



ST. PAUL'S HOSPITAL MILLENNIUM MEDICAL COLEGE

**ASSESSMENT OF PATIENT SATISFACTION AND
ASSOCIATED FACTORS IN OUTPATIENT PSYCHIATRY
SERVICE AT St PAUL'S HOSPITAL MILLENNIUM
MEDICAL COLLEGE**

BY:

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DR. TIGIST ZERIHUN (MD)

SEPTEMBER, 2017

ADDIS ABABA, ETHIOPIA



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**A STUDENT RESEARCH PAPER TO BE SUBMITTED TO THE
DEPARTMENT OF PUBLIC HEALTH, SPHMMC, IN THE
PARTIAL FULLFILLMENT OF THE REQUIRMENTS FOR THE
DEGREE OF DOCTOR OF MEDICINE**

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Abstract

Background: Patient satisfaction is playing an increasingly important role in quality of care reforms and health-care delivery. This study was conducted to assess patient satisfaction, associated factors that can affect the satisfaction of patients in outpatient Psychiatry service at SPHMMC and to point a possible direction for increment of patient's satisfaction on the service.

Methods: A cross-sectional study was conducted from June 2017G.C to July 2017G.C on patients, who were on follow up, at SPHMMC Psychiatry OPD. Patients were selected using systematic random sampling technique. Explanation about the research and verbal consent to participate was asked. Patient satisfaction was assessed using Charleston Psychiatric Outpatient Satisfaction Scale. Multivariable logistic regression, with 95% CIs was used to show the strength of associations, and P-value <0.05 was considered as statistically significant.

Result: A total of 404 respondents were invited in the study and 398 responded, giving a response rate of 98.5%. The overall satisfaction of patients at SPHMMC psychiatry out patient service was 70.4%. Being divorced (adjusted odds ratio (AOR) = 0.02, 95% CI: 0.004, 0.15), being from urban areas (AOR = 0.54, 95% CI: 0.15, 0.89), being unemployed (AOR = 0.39, 95% CI: 0.10, 1.47), having poor insight about one's own illness (AOR = 0.56, 95% CI: 0.26, 1.24), thinking the treatment won't help (AOR = 0.18, 95% CI: 0.08, 0.39), having comorbid physical illness (AOR = 1.07, 95% CI: 0.33, 3.47), being affected by the price of medication (AOR) = 0.52, 95% CI: 0.25, 1.10), being antisocial (AOR) = 0.46, 95% CI: 0.11, 1.87), feeling discrimination from others (AOR) = 0.65, 95% CI: 0.23, 1.80), having Psychotic illness (AOR) = 0.16, 95% CI: 0.06, 0.45) were found to be significantly correlated with poor satisfaction.

Conclusion and recommendation: About 30 % SPHMMC Psychiatric OPD service consumers were dissatisfied with the service. Psychoeducating patient's family and the society about mental illness and improving the availability and overall quality of all level of psychiatric service are recommended for good satisfaction.

Abbreviation

AOR: Adjusted Odds Ratio

CI(s): Confidence Interval

COR: Crude Odds Ratio

CPOSS: Charleston Psychiatric Outpatient Satisfaction Scale

ETB: Ethiopian Birr

G.C: Gregorian Calendar

OPD: Out Patient Department

SD: Standard Deviation

SPHMMC: Saint Paul's Hospital Millennium Medical College

SPSS: Statistical Package for the Social Science

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1. Introduction

1.1. Background

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 (1). Patient satisfaction is one desired outcome of mental health care service and core parameter for the positive evaluation of a mental health care system (2). 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 (3).

A dissatisfied patient is not psychologically and socially well becoming evident of lack of goal attainment by the service provider or the clinician. Satisfied patients are likely to exhibit favorable behavioral intentions, which are important for long-term success of the health care providers and are more likely to complete treatment regimens and be compliant and cooperative (4). Patient satisfaction is one of the yardsticks to measure the success of mental health service (5).

Over the last few decades, patient’s opinion regarding the assessment of services has acquired great importance. Patient satisfaction is playing an increasingly important role in quality of care reforms and health-care delivery (6). However, patient satisfaction studies are challenged by the lack of a universally accepted definition and by a dual focus: while some researchers focus on patient satisfaction with the quality of health-care services received others focus on people’s satisfaction with the health system. The significance of both perspectives has been demonstrated in literatures (1).

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, form of treatment and quality of care, treatment process and results, and payment for psychiatric services (7). Different studies also indicated that, other than the quality of service delivery, satisfaction is also affected by many factors such as patients’

demographics, diagnosis and duration of disease(8), treatment program, and patients' expectation of service (9).Three most important issues identified in a recent study were that the patients expected their psychiatrist to listen to them, explain the cause of their illness and offer appropriate symptomatic treatment (10).

It is indicated that health care systems in most developing countries suffer from serious deficiencies in financing and efficiency and are poorly prepared to meet the challenges related to patient satisfaction (11). Availability, accessibility and quality of service are the first cause of Psychiatric patient dissatisfaction in Ethiopia. Mental illnesses are common in Ethiopia; they are associated with a high burden due to disability and mortality. Despite the existence of affordable and effective treatments, less than one in 10 of the most severely affected people ever receive the treatment they need (12).

There is one dedicated psychiatric hospital in Addis Ababa with 268 beds, namely Amanuel Specialized Mental Hospital. The number of trained mental health professionals is wholly inadequate for providing services to Ethiopia's 80 million populations. Currently, there are 40 practicing psychiatrists in the country, 461 psychiatric nurses (there is no accurate estimate of those still working in mental health), 14 psychologists (none of whom have training in clinical psychology), three clinical social workers, and no occupational therapists. Comprehensive, decentralized and integrated mental health service at the primary health care level is the vision of National Mental Health Strategy of Ethiopia (12).

This study will assess patients' satisfaction and associated factors at SPHMMC Psychiatry outpatient service, at Addis Ababa, Ethiopia and provide important information which can be used to point necessary improvements to be made in the Psychiatric service delivery, for greater patient satisfaction and compliance and improved care.

1.2. Statement of the Problem

Symptomatic improvement of a patient is being used as the only parameter for the evaluation of a mental health care system but reliance on psychiatric symptoms alone as a measure of service satisfaction is a narrow concept (13).Very little is known

about the issues considered important to the psychiatric patients from developing countries which, if addressed, would be a great help in improving doctor patient relationship, patient satisfaction and compliance with treatment (10).

