

FREQUENCY OF DELUSIONAL HALITOSIS IN A UNIVERSITY COMMUNITY

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ABSTRACT

Objective: *This study reviewed the prevalence of delusional halitosis and analyzed the frequency of this condition within the University Community, over a period of three years.*

Method: *Sixty-eight (68) patients with delusional halitosis were diagnosed over a period of three years (2001 to 2003), at the Dental Hospital, University of Benin, Nigeria.*

Results: *Within the University Community; there were 14 cases (20.1%) and the largest group was within 20 to 29 years, 12 cases (17.7%).*

Conclusion: *The study suggests an increased level of awareness or an increased prevalence of this condition within the same population. A fifth of the patients were within the University Community; mostly male students who suffered social embarrassment and poor academic performance.*

Key Words: Frequency, Delusional Halitosis, University-Community

INTRODUCTION

Delusional halitosis, also referred to as psychological halitosis, delusional caco-somia or halitophobia, is a monosymptomatic disorder. This condition occurs in apparently healthy individuals who complain of chronic bad breath that no one else can smell and for which no local or systemic

disease causing oral malodour could be found¹. These patients believe that their breath is offensive even when no objective evidence of breath malodour can be identified²⁻⁷. Although several studies have been carried out on the aetiology, diagnosis and treatment of halitosis, physicians and dentists are generally poorly informed on the causes and treatment of halitosis⁸⁻¹³, specially in cases of delusional halitosis.

Previous work done in this centre on thirty-two (32) cases of delusional halitosis, did not analyse the frequency of this condition within the University of Benin Community where it was carried out¹. The University of Benin is a first generation University located in Benin City, Edo State, within the south-south zone of Nigeria. A study of delusional halitosis within this Community gives some baseline data as to the magnitude of this condition.

The study reviewed the prevalence of delusional halitosis and analysed the frequency of this condition within the University Community, over a period of three years (2001 to 2003), at the Dental Hospital, University of Benin, Nigeria.

MATERIALS AND METHODS

The study included patients who were either referred or those who presented at the University of Benin, Dental Hospital, over a period of three

years (2001 to 2003), with complaint of chronic bad breath. None of these patients had a previous history of drug abuse or psychiatric treatment. The diagnosis of delusional halitosis was made based on the patients' persistent complaint of bad breath, after detailed history and clinical examination followed by scaling and polishing, with instruction on warm saline mouth rinse.

Data collected were patients' age, sex and occupation. Age group (in decade) stratified data for all the patients as well as for those within the University Community. The frequency percentage of each age group were calculated and ratio for male and female was determined. Sex distribution of all the patients including those within the University Community was determined, and the frequency percentages for each sex were calculated.

RESULTS

Sixty-eight (68) cases of delusional halitosis were diagnosed, with 14 cases (20.6%) from within the University Community. Majority of the patients within the University Community were students, 13 cases (19.1%), with 1 case (1.5%) of a lecturer. The age range for these patients was 16 to 60 years, with an average age of 38 years. The largest group of patients was within the age group of 20 to 29 years; 36 cases (52.9%) generally and 12 cases (17.7%) within the University Community (Table 1).

There were 41 males (60.3%) and 27 females (39.7%) in the general population, with male to female ratio of 3:2. There were 10 males (14.7%) and 4 females (5.9%), with male to

female ratio of 2.5:1 in the University Community.

Table 1: Age distribution of Patients in the General Population and within the University Community under study.

Age (years)	General Patients	%	University Patients	(%)
0 – 9	–	–	–	–
10 – 19	5	7.4	–	–
20 – 29	36	52.9	12	17.7
30 – 39	13	19.1	2	2.9
40 – 49	10	14.7	–	–
50 – 59	3	4.4	–	–
60 – 69	1	1.5	–	–
70 and above	–	–	–	–
Total	68	100	14	20.6

DISCUSSION

Although information on the prevalence of halitosis is scarce¹⁴, presently nearly 50% of adult population suffers oral malodour¹⁵. It was reported in a large study carried out in Japan involving, 2,672 individual, that 6–23% of the subjects had halitosis as measured by volatile sulphur compounds (VSCs) higher than 75 parts per billion (ppb), in expired air at some time of the day¹⁶. In another study in the United States, it was observed that 24% of individuals over 60 years old have been told that they had oral malodour¹⁷.

However, there has been paucity of information on the prevalence of delusional halitosis, but it was reported in a study that 16 patients (14%) of the 118 patients who

attended the halitosis clinic had imaginary halitosis¹⁷. While in previous study carried out in this centre over a period of three years, 32 cases of patients with delusional halitosis was diagnosed¹. Whereas, in this study 68 cases of patients with delusional halitosis were diagnosed over a similar three-year period, which indicated more than 100% increase in diagnosed cases of delusional halitosis compared to the previous study. Therefore, there might have been an increased level of awareness or an increased prevalence of this condition within the same population. If the latter was the case, then delusional halitosis should be considered a major oral health concern within this population.

A fifth of the patients were within the University Community, which maybe due to the proximity of the Dental hospital and higher level of awareness within this Community. Majority of these patients were students, who suffered from the psychological effects of this condition with resultant interference with their interpersonal relationships, leading to social embarrassment and poor academic performance. There was a case of a final year male student who had extra-semester, because he could not sit for his first semester examination, following serious disturbance from this condition.

Although it has been reported in genuine halitosis, that approximately 50% of middle aged and older individuals have socially unacceptable bad breath when they wake up in the morning¹⁸, with equal ratio of male to female, and no gender based prevalence or severity^{19,20}. We observed that the largest group of these patients with

delusional halitosis was within the age group of 20 to 29 years in the general population and within the University Community. In general population there was a male to female ratio of 3:2, while in the University Community it was 2.5:1. Similarly in the previous study, it was also reported that majority of the patient were also within the age bracket of 20 to 29 years, with a male to female ratio of 3:2¹. These findings are characteristic of olfactory reference syndrome, a variant of mono-symptomatic hypochondriacal disorder^{1,4,7}, in which there is usually male predilection.

CONCLUSION

There was an increase in the number of patients with delusional halitosis in this study compared to those in the previous study, which suggests an increased level of awareness or an increased prevalence of this condition within the same population. A fifth of the patients were within the University Community; majority was male students who suffered social embarrassment and poor academic performance, as a result of the psychological effects of this condition on afflicted individuals.

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