

# **Final Research report**

## **Title**

**Self-stigma among outpatients with mood disorders at St. Paul's Hospital, Addis Ababa, Ethiopia: a cross-sectional facility-based study.**

Principal Investigator: Elias Tesfaye (Candidate for certificate of specialty in psychiatry, AAU)

Advisor: 1) Dr. Benyam Worku (Addis Ababa University, department of Psychiatry)

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## Abstract

**Background:** There is little information on the degree of self-stigma experienced by patients with mood disorder across Ethiopia. This study describes the levels of self-stigma, stigma resistance, self esteem and the level of disability reported in these groups who had follow up as outpatient in Psychiatry clinic at St. Paul's Hospital, Addis Abeba, Ethiopia.

**Methods:** Facility based cross-sectional study was conducted on 235 consecutive samples of people with mood disorder using interviewer administered (ISMI) scale. Data was entered and analysis was done using SPSS version 20. Bivariate and multivariate linear regressions were done to identify correlates of self stigma.

**Results:** Almost one in three patients (31.5%) reported moderate or high levels of self-stigma, (54.9%) had moderate or high stigma resistance score, (67.2%) had moderate or high self esteem, (27.7%) had moderate to high level of discrimination experience and One fourth of them (26.4%) had moderate to severe or extreme disability. And also, Females had higher self stigma (std.  $\beta = .169$  with  $P < 0.01$ ) than males and good adherence to medication was significantly correlated with lower self stigma (std.  $\beta = -.212$  with  $P < 0.01$ ) when compared with non adherence. In a multivariate linear regression model (60%) of the variance in self-stigma scores, among people with a diagnosis of bipolar disorder or depression, was accounted for by levels of self esteem and stigma resistance.

**Conclusions:** These findings suggested that self-stigma occurs among approximately 1 in 3 people with mood disorder in urban city of Ethiopia which was much higher than the findings in Europe. Female showed higher self stigma than male. So, Patient empowerment, psychosocial interventions and psychoeducation to increase compliance to medication can be helpful in reducing self stigma among people with mood disorder.

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## Acronyms

AAU: *Addis Ababa University*

CI: Confidence interval

DSM IV: Diagnostic and statistical manual of mental disorders IV

ISMI: Self Stigma of Mental Illness Scale

MDE: Major Depressive Episode

Mood disorder: both bipolar disorder and major depressive disorder

r: correlation coefficient

SD: standard deviation

Self stigma: internalized stigma

SMI: Severe mental illness

SPHMMC: St. Paul's hospital millennium medical college

SR: Stigma resistance

SS: Self esteem

Std. : Standardized coefficients

WHODAS-II: WHO Disability Assessment Schedule, version 2 (the 12 item)

## Introduction

There is limited information on the degree to which Selfstigma is experienced by individuals with a diagnosis of bipolar disorder or depression across Ethiopia. This study will attempt to describe the levels of Selfstigma, stigma resistance and self esteem reported in these groups.

A recent review of 57 studies using a quantitative measure of mental illness stigma found a predominant focus on a general illness category such as psychiatric disorders or severe mental illness (SMI) or else on schizophrenia or other psychotic disorders (Brohan et al., 2010).

The majority of studies (52.6%) used a sample with SMI, 28.1% considered schizophrenia or psychotic disorders alone, 3.5% considered bipolar disorder alone, 8.8% considered depression alone and 7% considered other diagnoses. Of the identified European studies, 79% used a measures of perceived stigma, 46% a measure of experienced stigma and 33% a measure of Self stigma (Gabriel and Violato, 2010; Kanter et al., 2008).

This suggests that as well as an under-representation of bipolar disorder and depression in stigma research, there is also a limited focus on measuring Self stigma. However, there is a growing interest in further examining the stigma related to bipolar disorder and depression, with several recent studies focusing on the development of specific measures for use with individuals with a diagnosis of depression (Gabriel and Violato, 2010; Kanter et al., 2008).

The two study previously done in Ethiopia also focus on self stigma on schizophrenia patient ( Assefa et al, 2012) and on moderate to severe mental illness including both mood disorder and psychotic patient( Girma et al, 2013).

This highlights a pattern of considering bipolar disorder and depression in combination with psychotic disorders as part of the general category of SMI, or considering schizophrenia or other psychotic disorders alone, with little research focusing on mood disorders specifically.

Self stigma is a personal response to perceived mental illness stigma (Corrigan and Watson, 2002). It can be considered a transformative process wherein a person loses his or her previously held or desired identities, e.g. as a parent, employee, friend, partner etc to adopt a stigmatized and devalued view of themselves (Yanos et al., 2008).

Public stigma is the belief that the public hold negative attitudes towards people with a mental health problem; while experienced stigma refers to instances of unfair treatment or discrimination due to having a mental health problem.

## Statement of the problem

There is growing interest worldwide to assess the level of self stigma and to address it in the management of bipolar disorder or depression (Gabriel and Violato, 2010; Kanter et al., 2008).

The burden that stigma adds to that produced by mental illness is not well recognized. Selfstigma can be considered a marker of burden of illness, a barrier to recovery and an area for intervention, however there is currently a lack of evidence on the degree to which Selfstigma is experienced by individuals with a diagnosis of bipolar disorder or depression across Ethiopia.

This study builds on earlier work which considered levels of Selfstigma among those with a diagnosis of bipolar disorder or depression and another study done among schizophrenia or other psychotic disorder across 14 European countries (Brohan et al., in press) and on two Ethiopia study that focuses on the level of Selfstigma on schizophrenia and moderate to severe mental illness (Assefa et al, 2012 & Girma et al, 2013).

As discussed, although there is a growing interest in examining the stigma experiences of individuals with a diagnosis of bipolar disorder or depression, to date research in this group has been limited particularly within the Ethiopian context.

For this reason, this study focuses individuals with a diagnosis of bipolar disorder or depression. It aims to (1) describe the level of Selfstigma experienced by people with a diagnosis of bipolar disorder or depression in Ethiopia; (2) examine the degree to which stigma resistance, self esteem, clinical factors, the level of disability and as well as socio demographic variables are associated with Selfstigma in this sample; and (3) draw implications for mental health services in Ethiopia.

## Literature review

Findings suggest that Selfstigma occurs among approximately 1 in 5 people with bipolar disorder or depression in Europe(Brohan, E., et al.,2010).

This European study demonstrated that among patients with bipolar disorder or depression over one fifth (21.7%) reported moderate or high levels of Selfstigma suggesting that the level of self stigma among bipolar disorder and depression patient is significantly lower than the schizophrenia patient (Brohan, E., et al.,2010).

There is initial evidence that individuals with bipolar disorder experience less Selfstigma than those with schizophrenia or depression. However, this finding requires confirmation from samples more representative of clinical or general population sampling frames (Brohan, E., et al.,2010).

The other results of the European study suggested that Self stigma appears to be common and sometimes severe among people with schizophrenia or other psychotic disorders in Europe with almost half (41.7%) reported moderate or high levels of Self stigma(Brohan, E., et al.,2010).

There has also been an emergence of qualitative work considering experiences of stigma in people with bipolar disorder and depression (Barney et al., 2009; Lim et al., 2004; Michalak et al., 2006).

In studies of patients with a diagnosis of bipolar disorder or depression, Self stigma has been associated with reduced quality of life (Yen et al., 2005), lower self-esteem (Ritsher and Phelan, 2004; Werner et al., 2009), reduction of morale (Ritsher and Phelan, 2004) and increased avoidance behaviors (Kanter et al., 2008; Manos et al., 2009).