In Ethiopia, even though mental illness is the leading non-communicable disorder in terms of burden, comprised 11% of the total burden of disease, out-ranking HIV/AIDS, enough attention was not given for the problem. Since 10 years back, it was planned by the FMOH for the mental health services to work to be responsive to the needs and choices of individuals with mental illness and their care givers, but very little is known about psychiatric patient needs and choices (14).

Despite psychiatric outpatient service being given in most of referral hospitals in Ethiopia, there had been lack of evidence that examined patients' satisfaction with the quality of psychiatric care based on sound theoretical frameworks. Therefore, it is imperative to consistently undertake surveys in the community or facility to introduce better services that fulfill patients' expectations (15).

Since SPHMMC is one of the hospital which provide psychiatry outpatients service, it is very important to have a study to determine the level of patient satisfaction and associated factors of psychiatric service consumers. With this research it is hoped to determine patient's satisfactory level at SPHMMC outpatient psychiatry service. The research will determine the factors that affect patient's satisfaction and it will also calculate the satisfaction difference in patients with different socioeconomic characteristics, disease type, disease severity illness duration, medication type, medication cost, living conditions, previous experiences, quality of care, waiting time, support of service, and outcome of care.

1.3. Rationale of the Study

Measurement of patients' satisfaction in psychiatric clinics is important because patients' satisfaction has been correlated with improved clinical outcomes and administrative measures of high-quality care.

It is worth keeping in mind that satisfaction with the treatment processes, treatment compliance, and positive treatment outcomes are inter-related. Patient's satisfaction is

a very important factor in every health facilities but it is more important in psychiatric patients, since most of psychiatry patients will be having a prolonged follow up and patient's satisfaction and good patient physician relationship is the most important part of Psychiatric treatment.

The research will give us information about the common factors that affect patient's satisfaction and how and how often type of mental illness, unpleasantly built environments, failure to obtain prescribed medications from the hospital pharmacies, long waiting hour's form of treatment and quality of care, treatment process and results, and payment for psychiatric services affect patients satisfaction at SPHMMC Psychiatry OPD.

2. Literature Review

In the last decade, there has been a growing interest in patient satisfaction as a measure of outcome and quality of care in psychiatry (16). Patient perspective in service evaluation is needed because objective outcome indicators in psychiatry are controversial (17). In addition, patient satisfaction is a factor in the care process, influencing intervention efficacy and consumer behavior such as compliance and service utilization (18). In addition, satisfaction appears to depend on the quality of care, as indicated by waiting time for appointments; support and service organization; and the outcome of care (that is, problem improvement as identified by patients)(19).

Several specific measures have been developed for evaluating patients' satisfaction in a variety of psychiatric settings, including inpatient (20) and outpatient (21) clinics. Furthermore, satisfaction has been shown to be associated with improved clinical outcomes and administrative measures of quality at the individual level (22), although it is not clear whether patients' satisfaction is a cause or an effect of changes in symptoms. Charleston Psychiatric Outpatient Satisfaction Scale is one of this satisfaction measurement scales. A study on reliability and preliminary validity of the Scale for use in outpatient settings, provide preliminary support for the reliability and validity of the Scale and designed for use with adult psychiatric outpatients. The Satisfaction Scale was validated in Nigeria and showed good validity and readability to be used in low- and middle-income countries (23).

Research on health system satisfaction, which is largely relative, has identified ways and means to improve health, reduce costs and implement reform (24). Thus satisfaction is associated with compliance and health outcome and its measurement may raise issues that are often overlooked by the service providers. In order to evaluate the possible influence of therapeutic non-compliance on the clinical outcomes, numerous studies using various methods have been conducted worldwide to evaluate the rate of therapeutic compliance in different diseases and different populations (25). Generally the compliance rate for the long-term medication therapies was between 40–50%, though, for short term therapy, it was much higher at between 70–80% while the compliance with life-style changes was the lowest at between 20-30% (26).

In an analysis of literature on satisfaction with mental health services between 1955 and 1983, chronically ill patients were found to be less satisfied with treatment than nonchronically ill patients (27). Further studies in the last 10 years have begun to investigate the relation between patient satisfaction and type of psychiatric diagnosis. Different studies showed that the global level of patient satisfaction to psychiatric services ranges from 39.3% to 91.9%, with 39.3% in London,(28) 44.8% in the university hospitals of Canada and USA,(29) 57% in India,(30) 90% in Ireland, (31) and 91.9% in South Africa (32).

Researchers in Denmark found patients diagnosed as suffering from affective and adjustment disorders or from reactive psychoses to be more satisfied than patients with schizophrenia or personality disorders. Patients receiving antidepressant treatment were particularly satisfied (33). Similarly, Canadian researchers found the greatest level of patient dissatisfaction and the lowest level of patient–therapist agreement in patients suffering from schizophrenia and other psychotic disorders. They linked their findings to therapists’ underestimation of non biological treatment aspects, such as social support (34).

In another research done in Canada, on patient satisfaction with outpatient Psychiatric treatment, patients with disorders following an episodic course (that is, affective, anxiety, or adjustment disorders) were significantly more satisfied (mean 9.8, SD 2.5) with treatments than the patients with chronic disorders, such as somatoform, eating,

and personality disorders (mean 7.9, SD 2.7). Patients treated with a combination of psychotherapy and pharmacotherapy (n= 53, mean 9.7, SD 2.4) were numerically but not statistically more satisfied than patients treated with psychotherapy alone (n= 44, mean 8.8, SD 3.0). The treatment with antidepressants in particular was also not associated with satisfaction. The factors sex, age, pharmacotherapy, number of treatment sessions, and days between treatment and assessment did not have a significant effect on patient satisfaction. However, the presence of a chronic disorder was significant predictor for dissatisfaction (35).

In research done in Pakistan, on patients satisfaction on mental health service, it was found that 9.3% participants were dissatisfied, 18.7% were mildly satisfied and 72% were mostly satisfied and the principal reasons for dissatisfaction being the patient's lack of insight into the illness and inability to afford the cost of the prescribed medications. It also revealed a significant association of age with patient satisfaction ($p < 0.05$), while there was no association of gender ($p > 0.05$) and economic status ($p > 0.05$) with patient satisfaction (36).

In Institution based cross-sectional study done in Ethiopia, on 2014 G.C, to assess patients' satisfaction and associated factors among outpatients receiving mental health services at Amanuel Mental Specialized Hospital satisfaction level of patients' was 78.3%. Among the factors studied, educational status, waiting time preceding the service and type of diagnosis were found to be statistically significant (37). The satisfaction level was found to be good, which was found higher than those of the studies done in Canada and USA, (29) India, (30) and London, (28) but lower than those studies done in Ireland, (31) and South Africa (32).

