

Original Article

KNOWLEDGE ATTITUDE AND PRACTICE REGARDING TOBACCO CESSATION METHODS AMONG THE DENTAL PROFESSIONALS – A CROSS-SECTIONAL STUDY.

Dr. Priyanka paul madhu

Postgraduate student, Department of public health dentistry, College of dental sciences, Davangere, India.

ARTICLE INFO

Keywords:

tobacco cessation

nicotine replacement therapies

dental professionals

ABSTRACT

INTRODUCTION: In India, the proportion of all deaths that can be attributed to tobacco use is expected to rise from 1.4% in 1990 to 13.3% in 2020. In this regard, health care professionals have a key role to play by working through the health care system to motivate and advise users to quit. **AIM AND OBJECTIVES:** The aim of the present study is to assess the dental students attitude and practice towards tobacco cessation programmes in the dental setting and to explore the influence of knowledge in its promotion. **MATERIALS AND METHODOLOGY:** This cross sectional survey was carried out at the college of dental sciences in davangere among the dental professionals i.e. final year, interns, post graduates students. A questionnaire was designed to test the knowledge, attitude and practice of dental surgeons regarding tobacco use. The self-administered survey included a set of questions. The data were analyzed using the SPSS 22. The chi-squared test was used to test associations between the responses among the age, qualification, and academic year. A critical p-value of 0.05 was regarded as significant. **RESULTS:** A total of 300 questionnaires were distributed, with a response rate of 96.39%. Out of the 250 participants, 54% were females and 46 % were males. About 68% students were in the age group between 20 to 23 years. About 32.4% were pursuing MDS and 67.6% pursuing BDS in the present study. Almost 50% preferred to recommend NRT as a tobacco cessation advise to the patients, 48% with self quitting practice and 1.2% with pharmacological methods.

DISCUSSION: More than half of the respondents had an average level of knowledge on smoking cessation interventions while a majority had a positive attitude towards the provision of smoking cessation interventions. Hence it's a need of hour to influence the students for generating interest in attaining knowledge about tobacco cessation methods.

© Copyright 2018 BioMedSciDirect Publications IJBMR - ISSN: 0976:6685. All rights reserved.

Introduction

Tobacco use remains one of the leading causes of preventable illness, disability, and premature death in the world. It kills nearly 6 million people each year worldwide India's tobacco problem is very complex, with a large use of a variety of smoking forms and an array of smokeless tobacco products. Many of these products are manufactured as cottage and small-scale industries using varying mixtures and widely differing processes of manufacturing.¹

The use of tobacco products, especially cigarettes, represents the leading cause of preventable illness and death in the developed world. In addition to being associated with a number of cancer and coronary conditions, tobacco always plays a role in the etiology of a number of serious oral conditions; it is a primary risk factor for oral cancer, as well as leukoplakia, periodontitis and delayed wound healing.² In such situations Health care providers can play a vital role in helping their patients attempt and realize tobacco cessation. The 2000 Public Health Service clinical practice guideline indicates that "brief physician advice significantly increases long-term smoking abstinence rates." However, according to the guideline, intensive interventions are always more effective than less intensive interventions and should be used whenever possible.³ programmes and providers being paid to help smokers quit.⁸

In recent years the *Journal of the Canadian Dental Association* has placed a high priority on disseminating information on the relationship between tobacco use and oral disease,⁴ and reiterating the obligations of the dental profession to promote smoking cessation.⁵

Healthcare programmes, services, and practitioners in the USA and many other western countries are being held increasingly accountable for quality, safety, and cost effectiveness.⁶

Evidence based guidelines for smoking cessation treatment exist, and recommended interventions are extremely cost effective.⁷ But there is little effort to ensure compliance with guidelines among

In India, the proportion of all deaths that can be attributed to tobacco use is expected to rise from 1.4% in 1990 to 13.3% in 2020 (Reddy and Gupta, 2004).³ In this regard, health care professionals have a key role to play by working through the health care system to motivate and advise users to quit. Since physicians are well regarded and their advice well-accepted, they also form the most likely persons from whom advice on quitting would be taken seriously and accepted by users.