It is also associated with greater depression severity (Kanter et al., 2008; Manos et al., 2009; Raguram et al., 1996; Ritsher and Phelan, 2004; Rusch et al., 2008; Yen et al., 2005), having been in treatment for depression (Kanter et al., 2008; Rusch et al., 2008), more negative attitudes towards treatment seeking (Conner et al., 2010) and lower treatment compliance in those with a diagnosis of depression (Fung et al., 2007).

Mass media campaigns to challenge public stigma, e.g. (Henderson and Thornicroft, 2009), provide an opportunity to examine the degree to which reductions in public stigma are associated with reductions in Self stigma and perceived stigma at several time points. Further research is needed to examine the impact of interventions targeted towards the general public and individuals with a bipolar disorder or depression on reducing Self stigma.

A study done in Ethiopia to determine the extent, domains and correlates of self stigma amongst outpatients with schizophrenia shows that nearly all participants (97.4%) expressed agreement to at least one stigma item contained in the ISMI; 46.7% had a moderate to high mean stigma score which is comparable to the finding in Europe (Assefa et al, 2012).

Almost half of those who discontinued their treatment reported that they had done so because of perceived stigma (Assefa et al, 2012). And of those who had attempted suicide (45.3%) were more likely to have a high stigma score (Assefa et al, 2012).

Study done in Jimma, Ethiopia to determine Selfstigma among people with moderate to severe mental illness including both mood disorder and psychotic patient on outpatient psychiatry service found the overall Selfstigma mean score was 2.32 (SD = 0.30) (Girma et al, 2013). And among the total respondents, 25.12% of them showed 2.5 and above Selfstigma score (Girma et al, 2013).

Compared with males, females had higher Selfstigma (Girma et al, 2013). And also, Private enterprise workers had significantly lower Self stigma than farmers (Girma et al, 2013). Higher education was significantly correlated with lower Selfstigma (Girma et al, 2013).

## **Significance of the study**

- 1) Because there was no study before that assesses the level of self stigma and its correlate among bipolar disorder or depressed patient in Ethiopia. So it would be base line study for future research for those who want to assess the impact of anti- stigma campaign among mood disorder patient.
- 2) The result from the study could be used in improving the psycho social treatment of bipolar disorder or depression in Ethiopia.
- 3) The result from the study could also be used to dictate policy makers and stake holders working on mental illness on the direction they should follow to address self stigma.

## **Objective**

### **General objective**

The objective of the present study was to determine the level of self stigma and its correlate among patients with mood disorders attending the psychiatry OPD at SPHMMC.

### **Specific objectives**

- 1) To determine the level of self stigma among bipolar or depressed patient.
- 2) To describe the correlation of self stigma with sociodemographic characteristics.
- 3) To describe the correlation of self stigma with clinical factors among bipolar disorder or depressed patient.
- 4) To compare correlation of self stigma with self esteem among bipolar disorder or depressed patient.
- 5) To measure the correlation of self stigma with the level of disability among bipolar disorder or depressed patient.
- 6) To describe the level of disability among bipolar disorder or depressed patient.

## **Methods**

### **Study design**

The study was a facility-based cross-sectional survey conducted at the psychiatric OPD in St. Paul's hospital.

### **Study setting**

The hospital is a referral specialized hospital located in the capital city, Addis Ababa, Ethiopia. The Hospital was built in 1969 (was named St Paul's General Specialized Hospital until 2008) by Emperor Haile Selassie in collaboration with the German Evangelical Church, as a source of medical care for underserved populations. It currently has 392 beds, with an annual average of 200,000 patients and a catchment population of more than 5 million. It has 13 amount of clinical service. Patients with mental illness are treated by psychiatry nurse, psychiatrist and psychiatry resident under the supervision of consultant psychiatrist. The hospital has no inpatient service for mentally ill patient except for those with substance problem with 5 beds only. On average 900 both new and old patients with mental illness are seen per month and also, around 11000 both new and old patients with mental illness are seen per year.

## **Sampling**

### **Study population**

The reference populations were all peoples with a clinical diagnosis of bipolar disorder or depression, aged 18 years and above who live within the catchment area. The source populations were all peoples with a clinical diagnosis of bipolar disorder or depression, aged 18 years and above who were on follow up at the psychiatry OPD of St. Paul's hospital.

### **Participant inclusion criteria:**

To be included in the study, the participant should have clinical diagnosis of bipolar disorder or depression, aged 18 years and above who had follow up in psychiatric OPD of St. Paul's hospital.

All bipolar disorder or depressed patients were identified by the psychiatric resident from their previous chart record. Their diagnosis would be confirmed by the evaluating resident using DSM-IV criteria for each disorder. If there was discrepancy between the two, the diagnosis would be settled by a consultant psychiatrist.

All eligible bipolar disorder or depressed patients who came to psychiatric OPD of St. Paul's hospital were invited to participate in the study following their consultation with the psychiatric resident.

### **Exclusion criteria:**

Patients were excluded from the study if they were:

- Acutely unwell and needing emergency treatment
- Unable to converse in Amharic, the official language of Ethiopia
- Unable to communicate, for example due to cognitive impairment
- Suffering from acute psychotic disorder

## **Sampling technique**

Consecutive bipolar disorder or depressed patients who fulfill the criteria were evaluated by psychiatry residents as they come to psychiatry OPD until enough sample size was obtained.

## **Procedure**

After informed consent the test assessments: the socio-demographic and clinical inventory, the Rosenberg self-esteem scale, The Self Stigma of Mental Illness (ISMI) Scale for the assessment of stigma and WHODAS version 2 (the 12-item) were collected by the principal investigator who was also psychiatry resident. The interviews were carried out in a private room.

## **Measures**

- 1. Socio-demographic**
- 2. clinical inventory**
- 3. Rosenberg Self-Esteem Scale**
- 4. Self Stigma of Mental Illness (ISMI)**
- 5. WHODAS version 2 (the 12 item)**

### **1. Socio-demographic characteristics**

Self-report of age, address, gender, educational level, marital status, employment status, and indicators of socio-economic status.

### **2. Clinical inventory**

- ❖ Working Diagnosis
- ❖ Age at onset
- ❖ Duration of illness
- ❖ Duration of treatment
- ❖ Current clinical status
- ❖ previous Suicide attempt
- ❖ Medication adherence

### **Previous suicidal attempt:**

The question on suicide simply asked whether the participant had felt so desperate that they had attempted suicide: (“**Have you ever felt so desperate that you even attempted to harm yourself or end your life?**”).

This question was similar to the single question used in asking about suicide attempt in the widely used structured Composite International Diagnostic Interview diagnostic interview instrument of the World Health Organization (WHO 1997).

### **Medication adherence:**

The medication adherence question asks about history of non-adherence with psychotropic medications and whether the non adherence behavior has link to stigma. Specifically we asked “**Have you ever discontinued medication?**” And “**Did your experience of stigma contribute to your decision to discontinuing medication?**”

### **3) The Rosenberg Self esteem scale**

The scale has 10 Likert scale items. Some Items are reverse coded. Give “Strongly Disagree” 1 point, “Disagree” 2 points, “Agree” 3 points, and “Strongly Agree” 4 points. Sum scores for all ten items. Higher scores indicate higher self-esteem. Although not formally validated this version used in the previous study in Ethiopia (Girma et al, 2013) which suggests that it was appropriate to use it as a standalone measure.

