

Tobacco Cessation Practices and Perceived Barriers for its Implementation among Nepali Dentists

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ABSTRACT

Introduction: Tobacco use and its resulting ill health effects can be controlled by adopting appropriate cessation measures at individual, community and national level. Health care service providers, and particularly dentists, can play a major role in providing tobacco cessation counselling to the patients who come in their contact.

Objective: To assess the tobacco cessation practices and perceived barriers for its implementation among Nepali dentists.

Methods: This descriptive cross-sectional study using online questionnaire for data collection was done among 246 Nepali dentists selected by convenient sampling from November, 2020 to January, 2021 after ethical clearance from institutional review committee of Nepal Medical College. Data entered into Google Forms were exported to Microsoft Excel and SPSS v.20 for descriptive analysis.

Results: A total of 246 (111, 45.1% male and 135, 54.9% female) dentists responded to the survey. Mean age of the respondents was 30.75±4.61 years. Most respondents (159, 64.6%) were from Bagmati province. Out of the participants, 204 (82.9%) were "never smokers" themselves. Most of the participants (161, 65.5%) asked patients about smoking habits, 176 (71.6%) advised patients not to start smoking and 119 (48.4%) rarely advised quitting tobacco. Only 15 (6.1%) dentists assisted patients to quit smoking. Among the perceived barriers, most reported lack of trainings (143, 58.1%).

Conclusion: Even though majority of the study participants asked their patients about smoking habits, only few assisted them to quit. Those having received trainings regarding tobacco cessation being fewer in number further suggests the need of regular continuing medical education and trainings.

Keywords: Dentists; Nepal; smoking; tobacco cessation.

INTRODUCTION

Globally, tobacco use remains one of the leading preventable cause of early death.¹ Nepal Demographic Health Survey, 2016 showed the prevalence of smokeless tobacco and smoking as 40.1% and 27.4% respectively among males and 5.5% and 3.8% respectively among females.² There is an increasing trend of cancer incidence in Nepal from 2013 to 2020, lung cancer being the major one among males.³

Tobacco cessation has resulted in oral and general health benefits among various populations^{4,5} and dentists have been found to play a major role in rendering tobacco cessation counselling effectively.⁶⁻⁸ A practical toolkit has been developed by World Health Organization (WHO) for oral health professionals to integrate brief tobacco

interventions though 5 'A's and 5 'R's approach.⁹ Dentists have access to various groups of patients, young to old and healthy to diseased smokers. Dental treatment being a lengthy procedure and demanding multiple appointments puts the dentists in ideal position to help patients quit tobacco.

Because of the paucity of literature regarding tobacco cessation practices by dentists in context of Nepal, this study aims to assess the tobacco cessation practices and perceived barriers in its implementation among the Nepali dentists.

METHODS

A descriptive, cross-sectional online questionnaire survey was conducted among 246 Nepali dentists from November, 2020 to January, 2021 after ethical approval (Ref. 030-077/078) was obtained from Institutional Review Committee, Nepal Medical College, Attarkhel, Kathmandu, Nepal. As it was an online survey using Google Forms (Alphabet Inc., USA), those participants who consented to participate in the study only gave the responses. Form links were shared via social media (Facebook Messenger and

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Citation

Khapung A, Vaidya S. Tobacco Cessation Practices and Perceived Barriers for its Implementation among Nepali Dentists. *J Nepal Soc Perio Oral Implantol.* 2021 Jul-Dec;5(10):72-6.



Viber). Anonymity of the participants was maintained and all the ethical considerations were adhered to.

Minimum sample size of 222 was calculated by using the formula, $n = Z^2pq/d^2$; where $Z=1.96$ at 95% confidence interval, $p = 0.825$ (82.5% prevalence of dentists who inquired patients about their tobacco habits) with reference to the study by Singla et al.,¹⁰ $q=1-p$ and $d =$ margin of error = 0.05 (5%). Convenience sampling method was used for sampling. Those dentists who gave consent to participate in the study, were registered in Nepal Medical Council (NMC) and who were currently practicing in clinical setup and dealt with patients were included in the study.

