Research Article

BIOMEDICAL Journal of Scientific & Technical Research

ISSN: 2574 -1241

DOI: 10.26717/BJSTR.2021.33.005360

Causes and Effects of Halitosis Among Secondary Students in Ijero Ekiti, Ekiti State, Nigeria

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ARTICLE INFO

Received: January 05, 2021

Published: January 15, 2021

Citation: Okunade RA. Causes and Effects of Halitosis Among Secondary Students in Ijero Ekiti, Ekiti State, Nigeria. Biomed J Sci & Tech Res 33(2)-2021. BJSTR. MS.ID.005360.

Keywords: Problems; Dental Health; Oral Hygiene; Health Facility

ABSTRACT

Halitosis or mostly commonly bad breath is term used to describe noticeably unpleasant breathing. Halitosis can be important social problem. The standard dental treatment and mouth wash that are often recommended provide only temporarily relief the smell emanating from the mouth. The objectives of this research are to identify the causes of halitosis among secondary student in Ijero Ekiti local government area of Ekiti state, Nigeria and to find out the Effects of halitosis among secondary student in the study area. The study area is Secondary schools in Ijero Ekiti. There are two major secondary schools which are Doherty memorial grammar school and Ijero High School. Students at Mercy Model Private School were excluded from this study as the researcher focused on public secondary school because of prevailing factors. Two public schools were selected for this study namely, Doherty memorial grammar school and Ijero High School. The population of the study area is 2900 for Ijero High School while 3200 for Doherty Memorial grammar school which gave us a total of 6100 students as at the time of this research work. Author used stratified sampling technique where in the population was divided in to two strata [Junior and senior category], where in 25 students were randomly selected from the junior category in each school. Hence, a total of 100 respondents were drawn for the study. Questionnaire was adopted as the instrument for data collection, the instrument was tested through a pilot study with result at 0.91. Results were analyzed using simple percentage, graphs and tables.

Introduction

The term halitosis is derived from the Latin word Halitu, meaning breath and greek suffix "osis" mean condition. Halitosis is defined as a noticeable unpleasant odour that emanates from the mouth which is objectionable to others. it is a medico_ social problem that affect a significant number of people around the world [1]. Halitosis or mostly commonly bad breath are term used to describe noticeably unpleasant of our exhale in breathing. Halitosis can be important social problem in which the standard dental treatment and mouth wash that are often recommended provide only temporarily relief the smell is from an oral source due to bacterial activities [2]. Halitosis is document to be the third most frequent reasons for seeking dental aid following tooth decay and periodontal disease many studies on self-reported halitosis have stressed that the problem of bad breath is often not self-perceive [3]. Some cases, there is reduced chance of self-detection of oral mal-odor because the path between the inhaled and exhale air is diverge (while exhale air travel horizontally, inhaled air travel primarily vertically).the information fact is that many people do not know that they have a break problem unless someone directly inform them [4]. Some bad breath, however, are considered to be somehow normal one example is "morning mouth" which is as a result of change the condition of mouth during sleeping.

During the day ,saliva washes decaying food and odor out of the mouth. Less saliva is produced at night this the mouth become dry and dead cell sticks to tongue and cell for food ,they produce foul odor [5]. The most common location for mouth related halitosis is the tongue. Tongue bacteria produce mal-odor and fatty acid and count for about 80 to 90 percent of all case of mouth related bad breath. Large quantities of naturally occurring bacteria are often found on the dorsum of the tongue, where they are relatively undisturbed by normal activities [6]. This part of the tongue is relatively dry and poorly cleaned and bacteria population can thrive

on remnant of food deposit, dead epithelial cell and postnasal drip. The convoluted microbial structure of the tongue dorsum provide an ideal habitat for anaerobic bacterial ,which flourish under a continually forming tongue costing of food debris, dead, cells, postnasal drip and overlying bacteria living and dead when left on the tongue the anaerobic respiration of such bacterial can yield either the putrescent smell of in dole, skatole,methyl mercapton, alloymethyl sulfide and dimethyl [7]. There are several cause of halitosis although the main one is oral bacterial over 90 million people suffer from chronic halitosis which is medical term for bad breath in most cases halitosis originate from the gum and tongue, caused by bacterial from the decay of food parties, other debris in the mouth itself [8].

