Original Article

The barriers for tobacco cessation counseling in teaching health care institutions: A qualitative data analysis using MAXQDA software

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Abstract

Introduction: Recently, Dental Council of India directed all the teaching dental institutions in the country to set up tobacco cessation centers (TCC). International experiences suggest that there are many barriers for the provision of tobacco cessation counseling at dental clinics. In this context, it is important to understand the dental students' attitudes toward this initiative of tobacco cessation counseling at dental settings. **Materials and Methods:** This qualitative study to document the dental students' perspectives toward the provision of tobacco cessation counseling using focus group interviews was conducted in two teaching dental institutions in the state of Andhra Pradesh, India. 133 house surgeons from two dental institutions participated in the study and were interviewed as 13 focus groups. MAXQDA (version 12, VERBI GmbH, Berlin, Germany) was used for data analysis. All the interviews were audio recorded and the transcripts were open coded by three independent investigators. **Results:** The response rate in this study was 78.45%. The following themes were extracted from the views and opinions shared by the students: the reluctance of patients to discuss tobacco-related problems; tobacco use among students discouraging them to actively participate in counseling; an opinion that dental clinics are not suitable for the provision of tobacco cessation counseling; belief among students that they are not qualified enough. **Conclusion:** The directives given by the Ministry of Health and Family Welfare in association with Dental council of India to set up TCC at every teaching dental institution are laudable and demonstrate the commitment at policy level toward bringing down tobacco consumption in the country. However, few reforms need to be made in the curriculum to better execute the delegated responsibilities, which include orientation programs for dental students on the scope of the dental profession and workshops on tobacco cessation counseling.

Keywords: Focus groups, qualitative research, tobacco use cessation

Introduction

Tobacco consumption emerged as one of the most common and most deleterious habits in recent decades.[1] The global statistics reveal the ubiquitous nature of tobacco use.[2] In India, the habit of tobacco consumption is very prevalent with nearly 30% of all adults consuming tobacco in one form or the other.[3] The contribution of tobacco toward a country's disease burden and the range of negative health outcomes of tobacco led to the identification of tobacco consumption as a global epidemic.[4] In the Indian context, a lot of efforts have been directed toward making people aware of the ill effects of

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tobacco. The Indian government launched National Tobacco Control Program (NTCP) in 2007 to bring down the growing consumption of tobacco, and constituted the National Tobacco Control Cell, organizing at the national, state, and district levels.[5]

It has recently been suggested by the Ministry of Health and Family Welfare, Government of India in collaboration with various stakeholders including the Dental Council of India to set up tobacco cessation centers in teaching dental institutions across the country. A book titled "Establishment of Tobacco Cessation Centers (TCC) in Dental Institutes—An Integrated Approach in India—Operational Guidelines 2018" was also published in which the directives were narrated. This responsibility of setting up and supervising the proceedings of the TCC has been delegated to the departments of Oral Medicine and Radiology, Public Health Dentistry.[6] Though oral health care professionals are well informed about the scope that the dental profession has in identifying tobacco users and offering tobacco cessation counseling, this directive encourages future oral health professionals to adapt tobacco cessation counseling as an integral part of the provision of oral health care owing to the fact that tobacco cessation counseling would now be an integral component of their curriculum. International experiences suggest that there are many barriers for the provision of tobacco cessation counseling at dental clinics.[7-9] In this context, it becomes important to comprehend the dental students' attitudes toward their roles as tobacco cessation counselors. Such comprehension could be understood as a part of formative evaluation of the directive of the institution of TCC in teaching dental institutions. With this background, the objective of this study was to document the perceptions of house surgeons in two teaching dental institutions in the state of Andhra Pradesh, India.

