A Community View of Smoking Cessation Counseling in the Practices of Physicians and Dentists

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Synopsis

The practice norms of community physicians and dentists in the Lehigh Valley of Pennsylvania for counseling about smoking cessation were surveyed. In addition, 1,373 residents in the valley were interviewed by telephone about the smoking counseling behaviors of their dentists and physicians. These activities were conducted as part of the planning for an intervention by the Coalition for a Smoke-Free Valley, a coalition of 100 persons and organizations in the area.

The survey response rate for 172 physicians was 77 percent, and for 103 dentists, it was 76 percent. More physicians than dentists advised patients to quit, counseled patients, provided materials, and helped the patient to set a quit date. However, there was a clear discrepancy between what physicians say they do and what smokers say they hear.

THE CONTRIBUTION that physicians and dentists can make in tobacco control has been demonstrated (*1–5*). Their activities in smoking cessation have been recommended in the National Cancer Institute (NCI) Cancer Control Objectives (*6*), the U.S. Preventive Service Guidelines (*7*), and the Year 2000 Health Objectives (*8*). It is suggested that, for patients who smoke, physicians should ask them about smoking; offer direct, personal advice and suggestions regarding quitting; assist patients in setting a quit date; schedule reinforcement through followup telephone calls and visits; give self-help materials; refer patients who smoke to community smoking cessation programs; and provide drug therapy, if appropriate (*7,9*). The same guidelines could apply to dentists. At present, the contribution of physicians and dentists to decreasing the rates of tobacco use in the U.S. population falls short of its potential.

Although the majority of providers include questions regarding the patient's use of tobacco at least in the initial health interview, fewer include advice to quit, and the proportion of providers who counsel patients for at least 5 minutes and those who help set a quit date is small. In a sample of community physicians, 99 percent took a smoking history, 93 percent advised smokers to quit, 27 percent counseled patients for at least 5 minutes during the first visit, and 25 percent referred smokers to outside cessation programs (*10*). In a national survey of family practice physicians, 63 percent counseled at least 75 percent of patients who smoked, with 24 percent reporting that they counseled smokers for at least 6 minutes, and 19.5 percent referred patients to other personnel for cessation services (*11*).

San Francisco internists were more likely than general practice dentists to counsel patients who smoke about quitting at nearly every or every visit (58 percent versus 17 percent). They were more likely to record smoking status in the patient's chart (95 percent versus 74 percent), to refer smokers to cessation programs at least sometimes (79 percent versus 33 percent), to give them pamphlets or educational materials at least sometimes (52 percent versus 31 percent), and to spend at least

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3 minutes counseling new patients (43 percent versus 11 percent) and patients who are returning (19 percent versus 5 percent) (*12*).

Dentists in an Oregon study were found to be more likely to advise about the health hazards of using smokeless tobacco (88 percent) than smoking (55 percent); 62 percent discussed the benefits of smokeless tobacco cessation and 51 percent, of quitting use of the substance (*13*).

Patients' reports of physician counseling are fewer. In one survey, as few as 40 percent of smoking consumers recall receiving physician counseling regarding their smoking behavior (*14*). In a study of internists and dentists, following providers' receipt of a lecture and booklet with a protocol for counseling patients about smoking, 41 percent of patients reported their physician had asked about their smoking, 27 percent that they had been advised to quit, and 2 percent that a quit date had been set with their physician.

The reports from dental patients were similar, with 37 percent reporting that they had been asked about their smoking, 18 percent that they had been advised to quit, and 3 percent that their dentist had set a quit date (*15*). In a Vermont survey, 87 percent of dentists reported discussing smoking concerns with their patients; 60 percent provided guidance on behavior change. These dentists reported spending an average of 2.4 minutes on smoking issues with their patients who smoke (*16*).

