobacco use in the last year, 10.6 percent reported use in the last month, and 6.3 percent labeled themselves daily consumers. The reduction in smoking prevalence among physicians resulted from a decrease in smoking uptake among new physicians and by the successful quitting of experienced physicians (US DHHS, 1989).

As the negative health consequences of smoking become widely known, we would expect smoking uptake rates to change much more rapidly than quitting behavior because it is easier not to start than to quit an addictive behavior. In the United States, taking up smoking generally has occurred between the ages of 12 and 25 (Pierce et al., 1991; US DHHS, 1989). Therefore, studies of smoking prevalence among medical students should indicate quite accurately the proportion of new physicians who will smoke. The Johns Hopkins Precursors Study and the Preventive Cardiology studies provide data on smoking uptake among medical students.

From 1948 through 1964 at the Johns Hopkins Medical School (Baltimore, Maryland), the behavior of medical students was analyzed by

annual surveys, now known as the "Precursors Study" (M. Klag, personal communication). Members of each admitted class were surveyed on several categories of behavior, including current cigarette use. The average smoking prevalence among medical students at Johns Hopkins Medical School was 65.4 percent for the years 1948 through 1951 (Figure 4), a rate only slightly higher than the prevalence of smoking among physicians during these years. However, by 1965 the prevalence for the medical students had dropped below 40 percent. Presumably, if surveyed later as practicing physicians, some would be found to have quit.

Throughout the 1980's, the National Heart, Lung, and Blood Institute provided a series of preventive cardiology awards to several investigators at medical schools (Stone et al., 1990). As part of these awards, investigators undertook cardiovascular risk surveys of medical school students. Dr. Tom Pearson of Bassett Hospital (Cooperstown, New York) combined and computerized data from eight medical schools (Johns Hopkins University, Case Western Reserve University, Mt. Sinai, St. Louis University, State University of New York at Rochester, University of Utah, George Washington University, and the University of California at Irvine) (T. Pearson, personal



#### Figure 4 Smoking prevalence among medical students

Sources: Derived from unpublished data, Precursors Study and Preventive Cardiology Series.

communication). In general, first- and fourth-year medical students from the graduating classes of 1981 through 1987 were surveyed. In these medical schools, from 1981 through 1987, the maximum prevalence was less than 3 percent in any year. These data seem to indicate that medical students in the United States had become almost smoke-free by the early 1980's.

Smoking prevalence among medical students can be put in context by comparison with the smoking prevalence in 22- to 26-year-old individuals in the population with 16 or more years of education, as determined from the National Health Interview Surveys. In 1965, an estimated 40 percent of the NHIS population in the age and education ranges given above were current smokers, about the same percentages observed for the Johns Hopkins medical students in that year. Prevalence declined steadily in the general population over time, and by 1987 it was down to 14 percent (which is at least 10 percentage points higher than smoking prevalence among medical students in the Preventive Cardiology series). One explanation for the difference between the change in the smoking behavior of medical students and that of their peers is the radical change in social norms among aspiring physicians with respect to the acceptability of smoking after publication of the 1964 Surgeon General's report.

#### PHYSICIANS' ADVICE, **AS REPORTED BY** PATIENTS

Gritz (1988) has estimated that some 70 percent of the population visit a physician each year. In California in 1990 (Burns and Pierce, 1992), 72.4 percent of the total population visited a physician in the year prior to the survey. This included 66.8 percent of all current smokers. Indeed, 40.2 percent of current smokers visited their physician on more than one occasion during that 12-month period. Physicians have both the mandate and the opportunity to advise smoking patients to quit; they are in the position to provide that advice at low cost on a one-to-one basis to the majority of smokers each year.

Information on whether physicians had advised individual patients **Data Sources and** Measures to quit smoking was obtained from three National Health Interview Surveys (1974, 1976, and the 1987 Cancer Risk Factor Supplement) and the 1986 Adult Use of Tobacco Survey (AUTS). The three NHIS studies were household in-person interview surveys with questions related to smoking asked directly of the respondent (response rate more than 85 percent). Details of the survey methodology were reported previously (NCHS, 1985 and 1987). The 1986 AUTS survey was a random-digit-dialing telephone survey; within an identified household, eligible respondents answered the questions themselves (US DHHS, 1986b). The response rate was 74 percent. Rates of physicians' advice from the surveys, reported previously (Gilpin et al., 1992), are summarized below.

> In each survey year, ever-smokers were defined as those who had smoked more than 100 cigarettes in their lifetime. Current smokers were defined by the question, "Do you smoke cigarettes now?" Ever-smokers who answered no to the question about current smoking were labeled "former smokers."

In the 1974 and 1976 surveys, respondents were asked, "Have you ever been advised by a doctor to quit smoking?" In the 1986 survey, respondents were asked, "Did any doctor ever advise you to quit smoking?" Finally, in the 1987 survey the question was, "Has a doctor ever advised you to quit smoking?" For this discussion, the sample of respondents analyzed included current and former smokers, aged 20 or older at the time of interview, who indicated whether or not they had received advice to quit from a physician. When respondents were asked whether they had ever received advice to quit smoking from a physician, no time interval was mentioned.