* Corresponding Author : **Dr. Priyanka paul madhu**
drpriyanka0690@gmail.com

Therefore, physicians can and should utilize the window of opportunity available during their contact with patients to offer tobacco cessation interventions actively in their routine clinical practice (Richmond et al., 1999).¹⁰ This becomes even more imperative in the case of professional group that is most actively consulted by tobacco using patients in India -the dental surgeons. Yet, one is not sure of the attitudes of such professionals towards tobacco cessation, which is important since negative attitudes may result in them less likely to counsel patients regarding the hazards of tobacco use (Tessier et al., 1995).¹¹

Dental treatment that often necessitates multiple visits provides the mechanisms for initiation, reinforcement, and support of tobacco cessation activities. Cessation advice can also be associated with readily visible changes in oral status. Cessation rate of 8.6% after one year of counselling alone has been reported, and when combined with prescription of (NRT) Nicotine Replacement Therapies, the quit rate increased. The awareness among the dentist regarding NRT is a prerequisite to build their confidence in their counselling skills. The reasons for not providing it include time and reimbursement issues, poor education and lack of further postgraduate training and poor co-ordination of dental and smoking cessation services.¹²

The aim of the present study is to assess the dental students attitude towards tobacco cessation measures in the dental setting and to explore the influence of knowledge, belief in effectiveness, gender and curriculum of cessation programmes.

This study provides evidence that clinical dental undergraduates are willing to give smoking cessation advice to their patients but perceive barriers in giving such advice. We therefore attempted to carry out a survey on the knowledge, attitude and practices of dental surgeons regarding tobacco use.

Materials and methodology

This cross sectional survey was carried out at the college of dental sciences in Davangere among the undergraduates i.e. final year, interns, post graduates students.

A questionnaire was designed to test the knowledge, attitude and practice of dental surgeons regarding tobacco use and then piloted to test for comprehensibility. Appropriate changes were made to grammar, layout and style. The self-administered survey instrument included 18 questions covering topics such as: 1) Personal data; 2) Knowledge of the hazards of smoking and attitude towards tobacco control policies; 3) Any smoking cessation interventions provided to patients; and 4) Whether or not dental surgeons received any training in smoking cessation methods.

All questionnaires were checked for completion and incomplete questionnaires were discarded. The data were analyzed using the Statistical Package for Social Sciences 22.

All clinical and postgraduate students of a dental college in Davangere, who were present on the day of distribution of questionnaire, were included in the study. Questionnaire was administered to a sample of 15 students attending public health dentistry clinical posting who were interviewed to gain feedback on the overall acceptability, validity, and reliability of the questionnaire in terms of length, language clarity, time, and feasibility of students completing and returning it. Based on the opinions expressed, a cronbach alpha value of 0.85 was found. After obtaining the consent from each participant, the questionnaire was self-administered by single investigator. Each one was asked to fill the

provided questionnaire in front of the investigator with adequate time to avoid any malpractice while answering. Confidentiality was maintained throughout the process. Incomplete response sheets were excluded from data capturing and analysis.

The answer keys for the core questions on knowledge of nicotine replacement treatment were generated using the guidelines of tobacco cessation measures which have been written in parallel with guidance on the cost effectiveness of smoking cessation interventions, produced by the Centre for Health Economics at the University of York.¹³

Materials and methodology

The data from 250 clinical dental students so obtained were entered in Excel sheet, and descriptive and inferential statistical analysis was made. Statistical Package for Social Sciences software version 22 was used for data analysis. The chi-squared test was used to test associations between the responses among the age, qualification, and academic year. A critical p-value of 0.05 was regarded as significant.

RESULTS

A total of 300 questionnaires were distributed, out of 260 were returned, with a response rate of 96.39%. Out of the 250 participants, 54% were females and 46 % were males (Graph 1). About 68% students were in the age group between 20 to 23 years (Graph 2). The sample consisted of Three groups according to the different academic levels: IV year Bachelor of Dental Surgery (BDS; 28.4%), interns (39.2%), and postgraduates (32.4%) (Graph 3). About 32.4% of the students were pursuing Master of Dental Surgery (MDS) and majority (67.6%) were pursuing BDS in the present study (Graph 4).

