

Patient Receptivity to Tobacco Cessation Counseling in an Academic Dental Clinic: A Patient Survey

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Abstract

Objective: This study investigated dental patient attitudes towards tobacco cessation counseling in the dental school setting. **Methods:** Patients attending an academic dental clinic during a six-week period were asked to complete a 22-item self-administered survey. Means and frequency distributions were assessed on all variables as appropriate. **Results:** Response rate was 71%. Twenty-nine percent of respondents reported that they currently used tobacco. Seventy-two percent of tobacco users agreed that the student dentist should ask patients whether or not they use tobacco, 67% agreed that the student dentist should advise tobacco users to quit, and 89% agreed that student dentists should offer quit tobacco information to patients who want to quit. Seventy percent of tobacco users were considering quitting or currently trying to quit. Of these, only 31% were aware of community resources to help them quit. **Conclusions:** The majority of tobacco users were positive in their attitudes toward delivery of tobacco cessation counseling and services in the dental setting. Many were considering or trying to quit, but few were aware of community resources to help them.

Key Words: Tobacco, tobacco cessation, dentistry, patient attitudes

Introduction

Tobacco use is a risk factor for oral cancer, periodontal disease, and numerous systemic diseases (1,2). The US Public Health Service *Clinical Practice Guideline: Treating Tobacco Use and Dependence* recommends that primary health care providers, including dentists, provide brief tobacco cessation interventions for all patients who use tobacco (3). Nearly half of adult smokers in the US visit a dentist each year (4), providing a significant opportunity for the dental profession to contribute to national tobacco cessation efforts. However, evidence suggests that dentists as a group do not consistently provide tobacco cessation interventions to their patients to the extent recommended in the guideline (4, 5).

Perceived patient resistance may be a barrier to provision of tobacco

cessation interventions in the dental setting. In a study of 145 dentists, dental hygienists and dental assistants involved in a National Cancer Institute tobacco-cessation training program, 33% of respondents rated patient resistance as a strong barrier to providing tobacco cessation services (6). A study conducted in 52 dental offices in rural Alberta, Canada examined dentist and patient attitudes toward delivery of tobacco cessation services in the dental setting. Ninety-four percent of dental professionals believed patient resistance was a strong barrier or somewhat of a barrier to provision of tobacco cessation services (7).

Two previous studies have examined patient attitudes toward tobacco cessation promotion in the dental setting. In the study in rural Alberta, the majority (58.5%) of patients believed

that dentists should routinely provide tobacco cessation services, yet the majority (61.5%) of dental professionals believed that dental patients did not expect such services (7). A study of private dental patients in Australia found that a majority (61%) of patients would expect their dentist to discuss smoking with them and a majority (64%) of smokers would appreciate their dentist advising them about the effects of smoking on oral health, but fewer (41%) would appreciate their dentist giving them practical advice about how to quit (8). Patient receptivity to tobacco cessation counseling in the dental setting remains incompletely understood. The aim of this study is to investigate attitudes of patients who use tobacco towards the delivery of tobacco cessation counseling and services in the dental setting.

Methods

A cross-sectional descriptive survey method was used in this study. Participants were a convenience sample consisting of patients attending the undergraduate dental clinic of a single Midwestern dental school during a six week period (n=594). Each patient in the clinic waiting room during this period was asked by a dental student-researcher to complete a 22-item anonymous self-administered survey. The study was approved by the institutional review board, and each participant signed a consent document.

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Table 1
Demographic characteristics of
current tobacco users (n=122)

Gender	
Female	58%
Male	42%
Race/Ethnicity	
White/Caucasian	55%
Black/African-American	36%
Hispanic	3%
Native American	2%
Asian/Pacific Islander	2%
Other	2%
Mean Age	46 ± 16 years

The survey items were developed by the authors, following a review of survey items used in prior, similar studies (7,8). The survey items were designed to determine patients' attitudes toward the provision of tobacco cessation counseling and services in the dental setting. These were developed within the context of the recommendations contained in the US Public Health Service Clinical Practice Guideline: Treating Tobacco Use and Dependence ("the 5 A's") (3). In addition, questions were included to determine each respondent's demographic characteristics, current tobacco use status, quitting history, readiness to quit, awareness of community resources, whether or not the respondent has a medical doctor and if and when the medical doctor had discussed tobacco use with the respondent. The survey was pilot tested with dental clinic patients in summer 2003 and revised prior to use in summer 2004.

