



Evaluation of patients with schizophrenia satisfaction with out-patient care: a comparison of two diverse psychiatric settings in Nigeria

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ABSTRACT

Background: Patient's satisfaction with care is an important construct in determining the quality of care and adherence to treatment. This study was aimed at comparing the satisfaction level of patients with schizophrenia regarding the outpatient care in community mental health setting with that of typical psychiatric hospital and identifies factors accounting for any difference.

Methods: This is a comparative cross-sectional survey of patients with the diagnosis of schizophrenia attending the outpatient clinic of the Neuropsychiatric Hospital (NPH) and the State Community Psychiatric Services Centre (OSCPSC), Oke Ilewo, both in Abeokuta, Ogun State, Nigeria. Patients' satisfaction was assessed using the Charleston Psychiatric Outpatient Satisfaction Scale (CPOSS). Frequency distribution, mean scores with standard deviations, independent *t*-test, and analysis of variance were calculated as deemed appropriate. The level of significance was set at $p < 0.05$.

Results: Out of the 260 patients sampled, 22 opted out, thus giving a response rate of 91.5%; 121 from NPH and 117 from OSCPSC. With the exception of employment status, the two centers did not differ significantly on other socio-demographic variables. The overall mean CPOSS scores for the respondents at NPH and OSCPSC were comparable ($p = 0.287$). Meanwhile, participants at OSCPSC were significantly satisfied more with record officers' help, clinic hours, waiting time, and cost of treatment ($p < 0.05$), while participants at NPH were significantly satisfied more with treatment center's appearance ($p = 0.001$). Similarly, patients with lower level of education and females particularly those from OSCPSC are likely to be satisfied more with their care than do other categories.

Conclusion: Although, patients' overall satisfaction with out-patient care was found to be similar in both settings, patients attending OSCPSC enjoy easier access to care and relatively lower cost compared with their counterpart at NPH, who were relatively satisfied more with the appearance of the treatment center.

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Introduction

Patient's satisfaction with care is an important factor in determining the quality of care and patient adherence to treatment [1]. It is a key to evaluating mental health system and the extent to which outcomes are achieved [2,3]. Generally, there are many factors that influence patients' satisfaction with health care delivery; hospital infrastructure, waiting time before consultation, quality of clinical services rendered, physical comfort, drug

availability, attitude of doctors and other health care workers, emotional support, and respect for patients' preferences among others [4,5].

Among patients with mental illness, several factors have been identified as contributing to patients' satisfaction. Of these, greater patient's satisfaction was found to be significantly associated with patients' demographics such as older age, lower education, being married, and having higher social status [6,7]. Nonetheless, one other study had

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reported no association with most demographic variables [8]. Apart from patients' demographic, the diagnosis [9,10], treatment program [11,12], the duration of the illness [13], patients' expectation [14], and institutional characteristics such as the hospital size are other important factors [15]. Patient's satisfaction with care is also an important factor in predicting default clinic attendance [16].

Varying global levels of patients' satisfaction to psychiatric services have been reported in the literature [7,17–22], and these ranged from 39.3% to 91.9% with the least reported in London and the highest in South Africa. According to Yimer et al. [22], in Ethiopia, the global satisfaction with the psychiatric outpatient clinic was about 61%, with the patients who were widowed, male, urban dwellers, and those with poor social functioning or with a diagnosis of schizophrenia likely to be satisfied less with out-patient care. On the other hand, no association was found between levels of education, distance from the health service facility, wealth index, and satisfaction with outpatient psychiatric service in their study.

In a study looking at the determinant of patients' satisfaction with their mental health care and quality of life of adults of working age who were receiving input from a community mental health team in North Yorkshire [23], patients' age and their satisfaction in other areas of their lives such as housing, money, and relationships predict satisfaction with psychiatric service while gender and duration of disorder were unrelated to service satisfaction.