The satisfaction level at Amanuel Mental Specialized Hospital was found to be higher than the same research done in Ethiopia at Dessie Referral Hospital. Researches done in Denmark, Canada, Pakistan agree with significance of educational status, type of diagnosis and waiting time for patients satisfaction but in the research done in Dessie, educational status was found to be insignificant but it agrees with the other researches with waiting time and type diagnosis. Though the level of satisfaction was good on research done at Amanuel Mental Specialized Hospital, the research doesn't use CPOSS and from several other researches there are still areas requiring

improvement that the hospitals need to strive to maintain high standard of care in order to keep the patients satisfied with the service delivered.

A cross-sectional study conducted at Dessie Referral Hospital to assess the level of patient satisfaction and associated factors of psychiatric service consumers on 2015 using CPOSS, the overall satisfaction of respondents was 61.2%. The three items for which most patients showed higher satisfaction were monthly service bill (93.4%), appearance of the office (85.5%), and distance from transportation (84.4%). The three items for which most patients showed lower satisfaction were amount of waiting time (49.4%), location of the outpatient service (46%), and appearance of the waiting area (67.3%).

On the research done at Dessie Referral Hospital the psychiatric outpatient service satisfaction in relation to all explanatory variables, sex, marital status, residence, type of mental illness, attitude toward the outpatient psychiatric clinic, and social functioning were found to be significantly associated. Male respondents were associated with less satisfaction as compared to females ([AOR] =0.61, 95% CI: 0.39, 0.94). The possible reason may be males show poor adherence to treatment and higher use of psychoactive substance that make them less responsive to psychiatric treatment. Patients who were widowed were less satisfied than those who were married (AOR=0.13, 95% CI: 0.05, 0.36]. Participants dwelling in the urban residence were less satisfied with the psychiatric service than their counterparts (AOR =0.49, 95% CI: 0.31,0.78). This might be explained by the fact that those who are widowed are more likely to be prone to psychological distress and adjustment difficulties, which in turn might affect the satisfaction. Respondents with a diagnosis of schizophrenia were less likely to be satisfied as compared to major depressive ones (AOR =0.48, 95% CI: 0.28, 0.81).

Concerning the patient attitude toward the outpatient psychiatric service at Dessie Hospital, those who had unfavorable attitude (AOR =0.49, 95% CI: 0.28, 0.86) were less likely to be satisfied as compared to those who had favorable attitude. The possible reason might be that unfavorable attitude toward the service will create a negative environment in doctor–patient relationship that can decrease compliance and trust of treatment and increase dropout from follow-up. Other significant association

was found between social functioning of patients and satisfaction where those participants who had poor social functioning were less likely to be satisfied than those who had good social functioning (AOR =0.52, 95% CI: 0.34, 0.80). On the other hand, education, distance from the health service facility, and wealth index had no statically significant association with outpatient psychiatric service satisfaction (5).

Magnitude of satisfaction in the survey done at Dessie hospital was consistent with the study done in India, which was 57%. And it was found be slightly higher than those of the studies done in London, USA and Canada, and Qatar but lower than researches in Pakistan, South Africa, and Ireland. Generally, in the study, the satisfaction level of patients was found to be low. Being male, widowed, diagnosed with schizophrenia, urban residence, unfavorable attitude, and poor social functioning were found to have a statistically significant association with satisfaction. Integrating patients to their own treatment plan and regular service evaluation are important to improve satisfaction. Moreover, working on the attitudes of psychiatric service consumers may increase the level of patient satisfaction.

3. Objective

3.1. General objective

To assess patient satisfaction and associated factors in outpatient Psychiatry service at St Paul's Hospital Millennium Medical College, Addis Ababa, Ethiopia.

3.2. Specific objectives

1. To assess the level patient satisfaction in outpatient Psychiatry service at St Paul's Hospital Millennium Medical College, Addis Ababa, Ethiopia.
2. To identify factors that affect patient satisfaction in outpatient Psychiatry service at St Paul's Hospital Millennium Medical College, Addis Ababa, Ethiopia.

4. Methods and material

4.1. Study Setting

Saint Paul's Hospital Millennium Medical College is located in Addis Ababa, Ethiopia. It currently has 392 beds, with an annual average of 200,000 patients and a catchment population of more than 5 million. Approximately 75% of the patients receive medical services free of charge. There are over 1300 clinical and non-clinical staffs in.

The Department of Psychiatry, St. Paul's Hospital Millennium Medical College is one of the oldest psychiatry departments in Ethiopia. It was established with an outpatient general adult psychiatry clinic. A five bed inpatient unit for treatment of substance use disorders which was inaugurated in 2011. In 2014, an outpatient unit for was established. In addition to catering psychiatric services, the department has been a.

4.2. Study Population

All Patients attending at SPHMMC Psychiatry OPD from June 2017G.C to July 2017 G.C.

4.3. Study Subjects

Inclusion criteria

- All psychiatric patients age greater than or equal to 18 years.
- All psychiatry patients who were on follow up for at least 6 months.

Exclusion criteria

- Patients who were not be able to communicate due to illness.

4.4. Study Design

A cross-sectional study was conducted from June 2017G.C to July 2017G.C to assess the level of patient satisfaction and associated factors in outpatient psychiatric service at Saint Paul's Hospital Millennium Medical College.

4.5. Sample Size

The sample size was estimated using information from research done at Dessie Referral hospital on Satisfaction and Associated Factors of Outpatient Psychiatric Service Consumers in Ethiopia, with 95% confidence interval, the satisfaction rate was 61.2%. Margin of error is 0.05.

$$n = \frac{Z_{\alpha/2}^2 p(1-p)}{d^2}$$

$$n = \frac{(1.96)^2 0.612(1-0.612)}{(0.05)^2} = 365$$

$$n = 365$$

Sample size was calculated to be 365 plus 10% non response rate = 404

4.6. Sampling Procedure

Systematic random sampling technique was used to recruit the participants. 20 working days was used to collect the data, so 20 to 25 patients were interviewed daily. On average 120 patients visit the Psychiatry OPD for follow up, so with systemic randomization every 6th patient on waiting area were selected for an interview, after the first participant was selected by lottery method.

4.7. Variables of Study

Patients' level of satisfaction was the outcome variable and the independent variables were age, sex, religion, marital status, ethnicity, employment, educational status, economical status and residence, type of psychiatric diagnosis, duration of illness, number of medications and co morbid medical illnesses, patient's attitude toward service, and social functioning.

4.8. Operational Definition

Psychiatry: The branch of medicine dealing with the diagnosis and treatment of mental disorders.

