Perception and Barriers to Quality Oral Healthcare in Hospitalised Patients at a Teaching Hospital in Nigeria: The Nurses Experience

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ABSTRACT

Background: Oral healthcare is one aspect of healthcare that's more often neglected in hospitalized patients. The aim of this study was to explore nurses' perception of oral health in hospitalised patients and also to ascertain the nurse's barriers to quality oral care during their routine nursing procedures.

Methods: This was a descriptive cross-sectional study conducted in Alex Ekwueme Federal University Teaching Hospital Abakaliki, Nigeria. A proportional sampling method was used to select respondents and well-structured self-administered questionnaire was used for data collection. Data was analysed using IBM SPSS version 21. Chi square test was used to determine association between variables and statistical significance was set at $p<0.05$ for all statistical association.

Results: Nurses' perception to oral health importance in patients was good (54.4%), but better among females (55.4%). Nurse perception increased with increasing level of education: Diploma 34.7%, Bachelor 60.0% and postgraduate 65.6%. Nurses perception also increased with years of experience; < 1 year 41,7%, 1-5 years 56.5%, 6-10 years 60.5% and >10 years 61.5%

The study showed that 82.7% of the respondents identified one form of barrier or the other in rendering quality oral healthcare. These barriers cut across all the sociodemographic variables. Lack of oral care equipment (64.8%), shortage of nurses (46.3%), high workload (42.6%) and time constraint (35.8%) were the major barriers identified in this study.

Conclusion: The nurses' perception to quality Oral Healthcare Care in hospitalised patients was good and identified barriers to quality Oral Healthcare if adequately addressed, will go a long way in improving the quality of Oral Healthcare in hospitalised patients by nurses.

Keywords: Perception, Barriers to oral healthcare, Nurses, hospitalised patients

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INTRODUCTION

Oral health is the condition of the mouth and its associated structures which allows mouth to function normally without disease and discomfort, contributing to the overall wellbeing of individuals.[1,2]The awareness of oral healthcare in Nigeria is poor and not given adequate attention.[3] Oral health should be viewed as a crucial component of a healthy lifestyle, but it often receives insufficient attention. There are evidence linking oral health to other systemic diseases like cardiovascular disease, poor glycemic control in diabetes, difficulties during pregnancy and delivery and low birth weight.[1] Oral health can be seen as a mirror through which other aspect of general health is reflected,[4] and it has a significant impact on the well-being of individuals and quality of life.

Most often, the circumstances surrounding hospitalisation patients can lead to neglect of their oral hygiene. Long-stay hospitalized patients are often at risk of poor oral health due to suboptimal oral care. This may increase the risk of this group of patients to nosocomial infections and compromise their state of health adversely.[4] Studies that explored missed nursing care in hospitalized patients reported that mouth care is rated as a low-priority nursing procedure, and often left undone because it is not considered an important patient need.[5] Some studies [6,7] reported that other reasons for inadequate nursing care among hospitalised patients includes: inadequate manpower , lack of materials and equipment, and communication gap between medical team and the nursing team . For instance, when faced with inadequate manpower, nurses may omit or delay interventions like oral health hygiene and give more attention to other medical interventions.[6,7]

Oral healthcare of hospitalized patient has implications in identifying the magnitude of oral health conditions considered as fundamental to patient's wellbeing, prevention and control of oral diseases, reduced hospital stay, and overall strengthening of the healthcare system [8]. Adequate oral care provides relief and infection free mouth to patients who may not be able to perform this simple activity.[9]

Therefore, this study aimed to explore nurses 'perception of oral health in hospitalised patients and also to ascertain the nurse's barriers to provision of quality oral healthcare. The findings of this study will help in enhancing initiatives to improve the quality of nurse's oral healthcare in patients that can help in their quick recovery and wellbeing, and also provide essential data for subsequent studies

MATERIALS AND METHODS

This study was conducted in Alex Ekwueme Federal University Teaching Hospital, Abakaliki (AEFUTHA), Ebonyi State, South East Nigeria. AEFUTHA is about a 1000-bedded tertiary health facility rendering healthcare services to the people of Ebonyi State and other neighbouring States.

After obtaining ethical approval from AEFUTHA Ethics and Research Committee, a questionnaire based descriptive cross-sectional survey of nurses caring for hospitalized patients was conducted between last quarter in 2023 and first quarter in 2024. The inclusion criteria were nurses working in wards with in-patients and those willing to participate in the survey. Nurses working in outpatient clinics and other sections outside of wards were excluded from the study.