The most frequent reasons given by a sample of family physicians for not giving cessation counseling were their pessimism about people's ability to change (64 percent), the patient's resistance to referral (61 percent), a lack of confidence in behavioral referrals (28 percent), too little time (48 percent), and the need for further physician training (28 percent) (*17*). These findings, along with reasons such as forgetfulness and nonreimbursement for counseling and educational services, have been confirmed by others (*18–21*). Similar issues, including insufficient insurance coverage, time, and training, were echoed by the dentists along with the concern that the patients would leave their practice if urged to quit (*12*).

This paper describes the practice norms for counseling in smoking cessation as reported by a stratified sample of community physicians and dentists practicing in the Lehigh Valley of Pennsylvania and by adult smokers residing in the valley contacted in a random digit dialing telephone survey. The objectives of the surveys were (*a*) to determine the extent to which physicians and dentists engage in behaviors to encourage smoking prevention and cessation in adult patients and (*b*) to determine the perceptions of the adult population regarding smoking prevention behaviors of their physicians and dentists.

Coalition for a Smoke-Free Valley

Jointly funded in 1988 by the Henry J. Kaiser Family Foundation and the Dorothy Rider Pool Health Care Trust, with substantial in-kind support from the National Cancer Institute (NCI) and the Allentown Hospital Lehigh Valley Hospital Center, the Coalition for a Smoke-Free Valley (CSFV) consists of more than 100 persons and organizations working collaboratively to reduce the prevalence of smoking in the adult population (approximately 500,000) of the Lehigh Valley. The coalition's goal is to reduce the prevalence of smoking to 5 percent by the year 2000. Interventions are developed by "action groups" addressing worksites, community settings, schools, and health care settings. The data described in this paper are part of the information collected for use by the Coalition Health Care Action Group (HCAG) to determine the level of counseling services provided through private medical and dental offices before planning and implementing an intervention for these sites.

Methods

Physician and dentist practice survey. Separate survey instruments were developed for physicians and dentists based on the NCI's Community Intervention Trial for Smoking Cessation (COMMIT) telephone surveys for these practitioners. The survey questions, adapted for use in a mailed survey, related to smoking counseling or other prevention

assistance offered to patients and to the office smoking policies of the physicians and dentists.

The physician sample frame was divided into two stratums: (*a*) primary care physicians and (*b*) the specialities of cardiology, pulmonary disease, obstetrics-gynecology, osteopathy, oncology, allergies, and otolaryngology. The general and family dentists constituted the sampling frame for the dental providers. Names and addresses were obtained from local medical and dental society directories. Two 50-percent systematic samples with random starts were selected from the stratums with primary care physicians and the list of dentists. All physician specialists were surveyed. The final samples included 172 physicians and 103 dentists. Members of the HCAG were excluded from the survey because they were already addressing counseling activities.

In March 1990 questionnaires were mailed to practitioners along with a cover letter, a one-page fact sheet explaining the Coalition for a Smoke-Free Valley, and a pre-paid return envelope. Followup included (*a*) a second mailing approximately 2 weeks after the first, (*b*) telephone calls to nonrespondents 2 weeks after the followup mailing, and (*c*) a short five-question postcard. The postcard was mailed to the remaining nonrespondents 2 weeks after the telephone followup. Of the 172 physicians surveyed, 132 (77 percent) responded to the survey, and 79 of the 103 dentists (76 percent) surveyed responded. Very few respondents reported smoking: 1.6 percent of physicians and 1.1 percent of dentists. More than one-half of the physicians and 36.2 percent of the dentists were graduated from professional school prior to 1970. Table 1 displays practice characteristics of the respondents.

Data analysis. Data from the physician survey were weighted to account for the disproportionate sampling probability within sampling stratums. To combine the subsamples for an overall representation of the population, each case was first multiplied by the reciprocal of the probability of selection and then divided by the average sample weight so that sample size was not inflated. Counseling practices, preventive services, and office policies of physicians and dentists were compared using frequencies and two-way tables for categorical data and means for continuous data. The data for physicians and dentists are reported as proportions of the weighted practices.

