

Original Article

## Patients Satisfaction with Nursing Care Quality in Ibadan Nigeria

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### Abstract

**Background:** Patients' satisfaction is the extent to which patients' expectation of care matches the reality of care received. In Nigeria, there remains the question of whether the patients are satisfied with the quality of nursing care or not. This study focusses on patients' satisfaction level and the effect of socio demographic variables.

**Methods:** A descriptive cross sectional research design was used to assess patients' satisfaction of nursing care in three selected hospitals, Ibadan, Nigeria. Study sample (n = 400) comprises of patients admitted for at least two days before discharge. The Statistical Package for Social Science (SPSS) version 23 was used for data analysis. Results were presented in frequency table, bar chart, mean and standard deviation

**Results:** Findings revealed that 50.7% of the patients had high level satisfaction with nursing care quality. There are significant differences between the health facilities means of satisfaction of nursing care (F = 37.96; p < 0.001). Majority were satisfied with secondary facility (76.4%) than the tertiary facility (40.8%) and private facility (25.9%). Gender (p=0.005), patient's educational status (p = 0.001) and monthly income (p = 0.011) were significantly associated with the level of satisfaction of nursing care while age (p=0.182), marital status (p=0.816), occupation (p = 0.051) and type of admitted room (p = 0.410) were not significant.

**Conclusion:** Nurses need to improve the quality of patient care to ensure more satisfaction. Periodic assessment of patients' satisfaction of nursing care is required to identify areas of quality care and areas for improvement.

**Key Words:** Patient satisfaction, nursing care quality, hospital, Ibadan

### Introduction

Globally, healthcare services have witnessed a paradigm shift from providers centered care to patient centered care (Lateef and Mhlongo, 2020). This healthcare consumer oriented

model allows patient to make significant contribution to care (Ozturk, Demirsoy, Florczak, 2019; Kilic, Su, Gok, 2022; Nkabinde, Bopape, Mothiba, et al, 2021). Also, individualized patient care gives patient

opportunity to assess the care rendered. Patients' assessment of quality of nursing care is simply about if the patient is satisfied with the care. Patient satisfaction can be described as patient reaction to varieties of nursing care received. In other words, it is the patient's personal opinion about the quality of nursing care received during the period of hospitalization. Several researchers have also defined patient satisfaction in relation to patient experiences: Dinsa, Deressa, and Salgado, (2022) posited that patient satisfaction is about healthcare consumers' experience in relation to various aspect of care services.

Furthermore, in Nigeria, Olowe and Odeyemi (2019) defined patient satisfaction as the extent of resemblance between the patients expected quality of care and actual care received. Again, Onianwa, Ike & Kuforiji, (2022) described it as patients' expectation of nursing care as compared with reality of nursing care received. In all, Patient satisfaction is an influential parameter to determine the quality of nursing care worldwide. Issues on quality of nursing care and patient satisfaction is gaining attention of healthcare managers due to the fact that patient assessment of nursing care is a primary determinant of the overall hospital service performance (Dinsa et al, 2022). This opinion is valid because nursing care forms the wheel of healthcare services and nurses are the closest to patients. Therefore, because of their role in ensuring positive patient outcome, nurses offer twenty four hours services (Olowe & Odeyemi, 2019; Onianwa et al, 2022).

Globally, patient satisfaction has opens up competition among healthcare providers such that each provider wants to ensure adequate care of each patient (Lateef & Mhlongo, 2020; Karaca & Durna, 2019). This is particularly common in private sector driven healthcare environment. According to an Ethiopia study by Dinsa et al, (2022), patient satisfaction was reportedly high in private hospital as compared to public hospital. Invariably, patient centered care requires high nursing intensity and increase cost of care. Again, individualized care is an evolving approach in most developing countries, however, where it is practiced, it is

taught to be effective. In Nigeria, patient centered care is well known to nurses but implementation is a challenge (Lateef and Mhlongo, 2020): Lack of appropriate technology, nurse-patient ratio and poor remuneration have been implicated. Besides, Nigeria healthcare system is currently facing migration of specialized nurses to high income countries such as the United Kingdom, Canada and the United States. Adebayo, Labiran, Emerenini and Omoruyi, (2016) argued that Nigeria health system currently has a deficit of more than 30% healthcare workforce. It implies that individualized care will remain a difficult task for nurses in Nigeria

Today, patient satisfaction is a yardstick to evaluate the quality of nursing care and it is a key operational performance indicator for nursing staff (Karaca and Durna, 2019; Ozturk et al, 2019; Cadel, Marcinow, Singh, et al, 2022; Olowe & Odeyemi, 2019; Onianwa et al, 2022; Agbonjinmi, Ayorinde & Gbenga-Epebinu, 2022; Kilic et al, 2022; Dinsa et al, 2022; Kagura, Khamisa, Matsena et al, 2023). Little is known about nurses' education, years of experience, specialty as determinants of quality nursing care. Although, a UK study reported by Aiken, Sloane, Ball et al, (2018) argued that bachelor- prepared nurses demonstrated more patient care competency than diploma- prepared nurses. Similarly, Ozturk et al, (2019) in a study on patients' perceptions of nursing care in a University hospital, Turkey reported that higher level of patient satisfaction was associated with nurses with higher education, younger age, and high remuneration with fully employment. Nevertheless, in Nigeria and other developing countries, differential quality of nursing care based on nurses' educational preparedness has not been well studied. One suggestion is to compare competencies across spectrum of nursing education and specializations.

Nonetheless, care approaches including patients' assessment, diagnosis, care planning and effective interventions are believed to influence patient psychology of care. In addition, nurse-patient interaction, effective communication, reduce waiting time, cost containment, reduced rate of re-admission and

culture sensitive care also have role to play (Dinsa et al, 2022; Ogunlade, Ayandiran, Olaogun et al, 2017; Nunu & Munyewende, 2017; Okoloagu & Ndibuagu, 2023; Kagura et al, 2023). Culture orientation is central to patient care. A man is a product of his environment and culture. Every patient irrespective of colour, race or language wants quality care, however, variations do exist in perception of what is termed quality across culture. Thus, nurses need to be prepared for transcultural nursing care to improve patient satisfaction. Similarly, nurses must have professional knowledge and attitude to support the patient psychologically and emotionally (Karaca & Durna, 2019; Ozturk et al, 2019; Onianwa et al, 2022)

Moreover, patient satisfaction includes privacy, cleanliness, patient safety, and maintenance of physiological and social integrity, perceived clinical effectiveness (Kagura et al, 2023). Obviously, patient expects proper diagnosis and treatment, where these needs are met unsatisfactorily, healthcare consumer' perception of the whole system of care changes and explore healthcare services elsewhere (Karaca & Durna, 2019; Agbonjinmi et al, 2022). Conversely, if the patient is satisfy with the quality of nursing care rendered, it will foster compliance to treatment regimen, patient education and influences overall health outcome (Lateef & Mhlongo, 2020; Olowe & Odeyemi, 2019; Onianwa et al, 2022; Agbonjinmi et al, 2022; Dinsa et al, 2022; Nunu & Munyewende, 2017). Again, satisfied patients are more likely to recommend the health facility to friends and families (Karaca & Durna, 2019; Gishu, Weldetsadik, Tekleab, 2019; Fountouki & Theofanidis, (2021; Nkabinde et al, 2021)