Increase in Three separate analyses of changes in reported advice with time Reported Advice were performed. The first analysis considered former smokers, the second focused on current smokers, and the third included both current and former smokers and used information on the date of smoking cessation. The analysis of current smokers alone should give a better picture of recent advice patterns. Finally, in the third analysis, respondents who had been former smokers the longest would generally have been more likely to be advised at an earlier date than those who quit more recently or who are current smokers, thus providing another indication of changes in physicians' advice patterns.

Advice rates over time or over time since former smokers smoked were compared with the  $\chi^2$  test for trend. Figure 5 presents the overall percentages of current and former smokers who had been advised to quit smoking, as reported in each survey year. These percentages have increased steadily over the years (p < 10<sup>-8</sup>), especially in the last two survey years compared with the first two. In 1974, only 26.4 percent of current smokers reported receiving advice, and by 1987 the percentage had reached 50.9 percent. Furthermore, the percentages of former smokers (by interval since they smoked) and current smokers advised to quit smoking in the combined 1986 and 1987 surveys also show the trend for increased advice to quit with time (p < 10<sup>-8</sup>) (Figure 6).

The trend to increased reporting of advice with time has been noted previously within these same surveys and those for earlier years (US DHHS, 1990). For the 1964 AUTS survey, 15 percent of current smokers reported receiving advice. By the 1966 AUTS survey, the percentage of smokers reporting they received advice had reached 16.9 percent, and by the 1970 AUTS survey, it climbed to 21.8 percent (US DHHS, 1990).

**Demographic** To examine the relationship of demographic factors to the reported **Subgroups** To examine the relationship of demographic factors to the reported and 1976 (from NHIS), and the later 2 years, 1986 and 1987 (from AUTS and NHIS, respectively), were combined. There are some important demographic differences in who is likely to have received advice to quit smoking (Table 3). In both periods, more female smokers than male smokers reported having been advised to quit smoking (28.9 vs. 25.8 percent in the 1970's, and 53.3 vs. 45.6 percent in the 1980's).



Figure 5 Physician advice, as reported by current and former smokers

In both survey periods, a clear trend for age was seen: More advice is reported with advancing age of the patient. However, in the later period (1986 and 1987) this trend was less pronounced. This finding could result from more frequent visits to the physician by older people, from an aging of the population, or both (US DHHS, 1986a).

In both survey periods, white respondents reported receiving advice more than did blacks (28.5 vs. 18.4 percent in the 1970's, and 51.5 vs. 39.4 percent in the 1980's). This indicates that physicians may not be advising blacks to quit smoking as often or as strongly as they are advising whites.

Smokers with more than a high school education reported receiving advice more often than did those with less education, and all educational levels showed the same increase with time. While the average age of the population has been advancing in recent years, so has its level of education. These changes may tend to offset one another and probably account for the absence of a more substantial trend in reported advice relative to education level.

Sources: 1974, 1976, 1987 National Health Interview Surveys; 1986 Adult Use of Tobacco Survey.



Figure 6 **Physician advice, by interval since patient last smoked** 

**Differences in Physicians'** In 1986 and 1987, half of all current smokers reported And Patients' Reports In 1986 and 1987, half of all current smokers reported cian. In seven studies that relied on physician self-report (including two national surveys of family practitioners), the proportion of physicians reporting regularly advising their smoking patients to quit ranged from 52 to 97 percent (Fortmann et al., 1985; Ockene et al., 1986; Orleans et al., 1985; Rimer et al., 1986; Rosen et al., 1984; Valente et al., 1986; Wechsler et al., 1983; Wells et al., 1986).

> Several factors may account for the discrepancy in the advice rates reported by patients and those reported by physicians. First, physicians who do not respond to voluntary surveys about their practices for advising patients to quit smoking may not routinely give such advice. Second, the physicians seen most often by smokers may not be cardiopulmonary specialists and may not be as aware of the importance of advising patients to quit, and therefore do not give their patients as much advice (Wells et al., 1986). Third, physicians may be more likely to advise patients who have smokingrelated illnesses (Cummings et al., 1987; Ockene et al., 1987). Results from

Sources: 1986 Adult Use of Tobacco Survey, 1987 National Health Interview Survey.

	1974 to 1976 (n=16,033)	1986 to 1987 (n=10,403)	Ratio
	Percentage (S	Standard Error)	
Overall	27.3% (0.4)	49.7% (0.5)	1.8
Sex			
Male	25.8 (0.5)	45.8 (0.7)	1.8
Female	28.9 (0.5)	53.3 (0.7)	1.8
Age			
20 to 29 yr	19.4 (0.7)	41.9 (1.1)	2.2
30 to 44	26.7 (0.6)	49.6 (0.8)	1.9
45 to 64	33.0 (0.9)	55.1 (1.1)	1.7
≥ 65	33.4 (1.2)	54.5 (1.4)	1.6
Race			
White	28.5 (0.4)	51.5 (0.5)	1.8
Black	18.4 (0.9)	39.4 (1.3)	2.1
Other	15.9 (3.1)	44.1 (3.0)	2.8
Education			
< 12 yr	27.2 (0.6)	47.9 (1.0)	1.8
12	25.2 (0.6)	48.5 (0.8)	1.9
13 to 15	28.5 (0.6)	52.1 (0.9)	1.8
≥ 16	30.8 (1.3)	53.4 (1.5)	1.7

# Table 3Current smokers advised to quit, by time period and demographic characteristics

Sources: 1976, 1984, 1987 National Health Interview Surveys, 1986 Adult Use of Tobacco Survey.

a national survey of internists indicated that, although 82 percent of the group reported counseling more than 75 percent of smokers with heart disease, only 52 percent reported counseling more than 75 percent of all patients who smoke (Wells et al., 1986). Finally, physicians may have given advice that patients do not remember. A physician's simple statement to a patient, "You should quit smoking," may not have the same impact as active counseling or multiple messages (Kottke et al., 1988; Schwartz, 1987).

