



Original Article

Holistic approach to improved patient satisfaction in family medicine clinic: Findings from a tertiary facility-based survey in Calabar, Nigeria

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ABSTRACT

Objectives: Patient satisfaction remains a critical tool for assessing quality of care in the emerging context of patient-centered care. The objective of this study was to assess patient satisfaction with services received at a tertiary family medicine clinic in Calabar, Nigeria.

Material and Methods: This was a cross-sectional descriptive study with data collected from 208 adults by systematic random sampling using a validated self-administered patient satisfaction questionnaire-46. Data were analyzed using SPSS version 18.

Results: Most respondents (188, 90.4%) were generally satisfied with overall services. Highest prevalence of satisfaction was with doctors (95.7%), while least prevalence of satisfaction was with facility (27.9%). Satisfaction with nurses and appointment each had prevalence rate of 69.2%, while 65.9% were satisfied with access to care. Proportionally, subjects who were satisfied with each of the five domains access, doctors and nurses care, appointment, and facility were also satisfied generally and vice versa ($P < 0.05$).

Conclusion: In conclusion, a significant proportion of patients were satisfied with services received at the family medicine clinic. The level of patient satisfaction was dependent on the entire chain of service delivery. Patient satisfaction could be further improved by improving the five domains assessed, especially the condition of care environment at the clinic. Findings of this study may contribute significantly to improved patient care, add to existing local literature and further studies.

Keywords: Patient satisfaction, Patient satisfaction questionnaire-46, Calabar, Nigeria

INTRODUCTION

Patients' perception of health-care delivery has been accepted as an important indicator for measuring quality of health care and a critical component of performance improvement and clinical effectiveness.^[1,2] Patients' satisfaction has been defined as the degree of congruency between patients' expectations of ideal care and their perception of real care received.^[1,2] Higher levels of satisfaction indicate higher levels of patient empowerment, commitment to care, increased health service utilization, and compliance to recommended management, all of which result in better health outcomes.^[3]

Health is said to be a fundamental human right and a basic human need. Satisfaction with health-care services has become topical with most authorities accepting the concept of patient-

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centered care as a panacea to quality of health-care delivery. In developing countries, a large proportion of the population are underserved and deprived of basic health needs.^[4] Poor quality of care has been reported as a major problem in many developing countries. The services delivered by health care providers' do not meet the needs and perception of the clients.^[5] Facilities open and close irregularly, absenteeism rates of doctors and nurses are very high and staff can be hostile to patients.^[5] Measuring patients' satisfaction helps to improve service delivery and to prioritize capacity building needs and resource distribution, especially in resource limited settings.^[6] Developing countries are being impressed to ensure that limited resources not only have impact on populations health at affordable cost but also that health-care services are expected to respond directly to patients preferences and demands.^[4,7]

Factors influencing patient satisfaction have been broadly classified into three: Patient-related factors such as age, gender, level of education, race, socioeconomic status, physical, psychological, and illness experience; medical personnel-related factors such as technical skills of the health-care provider, time spent during visit, communication, and interpersonal relationship; and system-related factors such as accessibility, facilities, appointments, referrals, and continuity of care.^[8,9] Patient satisfaction is multifaceted and is an internationally accepted factor that needs to be assessed continually to ensure quality of care.^[1] Due to the need for better quality of health services in developing countries, patient satisfaction has become a major concern among researchers.^[10]

Most studies carried out in Nigeria assessing patient satisfaction in various hospital settings using different methods reported overall moderate to high patient satisfaction.^[6,11,12] Majority of the studies assessed individual factors influencing patient satisfaction. Research instrument and studies are scarce that holistically assess the broad factors influencing patient satisfaction and relating these factors to overall patient satisfaction. Furthermore, despite availability of researches on patient satisfaction, data are scarce on patient satisfaction in family medicine (primary care) clinics in Nigeria. The outpatient department of a hospital is considered the shop window of any hospital; hence, patients' perception of services obtained there reflects overall view of hospital services.^[11] Furthermore, a family medicine clinic in a tertiary care setting acts as a gateway to access to other services in the hospital and continuity of care. Emphasis in family medicine is placed on patient-centered care making providers to be more responsive in identifying and meeting patient's needs, preferences, and expectations.^[8] More so, with increasing demand for quality health care and with evolving expectations with service provision by patients, there is a continual need for studies to assess present patient satisfaction in the study setting.

