

# Attitude of Dental Students to Tobacco Cessation Services

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## Abstract

**Objectives:** To assess the attitudes of Nigerian dental students towards tobacco cessation, and the perceived barriers limiting its practice.

**Methods:** A questionnaire survey was done using all the Nigerian final year dental students during the period of study (N=180)  
**Results:** Majority feel that dentists should routinely advice patients against tobacco smoking (95.5%). Despite the fact that 97.2% claim to routinely take history of tobacco use, only 47.4% counsel patients on how to quit smoking. Majority (86.4%) has never received any training on tobacco cessation and 84.1% agree that there is a need for such training. Lack of training was the reason commonly given for not counseling patients on tobacco cessation and a large percentage (84.1%) will like tobacco cessation techniques to be included in the dental curriculum.  
**Conclusion** Dental students can play an effective role in tobacco cessation if given appropriate special training.

## INTRODUCTION

Tobacco use is one of the most significant public health issues facing the world today. It is the single most important preventable risk to human health in developed countries and an important cause of premature death worldwide. Tobacco use causes approximately 5 million deaths worldwide each year <sup>1</sup> .and projected to cause nearly 450 million deaths worldwide during the next 50 years <sup>2</sup> .

The different forms of tobacco are cigarettes, pipes, cigars, clove, bidis and smokeless tobacco, the commonest form is cigarette smoking which is harmful to nearly every organ in human body. Environmental exposure to cigarette smoke pollution results in health hazards not only on smokers but also non smokers. In children, passively inhaled tobacco smoke increases incidence of asthma, lower respiratory tract infections, and middle ear effusions. There is an association between environmental tobacco smoke and risk of caries among children <sup>3</sup>

Tobacco use adversely affects oral health and dental care. It has been directly implicated in numerous oral morbidities, including oral and pharyngeal cancers, oral epithelia dysplasia, oral leukoplakia, stomatitis nicotina, gingival recession, gingival bleeding, soft-tissue changes <sup>4</sup> acute necrotizing ulcerative gingivitis, root caries, staining of teeth/dental restorations, halitosis, snuff dipper's lesions,

smoker's palate and congenital defects such as cleft lip and palate in children. Tobacco increases the risk of periodontal diseases, which includes bone and tooth loss. Failure of the osseointegration of dental implants, impaired oral wound healing and failure of periodontal therapy are the negative impacts of smoking on dental procedures. In addition, many smokers report a loss of taste sensation and/or salivary changes.

Tobacco use usually begins during adolescence, initiation also can occur during young adulthood <sup>5</sup> . Preventing smoking initiation and tobacco use among youths and young adults is vital to reducing tobacco use globally. The prevalence of tobacco smoking among Nigerian youth <sup>6</sup> is 18.1 and 13.9 among senior executives <sup>7</sup> The focus of World No Tobacco Day year 2005 was on the role of health professionals in tobacco control. Health professionals have a critical role in reducing tobacco use; even brief and simple advice from health professionals can substantially increase smoking cessation rates [[[8.]]] Therefore, one of the strategies to reduce the number of smoking-related deaths is to encourage the involvement of health professionals in tobacco-use prevention and cessation counseling.

Most tobacco-dependent smokers need help as only a few (1 out of 40) can quit without help per year <sup>9</sup> . Studies indicate that smokers are more likely to quit smoking permanently if they receive health professional assistance, behavioral

counseling, and pharmacologic treatment <sup>10</sup> .

Organized dentistry has recognized the role of oral health professionals in discouraging tobacco use <sup>11</sup> . Patients expect and are comfortable with receiving dental advice to quit tobacco use <sup>12</sup> . Interaction with dentist, a respected health care provider has a powerful influence and can be tailored to individual patient interests, conditions, and culture. Tobacco prevention and control are important because reducing tobacco use is essential in improving quality of life, preventing and treating many oral diseases.

A dental office visit provides an opportunity for dental professionals to point out the detrimental effects of tobacco use on oral and general health. Previous research on tobacco cessation in dental clinics indicated that pointing out oral lesions and directly relating them to the patient's tobacco use was a powerful motivator for initiating a cessation attempt <sup>13</sup> .

The dental office is an ideal setting for tobacco cessation services as preventive treatment services, oral screening and patient education always have been a large part of the dental practice. Repeated contacts and a longer duration of contact are often more easily provided in dental practice than in many medical care environments.

Dentists are in a unique position to give their patients specific, authoritative information concerning the adverse oral effects of tobacco use as they rendered frequent dental services to adult and adolescent smokers.