**SUMMARY** Although more smokers in recent years are receiving health professionals' advice to quit smoking, many still are not being reached by this important avenue. Physicians and dentists may hesitate to advise smoking patients to quit because they perceive that such advice has little impact compared with standard therapies for other ailments. Physicians and dentists need to understand that the success of their efforts is not measured in how many patients become ex-smokers in the year after advice is given. On that scale, only about a 5-percent quit rate is to be expected (Cummings et al., 1987; U.S. Preventive Services Task Force, 1989). Rather, advice will lead the

patient along a cyclical path to quitting. Smokers generally move through stages of not thinking about quitting, then thinking about it, making a quit attempt followed by relapse, and another period of no interest (Prochaska and DiClemente, 1983). However, repeated advice to quit, together with messages from other sources, will help reinforce the process so that eventually the smoker will make a successful attempt and become one of the 5 percent who quit.

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# The Health Professional's Responsibility in Smoking Cessation: Strategies for Office and Community

John W. Richards, Jr., Thomas P. Houston, and Alan Blum

**INTRODUCTION** Achieving behavior change among individuals exposed to risks is a complex task. The field of risk communication is an evolving science, often poorly understood by both its practitioners and those who should be. It seems evident, however, that providing information about a potential risk is only the first of several steps in affecting behavior. Information, motivation, and sometimes legislation are needed to reduce personal and societal risks. Seat belt campaigns that have culminated in automobile safety laws for adults and children are a case in point.

The personal and professional role and responsibility of health professionals go beyond merely giving relevant information about smoking. Needed are office-based and community efforts that can help motivate patients and activate other health professionals to address more effectively the single largest cause of illness and death in our society, smoking.

In reviewing categories of behavior change, Green and colleagues (1988) identified three types of behavioral influence that apply to clinicians: predisposing, enabling, and reinforcing factors. Knowledge and attitudes toward health promotion and disease prevention, the health behavior of the professional, confidence in counseling skills, and belief about their patients' interest in such advice are the predisposing factors that can be both positive and negative cues toward health promotion behavior. Factors that promote or enable health promotion activities include a feeling of confidence about performing preventive care services, reimbursement for these activities, and an organized practice setting that facilitates preventive medicine. Reinforcing factors include positive feedback from patients, evidence of intermediate results, peer support, and a perception that health promotion activities add to the role of healer.

Many of these characteristics are not easily fulfilled in the case of smoking cessation. Although many health professionals have adequate knowledge about the pathophysiology of tobacco use and its adverse consequences on health, most are not adequately trained in medical or dental school, or during residency, to counsel patients about smoking cessation (Horton, 1986). Likewise, although many patients desire health promotion advice from their physicians, the physicians often do not fulfill the patients' expectations. In a study by Owen and Davies (1990), 67 percent of smokers preferred receiving advice from a health professional over other means of assistance with smoking cessation. Physicians and dentists, however, are notoriously lax about advising patients to stop smoking. Only about 45 percent of smokers report that a physician has ever advised them to stop smoking (Anda et al., 1987; Davis, 1988).

Good news about physician counseling behavior comes from a survey in which 98 percent of recently trained family physicians reported that they counsel patients about smoking, even when no smoking-related disease is present. Thirty percent of that group also said they believed they were influential in their patients' smoking cessation (Goldstein et al., 1987).

Many health professionals do not feel empowered to engage in smoking cessation efforts because of reimbursement issues and the perception that smoking cessation requires inordinate amounts of time. Green and co-workers' identified reinforcing factors (Green et al., 1988) also may be perceived as blockers when physicians' partners and peers do not support their beliefs about smoking cessation, when feedback from patients is not as readily apparent as with self-limiting or easily treated illnesses, or when there is discouragement because of failure to achieve a 100-percent cure among patients who smoke.

On the other hand, most physicians have adopted health behaviors that are conducive to smoking cessation in practice. A 1987 study conducted by the American Medical Association showed that only 9 percent of randomly selected physicians were smokers (Harvey and Shubat, 1987). Because health professionals have frequent contact with patients who smoke, there is opportunity for intervention. More than 70 percent of Americans see a physician at least annually, and more than 60 percent see a dentist each year. Smokers average 4.3 physician visits each year (Wetzler and Cruess, 1985), and even a brief intervention by physicians can be successful in doubling the spontaneous quit rate of 2 to 4 percent (Ockene, 1987; Schwartz, 1987).

