

Knowledge, Attitude and Counselling practices related to tobacco usage among Dental surgeons and students in and around ACDS, Andhra Pradesh, India

Abstract

Aim: To assess the knowledge and identify tobacco related attitude and counselling practices among dental surgeons and students in and around ACDS. **Methodology:** A cross sectional study was conducted among 200 dental surgeons and students in and around ACDS. The sample was selected from the list through systematic random sampling technique. Data was collected by means of a structured closed ended questionnaire. **Results:** The participated total sample of the present study is 191. Among them dental surgeons were 76.4% and dental students 23.6%. Males were 36.1% and females 63.9%. Among the total sample tobacco users were 4.7%. Among tobacco users 77.8% were using smoking tobacco. The peer sources of influence for their habit were mainly self-bought (77.8%). 55.6% of the tobacco users reported college (Intermediate/BDS) as their starting place for smoking. Among the former smokers 60% said they quit the habit on doctor's advice. 80.6% of the total sample reported that they come across patients with tobacco use in college/practice. 86.4% felt responsible to counsel them. 46.1% of the total sample reported the main barrier for motivation as lack of awareness. **Conclusion:** More than 50% were not tobacco habit users. >50% of them reported they come across tobacco users in their practice and feels responsible to counsel them and discuss harmful health effects of tobacco with them. Lack of awareness is the main barrier they feel to motive them followed by feeling of losing the patient.

Key Words

Tobacco; counselling practices; dental

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INTRODUCTION

Past behaviour guides future responses through 2 processes. Well-practiced behaviours in constant contexts recur because the processing that initiates and controls their performance becomes automatic. Frequency of past behaviour then reflects habit strength and has a direct effect on future performance. Alternately, when behaviours are not well learned or when they are performed in unstable or difficult contexts, conscious decision making is likely to be necessary to initiate and carry out the behaviour. For this conscious decision making, one

needs assistance from family members, doctor and society. One such negative habit we come across is tobacco usage, where the prevalence rate of its usage is found to be more than 1 billion all over the world, 700 million males and 100 million females in developing countries like India.^[1] Particularly in India the deaths that can be attributed to its usage is expected to rise from 1.4% in 1990 to 13.3% in 2020.^[2] It is evident from many studies that smoking has considerable influence on oral health, cardiovascular diseases and lung diseases. Majority of them include discoloration of teeth and

Table 1: Baseline characteristics, dental surgeons and student's attitude towards tobacco use

Category	Number	Percentage
Gender		
Males	69	36.10%
Females	122	63.90%
Designation		
Students	146	76.40%
Dental surgeons	45	23.60%
Tobacco habit		
Yes	9	4.70%
No	177	92.80%
Former Smoker	5	2.62%
Peer Source of influence		
Friends	2	22.20%
Self bought	7	77.80%
Parents	0	0%
Relatives	0	0%
Place started smoking first		
College (inter/bds)	5	55.60%
House	1	11.10%
Other environment place	3	33.30%

Table 2: Knowledge regarding harmful effects of tobacco and practice of dental surgeons and dental students regarding tobacco usage among their patients

Knowledge regarding affects of nicotine on vital organs		
Spleen	6	3.14% %
Liver	61	31.90%
Heart	101	52.90%
Kidney	6	3.10%
All the above	13	6.81%
Not aware	4	2.10%
Come across patients with tobacco use in practice		
Yes	154	80.60%
No	37	19.40%
Feelings		
Responsible to counsel them	133	86.40%
Waste of time	20	13%
Lack of interest	1	0.60%
Discuss harmful affects		
Yes	135	87.70%
No	19	12.30%
Advise them to quit		
Yes	138	89.60%
No	16	10.40%

restorations, hairy tongue, smoker's melanosis, smoker's palate, oral candidiasis, periodontal disease, decrease in healing ability, leukoplakia, oral submucousfibrosis, oral cancer^[3] etc. Though many tobacco cessation intervention programs like nicotine patches and chewing gums, professional counselling etc. have been developed, their usage rate and knowledge among dental surgeons and students is not known. Surveys of dentists in the USA, Canada, New Zealand, Finland and the UK have consistently found that the majority of dentists

believe it is appropriate for them to counsel about tobacco use.^[4,5] Similarly in the only published Australian study located regarding dentists and smoking, only 2% of dentists surveyed in 1993 felt that a patient's smoking habits were not their business.^[6] At the same time in an Indian study 99% of them felt that it is important to include counselling practices to tobacco cessation in their daily practice.^[2] Today's students in all dental institutions are tomorrow's doctors. Keeping this in view the present study has been conducted to assess

Table 3: Knowledge and attitude to motivate the tobacco users, Barriers they feel to motivate them and success rate in quitting the habit of the tobacco users