Population survey. The coalition's survey instrument and procedures were based on the NCI COMMIT Baseline Survey Screener and Extended Interview (*22*). This survey included questions about perceptions about smoking as a public health problem, norms and values concerning smoking, awareness of smoking cessation interventions in the community, and demographic characteristics of the respondent. A section of the interview focused on the respondent's recent experiences with medical and dental personnel providing smoking cessation advice or counseling.

The community telephone survey was conducted during the same months as the mailed survey of physicians and dentists. A sample of 4,125 telephone numbers were selected from the 54 area telephone exchanges through random digit dialing. Each telephone number was dialed as many as 10 times at varying times of the day and days of the week to collect basic information on each household. Of the 4,125 telephone numbers, 2,751 (67 percent) households were identified, yielding 1,828 household interviews on smoking history, attitudes, and opinions.

Interviewers completed 1,373 extended interviews. Based on the information provided during the survey's screening questions, household resi-

Table 1. Practice characteristics of physician and dentist survey respondents

Survey questions	*Physicians* [1]	*SD*	*Dentists* [1]	*SD*
Average number of physicians or dentists in the practice	2.4	2.0	1.6	2.8
Average number of other staff:				
Solo	5.8	...	4.6	...
Group	11.6	...	...	...
Average patients per week	85.4	65.7	78.9	30.8
Graduated before 1970 (percent)	55.6	...	36.2	...
Offices where more than 50 percent of patients were referred (percent)	31.0	...	1.7	...

[1] Range of respondents is 50–130 for physicians and 54–78 for dentists.
NOTE: SD = standard deviation.

Table 2. Training and preparation to counsel patients to stop smoking (percentage)

Category	*Physicians*	*Dentists*
Formal training in smoking cessation in 1989	10.3	0.0
Perceived preparation for smoking cessation counseling as of 1989:		
Very well	36.7	8.8
Adequately	50.0	40.4
Not well prepared	12.5	49.1
Definitely not prepared	0.8	1.8

Table 3. Proportion of physicians and dentists who take specific counseling actions with their patients who smoke

Action taken during visits	Percent of patients			
	None	Some	Most	All
Explain the dangers of smoking:				
89 physicians	0.0	5.4	38.5	56.2
59 dentists	6.8	54.2	25.4	13.6
Advised to stop smoking:				
89 physicians	0.0	4.6	20.0	75.4
58 dentists	3.4	31.0	24.1	41.4
Get patient to schedule a quit date:				
87 physicians	29.7	43.0	21.9	5.5
57 dentists	82.5	17.5	0.0	0.0
Help to develop a cessation plan:				
86 physicians	14.3	51.6	20.6	13.5
57 dentists	68.4	31.6	0.0	0.0
Provide self-help smoking cessation materials:				
88 physicians	13.2	42.6	31.0	13.2
57 dentist	68.4	28.1	1.8	1.8
Make a referral to a smoking cessation program:				
87 physicians	21.1	54.7	16.4	7.8
57 dentists	71.9	26.3	1.8	0.0
Prescribe nicotine chewing gum:				
89 physicians	21.5	67.7	6.2	4.6
57 dentists	73.7	26.3	0.0	0.0
Arrange a followup visit expressly for continued smoking cessation maintenance:				
88 physicians	53.5	32.6	10.1	3.9
57 dentists	100.0	0.0	0.0	0.0
Record results of smoking encounter in medical record:				
86 physicians	26.0	23.6	26.0	24.4
59 dentists	62.7	27.1	3.4	6.8

dents were classified into one of three categories: current smokers, recent quitters defined as those who quit during the past 5 years, and never smokers. Of the 80 percent of current smokers (18 years and older) identified in the screening interview, 540 were selected for an extended interview. Their responses to interview questions about their interaction with their physicians and dentists about smoking cessation are presented in this report.