At this point, a brief review of the hazards of smoking and the benefits of cessation is in order. Smoking's effects on health constitute the single largest cause of preventable disease and death in American society. The Office on Smoking and Health has estimated that more than 430,000 Americans die each year from diseases related to smoking (Centers for Disease Control, 1991). Nearly one of every five deaths in the United States is caused by smoking; this represents more deaths than the combined total of deaths each year from AIDS, automobile accidents, homicide, suicide, and illegal drugs.

The 1990 Surgeon General's report (US DHHS, 1990) points out that smoking is the leading cause of lung cancer among both men and women; the risk of lung cancer is 22 times higher among male smokers and 12 times higher among female smokers than nonsmokers. After smoking cessation, the risk of lung cancer declines, so after about 10 years of abstinence, the risk of lung cancer for the ex-smoker is between 30 and 50 percent of the risk for those who have continued to smoke. Smokers have about two times the risk of nonsmokers of dying from heart disease. Cessation reduces the excess risk by about 50 percent after only 1 year. After 15 years of cessation, the risk is similar to that for persons who have never smoked.

Stroke is the third leading cause of death in the United States. Stroke prior to age 55 is twice as common among smokers as it is among non-smokers. It is less clear how quickly stroke risks return to baseline for persons who have stopped smoking—probably between 5 and 15 years.

Smoking is the major cause of chronic obstructive lung disease, the fifth leading cause of death in the United States. Again, we see benefits in cessation because the progression of chronic obstructive pulmonary disease is reduced with abstinence from smoking. Cigarette smoking is one of the major causes of peripheral artery disease and increases the mortality from abdominal aortic aneurysm between two and five times.

Women have special risks from smoking besides lung cancer, now the leading cancer killer among women. These include an increased risk of cervical cancer and several complications of pregnancy, including bleeding during pregnancy, premature rupture of membranes, preterm delivery, placenta previa, abruptio placenta, and producing a baby with low birth weight. Women who stop smoking before becoming pregnant or stop smoking during the first trimester of pregnancy apparently reverse the risk of low birth weight for the baby as well as reducing the other pregnancyassociated risks.

Recent data show also that smoking during pregnancy affects the growth and development of young children, in both the physical and cognitive areas. Stopping smoking early in pregnancy prevents these effects, just as the in utero risks are reduced by smoking cessation (Sexton et al., 1990a and 1990b).

Both smoked and smokeless forms of tobacco have deleterious effects on the soft and hard tissues of the oral cavity.

Because the facts about smoking and the benefits of cessation are known, and 80 to 90 percent of patients want to stop smoking, it is incumbent on physicians and dentists as community members to participate in smoking cessation counseling. Clinicians are bestowed with an enormous mantle of authority: Most smokers who express a preference want information about smoking cessation from physicians in preference to other sources; and onehalf of smokers say they would try to quit if their dentist advised them to quit. Physicians and dentists also have an ethical duty to prevent illness and reduce the burden of disease and suffering.

Our patients do not wake up one morning and suddenly decide to become smokers; rather, they are bombarded from an early age with messages and role models that encourage tobacco use. A health professional's approach to smoking cessation should therefore be a longitudinal strategy involving a multitiered approach that includes the office, hospitals, schools, civic organizations, and the mass media, in addition to the more traditional individual patient encounter. What follows reflects trial and error by physicians and research efforts by members of Doctors Ought to Care, a physician-led group advocating smoking cessation strategies as an essential part of every practice (Blum, 1980 and 1982). Moreover, there is growing evidence that these techniques are effective.

IN THE PRAC-TITIONER'S Most physicians' and dentists' offices are remarkably underused for smoking cessation, especially in light of the above-described devastation of health by tobacco use. The entire office staff must work to create an environment conducive to nonsmoking behavior among patients. The first step is to assume a patient's perspective and tour the office with the objective of creating an atmosphere that clearly conveys the message that nonsmoking is the norm. Because the amount of time the patient spends registering and waiting may be as long as the health care encounter itself, every opportunity to encourage and support nonsmoking behavior must be used throughout the office environment. The following details what can be done in different office areas.

As part of the professional office, the reception area automatically **The Reception** grants credibility and implies endorsement to whatever editorial or Area commercial material it may contain. Health professionals are the target, therefore, of publishers who are trying to get their magazines displayed in patient care facilities. In fact, many magazines such as Better Homes and Gardens, Working Woman, Family Circle, Woman's Day, and People offer very low "professional rates." Each of these magazines contains an average of 10 cigarette advertisements per issue. These are often juxtaposed with health articles, most of which are unrelated to the subject of tobacco (Houston, 1984). Indeed, Time, Newsweek, Sports Illustrated, Better Homes and Gardens, U.S. News and World Report, Ladies Home Journal, and People-the most frequently purchased magazines for doctor's offices (Fischer, 1985)-have many advertisements encouraging and glamorizing tobacco use. In addition, most of them have deliberately avoided the subject of tobacco's effects on health (Richards, 1991).

