ADDIS ABABA UNIVERSITY COLLEGE OF HEALTH SCIENCE

PSYCHIATRY DEPARTMENT

FINAL YEAR RESIDENT RESEARCH THESIS

ETHIOPIA, DECEMBER/2017

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RESEARCH TITLE

Psychiatric out patients' health service satisfaction at psychiatric outpatient department in Amanuel Hospital, A.A, Ethiopia

STATEMENT OF PROBLEM

Service satisfaction has been described as a patient response to salient aspects of their experience of services [12] and as an outcome of care [13]. Though no universal definition of satisfaction at health service, it should not be conflated with quality of care, policymakers and planners cannot afford to ignore subjective reactions to service use which are inherent within reported satisfaction.

RESEARCH QUESTION

How does psychiatric out patients' level of satisfaction in health care relates to patient's socio-demographic and clinical characteristics at Amanuel Hospital among regular outpatient attendants?

ACRONYMS

AAU- Addis Ababa University
AMHSH -Amanuel Mental Health Specialized Hospital
CI- Confidence Interval
ETB- Ethiopian Birr
MHSSS-Mental health service satisfaction scale
OPD- Out-patient Department
P-value Probability value
SPSS- Statistical Package for Social Science
WHO- World Health Organization

Contents

SECTION ONE: INTRODUCTION

Consumer satisfaction is playing an increasingly important role in quality of care reforms and health-care delivery more generally in United States of America and Europe. However, consumer satisfaction studies are challenged by the lack of a universally accepted definition or measure [1–6] and by a dual focus: while some researchers focus on patient satisfaction with the quality and type of health-care services received [7–10]. Others focus on people's satisfaction with the health system more generally [11–14]. The importance of both perspectives has been demonstrated in the literature. For example, satisfied patients are more likely to complete treatment regimens and to be compliant and cooperative [14, 15]. Research on health system satisfaction, which is largely comparative, has identified ways to improve health, reduce costs and implement reform. Even though it is difficult to find an agreed-upon definition, patient satisfaction is "health care recipient's reaction to salient aspects of his or her experience, expectation and preference of a service met by health care service and provider [17] and is one desired outcome of mental health care service and core parameter for the positive evaluation of a mental health care system [18-20]. For consumers of mental health services, satisfaction has become a significant contributing outcome in the assessment and improvement of quality of care, including adherence to treatment, intent to return for care and follow-up and continuity of outpatient care [21].

The absence of a solid conceptual basis and consistent measurement tool for consumer satisfaction has led, over the past 10 years, to a proliferation of surveys that focus exclusively on patient experience, i.e. aspects of the care experience such as waiting times, the quality of basic amenities, and communication with health-care providers, all of which help identify tangible priorities for quality improvement.

The increasing importance of patient experience and the sustained interest in comparing people's satisfaction with the health system across different countries and time

periods suggests the need to characterize the relationship between them. Research relating global satisfaction ratings with patient experience has revealed strong associations between the two [23]. Yet to what extent patient experience explains satisfaction with the health-care system remains unclear. The literature suggests that much of the remaining variation in health system satisfaction after adjusting for factors commonly used to measure the concept is a reflection of patient experience [24, 25].

Different studies showed that the global level of patient satisfaction to psychiatric services ranges from 39.3% to 91.9%. A range of factors can affect patient satisfaction, including unpleasantly built environments, staff being too busy, failure to obtain prescribed medications from the hospital pharmacies, the stigma of a psychiatric treatment service, long waiting hours, results, and payment for psychiatric services. Consequently, a dissatisfied patient is not psychologically and socially well becoming evident of lack of goal attainment by the service provider or the clinician.[31–33] Different studies also indicated that, other than the quality of service delivery, satisfaction is also affected by many factors such as patients' demographics [34,35] diagnosis and duration of disease, [36,37] treatment program, [38] and patients' expectation of service [39] Studies on 21 European countries showed that patient experience accounts for only a small fraction of the unexplained variation in health system satisfaction, even after adjustments for the demographic, health and institutional factors with which such satisfaction is commonly associated. [21–23, 26–30]. In this study, most of the variation in satisfaction with the health-care system was explained by factors above and beyond patient experience.