Again, healthcare consumer service feedback mechanism should be included in health system management to elicit satisfaction information for future planning and care services (Karaca & Durna, 2019; Ozturk et al, 2019; Olowe & Odeyemi, 2019; Onianwa et al, 2022; Kilic et al, 2022), Expert asserted that patient satisfaction assessment should be done regularly with validated instrument to identify

areas of strength and areas that require alteration based on client responses to care rendered (Karaca & Durna, 2019; Onianwa et al, 2022; Agbonjinmi et al, 2022; Dinsa et al, 2022; Kagura et al, 2023) . Furthermore, evaluation of quality of nursing care is a complex procedure simply because patients experience and care needs varies with factors such as patients' age, diagnosis, acuity rating and severity index (Ogundeji, 2020; Ogundeji, Oluwaleke & Akinyemi, 2017). Therefore, individual patient experience and expectations of care will grossly influence individual perception of quality of nursing care (Gishu et al, 2019).

Consequently, assessment of patient satisfaction of nursing care involves measurement of patients' expectations, improvement in nursing care and identification of areas of failure (Karaca & Durna, 2019; Ojewale, Akingbougbe, Akinokun et al, 2022; Ozturk et al, 2019; Theofanidis, 2021; Cadel et al, 2022; Gishu et al, 2019; Olowe & Odeyemi, 2019). It gives reasons for nursing staff in-service training and specialized education. It also relates to nursing staffing and duty shift arrangement (Aiken et al, 2018). The authors noted that few studies have been done to explicit issues about patients' satisfaction of nursing care in Nigeria. Therefore, it is the interest of the researchers to examine patients satisfaction in federal, state and privately own hospitals in Ibadan, south west Nigeria

### Research Specific Objectives

1. To assess patients' level of satisfaction with the nursing care received.
2. To compare patients' level of satisfaction with the nursing care received in the three selected hospitals.
3. To identify factors influencing patients' satisfaction with the nursing care received.

### Research Hypotheses

1. There is no significant association between demographic characteristics (age, gender, educational status, occupation, monthly income) of the patients and level of satisfaction with the nursing care received.

2. There is no significant difference in the level of patient's satisfaction with nursing care received in the three selected hospitals.

### Materials and Method

**Study Design:** A hospital based descriptive cross - sectional design was used to assess the level of Patients' Satisfaction with the Nursing Care received in three (3) selected hospitals in Ibadan, Oyo State, Nigeria

**Study Setting:** The study was conducted in Ibadan, the capital of Oyo State, located in South West region of Nigeria. Ibadan is the third most populous city and the largest city by geographical area in Nigeria. Ibadan is made up of Eleven (11) Local Government Areas out of the total thirty-three (33) Local Government Areas in Oyo State. The three main hospitals which are referral centres in Ibadan metropolis were purposively selected for the study. They are the University College Hospital (UCH), Adeoyo Maternity Teaching Hospital (AMTH) and Our Lady of Apostle Catholic Hospital (OLACH). The University College Hospital (UCH) is Nigeria first Teaching Hospital established by the Federal Government of Nigeria in 1952. The hospital is sited in Ibadan North Local Government of Oyo State and is known to be referral centre for all health problem. The University College Hospital is involve in training of diverse healthcare professionals and has large workforce including Doctors, nurses, pharmacists, Medical Laboratory Scientists. It also involve in research and collaboration with international health agencies. Adeoyo Maternity Teaching Hospital (AMTH) was founded in 1928 and is the major Maternity Hospital in Ibadan metropolis. The hospital is secondary health facility owns by Oyo State Government of Nigeria. It is located in Ibadan North Local Government Area, provides maternity and child health services to people residing in Ibadan and its environs. Our Lady of Apostle Catholic Hospital (OLACH) is a Faith- Based health care facility located in Ibadan Municipality serving both Ibadan North and Ibadan North East Local Governments.

**Population:** The target population were patients admitted in the three hospitals in Ibadan, Oyo State Nigeria. The study population were patients admitted for at least

two days before discharge and were within the age bracket 18 years and above

**Sample Size Determination:** The sample size was estimated by Cochran (1963:75) formula for calculating a sample for proportions

$$n = \frac{z^2 pq}{e^2} \quad (\text{Israel, 2013})$$

Where:

n = desired sample size when population is greater than 10,000

z = the standard normal deviation which is set at 1.96 for 95 percent confidence level

p = the estimated proportion in the target population = 33% = 0.33. Perception of Emergency Nursing Care among Patients in selected Hospitals in Oyo State, Nigeria (Ogunlade et al., 2017)

$$q = 1 - P = 1 - 0.33 = 0.67$$

e = desired level of precision. For this study, precision was set at  $\pm 5\%$

$$n = \frac{(1.96)^2(0.33)(0.67)}{(0.05)^2} = 339.75$$

Equation for Adjustment for non-response was:

$$N = \frac{n}{1-f} \quad (\text{Bamgboye, 2014})$$

Where:

N = estimated sample size after adjustment

n = desired sample size when population is greater than 10,000

f = estimated non-response rate = 10% (0.1)

$$N = \frac{339.75}{1-0.1} = 377.5 \approx 378 \text{ respondents}$$

Therefore, the minimum sample size for the study was 378 participants

**Proportionate Distribution of Sample:** Based on the report of average number of admissions per year in UCH, AMTH and OLACH at 7667, 3801 and 162 respectively; The proportionate distribution of participants in three hospitals were as follows.

However, Sudman (1976) cited by Israel, (2013) recommended a minimum of 100 respondents for each major group in the sample to accommodate a comparative analysis of subgroup. However, since data collection was spanned through six weeks, only 27 patients was admitted in two months at 162 admitted patients per year.

Hospital	Proportionate distribution	Sample Size
UCH	$\frac{7667 \times 378}{11630} = 249.1$	$\approx 250$
AMTH	$\frac{3801 \times 378}{11630} = 123.5$	$\approx 124$
OLACH	$\frac{162 \times 378}{11630} = 5.3$	$\approx 6$

Therefore, the minimum sample size for OLACH was 27. Hence, the adjusted proportionate distribution was as follows:

$$\begin{array}{r} \text{UCH} = 250 \\ \text{AMTH} = 124 \\ \text{OLACH} = 27 \\ \hline \text{Total} = 401 \end{array}$$

Therefore, 401 respondents were recruited for the study.

**Sampling Technique:** The hospitals were purposively selected because they are the main referral hospitals and accommodate large number of patients. Three wards/units were randomly selected from each of the three hospitals. Convenience sampling technique was then use to select the study participants such that all eligible patients within the inclusion criteria were recruited for the study

**Instruments for Data Collection:** A self-administered questionnaire was used to collect data from the respondents (with back-to-back translation into Yoruba language), which had three (3) sections with thirty- nine (39) items:

**Section A:** contained the demographic characteristics of the respondents with five (5) items, developed by the researchers.