> It is absurd to display glamorous models in highly desirable settings to promote cigarettes in a physician's or dentist's waiting room. Health care professionals can send a message to patients and publishers alike by canceling subscriptions to these publications and subscribing to publications that do not promote tobacco (Richards, 1983; also see Appendix A). An alternative technique is to call attention to the harmful and often untruthful nature of these advertisements by stamping or pasting stickers on the advertisements with comments such as, "This ad is a rip-off" or "Your doctor does not approve of this ad" (Figure 7). Moreover, a sign might be placed in the reception area alerting patients to the reason specific reading material has been provided. Of course, a sign should be displayed that informs patients that the office is a smoke-free zone. Other signs in the office can invite patients to inquire about smoking cessation and inform them that smoking cessation activities are available.

#### Figure 7 Sticker for waiting room magazines



Source: Doctors Ought to Care; copyright 1987; used with permission.

Other areas of the office, such as the restrooms, can be provided with eye-catching posters and reading material that promote healthful behavior. Even the ceilings of exam rooms are open for attention-getting posters or messages. These would be supplements to the traditional use of time spent in the exam room, when patients can read carefully selected materials.

- **Vital Signs** In almost all practices, vital signs are noted prior to the patient-physician encounter. Because tobacco use is the principal cause of premature morbidity and mortality in this country, a column should be added to the vital signs record and headed "tobacco" (Richards, 1991). A simple question—"Do you use tobacco?"—should be asked as a part of checking vital signs. The utility of this simple screening test is far greater than most screening used in practice. When the response is positive, the physician or dentist has information that is a powerful predictor of both acute and chronic disease in the patient and his family. Moreover, it signifies to nonsmokers as well as to smoking patients that tobacco use is a very important factor in health and that the health care provider is concerned about smoking.
- **The Examination** Whether the presenting complaint is acute or chronic, smoking cessation can and should be a part of each visit. Tobacco use, once identified, should be placed on the problem list as a permanent problem. Just as a physician routinely takes blood pressure readings for formerly hypertensive individuals, the physician should continue to inquire about tobacco use even after cessation is achieved. This reinforces patient efforts because physician concern is often cited by patients as an important influence on smoking behavior.

Identifying and using "teachable moments," such as during or just after an illness, can significantly increase chances for a successful intervention by providing new motivating factors on which to build (Brunton, 1984). However, it is not sufficient to wait for teachable moments: Experienced physicians can and should create them.

To the alert physician or dentist, the presenting complaint will often lead to smoking cessation opportunities. For example, a child with an ear infection or even a cold offers a teachable moment to talk with parents about their cigarette smoking. Prenatal visits, the intrapartum hospital stay, and well-child visits provide the opportunity to discuss protecting children from environmental tobacco smoke as well as to remind parents about their own health risks. Routine dental appointments can become opportunities for smokeless tobacco education, especially among adolescent boys. The school sports physical, the camp physical, routine checkups for diabetic or asthmatic patients—all should be used as teaching encounters about tobacco use.

During the examination itself, opportunities abound. Instead of a spot on the wall for a patient to look at during the funduscopic exam, substitute an attention-getting poster to make productive use of 30 seconds of direct concentration. Casual comments while examining the mouth ("Still smoking, I see") or while listening to the lungs ("Still smoking, I hear") plant seeds for change. However, asking the traditional question, "How much do you smoke?," may lead the patient to interpret that there is a safe level of consumption, so the physician must be prepared with an appropriate disclaimer to follow the patient's response.

INDIVIDUALIZING<br/>INTERVENTIONSTo increase effectiveness, physicians and dentists should<br/>examine closely the basic reasons for patients' smoking, keeping<br/>in mind the techniques used to sell cigarettes and encourage consumption.<br/>Most people, especially teenagers, choose cigarettes that advertisers promise<br/>will make them look macho, mature, sexy, successful, or more acceptable to<br/>their peers. Because cigarettes, if used, actually cause the *opposite* appearance,<br/>the very same Madison Avenue images that promote buying and using<br/>cigarettes can also be employed successfully by physicians to promote<br/>*un*buying or *non*smoking.

Smoking cessation is really no different from many other medical interventions. However, with smoking cessation the average person who stops smoking has tried several times over a prolonged period—sometimes years—before becoming a successful nonsmoker. This can be frustrating for the physician who is accustomed to achieving success with measurable results in a matter of days.

For example, consider the urinary tract infection. The patient complains of frequency, urgency, and dysuria. A culture is taken. Antibiotics are selected and prescribed. The sensitivity confirms the correct choice. The patient generally gets better quickly and is well in a week. If the patient with a urinary tract infection were to come back in a week with continued symptoms, no physician would say, "I'm sorry, but we tried an antibiotic; unfortunately, it did not work. I guess you'll have to suffer with this until you figure out a way to get better. However, you might get pyelonephritis and septicemia and die." With smoking cessation, the practitioner does a "culture" by performing a general assessment of the patient's situation; determines the "sensitivity" by asking the question, "What brand do you smoke?"; and then selects the verbal "antibiotic" according to a combination of the above. If the first verbal antibiotic for smoking cessation does not work, the clinician should try another and then another, until success is achieved.

Just as a medical student is uncomfortable and apprehensive when using antibiotics to treat his or her first patient with a urinary tract infection, the same feelings are to be expected when first using various smoking cessation techniques. With practice, however, using smoking interventions will become as routine as treating a urinary tract infection.

