Original Article

Assessment of Patients' Satisfaction with Nursing Care in a Tertiary Hospital, South West Nigeria

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Abstract

Introduction: Nursing care is generally observed as an important determinant of overall patient satisfaction during hospital admission. As such it is a meaningful source of information for identifying gaps and developing an effective action plan for quality improvement in healthcare organizations.

Aim of the study: To assess patients' satisfaction with nursing care provided during hospital stay in a tertiary Hospital in Nigeria.

Methods: A descriptive cross sectional study design was utilized involving patients admitted to the wards for a minimum of two days and capable of independent communication. A semi-structured self and interviewer administered questionnaire developed by the researchers was used for data collection. One trained Research Assistant together with the researchers participated in the data collection. A simple random sampling technique was used to select a sample of 371 patients from various wards in the hospital.

Data was analysed using both descriptive and inferential statistics. Fisher's exact was used to test the association between patients' satisfaction and socio-.demographic variables.

Results: The majority of the respondents were female (76.6%) and the mean age was 38.7±15.9.

Overall, approximately 62% of the patients were satisfied with the overall nursing care they received at the Hospital. Most particularly, patients were satisfied with overall nurse-patient interaction (76.9%); nurse's admission and provision of information (61.3%) and nurse's attitude and performance of duty (61.6%). An overall 48% level of dissatisfaction with the services was observed. There was a statistically significant positive association between educational status (p<0.001) with level of patients satisfaction.

Conclusion: Patients were satisfied with the overall nursing care they received at the Hospital. There is need for nurses to learn to treat patients politely. Hospital Management should employ more nurses to meet the standard nurse-patient ratio and improve on water supply and toileting system.

Keywords: Assessment, Patient Satisfaction, Nursing Care, Quality improvement

Introduction

The concern for quality care has become increasingly important in health care facilities and patient satisfaction is generally observed as an important indicator for quality care. Patients now recognize quality care and services as their fundamental human right (McSherry, MSherry and Watson, 2012). In the light of this, healthcare facilities are concerned in maintaining high levels of patient satisfaction in order to stay competitive in the healthcare industry (Wai MunTang, Chi-Yang Soong and Wen Chieh Lim, 2013). Nurses are involved in almost every aspect of patient's care and interact with patients more often than any other healthcare professional in the hospital (Attallah, Hamdan-Mansour, Al-Sayed and Aboshaiqah, 2013). Hence, nursing care is an essential aspect of patient's satisfaction. Quality nursing care is desired by patients and promised by nurses (Koy, Yunibhand and Angsurroc, 2015). The American Nurses Association (2000) defines 'patient satisfaction with nursing care' as patients' opinion of care received from nursing staff during their hospitalisation (Wai MunTang, Chi-Yang Soong and Wen Chieh Lim, 2013). Patient satisfaction from the patient's point of view is the patient's expectation of care compared with the realities of the care received. In addition, patients' satisfaction reflects the expression of patient's overall judgment on the quality of care received particularly in the aspect of interpersonal process. Furthermore, patient satisfaction from the organization perspective is viewed as the goal of health care delivery. Care assessed to be high in quality according to clinical, economic, or other provider-defined criteria can be far from ideal if as a result of that care the patient is unhappy or dissatisfied (Eyasu, Adane, Amdie, Getahun and Biwota, 2016). Thus, measuring patient satisfaction is a vital source of information for identifying gaps and developing an effective action plan for quality improvement in healthcare organizations (Al-Abri and Al-Balusi, 2014).

Nurses are in the frontline that patients most likely meet with, spend the highest amount of time with and rely upon for recovery during their hospitalization. Since majority of health

service providers are nurses, care provided by them plays an important role in the satisfaction of patients (Motaghed, Mahboobi-Ardakan and Meskarpour-Amiri, 2016). In other words, nursing care plays a prominent role in determining patient's satisfaction. Several studies have demonstrated an association patient satisfaction, between nursing and identifying nursing care as the only hospital service having a direct and strong relationship with overall patient satisfaction (Joolaee, Givari, Taavoni and Bahrani, 2008; You, Aikenl Sloane, Liu, 2013; Papastavrou, Andreou, Tsangari and Merkouris, 2014). A practice that consistently and continuously measures patient perceptions will be more efficient and effective in its daily operations (Riskind, Fossey and Brill, 2011). Nurses will not know the quality of care they render unless it is investigated.

