

Concerns and Care Seeking Behaviour for Dental Caries among Dental Outpatients in Central Hospital, Benin City

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ABSTRACT

Objective: To examine concerns and care seeking behaviour for dental caries among dental out patients in Central Hospital, Benin City.

Methods: The cross-sectional study was carried out in Dental Centre of Central Hospital, Benin City which is a secondary health care facility in Edo State. A total population of 194 participants (18 years and above) attending the clinic during the four weeks study period participated in the study. Data was collected on their socio-demographic characteristics, worry and care seeking for dental caries.

Results: A total of 194 respondents participated in the study. Two-thirds (67.0%) of the respondents have experienced dental caries and 72.7% expressed different levels of worry about it while only 34.6% went for treatment immediately they knew. Finance (lack of money) was the major (53.1%) factor that influenced respondents' health seeking pattern.

Conclusion: The study also showed that 72.3.7% of the respondents expressed different levels of worry about dental caries but only 45.4% went for treatment when they discovered they had dental caries. This was greatly influenced by the financial status of the respondents to

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INTRODUCTION

It is a well-known and established fact in dental literature that dental caries is the most common disorder affecting the teeth (Szoke & Petersen, 2000). Dental caries is a health problem that affects all individuals, irrespective of age, sex, socioeconomic status, religion and race (Szoke & Petersen, 2000). In the United States of America, dental caries is the most common chronic childhood disease being at least five times more common than asthma (Healthy People, 2010). It is the primary pathological cause of tooth loss in children (Oginni, 2005). Between twenty-nine and fifty-nine percent of adults over the ages of fifty experience caries (The World Oral Health Report, 2003). Worldwide, most children and an estimated ninety percent of adults have experienced dental caries, with the disease most prevalent in Asian and Latin American countries and increasing in African countries

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Dental caries can be very dangerous to the patient if left unattended to. It can lead to tooth/teeth loss which can affect the speech of the patient since teeth aid in speech. This can make patient unable to pronounce some words properly, resulting in lack of confidence especially in public. It can negatively affect appearance leading to low self-esteem and even social withdrawal. It can also lead to nutritional problem due to inability to chew some food that may be very nutritious resulting in malnutrition with adverse consequences on growth and immune system of the body. In addition, meals may not be enjoyed since proper chewing may not be possible. Dental caries and the sequelae can keep patients from their jobs leading to loss of productivity and this will also

affect their finances, since more money will be needed to treat the condition. The problem can be so severe sometimes leading to dentoalveolar abscess, Ludwig angina and other sequelae which can be life threatening. This condition could lead to death which will have a lot of adverse effect on the immediate family and even the entire society as a whole. Many people have dental caries without paying attention to it because it is usually without symptoms at the early stage and only become painful at advanced stage.

The objective of the study was to examine concerns and care seeking behaviour for dental caries among dental outpatients in Central Hospital, Benin City.

MATERIALS AND METHODS

The cross-sectional study was carried out among adult dental patients in Central Hospital which is situated on Sapele Road in Central Benin area in Oredo Local Government Area of Edo State. A total of 194 patients were selected which exceeded the 163 minimum sample size calculated using the formula (Araoye, 2004). $n = Z^2pq / d^2$ Where n = the minimum sample size, Z = standard normal deviation, usually set at 1.96 corresponding to a 95% confidence level, p = target population estimated to be aware of causes and prevention of dental caries. (The prevalence (p) value was derived from a study done in Kenya to determine the dental caries experience and knowledge on the causes and preventive measures in an arid rural setting where 12% knew that bacteria was possible cause of dental caries (Kassim et al., 2006), $q = 1 - p$ = the proportion of target population estimated not aware of causes and prevention of dental caries., d = degree of accuracy desired, usually set at 0.05. The total population of patients of 18 years and above attending the dental clinic of Central Hospital, Benin within the study period of four weeks was used for the study.

Data collection tool was an interview administered questionnaire. The questionnaire elicited information on demographic characteristics, dental caries experience, worry about dental caries and their health seeking behaviour regarding dental caries. The questionnaire was pretested at the Dental Centre, Central Hospital, Auchi, Edo State which is a

secondary health care facility with a similar characteristic as with the study population.

Research assistants were used to administer the questionnaires and a day training workshop was organised to train them. They were three house officers and two medical officers from Central Hospital, Benin.

Ethical approval was obtained Edo State Ministry of Health Ethics and Research Committee. Informed consent was obtained from respondents.

The data was subjected to descriptive statistics using IBM SPSS version 20 was used for the analysis of data collected. Test for significance was using Fisher's exact statistics and statistical significance was at $P < 0.05$

RESULTS

Male respondents (50.5%) were slightly higher than the female (49.5%) respondents. The mean age is 37.8 ± 1.5 years. More than half of the respondents were between 20-29 years (32.5%) and 30-39 years (22.2%). Majority (94.3%) of respondents are Christians. Most of the respondents were either singles (42.3%) or married (50.0%) and 43.3% of the respondents were secondary school certificate holders and those without any education were low (6.2%) (Table 1). Two-thirds (67.0%) of respondents have experienced dental caries (Figure 1).

