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Exploring Knowledge, Attitude and Current Practices towards Smoking Cessation Counseling among Clinical Dental Students

Abstract

Background: Tobacco-related mortality in India is highest in the world with about 900,000 annual deaths. Tobacco usage is main cause of cancer and its continuous usage increases mortality. The data regarding dental students engaged in smoking cessation counseling is very scanty in the Indian scenario; hence the present study was conducted to explore the knowledge, attitudes and current counseling practices of dental student towards smoking cessation counseling. **Methods:** The pilot study was conducted in Jodhpur Dental College General Hospital, Jodhpur, Boranada, Rajasthan, India. The third year, final year and house surgeons were gathered together, explained the purpose of the survey, and given instructions for completing the questionnaire. The close-ended and self-administered questionnaire was developed by the investigators and explored the current practices among dental students regarding smoking counseling. **Results:** Majority of subjects 113 (98%) prohibit smoking in clinical facilities. Most of the subjects about 98 (85%) had been taught the role of tobacco in the etiology of oral cancer. Smoking cessation survey analysis demonstrated that only the year of study was significantly correlated to the positive responses for tobacco cessation (p=0.00). **Conclusion:** Majority of students were supportive of smoking cessation counseling in their professional career.

Key Words

Knowledge; attitude; practices; smoking

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INTRODUCTION

Tobacco- related mortality in India is highest in the world with about 900,000 annual deaths.[1] Tobacco usage is main cause of cancer and its continuous usage increases mortality. Annual oral cancer incidence in the Indian subcontinent has been estimated to be as high as 10 per 100,000 males.[2] The national family health survey for 2005-06 found that 32.7 percent of males and 1.4 percent of females to be smokers in India.[3] Smoking causes cancer and cardio vascular disease related mortality.[1] Smoking can cause cancers of the mouth, oesophagus, pharynx, larynx, lung, pancreas and bladders as well as chronic obstructive pulmonary disease, respiratory disease, vascular disease, peptic ulcers, cirrhosis, suicide and poisoning.[2] Death among smokers who smoked 1-7 cigarettes per day (mean 4 per day) was responsible for almost half of deaths from any medical cause (risk ratio is 1.8).[1] The death rate ratio is threefold at ages 45-64 and twofold at ages 65-84.[1] Many studies have demonstrated counseling by dental professionals to be more helpful for a person to quit his/her habit of tobacco usage. The dental office is an ideal setting for smoking cessation as it provides services in terms of preventive treatments, oral screening and patient education have always been a large part of the dental practice.[2] Unfortunately smoking cessation is not a part of routine Indian dental or medical practice. Professional advices through systematic counseling have demonstrated cessation rates of 10

Table 1: Response of subjects to questions related to tobacco and smoking

Questions	1 (Yes)	2 (No)	3 (Neutral)
Is smoking prohibited in clinical facilities?	113 (98.26%)	1 (.08)	1 (.08%)
Do you take tobacco usage histories from all patients?	78 (68%)	37 (32%)	0
Are you taught the role of tobacco in the etiology of oral cancer?	98 (85%)	17 (15%)	0
Is smoking cessation information such as posters or pamphlets displayed in your institution?	114 (99%)	1(1%))	0
Have you been ever taught anti-smoking advice suitable for patients?	105 (91%)	7 (6%)	3 (3%)
In the course of your training, have you ever helped a patient to quit smoking?	30 (26%)	41 (36%)	44 (38%)
Do you think smoking cessation counseling provided by dentists would help patients to quit smoking?	41(36%)	42 (37%)	32 (28%)
Arrange follow-up visits to discuss smoking cessation with smoking patients?	68 (59%)	45 (39%)	2 (2%)
Counsel smokers about the effects of smoking on their oral health?	78 (68%)	37(32%)	0
Suggest nicotine replacement therapy for patients who wish to quit?	44 (38%)	71(62%)	0
Is tobacco usage prohibited on college premises?	83 (72%)	32 (28%)	0
If you have a patient for oral surgery, would you advise him or her to abstain from smoking pre- and post-surgery & implant?	114 (99%)	1(1%)	0
Many tobacco usage patients do not have the motivation to quit?	86 (75%)	29 (25%)	0
Tobacco cessation counseling is ineffective unless the patient has a related health problem?	94 (82%)	15 (13%)	6 (5%)
Patients do not listen to dental students when they discuss tobacco usage?	55 (48%)	41 (36%)	19 (16%)
Access to smoking cessation research literature via CD-ROM or Internet?	5 (4%)	110 (95%)	0
Provide smoking patients with written information and self-help material to help them to quit?	34 (30%)	81 (70%)	0

