Patients' Satisfaction and Quality of Care Received at The Out-Patient Clinic in A Community-Built Geriatric Centre South-West Nigeria: A Patient Centred Clinical Practice experience

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Abstract

Background: Although patient satisfaction is a subjective evaluation of the services received in a health facility, is an essential ingredient of clinical auditing. The overall satisfaction depends on the different domains of quality-of-care, availability of technical facilities, the financial cost of care, the skill of the health care provider, the patient-doctor communication, time spent in the facility, the general attitude of the physician, accessibility and convenience of the health facility. This is most achievable in a family clinical practice.

Methods: A cross-sectional study of 422 older adults who attended a geriatric centre, Ilesa, Osun state (IGC) over the period of eight weeks of study duration was conducted. It is a one-stop shop Multiclinic having GOPC, eye clinic, SOP, dietetic and Dental clinic with laboratory facilities. An interviewer-administered questionnaire was used to obtain demographic and clinical information using a systematic random sampling technique

Data were cleaned, coded, entered and subsequently analysed. Descriptive and inferential statistics were done for all variables for all statistical analyses, p-values ≤ 0.05 were considered statistically significant at a 95 per cent confidence interval (CI).

Results: The mean age($\pm$SD) of the respondents was 71.62$\pm$80.4 years, age range of 60-69 years (41.9%). They were predominantly female (56.9%); married (63.3%); Christians (92.2%), and of Yoruba ethnicity (98.1%). Almost three-quarters (75.8%) earned $\geq$ ₦30,000 monthly. Retirement benefits and family contributions constituted 45.3% and 37.9% of current sources of income respectively. Spouses constituted 64.9% of primary caregivers. Cardiovascular, together with musculoskeletal conditions, were the frequent patterns of multimorbidities (72.0 %). The overall patient satisfaction is 99.8 %, highest rating in accessibility and convenience.

Conclusions: The overall satisfaction is high with the care provided at a stop-shop multi-clinic, as regards accessibility and convenience. It is recommended to have more of this type of centre across the nation.

Keywords: Satisfaction, Quality of Care, Older Adults, Geriatric Centre, Nigeria

INTRODUCTION

Although patient satisfaction is a subjective evaluation of the services received in health facilities, it is an essential ingredient of clinical auditing.[1] This has become a critical measure of the quality of health care services in Hospitals.[2,3] It is very crucial that health-care services are user-friendly, such that patients' needs and expectations are satisfied.[2,3] The patient's overall level of satisfaction with health care services depends on their perception of the different domains of quality of care such as availability of technical facilities, the financial cost of care, the inter-personal skill of the doctor, the patient-doctor communication, time spent in the facility, the general attitude of the doctor and accessibility and convenience of the health facility.[2]

The geriatric or elderly age group are individuals aged 60 years and above in low-income nations or 65years and above in high-income nations.[4] Over 60 % of the global elderly population are found in the low-income countries.[5] There is a progressive increase in the proportion of the global population of elderly as a result of decreasing birth rate and increasing life expectancy.[5] By 2050, the global elderly population is projected to rise from 1.5 billion from the 524 million it was in 2010,[4] sub-Sahara African elderly population from 46 million to 161million.[4] Moreover, the Nigerian elderly population will rise above 15 million in 2025 from the 6.9 million it was in 2006.[6] This suggests that the socio-economic state, health status and quality of healthcare received by the elderly will increasingly become important in all nations of the world and more so in low-income countries. This will invariably lead to an increased demand on the health system in view of the fact that older adults consume about 25 % of all hospital costs in most high-income countries at present.[7]

