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Cover Page Footnote

We acknowledge and appreciate all the patients who participated in this study for their calm responses and cooperation. This article is associated with the Patient, Family & Community Engagement lens of The Beryl Institute Experience Framework (<https://www.theberylinstitute.org/ExperienceFramework>). You can access other resources related to this lens including additional PXJ articles here: http://bit.ly/PX_PtFamComm

Determinants of ambulatory patients' satisfaction with encounter at core service stations in a tertiary hospital of a developing country

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Abstract

Patients may have different and complex convictions of what their idea of satisfaction is, which may not be addressed regarding what they perceive as satisfaction. Therefore, using the patients' demographic and clinical characteristics could tailor the individual needs of these patients, hence, providing feedback and recommendations on improvement in services provided. This study examined the determinants of patients' satisfaction with general outpatient department (GOPD) services of a tertiary hospital in Rivers State, Nigeria. A descriptive cross-sectional study was carried out among new and repeat patients attending the GOPD of the University of Port-Harcourt Teaching Hospital, Rivers State, Nigeria. A structured questionnaire was used to obtain information from 332 patients recruited into the study using a multi-stage sampling method. Patients were more satisfied with consultations and nursing services than they were with services received at the medical records department. Patients' socio-demographic and clinical characteristics that influence that satisfaction included age, marital status, visit status, insurance status, and level of schooling. This study provides insights on factors that determine the satisfaction of ambulatory patients with the record, nursing, and consultation services. Modifiable factors will form the basis for a future intervention to improve patient experiences in this facility.

Keywords

Satisfaction, patients, general outpatient department, healthcare services

Introduction

There are factors in the outpatient clinic that could be associated with the pattern and degree of patients' satisfaction or dissatisfaction with their experiences of healthcare.¹ As the delivery of health service is increasingly becoming patient-centered, patient satisfaction had become essential in the measurement and improvement of the quality of healthcare.²

While still considered an under-theorized construct, patient satisfaction with health services is commonly explained by '*value-expectancy*' relating satisfaction with a positive evaluation of distinct aspects of healthcare; '*fulfillment*' which attempts to construct satisfaction as the difference between desired and received rewards, or '*discrepancy*' which seeks to clarify the gap between expectations and rewards.³

The need for healthcare providers to meet the legitimate need of the patients makes it imperative to uncover satisfaction with services as underpinned by what patients expect and how they value what they receive at each service station during ambulatory care.^{4,5} The emerging consensus on measuring healthcare quality through the lenses of the patients and the nexus between satisfaction

and healthcare quality has made improving patient satisfaction a priority in healthcare delivery organisations.⁴

Satisfaction is a complex and multidimensional ideology with disparate expressions among the various stakeholders in healthcare. Divergent views on satisfaction is also possible within same stakeholder group, considering that what might be satisfactory to a patient might mean something different to another patient. Essentially, measuring satisfaction from the perspectives of patients and also giving considerations to how this is directly affected or influenced by the healthcare delivery system is fundamentally significant.⁶

The general outpatient clinics of hospital are important gateways which can influence patients perception with hospital encounter. Common concerns with the quality of healthcare especially in developing countries include long waiting time, the attitude of care providers towards patients, unfulfilled consultation with the doctors and understandably, both patient satisfaction and experience can be influenced by these factors.^{8,9}

Being a construct that can be measured and improved upon, healthcare providers can measure patients'

satisfaction from their feedback on services and their encounter with the health facilities.¹¹ In the quest of improving satisfaction, it is highly imperative to identify the variables that could influence patient satisfaction with services. Therefore, this study determined the pattern and predictors of ambulatory patients' satisfaction with registration, nursing, and consultation services in a tertiary hospital in Rivers State, Nigeria.

Methodology

Research Design

This descriptive cross-sectional study recruited ambulatory adult patients visiting the general outpatient clinics in the Department of Family Medicine at the University of Port Harcourt Teaching Hospital (UPTH). The primary outcome measure was the level of satisfaction of patients with the services received during registration at the medical records unit, nursing care at the outpatient clinic, and during consultation with the physicians (Figure 1).