By delivering a strong 2- to 3-minute cessation message to smokers as part of routine care, health professionals can achieve quit rates of 15-20% <sup>14,15</sup> . However, many health professionals report they do not provide cessation counseling because they lack training and knowledge of how to integrate cessation counseling in their practice. <sup>16,17</sup>

Practising dentists know that advice about tobacco use should be given during dental appointments and indicate a desire to receive cessation training <sup>18</sup> . Collectively, the above-referenced studies not only highlight the impact of tobacco use on health and the role of oral health professionals in tobacco-use cessation, but also illustrate the need for appropriate cessation training of dental professionals entering practice as well as those currently in practice.

The objective of this survey is to assess the attitude of clinical dental students towards tobacco cessation promotion

in oral healthcare setting.

## MATERIALS AND METHODS

A cross sectional survey of all the final level dental students in the four dental schools presently graduating dentists in Nigeria was carried out using a pretested self administered questionnaire. Recruitment was voluntary. Prior to administration of questionnaire, the aim and nature of the study was explained to the participant and informed consent obtained. Students completed the questionnaire anonymously during normal class sessions.

The 35 itemed questionnaire contained both open and closed ended questions and assessed the students demographic variables, tobacco use, exposure to secondhand smoke, attitude to tobacco cessation services, present practice in the area of patients counseling on tobacco cessation and the perceived constraint against counseling, students' specific training on tobacco cessation and their knowledge of the effects of tobacco on oral health.

Data analysis was be done using SPSS version 13.0

## RESULTS

Response rate was 98.9% (180/182). Respondents were 52.8% male and 47.2% female, with mean age 25.4±3.0 years. Only 3.3% of respondents reported the use of tobacco and cigarette smoking is the only form reported. Majority (83.3%) of the smokers were males (TABLE 1). Many of the respondents (63.9%) reported exposure to secondhand smoke mostly in public places.

Figure 1

TABLE1-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Characteristics	Frequency	%
<b>Age group (years)</b>		
20-24	76	42.2
25-29	87	48.3
30-34	14	7.8
35-39	3	1.7
<b>Gender</b>		
Male	95	52.8
Female	85	47.2
<b>Tobacco use</b>		
Smokers	6	3.3
Non- smokers	174	96.7
<b>Location of Dental School</b>		
Benin-City	70	38.9
Ibadan	33	18.3
Ile-Ife	34	18.9
Lagos	43	23.9

Majority of the students (91.5%) feel that dentists serve as role models to their patients (FIG 1) and 95.5% think that it is proper for dentists to routinely advice patients against tobacco smoking (FIG2). Less than half (47.4%) of the students counsel patients on how to quit smoking despite the fact that 97.2% claim to routinely take history of tobacco use. Majority demonstrated good knowledge of effect of tobacco on oral health. Over 90% know that tobacco consumption can cause periodontal diseases, oral cancers and congenital abnormalities (TABLE 2).

Figure 2

FIG1: RESPONDENTS' VIEW ON WHETHER OR NOT DENTISTS ARE ROLE MODELS.

