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SELF RATING OF ORAL HEALTH STATUS BY STUDENT DENTAL SURGEON ASSISTANTS IN IBADAN, NIGERIA - A PILOT SURVEY

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ABSTRACT

Background: **Individuals, generally, in this environment are known to rate their oral health status favourably despite the presence of oral diseases and conditions, probably due to sub optimal awareness level about oral health, however it is not known if this is the case with members of the dental team especially those who assist the dentist in day to day procedures.**

Objective: **This study assessed the self ratings of oral health status amongst student dental surgeon assistants on clinical rotation at the Dental Centre, UCH, Ibadan.**

Method: **This was a descriptive cross sectional study in which data was obtained with the use of self administered questionnaire and by clinical oral examination. Data obtained included sociodemographic data of respondents, questions assessing self rating of oral health status and evaluation of presence or absence of clinical oral conditions.**

Results: **A total of 54 students with a mean age of 23.9years on clinical posting participated in the study. Nearly all (98.1%) rated their oral health as very good or good and 55.6% perceived a need for oral health care. About 60% had consulted a dentist previously. The mean DMFT was 0.28 and 14.8% of the respondents had a DMFT score > 0. Significant association was found between the global self rating of oral health and perceived need for dental treatment.**

Conclusion: **The perceived need for dental treatment is an important factor in global rating of oral health amongst student dental surgeon assistants.**

Keywords - Self rated, Oral health, Dental auxiliaries

INTRODUCTION

Self rated oral health is a patient based assessment of oral health status, which assesses the perception of an individual about his or her oral health condition.[1,2] Different instruments have been used to assess the self ratings of oral health status, one of which is the single item global self rating of oral health, which has been widely used.[3,4] The global self rating of oral health is a simple and reliable measure of an individual's self perception of oral health.[5-7] It has been found useful in the assessment of treatment outcomes and in planning and evaluation of intervention programmes.[8-10] The self ratings of oral health vary according to the sociodemographic status, knowledge of oral health, perceived need for treatment and oral health behaviour.[11-16]

Adolescents and adults, in general, have been noted to rate their oral health status as excellent or good.[4] However, this rating has been shown not to correlate with the clinical findings recorded in the participants with the reason being partly that the awareness of oral health and its importance may be deficient in the society. It is unknown if this will be different in adults who presumably are knowledgeable about the importance of oral health such as students who are training to become dental surgeon assistants. Furthermore, these are future members of the dental team that will be closely involved with the management of the patients with the dental surgeon and are invariably expected to have good knowledge of oral health.

We therefore aimed, with this pilot study, to assess the global self rating of oral health status of the dental surgeon assistants in training on clinical posting at the University College Hospital, Ibadan and determine possible predictors of this self rating of oral health.

MATERIALS AND METHODS

This was a descriptive cross sectional study conducted amongst final year student dental surgeon assistants who were on clinical rotation to the Dental Centre, University College Hospital, Ibadan. Data was collected with the use of self administered questionnaires and by clinical oral examination using standard guidelines of the World Health Organization on basic oral health survey.[17] The questionnaires were administered to all 54 students who came for the clinical rotation in 2011/2012 academic session.

Data collected with the questionnaire included sociodemographic characteristics of the study participants, global self rating of oral health and oral health seeking behaviour, which was assessed by previous dental consultation.

Data collected was subjected to statistical analysis using SPSS version 17. Qualitative variables were summarised by frequencies, and percentages. Quantitative variables were summarised by means and standard deviations. Test of association was done using Chi Square (χ^2) and Fisher's exact test (FET) as appropriate. P-value for statistical significance set at 5%.

RESULTS

All the 54 student dental surgeon assistants who came for clinical posting consented to participate in the study. The majority (51, 94.4%) were females. The age range was from 18 to 40 years with a mean age of 23.9 ± 4.1 years. Only four of the study participants were married, with the rest being single. The majority (92.6%) were of the Yoruba tribe (Table 1).

Table 1: Demographic characteristics of the study participants

Characteristics	Frequency	Percentage
Age (years)		
≤24	36	66.7
>24	18	33.3
Gender		
Male	3	5.6
Female	51	94.4
Marital Status		
Single	50	92.6
Married	4	7.4
Ethnicity		
Yoruba	50	92.6
Igbo	3	5.6
Hausa	1	1.9

In rating their oral health status, 1 (1.9%) participant rated his oral health status as neither good nor poor, 25 (46.3%) rated this as good and 28 (51.9%) gave a rating of very good. Regarding their perception for dental treatment, 30 (55.6%) respondents perceived a need for treatment while 24 (44.4%) did not perceive that they need any form of dental care. A total of 31 (57.4%) respondents had previously consulted a dentist; the majority (21, 67.7%) consulting within a month prior to the interview and 9 (29.0%) did so between one month and one year before the interview. Of those who had consulted the dentist, 24 (77.4%) went for routine dental check up, while the others (7, 22.6%) went because of one dental problem or the other. The type of treatment received by the respondents who had consulted the dentist is as shown in Figure 1. The oral examination conducted revealed that the majority (35, 64.8%) had full complement of teeth and 19 (35.2%) had one or more teeth missing – missing teeth ranged from one to four. Five participants had carious tooth/teeth (three had one decayed tooth each and two each had two decayed teeth), six had missing tooth/teeth due to dental caries (three each had a tooth missing and three had two missing teeth each) and one had a filling done. Regarding overall dental caries experience of the respondents 8 (14.8%) had a DMFT score > 0, and the mean DMFT was 0.28 (±0.79). None of the participants had a fractured tooth. Thirty-seven of the respondents had supragingival calculus accumulation in their mouth (Table 2).