One must remember that smoking cessation efforts, like other therapy, must be individualized through consideration of agent (strategies that have the best efficacy for a given situation), absorption and elimination (factors that enhance or detract), dose (enough to be therapeutic, yet not toxic), and timing (frequency and relation to other agents). Rather than a source of frustration, each intervention should be considered a learning experience for both the clinician and the patient. Realistic expectations are a must. Achieving a smoking cessation rate of 25 percent of patients at 1 year might seem disappointing for the physician accustomed to a 100-percent success rate for treating urinary tract infections. However, one must keep in mind that 25 percent would be an incredible success rate when contrasted with a reported baseline rate of 2 to 4 percent per year. Clinicians would jump at the chance to prescribe an antibiotic that is 100 percent more effective than competing products. Practiced, thoughtful smoking cessation efforts can be 1,000 percent better than no intervention.

### STRATEGIES FOR COUNSELING

Words

**ES FOR** Selecting the proper words to discuss smoking with a patient is every bit as important as selecting the proper pharmacologic agents for other health problems. Unfortunately, little time in training is devoted to developing this skill. Selecting the verbal "drug of choice" is not difficult, however, once a proper culture and sensitivity have been established.

In a recent article, Richards (1992) discussed 5 of the most important questions for the physician to ask and 20 of the excuses most commonly given by patients. Practice in these anticipated dialogues will better equip the health care provider to deal with one-on-one smoking intervention opportunities.

**Money** Money is a powerful motivator. A high school freshman might respond to information that money saved by not buying cigarettes could be used to purchase a stereo at the end of a year or a car after the junior year of school. The young executive might be persuaded to give up a two-pack-per-day habit if told that the same money placed in an 8-percent annuity might be worth more than \$1 million at retirement. In a similar fashion, a reward can be paid for not smoking by taking the money one would have spent each day on cigarettes and putting it in a "nonsmoking piggy bank." This money can

be deposited in the bank, put into an account for children, used to pay for holidays or vacations, or, in a more immediate way, spent at the end of each nonsmoking month on a gift for the new nonsmoker or the family. At current prices, one pack per day comes to more than \$50 per month, which requires a pretax income of \$70 to \$100. A patient who quits smoking in celebration of the birth of a child will have saved enough money over 18 years of abstinence to pay for the child's college education.

**Demarketing** Turning the tables on Madison Avenue can be an easy and effective strategy. A 15-year-old girl who smokes Virginia Slims (or another fashion-image brand) to appear sexy and independent might listen to information about how smoking causes "zoo breath" and yellow teeth, and that kissing a smoker is like "licking an ashtray." It is unlikely that teenagers will listen to statistics about possible deaths or disease in 30 or 40 years.

A 35- or 40-year-old woman might respond to the knowledge that premature wrinkling of the face is a cosmetic side effect of smoking. Both teenaged and young adult women might have second thoughts when reminded that Philip Morris is exploiting women by making them think that they have "come a long way," when actually the company is mocking women's independence by telling them what to do and getting them addicted to cigarettes.

The smoker of Now, True, Carlton, or other "low-tar" brands is concerned about health. Would the same person buy bread marketed as the "lowest in poison" or a soup that has "only 3 milligrams arsenic"? Appealing to health concerns and reinforcing the health benefits of cessation may be most effective for this subcategory of smokers (Blum, 1979).

Another way to point out the illogic of smoking is to ask the patient who refuses to stop smoking to switch to a brand inconsistent with the patient's desired image. For example, for the Marlboro-smoking truck driver, suggest Virginia Slims or Eve. This often leads the smoker to smile and realize the absurdity of smoking, which seems to break the ice and resistance to further efforts. For the patient for whom no technique seems to work, despite many attempts, a tactic to prolong the amount of time the patient considers the doctor's suggestions after leaving the office might be beneficial (for example, giving pamphlets or handouts to enhance the patient's absorption of the message).

In all the above techniques and strategies, the physician or dentist must take care to create an alliance with the patient against an enemy, that is, the companies selling tobacco products. By pointing out the deceitful marketing and unethical business practices of the cigarette industry and the manufacturer of their brand in particular, patients, especially teens, may become angry enough to stop purchasing their products. We must never lose sight of the fact that our patients, the smokers, are victims of an industry that has addicted them to nicotine. We must never look on the smoker as the enemy or take sides against smokers in our efforts. Even though many of our patients may not be able to stop smoking, we must continue to treat them with compassion and kindness. **The Quit Date** Much has been written about establishing a quit date. Although beneficial to most patients, if it appears so hard to quit that the patient has to spend excessive time and effort getting ready, some may assume that it is just too difficult to stop smoking and will never even try.

Asking, "Have you set a quit date?" is really a way of determining the patient's readiness to stop smoking. If the answer is "yes," then follow with, "When?" and "What is it about that date that makes it a good one?" This will gather important additional motivating information for use in selecting the verbal drug of choice. This may also rapidly identify blockers to be dealt with or myths to be debunked.

If the patient has not already set a quit date, suggest setting one immediately. For patients who have tried to stop several times in the past, or for those who have relapsed after significant periods of cessation, "Why not today?" should be the next question. These patients may merely need a new boost for their previous success, and a lengthy period of contemplation before the stop date may actually allow them to put off the decision.

