

Awareness, Perception and Knowledge About Halitosis Among Dental Students

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Abstract:

Background: Halitosis is an unpleasant breath odour that has a negative impact on self-confidence and with people's professional and social life globally Halitosis has been associated with psychiatric symptoms such as phobias, depression, substantial worry, and alterations in behaviour and can badly affect self-esteem, self-confidence, cause social and personal isolation, decrease the quality of life and may indicate the presence of a more severe disease The objective of the present study was to evaluate self-perception, knowledge, and awareness of halitosis among dental students.

Materials and Methods: A questionnaire based study was carried out among the undergraduate students 100 students were included in the study. The students were randomly selected from the two years of study, so as to have an equal distribution of each batch among the sample interviewed (n = 50 in each year of study). The questionnaire had 12 closed ended question on Google forms were circulated on social media platforms among the students. The questions related to knowledge of halitosis were given a score of 1 or 0 and accordingly the responses of the students were graded into poor, average and good.

Results: The response rate was 92% (92/100). About 26% of the respondents were males while 74% were females. Most participants (52 %) thought that the most frequent source of bad breath is tongue and (41%) stated that PDL pocket is the source. About (47%) participants claimed that periodontal therapy is the best treatment for halitosis and (32%) stated that identifying the systemic factor is a must for the treatment. While (45%) students considered Gas Chromatography to be the gold standard for diagnosing halitosis. No statistical difference was seen among the male and female knowledge of halitosis (p>0.1).

Key Word: Halitosis; Dental students; Knowledge.

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I. Introduction

Halitosis is an unpleasant breath odour that has a negative impact on self-confidence and with people's professional and social life globally [1]. The scientific terms used to describe halitosis are Fetor ex ore, fetor oris and stomatodysodia [2]. More than 50% population worldwide suffers from halitosis [3]. Although Halitosis is one of the common causes of dental visits with a prevalence rate of 33%, only a limited number of patients refer to dentists seeking for treatment [4]. Halitosis is caused by a variety of reasons including but not limited to periodontal disease, bacterial coating of tongue, systemic disorders and different types of food. Major reasons can be stated as poor oral hygiene, inappropriate denture cleaning, reduced saliva flow, use of tobacco in any form, advanced caries lesions, periodontal disease, mucosal ulcers and food lodgement [5,6]. The main compounds that lead to halitosis are Volatile Sulfur Compounds (VSCs) produced from protein degradation by gram-negative anaerobic bacteria, especially hydrogen sulfide, methyl mercaptan and dimethyl sulphide are commonly seen [7,8].

Halitosis has been associated with psychiatric symptoms such as phobias, depression, substantial worry, and alterations in behaviour and can badly affect self-esteem, self-confidence, cause social and personal isolation, decrease the quality of life and may indicate the presence of a more severe disease [9, 10, 11]. The effect of halitosis is particularly seen more among younger population. Several studies have addressed self-perceived halitosis among youth, their samples population included dental and non-dental university students. Since dentists are the first healthcare providers to whom the patients might contact, it is of utmost importance for the dental students to be aware of the cause, effect and the treatment of halitosis. The objective of the present

study was to evaluate self-perception, knowledge, and awareness of halitosis among dental students in a dental college in Maharashtra.

II. Material And Methods

A questionnaire based study was carried out among the undergraduate students of a Government Dental College Aurangabad, Maharashtra. Students studying in the 3rd and 4th year for the Degree of Bachelors of Dental Sciences in the Institute were included in the study.

Procedure methodology

100 students were included in the study. The students were randomly selected from the two years of study, so as to have an equal distribution of each batch among the sample interviewed (n = 50 in each year of study). The questionnaire used was framed for the purpose of the study, and content validation was done by review. The questionnaire had 12 closed ended questions on Google forms were circulated on social media platforms among the students. The questions related to knowledge of halitosis were given a score of 1 or 0 and accordingly the responses of the students were graded into poor, average and good.

Statistical analysis

The responses were compiled, computed and analyzed. Microsoft excel 2013 version was used for the same. Statistical analysis of the data was done using frequency and percentages.

III. Result

The response rate was 92% (92/100). About 26% of the respondents were males while 74% were females (figure 1). Mean age of the students was 21 years (range-20-22 years). Self-perception of halitosis was low (27%), there was statistical significance among the responses in males and females (figure 2), females were more aware of their halitosis ($p < 0.01$). Those who had halitosis noticed it about a year ago (63%). Most of the participants, (82%) had halitosis experienced the most on waking up in the morning (figure 3).

A larger percentage (78.1%) indicated noticing people with bad breath. Whereas (39%) participants agreed that they will warn if someone has bad breath (figure 3).

