Oral health practices and self-assessed dental status of an adult population in Benin City, Nigeria

***Okeigbemen SA, **Akpata O, **Omoregie FO**

*Department of Preventive Dentistry, **Department of Oral Surgery and Pathology,
School of Dentistry, University of Benin, Benin City, Edo State, Nigeria

Correspondence: Okeigbemen SA
Email: svokeigbemen@gmail.com

Abstract

Objective: To determine the self- assessed oral health status and dental practices among an adult population in Benin City.
Method: The cross sectional convenience study involved 190 Christian religious leaders aged 24- 73 years, comprising 155 (81.6%) males 35 (18.4%) females. Data was collected by means of self administered questionnaire which included their personal characteristics previous dental visits, oral self-care behaviour, halitosis.
Result: Twenty five percent of the pastors had experienced toothache; only 3.2% had visited a dentist within 6 months prior to the study, 7.4% in more than a year but less than 3 years and, 67.9% had never been to a dentist. Only 25.3% visited for routine checkup and 8.4% felt they had bad breath out of which 14.7% thought it affected their communication with others. However, 69.5% rated their oral health as good.
Furthermore, 81.1% used toothbrush and paste, 16.3% a combination of toothbrush and chewing stick, while 51.1% cleaned their mouths once daily and 43.2% twice daily. Only 15.8% had done scaling and polishing. While 47.4% claimed to have previously received instruction on maintenance of proper oral health.
Conclusion: The findings from this study indicated a low utilization of dental services and significant need for oral health education. The role of the subjects who participated in this study stake holders in assisting to improve the health of members of the oragnisation and local community is advocated.

Key words: Oral health, practices, status, adult, Benin City

Introduction

Religious leaders play an important role in addressing the health problems of the population especially in deprived communities. They are often in the unique position to be approached for counselling by individuals and families during times of ill-health, trauma and social crisis[1]. Such pastoral care and activities in mental health is well documented in literature[2-3]. The role of faith- based organizations (FBOs) in health information dissemination in HIV/AIDS prevention has also been advocated and tried in some communities as alternative strategies[4-6].
The perceptions of pastors regarding health practices are quite significant, noting that they themselves are also vulnerable to health problems. Measures of perceived oral health though subjective, give some indications of the quality of life such as satisfaction with oral health, self-reported role limitations and avoidance of conversation due to problems with teeth or dentures. Self-rating of facial aesthetics or satisfaction with one's appearance represent another dimension that emphasize the importance of oral health with respect to the patient's self-image. Tooth loss arising from the effects of preventable dental diseases can alter the individual's facial profile giving an aged look and in some cases impair speech articulation and phonation. These attributes are important for one on one and public communication which is invaluable in pastoral work. Subjective health status assessment is a significant component of health-related quality of life and evidence suggests that what people perceive and report about their health is vital for the individuals themselves and for those to whom evaluations are given[7].
It has been argued that many of today's complex health problems may be studied and addressed through approaches that emphasize collaboration with communities by working to broaden the involvement of people and organizations including churches and other faith-based organizations[8,9].
The purpose of this survey was to obtain information on the oral health practices of a group of Christian religious leaders in Benin City and their self assessed dental health status in order to assess their health education needs for the improvement of community oral health.

Materials and method

This cross sectional descriptive questionnaire-based study was conducted on a convenience sample of 250 respondents selected from a group of Christian religious

leaders attending a national annual convention of Christian clergy held in Benin City, Nigeria. The organization is a prominent Pentecostal denomination in Nigeria with a health care facility to cater for the needs of the members and general public.

Approval for the study was obtained from the organizers at the headquarters in Benin City and consent also obtained from the subjects willing to participate in the study.

Data was collected from the religious leaders by means of a self administered questionnaire which included the personal characteristics dental visits and oral self-care behaviours. Data analysis was performed by SPSS 10. Chi square tests were used to test associations at level of significance of p less than 0.05.

Result

A total of 190 subjects returned the questionnaires (response rate of 76%). They compared 155 (81.6%) males 35 (18.4%) females, aged 24 - 73 years (mean 44.3±10.13 years). In this study, 81.1% used toothbrush and paste to clean the mouth while 16.3% used a combination of toothbrush and chewing stick. Difference in cleaning method between males and females was not significant (p=0.721) About half (51.1%) of the respondents brushed their teeth once daily, 43.2% brush twice daily and 5.8% claim to do so thrice or more times. There was also no significant differences by gender (p=0.704). Only 15.8% had ever done scaling and polishing Table 1 and 47.4% claimed to have previously received instruction on maintenance of proper oral health **(Table 2).**

Eight one percent (81%) of the religious leaders clean their teeth with tooth brush and tooth paste, out of which 51% do so once daily **(Table 1).** Only 15.8% had their mouth professionally cleaned by scaling and polishing while 47.4% had previously received proper oral health education.

Furthermore only 3.2% of the respondents had visited the dentist within the last 6 months prior to the study. The gender differences in these characteristics were not statistically significant **(Table 2).**

Twenty three percent 23% had experienced toothache and 8.4% felt they had bad breath of which 14.7% thought it affected their communication with others. However, 69.5% rated their oral health as good with 18.4% expressing a need for dental care and also differences were not statistically significant **(Table3).**

Discussion

The study sample consisted of religious leaders of a particular Pentecostal denomination. Specific studies concerning oral health of the clergy as a distinct group of adults with social responsibilities or their attitude to dental practices are scarce literature.

Tooth brushing practices is now a common feature in developing countries as an oral health maintenance measure. In a Tanzanian study[10], as high as 99% of respondents cleaned their teeth with tooth brush. In a similar Chinese study of an adult population, almost all of the middle-aged surveyed claimed that they brushed their teeth every day and used toothpaste during toothbrushing[11].