The regular assessment of patient satisfaction is done for the purpose of continuous quality improvement, which is in tandem with the principle of patient-centred clinical care and ultimately leads to excellent clinical practice.[1,8] This is well established in high-income countries but not yet so in middle and low-income countries[1,8] In South West Nigeria region, Kuteyi et al[1] reported 63% satisfaction among university staff and students, while Bello et al[9] reported 75.2% satisfaction among adults attending outpatient patients of a tertiary hospital. Similarly, Daniel et al in the North central region reported 91% satisfaction, while Ugwu et al in the South east region reported 88.3% satisfaction.[8,9,11&19] In another development, Nebbuye-Sekandi in Uganda found 50% of his respondents to be satisfied while Sinyiza in Malawi found

only 8.4% of his respondents to be satisfied with the quality of healthcare received [14,23.]
The high cost of healthcare and long clinic wait time were consistently found to negatively affect overall satisfaction with the quality of care. However, older age, being married and good communication skills of healthcare workers were found to be positively associated with patient satisfaction. This current study was intended to evaluate the level of patient satisfaction with the quality of care being offered at the outpatient clinic of Ijesaland Geriatric Centre, a community-based centre for the care of older adults

Methods

Study location: The study was carried out at the Ijesaland geriatric centre, Ilesa. Osun- state, Nigeria (IGC), one of the six units making up the Obafemi Awolowo University Teaching Hospital Complex (OAUTHC) with its administrative headquarters at Ile Ife. It is a one-stop shop, an all-inclusive centre for the care of the elderly. A Multiclinic with well-equipped surgical unit, Pharmacy, Eye clinic, Dental clinic, laboratory services, physiotherapy clinic and Dietetic clinic and Immunization Unit. IGC serves as a referral centre to elderly patients from the whole of Osun state and neighbouring states. It provides primary, secondary and tertiary health care for the elderly. The General Outpatient clinic (GOP) of IGC is run by Consultant Family Physicians and Medical Officers.

Study population: The elderly patients who attend the general out-patient clinic over the period of 3 years.

Study design: This is a hospital-based, cross-sectional descriptive Study.

Study duration: The study duration was eight weeks following approval by the OAUTHC ethical review committee.

Inclusion criteria: All patients aged 60 years and above, who consent to participate in the study and had attended the GOP clinic at least once prior the index visit.

Exclusion criteria: Severely ill patients and those with severe cognitive impairment (MMSE ≤ 9) who could not provide reliable information.

Sample size determination: The minimum sample size was determined using the formula;

$N = Z^2PQ/d^2$ ……………………………………..

Where N= the desired sample size.
Z= standard deviation of 1.96, which corresponds to 95% confidence interval.
P= 0.52 (previously published local prevalence was 52%)[22]
Q= 1-P., d= 0.05% (standard error or degree of accuracy).
    N= $(1.96)^2$ x 0.52x (1- 0.52)/0.05^2 = 383.6 (approximately 384).
The calculated minimum sample size was 384. However, 10% attrition rate (38) was added to make up for non-response.   = 384+38 = 422.

Sampling technique: A Systematic random sampling technique was used to select respondents for the study. The average weekly patient attendance at the clinic, being 400, gave a sampling frame of 3200. Targeting a minimum sample size of 422 over eight weeks gave a sampling interval of eight. The first recruited patient was selected by balloting, while every eighth eligible patient is recruited.

Study protocol:
An interviewer-administered questionnaire was developed based on the authors' aim and objectives and literature search. This was translated into the Yoruba language and back-translated into English by a Yoruba linguistic professional to ensure consistency. The research assistants were adequately supervised. The questionnaire has four sections: Section A; socio-demographic data, Section B was for general health information while the Section C was for physical examination. Section D was the PSQ-18, which assessed the satisfaction of the respondents with the care received at the clinic. Reliability coefficients for PSQ-18 (Cronbach's alpha was 0.85) and efforts made to ensure validity and reliability of this instrument, given the high rate of satisfaction recorded. It was summarized and scored under seven domains: General satisfaction; Technical quality; Interpersonal manner; Communication; Financial aspects; Time spent with the doctor; Accessibility and convenience.