Data analysis. To estimate smoking rates for the Lehigh Valley area, information for each respondent was weighted to approximate the age and sex distribution in the 1980 U.S. census. Because less than 4 percent of the population of the Lehigh Valley was nonwhite, nonwhites were dropped from the analysis. Population data are reported as the weighted proportions of the total population of the Lehigh Valley.

Population characteristics. Twenty-two percent of adults residing in the Lehigh Valley are estimated to be current smokers based on this survey. This estimate is based on the 540 smokers whose responses are reported. These respondents are, on the average, younger than the nonsmokers (38 years compared with 44 years) and are more likely to be male (56 percent of smokers). The smokers are less likely to be college educated, they have a lower family income than nonsmokers, and they are more often single.

Results

Counseling practices of physicians and dentists. Physicians estimated that approximately 33.8 percent of their patients smoke, and dentists estimated that 27.3 percent of their patients smoke. Both groups estimated that they spent 10–11 minutes in smoking cessation counseling with patients who smoked. Twice the proportion of solo physicians (9.4 percent) had a staff person assigned to counsel patients to stop smoking as did physicians in group practices (5.6 percent) or dentists (5.6 percent).

Most physicians (93.7 percent) and a large proportion of the dentists (64.4 percent) routinely ask new patients about smoking. Slightly fewer, 87.4 percent of physicians and 51.9 percent of dentists, routinely ask returning patients about their smoking behavior. Only one-half of the physicians and less than one-third of the dentists have a system in place that routinely identifies smoking patients.

Table 2 compares the proportions of physicians and dentists who feel adequately prepared to counsel their patients to stop smoking and the proportion reporting formal training in smoking cessation. A far greater proportion of physicians (86.7 percent) than dentists (49.2 percent) responded that they were either very well or adequately prepared, although only 10.3 percent of physicians and no dentists indicated that they had received formal training during 1989.

While many responded that they were adequately prepared to counsel patients, few did much beyond advising smoking patients to quit and explaining the dangers of smoking to them. Table 3 gives the proportion of physicians and dentists who undertook specific cessation actions, or provided cessation helps to their smoking patients. In all cases the physicians were more likely than the dentists to take a counseling action or provide information to the patient.

Except for nonsmoking signs, medical offices were more likely to provide environmental cues than dental offices. The most popular cues were posters encouraging nonsmoking and cessation brochures, followed by a list of community resources. Very few practices, medical or dental, had the policy of providing only magazines that do not carry cigarette advertising. Most (90.4 percent) of the health care offices have a nonsmoking policy for staff and virtually all (97.4 percent) have a nonsmoking policy for patients (data not shown). Solo medical practitioners tended to be early adopters of both staff and patient smoking policies with the group practices adopting policies in greater numbers since 1985.

Public perceptions of the role of physicians and dentists in smoking cessation. Seventy-five percent of the smokers reported that they would try to stop smoking if told to do so by their physician. More than three-quarters of the smokers surveyed responded that they had seen a physician in the past 12 months, and 64 percent had seen a dentist in the same 12 months. Of the current smokers reporting medical and dental contacts within the previous 12 months, two-thirds reported that they were asked whether they smoked by either their physician, dentist, or both (table 4). However, less than one-half indicated that they were informed of the dangers of smoking, and 20 percent were given a pamphlet that included this information. Only 43 percent were told to quit. Further, 9 percent of smoking patients were requested by their physician or dentist to set a quit date, 9 percent were prescribed Nicorette gum, and 3 percent were referred to a stop-smoking program.