Study Area

This study was carried out in the general outpatient clinics of UPTH which is one of the two tertiary referral hospitals in Rivers State, the Southern part of Nigeria. UPTH is a government-owned multi-specialty tertiary hospital that serves individuals from various geopolitical zones both the low, middle, and high-salary workers. The General Outpatient Clinics (GOPC) and National Health Insurance Scheme (NHIS) clinics are both under the Family Medicine Department of UPTH. The NHIS clinics serve the insured patients while the GOPC serves the uninsured patients. However, both categories of clinics are led by family physicians and provide differentiated and undifferentiated care to various classes of patients. They also serve as the entry points for most adult patients seeking clinical services at the hospital. As there are no electronic health record systems, the facility utilizes paper-based patient record where first-time or regular patients are required to commence their visits at the medical records department where new folders are created or old folders retrieved, which are then sent to the general outpatient clinics.

Patients are attended to at the general outpatient clinics on a first-come, first-serve basis. Serial numbers are given to each patient by the nurses in the order they arrived at the general outpatient clinic. Their vital signs are checked by the nurses and group health talks are undertaken by the nurses while patients wait to see the doctors. Subsequent activities after consulting the doctor follow typical recommendations of the consulting doctor such as issuance of a prescription for drugs, request for laboratory investigations, referral to specialty clinic, referral to the emergency department for critically ill patients, appointment for a follow-up visits or none of these.

Study Population

The study population comprised all first-time and repeat adult patients seeking ambulatory care at the General Outpatient Clinic at the University of Port-Harcourt Teaching Hospital, Rivers State.

All insured and uninsured adult patients seeking healthcare at the general outpatient clinic in the Family Medicine Department were eligible to be included in the study. These eligible participants were recruited at the medical record department, gave their consents, and were followed through their entire activities in the hospital. Patients who were critically ill, cannot respond, those who require inpatient care, patients who are staff of the hospital, and those seeking services other than general outpatient services were excluded from this study.

Sample Size Determination

The minimum sample size of 332 was calculated using the formula for cross-sectional survey¹⁵ with an assumed proportion of 50% of patients satisfied with the services rendered at the various stations during their visit. The $Z_{1-\alpha/2}$ was set at 5% type 1 error for a confidence interval of 95%. The calculated sample size was increased by 10% to cover for non-response or inappropriately completed questionnaires.

3.5 Sampling Method

A systematic random sampling method was used to select a total of 332 adult patients for this study. This is based on the sample frame of eligible patients present each day at

Figure 1. Conceptual framework

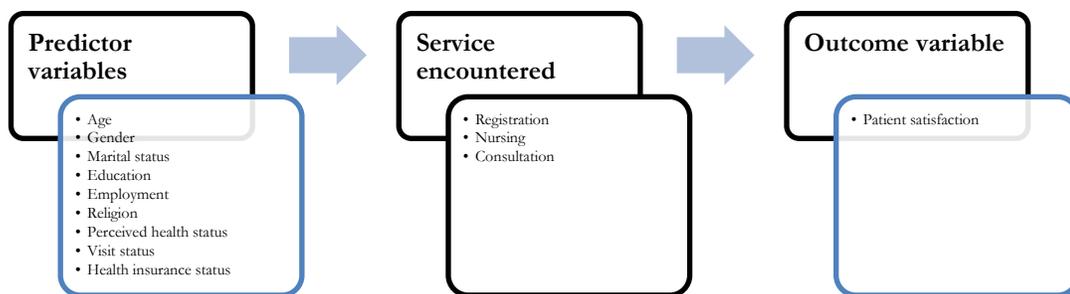


Table 1. Socio-demographic characteristics of the respondents

Variable	Categories	Freq	Percent
Age in years	<30	64	19.4
	30 – 60	228	69.1
	>60	38	11.5
Gender	Male	168	50.9
	Female	162	49.1
Marital status	Single	75	22.7
	Married	221	67.0
	Divorced	34	10.3
Level of Schooling	≤ Secondary	60	18.2
	Tertiary	270	81.8
Employment	Not employed	72	21.8
	Employed	258	78.2
Religion	Christian	284	86.1
	Moslem	46	13.9
Self-rated health status	Poor-fair	15	4.5
	Good-excel.	315	95.5
Visit status	First-time	65	19.7
	Repeat	265	80.3
Insurance status	Insured	166	50.3
	Uninsured	164	49.7

