



## ORIGINAL ARTICLE

## Patients' Satisfaction with Health Care Services in Selected Secondary Health Care Facilities in Ondo State, Nigeria

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### Abstract

**Aim/Objective:** This study assessed patient's satisfaction with health care services, and identifies factors associated with the satisfaction of patients in selected health care facilities in Ondo State.

**Methods:** Descriptive cross-sectional research design was utilized in three selected hospitals in Ondo State. Multi-stage random sampling was used to recruit 121 patients from three hospitals. Structured Questionnaire whose validity and reliability was established was used for data collection. Data were analyzed using Statistical Package for Social Sciences version 22. Both descriptive and inferential statistics were used.

**Results:** More than half of the participants, (63.6%) were very satisfied health care services provided by the medical and nursing team with mean score of  $32.63 \pm 3.64$ . Only 53.7% of patients that participated in this study were very satisfied with their experience of nursing care. The strongest factor associated with satisfaction with health care was found to be clean hospital environment ( $3.45 \pm 0.5$ ), followed by electricity supply ( $3.18 \pm 0.78$ ), accessibility ( $3.16 \pm 0.58$ ), and availability of adequate seating facility ( $3.15 \pm 0.76$ ). There is a significant relationship between participants satisfaction with health care services and their level of education ( $f = 6.27$ ;  $p = 0.01$ ); and occupation ( $f = 9.80$ ;  $p = 0.01$ ). Urban dwellers ( $134.38 \pm 10.40$ ) were more satisfied than rural dweller ( $128.72 \pm 11.8$ ;  $t = 2.28$ ;  $p = 0.02$ ) (OR 3.171, 95% CI 1.33-7.55).

**Conclusion:** Gender, level of education and occupation are predictors of satisfaction with health care services. Health care providers need to work on their health care delivery to improve care recipient satisfaction with care.

### Keywords

Hospital facilities, Medical care, Nursing care, Patients, Patients' satisfaction

### Introduction

Patients' satisfaction with health care services is becoming an essential factor in health promotion, when patients are satisfied with healthcare services, it will enhance quick recovery, patronage to the hospital will increase resulting in more funds for service provision and medical tourism will reduce. Also, satisfaction with care is an essential tool in the monitoring of the quality of health care [1,2]. Also, the quality of care given to a patient can be influenced by patient's attitude to the health caregiver, and the caregiver's previous experiences with the patient [3]. Satisfaction with care is predictive of likelihood of patient to continue to use healthcare facility and adhere to medical advice and determinant of overall care coverage and effectiveness [4]. Also, interprofessional collaboration had been documented to positively influence patient satisfaction with healthcare [5].

The quality of health care services has great impact on patients' satisfaction [6]. Onyeonoro, et al. [7] describe satisfaction with care to imply the degree of agreement between patient's perception of the care received and their expectation from the care relationship [7]. Health

care utilization had been found to be influenced by patient's satisfaction with care [8,9]. In the words of Manzoor, et al. [10], patient's satisfaction is the state of pleasure or happiness that the patients experience while using the health facility. Patients compare their perception of the care received with their expectation to give a judgment of their level of satisfaction. This made patient satisfaction care to be subjective from the patient's point of view. Goyal, et al. submitted that when patients are not satisfied with the care received, they are likely to seek health care elsewhere [9]. They further suggested that satisfaction with care may be a strong determinant of succeeding health-related behaviour and compliance with treatment and health outcome.

Feysia, et al. opined that due to inadequate nurse population ratio, scarcity of resources, incompetence and ineffective healthcare system, satisfaction with nursing care in Sub-Sahara Africa is low [11]. In Ethiopia, Eyasu, et al. documented that satisfaction with nursing care was low while Sharew, et al. submitted that only half of the patients in their study were satisfied with nursing care [12,13]. Previous studies in Nigeria had documented different level of satisfaction with nursing care among different categories of patient: among patients with prostate cancer [14]; among patients living with schizophrenia [15]; among HIV patient in the outpatient department [16]; among perinatal women [17]; and among antenatal women [18].

