

Knowledge, Awareness and Management of Halitosis among Dental Students

J.Harshana Priya

Student – Intern

Thai Moogambigai Dental College and Hospital
Chennai, Tamil Nadu, India

A.Roshini

Student-Intern

Thai Moogambigai Dental College and Hospital
Chennai, Tamil Nadu, India

V.Hemamalini

Student – Intern

Thai Moogambigai Dental College and Hospital
Chennai, Tamil Nadu, India

Dr. Uma Sudhakar M.D.S PhD

Professor and Head of the Department of Periodontology

Thai Moogambigai Dental College and Hospital
Chennai, Tamil Nadu, India

Abstract:- The goal of this investigation was to explain the aetiological element, regularity data, prognosis and the therapeutic mechanical and chemical approach to halitosis. Oral malodour is a miserable aroma deriving from the tongue cavity, leading to anxiety and psychosocial embarrassment. Oral malodour is produced by volatile components which are produced because of pathological or non-pathological reasons. A patient with bad breath mostly refer the primary care for management with identification of aetiology, proper diagnosis and timely referrals certain steps are taken to create successful therapeutic approach. Oral malodour can be managed by if its aetiology can be identified correctly. The important role for treatment of halitosis is detection aetiology or determination its source by detailed clinical examination. Management may include simple measure such as scaling, instruction for oral hygiene such as brushing, tongue scraping and mouth rinsing.

I. INTRODUCTION

Bad breath (Halitosis) is a general phrase used to describe a malicious or offensive smell disgorges from the breath regardless either from oral or non oral sources.

Originates from two Latin words,

- Halitus – breath
- Osis – disease

Halitosis is a common complaint of one-third of the general population for social problem ^[1]. It's an unlikable state that's a source for awkwardness and messes up with your association. People don't acknowledge their problems. It's such a taboo for people to talk about such as some people with bad breath aren't even aware there's a problem ^[16].

The creation of bad breath is a multiphase and may involve both oral and non oral sources. Non- oral sources of smell would include pathological conditions such as nasal, gastrointestinal disturbances such as helicobacter pylori, laryngeal lesions, the pulmonary or upper digestive tract and example of an extra oral, blood bony order is cirrhosis of

liver. In this example, the odour is emitted via the lungs but its origin is from the liver. However, the most authorities seem to agree that the majority of bad breath problem derives from the oral cavity ^[3, 7].

II. MATERIALS AND METHODOLOGY

In this representative evaluation, 100 students are certain from Dr MGR University, Thai Moogambigai Dental College and Hospital, Chennai, Tamilnadu, India. An informative 25 questionnaire precise to the analysis was formulated to record all the necessary relevant particulars.

III. SAMPLE SIZE

A total number of 100 samples were recorded.

IV. INCLUSIVE SIZE

Students in the clinical year of undergraduate course (BDS) were included in the study.

V. EXCULSIVE STUDY

Students in the preclinical year of BDS and post graduate students.

VI. METHODS OF COLLECTION OF SAMPLE

Upon obtaining approval from the institutional ethical committee board, the students were informed about the study and their consent was obtained. Beside the direct enquiry of obtaining information, e- questionnaire was communicated with the help of Google forms and they were circulated via social media and email with a view of establish the knowledge, awareness and management level of halitosis among dental students.

VII. RESULT

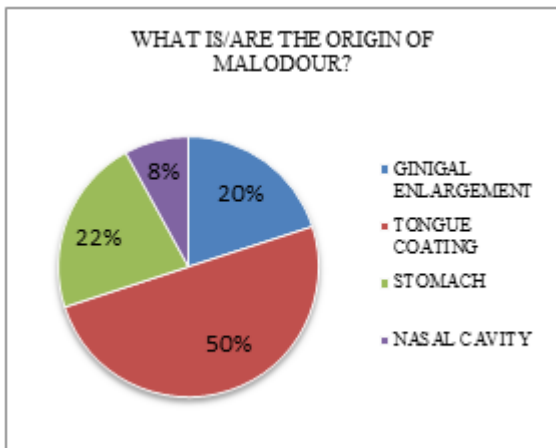
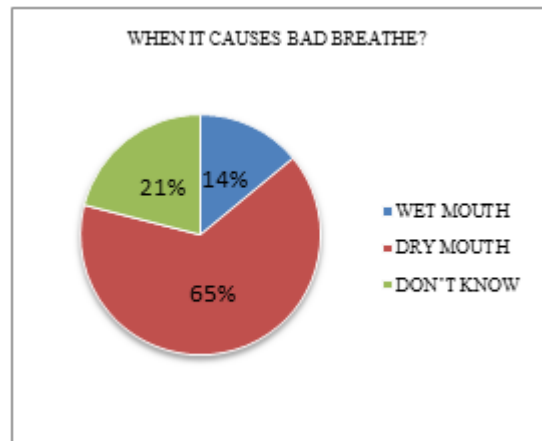
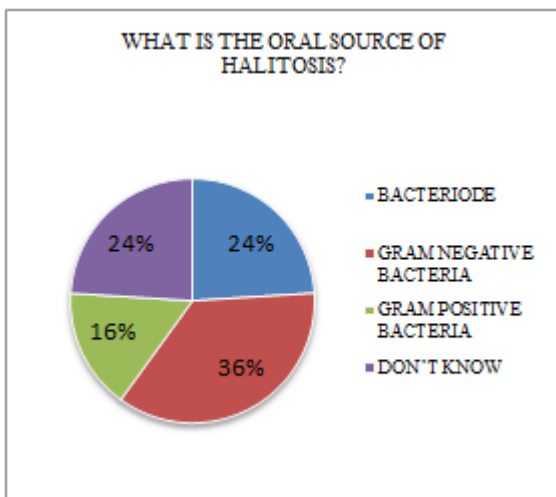