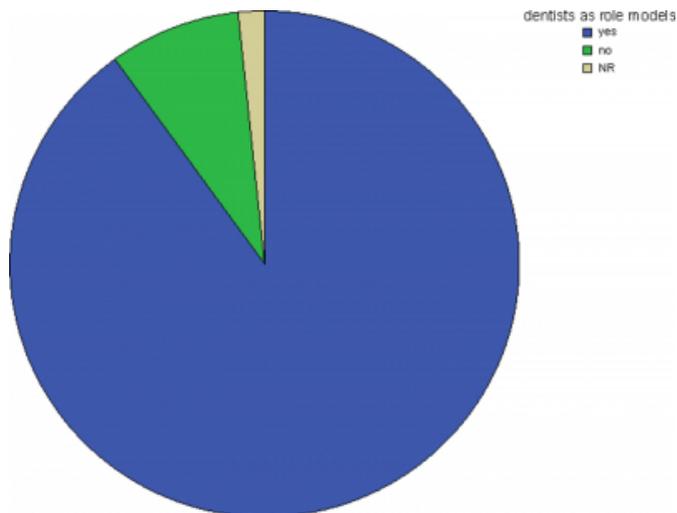


Figure 3

FIG 2:RESPONDENTS WHO FEEL IT IS PROPER TO ROUTINELY ADVICE PATIENTS AGAINST SMOKING

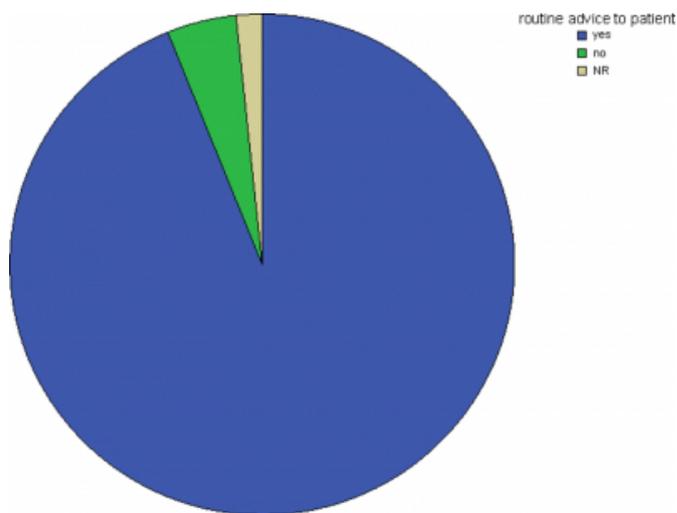


Figure 4

TABLE 2: RESPONDENTS' KNOWLEDGE OF EFFECT OF TOBACCO ON ORAL HEALTH

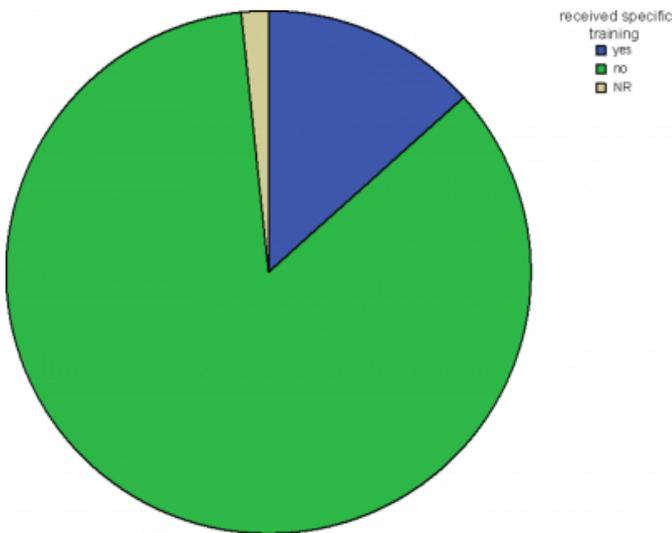
	YES	NO
Tobacco can cause periodontal diseases	96%	4%
Tobacco can cause oral cancer	98.3%	1.7%
Tobacco can cause congenital abnormalities	92.5%	7.5%

Many of the students (86.4%) have never received any

training on tobacco cessation (FIG 3) and 84.1% agree that there is a need for such training. About 61.4% have previous knowledge of nicotine replacement therapy. Lack of training was the reason commonly given for not counseling patients on tobacco cessation (FIG 4) and 44.9% reported inadequate counseling skills as the major constraint against counseling. A large percentage (84.1%) will like tobacco cessation techniques to be included in the dental curriculum.

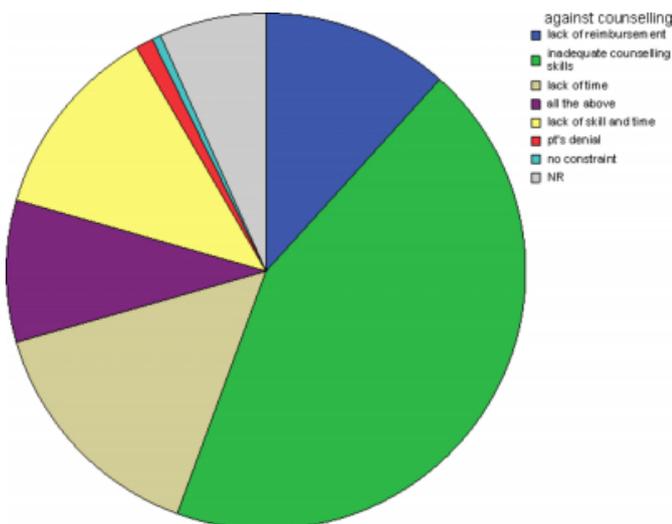
**Figure 5**

**FIG 3 RESPONDENTS WHO HAVE RECEIVED SPECIFIC TRAINING ON TOBACCO CESSATION**



**Figure 6**

**FIG 4: REASONS FOR NOT COUNSELLING PATIENTS**



**DISCUSSION**

This study revealed that inadequate counseling skill is the major constraint against tobacco cessation counseling. This is different from the result gotten from a previous study

carried out on incoming dental students where 71% anticipated that patient resistance could be a barrier to tobacco cessation promotion <sup>19</sup>. Another study uncovered a range of fundamental barriers limiting greater involvement in smoking cessation <sup>20</sup>. The key issues included a fatalistic and negative concept of prevention; perceived lack of relevance of smoking cessation to dentistry; patient hostility; and organizational factors within the practice setting <sup>20</sup>. A study on dentists and hygienists <sup>21</sup> identified potential barriers to delivering smoking cessation advice as lack of remuneration, lack of time and lack of training. In a study to investigate attitudes and opinions of the members of the British Dental Association towards implementing tobacco cessation strategies in dental practice, 68% of respondents agreed that offering patients advice about tobacco cessation was the duty of every dentist. The most common barriers to a successful tobacco cessation campaign were perceived to be the amount of time required, lack of reimbursement, lack of training, lack of patient education materials and lack of knowledge of available referral resources <sup>23</sup>

Many dental students are interested in receiving special training on tobacco cessation. This is similar to the study <sup>19</sup> that revealed that only 23% of incoming dental students were only slightly or not interested in receiving tobacco cessation training.

