

Awareness About Effects Of Smoking On Oral Health Among Smokers - A Questionnaire Study

Research Article

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Abstract

Background: The adverse effects of tobacco smoking on oral health are well documented. This includes impaired wound healing, periodontal disease, oral mucosal lesions and also benign and malignant oral diseases.

Aim: The aim of the study was to assess the awareness about effects of smoking on oral health among smokers.

Materials and Methods: This survey was carried out among 100 out-patients reporting to Saveetha Dental College and Hospitals, Chennai, Tamil Nadu for treatment were selected randomly. Those who smoked at least 100 cigarettes in their lifetime and smokes till date were only included in the study. A questionnaire consisting of seven questions were administered to all the study participants. The filled-up questionnaires were then collected and the responses were subjected to statistical analysis using Statistical Package for Social Sciences (SPSS) software, Version 23. Frequency distribution and percentage were calculated.

Results: Among 100 study subjects, 65% were aware that smoking affects general health. However, only 43% and 45% were aware that it affects oral health and causes gum diseases respectively. 70% were aware that smoking causes staining of teeth and 50% were aware that smoking causes bad breath. 71% and 82% were aware that it causes oral lesions and oral cancer respectively.

Conclusion: The present study suggests that the smokers were aware about the effects of smoking on oral health. Even though the smokers were aware, they were continuing to smoke. These findings should alert the clinicians that in routine practice, health education and evidence based smoking cessation counselling programs should be incorporated for smokers.

Keywords: Smoking; Smokers; Innovative; Oral Health; Oral Cancer.

Introduction

The adverse effects of tobacco smoking on oral health are well documented. Numerous studies have shown that tobacco is a risk factor for several systemic diseases which includes lung cancer, respiratory diseases, and cardiovascular disease [1-3].

Also, tobacco use has been associated with gingival, oral mucosa and dental alterations such as discoloration of teeth and dental restorations, bad breath, taste and smell disorders, impaired wound healing, periodontal disease, short-term and long-term implant success, oral mucosal lesions such as smoker's melanosis and smoker's palate, potentially malignant lesions and oral cancer

[4-5].

Gingivitis and periodontitis are the most common diseases of the oral cavity. Gingivitis is a gum disease characterised by inflammation of the gums, which appear red and swollen and bleed easily during teeth brushing or a dental checkup [6]. Gingivitis is a mild inflammatory illness that is frequently asymptomatic, therefore it goes unnoticed. Plaque is the primary cause of gingivitis, although there are other exacerbating variables such as smoking, stress, genetic factors, systemic disorders, and hormone imbalances [7-14]. Periodontitis develops if gingivitis is not treated, and symptoms include increased pocket depth, recession, furcation involvement, mobility, and bone loss [15-23].

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Received: September 13, 2021**Accepted:** September 22, 2021**Published:** September 23, 2021

Citation: S Barani Shankar, Arvina Rajasekar. Awareness About Effects Of Smoking On Oral Health Among Smokers - A Questionnaire Study. *Int J Dentistry Oral Sci.* 2021;8(9):4615-4619. doi: <http://dx.doi.org/10.19070/2377-8075-21000940>

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Our team has extensive knowledge and research experience that has translated into high quality publications [24-43]. Even though the negative effects of smoking on oral health has been well established, only few studies assessing the knowledge and awareness of such effects among dental patients are available. [5, 44-48]. Moreover, most of the existing studies have focused on oral cancer, and none has examined other oral health aspects. Therefore, the aim of this study was to assess the awareness about the effects of smoking on oral health among smokers.

Materials and Methods

This survey was carried out among 100 out-patients reporting to Saveetha Dental College and Hospitals, Chennai, Tamil Nadu for treatment were selected randomly. Those who smoked at least 100 cigarettes in their lifetime and smokes till date were only included in the study. Each participant signed a consent form acknowledging their voluntary and non-prejudicial participation in the study and the protocol was reviewed and approved by the Institutional Ethical Committee.

A questionnaire consisting of seven questions to assess the awareness about the effects of smoking on oral health were administered to all the study participants. The questionnaire was translated in regional language and distributed to the participants. The filled-up questionnaire forms were then collected and the responses were subjected to statistical analysis. The results obtained from the survey were tabulated, analysed and represented graphically using Statistical Package for Social Sciences (SPSS) software, Version 23. Frequency distribution and percentage were calculated.

Results

Among 100 study subjects, 65% were aware that smoking affects general health and 35% were not aware. (Figure 1) However, only

43% and 45% were aware that it affects oral health and causes gum diseases respectively. 57% and 55% of the participants were not aware that smoking affects oral health and causes gum diseases respectively. (Figure 2, Figure 3) 70% were aware that smoking causes staining of teeth and the remaining 30% were not aware that smoking causes staining of teeth. (Figure 4).

50% were aware that smoking causes bad breath and the remaining 50% were not aware that it causes bad breath. (Figure 5) 71% and 82% were aware that it causes oral lesions and oral cancer respectively. However, 29% and 18% of them were not aware that it causes oral lesions and oral cancer respectively. (Figure 6, Figure 7).

Discussion

The present survey was done to assess the awareness about effects of smoking on oral health among smokers.

Research has proved that smoking has a negative effect on oral health. Smoking has been established as a significant risk factor for periodontal diseases. Tobacco reduces the blood supply to the gingiva and eventually leaves them prone to microbial attack and hence resulting in bacterial infection.