Data was collected by the help of a structured, self-administered, online questionnaire prepared in google form (Alphabet Inc., USA) along with an information sheet and a consent form that was sent to the participants via social networking sites (Facebook Messenger and Viber). It included questions on socio-demographic details, current tobacco cessation practices and perceived barriers with multiple responses adapted from various studies.¹¹⁻¹³ The questions on current tobacco cessation practices were based on 5 'A's approach from the practical toolkit developed by WHO which included Ask (Systematically identify all tobacco users at every visit), Advise (Persuade all tobacco users that they need to quit), Assess (Determine readiness to make a quit attempt), Assist (Help the patients with a quit plan) and Arrange (Schedule follow up contacts or referral to specialist support).⁹ The form was closed after the data collection period was over. Data collected through online

platform into Google sheets was then validated using tools in Microsoft Excel. It was then exported to and analysed using IBM Statistical Package for the Social Sciences (SPSS) Statistics for Windows, version 20 (IBM Corp., Armonk, N.Y., USA). Descriptive statistics have been presented in the form of frequency, percentage, mean and standard deviation.

RESULTS

A total of 246 study participants were included in the study of which 111 (45.1%) were male and 135 (54.9%) were female. The mean age of the study participants was 30.75 ± 4.61 years with a minimum of 24 years and maximum of 49 years. Majority of the study participants (139, 56.5%) were from age group less than 30 years, most (159, 64.6%) were from Bagmati province and more than half (136, 55.3%) had completed Bachelor of Dental Surgery (BDS). Three-fourths of the participants (183, 74.4%) worked in private hospital/clinics (Table 1).

Of all participants, majority (204, 82.9%) were never smoker (have never smoked before), 13 (5.3%) were former smoker (used to smoke but have left smoking at present) and 29 (11.8%) were current smoker (smokes at present, have smoked for past 30 days) (Figure 1).

Majority of the study participants always asked patients about smoking habits (161, 65.5%), always advised patients who have never smoked to avoid starting (176, 71.6%) and always assessed patients' willingness to quit (130, 52.8%). Most of them rarely advised patients who smoke to quit (119, 48.4%) and rarely used medications like nicotine

Table 1: Distribution of study participants according to socio-demographic characteristics.

Variables		n (%)
Sex	Male	111 (45.1)
	Female	135 (54.9)
Age (years)	<30	139 (56.5)
	31-40	99 (40.2)
	41-50	8 (3.3)
Province	Province 1	28 (11.4)
	Province 2	13 (5.3)
	Bagmati province	159 (64.6)
	Gandaki province	19 (7.7)
	Karnali Province	3 (1.2)
	Sudurpaschim Province	1 (0.4)
	Lumbini province	23 (9.4)
Degree	BDS	136 (55.3)
	MDS	16 (6.5)
	BDS with other extra course	94 (38.2)
Work place*	Government hospital (n=246)	56 (22.8)
	Private hospital/clinics (n=246)	183 (74.4)
	Medical/dental College (n=246)	116 (47.2)
*Multiple response question		

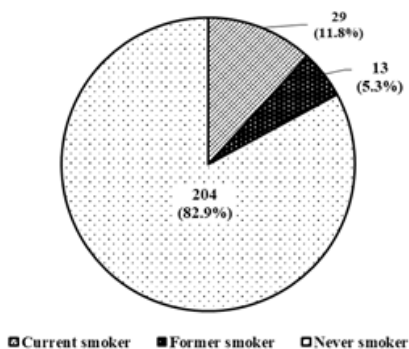


Figure 1: Smoking status of the study participants.

Table 2: Responses of the study participants regarding current tobacco cessation practices n (%).

Questions	Always/ nearly always	Sometimes	Rarely
	n (%)	n (%)	n (%)
1. Do you ask patients about smoking habits?	161 (65.5)	2 (0.8)	83 (33.7)
2. Do you advise patients who have never smoked to avoid starting?	176 (71.6)	2 (0.8)	68 (27.6)
3. Do you advise patients who smoke to quit?	81 (32.9)	46 (18.7)	119 (48.4)
4. Do you assess patients' willingness to quit?	130 (52.8)	8 (3.3)	108 (43.9)
5. Do you discuss general health risks of smoking with patients who smoke?	168 (68.3)	4 (1.6)	74 (30.1)
6. Do you discuss oral health risks of smoking with patients who smoke?	57 (23.2)	78 (31.7)	111 (45.1)
7. Do you assist patient to quit smoking?	15 (6.1)	168 (68.3)	63 (25.6)
8. Do you use medication like nicotine replacement therapy (gums, lozenges, patch etc.) to help them quit?	40 (16.3)	79 (32.1)	127 (51.6)
9. Do you discuss the use of nicotine replacement therapy with patients who smoke?	25 (10.2)	132 (53.6)	89 (36.2)
10. Do you refer your patients who smoke to others for special cessation treatment?	24 (9.8)	154 (62.6)	68 (27.6)
11. Do you arrange follow ups with patients on their progress with quitting?	110 (44.7)	114 (46.4)	22 (8.9)
12. Have you placed any no smoking sign in your waiting room for patients?	161 (65.5)	2 (0.8)	83 (33.7)

Table 3: Responses of the study participants regarding perceived barriers in tobacco cessation counselling, n (%).

