

Pathways to psychiatric care and factors associated with delayed help seeking behavior among psychiatric patients at Saint Paul's Hospital Millennium Medical College, Addis Ababa, Ethiopia.



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A thesis submitted to Saint Paul's Millennium Medical College psychiatry department as a partial fulfillment of post graduate program in psychiatry.

**November, 2022
Addis Abeba, Ethiopia**

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November, 2022

Addis Abeba, Ethiopia

APPROVAL SHEET

This is to certify that this specialty certificate qualification thesis entitled “Pathways to psychiatric care and factors associated with delayed help seeking behavior among psychiatric patients at Saint Paul’s Hospital Millennium Medical College, Addis Ababa, Ethiopia.” was carried out by Sewalem Anagaw and submitted to the Department of psychiatry in requirements for partial fulfillment of the specialty certificate of psychiatry with the regulation of University and meets accepted standards with respect to originality and quality.

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List of abbreviation

BSC	Bachelor of Science
DUMI	Duration of untreated mental illness
EMA	Ethiopian Medical Association
EPA	Ethiopian Psychiatric Association
JUSH	Jimma University specialized hospital
OPD	Outpatient department
PMI	Patients with mental illness
SPHMMC	Saint Paul's hospital millennium medical college
WHO	World health organization

Abstract

Background: Neuropsychiatric disorders account for about 14% of the global burden of disease. Many people living with mental disorders delay seeking psychiatric care from formal health facilities. Various factors contribute to delayed health seeking behavior including lack of knowledge about psychiatric disorders remains a major barrier to mental health care. An understanding of the process to seek care by patients who experience episodes of mental disorders may determine how and where they received the needed treatment. This study aimed to understand the pathways that put people with mental disorders traversed for psychiatric services, particularly where these individuals will first seek treatment and the factors that influence such pathways.

Method: A cross-sectional study was carried out with a total of 344 psychiatric patients visiting Saint Paul's Hospital Millennium Medical College's psychiatry outpatient department were enrolled in the study. Delayed health seeking behavior was assessed with WHO encounter form. The median duration used for delay of modern psychiatric services was 52.0 weeks. SPSSv.26 (SPSS for windows) was used for analysis and a multivariable logistic regression model was carried out. P value <0.05 was carried out for statistically significant for the final model.

Results: The study revealed that (51.2%, n=171) of the study participants contacted psychiatric hospital directly while the rest (48.8%, n=163) pass through different caregivers to reach a psychiatric hospital. Among those who came indirectly, 28.4% of them initially contacted religious/traditional healers, 12.9% contacted nurses/health officers, and 7.4% other doctors. The median over all delay was 40.0 weeks (IQR=88 weeks). The prevalence of delayed health seeking behavior above 52 weeks was 110(32.9%). Multivariable logistic regression Models showed that respondents with the diagnosis of addiction (AOR=6.37, 95% CI 2.28 to 17.79) and homelessness (AOR=2.37, 95%CI 1.04 to 5.40) were significantly associated with delayed health seeking behavior for psychiatric services with p value less than 0.05.

Conclusion: A significant proportion of patients were seeking care for their mental illness through different caregivers before coming to modern psychiatric care services. There is a need of early interventions should be done to help people seek care before different complications occur.

This study magnified the need to expand mental health services to the community and also the collaborative work that has to be done with religious healers and other traditional healers. Further studies are needed to explore the pathways to psychiatric care.

INTRODUCTION

1.1 Background

WHO conceptualizes mental health as a “state of wellbeing in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and can make a contribution to his or her community”(21)

Mental disorders a disease that affects cognition, emotion, and behavioral control and substantially interfere both with the ability of children to learn and with the ability of adults to function in their families, at work, and in the broader society (19).

Pathway to care is a comprehensive and systematized clarification of sources of care used by patients before seeking help from mental health professionals. An understanding of the process to seek care by patients who experience episodes of mental disorders may determine how and where they received the needed treatment. It is a rapid and reasonable method of studying the help-seeking behavior of mentally ill patients and their families(3).

Also, in Ethiopia mental illness is still under-recognized and has been attributed to supernatural sources and modern mental health services are scarce, inaccessible, and relatively expensive to the majority of the population(5). Therefore most people go to priests, traditional healers, magicians, and others for treatment and the majority of patients come to modern treatment after they tried and failed with all traditional treatments(6)

1.2 Statement of the problem

Mental disorders cover about 14 % of the global burden of disease which is associated with high levels of chronicity, morbidity, and premature mortality(1). However, there is a huge gap between the need for treatment and health-seeking behavior due to various factors(1). A lack of awareness about psychiatric disorders and the process to seek care remains major barrier to mental health care(2)

The majority of people with recent episodes of mental illnesses continue to go untreated, even in developed societies which left many nations searching for strategies to use their limited resources as efficiently as possible to lessen the burden given current constraints. Worldwide, few nations appear prepared to use widespread effective treatments to manage mental disorders causing tremendous morbidity, mortality, and impairment(4).

Neuropsychiatric disorders occur in people of all religions and all societies inflicting morbidity, mortality and disability-adjusted life years than physical illness of more than 450 million people worldwide(7). The WHO showed a huge gap between the demand for treatment and accessibility, especially in low and middle-income countries estimating 76% to 85% of people not getting treatment due to many problems to acquire treatment in these counties(8).

Despite the high prevalence and seriousness of mental disorders, multiple types of researches have indicated that there is a significant delay in seeking modern psychiatric treatment and many factors associated with it(9). Results of studies indicated mixed findings about the first source of help among patients with mental illness(10). While Seniat et al suggest that some consulted faith healers and non-psychiatrist allopath care providers, in other studies psychiatrists are followed by traditional healers and general practitioners(10). Delay in help-seeking behavior is affected by stigma, societal attitudes, lack of awareness, and under-recognition which causes poorer quality of life and outcome

However, at St Paul's Hospital, no scientific data were available indicating pathways to psychiatric care service. Therefore, this study had been conducted to assess the pathways to psychiatric care service and the associated factors that delay help-seeking among PMI. This type of study was very crucial to identify contributing factors to delayed psychiatric care and providing interventions for better treatment, prognosis, and outcome.