Fig 1:- 50% of the students revealed that bad breath is originated from tongue coating.



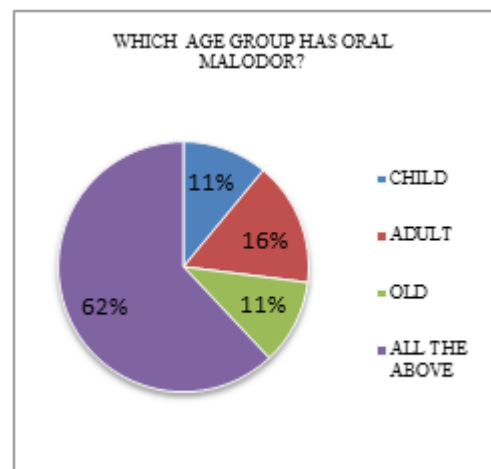
(Fig 04)

65% Students said that dry mouth can cause bad breath.



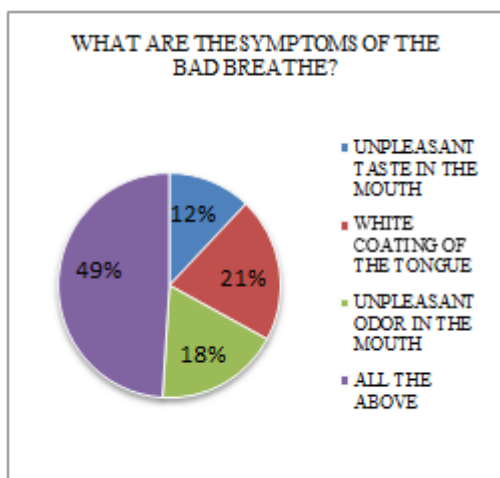
(Fig 02)

36% of students selected that the gram negative bacteria as the source of bad breath.



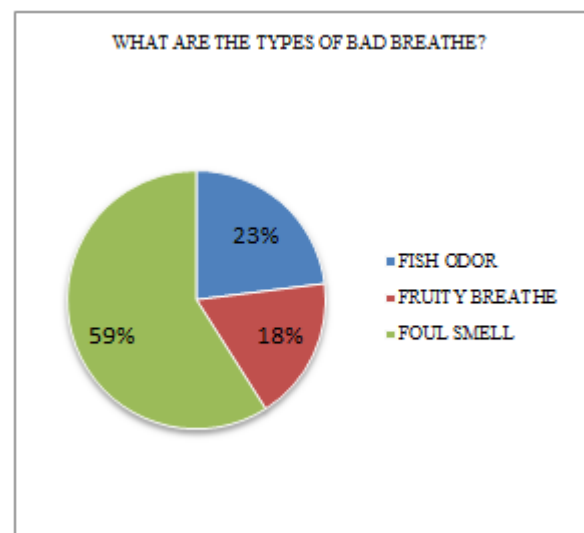
(Fig 05)

62% Of students said that all the age group has oral malodour.



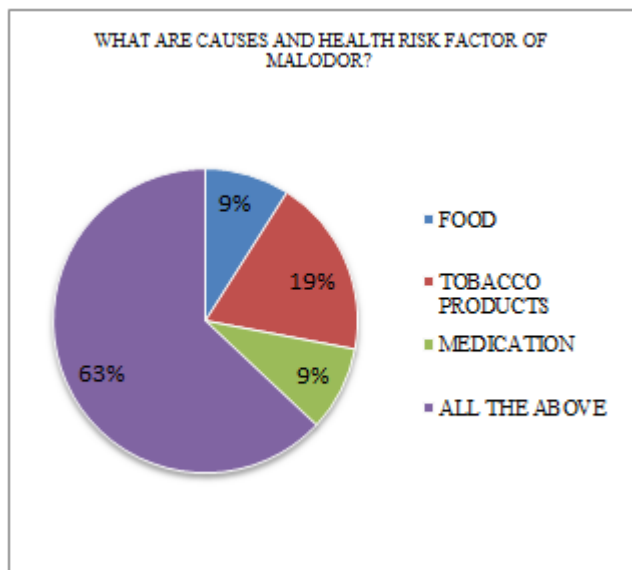
(Fig 03)

49% correctly choose all of the above that is symptoms of bad breathe.



