

Knowledge and Attitude of Specialist Hospital Health Care Workers to Dental Services in Benin City.

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ABSTRACT

Objective: To examine the knowledge and attitude to dental services among Health Care Workers in a specialist hospital setting.

Methods: This descriptive study was carried out among all cadres of workers in Edo Specialist Hospital (ESH); a government-owned secondary health facility located in Benin City. A structured online questionnaire created using Google forms was used to collect data anonymously from participants. The online form extracted information on demographic characteristics, oral health awareness, pattern of dental visits, and utilization of dental services at Edo Specialist Hospital. The data obtained were analysed using SPSS version 26.0 for frequency distribution and cross tabulation. Test for statistical significance was done using chi-square statistics.

Results: Majority of the participants had never visited a dentist before (59, 54.6%). Majority (48, 44.4%) of the respondents reported that they had not seen the need to visit. Among the respondents, the commonest reasons for previous dental visits were toothache (15, 13.9%) and Stains and deposits on the teeth (13, 12.0%). Majority (76, 70.4%) of respondents had a good or fair understanding of the causes of dental caries. All participants (108, 100%) were aware that there was a dental clinic at Edo Specialist Hospital (ESH). However, majority (86, 79.6%) had never visited it. Among the respondents, the commonest reason given for not attending the dental clinic at ESH was that they never saw the need to visit (54, 50.0%). On the other hand, the commonest reasons given for visiting the dental clinic at ESH were toothache (12, 11.2%) and Stains and deposits on the teeth (5, 4.7%). There was a significant relationship between the Staff cadre and previous dental visits.

Conclusion: Knowledge of dental care and service utilization was poor. Clinically indicated dental visit was seen among healthcare workers in a specialist health care facility

Keywords: Dental visit, oral health awareness, health care workers, dental clinic

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INTRODUCTION

Oral health is important to general health. Hence, keeping good oral health throughout life is vital to general well-being.¹ Good dental health engenders the general well-being of an individual because poor oral health impairs the quality of life and well-being of an individual.¹ One of the ways to improve and maintain oral health is through routine dental visits. Routine dental visits indicate proper utilization of dental services and help to advance oral health and by extension, general wellness.^{2,3}

Dental care utilization refers to the number of persons who received dental care over a period of time. It is expressed in terms of the number of visits to the dental clinic and services received over a specified period.⁴ Furthermore, it is an indispensable facilitator of oral health.⁵⁻⁷ Dental service utilization enhances oral health because it promotes the control of oral diseases and the preservation of dental health.^{8,9} A study reported that routine dental visits facilitate prevention as well as quick management of oral diseases.¹⁰ On the other hand, irregular dental visit promotes the progression of oral diseases with their attendant consequences.¹¹

It has been reported that people pay less attention to the health of their mouth than they do to other parts of their body¹² which reflects in poor utilization of oral health care services.¹³

Several reasons have been attributed to low oral health care utilization including socioeconomic factors, perception and attitudes to oral health.¹⁴⁻¹⁷ Proximity to health facility, dental insurance, and cost of treatment have also been cited¹⁸⁻²². Other factors related to patients' experience such as the disposition of the dentist, waiting time, and scheduling have also been reported to affect dental services utilization.¹⁴⁻²⁴

The knowledge of dentistry is highly deficient among Nigerians and this poor public awareness of oral health care and services is limiting dental care delivery in Nigeria.²⁵⁻²⁷ Thus, most people do not place importance on dental health. It has been stated that a poor understanding of dental health negatively influences regular dental visits of individuals and persons that are not knowledgeable experience difficulty in adopting steps needed to prevent as well as treat dental conditions which results in late presentation to the dental clinic.²⁸

Good dental health of healthcare workers translates to increased work productivity since dental health facilitates the overall well-being of the individual. Previous studies^{13, 28-32} on the utilization of dental

facilities have focused on population studies. Scanty reports exist on this subject among healthcare workers in a specialist healthcare facility. This study hereby reports knowledge and attitude toward dental services among healthcare workers in a specialist healthcare facility.