1.3 Significance of the study

The studies done so far, one from Northern Ethiopia and the other from South Western Ethiopia on the topic have been less representative of the country as it has been done in some places except for one research which has been done at Emmanuel Specialized Mental Hospital in 2003G.C. Bearing this in mind, studying the topic at St. Paul's Hospital was very crucial as the

one research which was done in Addis Abeba was long ago and no similar research was done before in the hospital.

The study would help to know the level of delay in seeking psychiatric care and associated factors. It aimed to create awareness among patients and their relatives about the importance of early psychiatric health-seeking behavior and attending mental health professionals as their first consultation to improve the diagnosis, treatment, and prognosis. This research is different from the two researches as it includes people who come from across the country.

2. Literature review

2.1 Global overview

76,012 respondents aged 18 and older were studied in a survey conducted across different countries to determine the gap between ages of onset for individual disorders and ages of first treatment contact for each disorder and extent of delay in initial help seeking behavior. Median delays greatly vary among cases ranging 3.0 to 30.0 years for anxiety disorders, 6.0 to 18.0 years for substance use disorders, 1.0 to 14.0 years for mood disorders. The problems in help-seeking were worse in developing countries, older cohorts, men and cases with earlier ages of onset which showed delays in first help-seeking behaviors were pervasive (1).

In another descriptive study consisting of 50 subjects having follow up at psychiatry de-addiction clinic in a private medical college in Bagalkot, Karnataka in India during 1st November 2016 to 31st December 2016 was done using A World Health Organization (WHO) pathways to care proforma was used to determine the socio-demographic details of patients (9). About 36% of patients had their first visit by medical practitioners, followed by psychiatrists and faith healers. Average delay of 44.14 months was found in reaching psychiatric services (9).

In a similar pilot study conducted in rural Cambodia, the median length of untreated mental (DUMI) of all participants was 34.8 ± 42.4 months, ranging from 0 to 240 days (8). Difference in hospital, gender, age, hospital access, education level, occupation, or economic status does not show difference in DUMI but diagnosis does. The DUMI for patients with schizophrenia and epilepsy was long, while the DUMI for patients with neurosis and substance use were short (8).

In a different cross sectional study done in India, to know the various reasons resulting in treatment delay in patients with psychosis where 25 subjects were recruited revealed that unawareness of illness, explanatory models of illness, stigma, financial constraints are the most common themes. Other themes like relation of symptoms with premorbid personality, life events, and absence of paternal support were also unfolded in the current study (2).

2.2 African overview

A cross-sectional descriptive study conducted in Tunisia, showed the average help seeking delay was 15 months (± 23.0) with a median of 6 months. The delay was more than 6 months in around 50% of the cases. The average age was 41.3 years ± 10.1 and the gender ratio was 1.2. Greater than the third of the study population visited a traditional healer in the first contact and 60% of the patients had recourse to a medical doctor. Hallucinations, sleep disorders and aggressive behavior were the first symptoms which motivated the first visit. The main reason of delayed consultation was lack of knowledge about psychiatric symptoms followed by illness beliefs and gradual onset of the illness(11).

Similarly, a cross-sectional study conducted in Accra, Ghana showed 26 % has had a mental disorder for 11 or more years; 55 % had for 1–10 years and 19 % had for less than a year. Totally, up to 48 % of patients first visited non-psychiatric treatment centers as their initial consultation. Nearly above 50% of the patients consulted directly to the formal public psychiatric facility as their initial source of help. Significant association was found between first point of contact for psychiatric care and patients' occupation. Those with no formal education were more likely to initially seek care from the formal public psychiatric hospital compared to those with secondary education(12).

2.3 Ethiopian overview

Locally, a cross-sectional study was conducted in Northern Ethiopia which showed the average 4 weeks' delay duration from problem onset to contact with first care provider, whereas contact with modern psychiatric services was 52.0 weeks. Divorced, single, and who perceived mental illness as shameful had delayed treatment seeking behavior, whereas participants with no history of substance use were less likely to have delayed treatment-seeking behavior (10).

A similar cross sectional study was done in Jimma, Ethiopia from March to April 2010 that showed an average delay of 52.1 weeks to contact modern mental health service. From the study 135 (35.2%) patients came directly to Jima University Specialized Hospital (JUSH). 50% of the patients sought traditional treatment before they visited the hospital. Persons who seek care earlier are those who presented with abdominal pain and headache. Significant association was found between delayed treatment and being in the age group 31-40 years (5).

In a research conducted to study pathways to psychiatric care using WHO encounter form at Emmanuel Specialized Mental Hospital in Addis Ababa over a 2-month period in 2003, among a total of 1044 patients interviewed 41% of patients first contacted mental hospital and the rest sought care from up to four different caregivers before arriving at the psychiatric hospital. Where the initial service was not received at the psychiatric hospital, 30.9% of patients sought care from priests/holy water/church. The average delay was 38 weeks to arrive at psychiatric hospital. The longest delays before arriving at the mental hospital were associated with having no formal education, joblessness, and diagnoses of epilepsy and physical conditions(13).

