Patient Satisfaction with Quality of Nursing Services at Surgical Outpatient Department (SOPD) of Abubakar Tafawa Balewa University Teaching Hospital Bauchi

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Abstract

Introduction: Patient satisfaction is an essential tool in measuring the quality of health care services; as it gives an idea of the staff's progress towards patients' desires and is found to be useful in measuring patients' expectations. The study aimed to assess patient's level of satisfaction with the quality of nursing services they had received at the surgical outpatient department of ATBUTH Bauchi, Bauchi state, Nigeria. Methods: A cross-sectional study design was conducted at the surgical outpatient department (SOPD) of ATBUTH, Bauchi, using a SERVQUAL questionnaire. Results: The result from the study shows that 110 (56.4%) of the respondents were males, while 85 (43.6%) respondents were females. and their ages ranged from 33 to 37 years. The majority 50 (25.6%) of the respondents were business people. The variation in socio-demographic characteristics of patients was found to affect satisfaction by 27.5% among patients receiving care in SOPD ATBUTH, with p<0.05. The patients' levels of satisfaction differed between the different nursing services but were overall satisfied with the services they received. Conclusion: The level of satisfaction of patients revealed by the grand mean score (4.11) shows that the respondents generally agree that they were satisfied with the care they received. The study concludes that overall, the patients were satisfied with the quality of nursing services they had received in the S.O.P.D of ATBUTH but recommended an investment in modern technologies and training by the hospital management to help improve the quality of these services.

Keywords: Health facility, Nurses, Nursing care, Patient satisfaction

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Introduction:

Patient satisfaction is a relevant parameter that can be used to assess health care services, from the patient's point of view (Khan *et al*., 2014). The first proposed definition of patient satisfaction as it pertains to nursing was by Risser (1975) who defined patient satisfaction as the degree of congruence between a patient's expectation of ideal nursing care and their perception of the actual nursing care received.

Patient satisfaction is an important measuring tool commonly used for measuring the quality of health care (Ramos *et al.,* 2018; Wafaa &

Shaimaa, 2017). It is an essential ingredient in measuring the quality of health care services; it gives an idea of the staff's progress towards patients' desires and is found to be useful in measuring patients' expectations, especially as patients are becoming more knowledgeable about various treatment options.

Over the past years, patient satisfaction surveys have gained increasing attention as meaningful and essential sources of information for identifying gaps and developing an effective action plan for quality improvement in healthcare organizations

(Al-Abri & Al-Balushi, 2014). There is a strong relationship between the quality of service rendered and patient satisfaction (Joseph, 2017).

In a study by Gallardo *et al*. (2014), it was determined that service quality is an important aspect, that gives a competitive and comprehensive advantage to any health institution. However, it was discovered that the perception of the quality of services is affected by several factors, one of which is the patient's state of health. In several instances factors that affect the quality of service may be unknown, however, these can be collected from the patients to improve such services and deliver them in a way and manner that satisfies these patients (Gallardo *et al*., 2014).

The services provided by hospital staff affect, not only the patients but families and friends. In a study by Khan *et al*. (2014) it was discovered that seventy-five percent of the patients who attended a surgical outpatient clinic in a country in Southern Asia were not satisfied with the quality of nursing services they received. In addition to this Ahmed *et al*. (2017), identified that there are indeed health service quality issues that need to be looked into, which this study tends to address. Patient satisfaction is an important indicator for measuring quality in healthcare. There is a strong relationship between the quality of service rendered and patient satisfaction (Joseph, 2017). The perception of patients about the quality of services they receive in the health setting has been ignored for quite a long time by the providers of these services, especially in developing countries, this has led to patients avoiding the health care settings or visiting such as a last resort when all other attempts have failed (Andaleeb, 2001). The study aimed to assess the level of patient satisfaction with the quality of nursing services at the surgical outpatient clinic of ATBUTH Bauchi, Bauchi state, Nigeria, and to evaluate their perception of the nursing services they received and determine the relationship between the quality of nursing services and patient satisfaction.