Mental health: The psychological state of someone who is functioning at a satisfactory level of emotional and behavioral adjustment.

Insight: The correct attitude to morbid change in oneself

Discrimination: Treating a person or a particular group of people differently, especially in worse way from the way in which you treat other person, because of their skin color, sex, etc...

Satisfaction: The contentment one feels when one has fulfilled a desire, need, or expectation. The Charlestone Psychiatric outpatient satisfaction scale is used to assess patient's satisfaction at the service. Satisfaction is calculated used the 13 items questions. The answers to the questions were graded 1, 2, 3, 4, 5 for answers poor, fair, good, very good and excellent, respectively. The sum of the grade of 13 questions are added and put as a score of each participant the minimum value being 13, if the participant get 1 or poor in all the questions and the maximum is 65. The average score of all participant was found to be 41 .A participant who scored greater or equal to 41 is decided to have good satisfaction and a participant scores less than 41 is decided to have low satisfaction.

Charleston Psychiatric Outpatient Satisfaction Scale: A 15-item containing scale which can be used to assess the satisfactory level of a patient. It will be calculated by

adding the 13 items out of the 15. The scale contain 15 questions, including helpfulness of the professionals, information provided about payment for services, Amount of time waiting to be seen, Amount of information given to you about your problem, respect shown for your opinions about treatment, Matching of treatment plan to your individual needs, helpfulness of the services you have received, Overall quality of care provided, Appearance of the waiting area, Appearance of the office, Office hours, location of the outpatient service, Parking/distance of the clinic from public transportation, clear and correct monthly bill, Would you recommend this program to a friend or a family member?, Except would you recommend this program to a friend or a family member? and Overall quality of care provided the other 13 questions were used to calculate the satisfaction scale. The Satisfaction Scale was validated in Nigeria and showed good validity and readability to be used in low- and middle-income countries (23) and it was also used in research done in Ethiopia, Dessie hospital.

4.9. Data Collection Procedure (Instrument, personnel, data quality control)

4.9.1. Instrument and personnel

Data was collected by using structured interview. The interview paper was done in English language to keep the integrity of Charleston Psychiatric Outpatient Satisfaction Scaling system and to ease up the data entering process. The interview papers were number from 1 to 404. The morning room and the clerking offices were used for the interview. The interview was translated by the interviewer to Amharic or Afan Oromo depending on patient's language preference. One of the interviewers were selected to be able to speak both Amharic and Afan Oromo. The data was collected for 30 days from June to July 2017, 20 to 30 patients were interviewed per day. Two personnel were used to collect the data. The interviewers were tested for their fulfillment of the requirement by the principal investigator and ongoing corrections and discussions were made with the interviewers during the data collection process.

4.9.2 Data quality control

The data collection procedure was checked by the principal investigator at least 3 times per day, during the data collection process. The collected data were checked for completeness and accuracy, the clarity of the procedure during handling and storing them. The daily collected data was taken and stored by the principal investigator.

4.10. Data Processing and analysis

The coded data was entered into Epi Info software Version 3.5.3 and exported to SPSS Version 20 for analysis. The CPOSS was used to calculate the satisfaction scale. The scale was scored by summing each item, and satisfaction was considered to be high if the participant scored average and above of the scale. Descriptive statistics was used to describe the data. Bivariate and multivariable logistic regression analyses were used to ascertain the association between covariates 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.

4.11. Ethical consideration

Ethical clearance was requested from SPHMMC Psychiatry Department and SPHMMC Public Health Department. Participants were given the right to refuse the interview and to discontinue at any time they want. Confidentiality was maintained by interviewing the patients in a single room, by telling them that the interview will not have any effect on the service they are receiving, their name will not be mentioned and the information they have given will be anonymous. Informed consent was obtained from each participant.

4.12. Dissemination of Result

The result of the research will be presented to SPHMMC Public Health department, Psychiatry department and publication will be sought with peer reviewed journals.

5. Result

5.1. Socio demographic Characteristics

A total of 404 respondents invited in the study and 398 responded, giving a response rate of 98.5%. Out of the 398 study participants, 244 (61.3%) were males and 346 (36.7%) were between the age group of 28 years and 37 years. Of the total participants, 180 (45.2%) were Orthodox, 135 (33.9%) were Oromo and 260 (65.3%) were single. Among all study participants, 123(30.9%) secondary level educated and 104 (26.1%) were private workers. Out of the total participants 189 (47.5%) were from Addis Ababa, 357 (89.7%) were urban residents. Of the participants, 146(36.7%) spend less than or equal to 20 Ethiopian birr for transport and 152 (38.2%) has no monthly income (Table I).

Table I: Sociodemographic distribution Patients at SPHMMC, Psychiatry OPD, in 2017 (N=398)

Variables		Frequency	Percent
Age	less than 28	137	34.4
	28 to 37	146	36.7
	38 to 47	79	19.8
	48 to 57	34	8.5
	Above 57	2	0.5
Sex	Male	244	61.3
	Female	154	38.7
Religion	Orthodox	180	45.2
	Muslim	145	36.4
	Protestant	69	17.3
Ethnicity	Oromo	135	33.9
	Amhara	111	27.9
	Tigre	47	11.8
	Other	105	26.4
Marital Status	Married	100	25.1
	Single	260	65.3
	Divorced	25	6.3
	Widowed	13	3.3
Educational Status	Not Educated	55	13.8
	Primary	18	4.5
	Secondary	123	30.9
	Diploma	107	26.9
	Degree and above	95	23.9
Address	Addiss Ababa	189	47.5
	Oromia	169	42.5
	Others	40	10.1
Residence	Urban	357	89.7
	Rural	41	10.3
Transport Cost	Below 20	146	36.7
	21 to 100	188	47.2
	Above 100	62	15.6
Occupation	Government worker	85	21.4
	Private Worker	104	26.1
	Student	62	15.6
	Housewife	16	4.0
	Unemployed	90	22.6
	Other	41	10.3
Monthly Income	Below 2000	95	23.5
	2000 to 5000	124	30.7
	Above 5000	27	6.7

5.2. Clinical and patient related factors

According to the clinical characters of the participants, 126 (31.7) were found to have psychotic disorder, mostly Schizophrenia, and 113 (28.4%) were found to have Mood disorder such as Depression and Bipolar disorder. Of the respondents, 218 (54.8%) use single medication, 247 (62.1%) take their medication once per day and 109 (27.4%) of the participant spent less than 100 ETB for medication for month, Of total respondents 157 (39.4%) of the participant responds the price of medication affect their satisfaction in the service, 100 (25.8%) use single antidepressant, commonly Fluoxetine, Imipramine or Sertraline, and 135 (35.9) participants, thinks that the treatment they are receiving is not helping. Out of the participants about 252 (63.3%) were found to have insight about their mental illness, 50 (12.6%) were found to have comorbid physical illness, 103 (25.9%) were found to be ill for less than 2 years, 186 (46.7%) were on follow up for the past 1 up to 5 years and 130 (32.7%) come for follow up every 2 months. Out of the participants, 169 (42.5%) spend their day by working, 177 (44.5%) thinks that they are being discriminated by their family or friends and out of this 177, 68 (38.4%) thinks the discrimination affect their satisfaction at service (Table II).