This study, therefore, aims to assess patient satisfaction in an academic family medicine clinic using a validated patient satisfaction instrument that attempts holistic assessment of various components of satisfaction with doctors, nurses, accessibility, facilities, and appointments as well as overall general patient satisfaction.

MATERIAL AND METHODS

This cross-sectional descriptive study was carried out among outpatient attendees of family medicine clinic in the University of Calabar Teaching Hospital, Calabar, between February 2018 and May 2018. Minimum sample size of 207 was calculated using the Leslie and Kish statistical formula for cross-sectional surveys [$n = Z^2 P(1-P)/d^2$], with P derived from prevalence of satisfaction with outpatient medical care in previous similar study.^[13] Study participants were recruited using systematic random sampling method. Patient satisfaction was assessed using an adapted self-administered patient satisfaction questionnaire 46 (PSQ-46) that comprises 46 patient satisfaction questions with six categories of assessment which are general satisfaction, satisfaction with doctors, nurses, appointment, accessibility, and facility.^[1,14] Responses were coded 1–5 from "strongly agree" to "strongly disagree." Participants ticked the box (from "strongly agree" to "strongly disagree") that corresponded most closely to their response to each statement.

Only consenting adult patients (18 years or older) who had had at least two family medicine clinic visits were eligible to participate. Acute, debilitating, and mentally challenged patients were excluded.

Ethical clearance was obtained from the Health Research Ethics Committee, University of Calabar Teaching Hospital, Calabar, with protocol assigned number UCTH/HREC/33/556 on August 2017.

RESULTS

Data were obtained from 208 respondents. Females were more predominant with male:female ratio of 0.73:1. Mean age was 38.38 ± 13.9 years, ranging from 17 to 85 years. Most respondents were younger than 50 years (77.4%), married (57.7%), had tertiary level of education (71.2%), had monthly income within N100,000 or \$277.8 (67.3%), and paid for treatment by out of pocket (75%) [Table 1].

Figure 1 reveals that most respondents (188, 90.4%) were generally satisfied with overall services. Highest prevalence of satisfaction was with doctors (95.7%), while least prevalence of satisfaction was with facility (27.9%). Satisfaction with nurses and appointment had same prevalence rate of 69.2%, while 65.9% were satisfied with access to care [Figure 1].

Table 2 shows that proportionally, subjects who were satisfied with each of the domains were also satisfied generally

and vice versa. For instance, in the domain of satisfaction with doctors, we would say that if a subject was satisfied with doctors, he/she was likely to be satisfied generally. Furthermore, if a subject was dissatisfied with doctors, he/she was likely to be dissatisfied generally. This is similar for other domains with varying degrees of proportionality and levels of significance (*P*-value).

Table 3 reveals that 88.2% of the participants who were <50 years of age were generally satisfied with services received (*P* = 0.05). Furthermore, about 92.9% of the participants that earned less than one hundred thousand naira a month were generally more satisfied with services, although not

statistically significant (*P* = 0.08). Summarily, Table 3 indicates that general satisfaction was not dependent on sociodemographic characteristics of respondents (in view of *P* > 0.05). For instance, being male or female did not determine or increase chance of being satisfied or dissatisfied.

DISCUSSION

This study assessed patient satisfaction in a developing country tertiary family medicine clinic setting. Most respondents were female and young with mean age of 38.4 years. Studies in Nigeria have reported similar findings of predominantly young female adult population.^[11,12,15] This is reflective of a predominantly young adult population in Nigeria when compared to elderly population. Furthermore, females may have better healthcare-seeking behavior than males.^[16]

This study revealed that 90.4% of the study participants were generally satisfied with services from the study facility. Similar findings of patient satisfaction were reported by Mpinga *et al.* (i.e., 89%) in Switzerland, Wetmore *et al.* (i.e., 88%) in London, Qadri *et al.* (i.e., 89.1%) in India, and Ilyasu *et al.* (i.e., 83%) in Kano, Nigeria.^[1,17-19] However, the level of patient satisfaction in this study was much higher than what was reported by Adhikary *et al.* (i.e., 63.2%) and Aldana *et al.* (i.e., 68%) both in Bangladesh.^[3,20] Studies in public hospitals in Nigeria using rating scales also revealed lower satisfaction scores when compared to the present study.^[12,21] The high patient satisfaction rate in this study is attributable to satisfaction with the various domains assessed. For the doctors domain, this may be due to positive physician attributes in patient consultation in the context of patient-centered care that is part of the family medicine training.^[22] The functional Service Compact with All Nigerians (SERVICOM) in the facility may have contributed to the high patient satisfaction. SERVICOM was established in 2004 by the Federal Government of Nigeria to promote effective and efficient service delivery in public establishments. Worthy of note is that patient's expectation in