**Section B:** This is on factors affecting participants' satisfaction with the nursing care quality. It consists of eleven (11) items, which was developed by the researchers.

**Section C:** contained participants' satisfaction with nursing care quality with twenty-two (22) items which was adapted from Patient

Satisfaction with Nursing Care Quality Questionnaire - PSNCQQ (Laschinger, Hall, Pedersen, & Almost, 2005).

The questionnaire consisted of both open and close-ended questions and was administered by the researchers and the research assistants (RAs).

**Data Collection Process:** Three (3) research assistants (RA) were recruited and trained to assist the researchers in collecting data for the study. The training focused on the research objectives, research questions, significance of the study, obtaining respondents informed consent, sampling technique. Also, coordination, logistics, and standardization of survey methods were part of the training. Important details about the data collection instrument was discussed during the training. Practical session was also included to strengthen their capacity. Furthermore, familiarization with the instruments, determination of their understanding of study instruments, and interpersonal relationship techniques were emphasized. A total of four hundred and one (401) copies of questionnaires were administered among consenting respondents in the study areas but four hundred (400) were returned. Respondents' informed consent obtained and the purpose of the study explained before the administration of the

questionnaires. The administration of questionnaires lasted for six (6) weeks

**Validity of the Instrument:** Copies of the questionnaire with PSNCQQ scale was submitted to two senior colleagues who had post graduate education in community Health and a research analyst in the field of health statistics for review, critiquing and necessary corrections. Also, two (2) in - patients from Ring Road State Hospital (outside the selected hospitals) were given the questionnaire for their input on the instrument. Face and content validity were ensured by matching the set questions with related literature, research objectives and hypotheses.

**Reliability of the Instrument:** The questionnaire was pre-tested among forty - one (41) participants at Ring Road State Hospital representing 10% of the sample sizes. Though the PSNCQQ scale have been pre-tested, it was still subjected to a pre- test. Convenient sampling technique was adopted for their selection and their responses were analyzed using Cronbach alpha coefficient and the result of the reliability coefficient was 0.92.

**Data Management and Analysis:** The data collected were sorted, categorized, and analyzed. The completed questionnaires on the other hand, were serially numbered for control and recall purpose. Data collected were checked for completeness and accuracy on a daily basis. The data was then screened and transferred to a computer. The Statistical Package for Social Science (SPSS) version 23 was used for the analysis of the data. Descriptive and inferential statistics were used for analysis and results were presented in frequency tables.

**Ethical Consideration:** Ethical Approvals were obtained from Oyo State Ministry of Health and University of Ibadan/ University College Hospital Ethical Review Committees with the reference number: AD13/479/3028A and IRB#20/0507 respectively. Written Informed consent received from the respondents before administration of the questionnaire. The informed consent form was translated into Yoruba language for easy communication of participants who are non-literate or non-migrants of Ibadan. Respondents

were informed the objectives of the study and the benefits. Also, ethical principles as regard confidentiality, voluntariness were followed: All information collected were coded with numbers. No name, hospital number or any other means of identification were written on the questionnaire. Therefore, no information provided by the respondents can be linked to any of them. Also, no patient identifier will be included in any scientific report of the study. Participants were not coerced into the study and they were given free hands to withdraw their consent at any time.

## Results

From table 1, the age distribution of the respondents showed that more than half of the respondents (68.8%) were between the age ranges of 21-40 years while the least of the age categories 5.6% were respondents with 61 years and above. Regarding gender, majority of the respondents (72.0%) were female while 25.5% were male. Data on marital status revealed that there were more married respondents (74.8%), while 10.3% were not married.

Furthermore, the table reveals that almost half of the respondents (48.3%) had tertiary education. Most of the respondents (91.9%) have been using the hospital for 1-10 years. On the admission of the respondents to hospital, almost half (48.8%) have only been admitted once while majority (84%) were admitted in the hospital general ward

Table 2 examine patient's satisfactions on nursing care quality. Areas on patient's responses include satisfaction with nurse's explanation on tests and treatment, satisfaction as regards preparation for test and operation, nurses' willingness to answer patients' questions, how well nurses communicate with patient, how well the nurses kept them informed about their condition and needs, responses based on concern and care of nurses

Figure 1 shows that the mean score calculated was  $66.5 \pm 13.7$  and 50.7% of the patients had high level of satisfaction with nursing care quality.

Figure 2 reveals 76.4% of patients attending AMTH had high level of satisfaction of nursing care quality compared to UCH (40.8%) and OLACH (25.9%).

Table 3 reveals that gender ( $p=0.005$ ), patient's educational status ( $p = 0.001$ ) and monthly income ( $p = 0.011$ ) were significantly associated with the level of satisfaction of nursing care received while age ( $p=0.182$ ), marital status ( $p=0.816$ ), occupation ( $p = 0.051$ )

and type of admitted room ( $p = 0.410$ ) were not significant.

The table 4 shows that there are significant differences between the health facilities means of satisfaction of nursing care as F -value = 37.96;  $p < 0.001$ . This implies that there is statistically significance difference in the level of satisfaction with the nursing care received in the three (3) selected hospitals

**Table 1: Respondents' socio-demographic characteristics**

Variables	Frequency	Percentage
<b>Age group (years)</b>		
Less than 20	22	5.9
21-40	249	68.8
41-60	81	21.7
61 & above	21	5.6
<b>Total</b>	<b>373</b>	<b>100.0</b>
<b>Gender</b>		
Male	102	25.5
Female	288	72.0
No response	10	2.5
<b>Total</b>	<b>400</b>	<b>100.0</b>
<b>Marital status</b>		
Married	299	74.8
Divorced	12	3.0
Separated	6	1.5
Widowed	13	3.3
Never Married	41	10.3
No response	29	7.3
<b>Total</b>	<b>400</b>	<b>100.0</b>
<b>Level of education</b>		

No Formal Education	15	3.8
Primary Education	27	6.8
Secondary Education	140	35.0
Tertiary Education	193	48.1
No response	25	6.3
<b>Total</b>	<b>400</b>	<b>100.0</b>
<b>Years of the Hospital Use</b>		
1-10 years	329	91.9
11-20 years	22	5.5
21-30 years	6	1.5
41 years above	1	0.3
<b>Total</b>	<b>358</b>	<b>100.0</b>
<b>Number of hospital admission</b>		
Only once	195	48.8
Twice	111	27.8
Three times	48	12.0
over three times	34	8.5
No response	12	3.0
<b>Total</b>	<b>400</b>	<b>100.0</b>
<b>Type of admission room/ward</b>		
Private room	21	5.3
Room with 1 other person	17	4.3
Room with more than 1 person	26	6.5
General ward	336	84.0
<b>Total</b>	<b>400</b>	<b>100.0</b>

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**Table 2: Patients' Satisfaction with Nursing Care Quality**