Table II: Clinical and associated factors distribution of patients at SPHMMC, Psychiatry OPD, in 2017 (N=398)

Variables		Frequency	Percent
Type of illness	Mood Disorder	113	28.4
	Psychotic	126	31.7
	Anxiety	35	8.8
	Substance use	79	19.8
	Others	45	11.3
Medication number	No	48	12.1
	1	218	54.8
	2	112	28.1
	3	20	5.0
Medication Frequency	1	247	10.0
	2	102	63.5
	3	2	26.2
Medication price	Free	51	14.6
	Below 100	109	31.1
	100 to 200	146	41.7
	Above 200	44	12.6
Type of medication	Antipsychotic	82	21.1

	Antidepressant	100	25.8
	Anticonvulsant	12	3.1
	Antidepressant +antipsychotic	38	9.8
	Mood Stabilizer	19	4.9
	Antidepressant +sedatives	11	2.8
	Antipsychotic + antidepressant +sedatives	12	3.1
	Mood Stabilizer + antipsychotic	5	1.2
	Psychotherapy	55	14.2
Attitude to treatment	Good	238	63.3
	Poor	135	33.4
Insight	Good	252	63.3
	Poor	143	35.9
Comorbid physical illness	Yes	50	12.6
	No	343	86.4
Duration of illness	Below 2 years	103	25.9
	2 to 5 years	145	36.4
	Above 5 years	150	37.7
Duration of Follow-up	6mo to 1 year	153	38.4
	1 to 5 years	186	46.7
	Above 5 years	59	14.8
Frequency of visit	weekly	20	5.0
	2 weeks	55	13.8
	3 weeks	13	3.3
	1 month	127	31.9
	2 months	130	32.7
	3 months	52	13.1
Casual Day	Sleeping alone	51	12.8
	Watching TV, reading	51	12.8
	Talking with others	126	31.7
	Working	169	42.5
Discrimination	Yes	177	44.5
	No	213	53.5

5.3. Satisfaction of psychiatry service consumers

The overall satisfaction of patients at SPHMMC psychiatry out patient service was 70.4%. Using CPOSS, each participant get a score for each 13 items which range from 1 to 5. Higher satisfaction for each question is calculated depending on the percentage of the participants who score above or equal to the average score of all participants in the specific question. Higher satisfaction scale was found, in clear and correct monthly bill (92.9 %), Office hours (87.2%), Appearance of the office (88%) and in Parking/distance of the clinic from public transportation (87%) (Table III).

Table III: Distribution of satisfaction in each question of CPPOS, at SPHMMC Psychiatry OPD, in 2017 (N=398)

CPOSS Items	High satisfaction		Low satisfaction	
	Frequency	Percent (%)	Frequency	Percent(%)
helpfulness of the professionals	233	58.6	163	41.4
information provided about payment for services	168	42.4	228	57.6
Amount of time waiting to be seen	262	66.4	133	33.6
Amount of information given to respect shown for your opinions about treatment	158	39.9	237	60.1
Matching of treatment plan to your individual needs	229	58	166	42
helpfulness of the services you have received	252	63.8	143	36.2
Appearance of the waiting area	272	68.8	123	31.2
Appearance of the office	249	63.1	146	36.9
Office hours	348	88	47	12
location of the outpatient service	345	87.2	50	12.8
Parking/distance of the clinic from clear and correct monthly bill	141	35.8	254	64.2
	344	87	51	13
	367	92.9	28	7.1

5.4. Factors associated with satisfaction of outpatient psychiatry service

During the analysis of psychiatric outpatient service satisfaction in relation to all variables, significant association was found with marital status, residence, occupation, insight about their mental illness, thought about helpfulness of treatment, non mental illness, effect of price of medication on satisfaction, how they spent casual day, discrimination, and type of illness. Married participants at outpatient psychiatry service were found to have higher satisfaction compared to divorced participants (adjusted odds ratio (AOR) = 0.02, 95% CI: 0.004, 0.15).

Participant from urban areas were found to have lower satisfaction when compared to those from rural areas, (AOR = 0.54, 95% CI: 0.15, 0.89). Patients with poor insight about their mental illness were less likely to be satisfied than those with good insight (AOR = 0.56, 95% CI: 0.26, 1.24). Participants who are unemployed were found to

have significantly lower satisfaction when compared to those who are employed. Government workers were found to have higher satisfaction than unemployed (AOR =0.39, 95% CI: 0.10, 1.47). The participant who think treatment of psychiatric problems help, were more satisfied than the counter parts (AOR = 0.18, 95% CI: 0.08, 0.39).

Patients without comorbid non psychiatric medical illness were more satisfied than the counterparts (AOR = 1.07, 95% CI: 0.33, 3.47). Participants who respond not to be affected by the price of medication were more satisfied than the counter parts (AOR) =0.52, 95% CI: 0.25, 1.10). Patients who spent their casual day by working were found to be more satisfied than those who spent it by sleeping or sitting alone (AOR) = 0.46, 95% CI: 0.11, 1.87).

Participants who doesn't feel discrimination from family member or friends were found to be more satisfied than the counterparts (AOR) =0.65, 95% CI: 0.23, 1.80). Participants who has Psychotic illness were less satisfied than patients with Mood Disorder (AOR) =0.16, 95% CI: 0.06, 0.45).

On the other hand age, sex, religion, ethnicity, education, address, transport cost, income, duration of illness and follow up, and medication frequency and type, didn't have statistically significant association (Table IV).