*Statistically significant ($p < 0.05$)

the recording unit before the commencement of activities by 8 am and a cut-off time of 11 am. This required applying a sampling interval of 1:4 over 10 days. The participants entered the time they arrived and left each of the service stations and provided feedback on their level of satisfaction with the services rendered at each service station.

Data Collection

A self-administered questionnaire was used for this study. The questionnaire was used to obtain the socio-demographic data of the respondents and the standard domains of satisfaction, which are: satisfaction with Registration, satisfaction with Nursing services, and satisfaction with Consultation with the attending physician.

Study instrument

The structured questionnaire comprised two sections – Section A contained questions about the patient and section B captured Feedback on patient satisfaction with the services at the various service stations on a 5-point response scale (1=highly dissatisfied, 2= dissatisfied, 3 = indifferent, 4 = satisfied, and 5 = very satisfied) Each eligible participant who gave consent was given questionnaires at the record department and followed throughout the visit. The participants record their feedback on the level of their satisfaction with services received at each of the service stations.

To test for face validity, all items in the questionnaire adapted for this study were examined for face and content

validity by subject experts and subsequently assessed for internal consistency using the Cronbach's alpha coefficient.⁴

3.7 Data Analysis

The data were analyzed using IBM's Statistical Package for the Social Sciences Version 20.0 (Chicago, USA). Analyses were conducted to answer the two main research questions – pattern and predictors of outpatient satisfaction with registration, nursing, and consultation services. The frequencies of the various response options were computed and presented in Tables while multivariate ordinal logistic regression was used to identify possible predictors of patients' satisfaction with services received at service stations. Level of significance was set at p -value ≤ 0.05 .

Results

The Cronbach's alpha for satisfaction with services items was 0.79 and there was no missing data. Table 1 presents data on the socio-demographic characteristics of respondents. Most of the respondents were within the age group of 30 to 60 years (69.1%), married (67%), had attained a tertiary level of schooling (81.8%), employed (78.2%), and repeat visitors to the facility (80.3%) and rated their health status as good or excellent (95.5%).

Table 2 presents data on the patients' satisfaction with services at core service stations. More of the respondents were satisfied with the nursing (90.3%) and consultation

Table 2. Patient satisfaction with services at the various service stations

Service	Level of satisfaction with services received				
	Very dissatisfied – Freq (%)	Dissatisfied – Freq (%)	Neutral – Freq (%)	Satisfied – Freq (%)	Very satisfied - Freq (%)
Registration	0 (0.0)	22 (6.7)	77 (23.3)	163 (49.4)	68 (20.6)
Nursing	7 (2.1)	10 (3.0)	15 (4.5)	194 (58.8)	104 (31.5)
Consultation	2 (0.6)	6 (1.8)	12 (3.6)	194 (58.8)	116 (35.2)

services (94%) than they were with the services rendered at the registration point (70%).