Interestingly, the benefit of achieving patient satisfaction with nursing care include, compliance with healthcare regimens, health services utilization and general attitudes towards the health care system and better health outcomes. Apart from being an important indicator of quality nursing care, patient satisfaction has a reciprocal effect, that is, it can be used to improve nursing care that will in turn increase satisfaction (Wagner, Bear, 2009; Papastvrou, Andreou, Tsangari and Merkouris, Mahboobi-Ardakan 2014; Motaghed, and Meskarpour-Amiri, 2016). Measuring patient satisfaction is a prove that a system is interested in quality and in doing things better (Riskind, Fossey and Brill, 2011). To improve the quality of nursing care, the nurses need to know what factors influence patient satisfaction. In literature, patient satisfaction is linked with a variety of nursing factors, such as nurse staffing levels, higher proportions of registered nurse (RN) skill-mix, nurses' work environment, and RN-physician collaboration (Kutney-Lee, McHugh, Sloane, Cimiotti, Flynn, Neff and Aiken, 2009). Several environmental factors have been reported as hindering the nursing profession in its ability to achieve improved health outcomes through the provision of competent, culturally sensitive, evidence-based care. These factors among others include poor working conditions, heavy workloads, lack of participation in decision making, and limited opportunities for career mobility (Papastvrou, Andreou, Tsangari and Merkouris, 2014).

The healthcare managers that endeavour to achieve excellence take patient perception into account when designing the strategies for quality improvement of care (Al-Abri and Al-Balusi, 2014). In the study setting, the quality and effectiveness of care is constantly examined and monitored so as to maintain standards and ensure that patients receive quality care and are satisfied. The aim of this study therefore is to assess patients' satisfaction with quality of nursing care provided during hospitalization.

Objective

To assess patients' satisfaction with quality of nursing care provided during hospital admission in Tertiary Hospital, South West Nigeria. The questions expected to be answered in this research are as follows.

Research Questions

1. What is the level of patients' satisfaction with the ward environment during admission in UCH, Ibadan?

2. What is the level of patients' satisfaction with the nurse-patient relationship during hospitalization in UCH, Ibadan?

3. What is the level of patients' satisfaction with the information provided by the nurses about their care/ management during admission in UCH, Ibadan?

4. What is the level of patients' satisfaction with nurses attitude and their performance of duty during hospitalization in UCH?

5. What is the overall patients' satisfaction of quality of nursing care provided in relation to selected demographic characteristics during hospitalization in UCH, Ibadan.?

6. What are the areas of dissatisfaction with nursing care provided that need to be improved upon.

Research Hypothesis

There is no significant difference between patients' level of satisfaction with nursing care and selected demographic characteristics (age, gender, religion and educational status).

Research Methods

Study design: This study utilized a cross-sectional descriptive survey design to determine the level of patients satisfaction with nursing care provided during hospital admission.

Study setting: It was conducted in the University College Hospital Ibadan (UCH) in Oyo State, South West Nigeria. The Hospital is a flagship tertiary health care institution in West Africa Sub-region, located along Queen Elizabeth road, Orita-Mefa, in Ibadan North Local Government Area of Ovo State, Nigeria. UCH is a research, training and service centre for all health professionals and health care needs for all age groups. The bed capacity of the hospital is Nine hundred and seventy (970) and Nine hundred and twenty nine (929) for in-patients beds only in the following Units: Intensive Care Unit, Labour Ward Complex, Obstetric and Gynaecological Unit, Paediatric Unit, Surgical

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Unit, Medical Unit, Neuro Science Unit, Nephrology Unit, Radio Oncology Unit and Specialist Clinics. The department of Clinical Nursing is an arm of nursing that provides direct nursing care to patients. It is also involved in teaching, administration and research through its Quality Improvement Unit.

Study population: The population consist of all patients admitted into UCH. The average number of admissions in all the wards per month is 850. Respondents were proportionally drawn from the wards of each unit.

Sample size determination: The Slovin's formula was used to calculate the sample size;

$$n = \underline{N} + N(e^2)$$

Where: n= the desired sample size N= the estimated population e= the level of precision or relative error of estimation (0.05).

Using the above formula: n = 20331+(2033)(0.05)(0.05)

$$n = \underline{2033} + (2033)(0.0025) = \underline{2033}$$

6.0825 = 334 Sample size = 334

Adjusting for 10% Non- response rate =

Non- response rate = $\underline{\text{Total population}}$ 1- Nonresponse rate = $\underline{334}$

1-10% = 37 Sample size = 334+37=371

Sampling technique: Firstly, the researchers listed all the wards under each unit of the Clinical Nursing Department where patients are admitted. Two wards were selected from each unit using simple random sampling technique by balloting.

Secondly, patients who met the inclusion criteria and agreed to participate in the study were purposively selected from each ward. The number of patients who participated from each ward was proportionally calculated.

Instrument development: Questionnaire was used for data collection. The tool was designed after thorough literature review to assess patients' satisfaction with the quality of nursing care provided in UCH, Ibadan. It consists of forty two (42) items and three sections. Section A consist of ten (10) items which captured the sociodemographic information, Section B was structured to answer the research questions on patients satisfaction in relation to quality of nursing care provided. Patients will identify their satisfactions through a 5- point Likert scale type items

(Very dissatisfied, Dissatisfied, Neutral, Satisfied and Very satisfied). It contains 32 items divided into five domains as indicated below.