Graph 3:percentage distribution of students based on their academic level graph4 :percentage distribution of students based on their qualification

Knowledge of treatment modalities

About 11.2% of the respondents were aware about the usage of NRTs, only 26% of the students knew that nicotine nasal spray is absorbed faster. 49.6% were unaware of nicotine patches and about 49.2% were unaware of nicotine gums. Only 42% were aware of acute lethal dose of nicotine. Only 94% of the students had knowledge about tobacco cessation education programmes but the majority were unaware of the available pharmaceutical methods and dosage for tobacco cessation. (Graph 5)

Attitudes of dental surgeons regarding Tobacco cessation

Almost 53.2% keep a record of patients with habits and about 79.2% believe that nicotine replacement therapy can double the chance of quitting the habit of smoking. Yet there is hesitation towards recommending NRTs for smoking cessation to patients is due to lack of knowledge about its uses and side effects. Nearly all (88%) believed that there should be strict legislation against public use of tobacco, that media and were highly influential in promoting tobacco and that the warning labels on tobacco products should be increased. The majority of 41.2% also supported ban on public use of tobacco is an effective method of tobacco control. Due to the unawareness of such smoking cessation methods among the clinicians, almost 97.6% believed that Smoking Cessation Education should be a part of the core curriculum of the basic training of all health professionals. (graph 6)

Practice of dental surgeons regarding tobacco users among their patients

97.2 come across the patients with tobacco use. About 94.8% advocated tobacco cessation practices actively. With regard to details on follow up and records, only 46.8% did not followed up on their patients using tobacco nor maintained records. However, almost 50% preferred to recommend NRT as a tobacco cessation advise to the patients, 48% with self quitting practice and 1.2% with pharmacological methods. Hence, there is a felt need to be aware of all the methods to provide a better treatment for the people with a thought of quitting their habit.

Response rate of the questions and significance associated age, qualification and academic level.

Questions	response	n	%	p-value
1. Do you come across patients with tobacco habits.	A) Yes	243	97.2	0.25
	B) No	7	2.8	
2. Are you aware Of tobacco cessation education programme?	A) Yes	235	94.0	0.589
	B) No	15	0.6	
3. Do you provide patient with tobacco cessation advise.	A) Yes	237	94.8	0.553
	B) No	13	5.2	
4. Which tobacco cessation method do you prefer to recommend.	A) Nicotine replacement therapies	125	50	0.225
	B) Self quitting method	122	48	
	C) pharmacological methods	3	1.2	
5. Do you follow up or keep a record of these patients.	A) Yes	133	53.2	0.963
	B) No	117	46.8	
6. Can Nicotine Replacement	A) Yes	198	79.2	0.482
	B) No	52	20.8	

Therapies (NRTs) double the chance of success in quitting the habit of smoking?				
7. Do you have adequate knowledge about NRTs.	A) Yes B) No	89 161	35.6 67.4	0.318
8. Nicotine Replacement Therapy (NRT) is designed to use for,	A) 12 Weeks B) 4 Weeks C) Don't know D) 16 Weeks	46 28 135 41	18.4 11.2 54.0 16.4	0.001
9. Which product is absorbed faster ?	A) Nicotine Skin Patch B) Nicotine Gum C) Nicotine Nasal Spray D) Don't know	60 41 66 83	24.0 16.0 26.0 33.0	0.229
10. How much dose of nicotine gum should be advised to a heavy smoker?	A) 4mg B) 6mg C) 8mg D) Don't know	28 58 49 123	8.0 23.2 19.6 49.2	0.006
11. Nicotine skin patch should be worn for,	A) 24-48 Hours B) 16- 24 Hours C) 8-10 Hours D) Don't know	19 62 45 124	7.6 24.8 8.0 49.6	0.000
12. Nicotine patch and inhaler are not recommended upto which age group?	A) <18 Years B) <10 Years C) <15 Years D) Don't know	51 54 42 103	20.4 21.6 16.8 41.2	0.009
13. Acute Lethal dose of nicotine is,	A) 20-30mg B) 40-60mg C) 80-100mg D) 30-50mg	27 105 65 53	10.8 42.0 26.0 21.2	0.093