P – Poor; F – Fair; G – Good; VG – Very Good and EX - Excellent

Variable	Frequency (%)					Mean	SD
	P	F	G	VG	EX		
Nurses explanation on tests and treatments	1 (0.3)	16 (4.0)	121 (30.3)	140 (35.0)	122 (30.5)	3.92	0.89
Explanation on preparation for tests and operations	5 (1.3)	21 (5.3)	140 (35.0)	134 (33.5)	100 (25.0)	3.76	0.93
Willingness of nurses to answer patients' questions	8 (2.0)	22 (5.5)	128 (32.0)	117 (29.3)	125 (31.3)	3.82	1.00
Nurses communication with patients/ patients' relatives and doctors	12 (3.0)	24 (6.0)	141 (35.3)	118 (29.5)	105 (26.3)	3.70	1.02
Nurses information about conditions of needs	6 (1.5)	26 (6.5)	158 (39.5)	115 (28.8)	95 (23.8)	3.67	0.96
Nurses allow involvement of families/ friends on patients conditions and needs	6 (1.5)	38 (9.5)	139 (34.8)	123 (30.8)	94 (23.5)	3.65	0.99
Nurses concerns and care to patients	8 (2.0)	30 (7.5)	137 (34.3)	117 (29.3)	108 (27.0)	3.72	1.01
Nurses attention to patients' health conditions	11 (2.8)	43 (10.8)	128 (32.0)	112 (28.0)	106 (26.5)	3.65	1.07
Nurses recognition of patients' opinions	15 (3.8)	45 (11.3)	133 (33.3)	124 (31.0)	83 (20.8)	3.54	1.06
Nurses consideration of patients' needs	8 (2.0)	39 (9.8)	133 (33.3)	146 (36.5)	74 (18.5)	3.60	0.96
Rating of daily routine of nurses	11 (2.8)	39 (9.8)	136 (34.0)	130 (32.5)	84 (21.0)	3.59	1.01
Nurses ability to make patients comfortable and reassurance	5 (1.3)	28 (7.0)	148 (37.0)	114 (28.5)	105 (26.3)	3.71	0.97
Nurses response to patients' call	3 (0.8)	48 (12.0)	128 (32.0)	118 (29.5)	103 (25.8)	3.67	1.01
Nurses skills and competence on professionalism	2 (0.5)	23 (5.8)	156 (39.0)	113 (28.3)	106 (26.5)	3.74	0.93
Nurses coordination of care with other health professionals	1 (0.3)	29 (7.3)	150 (37.5)	116 (29.0)	104 (26.0)	3.73	0.94

Nurses provision of restful atmosphere to patients	3 (0.8)	37 (9.3)	150 (37.5)	121 (30.3)	89 (22.3)	3.64	0.95
Nurses provision of privacy	5 (1.3)	30 (7.5)	141 (35.3)	127 (31.8)	97 (24.3)	3.70	0.96
How nurses discharge instructions to patients	7 (1.8)	40 (10.0)	135 (33.8)	116 (29.0)	102 (25.5)	3.67	1.02
Nurses coordination of care after discharge	32 (8.0)	40 (10.0)	144 (36.0)	100 (25.0)	84 (21.0)	3.41	1.16