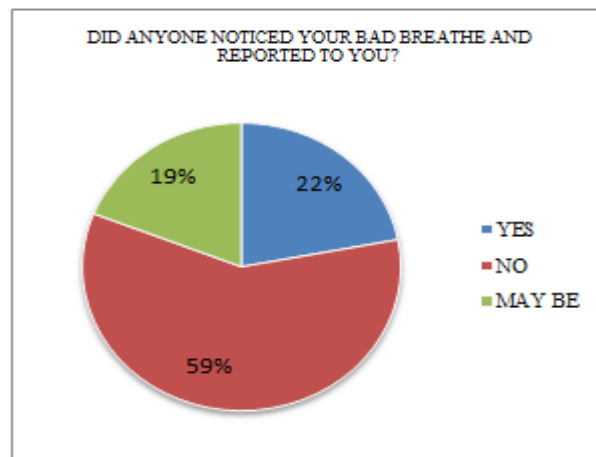
(FIG 06)

59% of students selected that the types of bad breathe is foul smell.



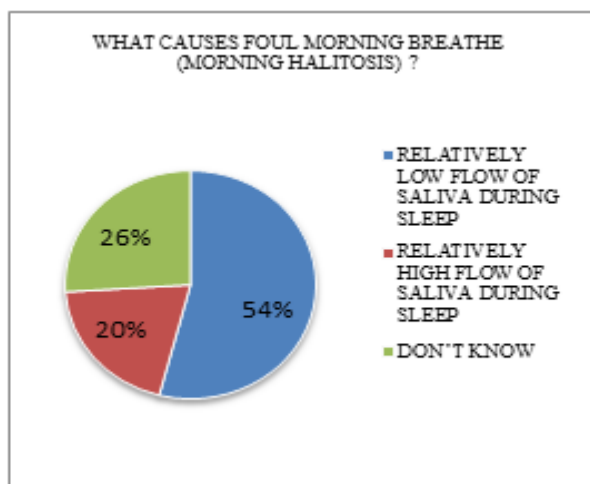
(FIG 07)

63% of students said that all the three categories are causes and health risk factor of malodour.



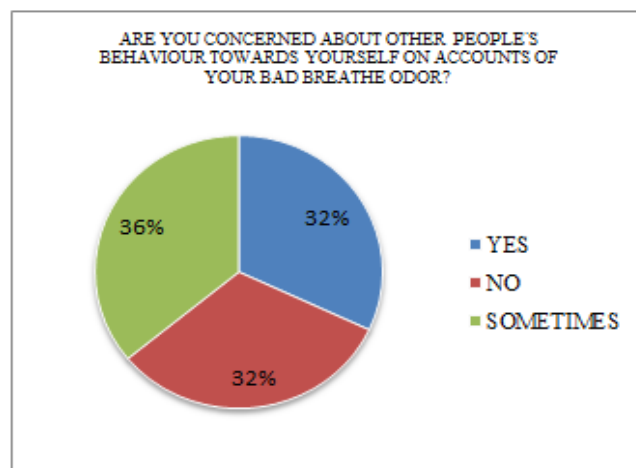
(FIG 10)

59% of people said that none of noticed their bad breathe and reported to them.



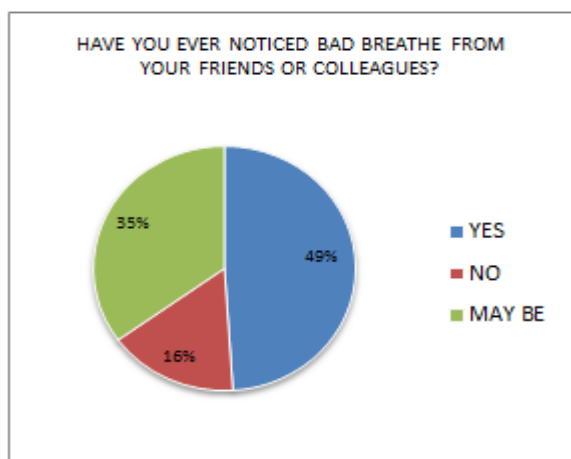
(FIG 08)

54% of participants selected that the low flows of saliva during sleep causes morning foul breathe.