Conceptual framework

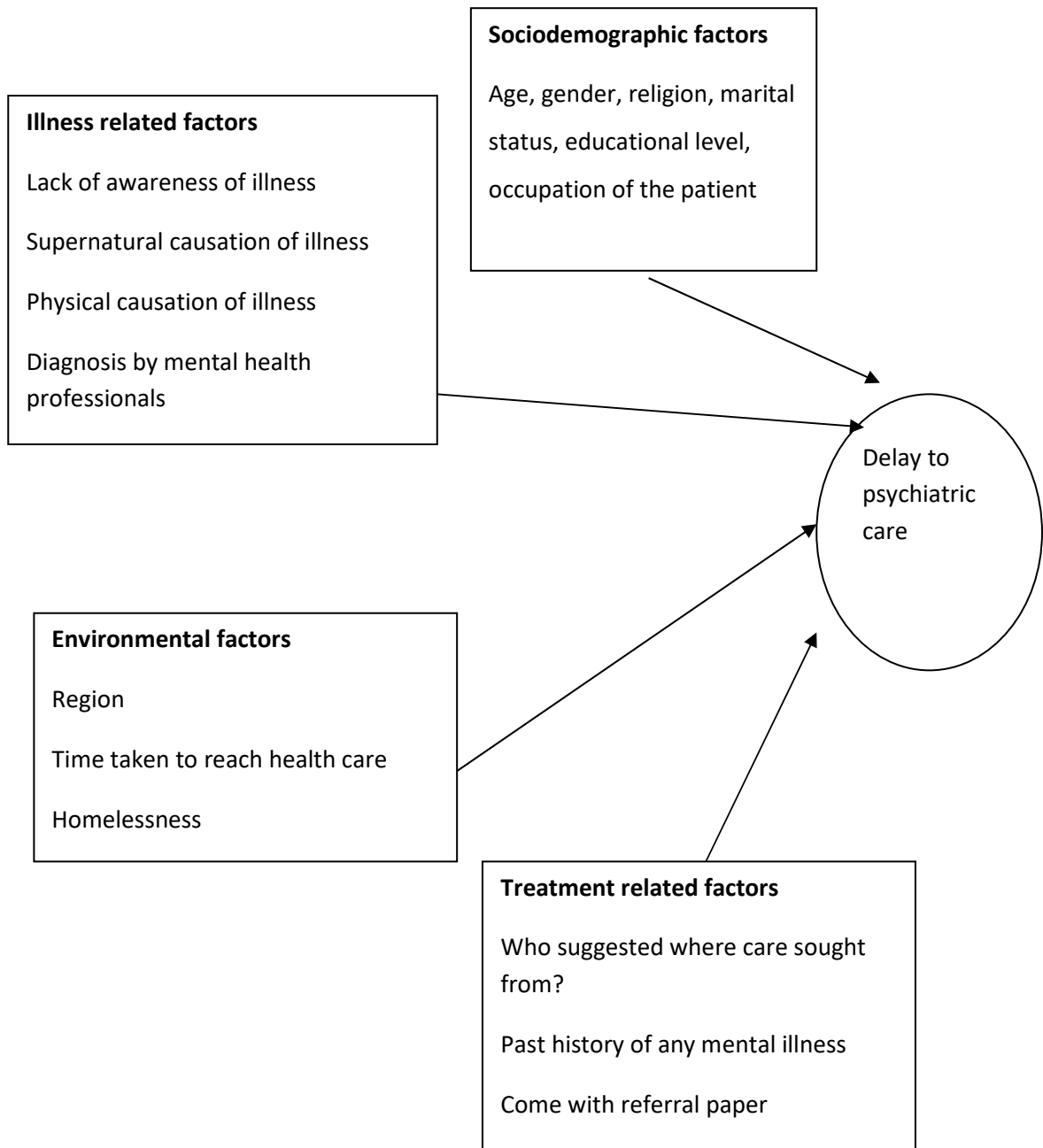


Figure 1: Conceptual framework for factors affecting delay to psychiatric care (9)

Source: developed through a review of literature by the principal investigator (2, 7, 9, and 13).

3. Objectives

3.1 General objectives

- To assess the pathways to psychiatric care and factors associated with delayed-help seeking behaviour among patients with mental illness at Saint Paul's Millennium Medical College, Addis Ababa, Ethiopia

3.2 Specific objectives

- To assess delay to psychiatric care
- To identify the routes or pathways to psychiatric care.
- To identify the factors that contribute to the delay in seeking care for mental illness

4. Methods and Materials

4.1 Study area and Study period

This study was conducted on adult patients with mental illness attending outpatient mental health care at SPHMMC. SPHMMC is one of the tertiary hospitals and medical college in Addis Ababa, Ethiopia. It is located at 1271 Swaziland Street, Addis Ababa, Ethiopia. The psychiatry department is one of the departments in the hospital. It has been providing mental health services for over 40 years consisting of both outpatient and inpatient services. The hospital outpatient department is visited by about 1894 patients from 3 month report of the department. The study was conducted for 1 month and two weeks (July 16th to August 30th 2022).

4.2 Study design

Across sectional study was implemented to determine the pathways to psychiatric care and factors associated with delayed help-seeking among patients with mental illness attending SPHMMC, psychiatry OPD.

4.3 population

4.3.1 Source population

All adults with mental illness visiting SPHMMC, psychiatry OPD in Addis Ababa, Ethiopia.

4.3.2 Study population

All patients who fulfill the inclusion criteria.

4.4 Inclusion and Exclusion criteria

4.4.1 Inclusion criteria

- Those who were diagnosed with mental illness of any kind
- Those who gave written consent

- Age ≥ 18 years of age

4.4.2 Exclusion criteria

- Patients who were acutely sick and with no collateral to give information.

4.5 Sample size determination and sampling technique

4.5.1 Sample size determination

Sample size was determined using single population proportion formula assuming that the participants had seek early treatment at 95% confidence interval (CI) and 5% margin of error. The prevalence of delayed psychiatric treatment was 176 (41.6%) in Ayder Comprehensive Referral Hospital (9). Taking the recent prevalence, a total of 312 adult patients with mental illnesses were selected. It was taken from a relatively small proportion (N=1894, which is the 3 month outpatient visits in SPMMC, psychiatry department) the required minimum sample was obtained from the above by adding 10% non response rate, yielding 344 sample size.

