

# Oral Health Awareness and Care Seeking Behaviours among Public and Private Dental Clinics Attendees

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## ABSTRACT

**Objective:** To examine the oral health awareness and care seeking behaviours among public and private dental clinics attendees

**Methods:** This cross-sectional study was carried out among patients attending public and private dental clinics in Benin City. A pre-tested questionnaire which elicited information on demographic characteristics, oral health awareness, pattern of dental attendance, treatment pattern, duration of dental problem and reason for delayed presentation was data collection tool. Data collected were analyzed using IBM SPSS version 20 and test for significance was done using chi-square statistics or Fisher's exact test.

**Results:** Less than half (44.16%) of both public and private dental clinic respondents lacked knowledge or held erroneous knowledge about the cause of tooth problem. The majority (88.89%) of the both public and private dental clinic respondents knew who a dentist is. About one tenth (13.12%) of the respondents described as dentist as doctor that extracts teeth and this was higher among public (16.67%) than private (8.70%) dental clinic respondents. More than half (59.28%) of the respondents had visited the dentist with 54.31% being from public dental clinic and two-thirds (66.67%) being from private dental clinic. More than half (55.37%) of the respondents had extraction in the past with more being from the public (54.31%) than private (50.88%) dental clinic. Reasons for present dental attendance was majorly pain (49.11%) with more from public (57.89%) than private (37.64%) dental clinic. A total of 41.38% of the respondents delayed presentation to clinic for over a year with more from the public (42.31%) than the private (38.89%) dental clinic. The major reason for delayed presentation was personal treatment and observation which constituted 55.34% which was not different between public and private dental clinic respondents.

**Conclusion:** Oral health awareness was suboptimal, symptomatic dental attendance and delayed presentations were seen among public and private dental clinics attendees.

**Keywords:** Dental attendance, dental clinics, oral health awareness,

## INTRODUCTION

Dental services are geared towards maintenance and restoration of oral health with intention of improving quality of life of the citizens (WHO, 2019).

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People pay less attention to the health of their

mouth as they do to other parts of their body (CDC, 2011) which reflects in poor utilization of dental services.

Various reasons have been deduced for the underestimation of the importance of dental services. Okunseri et al. (2004) opined that the low oral health care utilization among adults in Benin City is a reflection of the cultural attributes of the population. Some especially those that have been to the dentist before and presenting with a fresh dental complaint claimed financial constraint as a limitation to dental treatment. Wang et al. (2001) stated that the utilization of oral health services is largely determined by people's income with low income earners having lower utilization than high income earners. Others attributed their late presentation to the dental clinic to their inability to access oral health facilities especially those that attend from outside the city where the dental health facility is located. Oral health awareness has also been identified as a factor that determines the level of utilization of dental care services. According to Wang et al. (2003), people with different socioeconomic background have varied level of dental awareness. The importance of education in the utilization of oral health services has been highlighted (Lindelow, 2004) and it has been reported that adequate knowledge will facilitate prompt seeking behaviour and adequate dental care (Slavkin, 1999; Suarez & Diaz, 2002; Amuh et al., 2014).

The oral health awareness is still grossly inadequate among Nigerians—(Agbelusi et al., 1999; Sofola et al., 2002; Orenuga & Sofola, 2005). It has been reported that low oral health awareness has direct effect on the illness seeking behaviour of the individuals. Populations not well informed experience difficulty in adopting steps needed to prevent as well as treat diseases. Subsequently, resulting to underutilization of oral health facilities and late presentation at the clinic with resultant complications (Sofola, 2010). There is paucity of information on oral health awareness and care seeking behaviours in reference to public and private dental clinics attendees. Hence, this objective this study was to examine the oral health awareness and care seeking behaviours among public and private dental clinics attendees in Benin City.