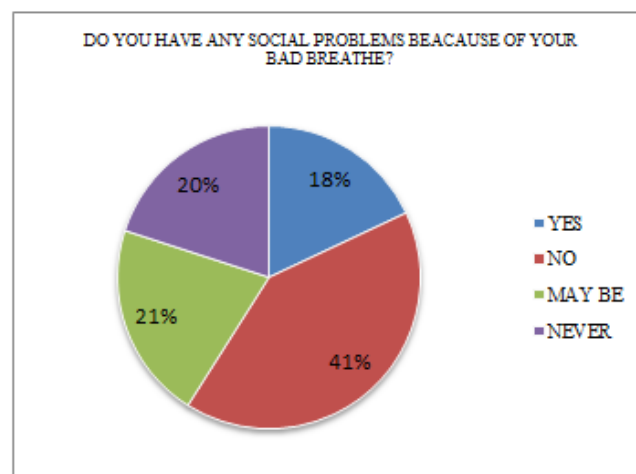
(FIG 11)

36% of students choose that they concerned about other people's behaviour towards their self on accounts of our bad breathe odor.



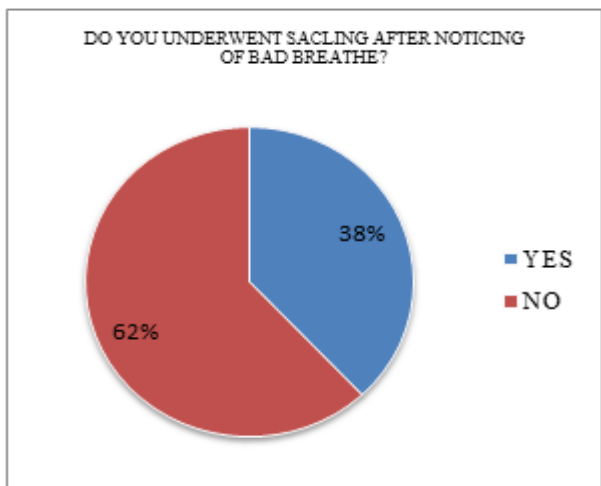
(FIG 09)

49% of students choose that they had noticed the bad from their friends or colleagues.



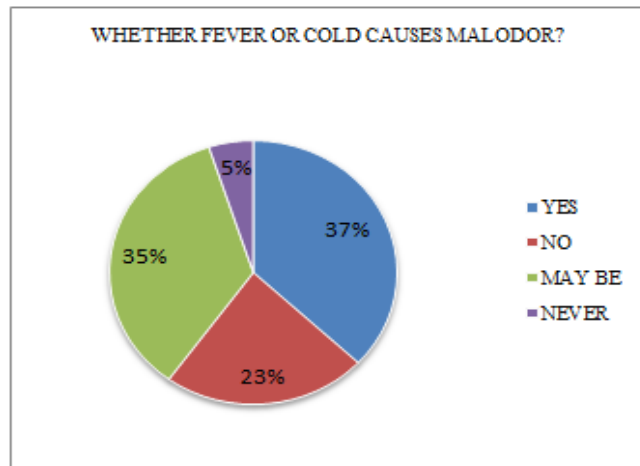
(FIG 12)

41% of students were chosen that they have social problems because of their bad breathe.



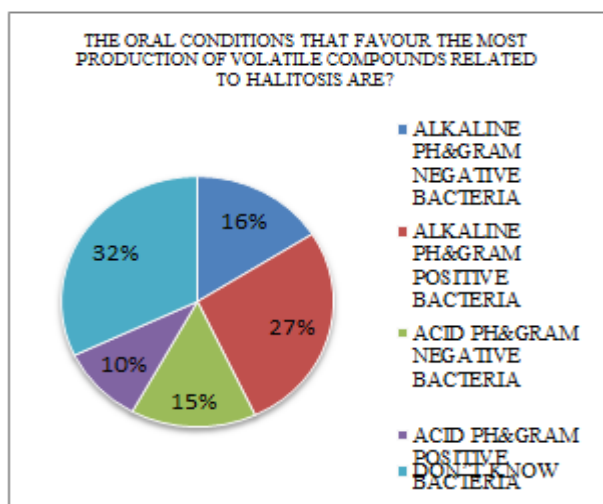
(FIG 13)

62% of students did not undergo scaling after noticing their bad breathe.