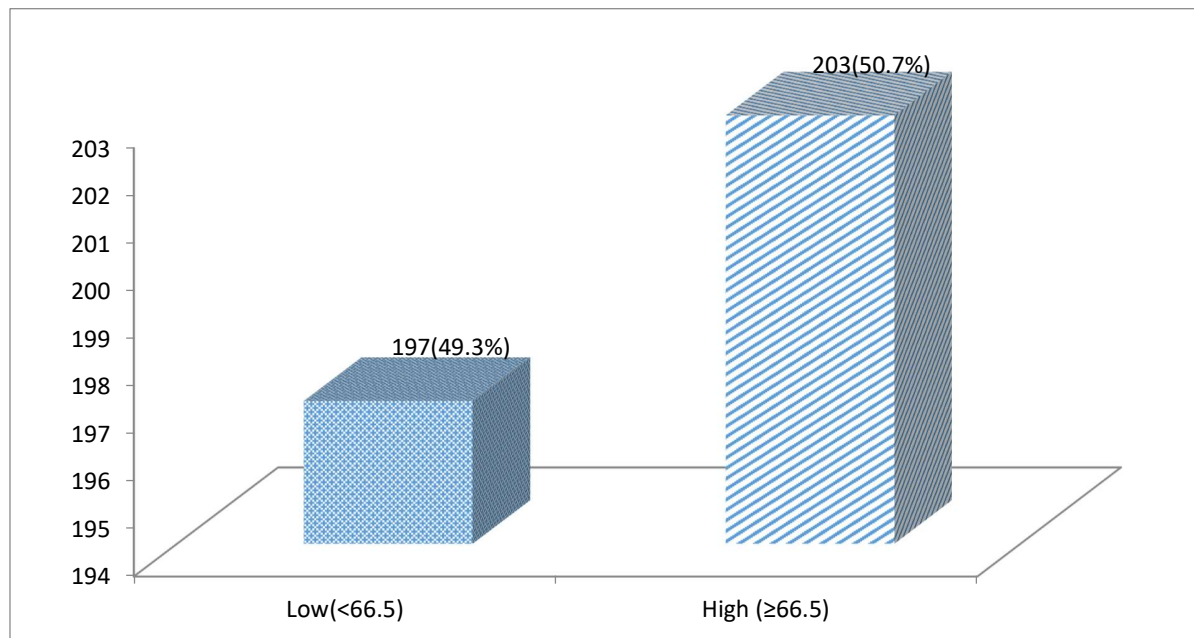


Figure 1: Level of satisfaction with nursing care

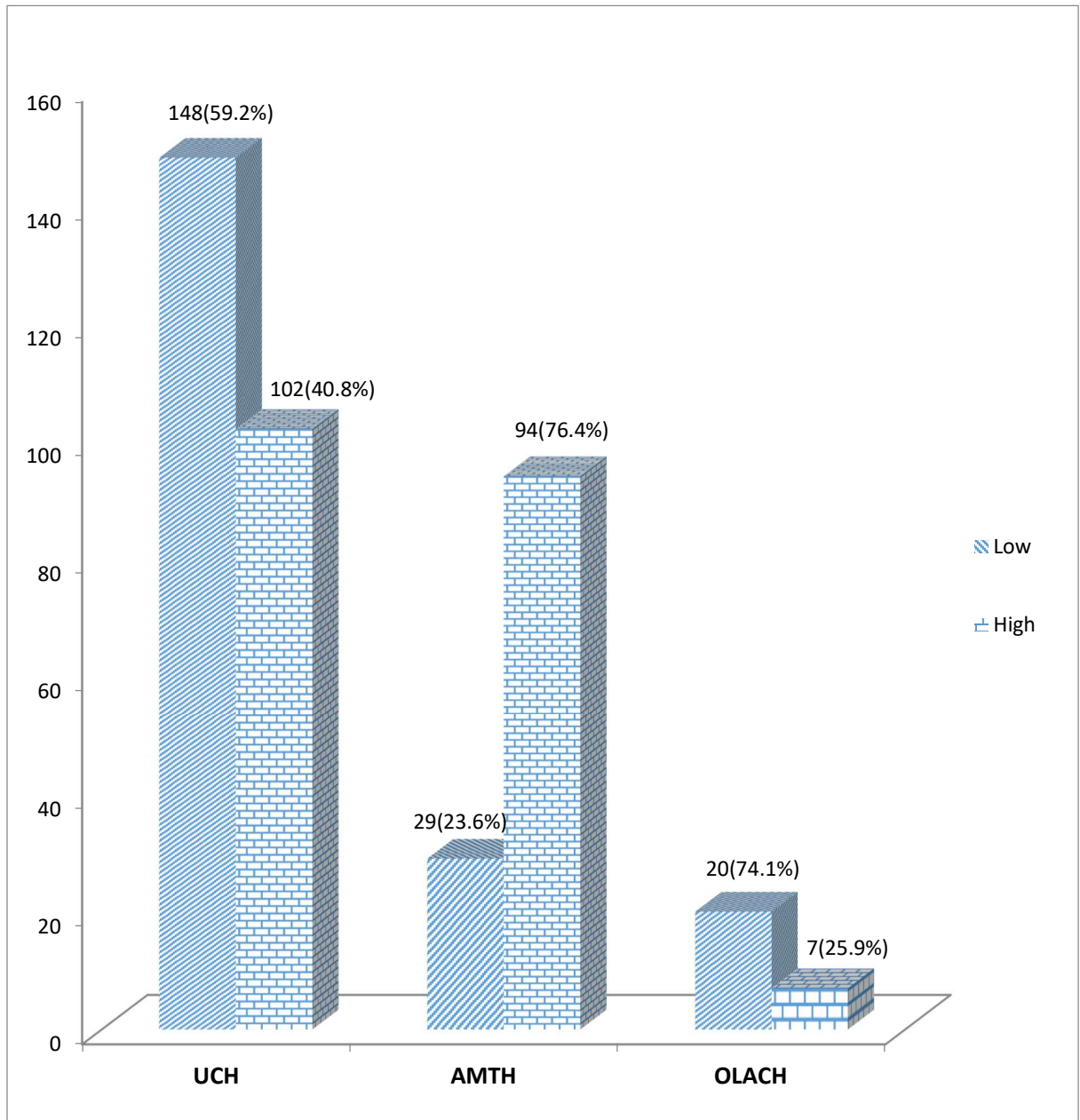


Figure 2: Level of Satisfaction across the health facilities

**Table 3: Patients' socio-demographic variables and level of satisfaction with quality of nursing care received**

Variables	Satisfaction		X <sup>2</sup> - Value	p-value
	Low (<66.5) n (%)	High (≥66.5) n (%)		
<b>Age group(years)</b>				
Less than 20	6 (3.3)	16 (8.3)	4.87	0.182
20 - 39	127 (70.2)	122 (63.5)		
40- 59	39 (21.5)	42 (21.9)		
60 and above	9 (5.0)	12 (6.3)		
<b>Gender</b>				
Female	129 (67.5)	159 (79.9)	7.71	0.005*
Male	62 (32.5)	40 (20.1)		
<b>Education status</b>				
No formal	4 (2.2)	11 (5.7)	16.20	0.001*
Primary	15 (8.3)	12 (6.2)		
Secondary	52 (28.7)	88 (45.4)		
Tertiary	110 (60.8)	83 (42.8)		
<b>Occupation</b>				
Farmer	1(0.5)	1 (0.5)	11.93	0.051
Artisan	18 (9.9)	16 (8.4)		
Trader	60 (33.0)	81 (42.6)		
Public/Private worker	64 (35.2)	51 (26.8)		
Employer of labour	11 (6.0)	3 (1.6)		
Unemployed	14 (7.7)	24 (12.6)		
Others	14 (7.7)	14 (7.4)		
<b>Monthly income (#000)</b>				
Less than 5000	14 (9.3)	28 (17.7)	14.79	0.011*
5001 - 18000	22 (14.6)	35 (22.2)		
18001 – 50000	54 (35.8)	42 (26.6)		

50001 – 100000	32 (21.2)	37(23.4)		
100001 – 200000	12 (7.9)	10 (6.3)		
Above 200,000	17 (11.3)	6 (3.8)		
<b>Admitted room</b>				
Private room	14 (7.1)	7 (3.4)	2.89	0.410
Room with 1 other person	9 (4.6)	8 (3.9)		
Room with more than one	12 (6.1)	14 (6.9)		
General ward	162 (82.2)	174 (85.7)		

\* Significant association at  $p < 0.05$ ; Fishers exact report for small cells

**Table 4: Level of satisfaction with nursing care received in the three (3) selected hospitals**

Centres	Mean	SD	F – value	p-value	Remark
UCH	63.3	12.9	37.96	<0.001	Significant
AMTH	74.6	12.4			
OLACH	59.0	10.4			

ANOVA-Test on significant difference at  $p < 0.05$ .

## Discussion

### Patients level of satisfaction with nursing care

Finding revealed that more than half (50.7%) of the patients had high level satisfaction with nursing care quality (figure 1). This finding is consistent with some previous Nigeria studies: Onianwa et al, (2022) reported 67% patients' satisfaction with nursing care in University College Hospital (UCH) Ibadan, Agbonjinmi et al, (2022) in Babcock University Teaching Hospital, Ilishan- Remo reported 93%, Olowe & Odeyemi, (2019) reported 78% of patients satisfaction with nursing care in Lagos University Teaching Hospital (LUTH), Mobolaji-Olajide, Adereti, Odutayo et al, (2020) reported 82% in teaching hospitals, Lagos while Babalola, Popoola, Olatubi et al (2022) reported 54% patients satisfaction with nursing care in secondary health facilities, Ondo

State. The differences in the level of patients' satisfaction with nursing care relates to socio demographic variables of the study population and the study settings. It can be inferred that most of the previous Nigeria studies only focused on hospitalized patients in either public or private hospitals which is a gap our study has filled. We recruited respondents from both public and private hospitals in Ibadan metropolis

Conversely, Ogunlade et al, (2017) in a study on patients' perception of emergency nursing care conducted in University College Hospital, Ibadan and Ladoke Akintola University of Technology Teaching Hospital Ogbomosho reported 67% patients' dissatisfaction with the nursing care. Our study did not examined the patients level of satisfaction with specialized nursing care but on a general note, 67% level of unsatisfactory with nursing care quality is

considered an aberration for nursing practice in Nigeria. Obviously, emergency nursing care is a specialized nursing service. The authors opined that those nurses who attended to the patients were not trained accidents and emergency nurses and could not meet patients' expectation of care. This development suggests that patients are satisfied with the general nursing care while they may not be satisfied with specialized nursing care. One Nigeria study conducted among patients living with cancer at the University College Hospital Ibadan by Oyekale, Uthman-Izobo, Adetoyi et al, (2023) documented that 87% were satisfied with oncology nursing care. Nevertheless, more studies are needed to examine patients' satisfaction with various nursing specialized care.