The bad breath differ during the day ,due to eating of certain food such as garlic, onions, meat, egg, smoking and alcohol consumption , since the mouth is exposed to less oxygen and is in active during the night the odour is usually worse upon awakening (morning breath). bad breath rinsing with special mouth wash .various method used to control halitosis (bad breath) such mouth spray and mouth wash may only be temporarily mask the odour created by bacteria on the tongue but cannot cure bad breath because they don't remove the source of bad breath, in order to prevent the production of the sulfur containing compound mention above the bacteria on the tongue must be removed regularly [9]. Most people who clean their tongue use a(tongue scrappy) or a toothbrush. Halitosis has the meaning is bad breath can be form by eating of certain foods, like cooed, garlic, onions, when absorbed into our blood stream, are transferred to lungs and exhale breath will be produced as bad breath and also the breakdown of food particles in and around the teeth can increase bacteria and cause a foul odour. Suffering from some system disease such as liver and kidney, diabetic mellitus, digestive tract infection whereby cases are blocked from passing the stomach or intestines can also bring mouth odour. When the mouth is dry ,saliva production decrease leaving the mouth natural ability to clean itself impaired. Saliva is mouth's natural mouth wash which container properties that keep the mouth clean. All these factor causes halitosis and also enlighten student about it.

Objective of the Study

a) To identify the causes of halitosis among secondary student in Ijero ekiti local government area of ekiti state, Nigeria.

b) To find out the Effects of halitosis among secondary student in Ijero ekiti local government area of ekiti state, Nigeria

Methodology

The study area is Secondary schools in Ijero Ekiti. There are two major secondary schools which are Doherty memorial grammar school and Ijero High School.

Inclusion and Exclusion Criteria

Students at Mercy Model Private school were excluded from this study as the researcher focused on public secondary school because of prevailing factors. Two public schools were selected for this study namely, Doherty memorial grammar school and Ijero High School [10-15].

Sampling Technique

The researcher adopted stratified random sampling technique to select study sample. The population of the study area is 2900 for Ijero High School while 3200 for Doherty Memorial grammar school which gave us a total of 6100 students as at the time of this research work. Author used stratified sampling technique where in the population was divided in to two strata [Junior and senior category], where in 25 students were randomly selected from the junior category in each school. Hence, a total of 100 respondents were drawn for the study. Questionnaire was adopted as the instrument for data collection, the instrument was tested through a pilot study with result at 0.91 [16-28]. Results were analyzed using simple Percentage, Graphs and Tables.

Results

Background Information about the Respondents

Tables 1-4 and Graphs 1 & 2.

Table 1: The majority of the respondent (50%) fell in age group 14- 16 years, (44%) of them are of age 11-13 years while 16-20years of age are of (6%).

Personal Data	Frequency	Percentage
Age		
11-13	22	44%
14-16	25	50%
16-20	3	6%
Total	50	100%

Table 2: 37%are respondent are representing females while 26%are representing male.

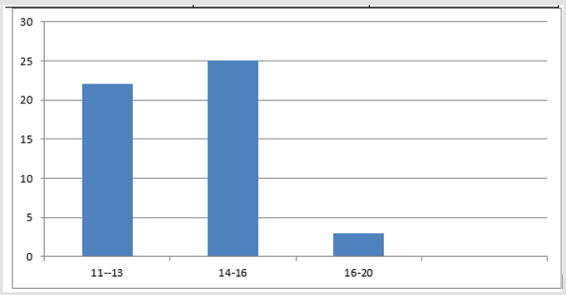
Sex		
Female	37	74%
Male	13	26%
Total	50	100%

Table 3: The majority of the respondents of 76% are of Christian, 24% of them are Islamic and 18% of them are Igbo.