Methods and Materials

A cross-sectional study design was conducted at the surgical outpatient clinic of ATBUTH Bauchi, using a 5-point structured Likert scale. SERVQUAL questionnaire developed by Parasuraman, (1988) was adopted with slight modifications; the same has been used in similar studies within the locality with good validity and reliability (Joseph, 2017). The Cronbach's Alpha coefficients of the respective constructs were found to reflect the following value for each variable: socio-demographic information was 0.49, tangibility was 0.65, reliability was 0.46, responsiveness was 0.40, assurance was 0.72, empathy was 0.47, consumer (patient) loyalty was 0.51, and hospital image was 0.56.

A total of 30 items were tested for the reliability of the variables, using the split half reliability method and the overall reliability was 0.84.

This study was conducted at ATBUTH Bauchi. The Hospital is a tertiary institution with 650 Bed space, located in the Northeastern Part of Nigeria. The hospital provides a wide range of medical, surgical, diagnostic, out-patient, rehabilitative and support services to residents of Bauchi and its environs. The sample size was determined by using the Cochran formula for infinite population, where 250 participants were selected:

$$n_0 = \frac{Z^2 pq}{e^2}$$

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Equation 1

Where:

- e is the desired level of precision (i.e. the [margin of error](#)),
- p is the (estimated) proportion of the population that has the attribute in question,
- q is $1 - p$.

The z-value is found in a Z table.
P = 0.5. q=0.05. A 95 % confidence level gives a Z value of 1.96, from the tables, thus:

$$n0 = \frac{((1.96)2\ (0.5)\ (0.05))}{(0.05)2} = 385$$

Applying the Cochran modified formula for a smaller population

$$n = \frac{n_0}{1 + \frac{(n_0 - 1)}{N}} \quad \ldots\ldots\ldots\ldots$$

Equation 2
Here n_0 is Cochran's sample size recommendation, the value obtained from the Cochran formula was (385), N is the population size, and n is the new, adjusted sample size. In this study (estimated target population (N)=710 patients) as per the statistics of the SOPD.

$$n = \frac{385}{(1+(384/710))} = 250$$

A purposive sampling technique was used, in selecting participants for the study. These participants were approached as they were more likely to have the required data needed to answer the research questions; therefore they were considered to be in a better position, to contribute gainful information towards the study (Erlingsson & Brysiewicz, 2013). (SERVQUAL) questionnaire created by Parasuraman, *et al.,* (1988) was administered and retrieved, in the clinic with the assistance of two nurses who were staff of the clinic and served as research assistants, they understood both English and Hausa Language.

Variables Definition and Measurement
Data was collected regarding the socio-demographic details of the respondents, these included their gender, age, occupation, marital status and the type of nursing service(s) they had received from the clinic, either wound care, blood glucose check, BP check or other nursing services. Patients were asked questions about the tangibility of the services they received, these included questions on the type of equipment used in the clinic, adequacy of physical facilities, appearance of the staff, and promptness in responding to the patients'

needs these were all included under the segment of tangibility. In the aspect of reliability, questions were asked about how the nurses showed sympathy, reassurance, dependability, accuracy and time management while attending to patients. Questions on responsiveness regarding the quality of nursing services included questions on; the willingness of the nurses to help the patients, whether nurses were too busy to respond to the patients and being truthful. Under assurance, the following questions were asked, if the nurses were trustworthy, and whether these patients felt safe to interact with the nurses, how polite the nurses were, and if they felt that the nurses needed more support from the management to do their work better. Furthermore, with regards to empathy, they were required to give feedback on the following; provision of individualized care, nurses' ability to understand patients' needs and have their best interest, timing of the clinic and patients' convenience. Questions were also asked on Consumer (Patient) Loyalty. This segment had to do with the Affordability of services, having a healthy, neat, and clean environment, and willingness to recommend the hospital to others and reuse the same again. As regards the Hospital Image, questions asked had to do with sincerity, honesty, and ethics in offering services, use of new technology, and whether their expectation towards the hospital was realized. Lastly, on the aspect of patient satisfaction, they were asked if they were satisfied with the services they had received, whether information and preparation for the procedure were done with courtesy and respect and about the cost-effectiveness of services.