More than one-third (39.2%) of the respondents were very worried and about one-quarter (27.7%) of the respondents were not worried about dental caries (Table 2). About one-third (34.6%) of the respondents went for treatment immediately when they discovered dental caries while 17.7% ignored it (Table 3). Respondents that were not worried about dental caries were more likely to go for treatment when it worsened (58.3%) while respondents that were very worried about dental caries were less likely to go for treatment when it worsened (31.4%) ($P = 0.000$) (Table 4). Finance (lack of money) was the major (53.1%) factor that influenced respondents' health seeking pattern. Other factors were accessibility 13.8% (bad roads, long distances from health facilities and bureaucracies of the hospital), beliefs (religious or cultural) accounted for 22.3% and 10.8% as a result of influences of other people such as relatives, friends, colleagues and so on (Table 5).

Table 1: Socio-demographic characteristics of Respondents

Variables	Frequency (N= 194)	Percent
Sex		
Male	98	50.5
Female	96	49.5
Age group in years		
10-19	14	7.2
20-29	63	32.5
30-39	43	22.2
40-49	26	13.4
50-59	23	11.9
60 and above	25	12.9
Religion		
Christianity	183	94.3
Muslim	11	5.7
Marital status		
Single	82	42.3
Married	97	50.0
Divorced	9	4.6
Widow/Widower	6	3.1
level of education		
None	12	6.2
Primary	37	19.1
Secondary	84	43.3
Tertiary	61	31.4

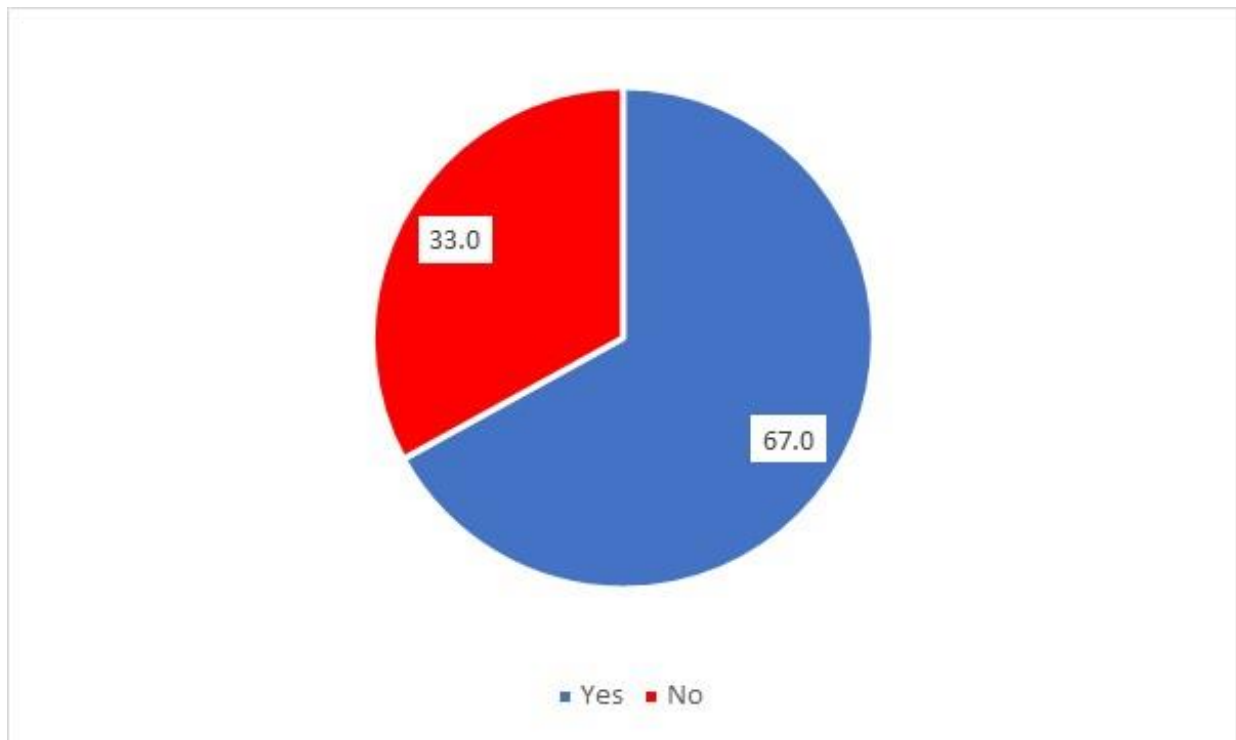


Figure 1: Respondents who have experienced dental caries

Table 2: Concerns of respondents who have experienced dental caries

Concern	Frequency	Percent
Not worried	36	27.7
Less worried	12	9.2
Worried	31	23.8
Very worried	51	39.2
Total	130	100.0