Table 2 distribution of study subjects and questionnaire responses compare by chi square test

Age	Less than 30	49	0.111
	More than 30	66	
Student	Intern	59	0.000*
	Final year	32	
	Third year	24	
Smoking status	Never	0	0.170
	Ex	31	
	Present	84	

to 20 percent.[4] Cessation rates of up to 18 percent have been achieved by dental professionals when they counsel their patients who smoke. More than 60 percent of adults and 83 percent of 15 to 19 year old visit to a dentist at least once a year.[6] Survey of Americans and Canadians have found that 58 percent of smokers made regular appointments with their dentists.[7] The data regarding dental students engaged in smoking cessation counseling is very scanty in the Indian scenario, even though numerous dental colleges in India have thousands of dental professionals graduating every year. Hence the present study was conducted to explore the knowledge, attitudes and current counseling practices of dental student towards smoking cessation counseling.

MATERIAL AND METHODS

The pilot study was conducted in Jodhpur Dental College General Hospital, Jodhpur, Boranada, Rajasthan, India. A list of all third year, final year and house surgeons was obtained from the administrative office of the institution. Permission to conduct the study was obtained from the college authorities, and ethical clearance was obtained from the institution's ethical committee of the institutional review board. The third year, final year and house surgeons were gathered together, explained the purpose of the survey, and given instructions for completing the questionnaire. After this, they were given a booklet consisting of informed consent, instructions, and a questionnaire; they had 1 hour in which to complete and return the questionnaire. The close-ended and self-administered questionnaire was developed by the investigators and explored the current practices among dental students regarding smoking counseling. Demographic information such as age, gender and place of residence was also obtained.

Correct and wrong answers for knowledge questions were given scores of 1 and 0, respectively. A total of 17 questions on smoking cessation focused on issues such as smoking prohibition in clinical facilities, collecting tobacco usage histories from all patients, if smoking cessation information such as posters or pamphlets were displayed in the institution, counsel smokers about the effects of smoking on their oral health. Questions related to attitude included question on anti-smoking advice suitable for patients, role of smoking cessation counseling provided by dentists in helping patients to quit smoking. Questions related to current practices included access to smoking cessation research literature via compact disc/ videos or internet and provision of smoking patients with written information and self-help material to help them quit. The questionnaire was pretested with 40 house surgeons before the start of the study. Cronbach alpha and split-half reliability values were 0.72 for general questions, 0.86 for attitude and 0.87 for behavior, respectively. The questions underwent subsequent revisions before the main study. The revisions were to clarify 7 questions of knowledge and 2 questions each for attitude and current practice. The results of the pretested questionnaire were not included in the main study; only its reliability and validity were assessed. The participants for the pretested questionnaire did not take part in the pilot study.

RESULTS

Table 1 shows the various responses given by the subjects on tobacco de-addiction. Majority of subjects 113 (98%) prohibit smoking in clinical facilities. Most of the subjects about 98 (85%) had been taught the role of tobacco in the etiology of oral cancer. 114 (99%) dentists display smoking cessation information such as posters or pamphlets in their institution. Majority of subjects had been taught anti-smoking advice suitable for patients. 114 (99%) of dentists gave positive answer that they will advice a patient for oral surgery to abstain from smoking pre- and post-surgery and following implant procedures. Most of the subjects 86 (75%) agreed with the statement that many tobacco usage patients do not have the motivation to quit. Majority of them 94 (82%) believed that tobacco cessation counseling is ineffective unless the patient has a related health problem. Table 2: Smoking cessation survey analysis demonstrated that only the year of study was significantly correlated to the positive responses for tobacco cessation (p=0.00).