According to Ogundeji, Akinyemi, Adeyemo et al, (2018); Ilesanmi & Ogundeji, (2020); Ogundeji, Risenga & Thupayagale-Tshweneagae, (2023), it is not uncommon in Nigeria that nurses without specialized training attend to patients requiring specialized care due to inadequate population of specialist nurses in the healthcare system. There is also current wave of migration of nurses from Nigeria to the United Kingdom, United States and Canada. Adebayo, Labiran, Emerenini and Omoruyi (2016) posited that there is already not less than 30% deficits of Nigeria frontline healthcare workers. Invariably, there is a proliferation of baccalaureate nursing programme in Nigeria Universities, however, nursing specialized programmes such as accident & emergency, Orthopaedic, Perioperative, intensive care remain at diploma level. This is an area the Nigeria Universities Commission (NUC) and the Nursing & Midwifery Council of Nigeria must give close attention

Critically, Agbonjinmi et al (2022) finding was far higher than our findings reaching more than 30% difference in level of patients satisfaction of nursing care. Also, Agbonjinmi et al finding was in contrast to finding related to private hospital in our study. From our finding, patients' satisfaction with nursing care in private hospital was very poor estimated to 25.9%. Although, Dinsa et al, (2022) compared

level of patients satisfaction of nursing care between a public hospital and a private hospital in Ethiopia and reported 54% level of satisfaction for patients in public hospital and 57% for patients in private hospital. Consequently, in Nigeria, the role of private hospitals in improving the quality of nursing care and level of patients' satisfaction has not been well studied. Based on this development, more empirical inferences is needed to uncover patients' satisfaction with nursing care quality among private hospitals in Nigeria.

Furthermore, on the account of patients satisfaction with dimensions of nursing care, there exists similitude between our findings and Alharbi, Alzahrani, Almarwani et al, (2022) finding in a study that compared patients satisfaction of nursing care quality between Riyadh and Medina provinces, Saudi Arabia. Patients were satisfied with various dimensions of nursing care (table 3). Similarly, in Olowe & Odeyemi, (2019) study in Lagos Nigeria, patients were also satisfied with dimensions of nursing care with exception on nurses' coordination of care after discharge. It seems most patients want continuation of care even after discharge from hospital. Home visits is an important aspect of nursing care but transportation network and poor staffing is affecting the home care services.

We examined inferences on level of patients satisfaction with nursing care from studies conducted outside Nigeria: In Turkey, Karaca and Durna (2019) reported 64% patients satisfaction with nursing care which is higher than our finding while Kilic et al, (2022) study among hospitalised patients in internal medicine of a University teaching hospital in Turkey also reported high level of patients satisfaction with nursing care which is consistent with our finding. Conversely, in Ethiopia, Gishu et al, (2019) study reported only 36.8% patients satisfaction which is lower than our finding while Dinsa et al, (2022) in a comparative study on patients satisfaction towards nursing care in Jimma, Ethiopia reported 56%. Furthermore, in South Africa, Nkabinde et al, (2021) study in Mpumalanga Province reported 88% patients' satisfaction

with nursing care while Kagura et al, (2023) reported 84% satisfaction with nursing care.

### **Differential Patients satisfaction with nursing care across hospitals in Ibadan Nigeria**

We assess the level of patients' satisfaction in the three selected hospitals. Statistically, there is significant difference in the level of patients' satisfaction of nursing care received from the three chosen hospitals (table 4).

This finding is dissimilar to Ozturk et al, (2019) finding in a Turkey tertiary care hospital. Ozturk et al argued that satisfaction with nursing care has no meaningful relationship with care setting. Choice of study setting rather than the methodology may be the difference. Our study compared patients' satisfaction in three different levels of hospitals in Ibadan Nigeria while Ozturk et al compare patient satisfaction in a typical tertiary hospital in Eskisehir, Turkey. Interestingly, more than two-third of the patients (figure 2) were satisfied with nursing care at Adeoyo Maternity Teaching Hospital (AMTH) which is a secondary health facility than the University College Hospital (UCH) which is a tertiary health facility. The authors opined that the respondents were satisfied with AMTH because they were mostly female and within the reproductive age bracket. AMTH is organized for maternal & child health and this may influence patients' perception of nursing care quality. Similar to our respondents' perception of quality nursing care, in Karaca & Durna (2019) study, patients were more satisfied with nursing care in maternity unit than other specialised units such as surgical ward.

An assumption is that nurses at the University College Hospital (UCH) are involve in advance care than nurses in Adeoyo Maternity Teaching Hospitals (AMTH) and private care settings within Ibadan Metropolis. However certain factors are thought to influence patients' satisfaction of nursing care at UCH. Firstly, some folk believed that there is more involvement of nurses in patients care at AMTH than UCH which is regarded as huge determinant of patients' satisfaction. Nurses are

the frontliners in patients care and rendered continuous care until patients' full recovery. Based on nurses training and skills, they have more direct contact with patients than other health professionals. Invariably, where there is minimal or controlled nurses' involvement in patients care, there is risk for limited patients' satisfaction of nursing care quality

Secondly, patients' acuity and nurse-patient ratio are also implicated. Nurses are expected to support the patients physically and emotionally. This was emphasized by Ozturk et al, (2019) in a cross sectional study in Turkey. Inadequate staffing, work stress and burn out can impede on quality nursing care. There is high patients' traffic in UCH. The hospital receives the most critical and dying patients. In fact, UCH is a referrer centre for all health problems in the south west geopolitical zone of Nigeria. It follows that UCH nurses manage patients that are mostly critical compared to AMTH, therefore, burn out from stressful work experience is common and it affects patients satisfaction with care rendered. Besides, UCH is a complex setting with advanced care modality. It is straining for patients and relatives to traverse length and breadth of UCH during acute care. From another perspectives, the locals believe that treatments at UCH is expensive and drains patients and family resources. Therefore, patients expect so much from the attending nurses. Patients want nurses to do more to compensate for payment for surgery, drugs, laboratory tests and other non-nurses expenses. Whatever nurses do or did not do is seen by the patients as the overall hospital care quality.

Moreover, contrary to Dinsa et al., (2022) submission in an Ethiopia study that patients satisfaction was higher in private hospitals than public hospitals, our results show that patients' satisfaction of nursing care quality in the selected private hospital in Ibadan was below patients expectation. This is not surprising as most of the private hospitals in Ibadan engages the services of unprofessional nurses. Individuals who do not attend nursing educational programme with the prescribed length of training, acquired nursing skills and be

licensed to practice are found parading as nurses in these hospitals. Most of the private hospitals in Ibadan lacks registered nurses and grossly undermined nursing care quality and patients satisfaction. This is a menace the duo of the Oyo State Hospital Management Board (OYSHMB) and the state chapter of the National Association of Nigeria Nurses and Midwives (NANNM) must wake up to address. Although, anecdotal evidence suggests that private hospitals own by faith-based organizations engage registered nurses. However, an assumption is also that such registered nurses leave shortly to join the mainstream government hospitals or travel abroad. Clearly, private sector participation of quality healthcare services in Ibadan has not been well organized unlike other Nigeria cities such as Lagos, Port Harcourt and Abuja. Moreover, Lateef and Mhlongo, (2020); Karaca and Durna, (2019) reiterated that patients level of satisfaction of hospitals can spur competition among private hospitals in private sector driven healthcare service settings

#### **Patients' socio-demographic variables and level of satisfaction with nursing care received**

Our findings suggest that variables such as gender, patients' education and level of income significantly influence patients' satisfaction of nursing care while variable such as age has no meaningful relationship with satisfaction with nursing care quality. It is worthy of note that scholars opinion greatly differs on how socio demographic variables influence patients perception and satisfaction with nursing care across care settings. There has not been consensus among scholars on how these variables predict the level of patients' satisfaction. Onianwa et al, (2022) explicated that sociocultural differences may play a role. From literature review, patients' educational level and nurses teaching are consistently significant in relation to patients' satisfaction of nursing care quality.