Table 3: Decision of respondents who have experienced dental caries

Decision	Frequency	Percent
Ignored it	23	17.7
Went for treatment immediately	45	34.6
Went for treatment when it worsened	59	45.4
Did not know what to do	3	2.3
Total	130	100.0

Table 4: Association between decision and attitude of respondents who have experienced dental caries

Decision	Not worried n (%)	Less worried n (%)	Worried n (%)	Very worried n (%)	Total n (%)	P-value
ignored it	11 (30.6)	6 (50.0)	1 (3.2)	5 (9.8)	23 (17.7)	0.000
treatment immediately went for treatment when	4 (11.1)	0 (0.0)	12 (38.7)	29 (56.9)	45 (34.6)	
it worsened	21 (58.3)	6 (50.0)	16 (51.6)	16 (31.4)	59 (45.4)	
did not know what to do	0 (0.0)	0 (0.0)	2 (6.5)	1 (2.0)	3 (2.3)	
Total	36 (100.0)	12 (100.0)	31 (100.0)	51 (100.0)	130 (100.0)	

Table 5: Factors that influenced respondents' health seeking pattern

Respondents	Frequency	Percent
Finance	69	53.1
Accessibility to health facility (bad roads, distances and bureaucracy etc)	18	13.8
Human (relatives, friends and colleagues etc)	14	10.8
Belief (religious and cultural)	29	22.3
Total	130	100.0

DISCUSSION

The study showed that two-thirds of respondents have experienced dental caries indicating a high prevalence of this condition which is tandem with a finding of high value (58.6%) in a missionary hospital in Benin City (Ogbebor & Azodo, 2016). The high prevalence of dental caries experience may be due to high intake of refined carbohydrate according to the findings of the World Oral Health Report, released by the World Health Organization that with changing living conditions,

dental caries is expected to increase in many developing countries in Africa, particularly as a result of the growing consumption of sugars and inadequate exposure to fluoride (The World Oral Health Report, 2003). This is worsened by so many herbal toothpastes without fluoride that are available in the market.

Regarding respondents that have experienced dental caries, about three quarters (72.3%) expressed different levels of worry. This may be connected with the fact that painful symptom of

dental caries starts at advanced stages and the respondents may have been experiencing of different stages of dental caries. However, more than one-third (39.2%) of the respondents expressed that they were very worried and it could be ascribed to the previous horrible personal experience or experiences of their significant others and also some could have experienced dental caries of anterior teeth which would have aesthetically unpleasant.

From this study, 45.4% of the respondents only went for treatment when it worsened which may be due to the fact that Nigerians are generally known to indulge in more in symptomatic dental attendance (Ogbebor & Azodo, 2016). There was significant association between concerns about dental caries and decision taken in this study ($P=0.000$). Respondents that expressed no worry about dental caries were more likely to have gone for treatment when it worsened while the respondents that very worried about dental caries were more likely to have gone for treatment immediately. Seeking treatment early for dental caries is likely to facilitate restoration of the affected tooth/teeth to health and function and ultimately improve the oral health related quality of life.

The factors that influenced the decision of respondents who experienced dental caries based on the findings of this study were finance (lack of money) which contributed majority (53.1%) to the decision of respondents. This could be as a result of high level of poverty in the country where an average individual lives on less than a dollar (less than two hundred naira) per day, so undergoing a dental treatment, which is usually not less than three thousand naira in most government owned hospitals, may not be an option to take by respondents except the condition becomes life threatening. Other factors are accessibility to health facilities (bad roads, long distance to the place and bureaucracies of the system). These contribute to respondents' decision taking since they will likely lead to spending a lot of money on transportation which the respondents may find difficult to afford. The hospital bureaucracies also affect the respondents because some of them may not have adequate education to express themselves aside from this time wasting at various stages before being treated also has a great influence on their decision as they feel vital time to

meet their other needs in life is being wasted. The individual beliefs 22.3% (religious and cultural) play an important role as some religion may not permit male doctors to treat female patients and this could affect their decision if no female doctor is in the health centre or clinic. Other people such as colleagues, relatives, friends, and so on contribute 10.8% to respondents' decision on what to do when having dental caries. This could be so because in our environment, communal and extended family way of life still thrive and these could have their effect on respondents' decision when they have dental caries.

CONCLUSION

The study also showed that 72.3.7% of the respondents expressed different levels of worry about dental caries but only 45.4% went for treatment when they discovered they had dental caries. This was greatly influenced by the financial status of the respondents to afford treatment. Other factors such as accessibility to the health facilities and the hospital bureaucracies also contributed

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