Australian Dental Students' Views about Smoking Cessation Counseling and Their Skills as Counselors

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Abstract

Objectives: *This paper seeks to determine Australian dental students' views about and skills to provide smoking cessation counseling.* ***Methods:*** *In 2000, we surveyed dental students enrolled in all five years of the undergraduate degree course at the Faculty of Dentistry, University of Sydney, Australia.* ***Results:*** *We obtained 248 questionnaires (response rate=88%). Of our sample, 31 (13%) were self-reported current smokers. Most students (n=203; 82%) indicated they were expected to give smoking cessation counseling to patients. While the majority responded they had been taught the risks from tobacco in the etiology of oral cancer (n=180; 73%), significantly fewer (n=111; 45%) indicated they were taught smoking cessation counseling (McNemars chi-square=41.66; df=1; P<.001). Independent of their own smoking status, most planned to advise patients about tobacco use in their graduate careers (n=219; 91%). However, significantly fewer (n=129; 54%) indicated that such counseling would be effective (McNemars chi-square=9.95; df=1; P<.04). Students' confidence to counsel smokers to quit was low and did not differ significantly by year (chi-square=3.90; df=4; P=.42). Resources highly ranked for inclusion in the undergraduate curriculum were seminars with experts (50%) and practical skills training (49%).* ***Conclusions:*** *Dental students' low perception of the effectiveness of smoking cessation counseling and the inadequacies of the current evidence-base invite more convincing research about dentists' role in tobacco control and better skills training in response. [J Public Health Dent 2003;63(3):200-6]*

Key Words: smoking, dentistry, student, smoking cessation counseling.

The role of dentists in assisting patients who smoke to quit continues to be highlighted in the dental literature (1). It has been argued that the professional skills required by dentists to provide smoking cessation counseling to their patients ideally should be learned during the dental curriculum and reinforced within continuing education (2-4).

Little research has been conducted to ascertain policy and practice with regard to tobacco-related curriculum content in dentistry (4-7). In 1989, fewer than one-third of responding US dental schools reported having a curriculum addressing relevant counseling techniques (28%) and only one in five (19%) required students to counsel patients about tobacco use (5). In 1993, fewer than half (41%) of dental schools surveyed in the United States had a course devoted solely to smoking cessation counseling (6). By 1998, this had reportedly increased to 51 percent (7). Despite only half of US dental schools offering students specific training, all US dental programs and 98 percent of US dental hygiene programs appear to require their students to advise tobacco users to quit (5). Fewer than two-thirds of European dental schools teach dental students necessary skills (4). An evaluation of a "minimal" educational intervention provided to students in years three and four of the University of Missouri-Kansas City School of Dentistry, Barker et al. demonstrated that a majority (98%) of dental students (n=143) and dental hygiene students (n=24) intended to advise patients against tobacco use in their professional careers (3). In a more recent survey of 244 dental students attending New York University College of Dentistry, fewer than three-quarters of students endorsed their role in assisting patients to quit smoking (2).

Smoking cessation counseling is not yet part of routine Australian or overseas dental practice (8-14). It is claimed that, unless dental students are better skilled, smoking cessation counseling will remain low (4). Therefore, the present study was undertaken to determine Australian dental students' views about their role in providing smoking counseling to patients and their confidence in doing so, their beliefs about the potential effectiveness of such counseling, their skills and their utilization of smoking cessation strategies. We also assessed dental students' ratings of their perceived usefulness of resources for their undergraduate training. Our survey was undertaken with all students enrolled in a five-year undergraduate program in the Faculty of Dentistry at the University of Sydney, the largest dental school in Australia.

Methods

Subjects. All students enrolled in the year 2000 in any of the five years of the undergraduate dental degree at the faculty were invited to participate.

Survey Instrument. Our 10-page questionnaire ascertained age, sex, country of birth, marriage status, smoking status, number of household smokers, year of dental training, intended career path in dentistry, and student membership of the Australian

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Dental Association (ADA).

With permission, we adapted six questions asked of European dental students about relevant policies and practices, as follows (4):

- Does your school have a written smoking policy?
- Is smoking prohibited in:
  - —nonclinical teaching facilities?
  - —clinical facilities?
  - —public areas associated with clinical facilities?
- Are students expected to give antismoking advice to patients?
- Do students take tobacco usage histories from all patients?
- Are students taught antismoking advice suitable for patients?
- Are students taught the role of tobacco in the etiology of oral cancer?