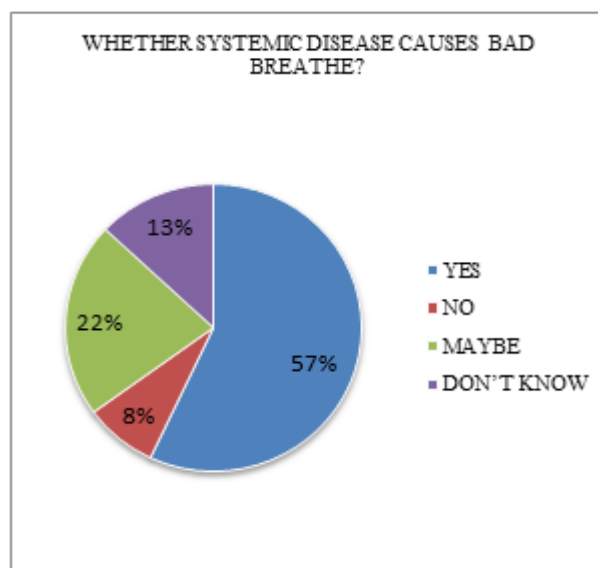
(FIG 16)

37% of participants said that fever or cold causes malodour.



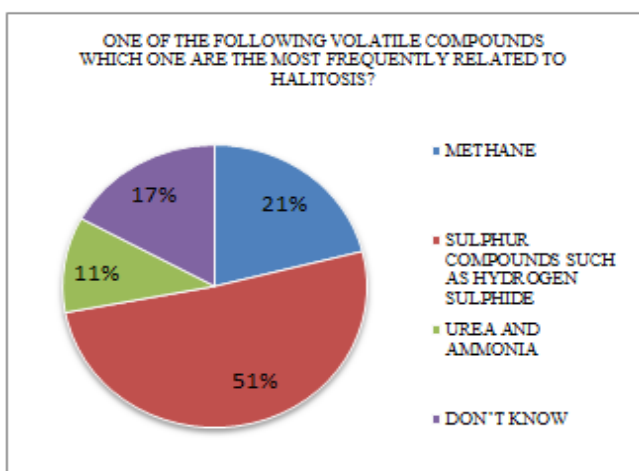
(FIG 14)

32% of students said that they don't have any knowledge about the oral conditions that favour the most production of volatile compounds related to halitosis.



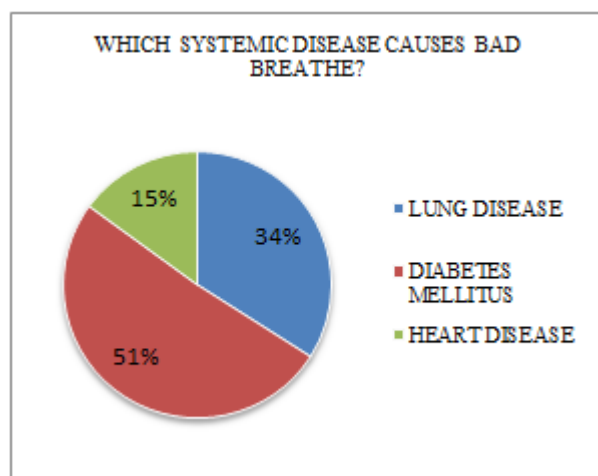
(FIG 17)

57% of students revealed that the systemic disease causes bad breathe.



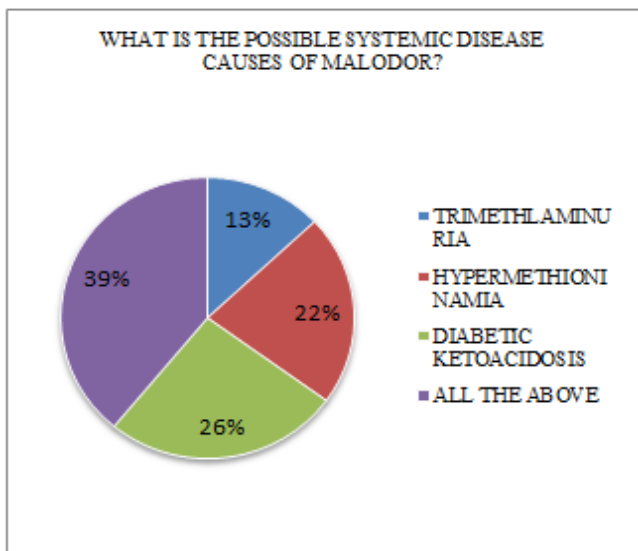
(FIG 15)

51% of students revealed that sulphur compounds such as hydrogen sulphide is the one of the following volatile compounds most frequently related to halitosis.