A. Therapeutic Ward Environment: This domain consists of four items, in which patient will identify their satisfaction with the ward environment.

B. Interpersonal Relationship: This domain consists of 5 items, in which patient will identify their satisfaction with nurses interpersonal relationship.

C. The nurse as an information provider: This domain consists of eleven items. Patient will identify their satisfaction as regards nurses as information providers through a 5-point Likert scale type items.

D. Nurses attitude and performance of duty: This domain consists of ten (10) items. Patient will identify their satisfaction in relation to nurses' attitude as caring, competent and skilled healthcare provider through a 5-point Likert scale type items.

The score assessment will be conducted by aggregating the points of all items and converting them to percentage values. A total score of 'satisfied' and 'dissatisfied' was calculated and documented.

Finally, Section C consist of two open ended questions aimed at soliciting information on patients areas of dissatisfaction with care and recommendations to improve nursing care.

Validity of instrument: The face and content validity of the instrument was ensured by reviewing and critiquing by the researchers. A pilot study was carried out in the orthopaedic wards of the same setting to ascertain feasibility of the study before the final study was carried out.

Method of Data Collection: Data was collected by a self and interviewer administered semi-structured questionnaires from literate and non-literate patients respectively on the wards of the UCH. The researchers; members of Staff of Continuing Education and Training Unit and Nursing Audit of the Department of Clinical Nursing, UCH, Ibadan, and one trained research assistant participated in data collection. At each ward, the nurse in charge (Ward Manager) was approached; the purpose of the study explained and a copy of ethical approval given. The ward leader assisted in introducing the researchers to the patients and explanation was given on the study, purpose, benefits and criteria for selection of participants.

Data Analysis: The Statistical Package for Social Science (SPSS 20) software was used for data entry, storage and analysis. Descriptive statistical analysis such as frequency count, percentage, mean and standard deviation was employed to describe the variables of interest. Inferential statistics fisher's exacts was used to describe the association between variables. Statistical significance was set at $p \le 0.05$.

Ethical consideration: Approval to carry out the study was obtained from UI/UCH Ethical Committee (NHREC/05/01/2008a). The project was implemented with the authorization and support of the Chairman Medical Advisory Committee UCH, Ibadan and Director Clinical Services, Research and Training and the Director of Nursing and Head, Department of Clinical Nursing. The investigators also met with the Deputy Director of Nursing in charge of each unit and Ward leaders for their informed consent and their maximum cooperation during the process of data collection.

Administration of the questionnaire observed all ethical principles on patient information, anonymity and privacy. Respondents were made to know that their participation in the study was voluntarily and that their decision is of their own choice without any direct or indirect influence.

Results

Table 1.1 reveals that the age of the respondents ranges between 19 and 93 with slightly above half (54.5%) of the respondents within the age group of 20 to 39 years with mean \pm SD 38.7 \pm 15.9. Threequarter (76.6%) are female with sex ratio of 0.3 indicating that for every one male there will be three female. Seventy four percent (74.0%) were married. Apart from Yoruba tribe with the highest number (82.1%), Igbo tribe was high among other tribes, and about two-third (64.9%) of the respondents were Christians. Slightly above two-fifth (41.8%) of the respondents had tertiary education certificate and nearly one-third (29.1%) engaged in trading as occupation. On the aspect of satisfaction with therapeutic ward environment, 94.3% were satisfied with the cleanliness of the ward environment, 56.1% were satisfied with functioning toilet and bathroom, 95.6% were satisfied with ventilation and lightning and 90.1% were satisfied with visitors and noise under control (table 2.1). The overall cleanliness of the ward environmental satisfaction mean score was 11.9 ± 2.8 . Figure 1 reveals that 88.8% of the patients were satisfied with overall cleanliness of the ward environment.

The patients' satisfaction about interpersonal relationship (nurse-patient interaction), table 2.2 reveals that 88.8% of the patients were satisfied with nurses' being very friendly and courteous manner of treatment, 89.3% were satisfied with nurses' 'listening carefully' and 81.7% were satisfied with nurses spending enough time to explain and interact in an easy manner to understand the procedure. Figure 2 shows that 76.9% of the patients were satisfied with overall satisfaction on nurse-patient interaction.

Table 2.3 reveals that 96.9% of the patients were satisfied with nurses' admission, 70.6% were satisfied with nurses' pre-admission, only 21.3% were satisfied with nurses' introduction to the ward and other patients, 77.7% were satisfied with nurses' provision of information on patient's investigation, 75.1% were satisfied with nurses' provision of information on patient's meal policy, 93.5% were satisfied with nurses' provision of information on patient's purchase, 93.5% were satisfied with nurses' provision of information on patients' visiting time and 57.1% were satisfied with nurses' provision of information on patient's need. The overall nurses' admission and information satisfaction mean score was 20.7±4.9. Figure 3 reveals that 61.3% of the patients were satisfied with overall nurses' admission and information provision for patients.