Reliance on psychiatric symptoms alone as a measure of service satisfaction is somehow a narrow concept; it is rather important to see how satisfied the patients are by the service they received [42]. Despite psychiatric outpatient service being given in most of referral hospitals in Ethiopia, there had been few evidences that examined patients'

satisfaction with the quality of psychiatric care based on sound theoretical frameworks and this study also probably contributes pattern of satisfaction of psychiatric patients in Ethiopia. However the scales used to measure satisfaction level was based on scales validated and used in other countries. Hence a need to understand more patients experience based on a mental health service scale (MHSSS) scale, validated and tested in Ethiopia makes this study sound helpful [45].Patient's responses to their experiences of using services are under-researched in the context of mental healthcare in low income countries.

Therefore, the purpose of this study is to explore the factors underlying psychiatric patients' satisfaction with the health-care system and the extent to which satisfaction reflects their experience of care with the validated MHSSS (mental health service satisfaction scale) tool in Ethiopia, written in Amharic and English version as a measure of satisfaction among consumers of mental healthcare.

SECTION TWO: OBJECTIVE

General Objective:

- To evaluate psychiatric out patients reported level of satisfaction with health care service, and identifying factors associated with satisfaction at Amanuel Specialized Mental Health Hospital, Ethiopia

Specific Objectives

- To describe socio-demographic and clinical characteristics of respondents
- To describe the level of psychiatric outpatient's reported levels of satisfaction with psychiatric out-patient department health care services.
- To determine the association between patients' reported level of satisfaction in the health care services and socio-demographic and clinical characteristics of respondents

SECTION THREE: RESEARCH METHODS

Study Setting

A cross-sectional study was conducted from August 2017 to September 2017 to assess the level of patient satisfaction and associated factors of psychiatric service consumers at Ammanuel Specialized Hospital, which is located in capital town Addis Ababa, Addis Ketema Sub-city Kebele 08. Currently there are 08 regular OPD, 01 emergency OPD, different OPD's including non-psychotic, forensic psychiatry clinics. There are about 250 health professionals and 344 supportive staffs working in Amanuel hospital.

Study Population

The study populations were patients, aged 18 years old or above, attending a psychiatric regular outpatient department at mood and psychosis case teams, who were initiated with treatment 1 month or before and consented.

Inclusion Criteria

- Patients physically available on the date of interview
- Patients who were willing to participate in the study following consent

Exclusion Criteria

- Patients attending Emergency, Forensic, and Non-Psychosis Clinic
- New patients who started treatment or on treatment less than 01 month
- Severely ill, Aggressive patients
- Patients unable to give consent
- Patients unable to communicate, in the language of interview

Sample Size calculation

Based on the formula to estimate single population proportion, the sample size was calculated using a formula to estimate the proportion of patient satisfaction. By taking a previous study that was conducted at Dessie Hospital, that showed proportion of patient satisfaction, 61.72% [43], non-response rate of 3.9% [43], and a 95% confidence interval, margin error of 0.05, the minimum sample size was calculated to be 365.

$$n = \frac{z^2 P(1-P)}{w^2} = \frac{(0.96)(0.96)(0.6172)(0.3828)}{0.05)(0.05)} = 364.77 = 365$$

- Where z is reliability coefficient at 95% confidence interval (1.96)
- P is the proportion of patients satisfaction =0.6172
- W margin of error =0.05
- N nonresponse rate 3.9% [43]
- The total sample size was, 365+ 15= 380

Sampling Procedure

Participants that were eligible based on the inclusion criteria were taken from available lists of registered patients or during every morning before the start of the OPD activity. Then a Simple Random sampling technique was used to select samples.