METHODOLOGY

This descriptive study was carried out among all cadres of health workers including doctors (medical and dental), nurses, dental surgery technicians, dental therapists and dental technologists (Dental auxiliaries), pharmacists, medical laboratory scientists, other health care workers (cleaners, front desk officers, medical record personnel, health care assistants), in Edo Specialist Hospital (ESH); a government-owned secondary health facility located in Benin City. A structured online questionnaire created using Google forms was used to collect data anonymously from willing participants, over a three-month period. There was information extracted on knowledge and attitude toward dental services. Knowledge of dental caries was graded by the respondents' understanding of the causes of dental caries. While a good understanding meant having adequate knowledge of the two etiologic factors of dental caries which is the action of bacteria on sugary substances, a fair understanding meant having the knowledge that either bacteria or sugary substance results in dental caries. Poor knowledge meant the lack of knowledge of either the action of bacteria or sugary substances as the cause of dental caries. The statistics obtained were analysed using SPSS version 26.0 for frequency distribution and cross tabulation. Test for statistical significance was done using chi-square statistics.

Ethical clearance was given by the Research and Ethics Committee of Edo Specialist Hospital.

RESULTS

A total of 108 healthcare workers participated in this survey with ages of between 21-56 years and a mean age of 32.63±6.9. Majority were between 25-40 years (90, 83.3%), females (67, 62%) and were married (56, 51.9%). Most of the participants belonged to the category of other health care workers which included cleaners, front desk officers, medical record personnel, health care assistants (54, 50.0%). Majority were educated up to the tertiary level (77, 71.3%) and had a working experience of within 1-5years (58, 53.7%). Furthermore, the majority of the

participants earned between 30,000-100,000 naira monthly (71, 65.7%) (Table 1). Majority of the participants had never visited a dentist before (59, 54.6%). Majority (48, 44.4%) of the respondents reported that they had not seen the need to visit a dentist. Among the respondents, the commonest reasons for previous dental visits were toothache (15, 13.9%) and stains and deposits on the teeth (13, 12.0%) (Table 2). Majority (76, 70.4%) of respondents had a good or fair understanding of the causes of dental caries, based on their knowledge of the scientifically proven cause of dental caries (Table 3). All participants (108,100%) were aware that there was a dental clinic at Edo Specialist Hospital (ESH). However, the majority (86, 79.6%) had never visited

it. Among the respondents, the commonest reason given for not attending the dental clinic at ESH was that they never saw the need to visit (54, 50.0%). On the other hand, the commonest reasons given for visiting the dental clinic at ESH were toothache (12, 11.2%) and stains and deposits on the teeth (5, 4.7%) (Table 4).

There was no statistically significant relationship between age, gender, marital status, level of education, years of working experience, monthly income, and previous dental visits. However, there was a statistically significant relationship between doctors (medical and dental) and previous dental visits ($P < 0.05$) (Table 5).

Table 1. Sociodemographic characteristics of the Participants.

Characteristics	Frequency(n)	Percent (%)
Age Group (years)		
<25	7	6.5
25-40	90	83.3
>40	11	10.2
Gender		
Male	41	38.0
Female	67	62.0
Marital Status		
Single	52	48.1
Married	56	51.9
Staff Cadre		
Doctors (medical and dental)	10	9.3
Nurses	32	29.6
DST's, Therapists and Technologists	2	1.8
Pharmacists	6	5.6
Med Lab Scientists	4	3.7
Other Health Care Workers (cleaners, front desk officers, medical record personnel, health care assistants)	54	50.0
Level of Education		
Primary	1	0.9
Secondary	7	6.5
Tertiary	77	71.3
Postgraduate	23	21.3
Years of Working Experience		
<1 year	6	5.6
1-5years	58	53.7
6-10years	24	22.2
>10years	20	18.5
Monthly Income (Naira)		
30,000-100,000	71	65.8
100,000-200,000	20	18.5
>200,000	17	15.7

TOTAL	108	100
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Table 2. Assessment of Participants' previous dental visits and reasons for visit and non-visit.