Materials and Methods

This qualitative study to document the dental students' perspectives toward the provision of tobacco cessation counseling using focus group interviews was conducted in two teaching dental institutions in the state of Andhra Pradesh, India. The study was conducted from July, 2019 to September, 2019. Ethical approval for the study was obtained from the Institutional Review Board (IRB) [IRB/KIMS/2019-09; issued on 30/4/2019]. Administrative authorities of the two participating dental institutions were approached and prior permissions were obtained before the conduct of the focus group interviews. All the house surgeons were invited to participate in the study; however, none of them was compelled against their choice. Of the 167 house surgeons available during the time the study was conducted, 133 agreed to participate. The study protocol was explained to them in detail and the participants were informed about audio recording the interviews. Two trained moderators conducted the focus group interviews in both institutions. Following consent to participate, segregation of participating students into focus groups and allotment of a pseudonym to each of the focus group participants were done. Each focus group consisted of eight to ten participants, and 13 focus group interviews were conducted in total. The moderators initiated the discussion with a loose set of preformulated questions to facilitate the interview. The interviews were audiotaped and data analysis was done using MAXQDA (version 12, VERBI GmbH, Berlin, Germany). The transcripts were subjected to open coding by two independent investigators for the extraction of thematic constructs. The investigators discussed between themselves to resolve differences in coding. At the end of the interviews, students were asked about their tobacco cessation practices in the form of 5As (Ask, Advise, Assess, Assist, Arrange) approach of tobacco cessation[10] and their responses were documented. After the focus group interviews, a video presentation was given to the students on various health education models and tobacco cessation counseling strategies, with special emphasis on the transtheoretical model.

Results

The response rate in this study was 78.45%. Of the 233 students participated, 187 (80.25%) were female students. The mean age of the study participants was 24.03 ± 2.11 years. The students reported that they have been attending TCC for the past few months. It was observed that there was a decline in the percentage of students practicing tobacco cessation while moving toward right in the Ask–Arrange spectrum. While 202 (86.7%) students reported asking patients about their tobacco use, only 138 (59.2%) advised them to quit the habit of tobacco consumption. This percentage further declined with regard to their assessment of the willingness of the patients to quit tobacco (21.03%). Thirty-eight (16.3%) students assisted their patients who demonstrated willingness to quit tobacco. Of the 233 students participated, only 4 students reported arranging follow-up contact with their patients to learn about the quit attempts. These findings are presented in Figure 1.

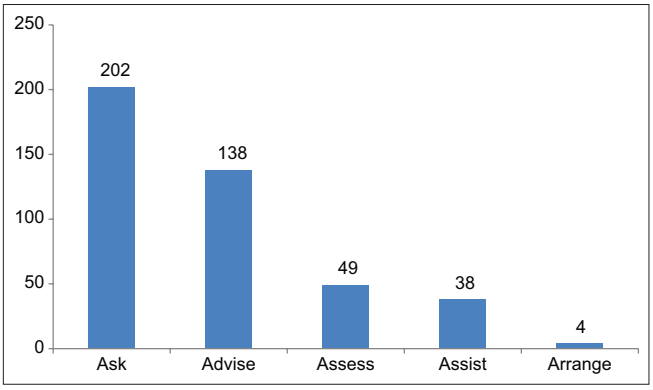

Figure 1: Decline in students' practice of tobacco cessation counseling in the Ask-Arrange spectrum

The following themes were extracted from the views and opinions shared by the students:

a. Reluctance of patients to discuss tobacco-related problems: A majority of the participants opined that the patients being referred to TCC for counseling do not pay any attention to the information provided by them. The following factors were identified as being responsible for the perception of dental students about patients being reluctant toward tobacco-related discussion: overabundance of tobacco-related information; belief among patients that tobacco could not harm them; patients not willing to learn from dental students about tobacco ill effects.

Overabundance of tobacco-related information: Participants reported that few patients get annoyed when they ask them to stop using tobacco by emphasizing on the ill effects of consumption.

"The patient almost shouted that he knows the problems with tobacco and these days everyone was saying tobacco is bad for health, even in movies. He said that the reasons for using tobacco are not known to us and refused to share the reasons and left."[S131].

Belief among patients that tobacco could not harm them: Some students reported that patients try to rationalize their behavior of tobacco consumption in numerous ways, among which believing that tobacco could not harm them is common.

"The problem is they know the problems with smoking. There is a lot of information being shared to the public about smoking-related health problems. The problem is their belief that smoking does not affect them which usually comes from their experience of knowing persons who lived long with the habit." [S 049]

Patients not willing to learn from dental students about tobacco ill effects: Most of the study participants opined that the patients demonstrate a reluctance to discuss tobacco-related problems with them as they would not like to be advised by dental students about tobacco ill effects.

"I feel they just don't wish to be taught by a dental student on various problems of tobacco consumption. Most patients feel that this (discussion on tobacco) is out of our (dentist's) expertise, especially when we (dental students) are in the process of getting trained." [S 053]

b. Tobacco use among students discouraging them to provide counseling: Few students in the study are tobacco users themselves. The responses from these students were observed to be relating to: personal experience of unsuccessful quit attempts; ethical conflict of preach without practice.