In Nigeria, most studies have reported high levels of satisfaction with psychiatric services [8,20,21]. In a recent study among patients with schizophrenia, high level of satisfaction was reported in the area helpfulness of the records clerk, helpfulness of services received, and the overall quality of care [8]. Nevertheless, low areas of satisfaction were recorded on items relating to assessing the cost of billing and waiting time. Waiting times and cost of services have been reported as the major constraint to quality service delivery in Nigeria and sub-Saharan Africa [21,24].

In recent time, there has been move to de-institutionalized psychiatric care with an emphasis on community care. Despite this move, psychiatric service still takes place largely in major psychiatric hospital in most developing nations. Nonetheless, patient's satisfaction with out-patient care has been shown to predict the quality of life [8], hence the

outcome of care. A comparison of patients' satisfaction with outpatient care in a typical psychiatric hospital and community care setting will provide an insight into the quality of care in these two settings.

The objective of the present study was to determine if there was a significant difference in the level of satisfaction of patients with schizophrenia attending an outpatient care at community psychiatric setting compared with those attending typical psychiatric hospital, and those factors accounting for any difference. It was hypothesized that patients managed at a specialized center would display higher satisfaction rates as a result of more intensive and specific treatment interventions.

Methods

Research design and setting

The study was a comparative cross-sectional survey of patients who met the criteria for the diagnosis of schizophrenia attending the outpatient clinic both at the Neuro-psychiatric Hospital (NPH), Aro, and the Ogun State Community Psychiatric Services Centre (OSCPSC), Oke-Ilewo, both in Abeokuta, Ogun State, Nigeria.

Study population

The outpatients of NPH, Aro, and the OSCPSC, Oke-Ilewo were chosen for the study. The patients were selected based on the following criteria: (i) Diagnosed with schizophrenia by a Consultant Psychiatrist and met ICD-10 criteria for schizophrenia based on the Diagnostic Criteria for Research for ICD-10, (ii) had been attending the clinic for at least 6 months (to ensure acquaintance with most aspects of the clinic), (iii) absence of co-morbid medical condition(s) that could disturb the patient's ability to comprehend or respond appropriately to the questionnaire, and (iv) were clinically stable to engage in the interview session, and (v) be in the age range of 18–70 years.

The sample size was calculated using the statistical formula for studying proportions with a population <10,000 [25]. Based on this, a sample size of 260 was estimated, including an extra 10% and this was shared equally between the two centers, that is, 130 subjects from each center.

Data collection

A pro forma was developed to assess the socio-demographic and clinical variables such as age, sex, employment status, marital status, education,

duration of attendance, and frequency of admission. Perception of patients' satisfaction with the outpatient clinic was assessed using the Charleston Psychiatric Outpatient Satisfaction Scale (CPOSS). This is a 15-item questionnaire scored on a five-point likert scale, with an E5 response format: 5, excellent; 4, very good; 3, good; 2, fair; 1, poor; and a "does not apply" option for all except the last item. The last item is rated on a four-point scale (1 = Yes, Definitely; 2 = Yes, Probably; 3 = No, definitely; and 4 = No, Probably). It was developed at the Medical University of South Carolina, Charleston, in the United States of America [24]. The items on the Charleston Psychiatric Outpatient Satisfaction Scale (CPOSS) cover administrative, clinical/treatment, and environmental areas. For purpose of clarity, some of the items on the scale were reworded in line with the nature of the service provided in the Hospital. For example, helpfulness of the secretary was readjusted to read Helpfulness of the Records officer and item 14 on clear and correct monthly bill was modified to read the cost of medications and services. The overall satisfaction was calculated from the sum of the 13 items excluding the two anchor items. The reliability and validity of the CPOSS have been reported in Nigeria [20]; the internal consistency was high ($\alpha = 0.91$) and convergent validity ranged between 0.30 and 0.68.