### **4) The (ISMI) Scale for the assessment of self stigma**

The ISMI was a 29-item scale that assesses Selfstigma. It was composed of 5 subscales: Alienation, Stereotype Endorsement, Perceived Discrimination, Social Withdrawal and Stigma Resistance. Alienation is “the subjective experience of being less than a full member of society”. The Stereotype Endorsement is “the degree to which patients agreed with common stereotypes about people with a mental illness”. The Discrimination Experience measures “respondents’ perceptions of the way they tend to be treated by others”. The Social Withdrawal measures the self exclusion from social events/situation due to mental illness”. The Stigma Resistance subscale is “a person’s ability to resist stigma” (Ghanem HNM, 2011). Unlike the above four subscales, higher score in this subscale indicated lower stigma resistance.

Strong internal consistency ( $\alpha = 0.90$ ) and test-retest reliability ( $r = 0.92$ ) have been reported for the ISMI (Ritsher and Phelan, 2004). A study in Iran showed that the ISMI subscales had reliability values (Cronbach's alpha) of (alienation = 0.84, stereotype endorsement = 0.71, discrimination experience = 0.87, social withdrawal = 0.85 and stigma resistance = 0.63) (Ghanian, 2011).

In the previous study in Ethiopia, the following reliability values (Cronbach's alpha) were found: alienation = 0.84, stereotype endorsement = 0.73, discrimination experience = 0.79, social withdrawal = 0.77 and stigma resistance = 0.65 (Girma et al, 2013).

Recent research has suggested that the 'Stigma Resistance' subscale is conceptually different to the other subscales (Lysaker et al., 2008; Sibitz et al., 2009). For this reason, stigma resistance (SR) was considered as a separate construct to Selfstigma throughout this paper. Stigma Resistance subscale was reverse coded (4 = strongly disagree to 1 = strongly agree). And higher score shows lower Stigma Resistance.

Each ISMI item contains a declarative statement about a potential stigma issue and participants respond to each statement by indicating their level of agreement: 1 = strongly disagree; 2 = disagree; 3 = agree; 4 = strongly agree. The overall Selfstigma refers to the summed average of the other 4 ISMI subscales excluding Stigma Resistance subscale. And higher score shows higher Selfstigma.

## **5) WHO Disability Assessment Schedule version 2 (the 12 item)**

The 12-item interviewer-administered Disability Assessment Schedule version 2, developed by the World Health Organization (WHODAS-II), was used to establish level of impairment associated with depression and bipolar disorders. WHODAS assesses the level of disability and the number of days lost from work in the previous 30 days. The instrument is considered cross-culturally applicable (Chwastiak, 2003) & (WHO, 2010). The Amharic version of the 36-item version has been previously validated in Ethiopia (Mogga, 2006).

### **Data collection:**

The data was collected by the principal investigator alone who was also a psychiatry resident.

## Sample size

We used a single population formula

$$n = \frac{1.96^2 \hat{p}(1 - \hat{p})}{E^2}$$

Where  $n$  = required sample size

P = prevalence

E = margin of error

*Using the following assumptions:*

- **with 95% confidence interval**
- **Prevalence=21.7% found from study in Europe (Brohan, E., et al.,2010)**
- **With margin of error of 5%**

The required sample size would be 261 and we managed to collect 90% of the expected sample size=235.

## Data analysis

- Data was entered, cleaned and analyzed using the SPSS software version 20. A frequency table was computed for socio-demographic and other variables. Stigma scores were checked for normal distribution. Tests of significant mean differences ( $t$  test and ANOVA) of stigma scores and other variables were done for the overall self stigma scores. One multivariate linear regression model was developed using variables which had significant statistical associations with the overall self stigma scores during bivariate analysis. A P-value <0.05 was used to declare significant statistical association.

## Result

### Background sociodemographic characteristics:

There were 235 participants, the majority of whom were females (60.4%). The mean age was 37.94 (SD = 13.2) years. (39.1%) were married and (44.3%) of them were single in marital status. (92.8%) of them attain some level of education and (39.6%) of them were in either college or university educational status. Around one fourth of them (27.7%) were unemployed and nearly half were either government or private employee (46.4%). Around half of them (42.6%) had no income and the mean monthly income of the participant was about 59.65\$ with (SD = 85.7) USD as shown in (Table 2).

### Clinical factors:

(37.4%) had bipolar disorder and nearly two-thirds (62.6%) had depression diagnosis. The Mean age of onset of the illness by the participants were 27.89 with SD=11.2. The Mean duration of the illness by the participants were 10 year with SD=9.4. The mean duration of treatment by the participants were 7.45 year with SD=8.1. The Mean duration of treatment delay by the participants were 2.6 year with SD=4.8. Nearly nine out of ten (86.4%) claimed to be either partially or fully improved. More than one third of them (35.7%) had previous history of suicidal attempt. And also, half of them (48.5%) had history of treatment non adherence. From those participants who were non adherent to medication almost one third (29.8%) claimed stigma to play a role for their non adherence as shown in (Table 3).

### Scoring and scaling structures:

The internal consistency for the 24-item ISMI(excluding stigma resistance) was  $\alpha=0.95$ . The SR subscale had an internal consistency of  $\alpha=0.87$ . The other 4 subscales had the following values: alienation(  $\alpha=0.90$ ), stereotype endorsement (  $\alpha=0.79$ ), discrimination experience (  $\alpha=0.88$ ) and social withdrawal (  $\alpha=0.95$ ). The Rosenberg self esteem questioner had an internal consistency of  $\alpha=0.80$ . And also the WHODAS II (the 12 item) had an internal consistency  $\alpha=0.96$  as shown in (Table 1).

### ISMI scale:

**Overall self stigma** (excludes Stigma resistance): The overall mean of the 24 ISMI scale was 2.2 with SD= 0.63. Based on the mean score, and using similar score categories to the European study (<2 minimal stigma, 2-2.5 low stigma, 2.5-3 moderate stigma, 3+ high stigma); Among the total respondents, almost one third of the participant with mood disorder (31.5%) had moderate to high level of self stigma considering the mean cutoff point to be  $\geq 2.5$ . Over all 80.4% of the participant had responded by saying agree or strongly agree for at least one item in ISMI scale.

The mean of alienation was 2.56 with SD=0.82. More than half of them (54.5%) had moderate to high level of alienation. The mean of stereotype was 2.02 with SD= 0.59. Around one fifth of them (21.7%) had moderate to high level of stereotype endorsement. The mean of discrimination was 2.13 with SD=0.77.(27.7%) had moderate to high level of discrimination experience. The mean of social withdrawal was 2.11 with SD=0.74. (26.4%) had moderate to high level of social withdrawal. The mean of stigma resistance was 2.6 with SD= 0.78. (54.9%) had moderate to high level of stigma resistance scores as shown in (Table 4&Table 6 respectively).

**Other scales:** The mean of self esteem was 2.6 with SD=0.44.(67.2%) had moderate to high self esteem considering the mean cutoff point to be  $\geq 2.5$ . The mean of WHODAS II (the 12 item) was 2.13 with SD=1.24. One fourth of them(26.4%) had moderate to severe or extreme disability **WHODAS II** (the 12 item) score considering the mean cutoff point to be  $\geq 3$ . The mean of the overall days of disability in 30 days was 10.7 with SD= 12.05. The mean of the days of total difficulty in 30 days was 1.93 with SD=5.26. The mean of the days of partial difficulty in 30 days was 8.17 with SD= 10.95 as shown in (Table 6).