It was detected (table 2.4) that 56.9% of the patients were satisfied with nurses' introduction of herself to patients, 82.6% were satisfied with nurses' seek permission before performing nursing procedures, 81.8% were satisfied with nurses' explanation of nursing procedure, 82.1% were satisfied with nurses' provision of nursing care without delay and 93.5% nurses' provision and assurance of privacy. The overall nurses' attitude and performance of duty satisfaction mean score was 20.9 ± 4.5 . Figure 4 reveals that 61.6% of the patients were satisfied with overall nurses' attitude and performance of duty.

Figure 5 reveals that 61.6% of the patients were satisfied with overall nursing services. The overall satisfaction mean score was 43.6 ± 6.7 .

Data analysis (table 3.1) reveals that out of 48 patients who signified their areas of dissatisfaction, 25.0% were dissatisfied with heavy workload on nurses as it affects quick response to patients, 20.8% reported impolite attitude of nurses, 14.6% complained of water shortage, 10.4% reported on toileting system and other complained such as infestation of rats, mosquitoes bite, malfunctioning of socket and unpleasant food served.

On the areas of improving nursing care (table 3.2) It was revealed that only one hundred and thirty three (133) patients responded out of which 43.6% reported on employment of more nurses to reduce the workload, 17.3% implored on training and retraining of nurses on skilful discharge of duty, 14.2% challenges on time to time supervision of nurses on duty, 9.0% urged that all cadre of nursing should be involved in nursing care not only the junior ones, 10.6% urged management to work on ward lighting, water and toilet system, functional electrical equipment and ward environmental sanitation, 5.3% encouraged the management of the hospital on computerization of the services to ease paper work especially on investigation results.

Inferentially, test of association shows that only educational status was significantly (p<0.001) associated with level of satisfaction while age (p=0.658), gender (p=0.921) and occupation (p=0.103) were not significantly associated with patient's level of satisfaction with nursing services (table 4.1).

Variable	Frequency	Percentage (%)	
Age group (yrs)			
Below 20	28	7.3	
20-39	210	54.5	
40 - 69	124	32.2	
Above 69	23	6.0	
(Mean±SD) = (38.7±15.9)			
Max = 93, Min = 19			
Gender			
Male	90	23.4	
Female	295	76.6	
Sex ratio: 0.3			
Marital Status			
Single	71	18.4	
Married	285	74.0	
Divorced	12	3.1	
Widow	3	0.8	
Widower	14	3.6	
Tribe			
Yoruba	316	82.1	
Igbo	33	8.6	
Hausa	8	2.1	
Others	28	7.3	
Religion			
Christianity	250	64.9	
Islam	124	32.2	
Traditional	4	1.0	
Other	7	1.8	
Educational Status			
Primary	57	14.8	
Secondary	142	36.9	
Technical	10	2.6	
Tertiary	161	41.8	
Non-formal	15	3.9	

Table 1.1: Demographic Characteristics

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Civil service	36	9.4
Trading	112	29.1
Teaching	34	8.8
Self-employed	91	23.6
Health worker	18	4.7
Others (student)	94	24.4

Table 2.1. **Therapeutic Ward Environment**

		Frequency (%)		
Variable	Item	Satisfied	Dissatisfied	
Therapeutic Ward	Cleanliness (ward environment)	363(94.3)	22(5.7)	
Environment	Functioning toilet and bathroom	216(56.1)	169(43.9)	
	Ventilation and lightning	368(95.6)	17(4.4)	
	Visitors and noise under control	347(90.1)	38(9.9)	
Mean score = 11.9±2.8	Cut off point = 12			

Interpersonal Relationship (Nurse-patient interaction) Table 2.2.

		Frequency (%)		
Variable	Item	Satisfied	Dissatisfied	
Interpersonal Relationship	Nurse's very friendly and courteous manner treatment	342(88.8)	43(11.2)	
	Nurse's listen carefully Nurse spends enough time to explain and	344(89.3) 315(81.7)	41(10.7) 70(18.3)	
Mean score = 13.4±2.7	interact in an easy manner to understand Cut off point = 13	515(01.7)	/0(10.3)	

Table 2.3 Nurses' Admission and Information Provision for patient

		Freque	ency (%)
Variable	Item	Satisfied	Dissatisfied
Information Provision	Nurses' admission of patients	373(96.9)	12(3.1)
	Nurse's pre-admission instruction to patient	272(70.6)	113(29.4)
	Nurses' introduction to the ward and other patients	82(21.3)	303(78.7)
	Nurses' provision of information on patient's	299(77.7)	86(22.3)
	investigation Nurses' provision of information on patient's meal	289(75.1)	96(24.9)
	policy	360(93.5)	25(6.5)