Have you ever visited a dentist before	Frequency (n)	Percent (%)
Yes	49	45.4
No	59	54.6
Total	108	100
Reasons for not visiting		
Perceived fear of Dental procedures	6	5.6
Fear of needles	1	0.9
Negative past dental experiences of others	2	1.9
Cost of treatment	9	8.4
Unavailability of desired services and personnel in your locality	1	0.9
I don't think dental care is necessary	1	0.9
I never saw the need to visit	48	44.4
Busy schedule	1	0.9
No reason	2	1.9
Reasons for a previous dental visit		
Toothache	15	13.9
Stains and deposits on the teeth	13	12.0
Missing tooth/teeth	1	0.9
Bleeding and/or swollen gums	4	3.7
Hole in the tooth	4	3.7
Total	108	100

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Table 3. Knowledge of participants concerning the causes of tooth decay.

What do you think is(are) the causes of tooth decay	Frequency (n)	Percent (%)
Bacteria	47	43.5
Sugary substances	29	26.9
Worms alone	8	7.4
Worms and bacteria	1	0.9
Worms and Sugary substances	1	0.9
Worms, Sugary substances, and bacteria	9	8.4
I don't know	13	12.0
Total	108	100

Table 4. Awareness among participants concerning the presence of a dental clinic at ESH and reasons for visiting or not visiting.

Are you aware there is a dental clinic within ESH?	Frequency (n)	Percent (%)
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Yes	108	100.0
No	0	0.0
Total	108	100
If you are aware, have you ever visited?		
Yes	22	20.4
No	86	79.6
Total	108	100
Reasons for not visiting		
Fear of Dental procedures	3	2.7
Fear of needles	1	0.9
Negative past dental experiences	2	1.9
Cost of treatment	12	11.2
Attitude of the Staff in the clinic	1	0.9
I don't think dental care is important	1	0.9
I never saw the need to visit	54	50.0
Busy schedule	3	2.7
No reason	3	2.7
Reasons for Visiting		
Tooth ache	12	11.2
Stains and deposits on the teeth	5	4.7
Missing tooth/teeth	0	0.0
Bleeding and/or swollen gums	0	0.0
Hole in the tooth	4	3.7
Fractured teeth	0	0.0
Routine dental check up	2	1.8
No reason	5	4.7
Total	108	100

Table 5. Association between Sociodemographic characteristics of the Participants and previous dental visits.

Characteristics	Yes	No	Total	<i>p-value</i>
Age Group (years)				
	n (%)	n (%)	n (%)	0.112
<25	4 (57.1)	3 (42.9)	7 (100.0)	
25-40	37 (41.1)	53 (58.9)	90(100.0)	
>40	8 (72.7)	3 (27.3)	11(100.0)	
TOTAL	49 (45.4)	59 (54.6)	108(100.0)	
Gender				0.151
Male	15 (36.6)	26 (63.4)	41(100.0)	
Female	34(50.7)	33 (49.3)	67((100.0)	
TOTAL	49(45.4)	59 (54.6)	108(100.0)	
Marital Status				0.538
Single	22 (42.3)	30 (57.7)	52(100.0)	
Married	27 (48.2)	29 (51.8)	56(100.0)	
TOTAL	49 (45.4)	59 (54.6)	108(100.0)	
Staff Cadre				0.011
Doctors	9 (90.0)	1 (10.0)	10 (100.0)	
Nurses	12(37.5)	20(62.5)	32(100.0)	