Table 1: Sociodemographic characteristics of respondents (*n*=208).

Variable	Frequency	Percentage
Gender		
Male	88	42.3
Female	120	57.7
Total	208	100
Age group (in years)		
<50	161	77.4
>50	47	22.6
Total	208	100
Marital status		
Married	120	57.7
Single	79	38.0
Widowed/separated	8	3.8
Cohabiting	1	0.5
Total	208	100
Educational level		
Non-formal	5	2.4
Primary	3	1.4
Secondary	52	25.0
Tertiary	148	71.2
Total	208	100
Occupation		
Civil servant	48	23.1
Business/trader	53	25.5
Public servant	43	20.7
Student	49	23.6
Company staff	8	3.8
Others	7	3.4
Total	208	100
Religion		
Roman catholic	59	28.4
Orthodox	54	26.0
Pentecostal	76	36.5
Muslim	3	1.4
Others	16	7.7
Total	208	100
Mode of payment for treatment		
Out of pocket	156	75.0
Insurance/retainership	52	25.0
Total	208	100

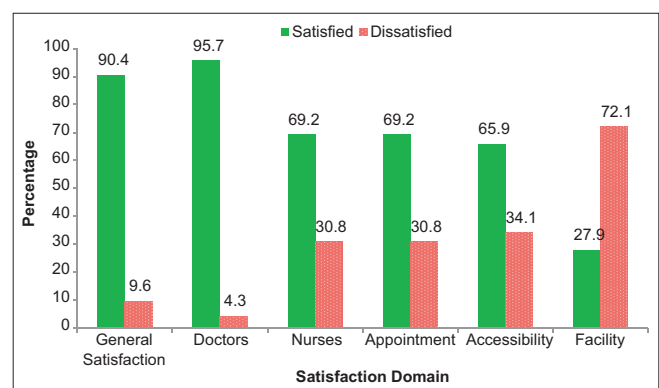


Figure 1: Proportion of satisfaction and dissatisfaction in each domain of patient satisfaction.

Table 2: Relationship between general satisfaction and other domains (*n*=208).

Variable	General satisfaction		Chi-square (<i>P</i> -value)
	Satisfied <i>n</i> (%)	Dissatisfied <i>n</i> (%)	
Satisfaction with doctors			
Satisfied	183 (92.0)	16 (8.0)	Fisher's Exact 0.00
Dissatisfied	5 (55.6)	4 (44.4)	
Total	188 (90.4)	20 (9.6)	
Satisfaction with nurses			
Satisfied	134 (93.1)	10 (6.9)	3.84 0.05
Dissatisfied	54 (84.4)	10 (15.6)	
Total	188 (90.4)	20 (9.6)	
Satisfaction with appointment			
Satisfied	136 (94.4)	8 (5.6)	8.88 0.00
Dissatisfied	52 (81.3)	12 (18.7)	
Total	188 (90.4)	20 (9.6)	
Satisfaction with accessibility			
Satisfied	129 (94.2)	8 (5.8)	6.58 0.01
Dissatisfied	59 (83.1)	12 (16.9)	
Total	188 (90.4)	20 (9.6)	
Satisfaction with facility			
Satisfied	58 (100)	0 (0.0)	Fisher's 0.00
Dissatisfied	130 (86.7)	20 (13.3)	
Total	188 (90.4)	20 (9.6)	

low-income countries may not be as high as those in high-income countries with differences in patient expectation and experiences.^[23] Therefore, due to limited understanding of the health sector, patients might report high satisfaction even if poor standards were provided.^[23]

Patient satisfaction in this study was assessed by a validated PSQ-46 with good correlation between subscales with general satisfaction.^[14] Most of the participants (71.2%) in this study had tertiary education with possible better capacity to understand the health sector/expectations and assess generally their level of satisfaction with services received at the family medicine clinic. Thus, the outcome of the study may be a true reflection of their experiences and expectations from the facility. However, contrary to the findings in this study, Ashrafun *et al.*, in a Bangladesh study, reported lower level of patient satisfaction with higher education.^[4] Responses to the level of satisfaction among respondents with higher education may differ according to settings. Furthermore, respondents in the Bangladesh study were in-patients in various units who had spent 4 or more days on admission, which may have given them enough time for continued assessment of the facility when compared to an outpatient setting.