	Nurses' provision of information on patient's drug purchase	360(93.5)	25(6.5)
	Nurses' provision of information on patient's visiting times	220(57.1)	165(42.9)
	Nurses' provision of information on patient's health needs		
Mean score = 20.7±4.9	Cut off point = 21		

Nurses' Attitude and Performance of duty Table 2.4

		Frequ	Frequency (%)	
Variable	Item	Satisfied	Dissatisfied	
Attitude and	Nurses' introduction of herself to	219(56.9)	166(43.1)	
Performance of duty	patients	318(82.6)	67(17.4)	
	Nurses' seek permission before performing nursing procedures			
	Nurses' explanation of nursing procedure	315(81.8)	70(18.2)	
		316(82.1)	69(17.9)	
	Nurses' provision of nursing care without delay	360(93.5)	25(6.5)	
	Nurses' provision and assurance of privacy	500(5515)	20(0.0)	
Mean score = 20.9 ± 4.5	Cut off point = 21			

Table 3.1: Areas of Dissatisfaction (n=48)

Dissatisfaction with:	Frequency	Percentage (%)	
Toileting system	5	10.4	
Shortage of water	7	14.6	
Delay in calling doctor	2	4.2	
Heavy workload on nurses affects quick response to patients	12	25.0	
Inadequate number of nurses especially at night	4	8.3	
Impolite attitude of nurses	10	20.8	
Environmental noise and poor ventilation	3	6.3	

Others (Infestation of rats, Malfunctioning of socket, food served not delicious)	5	10.4
Total	48	100.0

Areas of improving nursing care (n=133) **Table 3.2:**

Improve on:	Frequency	Percentage (%)
Employment of more nurses to reduce the workload	58	43.6
Training and retraining of nurses on skilful discharge of duty and relationship with patients and relatives	23	17.3
All cadre of nursing should be involved in nursing care	12	9.0
Time to time supervision of nurses on duty	19	14.2
Management should provide ward light, water and toilet system, functioning electrical equipment and environmental sanitation to keep out rats and mosquitoes	14	10.6
Computerization of the hospital to ease paper work especially on investigation results	7	5.3
Total	133	100.0

Table 4.1: Cross – tabulation of demographic characteristics and patients' level of

Sa	atisfaction						
		Level of sat	isfaction				Remark
		Dissatisfied	Satisfied	d.f	X ² -value	p-value	
	Below 20	13 (8.8%)	15 (6.3%)				
A	20 - 39	83 (56.1%)	127 (53.6%)	3	1.61	0.658	T:: £:
Age group	40 - 69	43 (29.1%)	81 (34.2%)				Insignificant
	Above 69	9 (6.1%)	14 (5.9%)				
	Male	35 (23.6%)	55 (23.2%)	1	0.01	0.921	т. с.
Gender	Female	113 (76.4%)	182 (76.8%)				Insignificant
	Non-formal	4 (2.7%)	11 (4.6 %)				
	Primary	21 (14.2%)	36 (15.2%)				
Educational status	Secondary	37 (25.0%)	105 (44.3%)	4	20.38	< 0.001	Significant
	Tertiary	81 (54.7%)	80 (33.8%)				
	Technical	5 (3.4%)	5 (2.1%)				

	Civil service	20 (13.5%)	16 (6.8%)			
	Trading	40 (27.0%)	72 (30.4%)			
O	Teaching	13 (8.8%)	21 (8.9%)	5	9.15	0.103 Insignificant
Occupation	Health worker	9 (6.1%)	9 (3.8%)			
	Self employed	27 (18.2%)	64 (27.0%)			
	Others	39 (26.4%)	55 (23.2%)			