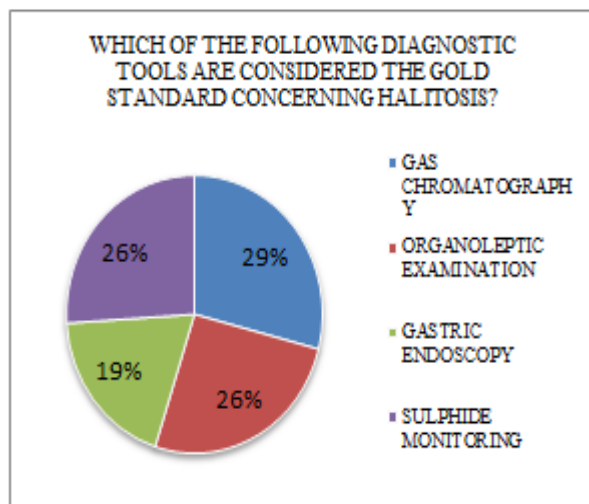
(FIG 18)

51% of participants were aware of that the systemic diseases of diabetes mellitus as are aetiology of the bad breathe.



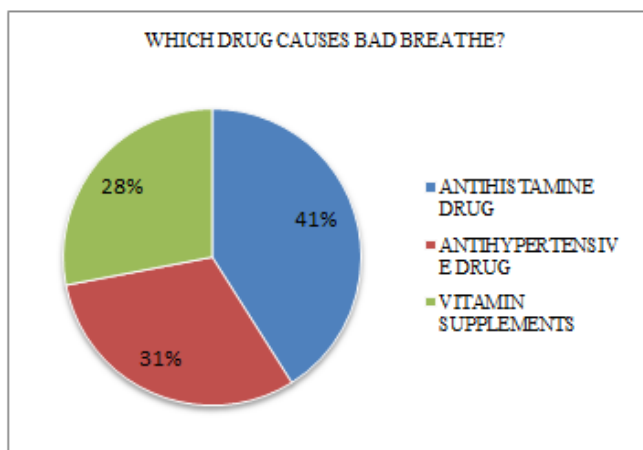
(FIG 19)

39% of students choose that all the three criteria as the possible systemic disease caused the malodour.



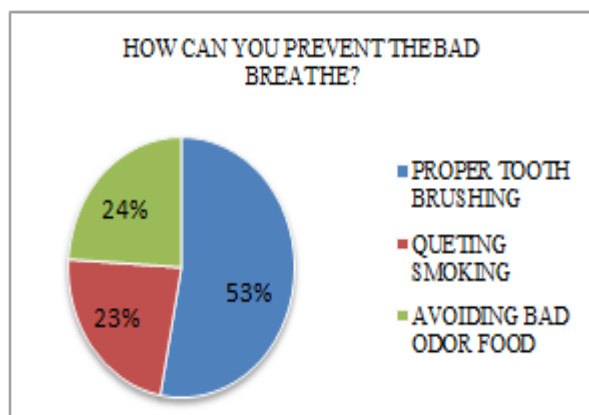
(FIG 22)

29% choose that the gas chromatography is the gold standard concerning of halitosis.



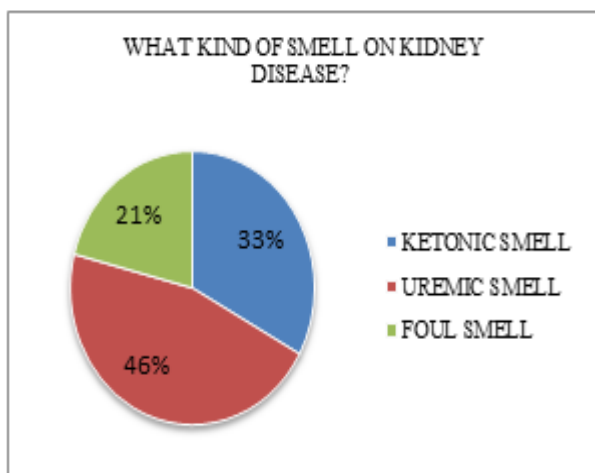
(FIG 20)

41% of students were choose that antihistamine drug can causes the bad breathe.



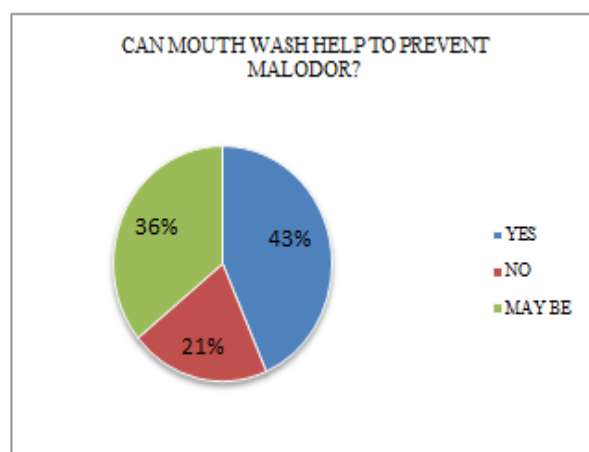
(FIG 23)

53% revealed that the proper tooth brushing can avoid the bad breathe.