Ethical approval for the study was obtained from the ethics committee of Abubakar Tafawa Balewa University Teaching Hospital Bauchi, with reference number: 009/2020.

Results
One hundred and ninety-five (195) respondents returned their questionnaires representing a 78% response rate, while 55 representing 22% were either invalid or not returned.

Table i: Socio-demographic characteristics of the respondents N=195

Gender	Frequency	Percent (%)
Male	110	56.4
Female	85	43.6
Total	**195**	**100.0**
Age		
18-22 years	33	16.9
23-27 years	24	12.3
28-32 years	36	18.5
33-37 years	39	20.0
38-42 years	17	8.7
43-47 years	14	7.2
Above 47 years	32	16.4
Total	**195**	**100.0**
Occupation		
Farmer	20	10.3
Student	43	22.1
Business	50	25.6
Civil servant	46	23.6
Others	36	18.5
Total	**195**	**100.0**
Marital status		
Single	56	28.7
Married	123	63.1
Divorced	6	3.1
Widowed	10	5.1
Total	**195**	**100.0**

Table I above represents the socio-demographic characteristics of the respondents. There were more male respondents, a total of 110 that participated in the study which represented 56.4% of the total population. The majority of the participants were middle-aged between 33-37 years and 123 of them were married representing 63.1%.

Table ii: Tangibility/Reliability

Tangibility							
S/N	Items	N	$\bar{X}$	SD	Rank	Remark	
1	The equipment used in the clinic is up-to-date	195	4.11	0.77	3	High	
2	Physical facilities in the clinic are visually appealing	195	4.05	0.79	4	High	
3	The employees are well-dressed/neat	195	4.30	0.68	1	High	
4	The nurses respond promptly to patient's needs	195	4.20	2.30	2	High	
	Grand Mean		**4.17**			High	
Reliability							
S/N	Items	N	$\bar{X}$	SD	Rank	Remark	
1	The nurses are sympathetic and reassuring when the patient has problems	195	4.02	0.88	3	High	
2	The nurses are dependable	195	4.33	03.67	1	High	
3	Services are provided at the scheduled time	195	3.88	1.00	4	High	
4	Records are kept accurately	195	4.23	2.87	2	High	
	Grand Mean		**4.12**			**High**	

Results presented in Table ii showed the participants' responses on the tangibility and reliability of the nursing services they have received; where the participants gave a high rating on all the items with a mean score greater than 4 for each, which represented the overall satisfaction of the participants on these aspects of the nursing services they received.

Table iii: Showing Responsiveness/Assurance/Empathy

Responsiveness						
S/N	**Items**	**N**	**$\bar{X}$**	**SD**	**Rank**	**Remark**
1	Nurses are not expected to tell patients exactly when each service was rendered	195	3.75	1.01	3	High
2	Nurses are always willing to help patients	195	4.31	3.68	1	High
3	It's OK to be too busy to respond promptly to patients' requests	195	3.95	1.06	2	High
	Grand Mean		**4.01**			**High**
Assurance						
S/N	**Items**	**N**	**$\bar{X}$**	**SD**	**Rank**	**Remark**
1	Nurses in the clinic are trustworthy	195	4.11	0.76	2	High
2	Patients feel safe when interacting with nurses	195	4.07	0.73	3	High
3	The nurses in the clinic are polite	195	4.04	0.82	4	High
4	The nurses need adequate support from the management to do their job well	195	4.26	0.78	1	High
	Grand Mean		**4.12**			High
Empathy						
S/N	**Items**	**N**	**$\bar{X}$**	**SD**	**Rank**	**Remark**
1	Nurses are not expected to give each patient individualized attention	195	3.59	1.11	4	High
2	It is unrealistic to expect the clinic nurses to fully understand the needs of the patients	195	3.90	2.39	2	High
3	It is unreasonable to expect nurses to have the best interests of the patients at heart	195	4.05	0.89	1	High
4	The clinic does not necessarily have to operate at hours convenient to all patients	195	3.73	1.07	3	High
	Grand Mean		**3.82**			**High**

The participants' responses on the aspects of responsiveness, assurance and empathy are summarized in Table iii above, where assurance had the highest ranking; trustworthiness, safety, politeness and the need for further support from the management for the nurses to do better were regarded as a priority by the participants in order to enhance their performance.