Note: Fisher's exact result was recorded for small cell

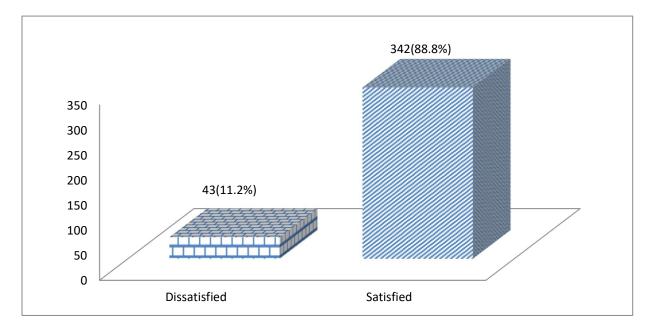


Figure 1: Respondents' level of satisfaction on Therapeutic Ward Environment

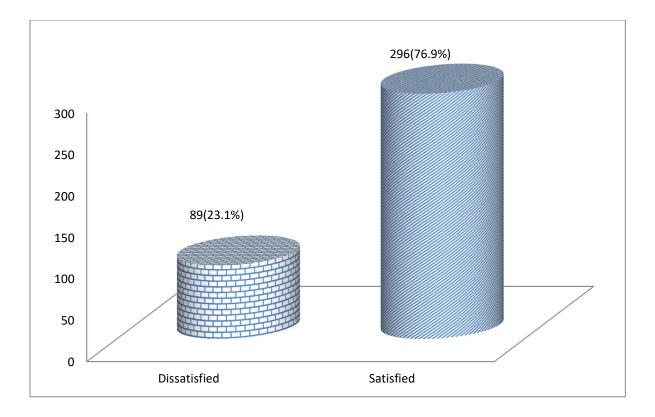


Figure 2:Respondents' level of satisfaction on Nurse-patient interaction

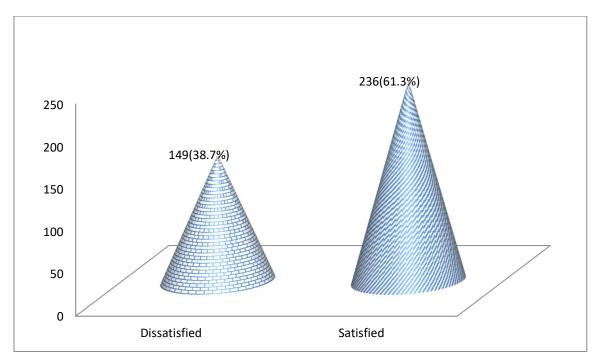


Figure 3: Respondents' level of satisfaction on Nurses' Admission and Information Provision for patient

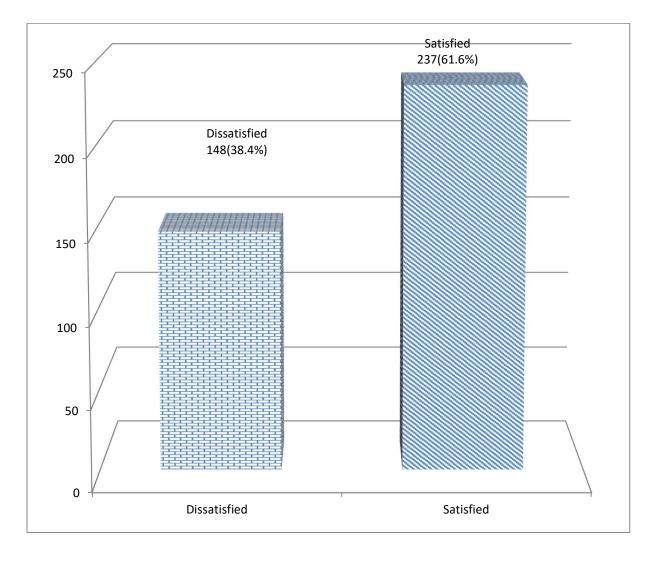


Figure 4: Respondents' level of satisfaction on Nurses' Attitude and Performance of duty

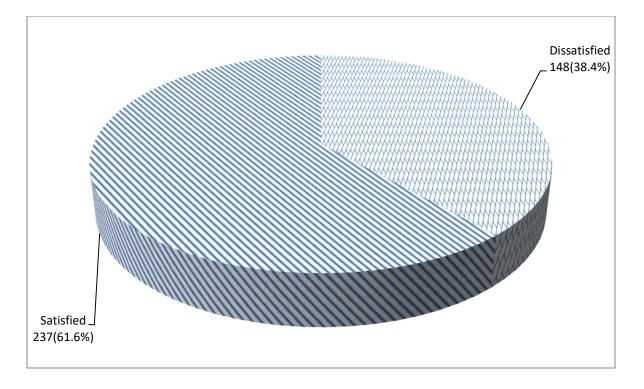


Figure 5: Respondent's Overall level of satisfaction

Discussion of Findings

Nursing care is one of the major components of health care services, hence patient satisfaction with nursing care is an important indicator of health care services. This study assessed the level of patients' satisfaction with nursing care and its associated factors.

The study revealed the mean age of the respondents as 38.7±15.9 with three-quarter (76.6%) being female and male to female ratio of 0.3 indicating that for every one male patient there were three females. This is in congruent with other studies where more female were admitted than their male counterparts (Omorogbe and Amiegheme, 2016; Lawal, Agbla, Bola-Lawal, Afolabi and Ihaji, 2018). This could be due in part to the fact that the life expectancy is higher among women than men as reported by Crimmins, Shim, Zhang, Kim. (2019). However this may not necessarily be generalized as the high rate of female admission is exclusive to the research under study. This study also found that majority (41.8%) of the respondents had tertiary education certificate. This is consistent with a similar study in Abuja, Nigeria where University

graduates (47.9%) were majority among the respondents (Lawal, Agbla, Bola-Lawal, Afolabi and Ihaji, 2018). This could be due to the fact that the University College Hospital (UCH) is located within the heart of Ibadan city which would invariably cause influx of more educated people to access health care services and also most of the locals erroneously believe UCH to be the 'last bus stop' of any such individual and that such persons may never recover. Nurses can also leverage on this information and health educate the public against the ills of believing such hearsays.