Descriptive statistics were generated for each item. To determine whether or not there were differences in patients' attitudes toward tobacco cessation counseling and service delivery in the dental setting based on patients' readiness to quit tobacco use, an attitudes summary score for each patient was calculated based on responses to the five items listed in Table 2. Response categories for each of the five items ranged from 1 (No/Not At All) to 3 (Yes/Routinely). Therefore, the summary score could range from 5 to 15. The Mann-Whitney U Test was used to compare

Table 2
Tobacco-users' responses to items about tobacco cessation promotion
activities of provider

	n	%
Should your student dentist ask you whether or not you use tobacco?		
Yes/Routinely	88	72
Not Sure/Sometimes	18	15
No/Not At All	16	13
Should your student dentist tell patients who use tobacco how tobacco use can affect oral health (mouth, gums, and teeth)?		
Yes/Routinely	107	88
Not Sure/Sometimes	13	11
No/Not At All	2	1
Should your student dentist advise patients who use tobacco to quit?		
Yes/Routinely	82	67
Not Sure/Sometimes	31	26
No/Not At All	9	7
Should your student dentist offer quit tobacco information to patients who use tobacco and want to quit?		
Yes/Routinely	108	89
Not Sure/Sometimes	11	9
No/Not At All	3	2
Should your student dentist offer quit tobacco assistance and services to patients who use tobacco and want to quit?		
Yes/Routinely	105	86
Not Sure/Sometimes	14	12
No/Not At All	3	2

the attitudes summary scores of tobacco users not currently interested in quitting to those of tobacco users currently interested in quitting or trying to quit. Statistical analyses were conducted using SPSS 10.0.

Results

Response rate was 71%. Twenty-nine percent (122/422) of respondents reported that they currently used tobacco, 37% were former tobacco users and 34% had never used tobacco. Of the 122 current tobacco users, the majority smoked cigarettes (94%). Demographic characteristics of current tobacco users are shown in Table 1.

Five items asked tobacco users to indicate whether or not they thought their provider, the student dentist, should offer various aspects of tobacco counseling and services in the dental clinic setting, such as asking about tobacco use, advising users to quit, and offering quit-tobacco infor-

mation to tobacco users who want to quit. The responses are shown in Table 2. Seventy-two percent of tobacco users agreed that the student dentist should ask patients whether or not they use tobacco, 88% agreed that the student dentist should tell patients how tobacco use can affect oral health, 67% agreed that the student dentist should advise tobacco users to quit, 89% agreed that student dentists should offer quit tobacco information to patients who want to quit, and 86% agreed that the student dentist should offer quit tobacco assistance and services to patients who want to quit.

The Mann-Whitney U Test was used to compare the attitudes summary score of tobacco users not currently interested in quitting (n=36, median=13, range 8-15) to tobacco users currently interested in quitting or trying to quit (n=85, median=15, range 9-15). Both groups were posi-

tive in their attitudes; however, tobacco users interested in quitting or currently trying to quit were significantly more positive than those not interested in quitting ($p < 0.05$).

Seventy percent of tobacco users reported that they were currently considering quitting or trying to quit. Thirty-two percent of current tobacco users had made a quit attempt in the past 12 months and 69% had ever tried to quit. Of those currently considering quitting or trying to quit, only 31% were aware of community resources to help them quit. Thirty-one percent of tobacco users had not seen their medical doctor in the past year. Of the 69% who had seen their medical doctor in the past year, 39% had not discussed tobacco use.

Discussion

In general, respondents who used tobacco were positive in their attitudes toward the delivery of tobacco cessation counseling and services in the dental setting. The majority agreed that their provider, the student dentist, should ask about tobacco use, discuss the oral health effects of tobacco use with those patients who use tobacco, advise tobacco users to quit, and offer quit tobacco information and assistance to those who want to quit.

The results of this study indicate that the majority of patients may be receptive to delivery of tobacco counseling and services in the dental setting. However, those who were not considering quitting, although still positive in their attitudes, were significantly less positive than patients who were considering or trying to quit. Therefore, the need for dental providers to be trained to assess each patient's readiness to quit and to tailor the discussion appropriately must be emphasized.

In this study, the majority of tobacco users were considering or trying to quit, but few were aware of community resources to help them. These resources may include free telephone quit lines, web-based resources,

and local quit-tobacco programs. The results indicate that, although patients may be aware that they should quit, providers should not assume that all patients are aware of the resources available to help them to quit. Dentists see their patients relatively frequently and regularly as compared to other primary care providers, and therefore have a significant opportunity to disseminate information to patients who need it, at the time they need it.

The finding that nearly one third of tobacco users had not seen their medical doctor in the past year, and that over one third of those who had seen their medical doctor had not discussed tobacco use, underscores the need for dental professionals to include their efforts as part of the team of health care providers addressing this issue. This is particularly important given evidence that many patients would prefer smoking cessation assistance from a physician or other health professional over support groups, self-help, or other forms of assistance (9).

The results of this study of patients seen in an academic dental clinic are not generalizable to all dental patients, the majority of whom are seen in the private practice setting. Therefore, additional study is needed to assess patient receptivity to tobacco cessation counseling and services in the private practice setting. As with any survey, respondents may have been likely to give the response that they perceived the researchers wanted, in this case, positive attitudes toward tobacco cessation promotion, although it is possible that these results overestimate the extent to which respondents were positive in their attitudes toward tobacco counseling and services in the dental setting, the anonymous nature of the survey is likely to have minimized this effect.

Conclusions

An estimated 22.5% of all adults (46 million people) in the US smoke cigarettes (10). If one half of tobacco

users visit the dentist each year (4), then dental providers could provide brief tobacco interventions to approximately 23 million tobacco users each year. If only 10% of those who were advised to quit did so, an estimated 2.3 million people would quit each year. Dental providers' efforts in this area could provide an important public health service and could reduce adverse oral and systemic health effects for individual patients.

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