Table 4. Types of smoking cessation actions occurring during visits to physicians and dentists as reported by current smokers (percentage)

Actions taken	Yes			
	Physician	Dentist	Both	No
Asked if you smoked	37	13	17	33
Explained dangers of smoking	33	7	8	52
Told you to stop smoking	29	7	6	57
Suggested setting a quit date	7	1	1	91
Given a pamphlet about dangers of smoking	16	2	1	81
Prescribed nicotine gum	8	1	0	91
Referred you to stop smoking program	3	0	0	97
Asked you to return to discuss smoking	3	0	0	97
Have you ever asked for help in stopping smoking	13	1	0	86

The smokers described differences in the extent of physician involvement in smoking cessation according to their regular source of care. Sixty-five percent of those using health maintenance organizations (HMOs) were asked by their physicians about their smoking status, as were 65 percent of those using hospital emergency rooms. Sixty percent of smokers using clinics were queried about their smoking status compared with 47 percent using the Department of Veterans Affairs facilities and 42 percent seeing physicians in private practice. Fifty-two percent of the smokers using HMOs and 50 percent of the smokers using hospital emergency rooms were told to stop smoking by their physicians, as compared with the 39 percent who were attending clinics and the 38 percent seeing private practice physicians.

Discussion

While objectives and guidelines for clinical preventive services have been established that clearly encourage the inclusion of smoking cessation counseling practices in the clinical setting, changes in medical and dental practices to increase the use of these services and the subsequent decline in related morbidity and mortality have not yet occurred (*14,20,23*).

Both the physician and dentist surveys and the population survey reported in this paper indicate that, while providers may take the first step in smoking cessation by asking if the patient smokes, recommended subsequent actions are often lacking

'Both the physician and dentist surveys and the population survey reported in this paper indicate that, while providers may take the first step in smoking cessation by asking if the patient smokes, recommended subsequent actions are often lacking or relegated to the distribution of printed materials.'

or relegated to the distribution of printed materials. Moreover, the smoker rarely seeks help or advice, as evidenced by the small percentage (13 percent) responding that they had asked their physician for help and the 1 percent who asked their dentist. Either the smokers are not motivated to bring up the topic, or medical and dental settings are not viewed as the places to go for help and information about smoking cessation. Clearly, this may be the message given by dentists who rarely engaged in more than asking the patient for their smoking status.

More physicians than dentists advise patients to quit or counsel on the dangers of smoking than provide materials, help the patient set a quit date, set a followup appointment, or prescribe Nicorette gum. Dentists report being involved in explaining the dangers of smoking and advising their patients to quit. However, only a few dentists and a small proportion of physicians report taking definite actions. It is unclear whether this deficiency is a lack of familiarity with materials and the smoking cessation process, the lack of time and organizational skills necessary to organize this type of intensive counseling practice, or that the relatively small numbers of smokers make it difficult to organize a practice in this manner.

This lack of attention to the process of cessation within the medical setting has been reported elsewhere (*10,22,24*). Explanations range from lack of training in counseling techniques to lack of time and inability of the provider to receive reimbursement for the time spent educating and counseling the patient. Other reasons expressed involve the practice as an organization and the need to organize staff to identify and track patients needing ongoing counseling. Given that the responding providers report doing little else than counseling patient to stop, the reported average of 10 minutes per smoking patient on cessation counseling seems high. Additionally, both physicians and dentists report that a barrier to cessation counseling is lack of time.

Several approaches to increasing counseling are suggested by the data and corroborated by others in the field (*1,23,24*). Organization of the practice often falls in large part on the support staff; therefore, any attempt to incorporate additional counseling and tracking of patients must involve these staff members. Increasing attention to staff responsibilities after the initial counseling session may relieve the physician and dentist from the burden of additional tasks and place some of the responsibility on auxiliary staff (that is, nurse, dental hygienist, health educator) who have been trained in office management and patient education.

There is clearly a discrepancy between what the physicians say they do (most say they advise their patients to quit) and what smokers say they hear (most do not hear their physicians or dentists advise them to quit). This discrepancy could be an artifact of reporting. Physicians may over-report a behavior that they perceive as socially desirable (that is, counseling patients). The smokers' reaction may be related to the denial process associated with addiction. Individual smokers may under-report hearing a message that they do not want to hear (that is, "My doctor says stop smoking."). Alternately, the provider may not be giving a clear message. The message, "You should really think about quitting," is very different from the message, "I want you to stop smoking. Please read this material and select a quit date. When you come next week we will discuss how you can get started." The first can be taken as a mild suggestion; the second, as physician's orders.