Table 2: Clinical oral findings of respondents

Oral findings	Frequency	Percentage
Teeth present		
32	35	64.8
<32	19	35.2
Total	54	100.0
Calculus		
Present	37	68.5
Absent	17	31.5
Total	54	100.0
Caries experience		
DMFT=0	46	85.2
DMFT>0	8	14.8
Total	54	100.0

The association between the descriptive variables and global self rating of oral health showed that no demographic characteristic was significantly associated with the global self rating of oral health status of the participants – as good or very good (Table 3). A higher proportion of the students who did not perceive a need for treatment self rated their oral health status better, i.e. very good rather than good compared to those who perceived a need for dental treatment (62.5% vs. 43.3%, p = 0.161).

Table 3: Descriptive statistics according to global self rating of oral health

Variable		Global self rating Very good No (%)	Good* No (%)	Total No (%)	χ^2	p value
Gender						
	Male	2 (66.7)	1 (33.3)	3 (100.0)	FET	1.000
	Female	26 (51.0)	25 (49.0)	51 (100.0)		
	Total	28 (51.9)	26 (48.1)	54 (100.0)		
Age (years)						
	≤ 24	18 (50.0)	18 (50.0)	36 (100.0)	0.148	0.700
	> 24	10 (55.6)	8 (44.4)	18 (100.0)		
	Total	28 (51.9)	26 (48.1)	54 (100.0)		
Marital status						
	Single	25 (50.0)	25 (50.0)	50 (100.0)	FET	0.612
	Married	3 (75.0)	1 (25.0)	4 (100.0)		
	Total	28 (51.9)	26 (48.1)	54 (100.0)		
Previous dental consultation						
	No	12 (52.2)	11 (47.8)	23 (100.0)	0.002	0.967
	Yes	16 (51.6)	15 (48.4)	31 (100.0)		
	Total	28 (51.9)	26 (48.1)	54 (100.0)		
Perceived need for treatment						
	No	15 (62.5)	9 (37.5)	24 (100.0)	1.962	0.161
	Yes	13 (43.3)	17 (56.7)	30 (100.0)		
	Total	28 (51.9)	26 (48.1)	54 (100.0)		

** - including the category 'neither good nor poor'*

The clinical oral findings were positively related to the self rating of oral health; a higher proportion of students with complete dentition, no caries experience or who did not have supragingival calculus rated their oral health better than those with one or more missing teeth or those with carious teeth or filled teeth due to dental caries or those with supragingival calculus (Table 4).

Table 4: Association between the clinical oral characteristics of respondents and global self rating of oral health status

Clinical characteristic	Global self rating Very good No (%)	Good* No (%)	Total No (%)	χ^2	p value
Functional teeth					
< 32	21 (60.0)	14 (40.0)	35 (100.0)	2.645	0.104
32	7 (36.8)	12 (63.2)	19 (100.0)		
Total	28 (51.9)	26 (48.1)	54 (100.0)		
Caries experience					
DMFT > 0	3 (37.5)	5 (62.5)	8 (100.0)	FET	0.460
DMFT = 0	25 (54.3)	21 (45.7)	46 (100.0)		
Total	28 (51.9)	26 (48.1)	54 (100.0)		
Supragingival calculus					
Present	16 (43.2)	21 (56.8)	37 (100.0)	3.489	0.062
Absent	12 (70.6)	5 (29.4)	17 (100.0)		
Total	28 (51.9)	26 (48.1)	54 (100.0)		