Kind of advertisement to motivate them		
Using pamphlets and videotape	60	31.40%
Lecture to specific community or school	39	20.42%
Display of adverse effects of tobacco usage on the walls	49	25.70%
All the above	6	3.10%
Using pamphlets and videotape and Display of adverse effects of tobacco usage on the walls.	2	1.05%
Will not use any kind of advertisement	35	18.30%
Best method they feel to make the tobacco users quit		
Will power	130	68.10%
Cold turkey method	7	3.70%
Visualization	10	5.20%
Deep breathing	1	0.52%
Prescribing drugs like Champix (Vercincline)	4	19.90%
Prescribing Nicotex chewing gum	38	19.90%
Awareness regarding Tragerstrom test		
Yes	30	15.70%
No	161	84.30%
Barriers they feel to motivate them.		
Feeling of losing the patient	73	38.20%
Lack of awareness	88	46.10%
Uncomfortable talking to patient	25	13.1%
All the above	5	2.60%
Perceiving success in quitting their habit		
Yes	43	22.50%
No	30	25.20%
Sometimes	118	61.80%

Table 4: Knowledge of dental surgeons and students on tobacco cessation activities in India

Reporting of 'No Tobacco Day'	
May 31 st	52.4%
31 st April	36.6%
7 th April	3.1%
Others	7.9%
Ban on smoking in public places	
31 st April 2009	24.6%
2 nd October 2008	22.5%
31 st May 2008	20.9%
4 th Nov 2008	7.4%
Others	24.60%

the knowledge regarding tobacco cessation counselling practices among dental surgeons and students in and around ACDS, Andhra Pradesh.

MATERIALS & METHODS

The present cross sectional study was conducted among dental students of ACDS and dental surgeons who were practising towards north east direction of ACDS under which the main areas were Chennapur, Balaji Nagar, Yaprall, Thirumalgherry, Lal bazaar, etc. The sample was 200 dental surgeons and dental students. The lists of dental practitioners pertaining to the direction were obtained from the Indian Dental Association organization Deccan branch. A simple random sampling technique was used to select the clinics

from the list obtained. Data was collected by means of a structured closed ended questionnaire. To check the feasibility and validity of the questionnaire, it was pilot tested on samples that were included in the final sample. The first part of the questionnaire comprised of demographic details, the second part comprised regarding attitude of the dental surgeons and students towards tobacco usage, knowledge and practical implementation towards tobacco cessation counselling practices. Ethical clearance was obtained from ethical committee of Army College of Dental Sciences, Jawahar Nagar. Informed consent has been taken from dental surgeons and students by explaining them the purpose of the study.

RESULTS

Among 200 dental surgeons and dental students who were approached only 191 participated in the study. Therefore the total sample of the present study is 191. Among them dental surgeons were 76.4% and dental students 23.6%. Males were 36.1% and females 63.9%. Among the total sample tobacco users were 4.7% and former smokers were 2.6%. Among tobacco users 77.8% were using smoking tobacco and 22.2% smokeless tobacco. The tobacco users reported that the peer sources of influence for their habit were mainly self bought (77.8%) and few said friends (22.2%). 55.6% of the tobacco users reported college (Intermediate/BDS) as their starting place for smoking, 33.3% said other environmental places like parks and only 11.1% said as house. Among the former smokers 60% said they quit the habit on doctor's advice, 20% said on self motivation and 20% said both (Table 1). Most of the respondents in the study reported that Nicotine affects heart, 61% reported that it affects liver, 6% of them as kidney and 6% of them as spleen, 13% of them said all the above and 4% said they are not aware. 80.6% of the total sample reported that they come across patients with tobacco use in college/practice. Among them 86.4% felt responsible to counsel them, 13% felt waste of time and 0.6% said they are not interested. Among the 154 users who come across tobacco users in their college/practice 87.7% of them said they discuss harmful health effects of tobacco habits with their patients and 90% of them said they advise them to quit the habit (Table 2). Among the total sample approached (191), 31.4% of them said the kind of advertisement they preferred to motivate the tobacco users was using pamphlets and videotape, 20.4% said by giving lecture to specific community/school, 25.7% said by display of adverse effects of tobacco usage on the walls, 1% said by using both i.e., by using pamphlets and videotape and by display of adverse effects of tobacco usage on the walls, 3.2% said they use all the kinds of above said advertisements and lastly 18.3% said they will not use any kind of advertisement. 84.3% of the total sample reported that they are not aware of Fragerstrom test for Nicotine dependence and 15.7% said they are aware of it. Majority (68.1%) of them reported that will power of the patient is the best method advised to quit smoking, 19.9% said prescribing Nicotex chewing gum, 5.25% of them said visualization, 3.7% said cold turkey method, 2.1% said