 Data analysis: Data were cleaned, coded, entered and subsequently analysed using the statistical package for social sciences (SPSS) software version 21 (SPSS, Chicago, Il, USA). Summary of statistics was presented using means, median, and standard deviation for continuous variables and frequency/percentages for categorical variables for all statistical analyses; p values of less than 0.05 were considered statistically significant at 95 percent confidence interval (CI).

Ethical clearance, considerations and consent
Ethical approval was obtained from the OAUTHC, Ile-Ife ethical review committee. (Ethical registration number: IRB/IEC/0004553). Written informed consent was obtained from the respondents, and confidentiality of information obtained was maintained.

Results
 The mean age of the respondents was 71.62± 80.4 years, with the age range of 60-69 years constituting 41.9%. The respondents were predominantly female (56.9%), Christians (92.2%), and of Yoruba ethnicity (98.1%).

Table 1: Socio-demographic characteristics of respondents

Characteristics	Frequency (N=422)	Percentage
Age (years)		
60 – 69	177	41.9
70 – 79	168	39.8
80 – 89	72	17.1
≥ 90	5	1.2

Mean ± SD (years)	71.62 ± 8.04	
Gender		
Male	182	43.1
Female	240	56.9
Number of children		
None	21	5.0
2 - 5	346	82.0
> 5	55	13.0
Religion		
Christianity	389	92.2
Islam	33	7.8
Ethnicity		
Yoruba	414	98.1
Igbo	6	1.4
Others	2	0.5
Level of Education		
University graduate	141	33.4
Senior secondary school	132	31.3
Primary School	116	27.5
No formal Education	33	7.8
Occupation while in service		
Professionals/top civil servants	59	14.0
Middle-level bureaucrats/teachers/large-scale farmers & traders	208	49.3
Drivers/Artisans	72	17.1;
Unskilled workers/small-scale farmer and traders	72	17.1
Unemployed	11	2.5
Aggregate monthly income		
< N 30,000	102	24.2
≥ N 30,000	320	75.8

The majority are married (63.3%), 75.8% of the respondents earned ≥ ₦30,000 monthly. Retirement benefits and family contributions constituted 45.3% and 37.9% current sources of income, respectively for the respondents. Most of the respondents (77.7%) had caregivers, who was their spouses in 64.9% of cases.

Table 2: Family characteristics of Respondents

Characteristics	Frequency (n)	Percentage (%)
Marital status		
Married	267	63.3
Divorced	2	0.5
Separated	4	0.9
Widowed	149	35.3
Number of children		
None	21	5.0
2 - 5	346	82.0
> 5	55	13.0
Household Pattern		
Lives alone or with tenants or maids	97	23.0
Live with spouse only	227	53.8
Lives with grown-up child's family	76	18
Lives with grandchildren	15	3.6
Lives with brother and sister	4	0.9
Lives with other extended family members	3	0.7
Possession of primary caregiver		
Yes	328	77.7
No	94	22,3
Personality of the caregiver (N=328)		
Spouse	213	64.9
Biological family member	83	25.3
Paid house help	32	9.8
Present Sources of Income		
Retirement benefits/pensions	191	45.3
Return on investments	13	3.1
Contribution from family members	160	37.9
Wages or earnings from a trade	43	10.2
Others	15	3.5

The commonest health problem among the study respondents were: hypertension (64.7%) osteoarthritis (45.7%), diabetes