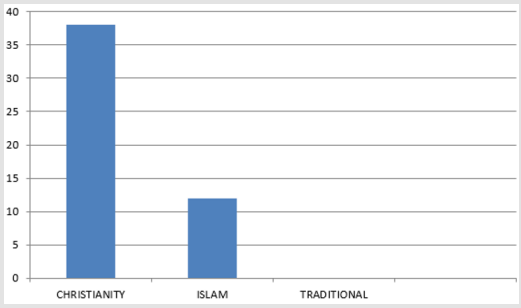
Religious		
Christianity	38	76%
Islam	12	24%
Traditional Total	50	100%

Table 4: 72% of the respondents are Yoruba, 10% are of Hausa, and 18% of the respondents are of Igbo.

Tribe		
Yoruba	36	72%
Hausa	5	10%
Igbo	9	18%
Total	50	100%



Graph 1.



Graph 2.

Attitudes, Knowledge and Awareness of the People Towards Oral Health

Tables 5-14 and Graphs 3-7.

Table 5: It was gathered that 72% of the respondents have heard about oral health education while 28% are not aware.

Question	Response	Frequency	Percentage
Have you heard about oral health education before?	Yes	36	72%
	No	14	28%
	Total	50	100%

Table 6: 23 respondents representing 46% heard about oral health education by the means of television, 4 respondents representing 8% heard in the office,20 respondents representing 40% heard through magazine, 3 respondents representing 6% heard through Radio.

If yes, by what means?	Television	23	46%
	In the office	4	8%
	Magazine	20	40%
	Radio	3	6%
	None	None	None
	Total	50	100%

Table 7: Shows that 54% of the respondents have gained from oral health education while 46% gained nothing from oral health education.

Have you gained anything oral health education?	Yes	27	54%
	No	23	46%
	Total	50	100%

Table 8: It was gathered that 76% of the respondents clean their mouth once a day while 24% clean their mouth twice a day.

How many times do you clean your mouth in a day?	Once	38	76%
	Twice	12	24%
Total		50	100%

Table 9: Show all the respondents uses toothbrush and toothpaste for brushing of their mouth.

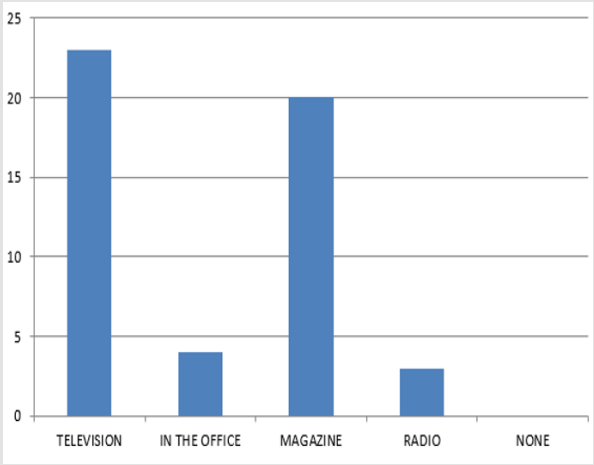
What do you use in cleaning your mouth?	Toothbrush and Toothpaste	50	100%
	Charcoal.	None	
	Chewing stick	None	
	Total	50	100%

Table 10: Show that 16 respondents representing 32% are aware about fluoride in toothpaste while 34 respondents representing 68% are not aware about fluoride in toothpaste.

Do you know anything about fluoride in the Toothpaste?	Yes	16	32%
	No	34	68%
	Total	50	100%

Table 11: It was gathered that 78% if the respondents eat sweet and snacks while 22% do not eat sweet and snacks.