Informed consent was obtained from each participant prior to the survey and participation was voluntary. The minimum sample size for this study was 136. A self-administered questionnaire adopted from a previous study, [12] was the tool used for data collection. The questionnaire was divided into two sections. The first section was used to obtain information on socio-demographic characteristics like age, gender, level of education, designation and work experience. The second section was used to collect data on the necessity for oral health and barriers to quality oral healthcare.

Necessity for oral health was graded on a scale of 1-5, with 1 being the lowest and 5 the highest score. A score of 1 was considered not necessary, a score of 2 -3 was considered necessary while a score of 4-5 was considered very necessary. Respondents identified barriers to quality oral healthcare from list of options provided. Where such barriers were not captured in the options provided, they supplied the need information under others.

The data were analysed using the Statistical Package for Social Sciences (SPSS) version 21 software. The frequency distribution and the percentage frequency of the variables determined, and Chi square test was used to determine association between variables and the P value was set at ≤0.05.

RESULTS

The number of respondents is this study was 191. The mean age was 34.8 standard deviation, with a male to female ratio of 1:4.6. A greater proportion of the participants had first degree as their highest level of

education (57.6%) in Table 1. A greater proportion (54.4%) of the respondents saw the necessity for oral healthcare in hospitalised patients (figure 1). The necessity for oral health increased with increasing age, level of education and years of work experience. There was significant relationship between respondent's age and level of education with the necessity for oral healthcare as shown in Table 2.

Barriers to carrying out oral healthcare procedures were acknowledged in 82.7% of the respondents as shown in figure 2. The barriers to oral healthcare cut across all the socio-demographics in Table 3. Factors hindering nurses from accessing and carrying out oral healthcare procedures in hospitalised patients. (Table 4)

Table 1: Socio-demographics variables of the participants

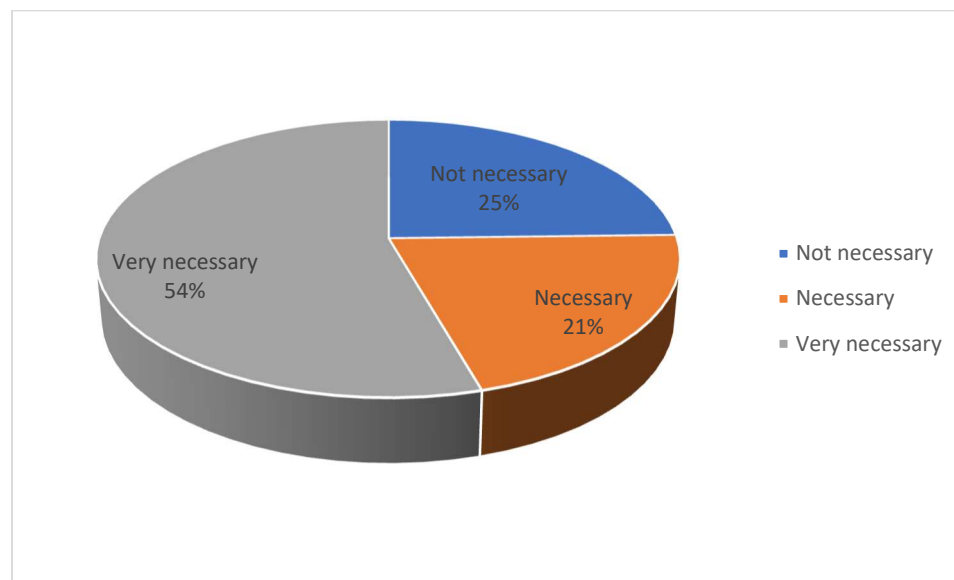| Variables	Number	Percentage
Age (years)		
<20	10	5.2
20-29	55	28.8
30-39	65	34.0
≥ 40	61	32.0
Gender		
Male	34	17.8
Female	157	82.2
Level of Education		
Nursing School	49	25.7
Tertiary (Degree)	110	57.6
Post-graduate	32	16.7
Designation		
Student/Intern	59	30.9
Junior Cadre	55	28.8
Senior Cadre	77	40.3
Work Experience		
< 1 year	60	31.4
1-5 years	23	12.1
6-10 years	43	22.5
>10 years	65	34.0

Figure 1: Necessity for Oral Healthcare for hospitalized patients

Table 2: Relationship between Age, Gender, Cadre, level of Education, Work Experience and Necessity for Oral Care for hospitalized patients