## MATERIALS AND METHODS

This cross-sectional study was carried out on selected public and private dental clinics attendees of all age groups in Benin City, Nigeria over a three-month period. The public dental clinic was Central Hospital Benin City, a government owned secondary health facility. Faith Mediplex which is a missionary hospital and three registered private dental clinics which constituted the private dental clinics were conveniently selected. Tool of data collection was a pre-tested interviewer-administered questionnaire. The questionnaire elicited information on demographic characteristics, oral health awareness, pattern of dental attendance, treatment pattern, duration of dental problem and reasons for delayed presentation. Informed consent forms were duly completed and signed by willing participants. Data was analyzed using IBM SPSS version 21.0 for frequency distribution and cross tabulation. Test for statistical significance was done using chi-square statistics or Fisher's exact test. Statistical significance was set at  $P < 0.05$ .

## RESULTS

A total of 200 patients participated with 60.0% (120/200) from public dental clinic and 40.0% (80/200) from the private dental clinics. The mean age of respondents from the public dental clinic was  $30.06 \pm 3.89$  years while that of respondents from private dental clinics was  $30.38 \pm 4.91$  years. The majority (36.00%) of the respondents were in their third decade of life with public dental clinic respondents constituting 38.33% and private dental clinic respondents, 32.50%. More females (53.00%) were studied they constituted 53.75% of private than 52.5% public clinic respondents. Respondents with tertiary level of education made up 44.22% of the respondents with 38.66% from public and 56.58% from private dental clinics. (Table 1).

Less than half (44.16%) of both public and private dental clinic respondents lacked knowledge or held erroneous knowledge about the cause of tooth problem. The majority (93.40%) of the both public and private dental clinic respondents reported that they will seek care in hospital for oral health problem. The majority (88.89%) of the both public and private dental clinic respondents knew who a dentist is. About one tenth (13.12%) described the dentist as a doctor that extracts

teeth and this was higher among public (16.67%) than private (8.70%) dental clinic respondents (Table 2).

More than half (59.28%) of the respondents had visited the dentist with 54.31% being from public dental clinic and two-thirds (66.67%) being from private dental clinic. More than half (55.37%) had extraction in the past with more being from the public (54.31%) than private (50.88%) dental clinics. About one-third (34.31%) of the respondents had their last dental attendance within 12 months with less from public (29.41%) than private (41.79%) dental clinics. The main reasons for the present dental attendance was

pain (49.11%) with more from public (57.89%) than private (37.64%) dental clinics. Demand for tooth/teeth extraction was 28.99% which was less in public (23.16%) than private (36.49%) dental clinics (Table 3).

A total of 41.38% of the respondents had delayed presentation to the clinic for over a year with more from the public (42.31%) than private (38.89%) dental clinics. The major reason for delayed presentation was personal treatment and observation which constituted 55.34% which was not different between public and private dental clinic respondents (Table 4).

Table 1: Demographic characteristics of the respondents

Characteristics	Public n (%)	Private n (%)	Total n (%)	P-value
<b>Age (years)</b>				0.574
≤ 20	27(22.53)	17 (20.80)	44(22.00)	
21-30	46 (38.33)	26 (32.50)	72(36.00)	
31-40	18 (15.00)	18 (22.50)	36(18.00)	
>40	29 (24.13)	19 (24.25)	48(24.00)	
Total	120 (100.00)	80(100.00)	200 (100.00)	
<b>Sex</b>				0.862
Female	63 (52.5)	43 (53.75)	106 (53.00)	
Male	57 (47.5)	37 (46.25)	94(47.00)	
Total	120 (100.00)	80 (100.00)	200 (100.00)	
<b>Levels of Education</b>				0.028
No Formal Education	14 (11.76)	2 (2.50)	16 (8.04)	
Primary Education	20 (16.80)	8 (10.00)	28 (14.07)	
Secondary Education	39 (32.78)	28 (35.00)	67 (33.67)	
Tertiary Education	46 (38.66)	42 (52.50)	88 (44.22)	
Total	119 (100.00)	80 (100.00)	199 (100.00)	
<b>Monthly income</b>				0.666
<30,000	17 (15.04)	13(17.11)	30(15.87)	
>31,000<50000	9 (7.96)	9 (11.84)	18(9.52)	
>50,000	14 (12.39)	11 (14.47)	25(13.23)	
Unspecified	74 (65.49)	43 (56.58)	117(61.90)	
Total	113 (100.00)	76(100.00)	189 (100.00)	