The present study assessed the awareness on effects of smoking on oral health among smokers. Among 100 study subjects, 65% were aware that smoking affects general health. However, only 43% and 45% were aware that it affects oral health and causes gum diseases respectively. This is in contrast with previous studies by Lung et al in the United Kingdom which reported the level of awareness of only 7%, a study in Nigeria by Nwhator et al with 2.2% and a study by Shetty *et al.*, [13] in Saudi Arabia which reported the level of awareness of 11.3%.

Also in the present study, 70% were aware that smoking causes

Figure 1. Pie chart showing the response given by the participants when asked if they were aware that smoking affects general health. About 65% of them answered yes and 35% of them answered no.

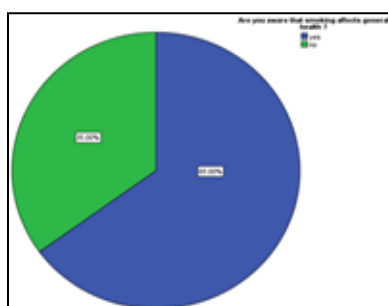


Figure 2. Pie chart showing the response given by the participants when asked if they were aware that smoking affects oral health. About 43% of them were aware and 57% of them were unaware.

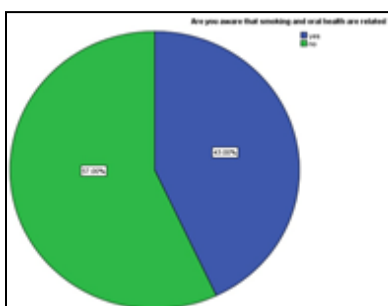


Figure 3. Pie chart showing the response given by the participants when asked if they were aware that smoking causes gum diseases. About 45% of them were aware and 55% of them were unaware of it.

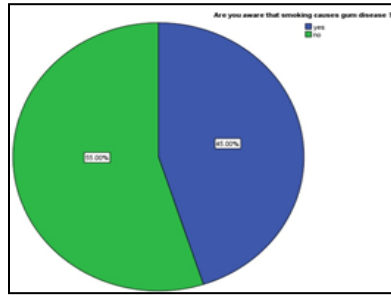


Figure 4. Pie chart showing the response given by the participants when asked if they were aware that smoking causes staining of teeth. About 70% of them answered yes and 30% of them answered no.

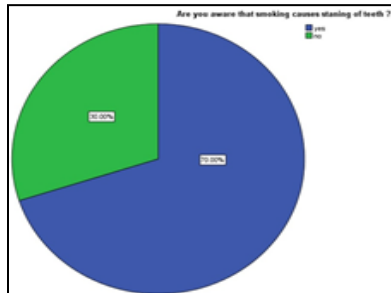


Figure 5. Pie chart showing the response given by the participants when asked if they were aware that smoking causes bad breath. About 50% of them were aware and 50% of them were unaware.

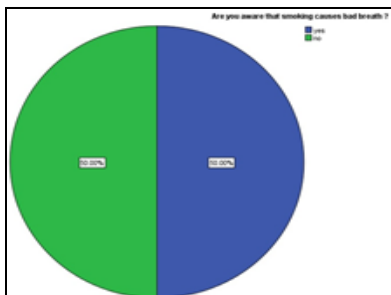


Figure 6. Pie chart showing the response given by the participants when asked if they were aware that the smoking causes oral lesions. About 71% of them answered yes and 29% of them answered no.

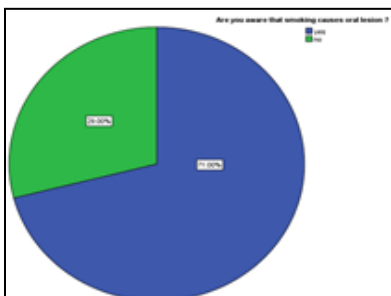
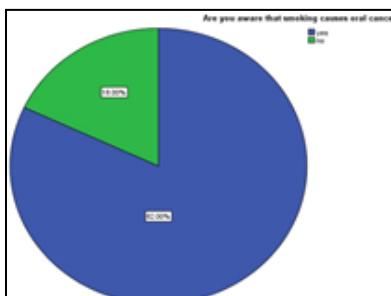


Figure 7. Pie chart showing the response given by the participants when asked if they were aware that smoking causes oral cancer. About 82% of them answered yes and 18% of them answered no.



staining of teeth. 50% were aware that it causes bad breath. 71% and 82% were aware that it causes oral lesions and oral cancer respectively. We also found out that 18% of the smokers were unaware that smoking could cause oral cancer despite the high prevalence of oral cancer worldwide. This is in accordance with the previous study by Muniandy *et al.*, who reported that 13% were unaware that smoking causes oral cancer. These findings emphasize that there is still a portion of the population to be educated and motivated with awareness programs.

Conclusion

The present study suggests that the smokers were aware about the effects of smoking on oral health. Even though the smokers were aware, they were continuing to smoke. These findings should alert the clinicians that in routine practice, health education and evidence based smoking cessation counselling programs should be incorporated for smokers.

Acknowledgement

The authors would like to acknowledge the help and support rendered by the Saveetha dental college and hospitals for their constant assistance with the research.

Funding

The present project is funded by

- Saveetha Institute of Medical and Technical Sciences
- Saveetha Dental College and Hospitals
- Saveetha University
- Sri Vijay Furniture, Puducherry

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