Variables	Response			χ^2	P-value
	Not Necessary n (%)	Necessary n (%)	Very Necessary n (%)		
Age (years)					
< 20	5 (50.0)	2 (20.0)	3 (30.0)	13.272	0.039*
20-29	14 (25.5)	18 (32.7)	23 (41.8)		
30-39	17 (26.2)	10 (15.4)	38 (58.5)		
≥40	11 (18.0)	10 (16.4)	40 (65.6)		
Gender					
Male	7 (20.6)	10 (29.4)	17 (50.0)	1.839	0.399
Female	40 (25.5)	30 (19.1)	87 (55.4)		
Level of Education					
Nursing School	21 (42.9)	11 (22.4)	17 (34.7)	15.312	0.04*
Tertiary (Degree)	19 (17.3)	25 (22.7)	66 (60.0)		
Post-graduate	7 (21.9)	4 (12.5)	21 (65.6)		
Designation					
Student/Intern	18 (30.5)	17 (28.8)	24 (40.7)	7.715	0.103
Junior Cadre	10 (18.2)	9 (16.4)	36 (65.4)		
Senior Cadre	19 (24.7)	14 (18.2)	44 (57.1)		
Work Experience					
< 1 year	18 (30.0)	17 (28.3)	25 (41.7)	8.479	0.205
1-5 years	4 (17.4)	6 (26.1)	13 (56.5)		
6-10 years	12 (27.9)	5 (11.6)	26 (60.5)		
>10 years	13 (20.0)	12 (18.5)	40 (61.5)		

*Statistically Significant
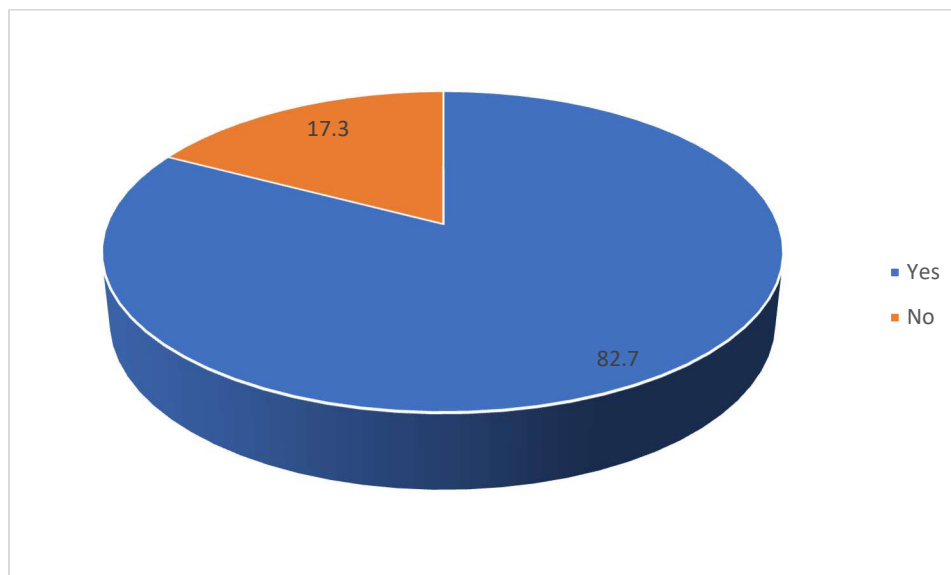

Figure 2: Barriers to Oral Health

Table 3: Relationship between sociodemographics and barriers to oral care

Variables	Response		χ²	P-value
	Yes n (%)	No n (%)		
Age (years)				
< 20	7 (70.0)	3 (30.0)	3.785	0.286
20-29	45 (81.8)	10 (18.2)		
30-39	58 (89.2)	7 (10.8)		
>40	48 (78.7)	13 (21.3)		
Gender				
Male	27 (79.4)	7 (20.6)	0.317	0.565
Female	131 (83.4)	26 (16.6)		
Level of Education				
Nursing	38 (77.6)	11 (22.4)	1.492	0.474
Tertiary (Degree)	92 (83.6)	18 (16.4)		
Post-graduate	28 (87.5)	4 (12.5)		
Designation				
Student/Intern	46 (78.0)	13 (22.0)	2.539	0.281
Junior Cadre	49 (89.1)	6 (10.9)		
Senior Cadre	63 (81.8)	14 (18.2)		
Work Experience				
< 1 year	47 (78.3)	13 (21.7)	2.121	0.548
1-5 years	20 (87.0)	3 (13.0)		
6-10 years	38 (88.4)	5 (11.6)		
>10 years	53 (81.5)	12 (18.5)		