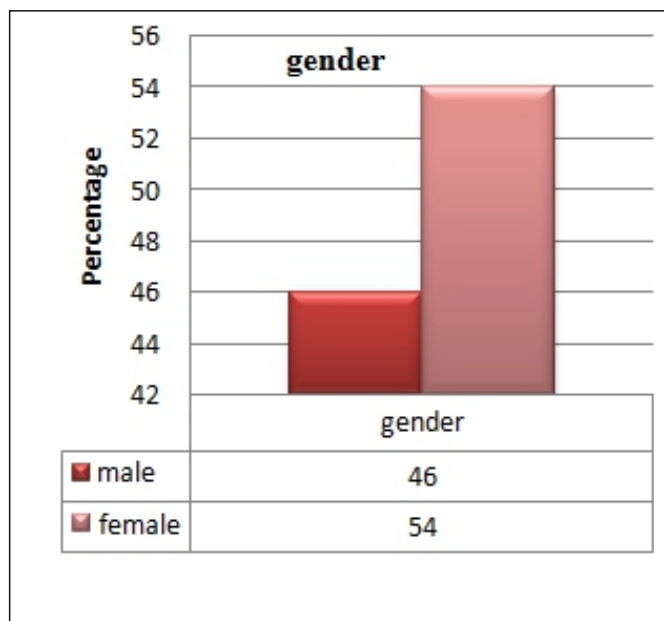
14. NRTs have the potential to increase the blood pressure by,	A) 0-5mmhg B) 5-10mmhg C) 10-15mmhg D) Don't know	28 60 52 110	11.2 24 20.8 44.0	0.000
15. Hesitation towards recommending NRTs for smoking cessation to patients is due to,	A) Lack of knowledge about NRTs B) NRTs are not helpful to quit smoking C) NRTs have hazardous side effects D) all of the above	193 20 21 16	77.2 8.0 8.4 6.4	0.211
16. Would you recommend a strict legislation on tobacco use in the public?	A) YES B) NO	220 30	88.0 12.0	0.147
17. If Yes,	A) If no B) Ban on public use of tobacco C) Increase price of tobacco products D) Increase the size of warning labels on the tobacco products E) All of the above	28 103 4 4 111	11.2 41.2 1.6 1.6 44.4	0.043
18. Should Smoking Cessation Education be a part of the core curriculum of the basic training of all health professionals?	A) Yes B) No	244 6	97.6 2.4	0.044

Table 1 : p≤0.05 significant, p≤0.01 highly significant

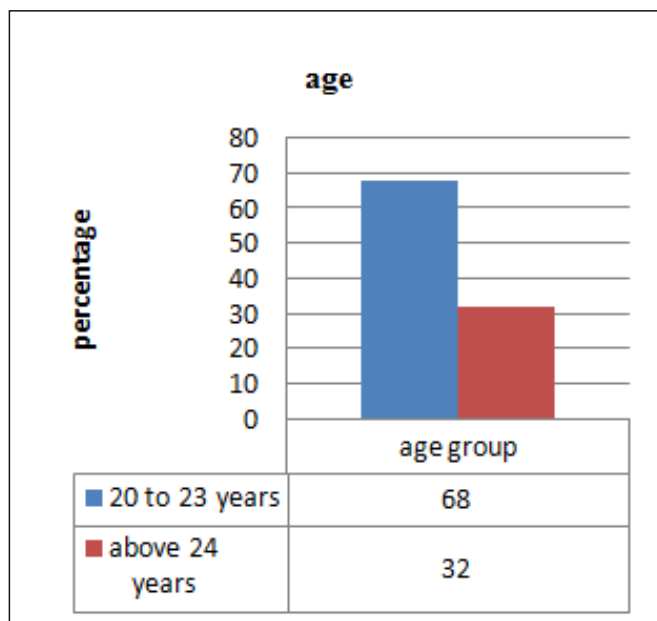
Questions	response	n	%	p-value
19. Do you come across patients with tobacco habits.	A) Yes B) No	243 7	97.2 2.8	0.25
20. Are you aware Of tobacco cessation education programme?	A) Yes B) No	235 15	94.0 0.6	0.589
21. Do you provide patient with tobacco cessation advise.	A) Yes B) No	237 13	94.8 5.2	0.553
22. Which tobacco cessation method do you prefer to recommend.	A) Nicotine replacement therapies B) Self quitting method C) pharmacological methods	125 122 3	50 48 1.2	0.225