The mean score for the overall ward environmental satisfaction was 11.9 ± 2.8 which reveals that

88.8% of the patients were satisfied with the general ward environment. This is in contrast to a

research carried out by other studies where patients registered dissatisfaction with the ward environment (Lawal, Agbla, Nkeiruka Bola-Lawal,Afolabi and Ihaji,2019). Infection control practices is an integral aspect of any health care institution as it largely contributes to overall health outcome of patients. Though more than three quarter of the respondents were satisfied with UCH general ward environment, there is still room for improvement to make it as close to home as possible.

There was 76.9% overall satisfaction of patients on nurse-patient interaction. This finding is a pointer to the level of professionalism displayed by the nurses on the respective wards. This implies that nurses utilize Hildegard Peplaus' theory of interpersonal relations in their daily practice of nursing care. In the theory of interpersonal relations, Peplau emphasized patients' experience and the effect that nurse-patient interaction have on those experiences (Hagerty, Samuels and Gigliotti, 2017). Cordial relationship between nurses and patients is a strong precursor of quality nursing care at all levels of healthcare delivery system (Ojo, 2010). The finding however, is not consistent with another study in northern Nigeria where most of the patients were dissatisfied with the poor interpersonal relationship and unfriendliness of the nurses (Ajayi and Olumodeji, 2016). Owing to the fact that patients are becoming aware of their rights with the increasing cost of healthcare services, it is essential for nurses to improve on their communication skills.

As indicated in the report, 81.7% were satisfied with nurses spending enough time to explain and interact in an easy to understand way. This high level of satisfaction could be due in part to UCH determination as the centre of excellence to maintain professionalism by employing highly skilled and qualified nurses.

Slightly more than half (61.3%) of the patients were satisfied with overall nurse's admission and provision of information. A study in two public hospitals in Kenya showed similar findings whereby most of the patients in both settings were satisfied with the information received from the nurses on admission (Githemo, Karani, Ogutu and Gachoka, 2018). This is in contrast to other studies in Nigeria and Turkey where the patients reported dissatisfaction with the information given by nurses (Ajayi and Oyedele, 2009; Karaca and Durna, 2019). Informations provided to patients during admission play an important role in their satisfaction; more importantly if nurses provide the information in a clear and concise method (Ozsoy, Ozgur and Durmaz, 2007). This calls for a far more modern approach to providing information to patients. It reveals the dire need to adopt the advanced system of providing information to patients or their relatives in which patients will have all information in a handbill in the language they understand better. This will further reduce the workloads of nurses and other health care team as the time spent providing information will be used for other procedures.

In agreement with previous studies (Eyasu, Adane, Amdie, Getahun and Biwota. 2016), this study reveals that 61.6% of the patients were satisfied with overall nurse's attitude and performance of duty. This result is not better than the study conducted in two other tertiary institutions in southeast and south-south state of Nigeria where a higher proportion of the patients were satisfied with the attitude of nurses, 76. 8% and 93.7% respectively (Modebe, Azuike, Ucheagwa, Azuike, Obi, Epundu, Chikezie, Ebulue and Aniagboso, 2014; Ekpe and Peter, 2016). It has been noted in literature that nurses' attitude; courtesy, respect, careful listening and easy access of care have a great influence on overall patients' satisfaction (Ekpe and Peter, 2016). Therefore, there is need for UCH nurses to improve on their attitude and responsiveness to patients.

Interestingly, the current study revealed that, approximately 62% were satisfied with the overall nursing care they received at UCH. This finding is better than other studies in Ethiopia in which 52.5% (Eyasu, Adane, Amdie, Getahun and Biwota, 2016) and 49.2% (Sharew, Bizuneh and Habtewold, 2018) of the respondents were satisfied with overall nursing care they received respectively. However it is not better than other studies in Nigeria (77%), Kenya (87%), Malaysia (82.7%) and Turkey (63.9%).