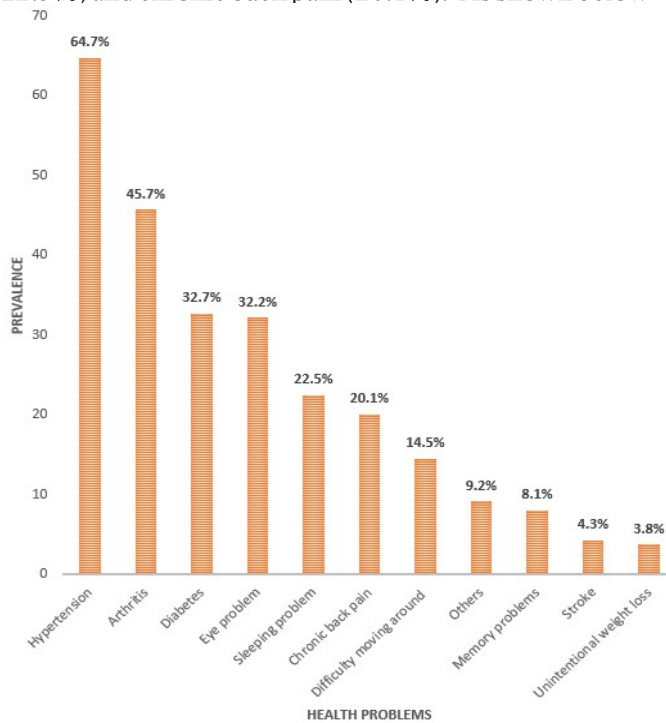mellitus (32.7%), visual problem (32.2%), sleep problem (22.5%) and chronic back pain (20.1%). As shown below

Figure 1. Health problems among the respondents

99.8% of the respondents had good overall satisfaction with the care received, as shown below
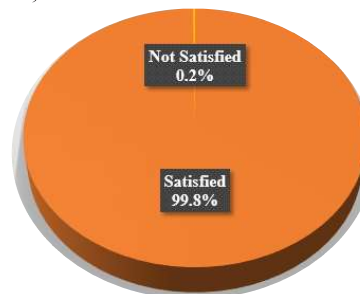

Figure 2: Overall Patient Satisfaction

Domain of Care at Health Care Facility

Scheduled visits constituted the majority (87.2%) of the hospital visits during the period of the study. About 50.0% of the respondents in the study had a fairly long stay (between 2-4 hours) at the hospital. The estimated expenditure during the clinic visits by the respondents in the study was ₦8,926.86 ± ₦4,315.31.

Table 3: Domain of care at the health care facility

Characteristics	Frequency (N=422)	Percentage
Type of visit		
General Health Check	42	10.0
Procedure visit	12	2.8
Scheduled/follow-up visit	368	87.2
Total time spent in the Hospital		
< 2hours (short)	205	48.6
2 -4 hours ((long)	211	50.0
> 4hours (Too long)	6	1.4
Estimated expenditure spent on the visit		
Mean ± SD (Naira)	8926.86 ± 4315.31	

Although, greater proportion of those with formal education (388,92%). those with monthly greater than N30,000.00, (319,99.7%) were more satisfied, this is not statistically significant

Table 4: Relationship between socio-demographic characteristics of the respondents and Patient Satisfaction.

Variables	Patient Satisfaction			χ^2	P-value
	Satisfied n (%)	Not satisfied n (%)	Total (n=422)		
Age (years)					
60 – 69	176(99.4)	1(0.6)	177(100)		
70 – 79	168(100.0)	0(0.0)	168(100)	4.225#	1.000
80 – 89	72(100.0)	0(0.0)	72(100)		
≥ 90	5(100.0)	0(0.0)	5(100)		
Gender					
Male	182(100.0)	0(0.0)	182(100)	0.760	0.383
Female	239(99.6)	1(0.4)	240(100)		
Religion					
Christianity	389(100.0)	0(0.0)	389(100)	11.816	0.001*
Islam	32(97.0)	1(3.0)	33(100)		
Ethnicity					
Yoruba	413(99.8)	1(0.2)	414(100)		
Igbo	6(100.0)	0(0.0)	6(100)	0.019	0.990
Others	2(100.0)	0(0.0)	2(100)		
Level of Education					
University graduate	141(100.0)	0(0.0)	141(100)		
Senior secondary school	131(99.2)	1(0.8)	132(100)	2.916	0.666
Primary School	116(100.0)	0(0.0)	116(100)		
No formal Education	33(100.0)	0(0.0)	33(100)		
Occupation while in service					
Professionals/top civil servant	59(100.0)	0(0.0)	59(100.0)		
Middle level bureaucrats'/teachers, large scale farmers & traders	208(100.0)	0(0.0)	208(100.0)		
Drivers/Artisans	71(98.6)	1(1.4)	72(100)	6.053#	0.507
Unskilled workers/small scale farmer and traders	72(100.0)	0(0.0)	72(100)		
Unemployed	11(100.0)	0(0.0)	11(100)		
Aggregate monthly income					
< N30,000	102(100.0)	0(0.0)	102(100)	0.320	0.572
≥ N30,000	319(99.7)	1(0.3)	320(100)		