If the patient will not set a quit date, then explore the rationale with a statement such as, "You're an intelligent person. With all you know about what smoking is doing to you and the fact that you will die about 18 years earlier because of it, help me understand how you came to this decision." The patient's answer will offer an enormous insight into his or her thinking and motivation and will provide information for advising other patients as well. More often than not, the patient's rationale is based on inaccurate information. Thus, it provides an opportunity to correct the myth, educate the patient, and further encourage the smoker along the path toward becoming a nonsmoker.

**The Contingency** Some clinicians use a written stop-smoking contract signed by both the patient and the physician after setting a quit date. Some include the contract as a part of the medical record and ask the patient to sign the agreement to stop smoking. Whether writing a personalized note on a prescription blank or the clinician's letterhead, or using specially designed contracts as may be found in smoking cessation kits from a number of sources, something tangible for the patient to take home may enhance the effectiveness of the cessation attempt (Taylor, 1985). Such a contract also serves to communicate the important message that medical or dental practice goes beyond dispensing medicine and repairing damaged tissue.

**Rewards** Many physicians find rewards to be beneficial adjuncts for smoking cessation activities. We previously mentioned monetary rewards, such as putting the amount of money the patient would have spent on tobacco during 1 year into an escrow account to be used for a long-term goal—holiday gifts, a stereo, or a downpayment on a car. This can be broken down into smaller increments as well, with daily contribution to a nonsmoking fund. Other, nonmonetary rewards might mark the 1-day, -week, -month, or -year anniversary and include a new hairstyle, a facial, a trip to a favorite

park, or the guarantee of a day off from child care (which involves family support). Creativity and engaging the patient in setting up a personalized reward system are important.

**Followup** After the quit date, followup is essential to reinforcing the message of smoking cessation to the patient. The physician or dentist should make the followup contact through a brief office visit or a personal phone call within a week or so of the quit date. If time constraints or schedules will not permit, the office staff may be just as useful in making these contacts. The perspective of Solberg and colleagues (1990) on the team approach to smoking cessation in the family physician's office is most instructive. At the followup visit, or if a future encounter reveals that the patient has relapsed by smoking one or more cigarettes, the physician or dentist must take care not to make the patient feel even more guilty about the relapse.

Many patients will assume that, because they have resumed smoking (even if it is at a much lower level), they have failed and cannot be helped. Rather, the relapse should be discussed in depth so that the patient can understand the circumstances under which smoking was resumed and create contingencies to address the situation that triggered the relapse. By building on what was learned during the smoking cessation effort, the patient should be encouraged to stop smoking again. Anticipatory guidance and warning the patient about tempting situations (being with smokers, attending parties, drinking alcohol—especially at bars) will assist the patient in dodging these bullets. A careful smoking history with a patient's smoking diary and recording the stimuli and situation associated with lighting up can be quite helpful to the clinician in this regard.

**COMMUNITY AWARENESS AND ACTION** From auto races to rock concerts to athletic events, even community charity fundraising events, the promotion of tobacco products appears in the guise of corporate sponsorship. These events are intended to create social acceptance and complacency among users and non-users alike. The enormous economic power of the tobacco industry through sponsorship, taxes, and advertising revenues can make local prevention efforts very unpopular. Health professionals should be aware of, but not deterred by, those who either do not recognize the long-term health consequences that sponsorship of these events represents or who consider economic gain more important than health. Every physician and dentist is a potential smoking cessation specialist and should take advantage of opportunities to participate or take the lead in nontraditional activities in tobacco control.

> Does everyone really know about the hazards of smoking? One need only consider the outcry by chain-smoking homeowners about radon vapors, by puffing parents over asbestos in the classroom ceilings, or by the news media over cyanide-tainted grapes, or the irony of tobaccocompany-sponsored boat races to raise money for cerebral palsy before realizing that, although much is known, very little is perceived or believed. Surveys of relative risk in our society make it clear that the general public thinks tobacco smoking is much less dangerous than health professionals know it to be.

A letter to the newspaper editor or to the local sponsors of an event that uses tobacco products in association with sports or fitness can often prompt a turndown of tobacco company sponsorship. The letter can highlight the conflict between tobacco sponsorship and the health of the community's children and others attending the event.

Physicians and others concerned about health can make "house calls" to encourage good health; for example, protesting the Virginia Slims tennis tournament or comparable events by picketing while wearing white coat and stethoscope and holding placards (Figure 8). Other tactics include holding a health press conference at the event or volunteering for media talk shows (Richards et al., 1988). The credibility enjoyed by dentists and physicians in the community goes far beyond that of tobacco promoters. By using local media, the service club speaking circuit, volunteer agencies, and even solicitation among patients, corporations and bureaucrats can be mobilized and motivated to take up a call to ensure a smoke-free environment for all citizens. The prohealth community should not overlook bus benches, T-shirts, bumper stickers, notebook stickers for schoolchildren, and buttons as vehicles for antismoking messages (for example, the shirt in Figure 9).

Smoking cessation and tobacco control must become an integral part of clinical practice. The office should be an oasis of health-promoting ideas

#### Figure 8





Source: Doctors Ought to Care; used with permission.