Personal experience of unsuccessful quit attempts: Some participants with the habit of tobacco consumption shared their experiences of quit attempts and how they were unsuccessful. They reported that quitting the habit could be very demanding.

"I tried quitting the habit so many times. The maximum I could do was stay away from that (cigarette) for five to six days. It is not easy and I think I could hopefully get rid of the habit once I complete my studies." [S 019]

Ethical conflict of preach without practice: Few students said that they are not interested in providing tobacco cessation counseling as they themselves use tobacco occasionally. *"I can't ask my patients do something which I am not doing myself. If the habit is too frequent, it may be a problem. One or two smokes a day should be fine according to me." [S 044]*

c. Dental clinics are not suitable places for tobacco cessation counseling: Many students opined that patients who go to an oral health care facility would not likely receive advice on their habits and systemic health. The following factors were observed as the basis for this perception on poor relevance of dental clinics for tobacco cessation counseling: need-based dental care would not help the cause; time constraints and financial returns; risk of losing the patient from their practice.

Need-based dental care would not help the cause: The majority of the participants suggested that regular dental visits are mandatory for tobacco cessation counseling to be successful. Need driven utilization of dental care, which often is sporadic in nature, does not support the cause as opined by the study participants owing to the fact that there is limited opportunity for monitoring and reinforcement.

"What is to be considered here is that the usual (oral health care-seeking behaviors) here is to see a dentist only when it is unavoidable. When the reason for a dental visit is pain and what patient wants is relief from that (pain), why would they listen to tobacco quit advice from us (dentists/dental students)? If there is a concept of regular dental visits, then tobacco-related health education can really work."[S 106]

Time constraints and financial returns: Some participants felt that TCC in dental practices is only a waste of time and effort as they strongly opine that advising the patient on benefits of quitting tobacco would not do the practice any favor in monetary terms, instead consumes additional time which could be avoided.

"This is a dental institution. We do this as it is mandatory and we know that this is good for people. But to be honest, this is not going to sustain as a practice once we move out. The patient would not pay you (the dentist) extra money for the extra time spent and the information shared. I (the dentist) could spend that time on treating another patient which is actually productive." [S 097]

Risk of losing the patient from practice: Few participants felt that advising the patients to quit tobacco and asking them about their personal behaviors bear the disadvantage of possible loss of the patient from their practices.

"I think patients may go to another dentist if they feel we (dentists/dental students) are probing too much into their personal life. The major goal should be to make the patient feel comfortable. That's how practices flourish. I would rather not talk about tobacco habits than lose a patient from my practice." [S 118]

"There are so many dental clinics. Now the priority is to make the patient comfortable in every possible way. If we cause them discomfort by asking personal questions on tobacco and alcohol, they may not like it. I would treat

the problem which brought him to me and not bother about giving suggestions which I am not really concerned with."[S 009]

d. Belief among students that they are not qualified enough: Some participants responded that they are not qualified enough to provide tobacco cessation counseling. It is because of this uncertainty and limited knowledge about TCC that they could not actively engage in TCC.

"We never had a formal workshop on how to provide tobacco cessation counseling and how to convince patients. I don't think we are qualified enough. Even when we sit in the room (tobacco cessation clinic) and speak to a patient, 90% of the time we are either hesitant or afraid."[S 103]

"To be honest, I don't know what are various methods of making the patient stop tobacco. I usually ask them about the habit and tell them that it is not good for health. For properly giving counseling (TCC), we have to learn a lot of things." [S 076]

Discussion

This is one of the first attempts to qualitatively document the attitudes of students toward providing tobacco cessation counseling through focus group interviews. This study yielded great insights into the attitudes of dental students about their roles as tobacco cessation counselors and highlighted areas that need reforms. It is for this reason that this attempt could be deemed as a formative evaluation of the ongoing progress at the TCC established by teaching dental institutions in the nation.

