

Knowledge, Attitudes, Practices and Perceived Barriers towards Tobacco Cessation Counseling Among Future Dentists.

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Abstract:

Background: It is an established fact that tobacco usage is associated with many of the fatal but preventable diseases. Most of the people are unaware about the hazards of tobacco on health, oral health if they are aware not proper assistance /guidance to get rid of this. Dentists and dental office may be ideally suited to help patients quit tobacco. But significant barriers to anti-tobacco counseling by dentists. Hence present study done to assess knowledge, attitudes, practices and perceived barriers towards tobacco cessation counseling among future dentists.

Methodology: A cross-sectional questionnaire survey that included a convenience sample of clinical dental students of Chennai city.

Results: Most respondents (95%) had knowledge that smoking does affect the dental management of the patient. All the students had the practice of asking the patients regarding tobacco habit, and if present the frequency and duration. But had negative attitudes to counseling because of lack of time and training.

Conclusion: Clinical dental students have the knowledge of tobacco and oral health. But lack in practicing tobacco counseling (Ask, Assess and advice) due to their perceived barriers.

Key words: attitude, barriers, dental student, knowledge, oral health promotion, tobacco, tobacco counseling.

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I. Introduction

It is an established fact that tobacco usage is associated with many of the fatal but preventable diseases.^[1,2] Tobacco related morbidity and mortality is on the rise in spite of advances in the diagnosis and treatment.^[3-5] Presently, it has been estimated that tobacco usage causes more than five million deaths worldwide, which is expected to rise up to more than eight million per year by 2030.^[1,6,7]

Today, 1.1 billion tobacco chewers are there worldwide, among them 182 million (16.6%) live in India. 2-3% growth per annum of tobacco consumption in India and by 2020 it is predicted that it will account for 13% of all deaths in India.^[8] World bank has reported that nearly 82,000-99,000 children and adolescents all over the world begin smoking every day. If current trend continues, tobacco will kill nearly 250 million of today's children.^[9]

Easy availability and cheap cost has made one to be addicted. This addiction has bad impact on the oral health there by both to the respiratory, cardiovascular, gastrointestinal and nervous system. Most of the people are unaware about the hazards of tobacco on oral health. Oral health is an important aspect of health both in terms of magnitude of dental problems in population and morbidity associated with it.^[10,11]

Dental health workers have an important role in preventing tobacco related diseases by becoming actively involved in assessment, detection and education of the patient and public.^[12] Brief interventions by dentists and physicians that involve simply advising patients to quit have been shown to have a small beneficial effect. Dental treatment often necessitates multiple visits, which gives platform for cessation advice by directly showing the changes in oral health status. Therefore, the dental office may be ideally suited to help patients quit tobacco.

In recent years, organized dentistry has embraced tobacco cessation as a component of dental practice. In addition, dental literature has featured articles on the 5A's (Ask, Advise, Assess, Assist, Arrange) and on the

link between tobacco and periodontal disease and oral cancer. In New York, tobacco cessation training is now mandatory to obtain dental licensure.^[13]

Significant barriers to anti-tobacco counseling by dentists in the world have been found because of self-use of tobacco, a lack of knowledge about its harmful effects, and a lack of training in counseling patients about quitting tobacco use.^[14-17]

It is therefore imperative that dental students, who are tomorrow's dentists, develop their knowledge of the harmful effects of tobacco use, attitudes towards it, and skills in dealing with it and receive training in counseling patients about quitting tobacco use. Hence this had been undertaken with an aim to assess knowledge, attitudes, practices and perceived barriers of dental students towards tobacco cessation counseling.

II. Material and Methods

A cross-sectional survey that included a convenience sample of clinical dental students of Chennai, Tamilnadu, India. A well-structured, pretested, self-administered questionnaire was used to assess student's knowledge, attitude and barriers in regard to tobacco counseling practice. The questionnaire included sections on demographic data and questions on attitudes, awareness of tobacco cessation, willingness to provide cessation services; student's their tobacco counseling practices and barriers to tobacco cessation advice in the dental setting. Ethical clearance was obtained. Permission was also obtained from Head of the Institution of the aforementioned dental college and informed consent was obtained from the study subjects. The data was collected at the end of a lecture class by asking the students to participate in this survey. Participation was voluntary, and all the participants were queried anonymously. They were provided with explanation of the purpose of the study and how to score the test items. The investigators was available throughout to answer any query regarding the inventory. Data was entered into the computer (MS Excel, MS Word). Data analysis was conducted and presented in frequencies and percentages.

