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# Perception and Attitude of Dental Students towards Tobacco Cessation Counselling in Dental Practice

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#### Abstract:

**BACKGROUND:** Use of tobacco is one of the most significant and serious public health issues facing the world today.

**AIM:** The main aim of the study is to assess dental student's perception and attitude on anti-tobacco counselling. **OBJECTIVE:** The study is conducted to understand the knowledge, effectiveness of the counselling and how they treated themselves as a counselor and the barriers faced by them.

MATERIALS AND METHODS: A 17 item questionnaire was collected through google forms and circulated among 151 dental students residing in Chennai. Collected responses were analysed through SPSS software version 23. Pearson chi square test was done to assess the association between occupation and whether dental students were aware of the "5 A's" and the "5 R's" protocol of tobacco cessation counselling.

**RESULTS:** From the study results, most of the participants belonged to the 18-25 age group and were dental undergraduates. 49.7% of the participants were aware of 5A's and 5R's protocol for tobacco cessation and 37.1% of the participants have used 5A's and 5 R's protocol for tobacco cessation. From this, Most of them were aware about the "5 A's" and the "5 R's" protocol of tobacco cessation counselling. Pearson chi square test value shows p value is 0.02( p value<0.05). Hence, it is statistically significant.

**CONCLUSION:** The dental students in our study were in general agreement that tobacco cessation counselling is within the scope and responsibility of the dental profession and that such counseling can be effective **Keywords:** Anti-tobacco, Attitude, counselling, Dental, Novel method, Perception,

# Introduction:

Tobacco use has detrimental effects on health including the occurrence of cardiovascular and respiratory diseases, carcinomas and a variety of other chronic ailments. Approximately six million annual mortalities worldwide are associated with tobacco use((1). From these, the reported annual incidence of oral and lip cancers was estimated to be 1,98,975 worldwide and 1,30,933 in developing countries in 2012(2).

Global indicators show a decline in smoking among high income countries, however in low and middle income countries, there is a continuous increase in the use of tobacco products(3). Smoking incidence and prevalence in middle eastern countries do not mirror those of western or developing countries in Asia((3,4). The current trend in Kuwait, among adult males, shows a high prevalence of smoking, as compared to females, whereas adolescent prevalence, which appears to be related to limited awareness of smoking hazards and their detrimental effects on health((5),).

Number of studies indicate that smokers are more likely to quit smoking permanently if they receive health professional assistance, behavioural counselling and pharmacological treatment((6). Tobacco is identified as a preventable cause of morbidity and mortality globally. Hence the aim of this study is to assess the attitude and perception of dental students towards tobacco cessation in a dental health care setting. Our team has extensive knowledge and research experience that has translate into high quality

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publications(7-15),(16),(17),(18,19),(20),(21),(22-26) Hence the main aim of the study is to assess dental student's perception and attitude on anti-tobacco counselling.

## MATERIALS AND MATERIALS:

A questionnaire based cross sectional survey was conducted among dental students residing in Chennai during February first week 2021. A 17 item questionnaire was framed and imputed in google forms and the link was forwarded to collect responses from the dental students. A total of 151 responses were collected at the end of the data collection. Dental students who agreed to participate in the study were asked to fill informed consent also. Students who were willing to participate in the study included in the study and Dental postgraduates and who are practicing after completing dentistry were excluded from the study.

Students completing the questionnaire anonymously during clinical hours. This questionnaire contained both and closed ended questions and assessed the students perception and attitude of tobacco services, present practise in the area of patients counselling on tobacco cessation and the perceived constraint against counselling, students specific training on tobacco cessation and their knowledge of the effects of tobacco on oral health. Data analysis was done using SPSS version 13.0. Descriptive statistics were used.