prescribing drugs like Champix (Vercincline), 0.5% said deep breathing and 0.5% said three of the above aspects i.e., will power, visualization and prescribing Nicotex chewing gum. 46.1% of the total sample reported due to lack of awareness, 38.2% reported feeling of losing the patient, 13.1% said they are uncomfortable talking to patient, lastly 2.6% said all the above. 61.8% said only sometimes they perceive success in quitting the habit of the tobacco users, 22.5% yes they perceive success and 15.7%. No they couldn't perceive success in quitting their habit at all (Table 3). Majority (52.4%) of the total sample reported that May 31st is considered as the "No Tobacco Day", 36.6% reported that it is on 31st April, 7.9% on 7th April, 3.1% on 6th April. Ban on smoking in public places was reported as 31st April 2009 by 24.6% of the total sample, 22.5% reported as 2nd October 2008, 20.9% as 31st May 2008, 7.4% as 4th Nov 2008 and 24.6% reported that they are not aware (Table 4).

DISCUSSION

The present cross sectional study had shown that more than 90% were not tobacco users which is nearer to the findings of Stuart J. Cohen *et al.*,^[7] Naveen Baratam, Joseph John *et al.*,^[8] and Kristin Zakariasen Victoroff *et al.*^[9] Therefore very less sample had genuinely accepted about their tobacco usage. Among the tobacco users majority were smokers which is similar to the study done by Sahoo Saddichha, Dorothy P Rekha *et al.*,^[2] which might be due to faster effect of smoking when compared to smokeless tobacco. Though friends, parents and relatives have been proved as a source of influence for this habit, majority (nearly 80%) acquired it by self. Though house and parks are the other starting places for smoking habit majority of them responded for college (>50%) as their starting place. According to the present study and an Indian study nicotine effects mostly heart and the lungs which are the vital organs of the body. Knowing this nearly 80% of the dentists and the dental students feel responsible to counsel, when they come across them in their practice or college. For motivating them majority (nearly 30%) said they use pamphlets and video tape in the present study where as in a study done by Naveen Baratam, Joseph John *et al.*,^[8] majority of them reported that they use display on their walls. In the present study nearly 60% of them reported that only sometimes they perceived success in quitting the tobacco user's habit when they came across. Majority of the dentists also stated that will power of the tobacco

user and prescribing nicotex chewing gum were the best treatment modalities to make them quit tobacco habit. Where as in a study done by Kerrie Clover *et al.*,^[10] 41% of the dentists disagreed with the statement that “Most tobacco users can stop if they want to”. Research says that treatment modalities change according to the habituated person’s nicotine dependence. In evolution many tests has raised for nicotine dependence but many of the dentists and dental students are not aware of this (Nearly 85% of the sample has reported in the present study that they were not aware of Fragerstrom test for Nicotine dependence). Though lack of interest and feeling of losing the patient were the main barriers in motivating the patient in an Indian study (Naveen Baratam, Joseph John *et al.*,^[8]) nearly 50% of the present study reported that lack of awareness is the main barrier to motivate them. Study by David A. Albert, Herb Severson, *et al.*,^[11] >60% indicated patient resistance, 75% amount of time, 76% lack of reimbursement, 69.3% concerns about effectiveness, 62.4% lack of educational materials, 72.4% lack of referral services as the barriers to motivate them. Kristin Zakariasen *et al.*,^[9] 71% of respondents anticipated that patient’s resistance might be a strong barrier to tobacco cessation motivation. Present study stated that dentist’s perceived knowledge about tobacco cessation interventions is low. This is similar with the study done by Trotter L *et al.*^[12] where in the dentists level of confidence in assisting their patients to give up smoking was notably low.

CONCLUSION

>50% were not tobacco habit users. Among 4.7% smokers >50% were using smoking. >50% reported their peer source of influence was self bought. Nearly 55.6% of them started their smoking habit at college. Majority of them reported that Nicotine effects Heart. >50% of them reported they come across tobacco users in their practice and feels responsible to counsel them and discuss harmful health effects of tobacco with them. Majority of them were using pamphlets and videotape to motivate them followed by displaying effects of tobacco usage on the walls. >80% were not aware about the Fragerstrom test for Nicotine dependence. Majority (>60%) feel that will power is the best method followed by prescribing Nicotex chewing gum to quit smoking. Lack of awareness is the main barrier they feel to motive them followed by feeling of losing the patient. Lastly >60% of them

perceived success in quitting their habit only sometimes.

SUGGESTIONS AND RECOMMENDATIONS

Tobacco cessation counseling practice methods should be implemented in the dental curriculum. Counseling the patients should be a part of their curriculum and success rate should be monitored. Government implemented policies to ban tobacco usage should be encouraged and made aware to Dental students, Dental surgeons and to the public. The government should also follow a regulatory approach to educate the public.

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