23. Do you follow up or keep a record of these patients.	A) Yes B) No	133 117	53.2 46.8	0.963
24. Can Nicotine Replacement Therapies (NRTs) double the chance of success in quitting the habit of smoking?	A) Yes B) No	198 52	79.2 20.8	0.482
25. Do you have adequate knowledge about NRTs.	A) Yes B) No	89 161	35.6 67.4	0.318
26. Nicotine Replacement Therapy (NRT) is designed to use for,	A) 12 Weeks B) 4 Weeks C) Don't know D) 16 Weeks	46 28 135 41	18.4 11.2 54.0 16.4	0.001
27. Which product is absorbed faster ?	A) Nicotine Skin Patch B) Nicotine Gum C) Nicotine Nasal Spray D) Don't know	60 41 66 83	24.0 16.0 26.0 33.0	0.229
28. How much dose of nicotine gum should be advised to a heavy smoker?	A) 4mg B) 6mg C) 8mg D) Don't know	28 58 49 123	8.0 23.2 19.6 49.2	0.006
29. Nicotine skin patch should be worn for,	A) 24-48 Hours B) 16- 24 Hours C) 8-10 Hours D) Don't know	19 62 45 124	7.6 24.8 8.0 49.6	0.000
30. Nicotine patch and inhaler are not recommended upto which age group?	A) <18 Years B) <10 Years C) <15 Years D) Don't know	51 54 42 103	20.4 21.6 16.8 41.2	0.009
31. Acute Lethal dose of nicotine is,	A) 20-30mg B) 40-60mg C) 80-100mg D) 30-50mg	27 105 65 53	10.8 42.0 26.0 21.2	0.093
32. NRTs have the potential to increase the blood pressure by,	A) 0-5mmhg B) 5-10mmhg C) 10-15mmhg D) Don't know	28 60 52 110	11.2 24 20.8 44.0	0.000