Most participants (52%) thought that the most frequent source of bad breath is tongue and (41%) stated that PDL pocket is the source. About (47%) participants claimed that periodontal therapy is the best treatment for halitosis and (32%) stated that identifying the systemic factor is a must for the treatment. While (45%) students considered Gas Chromatography to be the gold standard for diagnosing halitosis. No statistical difference was seen among the male and female knowledge of halitosis ($p > 0.1$).

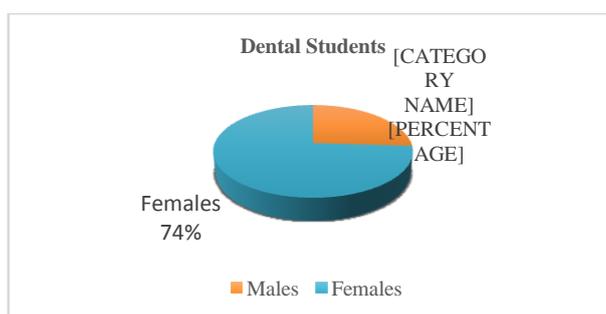


Figure-1-Total number of dental students

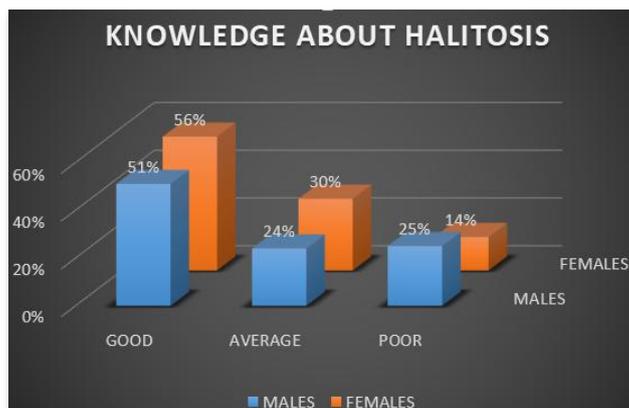


Figure 2-Knowledge about halitosis

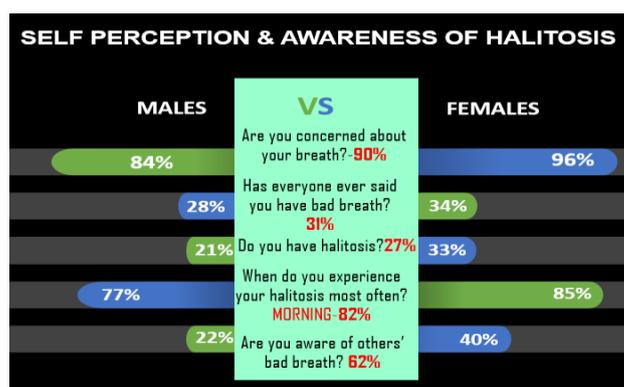


Figure 3- Self-perception and awareness of halitosis among dental students

IV. Discussion

Oral malodour is a significant issue among the general population. It can have psychologically traumatic effect that may become a social handicap. Self-perception is significant for diagnosing and controlling bad breath by seeking proper dental treatment [12]. In the present study, self-perception of halitosis was low (27%), there was statistical significance among the responses in males and females, females were more aware of their halitosis ($p < 0.01$). (Figure 1). The difference in reporting self-perception of halitosis between females and males was found to be statistically significant. According to the studies conducted in King Saudi University and University of Baghdad, 44% of males and 32% of females, reported the self-perception of malodour. [13,14] In another study conducted by Azizah Bin Mubayrik, et al (2019) the response rate was 89.1% (392/440). Self-perception of halitosis was low (21.4%), whereas a larger percentage (78.1%) indicated noticing people with bad breath [15]. The rate of self-perception of halitosis was relatively low among the respondents in this investigation which is similar to other Studies conducted by Bin Mubayrik, Azizah et al. in 2017 and Dr. Shah et al. in 2020 [15,16]. All these studies concluded that, there is a significant association in self-perception of halitosis based on gender difference. The results of this study about level of halitosis knowledge in students shows that 57% had a good knowledge. This is similar to the study conducted by Muhammad Arya Rizkianto et al (2020). The results of this study showed that the level of halitosis knowledge in pre-clinic students -57% had a proper knowledge and 43% had a poor knowledge. While clinical students have a 46% poor knowledge result and 54% with proper knowledge [17].

V. Conclusion

Halitosis was predominant among dental students. They may benefit by an awareness of the problem and encouragement to improve their own oral hygiene. The investigation revealed low self-perception and average knowledge regarding halitosis. Therefore, more efforts should be taken by the students to learn more about the aetiology, treatment a prevention of halitosis.

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