An additional question assessed whether smoking cessation information such as poster or pamphlets was displayed within the student's teaching institution.

We next asked respondents their views about smoking cessation counseling, using two standardized questions (3):

- In the course of your training, have you ever assisted a patient to quit smoking?
- Do you plan to advise patients about tobacco use in your professional career?

We also asked students whether smoking cessation counseling provided by dentists would assist patients to quit and whether they were concerned that such counseling in dentistry may alienate patients. Response options for these questions were "yes," "no" and "unsure."

We next assessed students' utilization of six strategies (15):

- Ask patient about their smoking status.
- Advise patient to quit "cold turkey"(in one go).
- Counsel smokers about the effects of smoking on their oral health.
- Provide smoking patients with written information and self-help material to assist them to quit.
- Arrange follow-up visits to discuss smoking with smoking patients.
- Suggest nicotine replacement therapy for patients who wish to quit.

Students were provided with a five-point scale (always, frequently, sometimes, occasionally, never) with which to rate their utilization of these strategies. Students also were asked to rate their confidence in using each of these six strategies, on a visual analogue scale (1=not at all confident to 5=extremely confident), allowing calculation of a global "confidence score" by summing responses to all six strategies (6=lowest possible score, 30=highest possible score).

We next included a series of 13 questions to assess students' perceptions of barriers discouraging smoking cessation counseling during clinical placements. Students were asked to rate their agreement with each statement using a five-point Likert scale (strongly agree to strongly disagree).

We then listed smoking resources to assist students in their provision of smoking cessation counseling, comprising educational resources (n=7), innovative approaches (n=3) and patient-based approaches (n=2). Students were asked to rate the perceived "usefulness" of each resource, using a four-point scale (quite useful to unsure).

To assess students' knowledge about smoking counseling relevant to dentistry, we concluded with four statements:

- Should all patients be routinely asked about their tobacco use? (correct response=yes) (15)
- If you are considering your patient for implant placement, would it be relevant to ask whether they have a history of smoking? (correct response=yes) (16)
- If you have a patient for oral surgery, would you advise them to abstain from smoking pre- and postsurgery? (correct response=yes) (17)
- Is routine screening of asymptomatic patients by primary care physicians for oral cancer recommended? (correct response=no) (15)

We calculated a knowledge score by summing the number of correct responses to each of the four questions.

Statistical Procedures. For descriptive statistics, Epi Info statistical package was used (18). As this was a census survey, 95 percent confidence intervals are not presented. SPSS was used for univariate analyses and logistic regressions (19). Univariate analyses included the following dichotomized variables: age (≤21 and ≥22), smoking status (current smokers vs other responses), household smokers (none vs some), country of birth (Australia or outside Australia) and confidence score in providing smoking cessation counseling. Confidence score was dichotomized into high and low scores for ensuing logistic regressions.

We first sought to determine predictors of current smoking status (yes/no). Predictors of whether students considered smoking cessation counseling as effective in assisting patients to quit (yes vs other responses), whether they "always" asked patients about their smoking status during clinical placements, and whether they planned to advise patients about tobacco use in their professional career (yes vs others) were examined. Predictors of confidence score to undertake smoking cessation counseling were investigated next. Predictors of student interest (quite useful vs other responses) in lectures or seminars with experts in smoking and practical skills training in tobacco counseling, to be incorporated in the undergraduate training, were also examined. Finally, we sought to identify predictors of students having correct knowledge of all four knowledge items.

Variables univariately associated with any outcome (P<.25) were modeled in the logistic regression analyses (20). A backwards elimination procedure was used to determine independent predictors (P<.05) . The Hosmer-Lemeshow chi-squared statistic was used to determine goodness-of-fit of the multivariate logistic regression models, with a nonsignificant chi-square value indicating satisfactory fit between predictor and outcome variables.

Results

Student Recruitment. While all students attending teaching sessions completed their questionnaires (response rate=100%), absenteeism on the day of survey administration ranged from 8 percent to 27 percent (Table 1). From 283 students in total enrolled within the Faculty of Dentistry, we received 248 usable questionnaires (88%). No data were available to ascertain response bias.