III. Results

This descriptive cross sectional study was conducted among clinical dental students. A total of 198 students (clinical) participated in the study. Table 1 shows the demographic details of the study population.

Table 1: Distribution of study population according to demographic details

Variables		
Age	Less or equal to 24 yr	196 (99%)
	More than 24yrs	2 (1%)
Year of Studying	III yr	79 (40%)
	IV yr	69 (35%)
	House Surgeons	50 (25%)
Gender	Male	32%
	Female	68%

Tobacco usage: A total of 90% (n=178) respondents reported that smoking was not allowed in their workplace premises and 92% (n=182) of them reported that smoke-free policy was always enforced in their workplace. A majority (n=63, 32%) of respondents reported that selling of tobacco was prohibited in their workplace premises, 82% (n=162) of students mentioned that tobacco and its effects related posters and pamphlets are displayed in their college premises.

Knowledge about tobacco cessation counseling relevant to dentistry:

Most respondents (n= 188, 95%) believed that smoking does affect the dental management of the patient. Tobacco cessation was described as counseling and nicotine replacement therapy by 43% (n=85) students and 90% (n=178) believed that dental clinic is the right place for tobacco cessation. All of students believed that every patient has to be asked regarding tobacco usage. Everyone thought that ill effects of tobacco have to be told to the tobacco users. But 95% (n=188) didn't had detailed knowledge of tobacco counseling cessation.

Regarding the attitudes: Table 2 shows the students attitudes towards tobacco cessation counseling where students have shown negative attitudes.

Table 2: Distribution of the student's attitudes towards tobacco cessation counseling.

Attitudes	Strongly agree	Agree	Tend to agree	Disagree	Strongly disagree
It is the dental professional's responsibility to:	89 (45%)	74 (37%)	29 (15%)	06 (3%)	0

<ul style="list-style-type: none"> Educate patients about the risk of tobacco use related to overall health or well-being. 	108(55%)	34 (17%)	53 (26%)	03 (2%)	0
<ul style="list-style-type: none"> Educate patients about the risk of tobacco use related to oral health. 	147(74%)	19 (10%)	32 (16%)	0	0
<ul style="list-style-type: none"> Encourage patients to quit using tobacco. 					
It is within the scope of dental practice to:					
<ul style="list-style-type: none"> Ask patients if they use tobacco. 	198(100%)	0	0	0	0
<ul style="list-style-type: none"> Advise patients to stop using tobacco. 	198(100%)	0	0	0	0
<ul style="list-style-type: none"> Discuss health hazards of tobacco use. 	102(52%)	76 (38%)	10(05%)	2 (01%)	0
<ul style="list-style-type: none"> Discuss benefit of stopping. 	186(94%)	12 (06%)	0	0	0
Responses related to effectiveness of smoking cessation programs:					
<ul style="list-style-type: none"> Tobacco cessation counseling offered in the dental clinic can have an impact on patients' stopping. 	156(79%)	18(09%)	17(09%)	0	0
<ul style="list-style-type: none"> The dentist's time can be better spent doing things other than stopping tobacco use in patients. 	0	0	0	12(06%)	186(94%)
<ul style="list-style-type: none"> It is not worth discussing tobacco use with patients since most people already know they should stop. 	89(45%)	48(24%)	29(15%)	14(07%)	18(09%)
Giving tobacco cessation counseling harm the dentist- patient relationship	12(06%)	03(02%)	0	10(05%)	173(87%)

Regarding the tobacco cessation practice: All the students had the practice of asking the patients regarding tobacco habit and if present the frequency and duration. All the students wanted to undergo proper tobacco cessation training if chances have been given.

Resources useful for tobacco cessation counseling:

A total of 100% of the respondents reported that they were willing to undertake tobacco cessation activities, while 98% of the respondents indicated that they had not undergone any training in tobacco cessation. Table 3 shows resources required by the students for tobacco counselling.

Table 3: Distribution of the students according their resources required for tobacco counseling.