### Results

From the analysis made from the SPSS software version 23 we could make some conclusion that is positive over the tobacco cessation counselling. Most of the dental students asked patients whether they are using tobacco or not and they also advised patients to quit tobacco. Many of the dental students take patients' tobacco history. This helps dental students to advise about causes and educate them as a better person

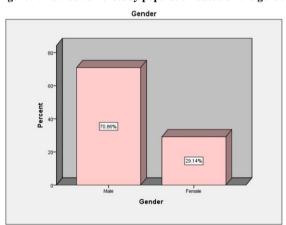


Figure 1:Distribution of study population based on the gender

**Figure 1:** Simple bar graph representing the distribution of the gender of the participants. About 70.86% of the dental students answered were males and 29.14% were females. Hence the male respondents were more.

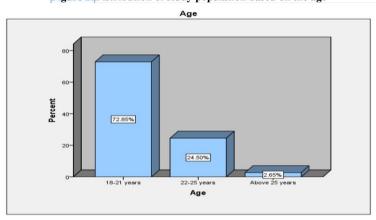
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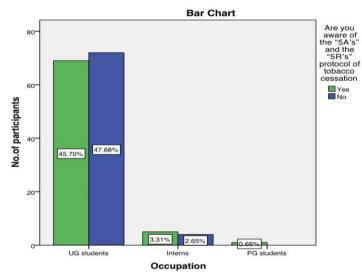
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Figure 2:Distribution of study population based on the age



**Figure 2:** Simple bar graph representing distribution of study population based on age. 72.85% in the age group of 18-21 years, 24.50% in the age group of 22-25 years and 2.65% in the age group of above 25 years.



**Figure 3:** Association bar graph between No. of participants and whether dental students were aware of the "5 A's" and the "5 R's" protocol of tobacco cessation counselling. The blue colour represents No and Green colour represents Yes. The X axis represents the occupation and the Y axis represents the number of dental students who were aware of the "5 A's" and the "5 R's" protocol of tobacco cessation counselling. The test had a p value of 0.02 and a confidence level of 95% chi square test was used. Hence the association bar graph was statistically significant.

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Table 1: Knowledge and Attitude of Dental Students Towards Tobacco Cessation Counselling

Table 1: Knowledge and Attitude of Dental Students Towards Tobacco Cessation Counselling				
Responses to Knowledge and Attitude of Dental Students	Agree n(%)	Disagree n(%)	Neutral n(%)	
Ask patients if they use tobacco	129(85.4%)	9(6%)	13(8.6%)	
Advice patients to stop using tobacco	140(92.7%)	2(1.3%)	9(6%)	
Dentist can act as a role model for society in the tobacco cessation program	118(78.1%)	5(3.3%)	28(18.5%)	
The dentist tobacco related habits will affect the impact of tobacco cessation counselling on patients	105(69.5%)	8(5.3%)	38(25.2%)	
Protocol for tobacco cessation counselling should be added to the dental curriculum	119(78.8%)	7(4.6%)	25(16.6%)	
Tobacco cessation counselling provided by a dentist would help the patient in quitting tobacco	110(72.8%)	4(2.6%)	37(24.5%)	
Dentist's time can be better spent doing things other than stopping tobacco	75(49.7%)	22(14.6%)	54(35.8%)	
Patients don't listen to dental students when they discuss tobacco usage	119(78.8%)	4(2.6%)	28(18.5%)	
Tobacco cessation counselling is ineffective unless the patient has a related health problem	118(78.1%)	12(7.9%)	21(13.9%)	

Table 1: The above table shows Knowledge and Attitude of Dental Students Towards Tobacco Cessation Counselling in which 85.4% of students were agreed to ask whether patients use tobacco or not, 92.7% of students were agreed to advice patients to stop using tobacco, 78.8% of students were saying Patients didn't listening to dental students when they discuss tobacco usage. 78.1% of students were saying that Tobacco cessation counselling is ineffective unless the patient has a related health problem.