Data source and collection tools

The data collection was done through a validated semi-structured- questionnaires interview (MHSSS) [44] which was written both in English and a translated and validated "Amharic" version [44], and Patient's chart review. The questionnaire had two different parts that consisted of a general socio-demographic; patient's clinical features and reported level of patient satisfaction with the health care service. Data was collected by trained health workers working at ASMHH. Data was collected from patients attending at regular psychiatric OPD during both morning and afternoon sessions and immediately after treatment upon exit.

Data Measurement

Patient satisfaction was assessed by validated mental health service satisfaction scale (MHSSS) a 24-item Likert scale ranging from 1 to 4, where 1 indicates "strong disagreement", 2 "Disagreement", 3 "Agreement" and 4 "Strong agreement". The scale was scored by taking the average score of reported 24 items. Patients' level of satisfaction was the outcome variable, measured by different 24 item questions and the independent variables were age, sex, religion, marital status, monthly income, education, and living condition, type of psychiatric diagnosis, duration of illness, course of illness, type of medications, medication adherence, medication side-effect, treatment response, history of substance use, comorbid medical illnesses, and social support systems.

Data Management and Analysis

The coded data was entered into SPSS Version 20 (IBM Corporation, Armonk, NY, USA) for analysis. Descriptive statistics were used to describe the data. Univariate and multivariate logistic regression analyses were used to ascertain the association between explanatory variables and the dependent variable. Odds ratios along with 95% CIs were used to show the strength of associations, and *P*-value, 0.05 was considered as statistically significant.

Ethical consideration

Ethical clearance was obtained from Ammanuel Specialized Hospital research and training department and Addis Ababa university department of psychiatry. Participants had the right to refuse the interview and to discontinue at any time they want. Confidentiality was maintained by anonymous questionnaire and informed consent was obtained from each participant.

SECTION FOUR: RESULTS

Description of Socio-demographic features

A total of 380 respondents participated in the study, with a hundred percent (100%) response rate. Out of these 380 study participants, 197 (51.8%) were males. Age group of between 18 and 25 years old were 195(51.3%) with the median and mean age of 29 and 30.59 years respectively with an interquartile range of 11 between age groups. Of the total participants, 225(59.2%) were Orthodox, 225(59.2%) were single. Among all study participants, 241 (63.4%) were jobless, 291 (76.6%) were living with their family, 169(44.5%) were educated up to a primary education, 227 (59.7%) reported to have no monthly income, with mean monthly income of 886.9. (Table 1)

Clinical characteristics and related factors of study participants

Concerning clinical characteristics of the respondents, 188(49.5%) were diagnosed to have schizophrenia; nearly half of them, 170(44.5%) had the diagnosis of depressive disorder; and the remaining had bipolar and related disorders. Above one-third of the respondents, 140 (36.8%), had a total duration of illness between 1 year and 3 years and 248 (65.3%) of the respondents had been taking only one type of oral psychiatric medications. Good medication adherence was reported by two-thirds 247(65%) of them and moderate to severe medication side effect among 44(11.6%) of cases. More than half of them 210(55.3%) had been on remission. Good treatment response rate was seen in 318(83.7%) of them. Only few 7(1.8%) of the respondents had comorbid physical illness. Self-reported substance use including alcohol and “Chat” was reported among 59(15.5%) as compared to non-substance

users which account 321(84.5%). Poor social support was reported by 16(4.2%) as compared to a good social support which accounts for 338(88.9%) of respondents.