Only a few studies had assessed clients' satisfaction with health care generally in Nigeria. Osiya, et al. compared patients' satisfaction with health care in the tertiary and primary level of health care in Port Harcourt [4]. On the other hand Akinyinka, et al. [19] conducted a community-based study to assess people's satisfaction with health care services in Nigeria [20]. Little is known about satisfaction with health care services provided in the secondary level of health care system in Nigeria. Also, the focus had been on assessing satisfaction with nursing care in particular categories of patient or clinics in the hospital [17,18]. Secondary level of healthcare refers to hospitals that provide middle level of healthcare usually with general medical practitioners. They serve as referral centre for primary health care centres. This study, therefore, provides a modest attempt to assess satisfaction with health care services in the secondary level of health care system in Ondo State.

## Objective of the Study

This study assessed the level of patients' satisfaction with health care delivered by the medical and nursing team, assessed patients experiences with nursing care and identify factors associated with the satisfaction of patients in selected secondary health care facilities in Ondo State, Nigeria. Secondary level facilities are hospitals with majorly general practitioners. There

are usually no specialist cares rendered in this level of hospital.

## Methodology

The study adopts a descriptive cross sectional research design. The study was carried out to assess patients' satisfaction with health care services in selected secondary health care facilities in Ondo State. Multi-staged random sampling was used to select 121 patients from three hospitals in the three senatorial districts in Ondo State. Ondo state is made up of three senatorial districts (Northern senatorial district, central senatorial district and southern senatorial district). Each of the senatorial district has six secondary health care facilities. The first stage of selection involved selecting one secondary health care facility each from each senatorial district using the ballot system. Therefore, General Hospital Owo was selected for norther senatorial district, General Hospital Igbara-Oke for Central Senatorial District and General Hospital Ore for southern senatorial district. In each of the health facility selected, the facility was cluster into patients wards/units and three wards/units were randomly selected using simple ballot. In each of the wards/units systematic random sampling technique was used to recruit clients that eventually participated in the study.

Sample size was calculated using Karish formula for opinion surveys for population less than 10,000 [21], using prevalence rate of 0.88 from previous study [22]. Therefore, sample size of 163 was arrived at, after data collection and sorting of questionnaires only 121 questionnaires were returned satisfactorily filled giving response rate of 74.2%.

A self-structured questionnaire was used for data collection. The questionnaire was developed from literature and had been successfully used in previous studies [13,23-28]. The questionnaire consists of five sections. The first section consist of eight (8) items that elicit information about socio-demographic characteristics of the participants. The second section consists of 10 items on patient satisfaction level with medical and nursing care services. The total mark obtainable is "40" while the least is "10". The mean score (32.64) was used to categorised satisfaction with services delivered by nurses and doctors into "fully satisfied" and "fully unsatisfied". The third section asks questions on patient satisfaction about nursing care services. It is a ten 4-point Likert scale type questions. The total mark obtainable is "40" while the least is "10". The mean score (32.41) was used to categorised satisfaction with nursing care into "fully satisfied" and "fully unsatisfied".

The fourth section asked question about respondents' satisfaction with the facilities and services provided in the hospital. It consists of 11 items of 4-point Likert questions. The total mark obtainable if 44 while the least

is 11. Higher score represent high level of satisfaction with facilities and services provided in the hospital. The mean score (32.24) was used to categorised satisfaction with facilities and services in the hospital into "fully satisfied" and "fully unsatisfied". The fifth section of the question which consists of 10 items seeks to assess the overall level of satisfaction of respondents with health care delivery services. The mean score (30.43) was used to categorised satisfaction with health care delivery services in the hospital into "fully satisfied" and "fully unsatisfied".