The calculated sample size is using the following formula:

$$n = \left(\frac{z\alpha}{2} \right)^2 \times p(1 - p) / d^2$$

where;

n=Minimum sample size for a statistically significant survey.

Z=Normal deviant at the portion of 95% confidence interval two tailed test is =1.96.

P =Proportion of delay at Ayder Comprehensive Referral Hospital, 41.6%

d = margin of error taken as 5%= 0.05

10% non response rate=32

4.5.2 Sampling Procedure

A consecutive sampling method was used to select participants of the study until 344 participants (182 males, and 152 females) were collected. When the participant refused to participate, the next participant was selected.

4.6 Variables

4.6.1 Dependent variable

- Delay in psychiatric care

4.6.2 Independent variables

- Age
- Sex
- Marital status
- Occupation
- Educational status
- Religion
- Region
- Homelessness
- Time taken to reach care
- Who suggested where care sought from
- Come with referral paper
- Past history of any mental health services
- Diagnosis by mental health professionals

4.7 Operational definitions

1. A person with mental illness is defined as any patient who received any psychiatric diagnosis after being evaluated by mental health professionals based on DSM-5-TR (19).
2. Pathway to psychiatric care is defined as a comprehensive and systematized clarification of sources of help used by patients before seeking help from mental health professionals (9).

3. Delay to psychiatric care is when patients take longer than 4 weeks duration from problem onset to contact with first care provider and longer than 52 weeks to contact with modern psychiatric services (9).
4. Help-seeking is defined as an adaptive coping process aimed to obtain external assistance to deal with a mental health concern (22).
5. Duration of untreated mental illness (DUMI) is defined as the duration between the onset or first symptom of mental illness and the first visit to a psychiatric department or clinic (8).
6. Addiction refers to any substance use disorder based on DSM-5-TR (24).
7. Homelessness is defined as not having housing and assistance in meeting other basic needs and offer emotional and financial support (20).

4.8 Measurement

Encounter form (Amharic version) developed by WHO for assessment of pathway to care was used. The form contains basic questions including source of referral, profession of the mental health practitioner who sees the patient and characteristics of the patient (age, sex, marital status, social position and past history of psychiatric care). It also includes the profession of each previous carer, total duration of symptoms, length of time since the patient was first seen, the source of each referral, the main treatment offered, the duration of patients' journey to the carer and the diagnosis of the patient.

The encounter form was modified to suit this study, particularly to assess impact of delay in seeking help and experiences related to various care pathways. Specifically the following areas were explored in the modified encounter form: care at home, traumatic experiences at each levels of care, source of information, questions about homelessness and other sociodemographic characteristics (address,. Religion, occupation and level of education) were added to the original encounter form. Additionally, questions which were not relevant to our study like name of the mental health practitioner, profession of the mental health practitioner who saw the patient and some other questions were removed.

Treatment had been measured using the median time interval in weeks from problem onset to contact with psychiatric services. To sort significant delay for seeking mental health treatment, 4weeks' median duration from problem onset to contact with first care provider and 52.0 weeks with modern psychiatric services had been taken as a reference point from a study conducted in Northern Ethiopia (9). Therefore, individuals who sought mental health treatment from psychiatric hospitals after 52.0 weeks from the first onset of illness had been categorized as delayed treatment-seeking and before 52.0 weeks as early treatment-seeking for psychiatric care.

4.9 Data collection procedure

A total of 344 patients who visited SPHMMC outpatient department for a period of 1month and two weeks (July 16th to August 30th) were included in the study. After obtaining written consent , encounter form was administered by trained 6 psychiatric nurses and 6 residents working at

SPHMM,psychiatry opd .The data collectors were given a half day training on how to use the instrument and were supervised and supported thorough out the process of data collection by the principal investigator.

4.10 Data analysis

- Every data was checked for completeness right after collection and data entry and analysis was carried out by using SPSSv.26 (SPSS for windows). Different variables were recoded for further analysis. Sociodemographic characteristics and clinical characteristics of patients were analyzed and presented in tables. The impact of sociodemographic factors, who suggested care and time taken to reach care on the delay to psychiatric care, was examined by logistic regression (bivariable and multivariable). Binary logistic regression was used to predict variables which have an independent association with outcome variables. Variables which have a significant association at p-value <0.25 in the bivariate analysis were taken to multivariate analysis to include all potential variables. Odds ratio, and 95% CI was used to check for the existence and strength of association between independent and outcome variables. P-value of less than 0.05 considered as statistically significant in the multivariate analysis.

4.11 Ethical considerations

Ethical permission was obtained from the ethical review board, SPHMMC. Objectives and use of the interview were explained to the participants. Written consent was also obtained from participants before gathering information. A Clear explanation about the purpose of the research was made. The study did not have a direct benefit for the participants; they did go through any harm by neither participating nor differing from the study, except for giving up a few minutes of their time. It was explained that the participation was voluntary and that privacy of the information was protected. To maintain privacy, names were not used, and serial numbers were used.

4.12 Dissemination plan

Finally, the result of the study will be disseminated through defense and presentations on seminars. It will be submitted to SPHMMC, EMA, EPA, and the Ethiopian Federal Ministry of Health. Further efforts will be made to publish the findings on national and international journals.

5. Results

Sociodemographic characteristics

A total of 344 who visited SPHMMC were enrolled in this study and among them 55.5% (182) were male. The mean age was 37.3 and the age range of (18-80, SD=13.3yrs) and most of the participants (65.8%) were below 40 years. The majority of the respondents were orthodox Christians (63.4%), single (52.6%), unemployed (73.0%), came from outside of Addis Ababa (76.6%), and respondents with secondary and above level of education (72.4%). The sociodemographic characteristics of the study participants are presented in Table 1.