Table 1 Frequency Distribution of participants by Socio-demographic status,

Variables	Frequency	Percent	Variables	Frequency	Percent
Age in Years			Job		
18-25	139	36.60%	Jobless	241	63.40%
26-40	195	51.30%	Private	111	29.20%
41-55	46	12.10%	Government	28	7.40%
Sex			Religion		
Male	197	51.80%	Orthodox	225	59.20%
Female	183	48.20%	Protestant	60	15.80%
			Muslim	95	25.00%
Marital Status					
Single	225	59.20%	Income		
Married	129	33.90%	Zero	227	59.70%
Divorced	14	3.70%	1-1000br	29	7.60%
Widowed	12	3.20%	1001-3000br	105	27.60%
			>3000br	19	5.00%
Education			Living With		
None	17	4.50%	Alone	89	23.40%
Primary	169	44.50%	Family	291	76.60%
High school	162	42.60%			
College/University	32	8.40%			

Patients level of satisfaction in psychiatric outpatient services

The overall high satisfaction of study participants was 44.5% to the psychiatric service delivered at Amanuel specialized mental health hospital psychiatric Outpatient Department. Across all the 23 items measuring the patient satisfaction, participants showed more satisfaction in with more than two-third of the item questions 16(69.5%). The three items for which most patients showed higher satisfaction were health workers treatment with courtesy (96.8%), services' effective at decreasing relapses (93.2%), and services' effectiveness at helping with economic problems (93.2%). The three items for which most

patients showed lower satisfaction were chance of being followed by the same health worker (42.1), Cleanliness of latrine (45.8%0 and the administrative staffs treatment of them with courtesy and respect(43.9%).

Factors associated with satisfaction of outpatient psychiatric service

During the multivariate analysis of psychiatric outpatient service satisfaction in relation to all explanatory variables; sex, educational level, type of mental illness, duration of mental illness, psychiatric medication adherence and social support system were found to be significantly associated. Female respondents treated at the outpatient psychiatric clinic were less likely satisfied as compared to males (adjusted odds ratio [AOR] =0.35, 95% CI: 0.20, 0.58). Patients who are educated up to college/university level were less likely to be satisfied with the outpatient psychiatric service than those who were educated up to primary school (AOR =0.32, 95% CI: 0.12, 0.87). Respondents with a diagnosis of schizophrenia were less likely to be satisfied as compared to bipolar disorder (AOR =0.19, 95% CI: 0.05, 0.70). Concerning the total duration of psychiatric illness, patient with more than three years of illness duration were less likely to be satisfied as compared to those with illness duration of less than three years duration, (AOR =0.033, 95% CI: 0.008, 0.15). Participants with poor psychiatric medication adherence were less likely to be satisfied than those who adhere well with psychiatric medications, (AOR= 0.202, 95% CI: 0.004, 0.97). Other significant association was found between patient's social support system and those participants who had poor social support were less likely to be satisfied than those who had good social support (AOR =0.143, 95% CI: 0.05, 0.40). On the other hand, other socio-demographic factors like age, marriage, religion, job, monthly income, living condition, and clinical factors including the course of illness, medication type , response to treatment, medication side effect, substance use history and medical illness had no statically significant association with outpatient psychiatric service satisfaction (Table 2).

Table 2. Univariate and Multivariate Analysis of Factors Associated with perceived patient Satisfaction

Characteristics	COR	95% C.I.for EXP(B)		Sig.	AOR	95% C.I.for EXP(B)		Sig.
		Lower	Upper			Lower	Upper	
Sex								
Female	0.562	0.373	0.847	0.006	0.35	0.208	0.588	0
Male	Ref.				Ref.			
Education								
None	9.628	2.135	43.427	0.003	11.348	2.265	56.852	0.003
College/University					0.322	0.119	0.874	0.026
Primary	Ref.				Ref.			
Diagnosis								
Schizophrenia	0.249	0.093	0.665	0.006	0.191	0.052	0.701	0.013
Bipolar Disorder	Ref.				Ref.			
Duration Of Illness								
>3 years	0.027	0.006	0.117	0	0.033	0.008	0.149	0
1-3 year	Ref.				Ref.			
Medication Adherence								
Poor	0.185	0.042	0.819	0.026	0.202	0.042	0.97	0.046
V.Good	2.597	1.644	4.102	0	2.081	1.231	3.518	0.006
Good	Ref.				Ref.			
Social Support								
Poor	0.22	0.089	0.542	0.001	0.143	0.05	0.404	0
Good	Ref.				Ref.			