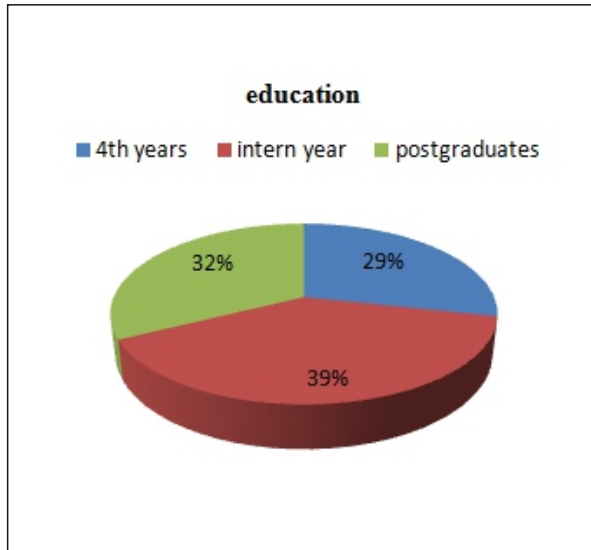
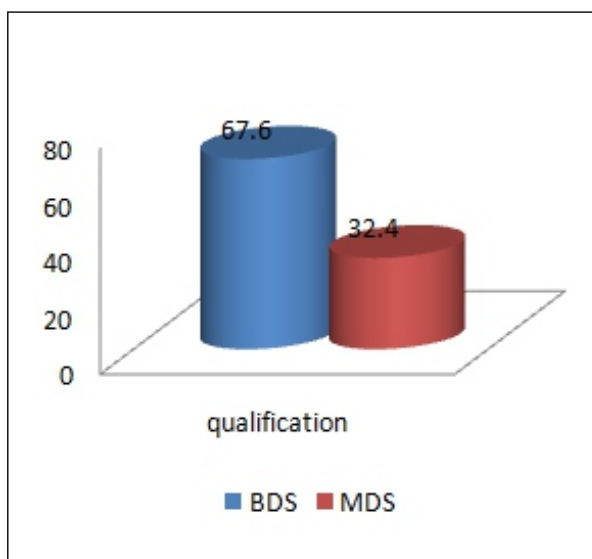
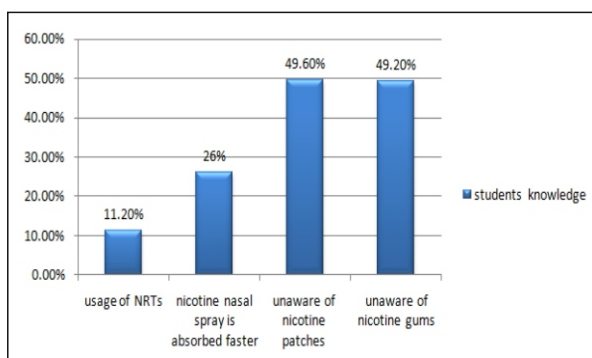
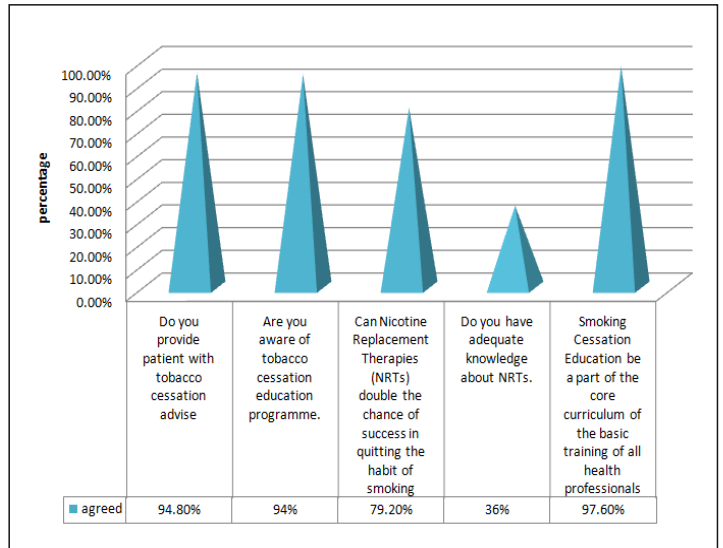
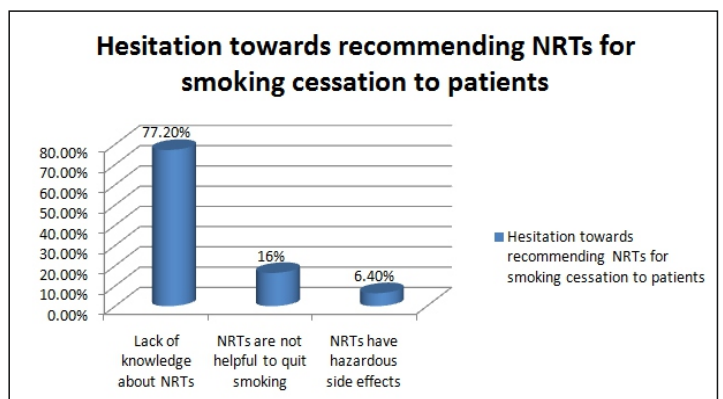
33.ÂHesitation towards recommending NRTs for smoking cessation to patients is due to,	A)Lack of knowledge about NRTs B) NRTs are not helpful to quit smoking C) NRTs have hazardous side effects D) all of the above	193 20 21 16	77.2 8.0 8.4 6.4	0.211
34.ÂWould you recommend a strict legislation on tobacco use in the public?	A)YES B)NO	220 30	88.0 12.0	0.147
35.ÂIf Yes,	A)If no B) Ban on public use of tobacco C) Increase price of tobacco products D) Increase the size of warning labels on the tobacco products E) All of the above	28 103 4 4 111	11.2 41.2 1.6 1.6 44.4	0.043
36.ÂShould Smoking Cessation Education be a part of the core curriculum of the basic training of all health professionals?	A)Yes B) No	244 6	97.6 2.4	0.044