This study did not find any significant association between patient satisfaction and gender. Similar findings were reported by Lawal *et al.*, in their study in Nigeria.^[21] Rahmqvist in a Swedish study reported similar findings where gender did not correlate with patient satisfaction.^[24] The present study revealed significant association between age and patient

satisfaction. Respondents who were <50 years were found to be more satisfied. However, the previous reports in different settings have revealed that older respondents generally recorded high satisfaction rates.^[18,24] This may have been attributed to lower expectations of health care and reluctance among elderly respondents to articulate dissatisfaction.^[18]

In this study, the level of satisfaction with care received from doctors and nurses was 95.7% and 69.2%, respectively. This was significantly associated with overall patient satisfaction in the study. This finding may suggest potential interprofessional differences in structure of training and continuing education, especially on patient communication skills in the health-care sector. Unlike nurses, medical doctors in Nigeria, undergo more structured curriculum-based training and supervision for their professional growth in the health-care sector. Nurses may, therefore, be less supervised and assessed on key attributes that may be influencing their patients' level of satisfaction. Yet, lower level of satisfaction with nurses may partly be due to potentially irritated and perhaps impatient patients, having more communication contact time with nurses compared with doctors. The nurses may, therefore, have to be more emotionally intelligent to manage their relationship with patients, who are usually distressed by long waiting time and other logistic difficulties with public health-care access in resource-poor settings. A similar study in Bangladesh revealed that patient satisfaction with doctors was significantly associated with general satisfaction and the doctors' treatment having the greatest impact on patient satisfaction.^[4] Providers' behavior toward client is a key indicator of patient satisfaction in public

Table 3: Relationship between satisfaction and sociodemographic characteristics (*n*=208).

Variable	General satisfaction		Chi-square (<i>P</i> -value)
	Satisfied <i>n</i> (%)	Dissatisfied <i>n</i> (%)	
Gender			
Male	82 (93.2)	6 (6.8)	1.37 (0.24)
Female	106 (83.3)	14 (16.7)	
Total	188 (90.4)	20 (9.6)	
Age group (in years)			
<50	142 (88.2)	19 (11.8)	Fisher's Exact (0.05)
>50	46 (97.9)	1 (2.1)	
Total	188 (90.4)	20 (9.6)	
Marital status			
Married	110 (91.7)	10 (8.3)	Fisher's Exact (0.57)
Single	69 (87.3)	10 (12.7)	
Widowed/separated	8 (100)	0 (0.0)	
Cohabiting	1 (100)	0 (0.0)	
Total	188 (90.4)	20 (9.6)	
Educational level			
Non-formal	5 (100)	0 (0.0)	Fisher's Exact (0.83)
Primary	3 (100)	0 (0.0)	
Secondary	47 (90.4)	5 (9.6)	
Tertiary	133 (89.9)	15 (10.1)	
Total	188 (90.4)	20 (9.6)	
Occupation			
Civil servant	41 (85.4)	7 (14.6)	Fisher's Exact (0.68)
Business/trader	50 (94.3)	3 (5.7)	
Public servant	39 (90.7)	4 (9.3)	
Student	44 (89.8)	5 (10.2)	
Company staff	7 (87.5)	1 (12.5)	
Others	7 (100)	0 (0.0)	
Total	188 (90.4)	20 (9.6)	
Religion			
Roman catholic	52 (88.1)	7 (11.9)	Fisher's Exact (0.89)
Orthodox	50 (92.6)	4 (7.4)	
Pentecostal	69 (90.8)	7 (9.2)	
Muslim	3 (100)	0 (0.0)	
Others	14 (87.5)	2 (12.5)	
Total	188 (90.4)	20 (9.6)	
Monthly income (₦)			
<100,000	130 (92.9)	10 (7.1)	3.01 (0.08)
>100,000	58 (85.3)	10 (14.7)	
Total	188 (90.4)	20 (9.6)	
Mode of payment for treatment			
Out of pocket	141 (90.4)	15 (9.6)	Fisher's Exact (0.98)
Insurance/retainership	47 (90.4)	5 (9.6)	
Total	188 (90.4)	20 (9.6)	