Validity of the questionnaire was ascertained using face and content validity criteria. The questionnaire was pilot tested in General Hospital Idanre by administering the questionnaire to 12 patients using split-half methods and their responses was correlated using Cronbach's Coefficient Alpha, the instrument yielded a Cronbach Alpha score of 0.84. The questionnaire is adjudged reliable. Permission was sought from the authority of the tertiary hospitals while informed consent was sought and gained from all respondents.

The three selected hospital were entered through the Medical Director of each of the hospital. The details of the research was explain to then in detail. This is after approval had been sought and gained from management of Ondo State Ministry of Health. Meetings were schedule with the Head of Nursing Services of the each hospital to familiarize them with the study and sought their approval and cooperation. The researchers also meet with the head of nursing in each of the wards selected for the study. Ethical approval was sought from Research committee of Ondo State Ministry of Health which is the supervisory agency for all government hospitals in the state. The study was approved by the Medical Director of all the hospital where the study was done. Written and verbal consent was sought and gained from all participants in the study. The study procedures were explained to them in details.

Data was collected using questionnaires that were given to patients on selected wards and units in each of the selected hospital after the study had been properly explained to them and their informed consent sought and gained. Questionnaire administration was done by one of the authors who is registered nurse with over ten years' experience in data collection and research. The process of data collection took 12 weeks. Filled questionnaires were retrieved and sort for analysis. Sorting of questionnaire was done by one of the authors. Only questionnaires that are satisfactory filled were analyzed. Data was entered into Statistical Package for Social Sciences data sheet and checked by independent data analyst.

Statistical Package for Social Sciences (SPSS version 21) was used to analyze data. Research questions were analyzed using descriptive statistics of mean, standard deviation, percentages and Analysis of

Variance (ANOVA) and Independent t-test. Analysis of Variance was used to determining defences in the level of satisfaction with health care services among participants with tertiary, secondary and primary level of education. Also, independent t-test to determine differences in the level of satisfaction with healthcare between participants living in the rural and urban areas.

## Results

**Table 1** shows that the demographic distribution of respondents revealed that 75 (62%) of the respondents are male. The age distribution shows that 32 (26.4%) of the respondents are within the ages of 18-32 years, while a little above half 65 (53.7%) were 58 years and above. Also results from the table showed that more than half of the clients that participated in this study were married 62 (51.2%) while only 21 (17.4%) had tertiary level of education. Results further showed that that 34 (28.1%) are public workers, 29 (24%) are Artisan, 11 (9.1%) are farmers, and 30 (24.8%) are professionals. The residence distribution shows that 86 (71.1%) stayed in the rural areas. On the respondents patronage to the hospital, 32 (26.4) of the respondents have patronized the hospital for a period less than 2 years, 22 (18.2%) patronage falls within 2-5 years, 39 (32.2%) patronage falls within 5-10 years, while 28 (23.1%) have patronized the hospital for a period more than 10 years.

Satisfaction with medical and nursing care among participants in this study as shown in **Table 2** revealed that 62 (51.2%) of the clients that participated in this study are fully satisfied with health care services they receive, while 59 (48.8%) are fully unsatisfied.

The mean satisfaction score was found to be  $32.63 \pm 3.64$ . **Table 3** revealed the respondents' view of nursing care services. Results from the table showed that, on average, the respondents' opined that the nurses spent enough time with them (mean = 3.1901), that the nurses are capable of their job (mean = 3.19) and that there is always a nurse around when needed (mean = 3.5).

Clients that participated in the study also opined that nurses come quickly to attend to them when they call on them (mean = 3.46). Participants said they mostly feel at home with the nursing services rendered (mean = 3.08), and that nurses explain things to them (mean = 3.24).