Required resources	No. and Percentage of students
Online resource materials	43 (22%)
Conducting CDE/workshops	187 (94%)
Training the students	198 (100%)
Mandatory as part of curriculum	195 (98%)

Regarding perceived barriers, a majority of the students reported that patients not being interested, lack of time, lack of awareness among patients, withdrawal effects as major barriers for tobacco cessation practices among their patients and knowledge regarding that (Table 4)

Table 4: Distribution of students according to perceived barriers

Percieved barriers	Yes	No
Many tobacco usage patients do not have the motivation to quit	143(72%)	55(28%)
Not having sufficient skills to provide anti tobacco use counseling at this stage of my training	198(100%)	0
I cannot accurately determine patients who use tobacco without being intrusive	79 (40%)	119(60%)
Do not have the time to provide tobacco usage cessation counseling during clinical consultations	172(87%)	26(13%)
Tobacco cessation counseling is ineffective unless the patient has a related health problem	189(95%)	09(05%)
Patient do not accept tobacco cessation counseling from dental student	143(72%)	55(28%)
Patient do not consider Tobacco cessation counseling part of dentist's professional role	107(54%)	91(46%)

IV. Discussion

Tobacco is the one of the leading cause for morbidity and mortality across the world. Research has found that dentists are in an ideal position to assist patients to reduce or stop smoking altogether.^[18,19] This is because of the regular contact many patients have with their dentists. But there is imbalance in number of dentists and population of India. So, it is essential to look at other best avenues available. Studies conducted worldwide have shown that dental students can bridge this gap by actively participating in tobacco cessation activities.^[20-23]

Hence study conducted to assess knowledge, attitude and barriers in tobacco counseling among dental students which can be used as baseline data to implement and if required modify the curriculum of dental education.

Six students (3%) did not agree that it is part of the dental professional's role to ask patients if they use tobacco, advise tobacco users to quit, or discuss the benefits of stopping. Two students disagree to discuss the health hazards of tobacco with patient. 6% of the students strongly agree that tobacco cessation counseling harm the dentist- patient relationship. Whereas rest of the students nearly 95% agreed that asking and discussing regarding tobacco and its illeffects is a professional obligation or duty. Similar findings were seen among pharmacy students,^[24] dental students^[25] and professions.^[26] This duty students were serving unknowingly through routinely asking about smoking during history taking but do not go beyond that. Similar finding were observed among dental students of Nigeria.^[27] Overall dental students had negative attitude towards tobacco cessation components. This can be due the gaps like low knowledge and barriers in cessation components.

Students were unable to incorporate the tobacco counseling components in their routine practice. This shows their low awareness regarding this. While students had knowledge regarding tobacco i.e., its effects on oral and general health, dental treatment, Nicotine replacement therapy, its types and availability. Less knowledge regarding dosage and withdrawal symptoms. Other studies showed similar findings regarding knowledge of tobacco among students.^[20-23, 28]

Perceived Barriers: Students thought that patient should have tobacco related health problem then only tobacco counseling will be effective. This shows that students are not able to identify the patient's stage of change and use of motivational interviewing approaches when advising their patients.^[29-33]

Study showed that students have no time to provide cessation counseling during their clinical consultations. Earlier studies^[25,28,34,35] have shown barriers like lack of time and patient resistance.

As the students are getting less time in which they have to finish their clinical intervention, quotas etc. and each step have to be shown to their staff. So students should be encouraged to provide cessation services (ask, advice) at least during when they are waiting for their instructors.

Another reported barrier was students were not having sufficient skills to provide anti tobacco use counseling. Similar barrier was observed among Australian dental students^[20] and fourth year dental students at the University of Iowa.^[28] This barrier can be overcome by encouraging students to apply their knowledge regarding tobacco, giving demonstrations, conducting workshops etc. Later, making it mandatory for students to mention regarding tobacco counseling their cases. By this way students start giving tobacco counseling, prescribing needed medicine to their patient.^[28,34,35]

V. Conclusion

Clinical dental students have the knowledge of tobacco and oral health. But lack in practicing tobacco counseling (Ask, Assess and advice) due to their perceived barriers which is reflecting in the form of negative attitudes. This hassle can be overcome by conducting workshops, continuing education programmes. These will help them to improve their knowledge and stimulate to provide smoking cessation services that would positively affect the outcomes of all the dental treatments they provide their patients.

VI. Recommendation

- Encouraging students to apply their knowledge regarding tobacco during clinical practice
- Conduct workshops, CDE and Hand on course for the students before they enter clinical postings
- Making it mandatory for students to mention regarding tobacco counseling their cases.

Limitation of our study was small sample of dental students of one dental college which is not entirely representative of Indian dental students. The results of the present study have to be confirmed among a larger sample. Studies which involve the use of questionnaires entail bias. Further studies are essential to explore the impact of these issues on tobacco cessation activities in the dental background.

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