Table 3 presents data on the possible predictors of patients' satisfaction with services at the various registration, nursing and consultation services following ordinal logistic regression. Findings show a significantly lower odds of being satisfied with services at the registration point for younger patients such as those younger than 30 years (OR=0.24, 95% CI: 0.08-0.74, p = 0.013) or between 30 to 60 years (OR=0.32, 95% CI: 0.13-0.82, p=0.018) when compared to those who were 60 years and above. Significantly lower level of satisfaction with consultation services was also observed for patients aged 30 – 60 years (OR 0.31 (95%CI:0.11, 0.87, p = 0.027). Married patients showed significantly higher odds of being satisfied with services at all service stations compared to those with relationship status given as

divorced/separated. Additionally, those who were first-time visitors at the registration point reported significantly higher odds of being satisfied with the registration services compared to repeat visitors (OR=2.10, 95% CI: 1.20-3.69, p=0.010). Furthermore, patients who had attained a secondary level of education or below reported significantly lower odds of being satisfied with services at the nursing service point (OR=0.28, 95% CI: 0.14-0.56, p=0.001), compared to those having more than a secondary level of education. Those that are not employed showed a higher odds for satisfaction at the nursing service point compared to the employed (OR=2.86, 95% CI: 1.49-5.50, p = 0.002). Finally, insured patients showed consistently and significantly higher odds of being satisfied with services at all service stations.

Table 3. Factors associated with patients' satisfaction with services at core service points from multivariate ordinal logistic regression

Factors	Categories	Registration AOR (95%CI)	p-value	Nursing AOR (95%CI)	p-value	Consultation AOR (95%CI)	p-value
Age in years	<30	0.24(0.08, 0.74)	0.013*	0.35(0.10, 1.23)	0.101	0.30(0.08, 1.05)	0.060
	30 – 60	0.32(0.13, 0.82)	0.018*	0.64(0.23, 1.78)	0.390	0.31(0.11, 0.87)	0.027*
	>60	-	-	-	-	-	-
Gender	Male	0.88(0.56, 1.38)	0.578	1.12(0.69, 1.82)	0.639	1.11(0.68, 1.80)	0.686
	Female	-	-	-	-	-	-
Marital status	Single	2.90(0.92, 9.17)	0.070	2.29(0.60, 8.74)	0.225	8.32(2.13, 32.53)	0.002
	Married	3.01(1.17, 7.80)	0.023*	3.32(1.08, 10.23)	0.037*	4.69(1.49, 14.72)	0.008
	Divorced	-	-	-	-	-	-
Level of Schooling	≤ Secondary	1.32(0.71, 2.45)	0.384	0.28(0.14, 0.56)	0.001*	0.92(0.46, 1.85)	0.823
	>Secondary	-	-	-	-	-	-
Employment	Not employed	0.71(0.38, 1.29)	0.258	2.86(1.49, 5.50)	0.002*	1.16(0.61, 2.22)	0.649
	Employed	-	-	-	-	-	-
Religion	Christian	0.65(0.35, 1.20)	0.171	0.75(0.38, 1.51)	0.428	0.82(0.42, 1.61)	0.560
	Moslem	-	-	-	-	-	-
Self-rated health status	Poor-fair	1.71(0.62, 4.70)	0.298	1.17(0.41, 3.40)	0.770	0.81(0.28, 2.33)	0.692
	Good-excel.	-	-	-	-	-	-
Visit status	First-time	2.10(1.20, 3.69)	0.010*	1.43(0.79, 2.61)	0.242	1.09(0.60, 1.99)	0.778
	Repeat	-	-	-	-	-	-
Insurance status	Insured	5.16(3.19, 8.36)	0.001*	2.32(1.43, 3.76)	0.001*	1.95(1.21, 3.15)	0.006*
	Uninsured	-	-	-	-	-	-

*Statistically significant (p<0.05), AOR – Adjusted Odds Ratio

Discussion

The main objective of this study was to explore the patterns and determinants of patients' satisfaction with the record, nursing, and consultation services at the general outpatient clinic of a tertiary hospital. The findings showed that more patients were satisfied with consultation and nursing services than they were with the services offered at the registration station. The more consistent predictors of patient satisfaction with services at the various stations were their marital and health insurance statuses.