In the present study, 86.7% of the students reported asking their patients about tobacco use, which is consistent with the study done by Ehizele *et al.*[11] in 2009 where 95.6% of the students reported asking their patients about tobacco use. Only 28% asked their patients about tobacco use in a study conducted by Pendharkar *et al.*[12] in 2010. The percentage of students advising their patients to quit tobacco consumption is substantially less than those who asked about their habit. Balappanavar *et al.*[13] in 2013 reported 12.6% of the dental students advising patients against tobacco use, while Rajasundaram *et al.*[14] reported 94.2% of the students performing this activity. This could be addressed by the conduct of orientation programs for the students on the relevance of dental profession to tobacco cessation. Only 21.03% of students assessed the willingness of their patients to quit tobacco. This is considerably less when compared with the findings reported by Ahmady *et al.*[15] in 2011, where 65% of the participating students assessed the willingness of patients. A considerably higher proportion (77.5%) of those who assessed their patients' willingness reported assisting them in the process of quitting. This percentage is significantly less when compared to the findings reported by Yip *et al.*[16] in 2000 where 24% of the students assisted their patients in quitting tobacco. However, this connection in the present study between the 3rd (Assess) and 4th (Assist) A's in the Ask–Arrange spectrum is noteworthy and efforts toward motivating the students to assess their patients' willingness to quit tobacco possibly bring an improvement in the percentage of students assisting the patients in quit attempts. A dismal number of four students arranged for follow-up contact with their patients, which is a serious concern as most of the quit attempts often prove unsuccessful. Literature suggests that clear variations exist among students in arranging for follow-up contacts between studies. Gandini *et al.*[17] in 2008 reported 1% of the dental students arranging follow-up contact with patients, while Yip *et al.*[16] reported 22% following the quit attempts of their patients. Without regular follow-up, the probability of reacquiring the habit is very high. In this context, the concept of family medicine could benefit the patients a lot. Family physician or family oral health care professionals as first contact doctors provide primary and continuous care for patients and possess comprehensive knowledge about the patients' health, habits, and personality.

Literature suggests that smokers who receive tobacco cessation counseling during clinical visits feel more satisfied than those who did not receive such counseling.[18] The opinions of the dental students in the present study broadly revolve around their perceived incompetence in the provision of counseling. Most of the barriers for cessation counseling as reported by the students point to the dismal orientation given to the students on patients' response to tobacco cessation counseling. The findings observed in this study are not very different from those reported at United States and Canadian dental schools with tobacco dependence education not being a part of the curriculum.[19] Similar experiences have been reported from Tanzania,[20] Saudi Arabia, United Arab Emirates, and Yemen,[21] Latvia,[22] Italy,[23] Romania.[24] There is a dire need for the conduct of regular workshops informing dental students about the scope and responsibilities of the profession.[25] In spite of substantial empirical evidence on the effectiveness of tobacco cessation counseling in oral health care settings, the attitudes of the oral health professionals toward the provision of tobacco cessation counseling remain an area of concern.[26,27] Dentists and primary care physicians assume an important role in increasing the tobacco quit incidence; this is reinforced by the inextricable association between oral health and general health, with the identification of oral health as an integral component of primary care.[28] In addition, keeping in view the negative influence of tobacco on the health-related quality of life of people, the provision of tobacco cessation counseling at oral health care facilities contributes toward public health and primary health care. However, evidence on the limited willingness of oral health professionals to provide tobacco cessation counseling suggests that it is time that efforts have to be made to improve the attitudes of students and professionals in oral health care toward the provision of tobacco cessation counseling, which enables them to contribute toward the increased tobacco quit rates and assume a proactive participatory role in primary care provision.[29,30] In light of these observations, the following findings made in this study are of great significance: the reluctance of patients to discuss tobacco-related problems; tobacco use among students discouraging them to actively participate in counseling; an opinion that dental clinics are not

suitable for the provision of tobacco cessation counseling; and belief among students that they are not qualified enough. The insights gained in this study may help in redirecting the preparation of dental students to better assume their future roles as providers of oral health care with integration of tobacco cessation counseling.

Conclusion

In this study, it was observed that students were apprehensive of providing tobacco cessation counseling, in many ways. Though few positive responses were noted from the students, in general, it appeared that conduct of formal training sessions for dental students may benefit the cause of tobacco cessation counseling in teaching dental institutions a lot. The findings of this study provide an insight into the focus areas of barriers in tobacco cessation counseling, which when addressed expands the scope for oral health care profession and benefits the nation's populace.

Declaration of patient consent

The authors certify that they have obtained all appropriate participant consent forms. In the form, the participants have given their consent for their images and other clinical information to be reported in the journal. The participants understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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