### **The association findings:**

**Using Independent T- TEST:** We found stastically significant mean difference between mean score of overall self stigma of female and male with  $t(233) = -2.622$  with  $p = .01$  of Females (Mean=2.29, SD=.64, n=142) and males (Mean=2.07, SD=.59, n=93). We also found stastically significant mean difference between mean score of overall self stigma of those who were non adherent to medication with  $t(233) = 3.3$  with  $p = .001$  of non adherence history (Mean=2.34, SD=.60, n=114) and adherent history (Mean=2.07, SD=.62, n=121).

Even though, There was no stastically significant difference between mean score of overall self stigma of bipolar and depression; there was a stastically significant mean difference if we used the mean of stigma resistance, alienation, stereotype, but not with discrimination and withdrawal. There was also stastical difference between bipolar and depression, if we used mean of self esteem and mean of WHODAS with  $p = .001$ .

**Using One way ANOVA:** There was no significant stastical difference in the mean of self stigma with job status.

**Non parametric test (K independent sample test)** was done for those who violate the assumptions of ANOVA; like: for those who were not normally distributed or with outliers or when test for homogeneity of variance was violated. In Non parametric test the p value was calculated by multiplying Mann-Whitney U test by the number of comparison we made.

There was stastical significant lowest self stigmawith p value less than 0.01 for being married than being single; for being a client with age group [55-64] than those in age group [25-34]; for those with 0 days of disability than the rest except for those with one days of disability;for those with 0 days of difficulty to function than for those with 2 to 7 days of total difficulty to function;andfor those with 0 days of partial difficulty to function than the rest except for those with one day partial difficulty.

There was also stastical significant lowest self stigma with p value less than 0.05 for being fully improved than the rest; and for having no previous history of suicide attempt than for having suicidal attempt history. And also, there was no stastical difference between the mean of self stigma among educational level.

**Using Pearson correlation:**There was negative stastically significant association with p value less than 0.01 between mean of overall self stigma and mean of self esteem with  $r=-.64$  and participant age with  $r= -.20$ .There was also strong positive significant relationship with p value less than 0.01 between mean of overall self stigma and mean of stigma resistance with  $r=.72$ .

**Spearman correlation** was done for those continuous variables who lacks normal distribution or who has outliers. Andthere was positive correlation with p value less than 0.01 between mean of overall self stigma and mean of WHODAS II (the 12 item) with  $r=.54$ ; 'for days they notice disability' with  $r=.48$ ; for 'days they notice total difficulty to perform day to day activities' with  $r=.34$ ;andfor 'days they notice partial difficulty to perform day to day activities' with  $r=.41$ .

There was negative correlation with p value less than 0.01 between mean of overall self stigmaand income with  $r=-.20$ ; andfor duration of treatment with  $r=-.18$ . There was also negative correlation with p value less than 0.05between age of onset and mean of overall self stigma with  $r= -.15$ . And no stastical significantdifference was seen between mean of overall self stigma and duration of illness and treatment delay.

## Regression models:

**Univariate Linear regression** was done after appropriate variables were converted to dummy variable. As shown in (**Table 5**) significant associations were found with lower self stigma scores with P value less than 0.01; for Being married (std. = -.204 & std. = -.177) when compared with being single, divorce or separated respectively; for Increment in age (std. = -.200); for Increase in income (std. = -.236); for Increase in the duration of treatment (std. = -.177); for Being fully improved (std. = -.318, std. = -.192 & std. = -.338) when compared with being partially improved, no change or relapse respectively; for Good adherence history to medication (std. = -.212) when compared with nonadherence; and for Those with high self esteem score (std. = -.635).

A significant associations were found with higher self stigma scores with P value less than 0.01; for Being female (std. = .169) when compared with being male; for Those with high stigma resistance score was (std. = .719); for Those with high level of WHODAS II ( the 12 item) disability score (std. = .513); for Those with large number of days of difficulty to function (std. = .430); for Those with large number of days of total difficulty to function (std. = .325); and for Those with large number of days of partial difficulty to function (std. = .316).

A significant associations were also found with lower self stigma scores with P value less than 0.05; for Increment in age of onset of the illness (std. = -.143); and significant associations with high self stigma scores with P value less than 0.05; for Those with positive history of suicidal attempt (std. = .140) when compared with those with no history of suicidal attempt.

No statistical significant association were found between mean of overall self stigma with diagnosis, job status, educational level, treatment delay, duration of illness and the client response to the question “does stigma contribute to non adherence”.

**Multivariate linear regression** was done for those variables that show significant association with p value less than 0.05 in univariate linear regression and after the assumption of multicollinearity and variance inflation factor (VIF) was satisfied. And the model explained (59.9%) of the variance on self stigma; indicating as the level of self esteem increased the level of self stigma decreased with (std. = -.274 with  $P < 0.01$ ); And as the level of stigma resistance score increased the level of self stigma increased with (std. = .451 with  $P < 0.01$ ); and also as the age of the onset of illness increased the level of self stigma decreased with (std. = -.229 with  $P < 0.05$ ) as shown in (**Table 5**).

## **Discussion:**

This study demonstrated the high burden of self stigma among patients with mood disorder attending a psychiatric outpatient department at Saint Paul's hospital in Addis Abeba, Ethiopia. When compared with similar studies in Europe; [Brohan et. al, 2010] almost one third (31.5%) of Participants with mood disorder in this study reported moderate to high levels of self-stigma which was somewhat higher than the rate of 21.7% (almost one fifth) in Europe study as shown in (Table 6).

On top of this the overall mean self stigma score across all four domains was between 2.0 and 2.6 in our study which is somewhat higher than the mean value in European study;[Brohan et. al, 2010] indicating clear large difference in the experience of self stigma between low and high income countries as shown in (Table 4).

Similar to a study conducted in Ethiopia by [Girma et.al, 2013], significant statistical difference was observed with regard to being female this might be explained by females being exposed to more blaming explanation of mental illness and social disadvantages, but no difference was found in regard to gender in European study [Brohan et.al, 2010].

Similar to a study conducted in European countries and Ethiopia; [Brohan et.al, 2010, Fung et al., 2007, Sirey et al., 2001 & Assefa et. al, 2012] this study indicated that increment in age, having high income status, being married, good adherence history to medication, being fully improved, having no previous history of suicidal attempt is significantly associated with lower scores in overall self stigma. But, no statistical difference was observed with regard to diagnosis, job status, educational level and treatment delay. These factors were usually identified as important predictors of stigma in both Ethiopian and European studies [Girma et.al, 2013 & Brohan et.al, 2010].

Similar to study in Europe and Ethiopia [Brohan et.al, 2010, Assefa et. al, 2012 & Girma et.al, 2013] this study showed high feelings of alienation but less agreement with common stereotype endorsement about people with mood disorder. And also, in line with the above mentioned literature, a significant inverse relationship was found between self esteem on the one hand and the overall self stigma score and stigma resistance score on the other hand.

Finally, this study demonstrated significant association between self stigma and days of total or partial difficulty to function and level of disability (WHODAS II the 12 item) score; suggesting the contribution of self stigma on impairing productive life.

## **Conclusion:**

These findings suggest that Self stigma was a major problem among persons with mood disorder in low income countries with approximately one third of people with mood disorder that has outpatient follow up in urban city of Ethiopia experience moderate to high level of self-stigma. And also, Self stigma had the potential to affect adherence to medication and was more likely to affect the recovery process and productivity. So, we recommend Psychoeducation focused on medication compliance and psychosocial patient empowerment interventions with stronger emphasis on females.