Table1: Sociodemographic characteristics of study participants at SPHMMC psychiatry department, 2022.

Characteristics		Sex of the participant		Total n(%)
		Male n(%)	Female n(%)	
Total	Category	182(55.5)	152(45.5)	334(100)
Age =mean,SD		36.1(12.6)	38.7(14.0)	37.3(13.3)
Age of the patient in years	18-30	69(57.5)	51(42.5)	120(100)
	31-40	62(62.0)	38(38.0)	100(100)
	41-50	23(47.9)	25(52.1)	48(100)
	51-60	18(38.3)	29(61.7)	47(100)
	>60	10(52.6)	9(47.4)	19(100)
Marital status of participants	Married	59(48.8)	62(52.2)	121(100)
	Single	112(63.6)	64(36.4)	176(100)

		Cohabitation	3(50.0)	3(50.0)	6(100)
		Separated	4(44.4)	5(55.6)	9(100)
		Widowed	1(7.1)	13(92.9)	14(100)
		Divorced	3(37.5)	5(62.5)	8(100)
Address of participants		Addis Abeba	147(57.4)	109(42.6)	256(100)
		Amhara	9(52.9)	8(47.1)	17(100)
		Oromia	22(43.1)	29(56.9)	51(100)
		SNNPR	3(42.9)	4(57.1)	7(100)
		Sidama	1(33.3)	2(66.7)	3(100)
Religion of participants		Orthodox	107(50.5)	105(49.5)	212(100)
		Muslim	47(68.1)	22(31.9)	69(100)
		Protestant	19(45.2)	23(54.8)	42(100)
		Catholic	3(100)	0	3(100)
		Other	6(75.0)	2(25.0)	8(100)
Educational status of participants		No formal education	6(30.0)	14(70.0)	20(100)
		Elementary	35(48.6)	37(51.4)	72(100)
		High school and preparatory	49(52.1)	45(47.9)	94(100)
		Higher education	92(62.2)	56(37.8)	148(100)

Occupational status of participants	Employed	58(64.4)	32(35.6)	90(100)
	Unemployed	124(50.8)	120(49.2)	244(100)

Clinical characteristics

About one-third of the participants (34.4%) had a diagnosis of schizophrenia, 30.5% had major depressive disorder, 8.0% had other psychotic disorder, and 7.8% had bipolar disorder. Regarding homelessness, 9.0% of patients had been homeless at least once and 39.0 % of patients reported bad treatment experiences including being restrained, beaten up, or mocked at a different level of care. The clinical and treatment experience of study participants is presented in table 2.

Table 2: clinical variables at SPHMMC psychiatry department, 2022

Category	Total (n, %)	Male (n, %)	Female (n, %)
Schizophrenia	115(100)	44(38.3)	71(61.7)
Major depressive d/o	102(100)	61(59.8)	41(40.2)
Bipolar d/o	26(100)	15(57.7)	11(42.3)
Anxiety d/o	20(100)	10(50.0)	10(50.0)
Addiction	25(100)	1(4.0)	24(96.0)

Other psychotic d/o	27(100)	10(37.0)	17(63.0)
Others *	19(100)	11(57.9)	8(42.1)
Total duration of illness : mean, median and SD	335.0,240.0,317.6	361.6,240.0,328.6	303.2,192.0,301.8
Delay from onset of illness to psychiatric care :mean, median, SD	106.3,40.0,182.6	122.0,48.0,188.8	87.6,24.0,13.6
Has been homeless in the past	30(100.0)	19(63.3)	11(36.7)
Pathway directly to hospital	171(51.2)	97(56.7)	74(43.3)
Indirectly to hospital	163(48.8)	85(52.1)	78(47.8)
Bad experience At hospital	64(49.2)		
At private clinic	7(5.4)		
At health center	11(8.5)		
At traditional/religious	48(36.9)		

*=PTSD, epilepsy, neurocognitive d/o

Pathway to care

A little more than half of the participants (51.2 %, M=56.7%,F=43.3%) of the participants visited hospitals directly and the rest,48.8 %(M=452.1, F=47.8) sought help from other caregivers before reaching a psychiatric hospital. Among those who visited indirectly, 28.4%(M=57.9%, F=42.1%) of them initially contacted traditional/ religious healers,12.9%contacted mental health professionals at government, and doctors at private and government hospitals were contacted by 7.4% of patients. The path way to care is shown in figure 2.