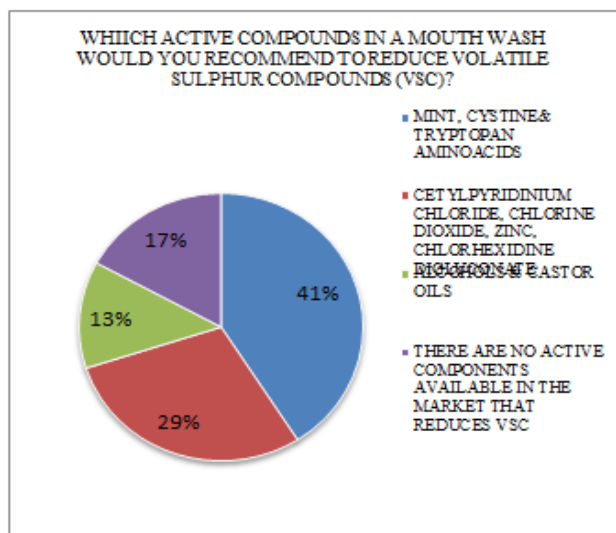
(FIG 21)

46% study population said that uremic smell is the kind of on kidney disease.



(FIG 24)

43% correctly choose that mouth wash can prevent the malodour.



(FIG 25)

41% of study population said that there are no active components available in the market that reduces VSC.

VIII. DISCUSSION

Self-perception is very important for diagnosing and preventing the bad breath by proper dental treatment.

IX. ORIGIN AND SOURCE

An ultimate cause of bad breath is agglomeration of dental plaque and food debris on teeth and tongue, deriving from bad oral hygiene and gingival disease and periodontal disease. 50% of respondents give result that origin of malodour is mainly from dorsum surface of the tongue and 22% give response for a gingival enlargement [3]. The oral malodour is caused gram negative bacteria and includes bacteriodes [7]. Oral malodour arises from posterior dorsum of tongue and this explains the facts that bad breathe sometimes occurs in population with good oral hygiene. As a significance of its huge and papillary surface area, the dorsum of tongue could retain wide amounts of leucocytes and microorganisms. The microbial content on tongue is formed to be more than in other areas [7].

X. CAUSES AND SYMPTOMS

Oral malodour is often arises after nocturnal and is sometimes termed as “morning oral malodour” is due to relatively low flow of saliva during sleep .in certain condition like xerostomia (dryness of mouth), causes oral malodour [6]. 62% of respondents say that the oral malodour affects all age groups. Transient bad breath can also arise after someone has eaten volatile foods such as garlic, onion or spices [8]. Likewise, tobacco product and alcohol consumption may also give rise to distinct [9].

49% of respondents give result that the symptoms of halitosis are unpleasant taste in the mouth, white coating of the tongue, and unpleasant odour in the mouth [11]. These symptoms may be attributable to a form of delusion or monosymptomatic hypochondriasis (self oral malodour

halitophobia). Such people often wrongly interpret that the breath is offensive and they avoid social interaction [13].

A person with halitophobia regularly does brushing and tongue cleaning and constantly uses chewing gums, mint, mouth rinses and sprays in the desire of reducing anguish. In this study 18% of people have communal hurdle about their bad breath and 38% of people underwent scaling after noticed by others [13].

XI. SYSTEMIC DISEASE AND DRUGS

The systemic disorder may rarely cause bad breath. An oral malodour of such disorder is unlikely to be a features of such disease (including undiagnosed type 1 diabetes mellitus) and is an incidental findings during clinical examination 51% respondents gave result that “diabetes is a main cause of halitosis” and other diseases such as lung diseases such as bronchitis and other lung diseases may also cause halitosis [3,7]. Trimethylaminuria is a unique disorder distinguished as a long standing oral malodour provoked by a surplus of trimethylamine that initiate a pungent Ammonical smell alike as the rotten fish. Hypermethioninaemia is a further unique metabolic disorder can assist to an oral malodour. 39% of respondents gave results that all the disorder mentioned above cause halitosis [4].

46% of respondents said that uremic smell is type of breath may have ammonia like odour (also described as urine – like) in people chronic kidney failure [5,3]. Certain drugs also cause malodour like vitamin supplements; antihypertensive and antihistamine is which cause dryness of mouth resulting in bad breathe [9].

XII. DIAGNOSIS AND TREATMENT

The clinical assessment of bad breathe is generally instinctive and situate by smelling the emanated air of the mouth. . In rare instances when the odour from the nose and mouth are similar intensity, as a systemic cause of malodour [10, 14]. An objective measurement of the breath components is rarely used in routine clinical practice, as it is expensive and time consuming. Volatile sulphur compounds are calculated by using portable sulphide monitor but as bad breathe may constitute agents other than VSC [8]. This may provide an inaccurate assessment of source and intensity of the malodour. 29% of the respondents gave result that gas chromatography is a method of determining the components of bad breath, but this is not used in clinical practice [9].