Therefore, tackling stigma should be an important public mental health intervention priority in low income countries. Strategies to address stigma should be incorporated into initiatives to scale up mental health services in low income countries. Finally, further research is needed to examine the impact of interventions targeted towards the general public and individuals with a bipolar disorder or depression on reducing self stigma.

## **Limitation of the study:**

The expected limitation of study may start from the inherent difficulty of to determine cause effect relation or time temporal relations between variables using cross-sectional study. The inclusion of those with comorbid substance use disorder can be a potential confounding factor. Finally, the study will suffer from selection bias because we didn't use random selection for selection of the participant and the study sample being taken from hospital site will make it difficult to interpret the finding for community at large.

**Table 1:** This is the Summary of Cronbach's Alpha of the scales used in patients with mood disorder in St Paul's hospital, Addis Abeba Ethiopia, 2014 in comparison with other studies.

Sub scales	Elias tesfaye finding	Eshetu Girma finding (Girma et.al, 2013)	Europe finding (Brohan et. al, 2010)	Iran finding (Ghanean, 2011)
Alienation	0.90	<b>0.84</b>	0.83	0.84
stereotype	0.79	<b>0.73</b>	0.81	0.71
discrimination	0.88	<b>0.79</b>	0.83	0.87
withdrawal	0.95	<b>0.77</b>	0.85	0.85
Over all 24 ISMI scales	0.95	0.89	<b>0.94</b>	.....
Stigma resistance scale	0.87	<b>0.65</b>	0.59	0.63
Self esteem scale	0.80	.....	.....	.....
WHODAS II (the 12 item)	0.96	.....	.....	.....

## Table 2

Background characteristics of patients with mood disorder in St Paul's hospital, Addis Abeba Ethiopia, 2014

characteristics	Frequency	percent
sex		
Male	93	39.6
female	142	60.4
Marital status		
Single	104	44.3
married	92	39.1
Divorce or separated	19	8.1
widow	20	8.5
job status		
Unemployed	65	27.7
Daily laborer	2	.9
House wife	25	10.6
student	24	10.2
farmer	5	2.1
retired	5	2.1
Government employee	53	22.6
Private employee	56	23.8
Educational level		
Illiterate	17	7.2
Educated from grade 1 up to grade 8	54	23
Educated from grade 9 up to grade 12 or (10+2)	71	30.2
College or university	93	39.6

## Table 3

Clinical characteristics of patients with mood disorder in St Paul's hospital, Addis Abeba Ethiopia, 2014

Clinical characteristics	Frequency	percent
<b>Diagnosis</b>		
Bipolar	88	37.4
Depression	147	62.6
<b>Level of improvement to treatment</b>		
Fully improved	112	47.7
Partially improved	91	38.7
No change	9	3.8
Relapse	23	9.8
<b>Suicide attempt</b>		
Yes	84	35.7
No	151	64.3
<b>Medication non adherence</b>		
Yes	114	48.5
No	121	51.5
<b>Contribution of stigma to non adherence (N= 114) **</b>		
Yes	34	29.8
No	80	70.2

\*\*Those without history of non-adherence (N = 121) excluded.

## Table 4

This is the Comparison of mean scores of stigma domain between patients with mood disorder in St Paul's hospital, Addis Abeba Ethiopia, 2014 from similar study in Europe.

Stigma domain	Stigma score			
	Ethiopia		Europe	
	mean	SD	mean	SD
Overall ISMI (excludes Stigma resistance)	2.2	0.63	1.79	0.87
Alienation	2.56	0.82	2.22	1.09
Stereotype endorsement	2.02	0.59	1.59	0.78
Discrimination experience	2.13	0.77	1.91	0.96
Social withdrawal	2.11	0.74	1.98	1.00
Stigma resistance	2.6	0.78	2.81	0.98

**Table 5:**

This is a linear model on determinants of self stigma on patients with mood disorder in St Paul's hospital, Addis Abeba, Ethiopia 2014.

Independent variables	Univariate models		Multivariate model	
	Standardized Beta coefficients	p- value	Standardized Beta coefficients	p- value
<b>Marital status</b>				
Single ( reference married)	.204	.004**	.046	.420
Divorce or separated ( reference married)	.177	.009**	.072	.123
widow( reference married)	.023	.730	.003	.946
<b>Gender</b>				
Male ( reference female)	-.169	.009**	.026	.568
Age of the patient	-.200	.002**	.098	.441
Monthly income	-.236	.000**	-.020	.681
Duration of treatment	-.177	.006**	.011	.903
<b>Level of improvement</b>				
Partially improved ( reference fully improved)	.318	.000**	.049	.333
No change ( reference fully improved)	.192	.002**	.004	.932
Relapse ( reference fully improved)	.338	.000**	.016	.755
<b>Medication non adherence</b>				
No non adherent ( reference yes non adherent)	-.212	.001**	-.029	.529
Mean of Self esteem	-.635	.000**	-.274	.000**
Mean of Stigma resistance	.719	.000**	.451	.000**
Mean of WHODAS II ( the 12 item)	.513	.000**	.114	.078
H1( the overall disability days in the past 30 days)	.430	.000**	-.184	.294
H2 ( the days of total difficulty to function in the past 30 days)	.325	.000**	.144	.113
H3(the days of partial difficulty to function in the past 30 days)	.316	.000**	.202	.214
Age of onset	-.143	.028*	-.229	.026*
<b>Suicide attempt</b>				
No suicide hx. ( reference yes)	-.140	.031*	.025	.581
Diagnosis ( reference bipolar)	.110	.092		
Job status ( reference unemployed)	-.239	.061		
Educational level ( reference college or university)	.133	.246		
Duration of Treatment delay	.085	.196		
Duration of illness	-.110	.093		
Contribution of stigma to non adherence (reference yes stigma contribute for non adherence)	.092	.159		

This linear regression model explain 60% of the variance on self stigma with p- value <.001.

\*\* Those with p-value less than 0.01

\* Those with p- value less than 0.05

## Table 6:

1. The prevalence of ISMI, self stigma resistance and WHODAS II (the 12 item) scales of patients with mood disorder in St Paul's hospital, Addis Abeba Ethiopia, 2014 in comparison with similar study in Europe.

Scale	prevalence of moderate to high levels in our study	Results from similar study in Europe [Brohan et. al, 2010]
<b>Overall self stigma</b> (excludes Stigma resistance)	<b>31.5%</b>	<b>21.7%</b>
Alienation	<b>54.5%</b>	<b>39.4%</b>
Stereotype endorsement	<b>21.7%</b>	<b>12.5%</b>
Discrimination experience	<b>27.7%</b>	21.7%
Social withdrawal	<b>26.4%</b>	28.7%
Stigma resistance	<b>54.9%</b>	59.7%
<b>SELF ESTEEM</b>	<b>67.2%</b>	.....
<b>WHODAS II</b> (the 12 item)	<b>26.4%</b>	.....

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## Appendix

### 1. Participants' Information Sheet

This is a mental health research and we are collecting data for a research purpose. This form explains why we do this study, your role in the study, the benefits and risks of involving in this study, compensations and confidentiality of the information you give us.