* Significant at 95% CI, # - Fisher's Exact value

The proportion of those with family size less than six or equal, (345,99.7%), those of income from retirement benefit, (191,100%), were more satisfied, though not statistically significant

Table 5: Relationship between Family characteristics of the respondents and Patient Satisfaction

Variables	Patient satisfaction				
	Satisfied n %	Not Satisfied n %	total	X^2	P value
Marital status					
Married	267(100.0)	0 (0.0)	267(100)	8.085#	0.367
Divorced	2(100.0)	0 (0.0)	2(100)		
Separated	4(100.0)	0 (0.0)	4(100)		
Widowed	148(99.3)	1 (0.7)	149(100)		
Number of Children					
None	21(100.0)	0(0.0)	21(100)	1.963	1.000
2 - 5	345(99.7)	1(0.3)	346(100)		
> 5	55(100.0)	0(0.0)	55(100)		
Household Pattern					
Lives alone or with tenants or maids	96(99.0)	1(1.0)	97(100)	10.510#	0.462
Live with spouse only	227(100.0)	0(0.0)	227(100)		
Lives with grown up child's family	76(100.0)	0(0.0)	76 (100)		
Lives with grand children	15(100.0)	0(0.0)	15(100)		
Lives with brother and sister	4(100.0)	0(0.0)	4(100.0)		
Lives with other extended family members	3(100.0)	0(0.0)	3(100)		
Possession of primary caregiver					
Yes	327(99.7)	1(0.3)	329(100)	0.287	0.592
No	94(100.0)	0(0.0)	94(100)		
Personality of caregiver N=328					
Spouse	213(100.0)	0(0.0)	213(100)	5.118#	0.098
Biological family member	83(100.0)	0(0.0)	83(100)		
Paid house help	31(96.9)	1(3.1)	32(100)		
Present sources of Income					
Retirement benefit/pensions	191(100.0)	0(0.0)	191(100)	5.461#	0.547
Return on investments	13(100.0)	0(0.0)	13(100)		
Contribution from family members	159(99.4)	1(0.6)	160(100)		
Wages or earnings from a trade	43(100.0)	0(0.0)	43(100)		
Others	15(100.0)	0(0.0)	15(100)		

Mean Sub-Scale of Patient Satisfaction

As it is shown below, among seven domains of patient satisfaction, two (technical quality and accessibility and convenience had the highest rating (mean± SD: 16.50±1.91 and 16.46± 3.52 respectively), while the domain of financial aspect of care had the lowest rating (mean± SD: 7.67± 1.64).

Table 6: Mean Sub-Scale of Patient Satisfaction

Sub Scale	Frequency (N=422)	Mean	SD
General Satisfaction	422	8.00	1.39
Technical Quality	422	16.50	1.91
Interpersonal manner	422	8.62	0.95
Communication	422	8.64	2.13
Financial Aspect	422	7.67	1.64
Time Spent with the Doctor	422	8.28	1.14
Accessibility and Conveniences	422	16.46	3.52

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Discussion

The participants in this current study were predominantly female (56.9%), and this is in consonance with the findings of other out-patient hospital-based studies among the elderly.[1,2] This can be explained by the fact that women have better health-seeking behaviour than men. In addition, a large proportion of the respondents earned more than the current minimum wage of civil servants and this implies a positive impact on the well-being of the respondents. Furthermore, there is a reported high incidence of the possession of caregivers among the respondents and these were their spouses in most cases. This also implies a positive impact on the wellbeing of the respondents.