Ethical consideration

After explaining the purpose of the study to each patient, a written informed consent was sought and obtained from every participant. Likewise, ethical approval was also obtained from the Research Ethics Committee of the Neuropsychiatric Hospital, Aro. Similarly, an approval to carry out the study was also obtained from the Permanent Secretary of the Ogun State Hospitals Management Board for permission to carry out the study at the OSCPSC, Oke Ilewo, and approval communicated through the managing Psychiatrist.

Data analysis

Data were analyzed using Statistical Package for Social Science version 17 (SPSS Inc.). Frequency distribution was computed for socio-demographic variables and mean scores and standard deviations for CPOSS scores as deemed appropriate. Patients' socio-demographic and clinical variables in the two centers were compared using chi-square. Independent *t*-test was used to explore the relationship between the mean total CPOSS scores and

individual item of CPOSS score of patients from the two centers while the mean CPOSS score of various categories under socio-demographic and clinical variables of the respondents from the two centers were compared using analysis of variance (ANOVA). The level of significance was set at $p < 0.05$.

Results

General measures

A total of 260 respondents who fulfilled the research criteria were approached at both centers. A total of 238 responded and completed the interview translating to 91.5% response rate. The 238 respondents who completed the interview were made up of 121 from Neuropsychiatric Hospital, Aro (NPH), and 117 from OSCPSC. The overall mean age for all the 238 respondents was 37.78 (SD = 11.50) years.

Socio-demographic characteristics

As shown in Table 1, the majority of the participants at both centers were between 25 and 34 years. The mean age was 37.94 ± 10.20 years and 37.62 ± 12.70 years for the respondents at NPH and OSCPSC, respectively. There was no statistically significant difference in the mean age of respondents at the two centers ($t = 0.20, p = 0.84$). Among the 238 respondents, 97 (40.8%) were males and 141 (59.2%) were females. Fifty-two (43.0%) of the NPH group were males and 69 (57.0%) were females, while at OSCPSC, 38.5% were males and 61.5% were female. There was no statistical significant difference in the gender distributions across the two groups studied ($\chi^2 = 0.33, p = 0.564$). With the exception of employment status ($p = 0.013$), the two groups did not differ significantly in term of other socio-demographic variables such as marital status, educational status, and religion ($p > 0.05$).

Comparison of the NPH and OSCPSC respondents' scores on the CPOSS

The overall mean CPOSS score for the respondents at NPH was 63.22 ± 9.93 , while at OSCPSC it was 64.48 ± 8.16 . ($t = -106, p = 0.287$).

On the whole, most items on CPOSS were scored higher by participants at OSCPSC relative to those at NPH; waiting time, cost of treatment, clinic hours, and Record officer's help were significantly scored higher ($p < 0.05$). On the other hand, respondents at NPH were significantly satisfied more with the treatment center appearance ($p = 0.001$). Other comparisons were as shown in Table 2.

Table 1. Comparison of socio-demographic characteristics of the NPH and OSCPSC respondents.

Socio-demographic variables	NPH N = 121 N (%)	OSCPSC N = 117 N (%)	χ^2	df	p
Age (years)					
18–24	10 (8.3)	11 (9.4)			
25–34	51 (42.1)	60 (51.3)	9.42	4	0.051
35–44	31 (25.6)	14 (12.0)			
45–54	19 (15.7)	15 (12.8)			
≥55	10 (8.3)	17 (14.5)			
*Mean age (years)	37.94 (10.2)	37.62 (12.7)			
Gender					
Male	52 (43.0)	45 (38.5)	0.33	1	0.564
Female	69 (57.0)	72 (61.5)			
Marital status					
Married	46 (38.1)	39 (33.3)	0.57	2	0.753
Single	51 (42.1)	53 (45.3)			
Others	24 (19.8)	25 (21.4)			
Educational level					
None	10 (8.3)	14 (12.0)			
Primary	39 (32.2)	50 (42.7)	5.05	3	0.168
Secondary	45 (37.2)	31 (26.5)			
Tertiary	27 (22.3)	22 (18.8)			
Employment status					
Schooling/Apprenticeship	12 (9.9)	11 (9.4)			
Employed	91 (75.2)	70 (59.8)	8.71	2	0.013
Unemployed	18 (14.9)	36 (30.8)			
Religion					
Christianity	81 (66.9)	81 (69.2)	0.057	1	0.811
Others	40 (33.1)	36 (30.8)			

* $t = 0.20$, $p = 0.84$.