DISCUSSION

Dentists play a key role in smoking use cessation counseling programs for community and individual patient welfare.[8] The present study investigated the attitudes and views of clinical dental students from Jodhpur dental college and general hospital, India. The study involved 115 students of third year, fourth year and interns of the dental institution. On October 2, 2008, Section 4 of India's Cigarette and Other Tobacco Products Act went into effect, prohibiting smoking in all public and work places. This act also stipulated that there should be a visible board at every entrance and every floor of a public place that reads, "No Smoking Area. Smoking Is an Offence." As per this legislation, most of the dental colleges in India adopted official policies banning smoking in buildings, clinics, and indoor public and common areas, although it has been reported that less than 10 percent enforce it. Only 58.7 percent of the students in another study reported that tobacco cessation information was displayed within their institution. This is in sharp contrast to the present study where 99% reported the display of tobacco cessation material.[9] A study on Indian students reported that although 94.2 percent of respondents said they give antismoking advice to smoking patients, only 47.1 percent said they had been taught antismoking advice suitable for patients;[9] which was similar to that reported in a study of Australian dental students.[10] The higher rate of advice despite the low levels of instruction was attributed to the emphasis placed on the hazardous effects of smoking on oral health in the dental curriculum. These findings underscore the importance of providing training that will encourage dental students to provide more comprehensive smoking cessation services.[9] The present study 91% respondents reported being taught about antismoking advice for patients. This may be attributed to the fact that the institution has a dedicated anti-tobacco cell for tobacco counseling which provided exposure to the students regarding tobacco cessation activities. However some negative trends were also observed. 86 (75%) they did not have the motivation to quit. 94 (82%) felt that tobacco cessation counseling is ineffective useless the patient has a related problem. 55 (48%) felt that patients do not listen to dental students when they discuss tobacco usage. 110 (95%) could not/ did not access smoking cessation research literature via compact disc/ videos or internet. 81 (70%) reported not providing smoking patients with

written information and self-help material to help them to quit.[11] Smoking cessation counseling is a skill. Lack of skill in turn acts as a barrier towards incorporating tobacco intervention into clinical practice. Health care professionals who receive formal training in cessation counseling develop professional competence in smoking cessation by encouraging the development of a prevention mindset, in which smoking counseling is included with other oral disease and their prevention with brushing and flossing. In smoking cessation efforts by focusing on the doubling and tripling of long-term quit rates to clinician efforts compared to self-help method.[12] Dental professionals are more comfortable including smoking prevention and cessation as a normal part of patient care. The study has limitations of sample size and sample selection. Also the data collected is a self -report, it could be subject to the respondents recall bias and to present responses in a favorable. The present studies found that majority of students were supportive of smoking cessation counseling in their professional career. However the skills needed to impart effective tobacco cessation counseling need to be improved by training/ continuing dental education programmes.

REFERENCES

1. Jha P, Jacob B, Gajalakshmi V, Gupta PC, Dhingra N, Kumar R, *et al.* A nationally representative case-control study of smoking and death in India. N Engl J Med 2008;358: 1137-47.
2. Gajalakshmi V, Peto R, Kanaka TS, Jha P. Smoking and mortality from tuberculosis and other diseases in India: retrospective study of 43,000 adult male deaths and 35,000 controls. Lancet 2003;362:507-15.
3. National Family Health Survey 3. 2005-06. At: www.whoindia.org/LinkFiles/Tobacco_Free_l nitiative_nfhs3.pdf. Accessed: January 9, 2011.
4. Owen N, Davies MJ. Smokers' preferences for assistance with cessation. Prev Med 1990;19:424-31.
5. Glynn TJ. Relative effectiveness of physician-initiated smoking cessation programs. Cancer Bull 1988;40:359-64.
6. Nagy K, Barabas K, Nari T. Attitudes of Hungarian health care professional students to tobacco and alcohol. Eur J Dent Educ 2004;4:32-5.
7. Campbell HS, Sletten M, Petty TL. Patient perceptions of tobacco cessation services in dental offices. J Am Dent Assoc 1999;130(2):219-26.
8. Pizzo G, Licata ME, Piscopo MR, Coniglio MA, Pignato S, Davis JM. Attitudes of Italian dental and dental hygiene students toward tobacco-use cessation. Eur J Dent Educ 2010;14(1):17-25.
9. Rajasundaram P, Sequeira PS, Jain J. Perceptions of Dental Students in India about Smoking Cessation Counseling. J Dent Educ 2011;75(12):1603-10.
10. Rikard-Bell G, Groenlund C, Ward J. Australian dental students' views about smoking cessation counseling and their skills as counselors. J Public Health Dent 2003;63:200-6.
11. Pizzo G, Licata ME, Piscopo MR, Coniglio MA, Pignat S, Davis JM. Attitudes of Italian dental and dental hygiene students toward tobacco-use cessation. Eur J Dent Educ 2010;14(1):17-25.
12. Yip JK, Hay JL, Ostroff JS, Stewart RK, Cruz GD. Dental students' attitudes toward smoking cessation guidelines. J Dent Educ 2000;64(9):641-50.