Do you eat sweet and snacks?	Yes	39	78%
	No	11	22%
	Total	50	100%



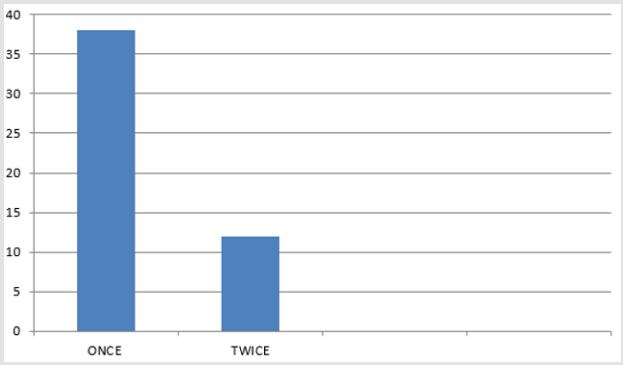
Graph 3.

Table 12: 42 respondents representing 84% always eat sweet and snacks while 8 respondents representing 16% do not eat sweet and snacks always.

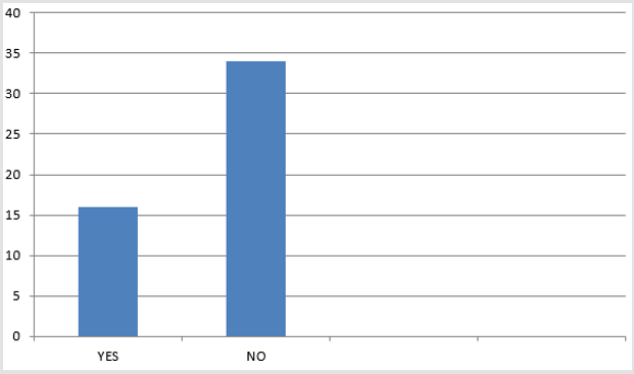
If yes, how often?	Always	42	84%
	Not always	8	16%
	Total	50	100%

Table 13: 24% of the respondents always rinse their mouth with water after eating while 76% do not rinse their mouth after eating.

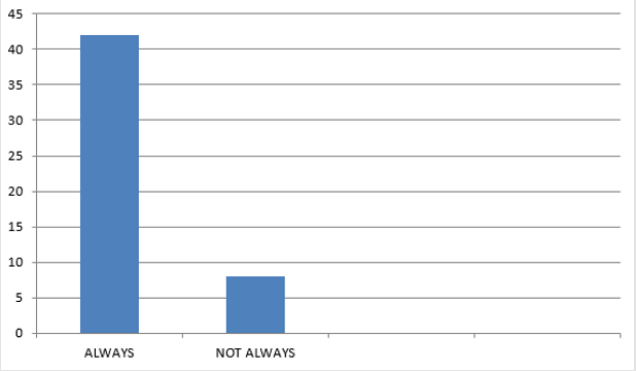
Do you rinse your mouth with water after each meal	Yes	12	24%
	No	38	76%
	Total	50	100$



Graph 4.



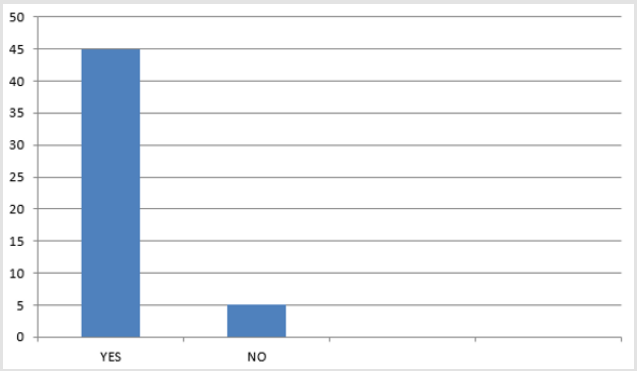
Graph 5.



Graph 6.

Table 14: Show that 90% of the respondents knew that balanced diet including plenty fruit and vegetables are good for maintenance while 10% are not aware.

Do you know that balance diet including plenty fruit and vegetables are good for maintenance	Yes	45	90%
	No	5	10%
	Total	50	100%



Graph 7.