Graph 1: gender distribution



Graph 2: percentage distribution of students based on their age



Graph 3:percentage distribution of students based on their academic level**Graph4 :percentage distribution of students based on their qualification****Graph 5: percentage distribution of students knowledge about tobacco cessation methods****Graph 6: percentage distribution of students attitude towards tobacco cessation measures****Graph 7: percentage distribution of students hesitation towards recommending NRT.**

There was a significant association seen in response to the smoking cessation education programme to be a part of the core curriculum. Only 8% of the students believed that 4mg of nicotine gum should be given to a heavy smoker and there was a significant association seen. 11.2% aware that about nicotine replacement therapies can be used for 4 weeks and 24.8% knew that nicotine skin patch could be used for 16 to 24 hours, as well as there was a highly significant association seen in respect to age, qualification and academic level.(table1)

Discussion

The Dental office provides an excellent setting for providing tobacco cessation intervention services. Dental patients are particularly more aware, quick to understand health messages during every dental visits, & oral effects of tobacco use which ultimately provide strong motivation for tobacco users to quit. Hence every dentist should always be ready and prepared to intervene patients who visit their dental office. There are 5 major steps (the "5 As") to intervention in the primary care setting. It is important for the Dental care

provider to "Ask" the patient if he or she uses tobacco,"Advice" him or her to quit, "Assess" willingness to make a quit attempt, "Assist" the patient in making a quit attempt and "Arrange" for follow-up contacts to prevent relapse.¹⁴

An earlier survey on counselling among dental surgeons had felt that giving advice or information about tobacco cessation was the responsibility of the dentist in order to persuade patients to quit tobacco and majority were also willing to receive formal training towards tobacco cessation and intervention strategies (Ajwani et al., 2001). Our survey however found that only half of them actually enquire about the tobacco use of their clients. Data from around the world suggests that upto half of all dental surgeons advise their patients and suggest methods to quit tobacco (Dolan et al., 1997; John et al., 1997; Warnakulasuriya et al., 1999; Campbell et al., 2001).¹⁵

Similarly, in line with other studies, only 53.2% respondents in our study maintained records or advocated tobacco cessation practices among their clients similar to Severson et al., 1990; Hastreiter et al., 1994; Tomar et al., 1996.¹⁶

In the present study Doctors were aware of behavioral methods of tobacco cessation and only about 35.6% aware of different forms of Nicotine Replacement therapy. With regard to medications, only a 1.2% was aware of pharmacotherapy, reflecting the urgent need to sensitize health professionals on the different modalities of tobacco cessation similar to Murthy et al., 2010.¹⁷ It would certainly benefit patients by improving cessation rates among them. Almost 16% of them think that nicotine replacement therapy are not helpful in quitting smoking along with 6.40% believe in the adverse effects of using nicotine gums contradictory to omolara guti et al study.(graph 7)

The low mean score observed for 'belief in effectiveness' indicates that respondents have low confidence in the fact that tobacco counselling offered in the dental office can have an impact on patients' quitting. This rather low perception of effectiveness follows the general trend reported in few literature. These responses suggest that many students may still be sceptical about the extent to which tobacco cessation counselling is effective in helping patients to quit. Moreover, more than 80 percent of the respondents felt their time could be better utilized on other things.

94.8% advise patients with tobacco cessation activities similar to omolara guti et al. The results of this study indicate that many dental students participating in the survey did not have prior training in tobacco control and many did not provide advice about nicotine replacement therapy. In addition, patient expectations do not create a demand for these services

The inclusion of smoking cessation training in the dental curriculum also becomes paramount if smoking cessation behaviour in dental practice is to be improved and almost 250 (97.2%) respondents also felt that tobacco cessation training is an important part of Dental curriculum similar to karbhari salman et al study.

Ehizele et al. reported lack of training as a barrier to providing cessation services among dental students. The results of our study are similar and indicate a lack of training opportunities in smoking cessation and prevention as a barrier to providing cessation services. Inclusion of cessation in the dental school curriculum and availability of continuing education in tobacco intervention are very important and should be encouraged among oral health care practitioners to enable them have up-to-date information and equip them to play their role effectively in the overall smoking cessation and prevention drive. There is, therefore, a need to provide such training as the respondents are willing to undergo it. The training will need to be didactic, practical, and relevant within the context of the dentist's day-to-day running of the practice.

Conclusion

The students from our study demanded the establishment of a Tobacco documentation centre by institutions, so that they get proper training about the cessation techniques. Researchers have posed the need for implementing professional training for medical and dental students in tobacco-cessation counselling techniques.

It also suggested that a positive attitude towards smoking cessation among professionals, does not always lead to good practice. This may be due to certain barriers faced while implementing the available knowledge and translating the positive attitude towards actual practice in the clinical scenario. Further studies includes multiple institutes will provide more insight on organizational practice of tobacco cessation interventions in India. As future role models, it is essential that smoking cessation counselling be embedded in the dental curriculum, but so that they may promote the importance of being tobacco free in the wider population.

Recommendations

Two things are needed to move forward in developing a national programme in training and certification. Firstly, leaders in the field of tobacco control, and more specifically experts in the area of treating tobacco dependence, need to embrace the concept. Secondly, funding needs to be obtained to support development and early implementation of the programme. Possible funding sources include government agencies, foundations, employer groups, consortia of managed care organisations, the health insurance industry, voluntary health agencies and pharmaceutical companies.