More respondents in this survey were male, employed, and repeat visitors to the facility. These patterns corroborate findings from a previous report.¹⁶ If observed socio-demographic characteristics of the respondents were indicative of the population with effective demand for outpatient services at the tertiary health facility in this setting, it will suggest inequity in a population with gender parity and a high proportion of unemployed.¹⁷ Available evidence supporting this finding shows that women/girls on the average, have lower educational attainment than their male counterparts which could serve as a disadvantage in the quota for paid employment. The implication of this is that women, who often are home makers with poorer financial capability could face unequal treatments like their male counterparts during outpatient visits. This could consequently spike a gender-based inequity where the female is left with lower health status, health-seeking behavior, and access to healthcare services.^{16, 18} It is therefore pertinent for managers of healthcare institutions and policymakers to adequately address the issues of gender inequality by ensuring that gender perspectives are considered in healthcare policies, services, and research to mitigate its ripple effects on healthcare services.

Interestingly, this study reported an increased odds of being satisfied among married respondents as compared to the respondents who were separated or divorced at all service stations studied. If taken alongside the age-dependent effects on satisfaction, may not be unrelated to the fact that single and younger respondents are more susceptible to the negative socio-psychological impact that comes with experiences encountered while seeking healthcare services.^{7, 19, 20} However, this collaborated finding from a previous study that depicted married patients as being generally more satisfied with life.²¹

The observed effects of marital status on satisfaction was accentuated during consultations. While this may probably be because of the humaneness and friendliness of the consulting physician, this finding is in contrast with a previous report which posited that apart from gender, other sociodemographic characteristics did not have any significant effect on the patient level of satisfaction.¹⁰

An important finding from this study is the nexus between patient's insurance status and satisfaction with services received at the registration, nursing, and during the consultation with the physicians. Insured patients showed significantly higher odds of being satisfied at all points of service stations compared to those that were uninsured. This may be reflective of the ease of access to services, level of friendliness of staff, better workflow, fewer workloads, and stricter third-party supervision in the NHIS clinic. The observed relationship between insurance status and satisfaction corroborates previous studies.^{16,22,23} Incidentally, only 2.6% of women and 3.4% of men in their productive years, in Nigeria are covered by any type of insurance²⁰

Limitations of the Study

Limitations of this study could be attributed to the use of descriptive cross-sectional design which limits causal inferences being made from the findings and the low internal consistency reliability of the instrument used to measure satisfaction, the study did not follow up after consultation with the doctor.

Implications of the findings

An important policy implication of the finding on socio-demographic predictors of satisfaction is the need for aligning services per the preference of individual patients. Focused interventions to enhance services should consider the socio-demographic background of care recipients. The low insurance coverage and dismal disparity among the wealth quintile in Nigeria,²⁰ suggests the need for the dragnet for NHIS enrolment to target women and those in the lower wealth quintiles who are largely outside the formal and organized private sectors.^{16, 23} While it is appropriate to view healthcare quality through the eyes of the patients, future research should answer questions bordering on the needs of general outpatients, contributions of service elements to patients overall satisfaction and how services can be redesigned to meet individual patient needs.

Conclusion

Findings revealed the pattern and predictors of patients' satisfaction with services at the General Outpatient Department of a tertiary health facility, highlighting that patient socio-demographic characteristic affects their levels of satisfaction. Healthcare managers should develop policies and systems that are tailored to the patient's specific characteristics and needs. Modifiable factors such as a patient's insurance status, employment and educational status should form the focus for planned interventions to improve patient experiences with services at this important gateway to care.