hospitals.^[20] Studies have revealed that health-care interpersonal communication skills and behavior were directly linked to patient satisfaction.^[3,21,25] There have been reports of providers' interpersonal communication skills outweighing their technical competence with recommendations to strengthen training on provider interpersonal and empathic skills.^[3,25] However, in this study, about a third of the patients (30.8%) were unsatisfied with services received from the nurses.

In this study, more than two-third (72.1%) of the respondents was not satisfied with the environment of the facility. Most of the respondents agree or strongly agree that the clinic building will need some improvement, that the waiting room is uncomfortable, that there are not enough seats in the waiting room and that the waiting room seats are uncomfortable. To improve patient satisfaction, the environment and facilities of the waiting and consultation rooms have to be

improved on by the hospital management. An analysis of 120,825 hospitalized patients in seven hospitals in Germany revealed that the environment of the hospital was the major determinant of general satisfaction.^[26] The previous studies have shown that a convenient and comfortable facility environment led to better patient satisfaction.^[3,25,27,28]

In this study, 69.2% of patients were satisfied with the ease of getting appointments. This moderate level of satisfaction was significantly associated with overall patient satisfaction. Similar finding was reported by Habibi *et al.* in a study conducted in 10 outpatient clinics in Iran, which revealed 55% of the patients identifying ease of getting appointment as the most important factor affecting patient satisfaction.^[28] The clinic in which the present study was carried out operates a single block appointment system where patients can have access everyday of the week from Monday to Friday within work hours of 8:00 am–4:00 pm. This system of appointment makes it easy for patients to access care at any time but has the potential of increasing waiting time when compared to the time-specific appointment system where appointments are given at specific day and time with less flexibility with the advantage of reducing waiting time. A study in a Nigerian teaching hospital in Jos reported that 70.3% of respondents would prefer time specific appointments to access health care.^[29]

The level of patient satisfaction to accessibility to care in this study was 65.9%. This moderate level of satisfaction was significantly associated with overall satisfaction. Most of the respondents found it easy to speak to their doctor and obtain advice by telephone, they were satisfied with time access and the facilities for emergency after clinic hours. This finding was corroborated by the previous studies that reported that patients with better access to care were more satisfied with services.^[18,30] In contrast to findings of this study, a Finnish study reported reduction in ease of access to primary health care services in Finnish health centers with patients reported to be less satisfied with services.^[31] This was attributed to shortage of general practitioners and decreased continuity of care.

This study had some limitations. First of all, our study was conducted in a tertiary-based primary care clinic, which is run by a group of trained specialists and postgraduates. The service providers are different from those in the public primary care clinics who are mainly medical officers without postgraduate qualifications. In addition, the public primary care clinics usually operate with limited manpower. The doctor-patient ratio is different compared to tertiary-based facilities. This study did not assess other relevant aspects of patient such as pharmacy, waiting time, and laboratory investigations. These factors have been found to be significantly influencing patient satisfaction in other studies.^[11,12,28] Furthermore, the research work was quantitative, the use of qualitative approach through in-depth interviews, and group discussions in focused groups would

help researchers understand body languages of respondents, including their values, attitude, lifestyle, culture, concerns, and emotions.

CONCLUSION

Overall, majority of respondents were satisfied with the services delivered at the family medicine clinic. However, many respondents perceived that clinic facilities were substandard. Majority of the respondents who were satisfied with doctors, nurses, appointment, and access were also generally satisfied and vice versa. Thus, effective interventions toward improving facilities will further increase patient satisfaction and hence enhance the quality of care provided by family medicine clinic. At the same time, continuous improvement should be made on all the evaluated aspects to ensure advancement in the quality of care. Further studies can also be extended to include other primary care clinics to give broader perspectives regarding quality of primary care services in Nigeria.

Declaration of patient consent

Institutional Review Board permission obtained for the study.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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