Barriers	Yes	No
	n (%)	n (%)
1. Do not see this as a part of my job	25 (10.2)	221 (89.8)
2. Lack of time	96 (39.0)	150 (61.0)
3. Lack of knowledge	52 (21.1)	194 (78.9)
4. Lack of educational resources to give to patients	127 (51.6)	119 (48.4)
5. Inadequate training/ lack of necessary skills	143 (58.1)	103 (41.9)
6. No knowledge on referral center	132 (53.7)	114 (46.3)
7. No knowledge on pharmacological treatments available	71 (28.9)	175 (71.1)
8. Patients may not listen to advice given	120 (48.8)	126 (51.2)
9. Fear of losing patients	19 (7.7)	227 (92.3)
10. No financial incentives for counselling the patients	35 (14.2)	211 (85.8)
11. Others	16 (6.5)	230 (93.5)

replacement therapy to help them quit (127, 51.6%) (Table 2).

Inadequate training/ lack of necessary skills (143, 58.1%) was the major barrier perceived by the study participants followed by no knowledge on referral center (132, 53.7%) and lack of educational resources to give to patients (127, 51.6%) (Table 3).

Of the total study participants, only 19 (7.7%) had adequate training on tobacco cessation counselling and 226 (91.9%) were willing to receive any training for tobacco cessation counselling.

DISCUSSION

Health care service providers can play a major role in providing tobacco cessation counselling to the patients who come in their contact. There exists a gap in the implementation of tobacco cessation efforts among the people who need help in their quit attempts in context of Nepal.¹⁴ This cross-sectional, online questionnaire survey among 246 NMC registered dentists was done to assess the tobacco cessation practices and perceived barriers among the Nepali dentists.

In the present study, 161 (65.5%) of the study participants ask the patients about their smoking habits. This finding is similar to a study done by Uti et al.¹⁵ (65%) and Aggarwal et al.¹³ (61.8%) but lower as compared to the studies by Parkar et al.¹⁶ (100%) and Ford et al.¹¹ (90.1%). The current study showed that although majority (65.5%) asked patients about smoking habits, only few (6.1%) assisted them to quit. Similar findings were seen in various other studies.^{11, 17} This finding coincides with the reasoning that it could be due to lack of proper trainings related to tobacco cessation counselling as reported in the present/current study by the study participants.

About half of the study participants in the present/current study rarely used medication like nicotine replacement therapy to help patients quit in contrast to a study by Aggarwal et al.¹³ (81.2%). This could be because nicotine replacement therapy is not easily available in Nepal. This finding also agrees to another finding regarding barriers perceived where about 71 (28.9%) study participants reported

having no knowledge on pharmacological treatments available to be one of the barriers in implementing tobacco counselling services.

Inadequate training was reported to be the major barrier in the current study which is in accordance to the study by Parkar et al.¹⁶ Although tobacco cessation is present in the BDS curriculum in the undergraduate level, only theoretical knowledge would not be enough to acquire the skill of tobacco cessation counselling. This could be the reason for inadequate training being the major barrier seen in this study. Furthermore, it suggests the need for implementation of workshops and training for the dentists. In the current study, 120 (48.8%) reported the barrier as "Patient may not listen to advice given" a finding similar to a study by Shaheen et al.¹⁸ A finding in this study that about 204 (82.9%) of the dentists were never smokers could help motivate the patients to quit smoking as the dentists could serve as role models in motivation.

The present study is the first of its kind in context of Nepal. As it was a self-administered survey, chances of observer bias are not present. However, this research was limited by the small sample size. Due to use of convenience sampling in this study, the data cannot be generalised to a wider population of dentists.

CONCLUSION

The findings of this study showed that less than half of the dentists assisted patients to quit smoking and discussed oral health risks of smoking. Only few of them had obtained training related to tobacco cessation counselling and the major barrier faced by them in implementing tobacco counselling services was inadequate training. All these findings suggest the need for regular Continuing Professional Development (CPD) regarding tobacco cessation trainings for the dentists.

ACKNOWLEDGEMENT

We would like to acknowledge Dr. Sujaya Gupta for her constant support during this study. We would also like to thank all the study participants who volunteered to participate in this study.

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