Physicians, dentists, and their staffs need to be trained to give consistent and explicit messages about smoking cessation (*1,7,9,23,24*). These messages would assist smokers; the majority responded that they would quit if their physicians advised them to do so. This study corroborates other surveys of smoking counseling practices of physicians and dentists, indicating that much greater emphasis can be placed on smoking cessation within the physician's office. And, if patients' reports are true, an increased emphasis will lead to smokers' quitting. Recent studies indicate that if physicians devote even a small amount of time to encouraging smoking cessation, they can be effective in increasing quit rates among adult smokers (*5,25,26*).

This information appears to give weight to the conclusions reached by Lawrence (*23*) that the clinical objectives for cancer prevention will not be met without systematic interventions aimed at increasing the use of counseling and screening in primary care practices and removing perceived barriers to implementing these interventions in the clinical setting.

An approach suggested in the literature is the use of tracking systems for smokers. A simple system—one that would tag smokers and remind the physician about counseling and goal setting—may help eliminate barriers of time and forgetfulness (*15,27*). Such systems have been used successfully for other populations such as infants and children and other topics (*27*). The following section discusses how the data reported in this paper were used by the Coalition for a Smoke-Free Valley Health Care Action Group to identify barriers and plan interventions to increase physicians' and dentists' involvement in smoking cessation counseling.

Application

Community-based action research, such as that undertaken by the Coalition for a Smoke-Free Valley, requires creativity and flexibility in methods. It also requires respect for the community processes that create both the context of much of that research as well as serving as the subject of the research. To recruit volunteers for the coalition and maintain their interest and involvement, it was necessary to begin planning and implementing programs and activities before the baseline data had been collected, analyzed, and reported to the relevant groups. As a result, the survey data in this report were unavailable to the Health Care Action Group (HCAG) until 1 year after its initial activities had begun.

The HCAG, which is composed of physicians, dentists, and other health care providers, developed program goals and implemented programs based on anecdotal data provided by members of the group, with the assumption that midcourse corrections and changes would be made when data became available. The HCAG plan is to encourage physicians and dentists to increase smoking cessation and prevention activities in their office practices. The major areas identified for emphasis were (*a*) lack of knowledge of cessation services, (*b*) desire to refer patients to support groups or hotlines, (*c*) lack of materials, training, and procedures for providing cessation counseling within the office practice, and (*d*) lack of knowledge about how to incorporate cessation counseling into the practice. As a result of these discussions, the following actions were undertaken: a flier listing local cessation programs was developed and distributed, Nicotine Anonymous support groups were established, and the NCI Program "How to Help Your Patients Stop Smoking" was introduced via hospital medical staff meetings.

The initial experience of the HGAC was that the member physicians displayed a higher level of interest and involvement than the dentists. Discussion of the data led the group to identify and begin planning several activities: to involve dentists more fully in cessation counseling activities, to continue to promote and support the integration of cessation activities within the office practice, and to provide information about the regional "Quit Smoking Hotline."

As the 2-year tenure of the previous HCAG chair drew to a close, a dentist was recruited as the new chair to encourage the involvement of the dental community. Dental hygienists had already become actively involved in a workshop on cessation counseling at a regional professional meeting.

Training in cessation counseling continues to be available to medical offices. Fliers providing information on Nicotine Anonymous meetings and local cessation resources are available to promote these resources via the medical and dental office setting. Familiarization of the HCAG members with techniques in prescribing nicotine gum by an addictions treatment specialist and the availability of a nearby, inpatient nicotine dependency treatment facility have also enhanced the cessation-related activities of area physicians.

The implementation of these activities provides instruction on how community providers can act to change counseling practices and enhance community services for those who smoke. Local efforts such as the one described in this report will eventually provide the basis for a norm of smoking cessation counseling at all primary care sites.

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