DMFT – Decayed, Missing, Filled and Total

** - including the category 'neither good nor poor'*

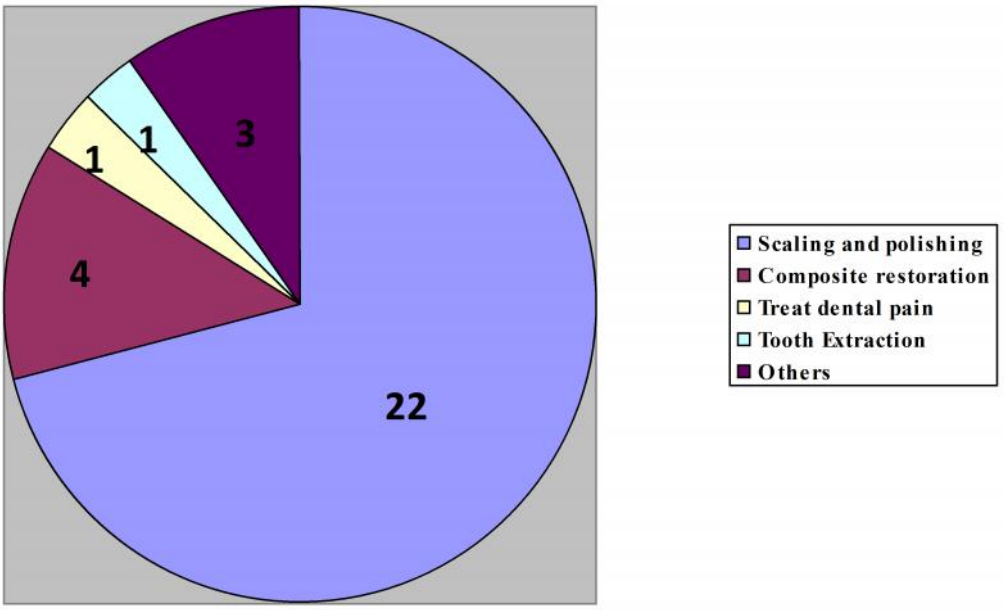

Figure 1: Type of treatment received by the students who had consulted a dentist previously (N = 31)

DISCUSSION

The self ratings of oral health is a useful tool in the subjective evaluation of a person's oral health status, assessing his or her self perceived need of oral health, and is therefore important in the planning of any intervention programme for oral health care.[15,18] Findings from this study showed that the majority of respondents rated their oral health status as either good (46.3%) or very good (51.9%). These values are higher than those reported amongst student dental therapists and technologists in Nigeria in which 77.7% rated their oral health as either excellent or very good.[4] The differences in the ratings of oral health amongst the different groups studied may be due to the different specialties of training of these students. Further explanation may be because, the student dental surgeon assistants are more directly involved in the delivery of care to patients than the auxiliaries and as such are more likely to know about different oral diseases, with a tendency to rate their oral better as they believe they do not have any of those oral disease or condition seen on regular bases in their training.

The self ratings of oral health have been shown to be influenced by demography, oral health behaviour and the clinical oral condition.[3,11] This study showed that the sociodemographic characteristics of the students dental surgeon assistants were similar to findings amongst student dental auxiliaries in Nigeria, in which the mean age of the study population was 23 years, and the respondents were mostly females and single.[4] The associations between the global self ratings of oral health of the respondents and their socio-demographic characteristics were not statistically significant, but showed some variations. The present study revealed that younger students rated their oral health better than the older age group; this finding is consistent with reports by other authors.[3,19,20] However, those who were married were found rating their oral health more favourably than those who were single, similar to what was reported amongst adults in Istanbul and Somalia.[12,21]

Findings from this study revealed that about 57% of the respondents have had previous consultation with a dentist; this proportion however, is lower than 81% reported among student dental auxiliaries in Nigeria.[4] This is a reflection of poor oral health care seeking behaviour. Although the student dental surgeon assistants work closely with the dentist by assisting them in their daily procedures, over forty per-cent of them had not consulted a dentist before either for preventive or curative reason. This behaviour may be because of their perception that they have good or very good oral health status translating to no need for dental consultation.

The study also found that the majority of the respondents who consulted the dentist did so during this clinical posting, a pointer to the fact that proximity to the dental setting could confer to a certain degree a positive influence on the health seeking behaviour of individuals. The students may, equally, be making use of the opportunity of the rotation to see a dentist for oral health care. Most of those who consulted the dentist went for routine check up, this may suggest that the posting has impacted positively on their oral

health care seeking behaviour especially towards preventive oral health care, further evidenced by a large percentage (71%) having scaling and polishing done as treatment received from the dentist. This preventive oral health behaviour was also reported amongst the dental auxiliaries in Nigeria where majority of those who had consulted the dentist did so to have scaling and polishing done.[4]

The perceived need for treatment of respondents in this study mirrored the self rating of oral health status with respondents who perceived that they do not need any form of dental treatment rating their oral health status better than those who perceived a need for treatment. This is similar to what was documented by some authors,[14,22] but contrary to what was reported amongst adults in Istanbul, where more adults who perceived a need for dental treatment were found to have rated their oral health status better.[21] These differences may be accounted for by the degree of knowledge or the level of awareness amongst these students, even though they rated their oral health as very good or good they still perceived a need for treatment by the dentist.

The clinical oral findings in the present study showed that students who had incomplete dentition, dental caries experience, or supragingival calculus gave less favourable self ratings of their oral health, similar to what was reported by Kim and Patton[3] in a study in which clinical oral condition was significantly related to less favourable ratings of oral health.

CONCLUSION

This study suggests that perceived need for treatment is a predictor of global self ratings of oral health. Nearly all the respondents rated their oral health as good or very good, but due to the knowledge they have about oral health they were able, to some degree, perceive a need for dental treatment. That nearly forty percent had never consulted a dentist, even for preventive oral health care in spite of the opportunity offered by the rotation through the dental centre, is a source of concern. A need therefore arises for an oral health promotion programme amongst all dental auxiliaries, to address this important group of oral health care providers.

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