- a. Purpose- The purpose of this study is to study the prevalence of self stigma on patient with the diagnosis of bipolar disorder or depression and to identify other correlates that will increase self stigma on patient with bipolar disorder or depression.
- b. Procedures to be carried on- Brief introduction will be given by data collector and data collector will administer the questionnaires after interviewing consenting bipolar disorder or depressed patient. There will not be any invasive procedures.
- c. Risks associated with the study- Apart from the time you spend with us we do not see any risk that you will undergo by participating in this study.
- d. Benefits of the study- We hope that the study will contribute to the improvement of mental health service delivery to depressed patient.
- e. Compensations- There will be no compensation for your time.
- f. Confidentiality of your information- The information you give during this study will be confidential. Once the data is entered into a computer, it will be coded and becomes unidentifiable/ anonymous. Your personal information that could lead to your identification will never be disclosed both in oral or written form.
- g. Termination of the study- You will only be recruited based on your willingness and without any obligation to participate in the study. Once you get involved in the study, you have also full right to withdraw your participation before completing the study.

I would also like to inform you that this study is not yet approved by the ethical committees of the Department of Psychiatry, Addis Ababa University.

The ethics committees address / contact details are;

Department of Psychiatry  
Addis Ababa University  
P.O. Box 8096  
Tel. +251115511079

The principal investigator is Dr. Elias Tesfaye, Department of Psychiatry, AAU.  
Email: elias.tesfaye2@gmail.com

## 2. Participant consent form

### Participant consent form

My name is..... After having information about the purpose of this study I would like to ask for your consent to participate in this study entitled Internalized stigma among outpatients with mood disorders at St. Paul's Hospital, Addis Ababa, Ethiopia: a cross-sectional facility-based study.

Participating in this study will only depend on your decision to do so and you have all the rights to withhold information, refuse or drop out of the study any time you want to do so without any need to explain to anyone. Withdrawing from the study will have no effect on you. All the information you give during the study will be kept confidential.

You have all the right to ask and get clarification at any time. In case you have doubts or questions, you can use the above address to access the principal investigator.

I finally would like to confirm your agreement by signing your name if you agree.

Signature of participant \_\_\_\_\_ Date \_\_\_\_\_

Signature of data collector \_\_\_\_\_ Date \_\_\_\_\_

1. ጥናት ተሳታፊዎች መረጃ ቅፅ

ይህ የአእምሮ ጤና ጥናት ነው። ይህ ቅጽ ይህንን ጥናት ለምን እንደምናጠና በጥናቱ ውስጥ የእርስዎ ድርሻ ምን እንደሆነ በዚህ ጥናት በመሳተፍዎ የሚያገኙት ጥቅምና ተጋላጭነት ምን እንደሆነ የሚሰጡን መረጃ ሚስጥራዊነትንና የሚያገኙአቸውን ካሳዎችን የሚገልጽ ነው።

ሀ) አላማ:- የዚህ ጥናት አላማ የሽቅለት እና የድብርት ህመም ያለባቸው ሰዎች ላይ ያለውን ውስጣዊ የአድሎ ና መገለል ስሜት ማጥናት ነው።

ለ) ምን ይደረጋል:- በምንም አይነት እርሶን አደጋ የሚያጋልጡ ምርመራዎችን አናካሂድም ።

ሐ) ከዚህ ጥናት ጋር የተያያዙ ጉዳዮች:- እርስዎ በዚህ ጥናት ቢሳተፉ የሚደርስብዎ ምንም አይነት ጉዳት የለም።

መ) የጥናቱ ጥቅሞች:- በምርምሩ የሚገኘው ውጤት የሽቅለት እና የድብርት ህመም ያለባቸው ሰዎች ላይ ለሚደረገው የአእምሮ ህክምና አገልግሎት ተጨማሪ አስተዋጽኦ ሊኖረው ይችላል።

ሠ) ማካካሻ:- በጥናቱ ላይ በመሳተፍዎ የሚያገኙት ማካካሻ ወይም ክፍያ አይኖርም።

ረ) መረጃዎችን በሚስጥር ስለመያዝ:- መጠይቁን ሲሞሉ የሚሰጡት መረጃ በሚስጥር ይጠበቅልዎታል። መረጃውም ወደኮምፒውተር የሚገባው በሚስጥር ቁልፍ (ኮድ) እየተመዘገበ በመሆኑ የመረጃው ባለቤት ሊታወቅ አይችልም። እርስዎን ሊያሳውቅ የሚችል የጽሑፍም ሆነ የቃል መረጃ አይኖርም።

ሰ) ጥናቱን ስለማቋረጥ:- በዚህ ጥናት የሚሳተፉት ያለምንም ግዴታና በሙሉ ፈቃደኝነትዎ ብቻ ነው። እርስዎ በዚህ ጥናት ለመሳተፍ ፈቃደኛ ሆነው ከጀመሩ በኋላ ለማቋረጥ ቢፈልጉ ይህ መብትዎ የተጠበቀ ነው።

ይህ ጥናት በአዲስ አበባ ዩኒቨርሲቲ የህክምና ትምህርት ቤት የአእምሮ ህክምና ትምህርት ክፍል የምርምር ስነ-ምግባር ኮሚቴ የጸደቀ ነው ።

ለተጨማሪ መረጃ በ [elias.tesfaye2@gmail.com](mailto:elias.tesfaye2@gmail.com) ይጠቀሙ። :

2. የተሳታፊዎች የፈቃደኝነት መግለጫ ቅፅ

የተሳታፊዎች የፈቃደኝነት መግለጫ ቅፅ

እኔ \_\_\_\_\_ በጥናት ተሳታፊዎቼ መረጃ ቅፅ ላይ የተዘረዘሩትን መረጃዎች በበቂ ሁኔታ ከተረዱ በኋላ በዚህ ጥናት ላይ እንዲሳተፉ በትህትና እጋብዝዎታለሁ።

በዚህ ጥናት ላይ መሳተፍ የርስዎን ሙሉ ፈቃደኝነት ይጠይቃል። ምንም ማብራሪያ መስጠት ሳያስፈልግዎ ላለመሳተፍ መወሰን ይችላሉ። በዚህ ጥናት ለመሳተፍ ፈቃደኛ ባለመሆንዎ የሚደርስብዎ ችግር የለም። የሚሰጡን መረጃዎች በሙሉ በሚስጥር ይያዛል። ማንኛውንም አይነት ጥያቄ የመጠየቅና ማብራሪያ የማግኘት መብትዎ የተጠበቀ ነው። ይህንን ለማድረግ በመረጃ መስጫ ቅፅ በተገለጸው አድራሻ ተጠቅመው ዋናውን ተመራማሪ ማነጋገር ይችላሉ። በመጨረሻም ፈቃድዎ ከሆነ የፈቃደኝነት ማረጋገጫ ፊርማና ስምዎን ከዚህ በታች እንዲያሰፍሩ በአክብሮት እጠይቃለሁ።

የተሳታፊ ፊርማ \_\_\_\_\_

ቀን \_\_\_\_\_

የመረጃ ሰብሳቢ ፊርማ \_\_\_\_\_

ቀን \_\_\_\_\_





**3.3) Questioner on self-esteem scale and Amharic version**

**The Rosenberg self-esteem scale**

Sr.No	Item	Responses			
		1)Strongly agree	2)Agree	3)Disagree	4)Strongly disagree
301	I feel that I am a person of worth, at least on an equal plane with others.				
302	I feel that I have a number of good qualities				
303	All in all, I am inclined to feel that I am a failure.				
304	I am able to do things as well as most other people.				
305	I feel I do not have much to be proud of.				
306	I take a positive attitude toward myself				
307	On the whole, I am satisfied with myself.				
308	I wish I could have more respect for myself.				
309	I certainly feel useless at times.				
310	At times I think I am no good at all.				