As regards area of dissatisfaction with services, during admission at UCH, findings revealed that out of 48 patients who signified their areas of dissatisfaction, 25.0% were dissatisfied with heavy workload on nurses as it affects their quick response to patients. This confirms the assertion by Ajayi and Olumodeji that heavy workloads and shortage of nursing staff reduces patients' satisfaction (Ajayi and Olumodeji,2016). This could be linked to poor staffing by the UCH management, brain drain and/or improper construction of duty roster by the nurse leaders. Nevertheless, the legally required nurse-to-patient ratio is 1:2 or fewer in an intensive care unit and 1:4 or fewer in other specialties at all times that patients are receiving treatment (Ford, 2013). A balanced nurse-to-patient ratio (good staffing) leads to positive outcomes (Needleman, Buerhaus, Pankraz, Leibson, Stevens and Harris, 2011; Aiken, Sloane, Ball, Bruyneel, Rafferty and Griffiths, 2018). UCH as the centre of excellence should strive to meet the standard nurse-to-patient ratio.

A good number (20.8%) of patients reported dissatisfaction with impolite attitude of nurses. The impolite attitude of nurses reported in this study is not acceptable for it violates the ethics of nursing profession. However, it might be connected to patient's attitude, high workloads, staff shortages, lack of equipment, lack of leaders support and burnout (Haskin, Phakathi, Grant and Horwood, 2014). Overall, patients' are the reason why nurses are employed and for no reason or situation should nurses act unethically.

Other areas of dissatisfaction include, Shortage of water (14.6%), toileting system (10.4%), infestation of rats, mosquitoes bite, malfunctioning of socket and unpleasant food served. There was an overall 48% level of dissatisfaction with the services. Though the percentage of dissatisfaction seemed low compared with other studies, the areas pointed out by the patients needs to be attended to as they would impact on overall patients' outcome. For instance, patient complained of shortage of water, poor toileting system, rat infestation and mosquito bites which are sources of nosocomial infections and thus requires urgent attention (Maina, Tosas-Auguet and Mcknight, 2019).

On the areas of improving nursing care, 43.6% suggested employment of more nurses to reduce the workload. Consistent with literature, reduction of nurses workload will greatly improve quality of patient care (Needleman, Buerhaus, Pankraz, Leibson, Stevens and Harris, 2011; Oetelaar, van Stel and Van Rehen, 2016; Aiken, Sloane, Ball, Bruyneel, Raffert and Griffiths, 2018). It is widely recognized that most countries particularly Sub-Saharan African countries have failed to meet the WHO recommendation for nurse patient ratio which greatly impacts on nursing care. Due to the peculiarities of Nigerians, referral system has not been effective, thus UCH had been saddled with large outflow of patients which had invariably

placed strains on the rather fragile health system and available resources. Hence the need to increase the number of nurses cannot be overemphasized. Few respondents (17.3%) implored on training and retraining of nurses on skilful discharge of duty. This is necessary because nursing continuing education results in improvement of nursing activity (Eslamian, Moeini and Soleimani, 2015).

Other areas of improving nursing care that worth mentioning according to the respondents include; supervision of nurses on duty, involvement of all cadres of nurses in the nursing care of patients, ward lighting, adequate water supply, toilet system, ward environmental sanitation, functional electrical equipment and computerization of the services to ease paper work especially on investigation results. The patient's response is directly related to the poor health system that has hitherto plaqued the Nigerian health care system. Research has shown that patients' opinion are the best source of feedback that can inform the hospital management and providers of important things, that can be used in healthcare planning and evaluation (Abdel Maqsood, Oweis and Hansa, 2012; Merkouris et al., 2013).

This study showed that there is a statistically significant positive association between educational status (p<0.001) with level of patients satisfaction. In other words patient satisfaction gets higher commensurately with the level of education. This corroborates other studies that reported more satisfaction among patients with tertiary level of education than those with high school level of education (Ibigbami, Egunranti, Akinsulore and Ibigbami, 2015; Karaca and Durna, 2019). However, it is not consistent with previous research where education level was not associated with patient satisfaction with care (Ozlu and Uzun, 2015: Sharew, Bizuneh and Habtewold, 2018; Lawal, Agbla, Nkeiruka Bola-Lawal, Afolabi, and Ihaji, 2019). The possible explanation is that, majority of the patients are graduates of tertiary institutions and thus have a good grasp of their patients' rights and would demand they receive quality care.

In addition, age (p=0.658), gender (p=0.921) and occupation (p=0.103) were not significantly associated with patient's level of satisfaction with nursing services. This is not in consonance with another study, where age, gender and occupation were among the factors significantly associated with patient satisfaction with nursing care (Eyasu, Adane, Amdie, Getahun and Biwota, 2016). The discrepancy could be due to different sociocultural background of the respondents.

Conclusion

The study showed that more than half of the patients were satisfied with overall nursing care received on admission. However, they were dissatisfied with heavy workload on nurses as it affects their quick response to patients. Other areas of dissatisfaction as documented by the patients include; impolite attitude of nurses, shortage of water, toileting system, infestation of rats, mosquitoes bite, malfunctioning of socket and unpleasant food served.

There is need therefore to develop service improvement strategies that will address the above listed issues in the hospital.

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