Student Sociodemographic Characteristics. Sociodemographic characteristics are summarized in Table 2. Students ages ranged from 18 to 38 years (median=22 years; mode=20 years). Nearly half intended to enter general dental practice (Table 2).

Students' Smoking Status. Of our sample, 31 (13%) were self-reported current smokers. There was no signifi-

TABLE 1
Student Response Rates by Year

Year in Dental School	Students Enrolled in 2000	n*	%
First year	61	61	92
Second year	59	59	78
Third year	55	55	84
Fourth year	56	56	86
Fifth year	52	52	73
Total	283	234	83

*n does not sum to 248 due to missing data.

TABLE 2
Student Sociodemographics (n=248)

		n*	%
Age (years)	≤21	127	51
	≥22	99	40
Sex	Male	120	48
	Female	112	45
Country of birth	Australia	106	43
	Outside Australia	126	51
Marital status	Never married	203	82
	Married/de facto	15	6
	Other	14	6
Intended career path in dentistry	General practice	112	45
	Specialist practice	25	10
	Oral surgery	17	7
	Research	3	1
	Periodontics	3	1
	Don't know	69	28
Member of ADA†	Yes	153	62
	No	72	29
Smoking status	Current smoker	31	13
	Ex-smoker	17	7
	Never smoker	184	74

*Where data missing, cells do not total 248.
†Australian Dental Association.

cant difference in age (chi-square= 0.003; df=1; P=.96), sex (chi-square= 0.58; df=1; P=.45), or country of birth (chi-square=0.20; df=1; P=.65) between smokers and nonsmokers. Smokers were significantly more likely than nonsmokers to live in a household with other smokers (80% vs 17%) (chi-square=55.25; df=1; P<.001).

Dental School Policies. Most respondents did not know whether their dental school had a written smoking policy (n=159; 64%). However, a majority were aware that smoking was prohibited in clinical facilities (n=220; 89%), nonclinical teaching areas (n=179; 72%) and public areas associated with clinical facilities (n=156; 63%). Students were significantly more likely to indicate that smoking was prohibited in clinical facilities than public areas associated with clinical areas (McNemars chi-square= 18.37; df=1; P<.001). A majority indicated that smoking cessation information was not displayed within their teaching institution (n=168; 68%).

Students' Perception of Their Expected Role as Smoking Counselors. Most students (n=203; 82%) indicated that they were expected to give antismoking counseling to patients. A majority indicated they took tobacco usage histories from all patients (n=192; 77%). Most students indicated that they had been taught the role of tobacco in the etiology of oral cancer (n=180; 73%). However, significantly fewer (n=111; 45%) indicated they were taught smoking cessation counseling strategies (McNemars chi-square=41.66; df=1; P<.001).

Strategies Used by Dental Students to Assist Their Patients to Quit Smoking. Table 3 summarizes students' use of six specific strategies to assist their patients to quit smoking and their confidence to do so. Students' confidence scores were normally distributed, ranging from 6 to 30 (mean=18; SD=4). There were no independent predictors of confidence score. Comparisons were made between the percentage of students responding that they "always" utilized each strategy and the percentage indicating extreme confidence to do so. Significantly more students indicated that they "always" asked patients about their smoking status (P=.001), counseled smokers about the oral health effects of smoking (P<.001), advised smoking patients to quit (P=.004), and provided written information to patients (P=.002) than those who indicated that they "extremely confident" to do so.

Whether students "always" asked their patients about their smoking status was not associated with their own smoking status (chi-square=0.78; df=1; P=.34), confidence score (chi-square=1.47; df=1; P=.23), sex (chi-square=0.04; df=1; P=.85), age (chi-square=0.12; df=1; P=.73), or country of birth (chi-square=0.001; df=1; P=.97). Students were significantly more likely to ask about patients' smoking status than counsel about the effects of smoking on oral health, however (68% vs 42%; McNemars chi-square=42.24; df=1; P<.001).