The current study found that there was a high level of satisfaction (99.8%) with the quality of medical care received by the respondents. This is quite high but compares well with the findings of Daniel et al at Makurdi,[11] and that of Adamu et al[22] who found 91% and 98% respectively. The high incidence in this current study may be explained partly by the fact that the patients are community-based health insurance making their access to care easy. The Centre is being run by Consultant Family Physicians with certificated training in the care of the elderly while the other staff cadres also had exposures to training in the care of elderly. This fostered professional, cutting-edge, patient-centred care of the elderly. This is further corroborated with high rating in technical quality, accessibility and convenience as domains of patient satisfaction. In addition, the centre is built in such way that is a stop-shop multi-clinic, as regards accessibility and convenience.

Moreover, the current study found that the quality of medical care received at the OAUTHC-IGC is good in terms of promptness of medical attention at the clinic visit. As stated earlier, it was found in this current study that delay in reception of care (evidenced by stay in hospital more than 4 Hours) was minimal (1.4%)

among the respondents. This probably contributed significantly to the satisfaction of the respondents with the quality of medical care received. This is similar to the findings of Adamu et al.[22] In addition, it was found that the mean expenditure per clinic visit of the respondents was less than one third of the current minimum wage (approximately ₦8,927) and this seemed to be a fair deal as majority (75.8%) of the respondents earned more than the minimum wage. This also partly explains the good patient satisfaction among the respondents in the current study. This is similar to the finding of Ugwu et al,[19] Iloh et al[10] and Nabbuye-Sekandi et al.[14] The moderate cost of care at OAUTHC-IGC has great potential for improvement as the implementation of a community sponsored health insurance scheme commenced shortly after the completion of the data collection for this current study.

The male gender was observed to have a relatively higher but statistically-insignificant satisfaction level than the female gender. This is in consonance with the findings of Kuteyi et al.[8] Similarly, non-possession of caregiver was also observed to portend a higher but statistically-insignificant satisfaction level. This may partly be explained by the skewedness of data.

All the reviewed health problems were found to have positive relationship with patient satisfaction except for patients with hypertension and those with sleeping problems who were found not to be satisfied with the quality of care received. This could be due to the fact that most of these health problems are chronic and degenerative in nature, non-reversible most especially eye problems None of the reviewed literature assessed the relationship between the clinical problems of the patients and their satisfaction with care.

In conclusion, prevalence of patient satisfaction with the quality of care at OAUTHC-IGC is high and the major factors identified were promptness at care delivery and moderate cost of care as a result of community-based insurance Scheme.

While it is good to have further studies to explore other dimensions of the quality of healthcare which can foster improved patient satisfaction, it is as well good too to have more establishment of patient centred facilities for the care of older adult with involvement of community-based health insurance scheme.

Limitations of the Study
A cross-sectional study, therefore cause and effect relationship might be difficult to establish.

Acknowledgements: All the older adults who participated in the study

Implication for clinical practice: This further enhances that Patient Centred Practice is an essential ingredient to clinical practice

Implication for policy makers: The study identified that the overall satisfaction is high with care as a result of   one one-stop-shop multi-clinic, as regards accessibility and convenience. Therefore, it is recommended to have more of elderly care centre across the nation.

Contribution of each author
Conceptualization and Review of Literature of Literature; FOO, IWO, FAO, AMK
Design of Methodology FOO, IWO, FAO, AMK, AAA
Data Collection FOO, IWO, FAO

Data analysis and Presentation of Findings: FOO, IWO, FAO, AMK, OOO, AAA, AAO, ONA
Discussion of Findings FOO, IWO, FAO, AMK, OOO, AAA, AAO, ONA
Final Authorization of Completed Manuscripts: All Authors authorised the manuscripts for publication.

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