Halitosis Problem Experienced and Where Treated

Tables 15-19 and Graphs 8 & 9.

Table 15: It was gathered that 37 respondents representing 74% have experience oral health problems while 13 respondents representing 26% have not experience such.

Question	Response	Frequency	Percentage
Have you ever experienced any dental problem such as gum bleeding, smelling mouth, tooth pain	Yes	37	74%
	No	13	26%
	Total	50	100%

Table 16: Shows that 86% of the respondents said hospitals/ clinic are best place for treating oral health problems, 10% of the respondents agreed that herbal home is the best place while 4% of the respondents said self-medication is the best place.

Which of the area is the best treatment of oral disease	Hospital/ clinic	43	86%
	Herbal home	5	10%
	Self-medication	2	4%
	Total	50	100%

Table 17: 26 of the respondents representing 52% have visited dental clinic before while 24 respondents representing 48% have not visit the dental clinic.

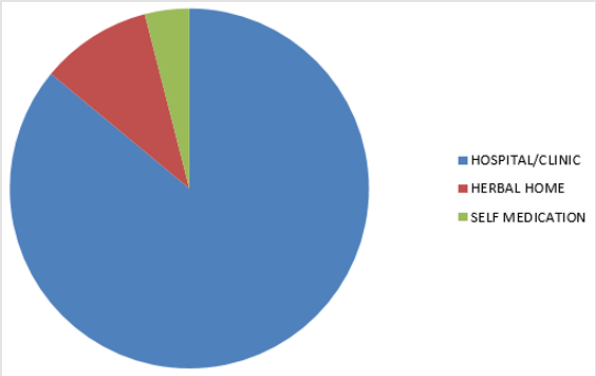
Have you visited any dental clinic before	Yes	26	52%
	No	24	48%
	Total	50	100%

Table 18: It was gathered that 94% of the respondents said they can advise their fellow colleague to go for dental clinic for checkup while 6% of the respondents cannot.

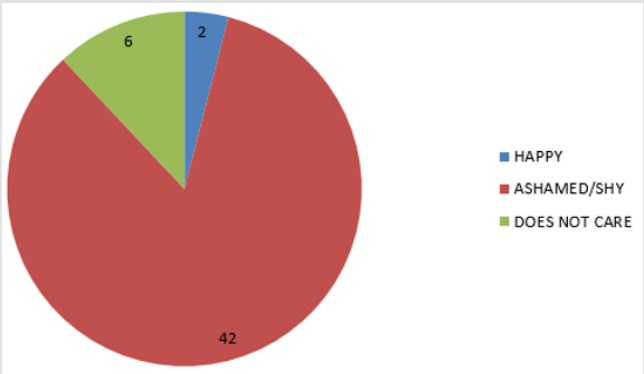
Will you ask your fellow colleague to go for dental check up	Yes	47	94%
	No	3	6%
	Total	50	100%

Table 19: Shows that 88% of the respondents said their friend feel ashamed and shy when noticed they have mouth odour while 12% said their friend does not feel concerns about it.

How do your friend who have mouth odour feel	Happy	None	
	Ashamed/ shy	44	88%
	Does not care.	6	12%
	Total	50	100%



Graph 8.



Graph 9.

Conclusion

Based on this research work, it was concluded that, Halitosis is a major health problem of concern in the study area while there are evidence of low awareness of oral health education among secondary school students in the study area.

Recommendation

a) Government should employ more dental center and clinic Ijero local government.

b) Government should employ more competent and qualified dental health professionals to bulk of the jobs in the area.

c) Government should organize seminars to inform the people on the needs and importance of maintaining good oral hygiene.

d) Government should subsidize the cost of production of toothpaste do that, they could be affordable by every individual.

e) Health workers should always carry out home visitation in order to correct those habits that can impair people's health.

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ISSN: 2574-1241

DOI: 10.26717/BJSTR.2021.33.005360

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