Respondents' view on the factors that determine their selection of healthcare facilities was presented in **Table 4**. Results as presented in the table showed that respondents think that the admission procedure is not easy (mean = 2.7). However, majority agreed that the hospital environment is clean (mean = 3.45). Participants were also satisfied with availability of seats at the hospital (mean = 3.15). Also, clients that participated in the study were satisfied with the location of the hospital as they believed the hospitals are accessible (mean = 3.16). However, majority opined that services in the hospital are not affordable (mean = 2.43). The respondents are

**Table 1:** Demographic Distribution of the respondents.

Variable	Characteristics	Frequency N = 121	Percentage
Gender	Male	75	62.0
	Female	46	38.0
Age	18-32	32	26.4
	28-37	9	7.4
	38-47	15	12.4
	48 and above	65	53.7
Marital Status	Single	49	40.5
	Married	62	51.2
	Widow	10	8.3
Level of Education	Primary	54	44.6
	Secondary	46	38.0
	Tertiary	21	17.4
Occupation	Public workers	34	28.1
	Artisan	29	24.0
	Farmer	11	9.1
	Professional	30	24.8
	Others	17	14.0
Ethnic	Yoruba	108	89.3
	Igbo	13	10.7
Residence	Urban	35	28.9
	Rural	86	71.1
How long have you patronized the services of this hospital?	less than 2years	32	26.4
	2-5 yrs	22	18.2
	5-10 yrs	39	32.2
	more than 10 yrs	28	23.1

**Table 2:** Patients' satisfaction with health care services delivered by health workers.

Level of satisfaction	Frequency	Percentage (%)	Mean score
Fully satisfied	62	51.2	32.63 ± 3.64
Fully unsatisfied	59	48.8	
Total	121	100.0	

**Table 3:** Patient's experiences with nursing care provided in selected health care facilities.

Statement	Strongly Disagree (%)	Disagree (%)	Agree (%)	Strongly Agree (%)	Mean
The nurses spent enough time with me	0 (0.0)	5 (4.1)	88 (72.7)	28 (23.1)	3.19 ± 0.48
The nurses are capable of their job	0 (0.0)	0 (0.0)	79 (65.3)	42 (34.7)	3.34 ± 0.47
There is always a nurse around when needed	0 (0.0)	0 (0.0)	60 (49.6)	61 (50.4)	3.50 ± 0.5
The nurses come quickly when I call for them	0 (0.0)	0 (0.0)	65 (53.7)	56 (46.3)	3.46 ± 0.5
The nurses always made me feel at home	0 (0.0)	5 (4.1)	101 (83.5)	15 (12.4)	3.08 ± 0.39
The nurses often checked to see if I was well	0 (0.0)	0 (0.0)	97 (80.2)	24 (19.8)	3.20 ± 0.4
The nurses explain things to me	0 (0.0)	8 (6.6)	76 (62.8)	37 (30.6)	3.24 ± 0.56
The nurses help put my relatives' or friends' minds at rest	3 (2.5)	0 (0.0)	93 (76.9)	25 (20.7)	3.16 ± 0.53
The nurses listen to my worries and concerns	3 (2.5)	9 (7.4)	94 (77.7)	15 (12.4)	3.00 ± 0.55
The nurses are friendly and accommodating	34 (28.1)	0 (0.0)	84 (69.4)	34 (28.1)	3.23 ± 0.57

**Table 4:** Factors that determine patients' selection of health care facilities.

Statement	Strongly Disagree (%)	Disagree (%)	Agree (%)	Strongly Agree (%)	Mean
The admission procedure is easy to take.	3 (2.5)	42 (34.7)	64 (52.9)	12 (9.9)	2.7 ± 0.68
The hospital environment is clean	0 (0.0)	0 (0.0)	66 (54.5)	55 (45.5)	3.45 ± 0.5
There is the availability of adequate seating at the hospital	9 (7.4)	0 (0.0)	76 (62.8)	36 (29.8)	3.15 ± 0.76
The location of the hospital is accessible	0 (0.0)	12 (9.9)	78 (64.5)	25.6	3.16 ± 0.58
The charge for services at the hospital is affordable	9 (7.4)	66 (54.5)	31 (25.6)	15 (12.4)	2.43 ± 0.8
Laboratory investigations available within the hospitals	9 (7.4)	9 (7.4)	63 (52.1)	40 (33.1)	3.11 ± 0.83
My relatives get to buy drugs easily	9 (7.4)	30 (24.8)	63 (52.1)	19 (15.7)	2.76 ± 0.81
There are adequate electricity supply to the wards	9 (7.4)	0 (0.0)	72 (59.5)	40 (33.1)	3.18 ± 0.78
There is water supply to the wards	12 (9.9)	81 (66.9)	12 (9.9)	16 (13.2)	2.26 ± 0.81
There are adequate toilets facilities in the ward	18 (14.9)	0 (0.0)	57 (47.1)	46 (38)	3.08 ± 0.99
There are adequate bathroom facility in the ward	9 (7.4)	9 (7.4)	81 (66.9)	22 (18.2)	2.96 ± 0.75