Table iv: Patient Loyalty/Hospital Image/Patient Satisfaction

Consumer (Patient) Loyalty						
S/N	**Items**	**N**	**$\bar{X}$**	**SD**	**Rank**	**Remark**
1	Services rendered here are affordable	195	3.88	0.93	4	High
2	The environment is healthy, neat and clean	195	4.15	0.82	2	High
3	I will recommend the hospital to others	195	4.40	3.64	1	High

S/N	Items	N	$\overline{X}$	SD	Rank	Remark
4	I am willing to re-use the services of this clinic	195	4.01	0.87	3	High
	Grand Mean	**195**	**4.11**			**High**

Hospital Image

S/N	Items	N	$\overline{X}$	SD	Rank	Remark
1	I find sincerity, honesty, and ethics in offering services are adhered to by the nurses in the clinic	195	4.05	0.83	2	High
2	Investment in new technologies by the hospital is needed to improve the quality of services	195	4.26	0.74	1	High
3	I find that my expectation towards the hospital's image was not realized	195	3.78	0.98	3	High
	Grand Mean		**4.03**			**High**

Showing Patient Satisfaction

S/N	Items	N	$\overline{X}$	SD	Rank	Remark
1	I am satisfied with the services provided	195	4.22	2.86	2	High
2	Explanation and preparation for each procedure by the nurses are overall satisfactory	195	4.11	0.73	1	High
3	The nurses carry out their work with courtesy and respect	195	4.11	0.80	1	High
4	I think that cost is an important determinant of patient satisfaction	195	3.99	0.86	3	High
	Grand Mean	**195**	**4.11**			**High**

Table iv, represents the findings of the participants with regard to patient loyalty, hospital image and Patient satisfaction, in the aspect of patient loyalty the highest mean as described by the patients is their willingness to recommend the hospital to others. As regards the hospital image majority of the participants recommended investment in new technology by the hospital to improve the quality of services and the highest mean of 4.22 was on the participants' affirmation of their overall level of satisfaction with the nursing services they had received.

Discussion

The study showed that 20% of the respondents were between the ages of 33 to 37 years. The females represented 43.6% (n=85) while the males showed the highest percentage 56.4% (n=110). Most of them were into business with 25.6% (=50) and civil servants 23.6.% (n=46), while the least were farmers with 10.3% (n=20). Married participants had the highest percentage 63.1% (n=123), followed by the singles 28.7% (n=56).

Table v: Analysis of Variance

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	89.87[a]	73	1.23	2.02	0.00
Intercept	523.98	1	523.98	854.00	0.00
Gender	0.21	1	0.21	0.34	0.56
Age	13.11	6	2.195	3.56	0.00
Occupation	1.92	4	0.48	0.78	0.54
Marriage	6.48	3	2.16	3.52	0.02
Nursing service	2.03	3	0.68	1.11	0.35

Gender * Age * Marriage	42.19	19	2.22	3.62	0.00
Error	74.24	121	0.61		
Total	3454.38	195			
Corrected Total	164.11	194			

Dependent Variable: Patient satisfaction

a. R Squared = .548 (Adjusted R Squared = .275)

Table V: shows the ANOVA result for the socio-demographic characteristics of patients' satisfaction. The model produced an overall R square value of 0.548 and an adjusted R square value of 0.275. These findings reveal that socio-demographic characteristics of patients are responsible for 27.5% of the satisfaction level. Patient satisfaction has been rated on a Likert scale and ANOVA was carried out to determine the overall level of satisfaction with quality of nursing services. The rating of general satisfaction with nursing services received reflects the quality of services received from the SOPD nurses in ATBUTH Bauchi.