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DST's, Therapists and Technologist	2(100.0)	0(100.0)	2(100.0)	
Pharmacists	2(33.3)	4(66.7)	6(100.0)	
Med Lab Scientists	0(0.0)	4(100.0)	4(100.0)	
Other Health Care Workers	24(44.4)	30(55.6)	54(100.0)	
TOTAL	49(45.4)	59(54.6)	108(100.0)	
Level of Education				0.150
Primary	0(0.)	1(100.0)	1(100.0)	
Secondary	3(42.9)	4(57.1)	7(100.0)	
Tertiary	31(40.3)	46(59.7)	77(100.0)	
Postgraduate	15(65.2)	8(34.8)	23(100.0)	
TOTAL	49(45.4)	59(54.6)	108(100.0)	
Years of Working Experience				0.525
<1 year	3(50.0)	3(50.0)	6(100.0)	
1-5years	27(46.6)	31(53.4)	58(100.0)	
6-10years	8(33.3)	16(66.7)	24(100.0)	
>10years	11(55.0)	9(45.0)	20(100.0)	
TOTAL	49(45.4)	59(54.6)	108(100.0)	
Monthly Income (Naira)				
30,000-100,000	29(40.8)	42(59.2)	71(100.0)	
100,000-200,000	9(45.0)	11(55.0)	20(100.0)	
>200,000	11(64.7)	6(35.3)	17(100.0)	
TOTAL	49(45.4)	59(54.6)	108(100.0)	

DISCUSSION

This study examined the knowledge and attitude to dental services among Health Care Workers in Edo Specialist Hospital, a Specialist Health Care Facility in Benin City and found that a reasonable proportion of the respondents correctly acknowledged that bacteria and sugary substances play roles in the aetiology of tooth problems. This may be due to the fact that most people believe that the action of bacteria on sugary substances results in teeth destruction. This finding may be because the respondents are healthcare workers in the hospital with plausible interdisciplinary interaction with oral healthcare providers. However, the erroneous belief of worm as the aetiology of tooth problems persisted and may be a contributing factor to some of the respondents with a history of nil previous dental visits. This was reflected in this study as 0.9% of the respondents did not think that seeking dental care in the dental clinic was necessary. A number of the respondents (13, 12%) reported a lack of knowledge of the aetiology of tooth problems and such unawareness may be a contributory factor to the growing number of dental caries in Nigeria.

The commonest reason for previous dental visit among the participants was toothache with 13.9% of respondents visiting a dentist before on account of

toothache while 11.2% visited the dental clinic at Edo Specialist Hospital previously on account of toothache. This gives credence to the fact that Nigerians indulge more in symptomatic dental attendance rather than preventive dental attendance.³³ Periodontal diseases are among the 2 leading types of dental diseases.³⁴ This was reflected in this study as 12% of respondents visited a dentist before on account of stains and deposits on the teeth while 11.2% visited the dental clinic at Edo Specialist Hospital previously on account of stains and deposits on the teeth. Stains and deposits on the teeth were the next prevalent cause for previous visits to the dentist.

The majority of the respondents never saw the need to visit a dentist or the dental clinic at ESH. Poor or non-visit to the dentist by the subjects may be due to their poor perception of the relevance of dental health to the general well-being of the individual. Cultural practices, low social class and low level of dental wellness information among Nigerians have been reported to account for the poor perception of the importance of oral health.¹³

In this study, majority of the Doctors (90%), Dental Surgery Technicians, Dental Therapists and Dental Technologists (100%) had history of previous dental visit. This may be related to the fact that these

groups of respondents had better understanding of the significance of oral health care, since they work in the dental clinic or have interdisciplinary relationship with the dental service providers. However, this history of previous dental visit was significantly higher than among respondents in other staff cadre in ESH. The explanation may be that respondents in the groups of Doctors, Dental Surgery Technicians, Dental Therapists and Dental Technologists have significantly better knowledge and attitude than respondents in the other staff cadre. Good oral health knowledge and attitude have been previously reported to result in more visits to the dental clinic.³⁵ There was no statistically significant relationship between age, sex, marital status, level of education, years of working experience, monthly income, and previous dental visits.

Ages, gender, level of education and personal income have been reported to have an effect on the utilization of oral health care services.^{36,37}

CONCLUSION

Knowledge of dental care and service utilization was poor. Clinically indicated dental visit was seen among health care workers in the specialist health care facility

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Conflict of interest

None declared

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