Table 1. Oral hygiene practices of the study participants.

	Male	Female	Total	p-value
	n=155 (%)	n=35 (%)	n=190 (%)	
Tooth cleaning Methods				
Toothbrush/paste	127 (66.8%)	27 (14.2%)	154 (81.1%)	
Chewing stick	2 (1.1%)	1(0.5%)	3 (1.6%)	
Combination of both	24 (12.6%)	7 (3.7%)	31 16.3%	
Other methods	2 (1.1%)	0(0.0%)	2 (1.1%)	**0.721**
Daily tooth brushing frequency				
Once daily	18(9.5%)	79(41.6%)	97 (51.1%)	
Twice daily	16(8.4%)	66(34.7%)	82(43.2%)	
Thrice or more daily	1(.5%)	10(5.3%)	11(5.8%)	**0.704**
Professional Prophylaxis				
Prophylaxis done	7(3.7%)	23(12.1%)	30(15.8%)	
No prophylaxis	28(14.7%)	132(69.5%)	160(84.2%)	**0.449**
Total	**155 (81.6%)**	**35 (18.4%)**	**190 (100%)**	

Table 2. Previous oral health instruction, received and last dental visit by gender.

	Male	Female	Total	p-value
Instruction on oral health				
Had instruction	69(36.3%)	21(11.1%)	90(47.4%)	
No instruction	86(45.3%)	14(7.4%)	100(52.6%)	**0.098**
Last dental visit				
6Months<	4(2.1%)	2(1.1%)	6(3.2%)	
6Months> 1 year<	1(.5%)	1(.5%)	2(1.1%)	
>1Year<3Years	9(4.7%)	5(2.6%)	14(7.4%)	
>3Years	25(13.2%)	5(2.6%)	30(15.8%)	
Never visited	111(58.4%)	18(9.5%)	129(67.9%)	
Don't know	5(2.6%)	4(2.1%)	9(4.7%)	**0.050**
Total	**155(81.6%)**	**35(18.4%)**	**190(100%)**	

Table 3. Perceived oral health status and dental care needs by gender.

	Male	Female	Total	p-value
Had toothache (past 6 months)				
Yes	34(17.9%)	10(5.2%)	44(23.2%)	
No	121(63.7%)	25(13.2%)	146(76.8%)	**0.401**
Have bad breathe (Halitosis)				
Yes	13(6.8%)	3(1.6%)	16(8.4%)	
No	142(74.7%)	32(16.8%)	174(91.6%)	**0.972**
Self-rated present oral health				
Fair	43(22.6%)	12(6.3%)	55(28.9%)	
Good	109(57.4%)	23(12.1%)	132(69.5%)	
Poor	3(1.6%)	0(0.0%)	3(1.6%)	**0.552**
Any unmet dental care (Past 12 months)				
Yes	26(13.7%)	9(4.7%)	35(18.4%)	
No	129(67.9%)	26(13.7%)	155(81.6%)	**0.218**
Total	**155(81.6%)**	**35(18.4%)**	**190(100%)**	

In Denmark, a developed country, tooth brushing twice-a-day was reported by 68% of the dentate respondents while 32% brushed their teeth once-a-day or less frequent[12]. Routine dental service utilization is considered the result of adequate oral health literacy. In developed countries it is often recommended that dental visits be made every 6 months though recently the National Institute for Health and Clinical Excellence (NICE) recommended that the interval between oral health reviews of persons aged 18 years and older should be between 3- 24 months. Recall intervals for patients who have repeatedly demonstrated that they can maintain oral health and who are not considered to be at risk of or from oral disease may be extended over time up to an interval of 24 months. Intervals of longer than 24 months were considered undesirable because they could diminish the professional relationship between dentist and patient, and people's lifestyles may change[13]. In this study **(Table 3)** only 7.4% had visited the dentist within an interval of more than 1 year but less than 3 years prior to study while only 3.2% had visited in the last 6 months or less out of which about a quarter (25.3%) did so solely for routine check- up. The differences in dental visiting practice by gender was significant (p=0.05).

In Western Australia it was demonstrated that people in rural and remote areas had a longer time since their last dental visit than people in urban areas[14]. The highest proportion of people having attended a dentist in the previous 12 months was in urban areas and the lowest was in remote areas. Our study did not consider rural, urban differences among the subjects. However, in a study in Ireland on adult diabetics by Allen[15], their dental attendance was noted to be sporadic, with 43% reporting attendance within the preceding year. Women tended to attend for dental care more regularly than men.

Oral malodor is a common social problem especially in public speakers such as pastors. In Libya[16], 40% percent of the males and 54% of the females reported self-perceived malodour, with the highest frequency (68%) during wake up time. In the present study, 8.4% felt they had halitosis of which 14.7% believed that affected their communication with others.

However, 69.5% rated their general oral health as good, 28.9% as fair while 1.6% felt it was poor. On the need for dental care, 18.4% felt they needed care in the paste 6 months. In Bangladesh[17] adults aged 40 years and over as high as 96%.expressed normative need for dental treatment with a perceived need of 48%

For effective rural health services collaboration in primary health care education and improvement of facilities for community-based primary health care education, research, and service delivery ; strengthening of the local primary health care information system is necessary.

Nigeria like other developing countries is presently faced with the arduous problem of coping with scarce resources to control existing and increasing oral disease levels. At present however, Nigeria is without formal oral health promotion and health education policies or programmes.

Health promotion is the process of enabling individuals and communities to increase control over the determinants of health and thereby improve their health[18, 19].

Conclusion

The current study gives a clue about the oral health practices of pastors indicating high frequency of use of tooth brush, low utilisation of dental services and significant need for dental care. Their role as stake holders in assisting to improve oral health of church members and local community is advocated. More information is needed on clergy oral health.

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