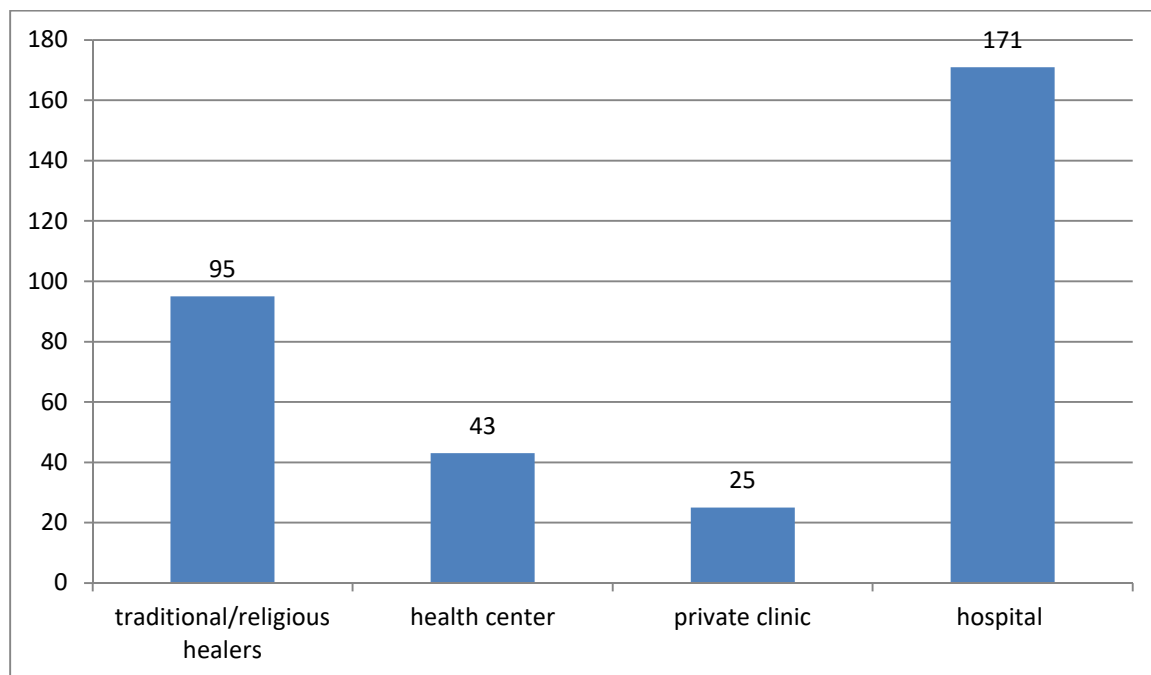


Figure 2 paths persons traversed to seek care at SPHMMC psychiatry department, 2022

Delay along the pathway

The median delay from the onset of the illness to psychiatric care was 40.0 weeks (M=48.0, F=24.0) weeks and ranges from [<1 - 1295] weeks with SD= 181.6 weeks and with an interquartile range of 88 weeks. It is depicted in figure3.

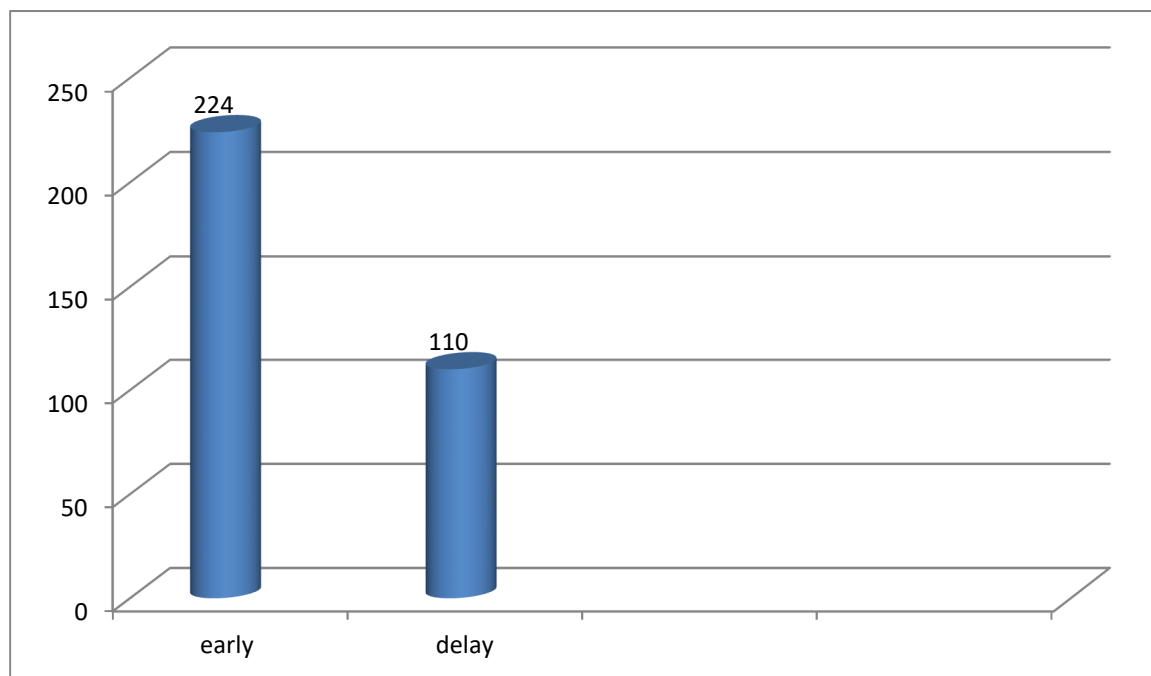


Figure 3 the frequency delay among mentally ill persons at SPHMMC psychiatry department, 2022

Predictors of delayed modern psychiatric care seeking

Before running logistic regression collinearity among predictors by collinearity statistics was tested. The variance inflation factor (VIF) ≤ 5 corresponds to indicating low collinearity. The association between overall delay and sociodemographic characteristics of patients is presented

in table 3. In the bivariate analysis gender; marital status; homelessness; and diagnosis of participants were significantly associated with a delay with a p-value less than 0.25. On the multivariable analysis, all of the variables that were significantly associated (p-value less than 0.05) were included, but only homelessness, and diagnosis of participants remained significantly associated with overall delay. The finding revealed that the odds of delayed mental health seeking is 6 times higher among participants with the diagnosis of addiction as opposed to those with the diagnosis of schizophrenia (AOR=6.37, 95% CI 2.28 to 17.79).

Respondents who were homeless were 2 times more likely to come late to psychiatric care than those living at a home (AOR=2.37, 95% CI 1.04 to 5.40).

Table3: Univariate and multivariate analysis of factors associated with overall delay (onset of illness-psychiatric care) at SPHMMC psychiatry department, 2022.