**Table 5:** Level of Satisfaction with Health Care Facilities.

Level of satisfaction	Frequency	Percentage	Mean score
Fully satisfied	59	48.8	32.24 ± 5.96
Fairly satisfied	62	51.2	
<b>Total</b>	<b>121</b>	<b>100.0</b>	

**Table 6:** Overall Level of Satisfaction among participants.

Level of satisfaction	Frequency	Percentage	Mean score
Fully satisfied	67	55.4	127.72 ± 15.57
Fully unsatisfied	54	44.6	
<b>Total</b>	<b>121</b>	<b>100.0</b>	

**Table 7:** Logistic Regression Model Showing Relationship between Place of residence and overall satisfaction with care.

Variable	95.0% C.I. for EXP (B)			OR	p-value
	Lower	Upper	SE		
Place of residence	1.331	7.554	0.443	3.171	0.009

also of the view that their relatives does not find it easy to buy drugs (mean = 2.76). Participants were satisfied with the supply of electricity supply to the wards (mean = 3.18), however some were not satisfied with water supply to the wards (mean = 2.26).

Overall in terms of satisfaction with health care facilities, results showed that 59 (48.8%) were fully satisfied with the health care facilities. Those that were fully unsatisfied were found to be 62 (51.2%). The mean score of the participants was found to be 32.24 ± 5.96 (Table 5).

Participants with tertiary level of education in this study were more satisfied with health care services they received (134.14 ± 3.85) compared to others with secondary (130.91 ± 8.31) and primary (122.52 ± 20.78) level of education (f = 6.27; p = 0.01). Also, there is a significant relationship between occupation and patient's satisfaction with health care services (f = 9.80; p = 0.01). Urban dwellers (134.38 ± 10.40) were more satisfied than rural dweller (128.72 ± 11.8; t = 2.28; p = 0.02) (Table 6).

The odd of urban dwellers been fully satisfied with healthcare services in the selected secondary teaching hospitals was 3.171 higher than that of the rural dwellers (Table 7).

## Discussion

Determinants of satisfaction with health care services may be related to the behaviour and attitude of the health care workers that attend to patient's health care needs. Supporting this assertion, Feysia, et al. posited that the level of competence of health workers influence patients satisfaction with health care [11]. This is further corroborated with the submission of, Akinyinka, et al. in a study in Lagos Nigeria that level of confidence in health workers influence the level of satisfaction with care [20]. In this study, we found out that more than half of the participants were satisfied with health care professional service delivery (doctor and nurses). The study also documented that one third only described their services has been fair.

The most satisfied aspect of doctors and nurses work

in the hospital according to the participants in this study is the fact that they work together as a team (mean score  $3.73 \pm 0.45$ ); followed that the fact that nurses ensure that patients take medication as prescribed ( $3.43 \pm 0.59$ ) and that doctors are considerate in their approach to treatment cost ( $3.43 \pm 0.54$ ). However, least satisfied with was found to be patients perceived capacity of the doctors ( $2.80 \pm 0.71$ ) and not getting attention of doctors early enough when they get to the hospital ( $3.26 \pm 0.84$ ). The reason for this might not unconnected with the fact that there are usually few doctors to attend to many patients in secondary level of hospitals in Nigeria. This is closely related to earlier submission of Akinyinka, et al. that waiting time is one of those important factors that make patients to be dissatisfied with health care workers [20]. This further exposed the inadequacy of the number of health workers in our health care facility and present how to reduce the patients waiting time, this help in improving the quality of health care services in our hospital. Also Feysia, et al. earlier found out that inadequate health worker population ration and level of competence affect patient satisfaction with health care services [11]. This is further emphasized in this study. Waiting time is one of the strong indicators of patient/clients satisfaction with care.