Table 2: Responses to Practice of Tobacco Cessation Counselling

Responses to Practice of Tobacco Cessation Counselling	Yes	No
Do you take tobacco usage history from all patients	123(81.5%)	28(18.5%)
Are you aware of the various forms of tobacco?	135(89.4%)	16(10.6%)

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Have you ever done tobacco cessation counselling for any patient?	97(64.2%)	54(35.8%)
Are you aware of the "5 A's" and the "5 R's" protocol of tobacco cessation counselling?	75(49.7%)	76(50.3%)
Have you ever used the "5A's" and the "5 R's" protocol while counselling on tobacco cessation	56(37.1%)	95(62.9%)
Is information on tobacco cessation such as posters and pamphlets displayed in your institution?	105(69.5%)	46(30.5%)
Do you have access to tobacco cessation research literature via CD-ROM, books, internet etc	90(59.6%)	61(40.4%)
Do you consume tobacco in any form	49(32.5%)	102(67.5%)

Table 2: The above table shows Responses to Practice of Tobacco Cessation Counselling in which 81.5% of students had taking tobacco usage history from all patients, 89.4% of students were aware of the various forms of tobacco, 64.2% of students were aware of "5A's" and the "5R's protocol of tobacco cessation and 67.5% of students did not consume tobacco.

# DISCUSSION:

Dentists play a key role in tobacco use cessation counselling directed toward the community as a whole and toward the individual patient. The training of dental students in counselling might increase the intervention in subsequent professional practise((27)). Our study investigated the attitudes and views of clinical dental students from private dental colleges in Chennai, India. The study sample consisted of 151 respondents, composed of dental graduates. The overall prevalence of Tobacco use is significantly higher in the rural (23.7%) compared to semi-urban (20.9%) and urban (19.4%) areas and tobacco smoking prevalence was 14.3%, 13.9% and 12.4% in rural, semi-urban and urban areas respectively in Chennai((28)). Which is more than what is reported in other countries, for example, Great Britain (7 percent), Australia (13 percent), Ireland (20 percent). Even though 96% of our participants provide anti tobacco counselling, only 57% students felt that sich counselling would always help their patients quit tobacco, this is in contrast to other finding reported in literature ((29), (30), (31)) This response in the present study highlights the importance of providing training that will encourage dental students to provide more comprehensive tobacco counselling services. Lack of time, knowledge, reimbursement, and confidence were all endorsed as barriers, but to a slightly lesser extent, which was in accordance to many previous studies. (32)

In fact, a variety of studies conducted amongst health care professionals have found that clinicians who receive formal training in cessation counseling are more likely to provide tobacco intervention for their patients (27). This study suggests the need to help dental students develop professional competence in smoking cessation by encouraging them to implement the concept of tobacco prevention. More emphasis should be placed on conveying information regarding the clinician's potential efficacy in tobacco cessation efforts. Focus on evidence-based teaching will help students stimulate their potential for success. (Vanobbergen et al., 2007)

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According to the study done within the UG graduates with the questions made and distributed over Chennai. It's very clear that the UG graduates are ready for tobacco cessation counselling but they think that they lack training to give proper cessation counselling for the tobacco users and that it would be nice if they had good training in tobacco cessation counselling ((33)). This could be done by having classes for tobacco cessation that could be held as a scheduled class in the academic session itself.

### CONCLUSION:

The dental students in our study were in general agreement that tobacco cessation counselling is within the scope and responsibility of the dental profession and that such counseling can be effective. Thus it's important to include in the curriculum or train dental students and provide them with adequate knowledge so that they can administer proper counseling for the patients. This survey also was shown to provide a valid and reliable assessment of attitudes and perceived barriers to tobacco cessation counseling in a dental environment. It is important that students are aware of these barriers and are taught how to overcome them and provide successful counseling for the patients.

## **AUTHORS CONTRIBUTION:**

Javith I: Literature, data collection, analysis, manuscript drafting.

Dr. R.Pradeep kumar: Data verification, manuscript drafting.

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# **CONFLICT OF INTEREST:**

All the authors declare that there was no conflict of interest in present study.

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