Relationship between mean total CPOSS score and socio-demographic variables

As shown in Table 3, the relationships between the mean total CPOSS scores of various categories of socio-demographic variables of the respondents from the two centers were explored using ANOVA. The difference in the mean CPOSS score of each category of gender (male and female) from both center was significant ($p < 0.001$). Similarly, there was a significant difference when the mean CPOSS scores of different levels of education of participants from the two centers were compared ($p = 0.043$). On *post-hoc* test, the difference in the mean scores was due to the females from OSCPC significantly having a higher mean CPOSS score than other categories of

gender ($p = 0.028$); however, none of the categories of level of education from the two centers was able to explain the difference observed.

Relationship between mean total CPOSS score and clinical variables

Comparison of the NPH and OSCPSC respondents' mean total CPOSS scores and clinical variables (such as the age of onset of illness, number of illness episodes, and duration of illness and presence of side effects of medications) from the two center did not significantly affect the patients' satisfaction with care ($p > 0.05$). Details of the comparison of the NPH and OSCPSC respondents mean total CPOSS scores and their clinical variables are provided in Table 4.

Table 2. Comparison of the NPH and OSCPSC respondents' scores on the CPOSS.

Item of satisfaction	Mean (SD) score on CPOSS		Statistics		
	NPH	OSCPSC	t	df	p-value
Record officer's help	4.28 (0.90)	4.56 (0.73)	-2.603	228.846	0.010
Explanation on Payment	4.11 (1.13)	4.21 (1.12)	-0.670	236	0.504
Waiting time	3.80 (1.17)	4.15 (1.03)	-2.650	234.125	0.009
Information about Problem	4.17 (1.05)	4.37 (0.952)	-1.494	236	0.136
Respect for opinion about treatment	4.32 (0.87)	4.47 (0.79)	-1.369	236	0.172
Match of treatment plan to needs	4.31 (0.95)	4.40 (0.86)	-0.745	236	0.457
Service helpfulness	4.48 (0.78)	4.55 (0.73)	-0.695	236	0.488
Overall quality of care	4.46 (0.74)	4.56 (0.69)	-1.092	236	0.275
Waiting area Appearance	4.36 (0.83)	4.11 (1.09)	1.945	216.164	0.053
Treatment Center Appearance	4.55 (0.77)	4.17 (0.99)	3.307	219.215	0.001
Clinic hours	4.15 (1.01)	4.39 (0.86)	-2.012	236	0.045
Out-patient service location	4.25 (0.95)	4.34 (0.81)	-0.819	236	0.414
Amenities for Convenience	4.15 (1.08)	4.03 (1.08)	0.818	236	0.414
Cost of treatment	3.91 (1.18)	4.26 (0.98)	-2.465	230.866	0.014
Recommendation of treatment center	3.92 (0.33)	3.88 (0.42)	0.758	236	0.449

Discussion

Patient's satisfaction with care is one of the indices to measure the outcome of mental health care service as well as a key parameter for the evaluation of a mental health care system [2,26]. It is not just a means of assessment of care but also provides an opportunity for improvement of the quality of care, including adherence to treatment and continuity of outpatient care [27]. In this study, we compared the level of satisfaction of patients with schizophrenia attending a typical psychiatric hospital out-patient care with those from community-based care. Globally, the levels of patients' satisfaction with outpatient care were essentially similar, though with slightly higher score recorded in community care setting. However, when compared with a similar study [8] among a similar population of patients in a typical psychiatric hospital in the major city in Nigeria like Lagos, participants in our study rated their satisfaction with the out-patient care higher. The difference may have resulted from patient-overload in the center where the previous study was conducted or possibly some reforms aimed at making the centers in this study more patient-friendly, particularly the main psychiatric hospital in this study.