Nurses account for the large percentage of health care workers in many hospitals. In some hospitals, this proportion can account for as high as 70% of the total health professionals in the hospital. This is because of their important roles in patients care. Nurses are the only set of health professional that care for the patients throughout their period of hospitalization. Other usually comes when their services are needed and go. This made interaction with nurses and level of patients' satisfaction with care they received from them an important determinant, if not the most important is assessing their level of satisfaction with during hospitalization or during period of accessing care in health care facilities.

Level of satisfaction of patients in this study with nursing care was found to be on average (mean  $32.41 \pm 3.24$ ). Only 53.7% of the study population were very satisfied with nursing services that they receive in the hospital. This is lower to the submission of [29] that (63.9%) of patients that participated in their study described nursing care services that they received in the hospital as excellent. This is lower than level of satisfaction recorded among patients in previous studies in different countries, 82.7% in Malaysia, [30], 73% in India, [31]. However close to 54.8% reported in Turkey [32], 57.8% in the Philippines [33], and slightly higher than 51.7% in Serbia, [34]. Our results showed that only half of the patients are satisfied with the nursing care they received. The difference in the results of this study and those of previous study might be due to the fact that while previous studies were done in urban setting our study was in rural area. In another related study

among patients in tertiary level of hospital in an urban city in Nigeria, Omorogbe, [35] documented high level of satisfaction among the sampled patients.

Results of this study are closely related to the level of satisfaction with nursing care of between 25 to 60% among patients living with schizophrenia [15]. However, in another previous studies in Nigeria, Paul and Ugwu, documented 73.68% among HIV patient in outpatient department [16]; Odetola and Fakorede, documented between 94% to 98% among perinatal women [17]. Onyeajam, et al. reported 90% level of satisfaction with ante natal care among ante natal women [18]. This difference in the result of this study and previous study in Nigeria might be probably due to the fact that Paul and Ugwu, [16] and Onyeajam, et al. [18] studies were carried out among patients in the out patients clinic while this study involve patients in the different units and wards of the hospital. Also, expected outcome of the hospitalization or client's engagement with the nurses might also determine their perception of their level of satisfaction with health care service [8,9,36]. This might account for the difference in the results of our study and those conducted in maternity units of the hospitals.

In the case of the nurses, availability all the time was found to be the most satisfied with among the participant (mean score  $3.50 \pm 0.50$ ), this is closely followed by their perceived level of competence on their job ( $3.34 \pm 0.47$ ) and fact that they explained thing to the patients ( $3.23 \pm 0.56$ ). This further emphasized the importance of healthcare workers availability in enhancing patients' satisfaction with care. Why participants in this study rated nurses high in terms of availability to attend to their needs they rated doctors low. The reason for this might be due to 24 hours shift run by nurses which made them available at all times while doctors are usually only available during the morning shift and on call for emergency purposes.

Participants in this study also score the nurses high on the fact that they are friendly and accommodating ( $3.23 \pm 0.57$ ) and checking on them to see to their welfare ( $3.20 \pm 0.40$ ). However, participants scored the nurses low because they hardly listen to their worries and concerns ( $3.00 \pm 0.55$ ). This shows that although the nurses are physically available, the participants opined that they are not emotionally available to attend to their emotional needs. This is closely related to what had been previously documented in the literature. Schofield, et al. proposed that providing emotional support and empathy are some of the importance services that influenced patients satisfaction with nursing care [37].