COR= Crude Odds Ratio, AOR= Adjusted Odds Ratio; Ref.= Reference; CI= Confidence interval

SECTION FIVE: DISCUSSION

This study used a newly adapted and developed psychiatric health care satisfaction scale in Ethiopia. Only one cross sectional study was done by the principal investigator who developed the MHSSS tool. Previous studies conducted in Ethiopia used psychiatric health care satisfaction scale of measurement based on its validity on other countries.

This study result showed a significant association among the explanatory variables including sex, educational level, Psychiatric diagnosis, course of illness, medication adherence and social support. Comparing with other studies, some factors including age, marital status, religion, income and living circumstances didn't any show significant association with consumer satisfaction.

Though it is stated that consumer satisfaction is a concept which has no universal definition and objective measurement, the validity among different studies still revealed its usefulness as a measurement tool making it a context dependent subjective phenomena with different outcomes among studied participants.

Hence interpreting these individually affected subjective experiences might not always show the existing situation including patient satisfaction with health care delivery accurately. However its validity among different studies as a measurement tool showed its usefulness in health care delivery practices to estimate patient's perceived satisfaction by providing a good outcome measurement scale.

With regard to this specific study results, different factors affect different persons at a given socio-demographic and clinical factors which are reflections to how various social differences will have a differing and subjective meaning. A biological factor like sex has a physical as well as social component in creating an individual response. Other clinical and social parameters like psychiatric illness diagnosis and their course, particularly those illnesses with chronic course might interactively work with poor medication adherence

practice which further affects outcome. A social factor like education level has a dual consequence. In one sense it creates a sense of awareness and knowledge in relation to the decision making practice which will foster a timely access to health care services, on the other hand it might lead to an erroneous generalization that hinders level of satisfaction based on the perceived experience.

The overall prevalence of satisfaction in this study is 44.5%. Despite is low figure 356 (93.7%) of the respondents in this study said that they will recommend the service to a friend or other person in need of a similar service. The magnitude of satisfaction in this survey was consistent with the study done in Canada and USA [46], which was 44.8%. The prevalence found in this study was found to be slightly higher than those of the studies done in London,[45]which reported a prevalence rates of 39.3%. However, the magnitude of satisfaction in this study was lower than that of similar study conducted in Ethiopia, which reported a satisfaction rate of 61.2[43]. The study also showed a lower rate of satisfaction as compared to other cross-sectional studies done in Nigeria (83%), Durban (91.9%), and Ireland (90.7%). [48, 49,50]. This finding is also lower than the finding from the follow-up study done in Sweden (77%), [51] comparative cross-sectional study done in Copenhagen (80.4%), [45] and the study done in Pakistan (90.7%). [52] This might be due to a difference in health care service or differing social circumstances.

Age and job were not significantly associated with satisfaction similar to other studies in Pakistan and London, (younger age in Pakistan). Unlike studies done in Ethiopia [43], marriage has no significant association with satisfaction which reported widowed respondents were less likely to be satisfied with psychiatric services as compared to those who were married.

Females were found to have a less likely satisfaction level as compared to males in this study. This might be due to the differing psychosocial stressors and a differing

reproductive health need among females and males. Similar with studies conducted at USA and Canada, lower educational level, [46] found to have a significant association with higher satisfaction and a lesser satisfaction was observed among those who attained a college or university level of education. This might be due to, those with little access to attend school or knowledge might have limited opportunity to acquire basic information and knowledge to make optimal patient informed health care. On other hand those individuals with higher educational level might evaluate the overall activity of service with their perceived expectation based on their knowledge, which might affect their decision with regard to their subjective satisfaction. The finding of this study also showed that patients diagnosed to have schizophrenia were 0.48 times less likely to be satisfied with mental health service as compared to patients with bipolar disorder. This is similar to studies done in India, [47] Canada and USA,[46] and Switzerland.[53], which might again co-related with the more likely longer course of illness as compared to other psychiatric illnesses.