Table 2: Oral health awareness among the respondents

Variable	Public n (%)	Private n (%)	Total n (%)	P-value
<b>Causes of tooth problems</b>				0.057
Worms	24 (20.34)	18 (22.78)	40 (20.30)	
Sugary substance	27 (22.88)	29 (36.71)	56 (28.43)	
Bacteria	32 (27.11)	20 (25.32)	52 (26.90)	
I don't know	35 (29.66)	12 (15.19)	47 (23.86)	
Total	118 (100.00)	79 (100.00)	197 (100.00)	
<b>Awareness of where to go for oral health services</b>				0.674
Hospital	110 (94.02)	74 (92.50)	184 (93.40)	
Chemist/Herbalist	7 (5.98)	6 (7.50)	13 (6.60)	
Total	117 (100.00)	80 (100.00)	197 (100.00)	
<b>Respondents knowledge of who a dentist is</b>				0.183
Yes	102 (86.4)	74 (92.50)	176 (88.89)	
No	16 (13.6)	6 (7.50)	22 (11.11)	
Total	118(100.00)	80(100.00)	198(100.00)	
<b>Knowledge and awareness of what a dentist does</b>				0.187
Extraction of teeth	15 (16.67)	6 (8.70)	21 (13.21)	
Care of the teeth (scaling / polishing)	42 (46.67)	41 (59.42)	83 (52.20)	
Filling the teeth	33 (36.67)	22 (31.88)	55 (34.59)	
Total	90 (100.00)	69 (100.00)	159 (100.00)	

Table 3: Dental attendance and treatment pattern among the respondents

Variable	Public n (%)	Private n (%)	Total n (%)	P-value
<b>Ever been to a dentist before</b>				0.086
Yes	63 (54.31)	52 (66.67)	115 (59.28)	
No	53 (46.69)	26 (33.33)	79 (40.72)	
Total	116(100.00)	78(100.00)	194 (100.00)	
<b>Treatment received at the past dental attendance</b>				0.575
Extraction of teeth	38 (59.38)	29 (50.88)	67 (55.37)	
Treated pain in the teeth	8 (12.50)	7 (12.28)	15 (12.40)	
Tooth filling	18 (28.13)	21 (36.84)	39 (32.23)	
Total	64 (100.00)	57 (100.00)	121(100.00)	
<b>Timing of last dental attendance</b>				0.026
Within the last 12 months	30 (29.41)	28 (41.79)	58 (34.31)	
12-36 months	8 (7.84)	12 (17.91)	20 (11.83)	
36-60 month	16 (15.69)	8 (11.94)	24 (14.20)	
Never been to a dentist	48 (47.06)	19 (28.36)	67 (39.64)	
Total	102 (100.00)	67 (100.00)	169(100.00)	
<b>Reasons for present dental attendance</b>				0.058
Extraction	22 (23.16)	27 (36.49)	49 (28.99)	
Scaling + Polishing	10 (10.53)	13 (17.57)	23 (13.61)	
Pain in teeth	55 (57.89)	28 (37.64)	83 (49.11)	
Tooth filling	8 (8.42)	6 (8.10)	14 (8.28)	
Total	95 (100.00)	74(100.00)	169(100.00)	

Table 4: Duration of problem and reasons for delayed presentation among the respondents

Variable	Public n (%)	Private n (%)	Total n (%)	P-value
<b>Duration of problem before presentation</b>				0.629
8 Weeks	28 (26.92)	25 (34.72)	53 (30.46)	
12 Weeks	17 (16.35)	12 (16.67)	29 (16.67)	
6 Months	15 (14.42)	7 (9.72)	22 (12.64)	
Over one year	44 (42.31)	28 (38.89)	72 (41.38)	
Total	104 (100.00)	72 (100.00)	174 (100.00)	
<b>Reason for delayed presentation</b>				1.000
No sufficient fund	29 (30.85)	20 (30.77)	49 (30.82)	
Time constraint	13 (19.15)	9 (13.85)	22 (13.84)	
Personal treatment and observation	52 (55.32)	36 (55.38)	88 (55.34)	
Total	94 (100.00)	65 (100.00)	159 (100.00)	