Students' confidence in asking patients their smoking status increased significantly from year 1 to 5 (year 1=35%, year 2=57%, year 3=67%, year 4=75%, year 5=68%) (chi-square= 19.96; df=4; P<.001). By contrast, students' confidence in counseling smokers to quit remained low and did not differ significantly by year of training (year 1: 0%, year 2: 2%, year 3: 2%, year 4: 6%, year 5: 3%) (chi-square=3.90;

TABLE 3
Comparisons Between Dental Students' Always Using 6 Specific Smoking Cessation Counseling Strategies and Their Confidence (Extreme) to Do So (*n*=248)

Strategy	Always (%)	Extremely Confident (%)	*P*
Ask patients if they smoke	68	58	.001
Counsel smoking patient about the oral health effects of smoking related to their own health	42	22	<.001
Advise smoking patient to quit ("cold turkey")	8	2	.004
Provide written information and patient self-help material about how to quit smoking (if available)	6	14	.002
Suggest nicotine replacement therapy to patients who wish to give up smoking	5	4	.82
Arrange follow-up visit to discuss smoking	1	2	1

df=4; *P*=.42).

Whether Students Had Assisted Patients in Quitting Smoking, Perceived Efficacy of this Assistance, and Plans to Continue Such Assistance in Their Career. Unassociated with their own smoking status (chi-square=0.41; df=1; *P*=.52) or confidence score (chi-square=0.96; df=1; *P*=.33), few dental students (*n*=55; 22%) indicated that, during the course of their training, they had assisted a smoking patient to quit. Also unassociated with smoking status (chi-square=2.89; df=1; *P*=.09) or confidence score (chi-square=1.92; df=1; *P*=.17), most students planned to advise patients about tobacco use in their professional careers (*n*=219; 88%). However, students further in their education were significantly more likely to respond that they planned to advise patients about tobacco use in their professional careers than students earlier in their education (year 1: 83%, year 2: 91%, year 3: 98%, year 4: 98%, year 5: 89%) (chi-square=9.95; df=4; *P*=.04).

While a majority of students planned to advise patients about tobacco use in their professional careers, significantly fewer indicated that such counseling would assist patients to quit (88% vs 52%) (McNemars chi-square=79.21; df=1; *P*<.001). After adjusting for age, smoking status, sex, and confidence score, confidence score emerged as the only independent predictor of students' indication of whether smoking counseling would assist patients to quit. Students with high confidence scores (≥19) were significantly more likely to respond that smoking counseling provided by dentists would assist patients to quit compared to students with low confidence scores (<19) (61% vs 39%; AOR=1.76; 95% confidence interval [CI]=1.04, 2.96; Hosmer-Lemeshow goodness of fit: chi-square=9.01; df=8; *P*=.34).

Barriers Preventing Dental Students' Provision of Smoking Cessation Counseling. Table 4 summarizes students' responses regarding the 13 potential barriers mitigating their provision of smoking cessation counseling. Patient motivation was the most highly ranked barrier mitigating students' provision of smoking cessation counseling (Table 4). This response did not differ with year of training (year 1: 17%, year 2: 18%, year 3: 18%, year 4: 9%, year 5: 3%) (chi-square=4.97, df=4, *P*=.29). Further, a majority of students (*n*=215, 87%) disagreed that "providing good dental care is enough," a significantly higher proportion than a sample of local dentists (87% vs 70%; chi-square=16.00; df=1; *P*=.001) (8).

With respect to skills to provide smoking cessation counseling, students earlier in their education were less likely to respond that not having sufficient skills was a barrier compared with students further on in their training (year 1: 59%, year 2: 48%, year 3: 37%, year 4: 42%, year 5: 18%) (chi-square=16.36; df=4; *P*=.003). Students with a low confidence score also were significantly more likely to agree that they didn't have sufficient skills than students with high confidence scores (50% vs 34%; chi-square=6.77; df=1; *P*=.009).

Few students disagreed (strongly disagreed or disagreed) that smoking cessation was not part of the dentists' professional role (Table 4). Responses were not associated with year of training (year 1: 86%, year 2: 85%, year 3: 80%, year 4: 85%, year 5: 87%) (chi-square=0.83; df=4; *P*=.93). However, significantly fewer disagreed that their patients did not consider smoking cessation counseling part of the dentists professional role (82% vs 32%; McNemars chi-square=110.92; df=1; *P*<.001). More than half of the students (*n*=132; 53%) disagreed (strongly disagreed or disagreed) that smoking cessation counseling may alienate patients.