Participants with poor medication adherence were 0.49 times less likely to be satisfied in mental health service as compared to those with good adherence. The possible reason might be that of poor attitude toward medication adherence might create a negative environment in patient-doctor relationship that can further affect drug compliance, trust of treatment and increased dropout from follow-up or it can by itself due to poor satisfaction that affects medication adherence. This coincides with the study done in Ethiopia [44]. Regarding social support, respondents with poor social support were 0.52 times less likely to be satisfied with mental health service than those with good social support, and it was consistent with the study done in Sweden.[51]. This might be due to the negative impact of poor support in broader context of life as a whole or a continuum of dissatisfaction at health care specifically.

SECTION SIX: CONCLUSION

In this study, the satisfaction level of patients was found to be low (44.5%). Being female, level education, diagnosis with schizophrenia, longer course of illness, poor medication adherence and poor social support system were found to have a statistically significant association with consumer satisfaction.

This study identified a number of potential determinants of satisfaction by using a specific, multidimensional satisfaction questionnaire that is based exclusively on patients' points of view. These factors are among the commonest ones in many studies, which are still the most important features associated with patient satisfaction. These factors might be amenable with intervention, which, in turn, might be expected to improve satisfaction, patient management, and health outcomes in psychiatric hospitals. The different facets of satisfaction, particularly the quality of care and personal experience dimensions, should be considered when developing specific interventions.

SECTION SEVEN: RECOMMENDATIONS

- Increase patient awareness and motivation to psychiatric treatment through a regular health education
- Equip health care service with minimum standard of care and support, in technical, managerial and other areas.
- Assess and evaluate health care delivery through a regular supervision
- Strengthen social support system networks
- Enhance integrated community psychiatry service
- Avail and renovate infrastructures timely and adequately
- Empower women and chronically ill patients through active involvement and partnership
- Increase awareness of staffs both technical and nontechnical staffs about quality of service integration and service ownership

Study strengths and limitations

This study has several strengths. It uses a necessary sample size calculated from studies on patient satisfaction in other area in Ethiopia. Study participants were selected by a probability sampling procedures which reduces selection biases, adequate data quality assessment before data collection and during analysis by doing pretesting. Analysis uses a validated MHSSS scale in Ethiopia.

This study has limitation by the fact that it is cross-sectional, rather than prospective, in design. No causal inference can be formally advanced, and the model should be interpreted from an associational point of view. Future studies are needed to establish whether the associations reported herein are longitudinally robust.

As in all self-reported satisfaction surveys, this study can be limited by a social desirability response bias (i.e., patients may have reported greater satisfaction than they actually felt because they believed that positive comments are more acceptable.

Finally, despite the large numbers of determinants included in this analysis, the multivariate model explained between 51% and 54% of the explained variance, suggesting other important factors may influence the satisfaction of patients (e.g., relationships with family, personality). Future studies should focus on identifying these factors; because research data did not allow for directly quantifying the explanatory power of broader societal factors with regard to people's satisfaction with the health-care system, it is impossible to know to what degree such factors explain the variation observed. As with any cross-country survey analysis, the comparability of the findings depends on the quality of the translation and cultural adaptation of the survey instrument. Reliance on self-reports from respondents speaking for themselves may have introduced recall bias. Finally, some of the predictors of patient's satisfaction with the health-care system came from studies of patient satisfaction

with health services. Any differences in their respective determinants may have affect model imprecise.

Acknowledgments

- ✓ Study participants for their participation and cooperation
- ✓ Amanuel Mental Specialized Hospital research and training department
- ✓ Addis Ababa University
- ✓ Addis Ababa university health Science College, psychiatry department
- ✓ Research Advisors

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