National health policy of government of india has set the target of relative reduction in prevalence of current tobacco use by 15% by 2020 and 30% by 2025. Hence such tobacco cessation interventions can create a huge difference for improving the health care in India.

Reference:

1. Reddy KS, Gupta PC. Report on Tobacco Control in India. New Delhi, India: Ministry of Health and Family Welfare; 2004 [cited: 15/12/2015]. Available from: http://www.who.int/fctc/reporting/Annex6_Report_on_Tobacco_Control_in_India_2004.pdf.
2. Preber H, Bergstrom J. Effect of smoking on periodontal healing following surgical therapy. *J Clin Periodontol*. 1990;17:324-328.
3. David Albert, DDS, MPH, Angela Ward, BA, RDH, Kavita Ahluwalia, DDS, MPH, and Donald Sadowsky, DDS, MPH, PhD, Addressing Tobacco in Managed Care: A Survey of Dentists' Knowledge, Attitudes, and Behaviors, June 2002, Vol 92, No. 6 | *American Journal of Public Health*.(1997 to 1001)
4. . Mirbod SM, Ahing SI. Tobacco-associated lesions of the oral cavity: Part II. Malignant lesions. *J Can Dent Assoc* 2000; 66(6):308-11.
5. Are Nicotine Replacement Strategies to Facilitate Smoking Cessation Safe? Are Nicotine Replacement Strategies to Facilitate Smoking Cessation Safe? October 2003, Vol. 69, No. 9 *Journal of the Canadian Dental Association*
6. Chassin MR, Galvin RW. The urgent need to improve health care quality. *Institute of Medicine National Roundtable on Health Care Quality. JAMA* 1998;280:1000-5.
7. Downloaded from <http://tobaccocontrol.bmj.com/> on December 9, 2016 - Published by group.bmj.com Quality improvement and accountability in the treatment of tobacco dependence: the need for a national training and certification programme, *Tobacco Control* 2000;9:355-358..
8. Sahoo Saddichha, Dorothy P Rekha, Basanagouda K Patil, Pratima Murthy, Vivek Benegal, Mohan K Isaac, Knowledge, Attitude and Practices of Indian Dental Surgeons Towards Tobacco Control: Advances towards Prevention, *Asian Pacific Journal of Cancer Prevention*, Vol 11, 2010, 939-942

9. Reddy KS, Gupta PC (2004). Tobacco control in India. New delhi: ministry of health and family welfare, Government of India, 2004.
10. Richmond RL (1999). Physicians can make a difference with smokers: evidence-based clinical approaches. Presentation given during the symposium on smoking cessation at the 29th world conference of the IUATLD/UICTMR and global congress on lung health, Bangkok, Thailand, 23-26 November 1998. International union against tuberculosis and lung disease. *Int J Tuberc Lung Dis*, 3, 100-12.
11. Tessier JF, Thomas D, Nejari C, et al (1995). Attitudes and opinions of French cardiologists towards smoking. *Eur J Epidemiol*, 11, 615-20.
12. J. Vanobbergen, P. Nuytens, M. van Herk and L. De Visschere Dental students' attitude towards anti-smoking programmes: a study in Flanders, Belgium. *Eur J Dent Educ* 2007, page1 – 7
13. Downloaded from <http://thorax.bmj.com/> on January 13, 2017 - Published by group.bmj.com, *Thorax* 1998;53 (Suppl 5, Part 1):S3-S7
14. Karbhari Salman, Mohammed Azharuddin, R Ganesh Attitude of Dental Students Towards Tobacco Cessation Counseling in Various Dental Colleges in Tamil Nadu, India, *International Journal of Scientific Study* | July 2014 | Vol 2 | Issue 4 20
15. Warnakulasuriya KA, Johnson NW (1999). Dentists and oral cancer prevention in the UK: opinions, attitudes and practices to screening for mucosal lesions and to counselling patients on tobacco and alcohol use: baseline data from 1991. *Oral Dis*, 5, 10-4.
16. Severson HH, Eakin EG, Stevens VJ, et al (1990). Dental office practices for tobacco users: independent practice and HMO clinics. *Am J Public Hlth*, 80, 1503-5.
17. Murthy P, Saddichha S (2010). Tobacco cessation services in India: Recent developments and the need for expansion. *Indian J Cancer*, 47, 69-74.