This study reveals where students are taught properly how to help their patients to quit tobacco use, they will be very effective because majority of them (97.2%) presently routinely take history of tobacco use from patients who present in the dental clinic. A study carried out in South Essex, an area in South East England <sup>20</sup> gave similar results. Majority reported asking their patients about smoking (90%) and recording this information in their clinical notes (75%). However, in this study, a relatively low number indicated active involvement in assisting smokers to stop (47.4%). In the England study, only few indicated active involvement in assisting smokers to quit (30%) or referring them for more detailed support (24%) <sup>20</sup>. The above result is the exact opposite of the one from the oxford study <sup>22</sup> where only 18% routinely recorded their patients' smoking status and only 37% believed dentists can be effective in smoking cessation.

Despite the fact that majority (61.4%) of the students have knowledge of tobacco cessation techniques and knowledge of effect of tobacco on oral health, The survey revealed that most respondents did not feel particularly well prepared to assist patients in quitting tobacco and 84.1% are willing to

undergo training because they favour the inclusion of tobacco cessation in to the dental curriculum. A study to assess the Tobacco cessation activities of UK dentists in primary care <sup>23</sup> also revealed such positive attitude. Most respondents did not feel particularly well prepared to assist patients in quitting tobacco, but 70% of respondents said they would be willing to cooperate with a campaign to inform all tobacco-using patients about the advantages of tobacco cessation.

### CONCLUSION

This survey reveals that although the dental students feel that they can play an effective role in counseling patients on tobacco cessation, they are presently limited by inadequate skill and will therefore require special training in that area.

### ACKNOWLEDGEMENT

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### ATTITUDE OF DENTAL STUDENTS TO TOBACCO CESSATION SERVICES

Dear respondents,

Please kindly complete this questionnaire with utmost sincerity as your response will be treated with strict confidentiality. Thank you.

- Age(years): \_\_\_\_\_
- Gender: Male  Female
- Location of University : Benin  Ibadan  Ile Ife  Lagos
- Do you smoke? Yes  No
- If yes when did you start? \_\_\_\_\_
- How many sticks per day? \_\_\_\_\_
- If no, why not? \_\_\_\_\_
- Do you chew tobacco products? Yes  No
- Are you exposed to secondhand smoke? Yes  No
- If yes where home  hostel  public places  dental clinic  Other (specify) \_\_\_\_\_
- Do you think smoking should be banned in all public places like restaurants, bars, discos, clubs e.t.c? Yes  No
- Do you think smoking should be banned in all enclosed places only? Yes  No
- Do you think tobacco sales to adolescent should be banned? Yes  No
- Do you think advertisement of tobacco should be prohibited? Yes  No
- Will you permit smoking in you dental office? Yes  No
- Do you believe that dentists serve as role models for their patients and the public? Yes  No
- Do you think dentists have a role in counseling patient about smoking cessation? Yes  No  If yes, why \_\_\_\_\_ If no, why? \_\_\_\_\_
- Do you think dentists should routinely advise patients who smoke to quit? Yes  No
- Do you think dentists who smoke are less likely to advise their patients to quit smoking than dentists who do not smoke? Yes  No
- Do you think the chances of patients quitting smoking are higher if a dentist advices them to quit? Yes  No
- Do you think dentists should get specific training on tobacco use cessation techniques? Yes  No
- Have you ever received any training on specific use cessation approach? Yes  No  If yes where? Classroom  special workshop  private study textbook/ journal  internet  Other(Specify) \_\_\_\_\_
- Do you routinely ask if a patient is a smoker when taking the history? Yes  No
- Do you counsel patients who are smokers on how to quit? Yes  No  If no, why not? \_\_\_\_\_
- Have you heard of nicotine replacement therapies? Yes  No

- Have you heard of the use of antidepressant for smoking cessation? Yes [ ] No [ ]
- Do you think tobacco use cessation technique and methods should be included in the dental curriculum? Yes [ ] No [ ]
- Can tobacco use cause periodontal disease? Yes [ ] No [ ]
- Can tobacco use cause oral cancer? Yes [ ] No [ ]
- Can tobacco use cause congenital abnormalities? Yes [ ] No [ ]
- What is the major constraint against counseling in dental practice?
- Lack of reimbursement [ ] Inadequate counseling skill [ ] Lack of time [ ] others (specify)  
\_\_\_\_\_

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