	Delay		COR	p-value	AOR	P-Value
	Early	Late				
Sex						
Male	112(61.5%)	70(38.5%)	1.75(1.09,2.80)	0.02	1.13(0.66,1.92)	0.66
Female	112(73.7%)	40(26.3%)	1			
Marital status						
Married	89(73.6%)	32(26.4%)	1			
Single	106(60.6%)	69(39.4%)	1.81(1.09,3.00)	0.02	1.47(0.84,2.56)	0.18
Others	29(76.3%)	9(23.7%)	0.86(0.37,2.02)	0.73	0.66(0.26,1.66)	0.38
Homelessness						0.04
Yes	13(43.3%)	17(56.7%)	2.97(1.38,6.36)	0.00	2.37(1.04,5.40)	
No	211(69.4%)	93(30.6%)	1			
Diagnosis						

Schizophrenia	77(67.0%)	38(33.0%)	1			
Major depressive disorder	71(69.6%)	31(30.4%)	0.88(0.50,1.58)	0.68	1.08(0.59,1.98)	0.80
Bipolar disorder	20(76.9%)	6(23.1%)	0.61(0.23,1.64)	0.32	0.74(0.27,2.06)	0.57
Anxiety disorder	18(90.0%)	2(10.0%)	0.22(0.05,1.02)	0.05	0.28(0.06,1.28)	0.10
Addiction	6(24.0%)	19(76.0%)	6.42(2.37,17.38)	0.00	6.37(2.28,17.79)	0.00
Other psychotic disorder	13(48.1%)	14(51.9%)	2.18(0.93,5.10)	0.07	2.22(0.92,5.32)	0.07
Other*	19(100%)	-	-			

COR=crude odds ratio, A OR=adjusted odds ratio, 1=reference, p-value=significance level, *=epilepsy, neurocognitive disorders

6. Discussion

Our study tried to see the pathway to psychiatric care and factors associated with delay to psychiatric care. The results of the study are stated as follows.

Pathway to care

A large proportion of patients in this study (51.2) contacted hospitals directly which is comparable to a previous study done at Amanuel Hospital (47.1%). Unlike to current study finding, the tendency to go to psychiatric hospital directly was lower in studies done in Tunis (40.9%) (11) and in Singapore (21.8%) (23). This could be explained by their increased access to general hospitals which most of them contacted first unlike ours.

The next highest group of patients went to religious/traditional healers (28.4%) which are closer to the previous study done at Amanuel hospital (30.9%) (13) and study done from Nepal (38%) (7) which can be due to the improved awareness of mental illness in recent times than before. In this study finding, religious/traditional places were contacted more by males (M=57.9%, F=42.1%).

Delay along pathway and determinants

In this study the overall delay is 40.0 weeks which is slightly lower than the study done at Jima (52.1 weeks) but higher from the study done at Amanuel hospital (38 weeks).

Unlike the previous study done at Amanuel, where significant association was established with occupation and level of education, this study showed significant association with homelessness, and diagnosis of addiction. The findings of this study are comparable to the study done at Debre tabor (17), Mexico national Comorbidity survey (18), and Boston (16), our study showed that having addiction diagnosis is associated with delayed treatment.

A study done in Indiana (USA) about the health seeking behavior of homeless population stated as they have unique attributes that delay their seeking care including (1) distrust in health services; (2) prioritizing physiological needs such as food, shelter and clothing over the safety needs of health; (3) delaying seeking care until physical symptoms are severe; and (4) having decreased access to healthcare because of being uninsured or having no money, requiring transportation, experiencing long wait times for appointments, or lacking knowledge of available healthcare services which is similar to our finding. Homelessness has high prevalence of (90%) some form of current mental disorders (14) and homelessness is caused by family conflict, worsening of mental illness and interplaying substance use (15).

Almost one-tenth of participants experience homelessness at least once before coming to psychiatric care which might indicate the impact of untreated illness in general. Additionally, patients had bad treatment experiences including being beaten up, chained, stigmatized, and mocked at a different level of care, the highest being from psychiatric hospitals.

Strength and Limitations

Limited researches are available in the country and no recent research in SPHMMC. This study can give more recent insights into the patterns of mental health-seeking behaviors and delay to psychiatric care.

Some of the limitations of the study include: - the study design, which was a cross-sectional study, which makes it difficult to make a cause and effect relation. Furthermore, having small sample size and being hospital based study affects its generalizability to the rest of the population. Since our sources of information were patients and informants, there might be a recall bias as to the onset of the illness and their pathway in general.

7. Conclusion and recommendation

According to the study findings, most patients came directly to psychiatric hospitals while a significant proportion of patients sought help from other caregivers which has contributed to delay. The median delay from the onset of the illness to psychiatric care was 40.0 weeks. The prevalence of delayed health seeking behavior above 52 weeks was 110 (32.9%). Respondents with the diagnosis of addiction, and homelessness were significantly associated with delay. We have found that homelessness and bad treatment experiences are also common in mentally ill patients.

Policymakers and health planners need to recognize the factors affecting mental health-seeking behaviors and delay to psychiatric care and increase their efforts to improve awareness about health seeking behavior.

Hospitals and other mental health care providers need to strive to enhance rehabilitation programs for addiction and to collaborate with different stakeholders to create shelter for the homeless. They should also educate primary care providers and the community about mental health seeking behavior.

This study magnified the need to expand mental health service to the community and also the collaborative work that has to be done with religious healers and other traditional healers. Finally, further studies are needed to explore the pathways to psychiatric care.

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Appendices

ANNEX 1- Participant Information Sheet and informed Voluntary Consent Form

Kindly see below the purpose of the study before going through the questionnaire.

Objective -To assess the pathways to psychiatric care and factors associated with delayed help seeking among patients with mental illness at Saint Paul's Millennium Medical College, Addis Ababa, Ethiopia

Procedure - The questionnaire contains 52 questions and the items are written in the form of statements about personal feelings or attitudes. Filling out the questionnaire will take less than 20 minutes. Your genuine and honest cooperation in responding to the questions prepared is highly appreciated.