References

1. Umoke M, Umoke PC, Eyo N, Ugwu A, Agu MN, Chukwu OJ, Eke DO, Njoku PO, Nwalieji CA, Onwe RN, Nwimo IO. Sociodemographic Determinants of Patients' Satisfaction with the Quality of Care in the General Hospitals in Ebonyi State, Nigeria. *Global Journal of Health Science*. 2020;12(11):7-19.
2. Iliyasu Z, Abubakar IS, Abubakar S, Lawan UM, Gajida AU. Patients' satisfaction with services obtained from Aminu Kano Teaching Hospital, Kano, Northern Nigeria. *Nigerian Journal of clinical practice*. 2010;13(4).
3. Lewis JR. Patient views on quality care in general practice: literature review. *Social Science & Medicine*. 1994;39(5):655-70.
4. Ogaji DS, Mezie-Okoye MM. Waiting time and patient satisfaction: Survey of patients seeking care at the general outpatient clinic of the University of Port Harcourt Teaching Hospital. *Port Harcourt Medical Journal*. 2017 Sep 1;11(3):148.
5. Thompson AG, Sunol R. Expectations as determinants of patient satisfaction: concepts, theory, and evidence. *International journal for quality in healthcare*. 1995 Jun 1;7(2):127-41.
6. Berkowitz B. The patient experience and patient satisfaction: measurement of a complex dynamic. *Online J Issues Nurs*. 2016 Jan 31;21(1).
7. Osundina KS, Opeke RO. Patients' waiting time: Indices for measuring hospital effectiveness. *International Journal of Advanced Academic Research | Social & Management Sciences*. 2017;3(10):2488-9849.
8. Ogaji DS, Giles S, Daker-White G, Bower P. Findings and predictors of patient-reported experience of primary healthcare in Nigeria. *J Patient Exp* 2016;3:69-80.
9. Williams B. Patient satisfaction: a valid concept? *Social science & medicine*. 1994 Feb 1;38(4):509-16.
10. Kirkwood BR, Sterne JA. *Essential medical statistics*. John Wiley & Sons; 2010 Sep 16.
11. Garba MR, Gadanya MA, Iliyasu Z, Gajida AU. Comparative study of patients' satisfaction between national health insurance scheme-insured and un-insured patients attending a Northern Nigerian tertiary hospital. *Nigerian Journal of Basic and Clinical Sciences*. 2018 Jul 1;15(2):118.
12. National Population Commission (NPC) [Nigeria] and ICF. 2019. *Nigeria Demographic and Health Survey 2018*. Abuja, Nigeria, and Rockville, Maryland, USA: NPC and ICF.
13. Gender, Women, and Primary Healthcare Renewal: A Discussion Paper. Geneva: World Health Organisation, 2010. Print.
14. Gădălean I, Cheptea M, Constantin I. Evaluation of Patient Satisfaction. *AMI [Internet]*. 23Dec.2011[cited20Oct.2021];29(4):41-7. Available, from: <https://ami.info.umfcluj.ro/index.php/AMI/article/view/361>
15. Belayneh M, Woldie M, Berhanu N, Tamiru M. The determinants of patient waiting time in the general outpatient department of Debre Markos and Felege Hiwot hospitals in Amhara regional state, North West, Ethiopia. *Glob J Med Public Heal*. 2017;6(5):2277-9604.
16. Ogaji D, Asuquo E, Ordinioha B. What does quality mean to the patient? An exploration of the expectations of patients for primary healthcare in Nigeria. *the Nigerian Health Journal*. 2016; 16(4): 257 – 276.
17. Hall JA, Dornan MC. Patient sociodemographic characteristics as predictors of satisfaction with medical care: a meta-analysis. *Social science & medicine*. 1990 Jan 1;30(7):811-8.
18. Oche MO, Adamu H. Determinants of patient waiting time in the general outpatient department of a tertiary health institution in North-Western Nigeria. *Annals of medical and health sciences research*. 2013;3(4):588-92.
19. Fenny AP, Enemark U, Asante FA, Hansen KS. Patient satisfaction with primary healthcare—a comparison between the insured and non-insured under the National Health Insurance Policy in Ghana. *Global Journal of Health Science*. 2014 Jul;6(4):9.
20. Iloh GU, Njoku PU, Ofoedu JN, Amadi AN, Godswill-Uko EU. Satisfaction with quality of care: A comparative study of National Health Insurance Scheme and non-National Health Insurance Scheme patients of a tertiary hospital in South-Eastern Nigeria. *Port Harcourt Medical Journal*. 2012;6(4):440-9