Table IV: Factors associated with patient satisfaction at SPHMMC, Psychiatry OPD, in 2017 (N=398)

Variables		Satisfaction		COR	AOR
		High	Low		
Marital Status	Married	87	13	1	1
	Single	186	74	0.38(0.19 -0.71)	0.32(0.1-0.88)
	Divorced	3	22	0.02(0.05-0.078)	0.02(0.004-0.15)**
Residence	Urban	245	112	0.37(0.15-0.91)	0.54(0.15-1.89)*
	Rural	35	6	1	1
Occupation	Government	64	21	1	1
	Private	87	17	1.67 (0.83-3.47)	0.67(0.19-2.26)
	Student	42	20	0.68(0.33-1.42)	0.71(0.16-3.12)
	Housewife	13	3	1.42(0.36-5.47)	0.67(0.05-9.24)
	Unemployed	49	41	0.39(0.20-0.74)	0.39(0.10-1.47)**
	Others	25	16	0.51(0.23-1.13)	0.47(0.11-1.95)
Insight	Good	190	62	1	1
	Poor	88	55	1.53(0.13-17.18)	0.56(0.26-1.24)**
Attitude to treatment	Good	201	37	1	1
	Poor	64	71	0.16(0.10-0.27)	0.18(0.08-0.39)**
Comorbid physical illness	Yes	29	21	0.52(0.28-0.97)	1.07(0.33-3.47)*
	No	248	95	1	1
Medication price affect satisfaction?	Yes	100	57	0.50(0.31-0.80)	0.52(0.25-1.10)**
	No	153	44	1	1
Casual Day	Sleeping alone	23	28	0.16(0.08-0.32)	0.46(0.11-1.87)**
	Watching TV,	27	24	0.22(0.11-0.44)	0.31(0.07-1.22)
	Talking	89	37	0.47(0.27-0.83)	0.64(0.21-1.96.)
	Working	141	28	1	1
Discrimination affect satisfaction?	Yes	32	36	0.27(0.15-0.47)	0.65(0.23-1.80)**
	No	244	75	1	1
Type of illness	Mood	98	15	1	1
	Psychotic	72	54	0.24(0.10-0.39)	0.16(0.06-0.45)*
	Anxiety	30	5	0.91(0.30-2.73)	0.66(0.11-3.81)
	Substance	54	25	0.20(0.09-0.46)	0.07(0.02-0.27)
	Others	26	19	0.33(0.16-0.68)	0.20(0.05-0.69)

Note: * = P value < 0.05, ** = P value < 0.01

6. Discussion

The overall prevalence of satisfaction in this study was 70.3%. The satisfaction prevalence found in this study was found to be higher than those of the studies done in London,(28) USA and Canada, (29) India and Qatar,(31) which reported prevalence rates of 39.3%, 44.8%, 57 %, and 49%, respectively. It is also higher than the research done in Ethiopia, at Dessie Referral Hospital, 61.2% (8).But, the prevalence satisfaction in this study was found to be lower than studies done in Nigeria (83%) (31), Durban (91.9%)(32), Pakistan (90.7%) (36) and Ireland (90.7%) (38). It was also slightly lower than the finding from Sweden (77%), (39) and Copenhagen (80.4%) (28). In this study the level of satisfaction was found to be moderate, it might be probably due to the absence of payment for the service, and the overall quality of the service.

In this research age, sex, educational status, address, wealth, distance from health service, and medication type were not significantly associated with satisfaction as in other previous studies in Pakistan (younger age),(36) USA and Canada (lower education),(29)London (28) and South Verona (paid employment), and in Dessie, Ethiopia (female sex) (8). Number , and type of medication were found to have no significant relation with patient satisfaction, which was also seen in research done in Canada, Patients treated with a combination of psychotherapy and pharmacotherapy were numerically but not statistically more satisfied than patients treated with psychotherapy alone. The treatment with antidepressants in particular was also not associated with satisfaction (35).

In this research, patients who are married and patients who are from rural area were found to have higher satisfaction, this was also seen in research done in Ethiopia, Dessie hospital(8). Patients who are married were found to higher satisfaction, this might be explained by the fact that those who are widowed or divorced are more likely to be prone to psychological distress and adjustment difficulties, which in turn might affect the satisfaction (35). Patient who come from rural area were found to have higher satisfaction, but except the study done in Dessie hospital, there was no significant association between residency and satisfaction in previous studies. A possible explanation for the higher satisfaction in those from rural area seems to be

that satisfaction of patients is dependent on their personal beliefs and expectations about the service. Patients from urban residence come with more expectation from the service as a result of alternative service experience, improved living style, increasing information access about medical service, and higher education, while this is not true for the rural ones.

In the study participants who are unemployed were found to have significantly lower satisfaction than the employed ones. no significant association were found between patient's occupation and satisfaction, but this can be explained with the fact that having a job and being able to do one's own work is an indication of improved mental health status, which can increase satisfaction on the service. In this research insight to the illness and medication price were found to have significant association with satisfaction, this was also seen in research done in Pakistan that, the principal reasons for dissatisfaction was the patient's lack of insight into the illness and inability to afford the cost of the prescribed medications. In the research participants, who don't think the treatment will help were found to have significant lower satisfaction, it was also seen in study done in India (30), and in Dessie hospital (8), patients with unfavorable attitude were found to have a significant lower satisfaction. The possible reason might be that unfavorable attitude toward the service will create a negative environment in doctor-patient relationship that can decrease compliance and trust of treatment and increase dropout from follow-up. Since insight about mental illness and social isolation can be used to assess the severity of a mental illness. In this study both of them were found to have significant association with satisfaction, so it is possible to conclude that severity of the illness can has significant association with satisfaction.

Patients with other physical illness were found to have significantly lower satisfaction. This may be explained with the fact that patients with multiple diseases will have lesser satisfaction with the health service. This study have also found Patients who spend their casual day by working were found to have significantly higher satisfaction, this was also seen in research done in India, Canada and Dessie hospital Ethiopia (8). Patient who feel they are being discriminated by their family or friends were found to have lower satisfaction. This might be explained by, discrimination from others, especially from family or friends will affect the patients

feeling and will make them feel lonely and decrease their desire for the service. In this research patients with Mood disorder or Anxiety disorder were found to have significantly higher satisfaction than patients with Psychotic disorder, this goes with a researchers in Denmark, which found patients diagnosed as suffering from affective and adjustment disorders or from reactive psychoses to be more satisfied than patients with schizophrenia or personality disorders. Patients receiving antidepressant treatment were particularly satisfied (33). And a research made in Canada, which found the greatest level of patient dissatisfaction and the lowest level of patient–therapist agreement in patients suffering from schizophrenia and other psychotic disorders (35). Type of diagnosis were also found to have significant relation with satisfaction in research done in Pakistan (36), USA(29), Switzerland and in institution based cross-sectional study done in Ethiopia, Amanuel Mental Specialized Hospital, on 2014 G.C,

7. Strength and limitation

The strength of this research include, well organized data collection and analyzing process, keeping the willing and privacy of participants during the interview. The availability of many references about patient satisfaction from different part of the world. CPOSS was used to assess patients’ satisfaction. The limitation of this study includes some difficulty on deciding on reliability of response from psychiatric patients. Difficulty, in getting the full trust of the participants. Limitation of amount and quality of response which was given by psychiatric patients.