Figure 9 **T-shirt bearing an antismoking message** 

Source: Doctors Ought to Care; used with permission.

and messages for patients about the risks of smoking and the benefits of cessation. Beyond the traditional messages, however, the practitioner must accurately present the facts and statistics and change smokers' perceptions about the mystique of smoking. Practitioners must remember that smokers have been victimized by an industry that makes enormous profits from ill health, and they must create an alliance with patients against the tobacco industry. Health professionals bear a burden of responsibility about informing, educating, motivating, and working toward behavior change in their patients. To do less shortchanges patients and places practitioners in the unenviable situation of merely treating the resultant illness and comforting the families of those who have died prematurely.

Finally, we must not be afraid to go beyond the traditional activities that health professionals are expected to do and step outside the bounds of the individual doctor-patient relationship into the community. Participating with the local press, appearing on radio and television talk shows, going to civic clubs and churches, and organizing protests at tobacco-sponsored events all have their place in community and medical activism. The importance of these activities cannot be overstated, given the enormous burden of morbidity and mortality caused by smoking and the obvious benefits of cessation and the prevention of smoking initiation. In many ways, the tobacco industry uses the community as a vector of the disease of nicotine addiction. Marketing pressures and social acceptance of smoking, exposure to environmental tobacco smoke, and the complacency of government, corporations, and even the medical community with respect to tobacco mandate action by the practitioner.

Individual clinicians can and do make a difference in community smoking control and individual smoking cessation. These two efforts are synergistic. The increased numbers of individuals who stop smoking add to the growing social unacceptability of smoking. Conversely, as community movements for smoking control gain momentum, individuals will become more motivated to seek advice on smoking cessation from physicians and dentists. To accomplish these joint tasks, we must first arm ourselves with the necessary skills, knowledge, and attitudes, then fully integrate smoking cessation counseling into everyday practice and work toward reducing the threat from the number one cause of morbidity and mortality.

Every physician and dentist can, should, and must become a smoking cessation expert. If we do not, who will?

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### APPENDIX A Magazines Without Tobacco Advertising

### FOR ADULTS

Accent on Living Adirondack Life Air & Space Alaska Magazine American Baby American Health American Heritage American History Illustrated American Square Dance Americas Animal Kingdom Antique Automobile Arizona Highways Arthritis Today Artist's Magazine Audubon Aviation Week & Space Technology Backpacker Bicycling **Business Week** Byte Cars & Parts Cat Fancy Child Christian Herald Common Cause Magazine Complete Woman Consumer Reports Cooking Light Country Journal Craftworks for the Home Crafts Cyclist Dance Magazine **Diabetes Forecast** Dog Fancy Down Beat Down East Magazine Elks Magazine **Exceptional Children Exceptional Parent** Farm Journal **Final Frontier Fishing Facts** Florida Sportsman Flying Flying Models Freshwater & Marine Aquarium

The Futurist Garbage Garden Golf Illustrated Good Housekeeping Good Old Days Guideposts Hadassah Magazine Harvard Business Review Harvard Lampoon Harvard Medical School Health Letter Health Health News & Review Hippocrates Historic Preservation Home Office Computing Horn Book Magazine Horse Illustrated Horticulture Income Opportunities Instructor International Travel News Isaac Asimov's Science Fiction Itinerary Journal of Irreproducible Results Kaleidoscope The Lion MacUser MacWorld MAD Magazine Maine Fish & Wildlife Maine Life Magazine Mature Outlook Mayo Clinic Health Letter Men's Fitness Men's Health Midwest Living Model Railroader Modern Maturity Montana Magazine Mother Earth News Mother Jones Ms. Muscle & Fitness Nation National Gardening

National Geographic National Parks National Wildlife Natural History The New Yorker North American Review Nutrition Action Healthletter Oceans Old House Journal Organic Gardening Parenting Parents Magazine PC Magazine PC World Personal Computing Petersen's Hunting Petersen's Photographic Popular Communications Popular Photography Popular Woodworking Prevention Railfan and Railroad Reader's Digest Runner's World Sail Salt, Inc. Satellite Orbit Saturday Evening Post Science Science News The Sciences Scientific American Sea Frontiers Shape Sierra Single Parent 16 Magazine Skin Diver Magazine Smithsonian Society Southern Accents Sports Afield Stork Sunset Magazine Theatre Crafts Threads Travel Holiday Travel & Leisure Twins

Source: Medical news and perspectives: Magazines without tobacco advertising. *Journal of the American Medical Association* 226(22): 3099-3102, 1991.

### FOR ADULTS (continued)

Utah Holiday Vegetarian Times Venture Magazine Vermont Life Vibrant Life Video Review Walking Magazine

#### FOR CHILDREN AND TEENS

Big Bopper Black Beat Bop Boy's Life Cricket Highlights for Children The Washington Monthly Weight Watchers Magazine West Coast Review of Books Western Outdoors Westways Wildlife Conservation Women's Sports & Fitness Workbasket Workbench World Monitor Writer's Digest Yankee Zoogoer

Humpty Dumpty Jack and Jill Kid City Ladybug Ranger Rick's Right On! Sassy Sesame Street Seventeen Teen 3-2-1 Contact YM