From our findings, gender was found to be an influencing factor for patients' satisfaction of nursing care and this was inconsistent with some studies. For instance, Ozturk et al, (2019) study in a Turkey tertiary care hospital

concluded that patients' satisfaction of nursing care has no relationship with gender, marital status or the hospital where patient received care. Karaca and Durna, (2019) also maintained that gender does not affect patients' satisfaction of nursing care. However, some Nigeria studies by Onianwa et al, (2022), Babalola et al, (2022), Oyekale et al, (2023) supported that gender plays a vital role in patients' satisfaction with nursing care. Also, Dinsa et al, (2022) study in Ethiopia public and private hospital revealed that majority of the participants were female and they were highly satisfied with nursing care when compared with men. Clearly, female especially reproductive age women are the major hospital attendees. One of our study settings (AMTH) is particularly for care of women and children and this may influence patients satisfaction of care received. Also, women pay more attention to hygiene and communication than men. Women expectation of nursing care is often higher than men

Furthermore, about 50% of the respondents have tertiary education (table 1). Statistically, educational status was significant which is consistent with Onianwa et al, (2022), Karaca & Durna (2019), Kilic et al, (2022) and Babalola et al, (2022). This study suggests that higher education has positive influence on patients satisfaction with nursing care and is in line with Ozturk et al, (2019) which also reported that patients' level of satisfaction is positively related to higher level of education. It is however inconsistent with Alharbi et al, (2022) finding which concluded that lower educational level favoured high level of patients satisfaction with nursing care quality. The authors opined that patients with higher education will cooperate with nurses on their care plan. Patients teaching is central to nursing care and situation where patients have good knowledge of the nursing care modality, it is optimizing that patients' satisfaction will increase. Again, Gishu et al, (2019) in an Ethiopia study corroborated that there was a strong positive association between patient teaching and satisfaction with nursing care. Nurses at all levels always need to educate patients about their clinical diagnosis and treatment regimen. Education from nurses perhaps is the most



important form of care patients required. Gishu et al, reported a large scale multi centre study in Europe where inferences showed that patients' education was over 40% lower. Globally, nursing research continues to show that patients' education has been inadequately performed by nurses

In the same vein, we found that patients' income is a determinant factor to patient satisfaction of nursing care. This is also consistent with Ozturk et al, (2019). Patients who can finance their healthcare needs have high expectation from nurses and if received adequate care will be satisfied whereas patients with low income could have low expectation of care and satisfaction. Nonetheless, like other variables, some studies maintained that patients' income does not have any influence on satisfaction level. Moreover, patient age was not found significantly related to satisfaction with nursing care (table 3) and this is congruent with Onianwa et al, (2022), Zarzycka, Barton, Mazur et al, (2019) but inconsistent with Kilic et al, (2022). From our findings, about 70% of respondents were young women and they were satisfied with the nursing care received in total. In Karaca and Durna (2019) study, patients age was significant alongside other variables such as married and managed for maternity related care. In addition, Ozturk et al, (2019) supported that younger age, being married and employed are collectively influence patients satisfaction with nursing care in hospitals.

Again, considering patients admission history, about 50% of the patients were only admitted once and they were generally satisfied with the nursing care quality. This finding was similar with Dinsa et al, (2022) finding in Jimma, Ethiopia. This result may be due to upgrading of the hospital and some other sociodemographic variables such as patients age and level of education. Also, room where patients were admitted was not found to determine satisfaction. The hospitals have general ward and private room. Most of the respondents were admitted in the general ward (table 1) and they were satisfied with nursing care.

**Limitations of the study:** The study examined patients satisfaction of nursing care mainly in

Ibadan metropolis and findings are inappropriate to determine level of patients satisfaction in all hospitals south west Nigeria. However, the authors suggest a multi-centre study with a large sample size across south west Nigeria. Furthermore, the study centres are heterogeneous in structure and administration, for instance, the University College Hospital (UCH) comprises of more specialized care units as compared to AMTH and OLACH which is another limitation. Further study will compare patients' satisfactions of nursing care quality across hospitals specialized units.

**Conclusion:** The study appraised the patients' satisfaction with quality of nursing care in Ibadan Nigeria. Interestingly, over fifty percent of the study respondents reported satisfaction with the quality of nursing care received. However, comparing nursing care quality across the three selected hospitals in Ibadan, there was a dramatic change in the level of patients' satisfaction with nursing care received. Notably, respondents reported high level of satisfactions with nursing care in AMTH as compared to UCH and OLACH. The authors opined that hospital policy and bureaucracy, patients' population, patients' acuity, nurses-patients assignment and work stress are the major drivers of patients' perception and satisfactions with nursing care in the hospitals. Importantly, areas of improvement in nursing services include effective communication, good nurse-patients relationship and involvement of patients and family in care decision making.

More so, level of patients' satisfaction of nursing care in the selected private hospital was abysmally low. The authors underlined that there is lack of specialized nursing staff across private hospitals in Ibadan, Nigeria. Moreover, gender, education and level of income were found to influence patients' satisfaction of nursing care in the three hospitals. Consequently, patients' satisfaction of nursing care quality is the heart of hospital services. Periodic assessment of patients' satisfaction of nursing care is required to identify areas of quality care and areas for improvement