## DISCUSSION

This study with set objective to examine the oral health awareness and care seeking behaviours among public and private dental clinics attendees in Benin City, found that a reasonable proportion of the respondents correctly acknowledged that bacteria and sugary substances play roles in the aetiology of tooth problem. This may be related to the fact that most people believe the act of devouring the sugary substances by bacteria results in teeth destruction. This finding may be the explanation why the majority of the respondents stated that hospital is the place to seek attention for tooth problem. However, erroneous belief of worm as the aetiology of tooth problems persisted and trigger the potential for some of the respondents to seek unorthodox dental treatment. as 6.60% sought care for tooth problem from chemist and herbalist. About one-quarter (23.86%) of the respondents reported lack of knowledge of the aetiology of tooth problem and such unawareness may be a contributory factor to the increasing prevalence of dental caries in Nigeria. Overall, knowledge of aetiology of tooth problem was not significantly difference between public and private dental clinic respondents which may be the explanation why their knowledge of where to seek care for oral health problem was similar.

In this study, majority of the respondents acknowledged that the main job of dentist, is prevention and restoration. This may be related to the fact that more than half (59.28%) of the studied respondents had history of previous

dental attendance. However, this knowledge of dentist job as doctor that does preventive and restorative treatments was higher among respondents in private dental clinic. The explanation may be due to the fact that respondents in the private dental clinic have better educational status than respondents in the public dental clinic. High educational levels have been previously reported to be associated with better health-seeking behaviour on the premise that there will be better access to information, which will improve knowledge about health, thereby modeling into a positive change in behaviour (Deyo & Inui, 1980; Johnson et al., 2004). This can also be attributed to the fact that private care providers take time to explain the causes of oral health problems and the need to make routine visit to the facility unlike the public care provider that have time constraint because of number of patients need attention especially emergency on the daily basis. The fact that the last dental visit among respondents from the private dental clinics was more recent may also be contributory as recall bias may have affected the respondents from public dental clinic. The reported knowledge of dentist job as doctor that removes teeth in about one tenth of the respondents is not surprising as the descriptors of a dentist in many Nigerian languages is a doctor that removes teeth. The reported knowledge of dentist job as the doctor that removes teeth was higher among respondents from public dental clinic while those that indicated conservative and

restorative roles of dentist were higher among respondents from private dental clinic. Reasons for present dental attendance was majorly pain (49.11%) among the respondents with more from public (57.89%) than private (37.64%) dental clinics which gives credence to the fact that Nigerians indulge more in symptomatic dental attendance rather than preventive dental attendance (Ogbebor & Azodo, 2016). The majority of the respondents waited for more than a year before visiting the dentist which may have complicated the case and that explains why the treatments were extraction. The belief that treatment is extraction may have delayed them in the visiting since they believe the treatment will lead to the tooth/teeth loss (Sofola & Uti, 2009). There was no statistically significant difference in the duration of oral health problem before present visit to the dentist between respondents from the public and private dental clinics. As much as 39.5% of patients from public dental clinic delayed for years for seeking dental treatment (Sofola & Uti, 2009). The wrong opinion that the "dental visit would necessarily lead to extractions, which they do not want" is reason why most of them did not seek dental treatment early thereby explaining why personal treatment and observation was the main reason for delayed presentation. Self-medication for oral health problems in high proportion has been reported in Nigeria (Afolabi et al., 2010).

## CONCLUSION

Oral health awareness was suboptimal, symptomatic dental attendance and delayed presentations were seen among public and private dental clinics attendees

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## Conflict of interest

The authors declare that they have no conflicts of interest.

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