Studies have shown that some hospital variables such as hospital infrastructure, waiting time before consultation, quality of clinical services rendered, physical comfort, drug availability, the attitude

of doctors and other healthcare staff, emotional support and respect for patients' preferences influence patients satisfaction with health care delivery [4,5]. Some of these variables may have explained the differences noted in these studies.

On consideration of individual items on CPOSS, patients with schizophrenia at the OSCPSC were significantly more satisfied the cost of treatment, clinic hours, waiting time, record officers' help compared with patients attending an out-patient clinic at the NPH. Similarly, in a typical psychiatric like NPH, low areas of satisfaction were recorded on items relating to the cost of treatment and waiting time [8]. In Nigeria and other sub-Sahara Africa, waiting times and cost of services have been reported as major challenges affecting quality of service delivery [21,24,28]. This possibly reflects the complexity of services at major psychiatric hospitals, more importantly in our environment compared with community service where patients have relatively easy access to most of the services provided. On the other hand, patients attending the out-patient clinic at the NPH were significantly satisfied more with center's appearance with relatively higher scores on items such as the appearance of the treatment center, amenities for conveniences, waiting areas' appearance, and desire to recommend the center to other. Patients' perception of the hospital environment including interpersonal, technical components of patients' care as well as the structural component such as the

Table 3. Relationship between mean total CPOSS scores and socio-demographic variables: NPH and OSCPSC compared.

Sociodemographic variables	Mean score (SD) on CPOSS		ANOVA	
	NPH	OSCPSC	F	p
Age (years)				
18–30	65.0 (9.83)	64.8 (8.55)	1.194	0.313
>30	62.5 (9.93)	64.4 (7.99)		
Gender				
Female	65.5 (8.99)	66.3 (6.79)	6.429	$p < 0.001$
Male	60.3 (10.43)	61.5 (9.30)		
Marital status				
Married	65.1 (10.26)	66.9 (6.37)	2.649	0.050
Not married	62.1 (9.62)	63.27 (8.70)		
Level of education				
<Secondary school	67.8 (7.67)	65.3 (7.44)	2.764	0.043
Secondary school and above	60.1 (10.15)	63.5 (8.92)		
Employment status				
Employed	62.7 (10.23)	65.8 (7.63)	2.057	0.107
Unemployed	64.9 (8.92)	62.5 (8.60)		
Location of abode				
Abeokuta	60.6 (10.47)	64.9 (6.80)	1.349	0.259
Outside Abeokuta	64.0 (9.69)	63.7 (10.42)		
Religion				
Christianity	62.9 (9.72)	63.8 (8.41)	0.339	0.797
Other religion	63.9 (10.45)	66.0 (7.46)		

location, attractiveness, cleanliness, and convenient facilities influences patients' satisfaction with care [28–30].

Although necessary, most of these “cosmetic” may have been part of those things that account for an increase in the cost of treatment at this center. Nonetheless, an improvement in the appearance of community care setting alongside the provision of basic facilities for comfort will likely improve patients' satisfaction with such out-patient care. As noted literature [28,31], the level of satisfaction influences patients' behavior differently, with satisfied patients likely to adhere more to treatment plan, keep follow-up appointments than dissatisfied patients.

In this study, with the exception of employment status, the two centers did not differ significantly in term of any socio-demographic variables. This difference noted here may have been due to “selection process”; the NPH is a referral center, with relatively expensive services. The relatively high cost of treatment in this hospital may have

attracted the people who are working and can afford the higher cost of treatment. However, patients' satisfaction with care as measured by the mean CPOSS scores significantly differed on some socio-demographic variables such as gender and levels of education. A significant difference was observed when the mean total CPOSS scores of different categories of gender from the two centers were compared, with female patients from the two centers expressing more satisfaction with care than their male counterparts, more importantly those from OSCPS. This may be due to the fact that male patients with mental illness have higher expectation from their care-givers [32] and are more likely to have higher level of education than female counterparts [33,34]. Similarly, patients with either no or low education level were likely to be satisfied more with their care than the more educated ones similar to other findings [6,7]. In similar studies of patients with schizophrenia satisfaction with out-patient care [8,18], besides marital status, none of the socio-demographic variables was

Table 4. Relationship between mean total CPOSS score and clinical variables: NPH and OSCPSC compared.