8. Conclusion

In this research, the satisfaction with the outpatient psychiatry service was found to be moderately high. Being divorced or widowed, urban residence, being unemployed, poor insight, bad attitude for treatment, prescience of physical illness, high medication price, social isolation, others discrimination and being schizophrenic were found to have statistically significant association with lower satisfaction. Severity of the illness was also found to have significant association with satisfaction since it can be explained by insight about their disease and social isolation. Participants who feel discrimination from family and friends were found to have significantly low satisfaction. Working on psychoeducation for the family about discrimination would help to increase satisfaction. It would also be important to do a more detailed research on pattern, effect and possible solutions of discrimination from others.

9. Recommendation

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 (3). So according this research, the family member and the friends of Psychiatric patients should give positive support for the patients. They should give time to talk to patients, motivate patients to involve in social events and entertaining activities, and advice patients to do simple works in the house, like cleaning the house and washing their own cloths. It is also recommended to avoid discriminating patients because of their psychiatry problem. Health professionals in psychiatry should involve patients and family members in the treatment process. They should give enough information for patients about their illness and its progress and give time for patients to express their idea and respect their opinion. Health professionals should give advice for their patients for early start of a job, or school, to participate in any working activity, social activities, and spend their time by talking with their friends or family members. Psycho education should also be given to family members of the patient to support the mentally ill patient and avoid discrimination of patients. Special attention should also be given for patients with Psychotic illness and poor insight, since they are found to have lower satisfaction. In patients with co morbid medical

illness the professional should also involve in treatment of co morbid illness. SPHMMC, Psychiatry department should involve in teaching the society about mental illness, that it can be treated, to improve the awareness and attitude for the society about mental illness. Considering decreasing the price of the service, and the medication for patients who are unable to pay is also advisable. The government must work to increase the people awareness and attitude about mental illness and should try to expand Psychiatric service and professional to deferent areas of Ethiopia. It is recommended to do further researches on patient's satisfaction in different department of this hospital and also in different hospitals of Ethiopia. Researchers can do further research on effect of service giving process and other hospital staff on patients satisfaction.

Reference

1. Bleich S, Özaltın E, Murray C. How does satisfaction with the health-care system relate to patient experience? *Bull World Health Organ* 2009;87(4):271–8.
2. Blenkiron P, Hammill CA. What determines patients' satisfaction with their mental health care and quality of life? *Postgrad Med J*. 2003; 79(932):337–340.
3. Boyer L, Lançon C, Baumstarck K, Parola N, Berbis J, Auquier P. valuating the impact of a quality of life assessment with feedback to clinicians in patients with schizophrenia: randomised controlled trial. *Br J Psychiatry*. 2013;202(6):447–453.
4. Osborn DPJ, Lloyd-Evans B, Johnson S, et al. Residential alternatives to acute in-patient care in England: satisfaction, ward atmosphere and service user experiences. *Br J Psychiatry Suppl*. 2010;197(suppl 53).
5. Solomon Y, Zegeye Y, Wondale G, et al. satisfaction and associated factors of outpatient psychiatric service consumers. patient preference and adherence 2016: (10): 1847 - 1852.
6. Edlund M, Young A, Kung F, Sherbourne CD, Wells KB. Does Satisfaction Reflect the Technical Quality of Mental Health Care? *Health Serv Res* 2003;38:631–45.
7. Abdosh B. The quality of hospital services in eastern Ethiopia: patient's perspective. *Ethiop J Health Dev*. 2006; 20(3):199–200.
8. Wright SM, Craig T, Campbell S. Patient satisfaction of female and male users of veterans health administration services. *J Gen Intern Med*. 2006;21(suppl 3):S26–S32.
9. Jackson JL, Chamberlin J, Kroenke K. Predictors of patient satisfaction. *SocSci Med*. 2001;52(4).
10. Channa R, Siddiqi MN. What do patients want from their psychiatrist? A cross sectional questionnaire based exploratory study from Karachi. *BMC Psychiatry* 2008;8:14.
11. Bruckner TA, Scheffler RM, Shen G, et al. The mental health workforce gap in low- and middle-income countries: a needs-based approach. *Bull World Health Organ*. 2011;89(3).
12. Federal Ministry of Health's (FMOH), National Mental Health Strategy (2012/13 – 2015/16). Ethiopia.
13. Powell RA, Single HM, Lloyd KR. Focus groups in mental health research: enhancing the validity of user and provider questionnaires. *Int J Soc Psychiatry*. 1996;42(3):193–206.
14. World Health Organizatio(WHO), Mental Health Atlas. Department of Mental Health and Substance Abuse. Ethiopia 2011.
15. Ahmad I, Din SU. Patients satisfaction from the health care services. *Gomal J Med Sci*. 2010;8(1):95–97.
16. Svensson B, Hansson L. Patient satisfaction with inpatient psychiatric care. The influence of personality traits, diagnosis and perceived coercion. *ActaPsychiatrScand* 1994;90:379– 84.
17. Kazdin AE. The meanings and measurement of clinical significance. *J Consult ClinPsychol* 1999;67:332–9.
18. Ruggeri M. Patients' and relatives' satisfaction with psychiatric services: the state of the art of its measurement. *Soc Psychiatry Psychiatric Epidem* 1994;29:212–27.
19. Shipley K, Hilborn B, Hansell A, Tyrer J, Tyrer P. Patient satisfaction: a valid index of quality of care in a psychiatric service. *ActaPsychiatrScand* 2000;101:330–3.