The findings on SERVQUAL (Tangibility, reliability, responsiveness, empathy, assurance, loyalty and hospital image) from this study showed that the patients are satisfied with the quality of nursing services in SOPD, ATBUTH. The result of this study is in keeping with a study conducted in the Northwestern part of Nigeria; involving the following hospitals: FMC Gusau, Usman Danfodio University Teaching Hospital, Sokoto and FMC Birnin Kebbi, where the findings revealed a significant relationship between the quality of care and patients satisfaction (Ramos *et al.,* 2018). Another study further stated that service quality was believed to positively influence the patient's satisfaction level (Nwobi *et al.,* 2014). This study is also in agreement with another study in Ghana in private and public hospitals which reported that the tangibles, technical quality, interaction, professionalism, efficiency and accessibility are significant and important dimensions of measuring service quality (Kofi *et al.,* 2016). Among all the dimensions used to assess the quality of nursing services on patient satisfaction at ATBUTH, it was noted that respondents were satisfied more with

assurance, hospital image and consumer loyalty, in that order with assurance being at a higher level. This is similar to the findings of Joseph, 2017, where assurance was a priority in determining satisfaction. Reliability also had a high index score, this has been discovered as the provision of promised healthcare systematically, involving nursing time and proper diagnosis as a priority (Kondasani *et al*., 2015; Naidu, 2009; Wathek, 2012). The other variables of tangibility and responsiveness were positive predictors of patient satisfaction. The reliability of the nursing services provided had a great influence on patient willingness to come back to the hospital and even possible recommendations for their family and friends.

The patients generally were satisfied with the quality of services they received and also considered explanation and preparation for the procedures as well as the nurses carrying out their work with courtesy and respect as factors that had a high impact on their level of satisfaction. These findings are in contrast with that of (Khan *et al*., 2014) in a study conducted among patients attending a public sector outpatient clinic in Pakistan, where the majority of the patients (75%) were not satisfied with the services they received. In this study empathy had the least ranking though significant among all the other variables used to measure patient satisfaction, This is in keeping with the findings of (Mohd *et al*., 2009) who conducted a similar study among patients attending a private healthcare hospital and they considered the need for empathy as a big gap that needed to be addressed. Achievements of patients' satisfaction can be hindered by several factors. These are relevant factors that can be implored to improve patient satisfaction levels with the services provided to these patients.

Conclusion:

The overall level of patients' satisfaction with care received in SOPD, ATBUTH, and Bauchi was significant. This indicates that patients significantly agree that they are satisfied with the care received from SOPD, ATBUTH Bauchi. The higher the quality of nursing services rendered in the SOPD, ATBUTH, the more patients were satisfied.

The findings bring to the conclusion that patients derive different levels of satisfaction from the different nursing procedures and that overall the patients were satisfied with the quality of nursing services they had received in the S.O.P.D of ATBUTH but recommended an investment in modern technologies and training by the hospital management to help improve on the quality of these services.

Recommendations

✧ The acquisition of modern facilities and equipment by the hospital and training of personnel on how to use the same is highly recommended based on the findings of this study.

✧ Nurses need to show more empathy when attending to their patients at all levels.

✧ The maintenance and optimal performance of all facilities and equipment enhances patient satisfaction, thus the need for management and staff to ensure all such are on good working terms.

✧ The training and retraining of nurses enhance their productivity which in turn enhances the quality of services provided and thus produces satisfaction among patients thus the need to avail nurses of such opportunities.

Implications for Nursing Practice

The findings from the study reveal that the manner in which care is rendered to patients and how they are attended to affects the overall perception of satisfaction of patients and not merely the availability of modern technologies, which enhances the services, but the attitude of the caregiver (nurse) was paramount in determining satisfaction and the patient's willingness to reuse the hospital and recommend it to others.

Therefore, it is recommended that nurses acquaint themselves with the relevant knowledge and skills needed to improve on their delivery of care to patients in all areas of practice and be more courteous particularly as patients are now having a high expectation from the nurses and becoming more aware of their rights.

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