In this study, the most important factors that determine patients' satisfaction with health care services received was found to be the cleanliness of the environment, followed by availability of adequate seat in the hospital and electricity supply. This is closely

related to the findings of Akinyinka, et al. in a study conducted among clients receiving care in selected hospitals in Lagos Nigeria [20]. Participants in their study rated the hospital they received care from as been clean and they emphasized their satisfaction with cleanliness of the hospitals. This is further corroborated by Paul and Ugwu, who conducted their study among patients in South-south zone of Nigeria [16].

Patients also rate the location of the hospital, availability of laboratory for investigations, and adequacy of bathing and toilet facilities in the hospital as an important determinant of their satisfaction with the care they received from the hospital. This is closely related to what Feysia, et al. described as resources and effectiveness of health care services [11]. They submitted that this influenced greatly patients' satisfaction with health care services. Dhyana and Venkatesh, opined that quality reflects patient satisfaction, while patient satisfaction depends on several factors like admission procedure, physical facilities, diagnostics services, the behaviour of staff, cleanliness, food, and procedural techniques [38]. These are further corroborated by findings of this study. Batbaatar, et al. found that providers' competence, interpersonal skills and facility characteristics (physical environment, type, and level of the facility) were positively associated with patients' satisfaction [39]. Adhikary, et al. found factors like convenient opening hours, asking provider questions about health problems, provision of better cleanliness and privacy settings were found to be significantly associated with patients' satisfaction [40].

Findings of this study showed that female patients that participated in the study are significantly more satisfied with health care services compared to the male counterpart ( $t = -3.32$ ;  $p = 0.01$ ). This corroborated submission of Eyasu et al., in an attempt to assess adult patients' satisfaction with inpatient nursing care and associated factors in an Ethiopian referral hospital, Northeast, Ethiopia [12]. They found out that female in their study were significantly more satisfied with care compared to their male counterpart. This is further corroborated by Alhusban and Abualrub, [41] and Zarzycka, et al. [42] in their separate submission. However, Ibraheem, et al. [43,44] posited that there is no gender influence on patient's satisfaction.

This study found out that there is a significant relationship between level of education and patient's satisfaction with health care services ( $f = 6.27$ ;  $p = 0.01$ ). This is because level of education patients/clients will influence their perception and expectation from healthcare services. This was corroborated by the submission of Zarzycka, et al. [42] that level of education significantly influences patient's level of satisfaction with health care services. However while in Zarzycka, et al. [42] study submitted that people having less education was found to have higher level of satisfaction

with health care, in our study, opposite is the case. Participants with higher level of education were found to be more satisfied with health care services. Karaca & Durna, also reported that level of education is associated with patient's satisfaction with care, also in their study people with college or university education were found to be more satisfied with care [29].

The results also showed that there is a significant relationship between occupation and patient's satisfaction with health care services. Also, urban dwellers in the study were found to be three times more satisfied with health care services than their counterpart from the rural area. This is probably function of their level of exposure and education.

## Conclusion

Most of the participants in this study were fully satisfied with healthcare services they received in the selected secondary hospitals. Most satisfied with aspect of their care were found to be availability nurses and accessibility of the hospitals. However, participants were not satisfied with the availability of the doctors, cost of care and admission procedure. It is therefore important that doctors should be more available to respond to the need to the patients. Also, nurses should not only be physically available in the hospitals, they should also be emotionally available to care for the emotional needs of the patients. Lastly, hospital administrators to review the admission procedures in the hospital to make it more patient friendly.

## Authors Contributions

Oyebola Babatola and Rabi Popoola conceptualize the study. Oyebola Babatola participated in data collection, study design writing-review and editing. Rabi Popoola supervised the study, review literature review, study design and editing. Matthew Olatubi participated in reviewing literature, designing the methodology, analysis of data and writing of the initial draft. Folasade Adewoyin participated in the review of literature, data cleaning and writing of the initial draft. All authors proof read and approved the manuscript.

## Disclosure Statement

The authors did not receive any funding for this study.

## Conflict of Interest

The authors have no conflict of interest to declare.

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