20. Babiker IE, Thorne P: Do psychiatric patients know what is good for them? *Journal of the Royal Society of Medicine* 86:28–30, 1993.
21. Glass AP: Identifying issues important to patients on a hospital satisfaction questionnaire. *Psychiatric Services* 46:83–85, 1995.
22. Holcomb WR, Parker JC, Leong GB, et al: Customer satisfaction and self-reported treatment outcomes among psychiatric inpatients. *Psychiatric Services* 49:929–934, 1998.
23. Ukpong DI, Mosaku SK, Aloba O, Mapayi B. Reliability and validity of a satisfaction scale in a Nigerian psychiatric out-patient clinic. *Niger J Psychiatry*. 2008;6(1):31–36.
24. DiMatteo MR. Patient adherence to pharmacotherapy: the importance of effective communication. *Formulary* 1995;30:596–8, 601–2.
25. Jin J, Sklar GE, Min Sen Oh V, Chuen Li S. Factors affecting therapeutic compliance: A review from the patient's perspective. *TherClin Risk Manag* 2008;4:269–86.
26. Blendon RJ, Schoen C, DesRoches C, Osborn R, Zapert K. Common concerns amid diverse systems: health care experiences in five countries. *Health Aff (Millwood)* 2003;22(3):106–21.
27. Lehman AF, Zastowny TR. Patient satisfaction with mental health services: a meta-analysis to establish norms. *Eval Program Plann* 1983;6:265–74.
28. Ruggeri M, Lasalvia A, Bisoffi G, et al; EPSILON Study Group. Satisfaction with mental health services in five European sites: results from the EPSILON study. *Schizophr Bull*. 2003;29(2):229–245.
29. Stein M, Roy-Byrne P, Craske M, et al. Quality of and patient satisfaction with primary health care for anxiety disorders. *J Clin Psychiatry*. 2011;72(7):970–976.
30. Holikatti P, Kar N, Mishra A, Shukla R, Swain S, Kar S. A study on patient satisfaction with psychiatric services. *Indian J Psychiatry*. 2012;54(4):327–332.
31. Lally J, Byrne F, McGuire E, McDonald C. Patient satisfaction with psychiatric outpatient care in a university hospital setting. *Ir J Psychol Med*. 2013;30(04):271–277.
32. Almeida R, Adejumo O. Consumer satisfaction with community mental health care in Durban: research. *Health SA Gesondheid*. 2004; 9(1):3–9.
33. Kelstrup A, Lund K, Lauritsen B, Bech P. Satisfaction with care reported by psychiatric inpatients. *Acta Psychiatr Scand* 1993;87:374–9.
34. Perreault M, Rogers WL, Leichner P, Sabourin S. Patients' requests and satisfaction with services in an outpatient psychiatric setting. *Psychiatr Serv* 1996;47:287–92.
35. Gregori H, Hanspeter M, Rosilla B. Patient Satisfaction With Outpatient Psychiatric Treatment: The Role of Diagnosis, Pharmacotherapy, and Perceived Therapeutic Change. *Can J Psychiatry*. 2004;49(5).
36. Naveed G, Khalid S, Fareed A, et al. Assessment of patient satisfaction with mental health service in a tertiary care setting. *J Ayub Med Coll Abbottabad*. 2011;23(1): 43–46.
37. Gari H. Assessment of patient satisfaction and associated factors towards mental health service at Amanuel Mental Specialized Hospital. Jimma University and the Khat Research Program. Ethiopia 2014.
38. Bener A, Ghuloum S. Gender difference on patients' satisfaction and expectation towards mental health care. *Niger J Clin Pract*. 2013; 16(3): 285–291.
39. Clinton D, Björck C, Sohlberg S, Norring C. Patient satisfaction with treatment in eating disorders: cause for complacency or concern? *Eur Eat Disord Rev*. 2004;12(4):240–246.

ANNEXES

Questioner

Hi, my name is YaredTesfaye, I am a medical Intern at SPHMMC and I am conducting a research for partial fulfillment of requirement for the degree of doctor of medicine on Assessment of patient satisfaction and associated factors in an outpatient Psychiatry department at SPHMMC. This is the interview for the research and your participation is very important. The data in this interview is fully confidential and will only be used for statistical purpose. Thank you for your participation and you have the right to discontinue the interview any time you feel discomfort.

Do you agree to participate on the interview?

☐ Yes ☐ No

Socio-demographic factor

1. Age _____

2. Sex ☐ Male ☐ Female

3. Religion

☐ Orthodox ☐ Islam ☐ Catholic ☐ Protestant ☐ Others

4. Ethnicity ☐ Oromo ☐ Amhara ☐ Tigre ☐ Other

5. Marital status ☐ Single ☐ Married ☐ Divorced ☐ Widowed

6. Educational Status

☐ Not educated ☐ Primary ☐ Secondary ☐ Diploma ☐ Degree and above

7. Address ☐ Addis Ababa ☐ Oromia ☐ Other _____

8. Residence ☐ Urban ☐ Rural

9. How much do you spend for transport to come to SPHMMC? _____

10. Occupation ☐ Jobless ☐ Has job _____
11. How much do you get per month? _____
12. Do you think you have mental illness? ☐ Yes ☐ No ☐ I don't know
13. Duration of illness, in months _____
14. How long have you been on follow up at SPHMMC Psychiatry OPD, in months _____
15. How frequent do you come for follow up per month? _____
16. Number of different medication? _____
17. How many times do you take medication per day? _____
18. Do you think treatment help? ☐ Yes ☐ No ☐ I don't know
19. Do you have any other non mental medical illness? ☐ Yes ☐ No ☐ I don't know
20. How much do you spend for month for you medication? _____
21. Does the price of medication affect you satisfaction on the service?
- ☐ Yes ☐ No ☐ I don't know
22. How do you spent you casual day?
- ☐ sleeping or Sitting alone ☐ Watching TV, reading books or listening music
- ☐ Talking with family or friends ☐ Working
23. Do you feel your family or your friends discriminate you because of your mental illness?
- ☐ Yes ☐ No ☐ I don't know
24. If the answer for the above question is "yes", does it affect you satisfaction about the survive at SPHMMC Psychiatry OPD
- ☐ Yes ☐ No ☐ I don't know

Charleston Psychiatric Outpatient Satisfaction Scale

CPOSS	Excellent	Very Good	Good	Fair	Poor	Not Apply
Score	5	4	3	2	1	N/A
Helpfulness of the professionals						
Information provided about payment for services						
Amount of time waiting to be seen						
Amount of information given to you about your problem						
Respect shown for your opinions about treatment						
Matching of treatment plan to your individual needs						
Helpfulness of the services you have received						
Overall quality of care provided						
Appearance of the waiting area						
Appearance of the office						
Office hours						
Location of the outpatient service						
Parking/distance of the clinic from public transportation						
Clear and correct monthly bill						
Would you recommend this program to a friend or a family member? (circle one)	Yes, Definitely	Yes, probably	No, probably not	No, definitely not		

To be filled from the chart

1. Type of illness

☐Mood disorder ☐Psychotic disorder ☐Anxiety ☐ Substance use disorder ☐ Alcohol use disorder ☐ others

2.specify _____

3. Type of medication