**3.3) The Amharic version of self-esteem scale**

ተራ ቁ	ጥያቄ	ምላሽ			
		1)በጣም እስማማለው	2)እስማማለው	3)አልስማማም	4)በጣም አልስማማም
301	እርባና/ዋጋ ያለኝና ቢያንስ ከሌሎች ጋር በእኩል ሁኔታ እንዳለሁ ይስማማኛል	4	3	2	1
302	ብዙ ጥሩ/መልካም የሆኑ ነገሮች እንዳሉኝ ይስማማኛል	4	3	2	1
303	በአጠቃላይ ሲታይ በኑሮይ የውድቀት ስሜት ባጋደለ መልኩ ይስማማኛል	1	2	3	4
304	አብዛኛውን ሰዎች የሚሰሩትን ስራ መስራት እችላለሁ	4	3	2	1
305	ብዙ የምኩራራባቸው ነገሮች ያሉኝ ያህል አይስማማኝም	1	2	3	4
306	ለራሴ በጎ/አዎንታዊ የሆነ አመለካከት አለኝ	4	3	2	1
307	በአጠቃላይ በራሴ ደስተኛ ነኝ	4	3	2	1
308	ከዚህ የበለጠ ለራሴ ክብር ብስጥ ኖሮ ደስ ይለኝ ነበር/አፈልግ ነበር	1	2	3	4
309	አንድ አንድ ጊዜ ምንም ጥቅም/እርባና የሌለኝ ያህል ይስማማኛል	1	2	3	4
310	አንድ አንድ ጊዜ በፍጹም ጥሩ ሰው እንዳልሆንኩ አስባለሁ	1	2	3	4

3.4 ) **Internalized Stigma of Mental Illness Inventory (ISMI) and Amharic version**

Sr.No	Item	Response			
		1)S.dis agree	2)Dis agree	3)agree	4)S.ag ree
401. Alienation					
401.1	I feel out of place in the world because I have a mental illness				
401.2	Having a mental illness has spoiled my life				
401.3	People without mental illness could not possibly understand me.				
401.4	I am embarrassed or ashamed that I have a mental illness				
401.5	I am disappointed in myself for having a mental illness.				
401.6	I feel inferior to others who don't have a mental illness				
402.Stereotype Endorsement					
402.1	Stereotypes about the mentally ill apply to me.				
402.2	People can tell that I have a mental illness by the way I look.				
402.3	Mentally ill people tend to be violent.				
402.4	Because I have a mental illness, I need others to make most decisions for me.				
402.5	People with mental illness cannot live a good, rewarding life.				
402.6	Mentally ill people shouldn't get married.				
402.7	I can't contribute anything to society because I have a mental illness				
403. Discrimination Experience					
403.1	People discriminate against me because I have a mental illness				
403.2	Others think that I can't achieve much in life because I have a mental illness.				
403.3	People ignore me or take me less seriously just because I have a mental illness.				
403.4	People often patronize me, or treat me like a child, just because I have a mental illness.				
403.5	Nobody would be interested in getting close to me because I have a mental illness				
404. Social Withdrawal					
404.1	I don't talk about myself much because I don't want to burden others with my mental illness.				

404.2	I don't socialize as much as I used to because my mental illness might make me look or behave "weird".				
404.3	I stay away from social situations in order to protect my family or friends from embarrassment.				
404.4	Negative stereotypes about mental illness keep me isolated from the “normal” world.				
404.5	Being around people who don't have a mental illness makes me feel out of place or inadequate.				
404.6	I avoid getting close to people who don't have a mental illness to avoid rejection				
405. Stigma Resistance (reverse-coded items)					
405.1	I feel comfortable being seen in public with an obviously mentally ill person.				
405.2	In general, I am able to live life the way I want to.				
405.3	I can have a good, fulfilling life, despite my mental illness.				
405.4	People with mental illness make important contributions to society.				
405.5	Living with mental illness has made me a tough survivor				

**3.4) The Amharic version of internalized stigma inventory (ISMI)**

ተራ ቁ	ጥያቄ	ምላሽ			
		1)በጣምአ ልስማማም	2)አልስ ማማም	3)እስማ ማለው	4)በጣም እስማማለ ው
401. እራስን ከሌሎች ለይቶ የማየት ሁኔታ					
401.1	የአዕምሮ ህመምተኛ ስለሆኑ እራስዎን የማይረባና በምድር ላይ ቦታ የሌለው ሰው አድርገው ያያሉ።	1	2	3	4
401.2	የአዕምሮ ህመምተኛ መሆንዎ ህይወትዎን የተመሰቃቀለ አድርጎታል።	1	2	3	4
401.3	የአዕምሮ ህመምተኛ ያልሆኑ ግለሰቦች በእርግጠኝነት እኔን አይረዱኝም።	1	2	3	4
401.4	የአዕምሮ ህመምተኛ በመሆንዎ በራስዎ ያፍራሉ ወይም ይሸማቀቃሉ።	1	2	3	4
401.5	የአዕምሮ ህመምተኛ በመሆንዎ በራስዎ ይከፋሉ/ይበሳጩ	1	2	3	4
401.6	የአዕምሮ ህመምተኛ ካልሆኑ ሰዎች አንፃር እራስዎን የበታች አድርገው ይመለከታሉ	1	2	3	4
402. እራስ ላይ የሚደረግ የተሳሳቱ ድምዳሜዎች/የማግለል ሁኔታዎች					
402.1	ማህበረሰቡ በአዕምሮ ህመም ላይ ያለው የተሳሳቱ ድምዳሜዎች በእኔም ላይ ይሰራሉ	1	2	3	4
402.2	አሁን ያለሁበትን ሁኔታ በማየት ብቻ ሌሎች ሰዎች የአዕምሮ ህመምተኛ እንደሆንኩ ማወቅ ይችላሉ	1	2	3	4
402.3	የአዕምሮ ህመምተኞች ሁሉ አስቸጋሪዎች/አመጸኞች ናቸው	1	2	3	4
402.4	የአዕምሮ ህመምተኛ ስለሆንኩ ልሎች ሰዎች በእኔ ምትክ ውሳኔዎችን	1	2	3	4