Treatment is primarily educating the patient as to the cause and prevention and lessening the accumulation of oral bacteria. Reduce the bad breath on effective by teeth cleaning, including brushing and interdental flossing, particularly in people with poor oral hygiene and related gingival and periodontal diseases [3, 6]. The bad breath act by either bacterial load or the associated odoriferous compounds can reduce by the mouth washes [7]. 29% of people had given response to a mouth wash of cetylpyridinium chloride and zinc lactate which also reduce

oral malodour [12, 8]. Oral malodour can diminish by other mouth washes contain such as cetylpyridinium chloride, chlorine dioxide and zinc chloride [12].

XIII. CONCLUSION

Halitosis was prevalent among dental students. Their responsibilities to diagnosis and improves oral hygiene. They may benefit by an awareness of the problem and encouragement to improve their own oral hygiene. The result of this evaluation indicates high prevalence of halitosis among the population consisting of dental students. The acknowledgement of bad breath was also turbulent among of this people. The perception of the bad breath is a discrete entity should be developed in the common people and the therapeutic measures should be available to all. Because of the halitosis is extremely unappealing characteristics of socio-cultural interactions and may effects on psychosocial relation. In all the aspects, there is a general lack of knowledge about oral malodour. The role of dental professionals in maintaining good health should be emphasized in the community. Thus awareness and education to the public must be increased. The humanities on halitosis, especially with clinical trials and additional studies are required. Since halitosis is a common complaint among dentist and other primary health care clinicians should be able to diagnose, classify, manage and educate to their patient suffering from this socially debilitating conditions.

REFERENCES

- [1]. Sevlly c, Eelix DH. Oral medicine – update for the dental practitioner: oral malodour. Br DentJ 2005; 199: 498- 500
- [2]. Morita M, Wang H- L. Association between oral malodour and adult periodontitis: a review J clin' periodontal 2001; 28: 813- 9
- [3]. Hoshik, Yamano Y, Mitsuraga A, Shimizu J, Kagawa J, Ogiushi H. Gastrointestinal diseases and halitosis; association of gastro Helico bacter pylori infection. Int DentJ 2002; 52: 207 – 11
- [4]. Mitchell S. Trimethylaminuria - fish odour syndrome and oral malodour. Oral Dis 2005
- [5]. Mudd SH, Levy HL, Tangerman A, Boujet C, Buist N, Davidson – Mundt A, et al. Isolated perisient. Hypermenthloninemia. Am J Hum Genet 1995; 57: 882 - 92
- [6]. Awano S, Gohara K, Kurihara E, Ansai T, Talcehara T. The relationship between the presence of periodontopathogenic bacteria in saliva and halitosis Int Dent J 2002; 52: 216 - 6
- [7]. Awano S, Gohara K, Kurihara E, Ansai T, Talcehara T. The relationship between the presence of periodontopathogenic bacteria in saliva and halitosis Int Dent J 2002; 52: 212 - 2
- [8]. Yaegaki K, Sanada K. volatile sulphur compounds in mouth air from clinically healthy subjects and patient with periodontal diseases J periodontal Res 1992; 27: 233- 8
- [9]. Yaegaki K, Sanada K. Biochemical and clinical factors influencing oral malodour in periodontal patients. J periodontal 1992; 63: 783 - 9
- [10]. Greenman J, Duffield, Spencer P, Rosenberg M, Corry D, Saad S, et al. study on the organoleptic intensity scale for measuring oral malodour. J Dent Res 2004; 83: 81 - 5
- [11]. Outhouse TL, Al – Alauri, Fedorowicz Z, Keenan J tongue scrapping for treating halitosis, Cochrane Database syst Rev 2006: (2): CD005519
- [12]. Franscella J, Gilbert RD, Fernandez P, odor reduction potential of a chlorine dioxide mouth rinse J Clin Dent 1998; 9: 39- 42
- [13]. Rosenberg M, Koziovsky A, wind Y, Minder E self assessment of oral malodour 1 year following initial consultation. Halitophobia 1999; 30: 324 – 7
- [14]. Rosenberg M. clinical assessment of bad breath: current concepts. Jam Dent Assoc 1996; 127: 475 – 82
- [15]. Tonzetich J oral malodour: an indicator of health status and oral cleanliness. Int Dent J 1978; 28: 309 - 19
- [16]. Portar SR, Scully C. oral malodour (halitosis) BMJ. 2006; 333; 632 - 5