Benefit - Even though the study might not have a direct benefit for the participants, the information gathered might be helpful for policy makers and will aid other researchers to draw base line information and might lead them to do further investigation on the area. Moreover, it will help me to write up my thesis for the partial fulfillment of a post graduate certificate in Psychiatry.

Harm - the participant will go through any harm by neither participating nor differing to the study, except for giving up few minutes of your time. There will not be any direct compensation/ payment for participating in this study.

Alternatives to participation -You have the right not to take part in this research. If you require any clarification, you can contact me with the information provided below. If you come across a question that you are not willing to give an answer to, you can skip it. You may stop participating in the research at any time during the course.

Confidentiality- Your answers and all the information you provide are entirely confidential and will be kept that way. You will not be asked to give your name.

Informed consent - I have read this form and I understand all conditions stated above. Therefore, I am willing to participate in this study Sign _____ If there are any questions or enquires about the study or the procedures, please contact:

Name of Principal investigator: Dr. SewalemAnagaw

Address: Tel. = +251939611049(E-mail = swanagawau@gmail.com)

Annex-2- Demographic and Socio-economic characters

- Age
- Sex
- Marital status
- Occupation

- Educational status
- Religion
- Region
- homelessness
- Time taken to reach care
- Who suggested where care sought from
- Come with referral paper
- Past history of any mental health services
- Diagnosis by mental health professionals

Annex-3 WHO encounter form

A. Information on center and mental health professional

1. Where was the patient seen?
2. Name of mental health professional (MHP).....
3. Profession of MHP Date.....

B. Basic information on the patient

1. Serial number-----
2. Address: region -----district-----Keble
3. Age -----
4. Sex(circle the appropriate one)
 - 4.1 male
 - 4.2 female
5. Marital status
 - 5.1 married
 - 5.2 single
 - 5.3 cohabitation
 - 5.4 separated
 - 5.5 widowed
 - 5.6 divorced
 - 5.7 other, specify -----
6. Religion (circle the appropriate one)
 - 6.1 orthodox Christian
 - 6.2 Muslim
 - 6.3 protestant
 - 6.4 catholic
 - 6.5 other, specify
7. Highest level of education -----
8. Occupation
 - 8.1 jobless
 - 8.2 unskilled laborer
 - 8.3 skilled laborer
 - 8.4 farmer
 - 8.5 private business
 - 8.6 pensioner

8.7 student

8.8 house wife

8.9 civil servant

8.10 others, specify-----

9. Who suggested care be sought from the mental illness service?

9.1 patient

9.2 previous carer

9.3 family

9.4 other -----

10. Has the patient come with referral letter?

10. 1 yes

10.2 no

11. Past history of care for any mental illness

11.1 yes

11.2 no

12. Source of information (can be more than one)

12.1 patient

12.2 informant

12.3 clinical records

12. 4 other-----

13. If informant, what is the relationship

13.1 parent

13.2 siblings

13.3 spouse

13.4 neighbors

1.5 close relative

13.6 others -----

14. Severity of illness

14.1 violence

14.2 self harm

14.3 Self neglect

14.4 other-----

15. Have u ever been homeless

15.1 yes

15.2 No

16. If yes,

16.1 when? -----

16.2 How many times? -----

16.3 For how long? -----

C. Care at home

1. Who was caring for you? -----

2. what was the main care offered?-----

2. Was there anything bad that happened to you?

A. yes

B. no

3. if yes, which of the following happened to you

A. restrained

B. beaten up

C. mocked

D. insulted

E. stigmatized

e. other -----

D. The first decision to seek care

1. Where did you go to seek help-----

2. How long ago?-----weeks

3. Who was seen? -----

4. Who suggested care was sought? -----

5. What was the main problem presented? -----

6. How long ago did the main problem begin? -----

7. What was the main treatment offered?

8. Duration of patients journey to care -----hrs. -----min

9. Was there anything bad that happened to you?

A, yes

B. no

10. If yes, which of the following happened to you

A. restrained

B. beaten up

C. mocked

D. insulted

E. stigmatized

F. other -----

E. The second carer

1. Where did you go to seek help?

2. How long ago?-----weeks

3. Who was seen? -----

-
4. Who suggested care was sought? -----
 5. What was the main problem presented? -----
 6. What was the main treatment offered? -----
 7. Duration of patients journey to care -----hrs -----min
 8. Was there anything bad that happened to you?
 - A. Yes
 - B. no
 9. If yes, which of the following happened to you
 - A. Restrained
 - B. beaten up
 - C. Mocked
 - D. insulted
 - E. stigmatized
 - F. other-----

F. The third carer

1. Where did you go to seek help?
2. How long ago?-----weeks
3. Who was seen? -----
4. Who suggested care was sought? -----
5. What was the main problem presented? -----
6. What was the main treatment offered?
7. Duration of patients journey to care -----hrs -----min
8. Was there anything bad that happened to you?
 - A. Yes
 - B. No
9. If yes, which of the following happened to you
 - A. Restrained
 - B. beaten up
 - C. Mocked
 - D. insulted
 - E. stigmatized
 - F. other-----

G. The forth carer

1. Where did you go to seek help?
2. How long ago?-----weeks
3. Who was seen? -----
4. Who suggested care was sought? -----
5. What was the main problem presented? -----
6. What was the main treatment offered?
7. Duration of patients journey to care -----hrs -----min

8. Was there anything bad that happened to you?

A. Yes

B. No

9. If yes, which of the following happened to you

A. Restrained

B. beaten up

C. Mocked

D. insulted

E. stigmatized

F. other-----

H. Mental health professional diagnosis

1. First diagnosis-----

2. Second diagnosis(if any)-----

Filled by -----(initials) on -----(date)

Coded by -----(initials) on -----(date)