	እንዲወሰኑልኝ እፈልጋለሁ				
402.5	የአዕምሮ ህመምተኞች ምልካም የሚባል እና አስደሳች ኑሮ ሊኖሩ አይችሉም	1	2	3	4
402.6	የአዕምሮ ህመምተኞች ትዳር መያዝ የለባቸውም	1	2	3	4
402.7	የአዕምሮ ህመምተኛ ስለሆንኩ ለማህበረሰቡ ምንም ማበርከት አልችልም	1	2	3	4
403. የመድሎ ገጠመኞች/ልምዶች					
403.1	ሌሎች ሰዎች የአዕምሮ ህመምተኛ ስለሆንኩ ብቻ መድሎ ይፈጽሙብኛል	1	2	3	4
403.2	ሌሎች ሰዎች የአዕምሮ ህመምተኛ ስለሆንኩ ብቻ በኑሮዬ ስኬታማ አይሆንም ብለው ያስባሉ	1	2	3	4
403.3	ሌሎች ሰዎች የአዕምሮ ህመም ስላሉብኝ ብቻ ትኩረት አይሰጡኝም ወይም ከቁም ነገር አይቆጥሩኝም	1	2	3	4
403.4	የአዕምሮ ህመምተኛ በመሆኔ ብቻ ሌሎች ሰዎች አብዛኛውን ጊዜ ዝቅ አድርገው ይመለከቱኛል ወይም እንደህጻን ይቆጥሩኛል	1	2	3	4
403.5	የአዕምሮ ህመምተኛ በመሆኔ ማንም ሰው ከእኔ ጋር የቀረበ ግንኙነት እንዲኖረው አይፈልግም	1	2	3	4
404. አራስን ከማህበራዊ ነገሮች ማግለል					
404.1	ሌሎችን በእኔ የአዕምሮ ህመም ሳቢያ ላለማስጨነቅ በማሰብ ስለራሴ ብዙም አላወራም	1	2	3	4
404.2	በአዕምሮ ህመሜ ሳቢያ እንግዳ/ያልተለመዱ ባህሪያትን/ሁኔታዎችን ላሳይ ስለምችል የአዕምሮ ህመምተኛ ከመሆኔ በፊት እንደነበረው ከሌሎች ሰዎች ጋር ማህበራዊ ግንኙነት የለኝም	1	2	3	4
404.3	ቤተሰቦቼ ወይም ጓደኞቼ በእኔ ምክንያት ሃፍረት እንዳይሰማቸው በማለት ከማህበራዊ ሁኔታዎች/ግንኙነቶች እራሴን አገላለው	1	2	3	4
404.4	ስለአዕምሮ ህመም በማህበረሰቡ ዘንድ ያሉ የተሳሳቱ ግንዛቤዎች/ድምዳሜዎች ከተለመደው የአኗኗር ሁኔታ እራሴን እንዳገል አድርገውኛል	1	2	3	4
404.5	የአዕምሮ ህመምተኛ ባልሆኑ ሰዎች ዙሪያ መገኘት ምችት እንዳይሰማኝ ወይም እንደማይገባኝ ይሰማኛል	1	2	3	4
404.6	መገለልን ለማስወገድ በሚል የአዕምሮ ህመምተኛ ካልሆኑ ሰዎች ጋር ብዙ አልቀርብም/አልግባባም	1	2	3	4
405. ማግለልን የመቋቋም ሁኔታ					
405.1	በሌሎች ሰዎች ዘንድ በግልጽ የሚታይ/የሚታወቅ የአዕምሮ ህመም ምልክቶች ያለበት ሰው ሆኖ መታየቴ ምችት ይሰጠኛል	4	3	2	1
405.2	በአጠቃላይ መኖር የምፈልገውን አይነት ኑሮ እየኖርኩ ነው	4	3	2	1
405.3	የአዕምሮ ህመምተኛ ብሆንም መልካም የሚባልና የተሟላ ኑሮ መኖር እችላለሁ	4	3	2	1
405.4	የአዕምሮ ህመምተኞች ለማህበረሰቡ መልካም የሆነ አስተዋፅኦ ያበረክታሉ	4	3	2	1
405.5	የአዕምሮ ህመምተኛ መሆኔ በኑሮዬ ጠንካራ እንድሆን አድርጎኛል	4	3	2	1
ተራ ቁ	ጥያቄ				
		1) በጣም አልሰማማም	2) አልሰማማም	3) እስማማለሁ	4) በጣም እስማማለሁ

## **3.5 WHODAS version 2.0 (the 12-item)**

### **Introduction**

#### **Hand flashcard #1 to respondent**

**Say to respondent:** The interview is about difficulties people have because of health conditions. By health condition I mean diseases or illnesses, or other health problems that may be short or long lasting; injuries; mental or emotional problems; and problems with alcohol or drugs.

Remember to keep all of your health problems in mind as you answer the questions.

#### **Point to flashcard #1**

When I ask you about difficulties in doing an activity think about...

- **Increased effort**
- **Discomfort or pain**
- **Slowness**
- **Changes in the way you do the activity.**

**When answering, I'd like you to think back over the past 30 days.** I would also like you to answer these questions thinking about how much difficulty you have had, on average, over the past 30 days, while doing the activity as you usually do it.

#### **Hand flashcard #2 to respondent**

Use this scale when responding.

#### **Read scale aloud:**

**1=none, 2=mild, 3=moderate, 4=severe, 5=extreme or cannot do.**

Ensure that the respondent can easily see flashcards #1 and #2 throughout the interview

#### **Show flashcard #2**

**In the past 30 days, how much difficulty did you have in?**

**1=None, 2= Mild, 3= Moderate, 4= Severe, 5=Extreme or Cannot do**

	none	mild	moderate	severe	extreme
S1 Standing for long periods such as 30 minutes?					
S2 Taking care of your household responsibilities?					
S3 Learning a new task, for example, learning how to get to a new place?					
S4 How much of a problem did you have joining in community activities (for example, festivities, religious or other activities) in the same way as anyone else can?					
S5 How much have you been emotionally affected by your health problems?					
S6 Concentrating on doing something for ten minutes?					
S7 Walking a long distance such as a Kilometer [or equivalent]?					
S8 Washing your whole body?					
S9 Getting dressed?					
S10 Dealing with people you do not know?					
S11 Maintaining a friendship?					
S12 Your day-to-day work/school?					

H1 Overall, in the past 30 days, how many days were these Difficulties present?	Record number of days ____
H2 In the past 30 days, for how many days were you totally unable to carry out your usual activities or work because of any health condition?	Record number of days ____
H3 In the past 30 days, not counting the days that you were totally unable, for how many days did you cut back or reduce your usual activities or work because of any health condition?	Record number of days ____

**This concludes our interview. Thank you for participating.**

## **Flashcard 1**

### **Health conditions:**

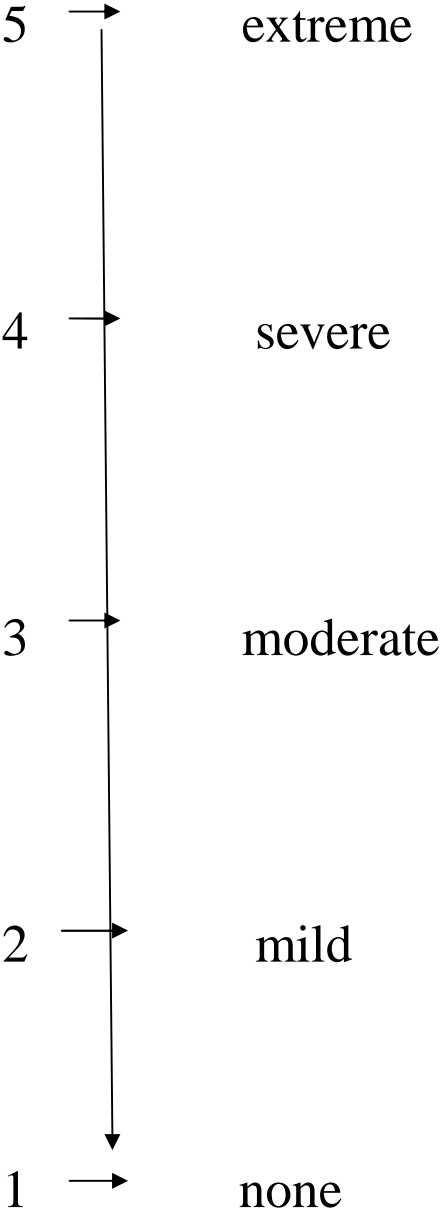
- **Diseases, illnesses or other health problems**
- **Injuries**
- **Mental or emotional problems**
- **Problems with alcohol**
- **Problems with drugs**

### **Having difficulty with an activity means:**

- **Increased effort**
- **Discomfort or pain**
- **Slowness**
- **Changes in the way you do the activity**

**Think about the past 30 days only.**

# Flashcard 2



## Flash card 3

CODE

A one day

B one week= (2-7 day)

C up to two week= (8-14day)

D above two week= (15-29day)

E every day= (30 day)