Table 4: Nurses hindering factors to oral healthcare in patients / (Multiple Response)

Hindering factors	Frequency	Percentage
Lack of Oral care equipment	105	64.8
Shortage of Nurses	75	46.3
High workload	69	42.6
Time constraint	58	35.8
Lack of training in Oral care	16	9.9
Absence of Guideline	14	9.3
Lack of oral care knowledge	12	7.4
Not part of job description	9	5.6
Not our priority	9	5.6
Lack of interest in Oral care	4	2.5

DISCUSSION

Oral healthcare is a very important aspect of the general healthcare especially in hospitalised patients with the aim of preventing oral diseases and promoting good oral health tissues.

The higher male to female ratio observed in this study is in agreement with other previous studies, [11-13] the reason for this may be due to the fact that more females enrol into nursing school in our environment. Most of the respondents were between the ages of 30-39 years and postgraduate was the highest educational level of the respondents. This was not in agreement with another study where majority of the

respondents were between 20-25 years and Diploma was the highest level of education.[,14] The reason for this could be due to the fact that in our environment, emphasis is place on level of education among other criteria in career progression. Majority of the participants in this study had first degree (54%). This was in agreement with a study which reported that majority of the participants (50.4%) had first degree (Bachelor).[14]

In this study, perception of nurses towards oral health care of hospitalised patients was good; 54.5% of the participants saw oral health care as very necessary in hospitalised patients. This corroborates

findings from a similar study by Orgambidez et al.[16] but varied with that of Chem et al.[18] which reported lower perception. The possible explanation for this may be that in the study by Chem et al [18] the nurses had more of the elderly on admission with increased health burden. As a result, nurses may feel severe stress, which may impair their perception.

In the current study, both sexes have good perception of necessity for oral healthcare among hospitalised patient though this perception was higher among females compared to males. This was in agreement with another study which reported 72.5% for females and 66.7% for males as having very good perception of the need to provide optimal oral care in hospitalised patients.[12] The reason for this finding may be because more females participated in the studies. Perception of oral health increased with increasing level of education in our study; This was in agreement studies by Al Rababah et al.[12], Ibrahim et al.[17] and Andegie et al.[19] The reason for this similarity might be due to the fact that there is an increase in the scope of knowledge and exposure as the level of education increases. Furthermore, nurses' oral health perception increased with years of working experience in the current study. This was also in agreement with another study, which reported that nurses who had working experience greater than 10 years had a better attitude compared with those nurses with less than 10 years of working experience.[14] The reason for this finding may due to the fact that nurses with greater years' experience might have some form of former or informer training on oral health in the course of their practice, and might have seen more complications arising from neglect of oral healthcare in hospitalised patient.

The nurses in our study identified barriers to Oral healthcare which cut across age, gender, level of education, and work experience. High workload, lack of equipment, shortage of nurses and time constraints were the major barriers to oral healthcare provision identified by the respondents in this study. The manpower shortage might be attributed to recent mass exodus of nurses out of the country for greener pastures abroad. This scarcity of nurses' leads to increased workload and causes nurses to give priority to other nursing activities they feel are more important. Other identified barriers were the absence of guidelines or protocol, lack of oral health knowledge, lack of training, lack of interest, and priority. This study finding is in consonance with the findings of Dagnew et al [14] which reported lack of oral care equipment and supplies, shortage of nurses,

inadequate knowledge, absence of guidelines, and poor supervision as barriers.

Palmer et al[19] reported lack of time as the most important barrier. This varied with our findings which had approximately one-third of the respondents identifying lack of time as a barrier, with lack of oral care equipment (65.8%) as a major barrier to quality oral health care.

CONCLUSION

Oral healthcare is one aspect of healthcare that is not given adequate attention by nurses during their routine nursing procedure. In this study, nurses' perception was good and it increased with increasing level of education and increasing years of work experience despite the numerous barriers identified in this study.

Improving their perception through exposure to oral health training, adequate motivation and addressing the identified barriers will go a long way in oral healthcare delivery in hospitalised patients.

RECOMMENDATIONS
1. Oral healthcare should be incorporated into nursing school curriculum and routine nursing procedures in the hospitals
2. Effort should be made by policy makers and hospital management to address the identified barriers in order to mitigate their effect on quality oral healthcare in hospitalized patients.

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