Dental Students' Preferences for Resources to Assist them as Smoking Cessation Counselors. Table 5 summarizes students' ratings of the "usefulness" of 12 resources to assist them as smoking cessation counselors. Students were significantly more likely to rate self-help pamphlets as useful compared with coordinated care (63% vs 51%; McNemars chi-square=11.37; df=1; *P*<.001) or seminars with experts (63% vs 50%; McNemars chi-square=14.42; df=1; *P*<.001). Students' ratings of seminars with experts were not associated with their age, sex, country of birth, smoking status, and confidence score. Similarly, students' rating of the usefulness of practical skills training was not associated with age, country of birth, and confidence score. Female nonsmoking students were significantly more likely to rate practical skills training as useful compared with males, however (63% vs 44%; chi-square=8.28; df=1; *P*=.004). Current nonsmokers also were more likely to rate practical skills training as useful than current smokers (57% vs 32%; chi-square=6.37; df=1; *P*=.01).

Students' Knowledge about Smoking Cessation Counseling Issues. A majority of students indicated correctly that the national guidelines recommend routine assessment of patients' tobacco use (*n*=148; 60%), that a

TABLE 4
Dental Students Views about 8 Barriers Mitigating Provision of Smoking Cessation Counseling (*n*=248)

Student Agreement about Barrier		%
Many smoking patients do not have the motivation to quit	Strongly agree + agree	59
	Tend to agree	27
	Disagree + strongly disagree	11
I do not have sufficient skills to provide smoking counseling at this stage of my training	Strongly agree + agree	42
	Tend to agree	30
	Disagree + strongly disagree	26
Student Disagreement about Barrier		
Providing good dental care is enough	Strongly agree + agree	3
	Tend to agree	6
	Disagree + strongly disagree	87
I do not consider smoking counseling part of the dentists' professional role	Strongly agree + agree	6
	Tend to agree	9
	Disagree + strongly disagree	82
Giving smoking cessation counseling to patients is not part of my role as a student	Strongly agree + agree	5
	Tend to agree	12
	Disagree + strongly disagree	80
I cannot accurately determine patients who smoke without being intrusive	Strongly agree + agree	10
	Tend to agree	23
	Disagree + strongly disagree	63
I do not have the time to provide smoking cessation counseling during clinical consultations	Strongly agree + agree	19
	Tend to agree	19
	Disagree + strongly disagree	60
I am concerned that the antismoking message may alienate smoking patients	Strongly agree + agree	22
	Tend to agree	22
	Disagree + strongly disagree	53
Indifference about Barrier		
Smoking cessation counseling about smoking is ineffective unless the patient has a related health problem	Strongly agree + agree	32
	Tend to agree	24
	Disagree + strongly disagree	40
Patients do not expect smoking cessation counseling from a dental student	Strongly agree + agree	35
	Tend to agree	25
	Disagree + strongly disagree	38
Patients do not listen to dental students when they discuss smoking	Strongly agree + agree	26
	Tend to agree	34
	Disagree + strongly disagree	36
Giving unwanted smoking cessation counseling may upset the dentist-patient relationship	Strongly agree + agree	27
	Tend to agree	35
	Disagree + strongly disagree	35
Patients do not consider smoking counseling part of the dentists' professional role	Strongly agree + agree	27
	Tend to agree	37
	Disagree + strongly disagree	32

Where data are missing, % do not total 100%.

smoking history is relevant for patients' considered for implant placement (*n*=196; 79%), and that patients about to have oral surgery should be advised to abstain from smoking (*n*=199; 80%). Only a minority of students correctly indicated that routine screening of asymptomatic patients for oral cancer is not recommended (*n*=25; 10%). Most were unsure (*n*=124; 50%).

Very few students correctly answered all four questions (*n*=17; 7%). Knowledge of all questions was not associated with students' age (chi-square=0.08; df=1; *P*=.78), sex (chi-square=0.01; df=1; *P*=.92), smoking status (chi-square=0.29; df=1; *P*=.59), country of birth (chi-square=0.01; df=1; *P*=.91), confidence score (chi-square=2.40; df=1; *P*=.12), or year of

TABLE 5
Dental Students' Ratings of Usefulness of 12 Smoking Cessation Counseling Resources (*n*=248)

	Quite Useful (%)
Patient-based approaches	
Access to patient self-help pamphlets	63
Free nicotine replacement therapy for patients	51
Innovative approaches	51
Coordinated care between dentists and other community accredited antismoking clinics	
ADA-sponsored advertising campaign	49
High-profile political involvement of the ADA in smoking issues	38
Educational opportunities	
Seminars with experts	50
Practical training in skills to promote smoking	49
Evidence-based guidelines	48
Access to smoking-cessation research literature in summarized form via CD-Room or Internet	40
National dental conference on smoking and oral health organized by the Australian Dental Association	39
Teaching audiotapes or videotapes	33
Professional distance learning or self-study module	23

training (chi-square=2.65; df=4; *P*=.62).