Clinical variables	Mean Score (SD) on CPOSS		ANOVA	
	NPH	OSCPSC	F	p
Age of onset (years)				
<35	63.41 (9.91)	64.22 (8.24)	0.65	0.58
≥35	62.06 (10.31)	65.89 (7.77)		
Duration of illness in years				
<5	61.63 (11.32)	64.47 (9.52)	0.99	0.40
>5	64.01 (9.14)	64.48 (9.54)		
Duration of remission in years				
<2	62.14 (10.75)	64.67 (8.52)	1.06	0.37
≥2	64.48 (8.82)	64.30 (7.87)		
Number of antipsychotic drugs				
1	64.56 (8.90)	65.74 (7.27)	1.23	0.33
2 or more	62.74 (10.28)	63.57 (8.68)		
Number of episodes				
1–2	62.86 (10.26)	66.23 (7.36)	1.17	0.32
>2	63.62 (9.64)	63.84 (9.11)		
Route of antipsychotic drug				
Oral or depot	63.85 (8.56)	65.90 (7.18)	1.21	0.31
Oral and depot	62.93 (10.56)	63.38 (8.74)		
Any side effect				
Yes	62.46 (9.98)	62.52 (7.31)	1.69	0.17
No	63.59 (9.94)	65.75 (8.47)		
Appointments kept				
<4	64.93 (8.90)	63.07 (8.40)	2.01	0.11
4 and above	62.35 (10.37)	65.82 (7.75)		

associated with satisfaction with out-patient care. This observation may be due to the methodological approach adopted in those studies.

Generally, studies [6,7,23] had shown association between greater psychiatric patients' satisfaction with care and patients' demographics such as older age, less education, higher social status, poor social functioning, while another study [22] reported that psychiatric patients who are widowed, male, urban dwellers, those with poor social functioning, and those with a diagnosis of schizophrenia were likely to be less satisfied with out-patient care.

In the same vein, none of the clinical variables such as the age of onset, duration of illness, number of antipsychotic drugs, route of administration of antipsychotic, and numbers of appointment kept did predict patients' satisfaction. Similarly, a study had also reported no association between clinical variables and patients' satisfaction with psychiatric care [35]. Conversely, other studies had reported

an association between patients' satisfaction and clinical variables such as duration of illness and specific psychiatric diagnosis [10,13,22]. Patients with schizophrenia have been shown to be satisfied less with care compared with other major psychiatric diagnoses such as major depression or bipolar affective disorders [7,22].

Conclusion

Patients' satisfaction with out-patient care was found to be similar in both settings, though with a relatively higher score among patients attending community care setting. The two centers do not differ significantly with respect to their satisfaction with out-patient care. Comparatively, patients attending OSCPS were significantly satisfied more with clinic hours, waiting time, cost of treatment, and Record officers' help in contrast to their counterpart at NPH who were satisfied more with the appearance

of the treatment center. Similarly, satisfaction with out-patient care differs significantly with respect to the level of education and gender, with females from both centers expressing greater satisfaction with outpatient care than their male counterparts. The satisfaction of psychiatric outpatients could be improved by improving infrastructures and provision of basic facilities that will enhance the comfort of patient, particularly at community care centers, while at the NPH, reducing waiting time, clinic hours, cost of treatment, and improving support are important steps to improving patients' satisfaction. Generally, community-based psychiatric may provide a comparably better care than those obtained in major psychiatric hospital.

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Conflict of Interest

None declared.

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