## References

- Adebayo O., Labiran A, Emerenini F and Omoruyi L. (2016). Health Workforce for 2016-2030: Will Nigeria have enough? *International Journal of Innovative Research and Growth*. 4(1): 9
- Aiken L.H., Sloane D.M., Ball J., Bruyneel L., Rafferty A.M., Griffiths P. (2018). Patient satisfaction with hospital care and nurses in England. An observational study. *BMJ Open*. 8:e019189. Doi: 10.1136/bmjopen-2017-019189
- Alharbi H.F., Alzahrani N.S., Almarwani A.M., Asiri S.A., & Alhowaymel F.M. (2022). Patients' satisfaction with nursing care quality and associated factors: A cross-section study. *Nursing Open*. 10 (5): 3253-3262.
- Agbonjinmi L.A., Ayorinde A.M. & Gbenga-Epebinu M.A. (2022). Assessment of Patients' Satisfaction with Nursing Care in Babcock University Teaching Hospital, Ilishan- Remo, Ogun State, Nigeria. *International of Nursing, Midwife and Health Related Cases*. 8(3): 34-44
- Babalola O.H., Popoola R.O., Olatubi M.I., Adewoyin F.R. (2022). Patients' Satisfaction with Health Care Services in Selected Secondary Health Care Facilities in Ondo State, Nigeria. *Journal of Family Medicine and Disease Prevention*. 8:145. doi.org/10.23937/2469-5793/1510145
- Bamgbose E.A., (2013). Lecture notes on research methodology in the health and medical sciences. 1<sup>st</sup> Edition, Folbam Publishers, Samonda, Ibadan, Nigeria
- Cadel L., Marcinow M., Singh H., Kuluski K. (2022). The use of patient experience data for quality improvement in hospital: A scoping review. *Patient Experience Journal*. 9 (1): 174-188.
- Dinsa K., Deressa B.G., and Salgado, W.B. (2022). Comparison of Patients Satisfaction levels toward nursing care in public and private hospitals, Jimma, Ethiopia. *Nursing: Research and Reviews*. 12: 177- 189
- Fountouki A. Theofanidis D. (2021) Patient Satisfaction: The Concept. *Asian Journal of Research in Medicine and Medical Science*. 3(1):11-14.
- Gishu, T., Weldetsadik, A.Y., & Tekleab, A.M. (2019). Patients' perception of quality of nursing care; A tertiary center experience from Ethiopia. *BMC Nursing*. 18(1). 37. Doi: 10.1186/s12912-019-0361-z
- Ilesanmi R.E.,& Ogundeji K.D. (2020). Nursing Intensity per Wound Care Episode: A Case of Poor Costing of Nursing Care in Nigeria. *West African Journal of Nursing*. 30(2): 36-46
- Israel, G.D. (2013). Determining sample size. Institute of Food and Agriculture Science (IFAS) Extension. University of Florida. PEOD6.
- Kagura J., Khamisa N., Matsena Zingoni Z., Dulaze N., Awuku-Larbi Y. & Tshuma N. (2023). Patient satisfaction with chronic disease care and its associated factors in primary health care facilities in Johannesburg, South Africa. *Frontier in Health Services*. 3:1-10.
- Karaca A. and Durna, Z. (2019). Patient satisfaction with the quality of nursing care. *Nursing Open*. 6(2), 535–545.
- Kilic H.F., Su S., Gok N.D. (2022). Perceived Individualized Care and the Satisfaction Levels of Patients Hospitalized in Internal Medicine Departments: Cross-Sectional and Correlational Survey. *Clinical and Experimental Health Sciences*. 12: 454-461.
- Laschinger, H.S., Hall, LM., Pedersen, C., & Almost, J. (2005). A psychometric analysis of the patient satisfaction with nursing care quality questionnaire: an actionable approach to measuring patient satisfaction. *Journal of Nursing Care Quality*. 20(3): 220-230.
- Lateef A.M. and Mhlongo E.M. (2020). Trends in Patient-Centered Care in South West Nigeria: A Holistic Assessment of the Nurses Perception of Primary Healthcare Practice. *Global Journal of Health Science*. 12 (6): 73-92.
- Mobolaji-Olajide O.M., Adereti S.C., Odutayo P.O. & Adejumo P.O. (2020). In-patient satisfaction with nursing care: Outcome measurement in a tertiary health facility in Lagos, Nigeria. *International Journal of Africa Nursing Science*. 13. <https://doi.org/10.1016/j.ijans.2020.100264>
- Nkabinde N.P., Bopape M.A., Mothiba T.M., Mphekgwana P.M. (2021). Patients' Satisfaction with Service Offered by Nurses at a Selected Ideal Clinic in Ehlanzeni District, Mpumalanga Province, South Africa. *The Open Nursing Journal*. 15:229-235.
- Nunu W.N. and Munyewende P.O. (2017). Patient satisfaction with nurse-delivery primary health care services in Free State and Gauteng provinces, South Africa: A comparative study. *African Journal of Primary Health Care & Family Medicine*. 9(1):1-8.
- Olowe A.F.F. and Odeyemi O. (2019). Assessment of Patient Satisfaction with Nursing Care in Selected Wards of the Lagos University Teaching Hospital (LUTH). *Biomedical Journal of Scientific and Technical Research*. 17(1):12489 -12497.

- Onianwa P.O., Ike E.U. & Kuforiji B. (2022). Assessment of Patients' Satisfaction with Nursing Care in a Tertiary Hospital, South West Nigeria. *International Journal of Caring Sciences*. 15(2): 1415
- Ogunlade A.A., Ayandiran E.O., Olaogun A.A. & Okunola I. (2017). Perception of Emergency Nursing Care among Patients in selected Hospitals in Oyo State, Nigeria. *International Journal of Caring Sciences*. 10(2): 971-978
- Ogundeji K.D. (2020). Evaluation of Nursing Care Value: Rhetoric of 21<sup>st</sup> Century Nursing Frontiers. *International Journal of Caring Sciences*. 13(2): 1463-1466
- Ogundeji K.D., Oluwaleke AK. & Akinyemi KF, (2017). Costing Nursing Services in Health Care Delivery System: Nigerian Nurses at the Cross Road. *West African Journal of Nursing*. 28(2): 41-47
- Ogundeji KD, Akinyemi K.F., Adeyemo A., Oluwaleke A.K., Ilesanmi R.E. (2018). Economic burden of wound care among patients in a Nigerian teaching hospital: Implications for Insurance Coverage in Nigeria; *African Journal of Nursing and Health Issues*. 9(2):139-154
- Ogundeji K.D., Risenga P. & Thupayagale-Tshweneagae G. (2023). Direct cost of wound dressing in Nigeria: Implications for catastrophic healthcare expenditure. *International Journal of Africa Nursing Sciences*. 19
- Ojewale L.Y., Akingbougbe O., Akinokun R.T., Akingbade O. (2022). Caregivers' perception of the quality of nursing care in child health care services of the University College Hospital, Nigeria. *Journal of Pediatric Nursing*. 66: 120-124.
- Okoloagu N.N. & Ndibuagu E.O. (2023). Patients' Perception and Satisfaction with Waiting Time and Facilities Available in a State Teaching Hospital Eye Clinic, Southeast, Nigeria. *Health*.15(6): 544-568.
- Ozturk H.O., Demirsoy N., Florczak K.L. (2019). Patients' perceptions of nursing care in a University Hospital. *Nursing Science Quarterly*. 33:1. <https://doi.org/10.1177/0894318419881798>
- Oyekale A.O., Uthman-Izobo O.S., Adetoyi T., Bobo M.E. & Oyekale A.O. (2023). Perceived Quality and Satisfaction with Oncology Nursing Care among Patients with Cancer in University College Hospital, Ibadan Oyo State. *Journal of Applied Sciences and Environmental Management*. 27(10). 10.4314/jasem.v27i10.3
- Theofanidis D. (2021a) Patient Satisfaction and Quality of Care. *International Journal of Caring Sciences*, 14(2):800-801.
- Theofanidis D. (2021b) Measuring patient satisfaction. *Nursing Practice Today*, 8(2):238-244.
- Zarzycka D, Barton E, Mazur A, Turowski K. (2019). Socio-demographic and medical factors associated with patients' satisfaction with nursing care and their perception of pain. *Annals of Agricultural and Environmental Medicine*. 26(2):298-30.