Discussion

Our self-administered survey of dental students enrolled at a prestigious Australian university examined tobacco-related policy issues, their attitudes about providing smoking cessation counseling and confidence providing such counseling, barriers mitigating their utilization of smoking strategies, and perceived educational preferences. A majority considered smoking cessation counseling part of the dentist's professional role (82%). Most also planned to counsel patients about tobacco use in their professional careers (88%). Of these, however, only 57 percent considered such counseling would be effective in assisting smokers to quit.

Comparisons with final year (years 3 and 4) American dental students demonstrated that our sample of Australian students (years 4 and 5) were equally likely to have assisted a patient to quit smoking (41% vs 32%; chi-square=1.88; df=1; *P*=.17) and to indicate they intended to advise patients about tobacco use in their professional careers (94% vs 97%; chi-square=1.49; df=1; *P*=.22) (3).

A systematic review of 10 randomized controlled trials suggests that training of health professionals increases their provision of smoking cessation counseling (21). This review included one trial of dental practitioners. However, whether patient smoking outcomes will significantly be influenced is less clear (21). Further, results of three randomized controlled trials to examine the efficacy of smoking cessation when delivered by dentists are mixed (22-24). Specifically, Cohen et al. (22) reported significantly increasing patient quit rates (six months) after an office-based dental intervention that included smoking cessation counseling supplemented with nicotine replacement gum. In contrast, Severson et al. (23) failed to demonstrate significant quit rates at 12 months following an office-based intervention that included direct advice from a dentist to quit, pamphlets, a quit kit, setting a quit date, a motivational video, and a follow-up phone call. In a third randomized controlled study undertaken in community adolescent dental clinics in Finland, Kentala et al. (24) also failed to demonstrate better quit rates between those receiving smoking advice from dentists and those receiving "usual care.". That was disappointing, given the findings of a review of 13 adolescent smoking cessation programs conducted in a variety of settings, school health clinics (*n*=8), medical inpatient/outpatient settings (*n*=3), and classroom and other settings (*n*=2). In that review, Sussman et al. (25) report that adolescent cessation programs will produce better quit rates than naturally occurring control group rates. However, none of the studies included in that review involved dentists.

Students in our survey lacked confidence in advising smoking patients to quit and fewer than half indicated that they had been taught the necessary skills. These findings reflect trends in the United States and Europe that dental teaching institutions instill positive expectations about students' roles as smoking counselors, but that skills training is less optimal (4,5). We speculate that the inconsistencies in providing dedicated tobacco-related training within dental curricula reflect continued uncertainty within the dental profession about what is effective (8,26,27).

In a systematic review of 34 trials, Silagy et al. (28) conclude that simple advice from health care physicians will have a modest effect on cessation rates. However, none of the studies in this meta-analysis included dentists as the health professional delivering the advice. The recent "Clinical Practice Guidelines on Treating Tobacco Use and Dependence" (29) highlight the unique position of health professionals in assisting smoking patients in the quit process, yet also argue for further research to demonstrate "effectiveness of specific types of clinicians" as agents for such advice. Further, the 2000 US Surgeon General's Report (30) stated that "research has not clarified fully the specific elements of minimal intervention that are most important to clinical success." We argue accordingly that, without identifying specific elements most important to clinical success in dental practice smoking interventions, it may be difficult to advocate convincingly for curriculum changes within dental schools.

When used by doctors, nicotine replacement therapy is proven to increase patient quit rates (31). Preliminary findings indicate nicotine replacement patches could be a valuable adjunct in dentistry (32). Students in our study also perceived patient-based approaches, self-help pamphlets, and written material would be

useful in assisting patients to quit.

Methodologically, we acknowledge that our results may have limited generalizability, as they are derived from self-reported data from students at only one Australian dental teaching institution. Nonetheless, our high response rate (88%) enhances confidence with respect to internal validity. Findings consistent with European and American studies justifies confidence in external validity.

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