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Magnitude of internalised stigma and associated factors among people with bipolar disorder at Amanuel Mental Specialized Hospital, Addis Ababa, Ethiopia: a cross-sectional study

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ABSTRACT

Objectives To assess the magnitude of internalised stigma and associated factors among patients with bipolar disorder attending the outpatient department of Amanuel Mental Specialized Hospital, Addis Ababa, Ethiopia.

Design Institution-based cross-sectional study design.

Setting Amanuel Mental Specialized Hospital, Addis Ababa, Ethiopia.

Participants We recruited about 418 participants using systematic sampling technique for an interview during the study period.

Measurement Data were collected by face-to-face interviews. Internalized Stigma of Mental Illness scale was used to measure internalised stigma. The Rosenberg Self-Esteem Scale and the Oslo-3 Social Support were instruments used to assess the associated factors. Bivariate and multivariate logistic regressions were performed to identify factors associated with the outcome variable. ORs with 95% CI were computed to determine the level of significance.

Results The magnitude of internalised stigma was 24.9% (95% CI: 21.2% to 28.9%). In the multivariate analysis, unemployed (adjusted OR (AOR)=2.3, 95% CI: 1.0 to 5.0), unable to read and write (AOR=3.3, 95% CI: 1.05 to 10.7), poor social support (AOR=5.3, 95% CI: 1.9 to 15.0), ≥4 previous hospitalisations due to bipolar disorder (AOR=2.6, 95% CI: 1.1 to 6.1) and low self-esteem (AOR=2.4, 95% CI: 1.1 to 5.1) had a significant association with internalised stigma.

Conclusions One in four patients with bipolar disorder reported high internalised stigma. Unemployment, low educational status, low self-esteem, poor social support and being hospitalised more than three times before were significantly associated with internalised stigma. Thus, a stigma-reduction programme focusing on self-esteem improvement and psychological health of patients to increase their stigma resistance to counteracting effects of internalised stigma is essential.

INTRODUCTION

The WHO considers the stigma of mental illness as a global health problem because it has a direct effect on the overall quality of life

Strengths and limitations of this study

► The limitation of the study emanates from its cross-sectional design, which might not show causal relationship.

► Social and recall biases might have occurred among patients while interviewing them using the questionnaire.

► An internalised stigma scale can be used for future studies because it had good internal consistency in this study.

of people with mental illness.[1 2] Mental health research identified different inter-related levels of stigma, including internalised stigma.[3] Internalised stigma is a phenomenon of accepting and incorporating a negative stereotype about mental illness into the identity of people.[4 5]

Bipolar disorder is one of the most severe mental illnesses, which is characterised by fluctuating periods of mania and depression. In severe episodes of the disorder, it contains delusions and hallucinations.[6] When the onset of the illness is early in age, severe and chronic, its disability impact is high.[7] It is the sixth cause of disability.[8] Studies in developed and developing countries showed that 18.5%–46% of patients with bipolar disorder have internalised stigma.[4 9–15] For example, the magnitude of internalised stigma has been 38.7% in Kerala, India,[14] 21.6% and 33.7% in Nigeria.[13 16] Because of internalised stigma, patients might have a reduction of morality, increased avoidance behaviours and reduced social functioning.[17–19] It also has an impact on an individual's decision to seek treatment and create similar barriers to life opportunities and achievements.[20 21] Moderating and risk factors for internalised stigma among

patients with bipolar disorder have been sex, middle age, low level of education, unemployment, severity of depression, perceived social support, family history of mental illness, number of previous hospitalisations, longer duration of illness and low-self esteem.[9–11 14–16 22 23] Patients' belief about the cause of the illness is more frequently associated with stigmatised attitude, and results in less likely seeking the recommended treatment.[24] Patients with high internalised stigma have lower adherence to their treatment so the condition of the illness becomes more severe.[25] Many patients with bipolar disorder have discontinued their prescribed medications and are rehospitalised, which results in a high cost for the healthcare system. Even though internalised stigma is high and has different impacts, there are no study findings which show its magnitude among patients diagnosed with bipolar disorder in Ethiopia. Therefore, determining the magnitude and associated factors of internalised stigma of patients diagnosed with bipolar disorder is important to control bipolar symptoms, decrease the burden of relapse and regain basic life functioning which all contribute to improving patients' quality of life.

Objective
The aim of this study was to assess the magnitude of internalised stigma and associated factors among people diagnosed with bipolar disorder at Amanuel Mental Specialized Hospital (AMSH), Addis Ababa, Ethiopia, 2016.

METHODS AND MATERIALS
Study setting and period
An institution-based cross-sectional study design was conducted among patients diagnosed with bipolar disorder who had follow-ups at AMSH in Addis Ababa, Ethiopia between May and June 2016. It was the first mental health-specialised hospital that started mental health services in Ethiopia. It gives treatment services for patients coming with different mental health problems in the outpatient and inpatient setting at the moment.

Study population
The study included patients aged 18 years and above during data collection in the outpatient department of the hospital. Patients with positive symptoms/acutely disturbed, unable to communicate and with hearing problem were excluded.

Sample size determination and technique
We determined the sample size by using the single population proportion formula with the assumptions of 50% prevalence of internalised stigma: p=0.5, Z=1.96 (standard normal distribution), 95% CI, α=0.05 and a 10% non-response rate. Accordingly, a representative/probabilistic sample was calculated to be 423. Participants were recruited randomly by using the systematic sampling technique. The sampling interval was determined by dividing the total study population who had follow-up during the data collection period by the total sample size, then the starting point was randomly selected.

Study variables
The dependent variable was internalised stigma measured by the Internalized Stigma of Mental Illness (ISMI) scale. We measured internalised stigma as a dichotomous variable (yes/no). Independent variables included sociodemographic factors, psychosocial factors and clinical variables (age at the onset of the illness, number of episodes, duration of the treatment and number of previous hospitalisations).

Data sources and measurement
Data were collected by face-to-face interviews using a semistructured questionnaire administered by six mental health professionals using the Amharic version of the tool for a month. The interviews were carried out after the patients have been seen by their physician. The questionnaire was designed in English and translated to Amharic and back to English to maintain consistency. Though the translated version of the questionnaire was not validated, a pretest was done prior to the actual data collection time. Data collectors were trained on introduction to bipolar disorder and stigma, how to interview and explain unclear questions. Furthermore, they were made aware about ethical aspects of the study, such as confidentiality/anonymity, data management and securing respondents' informed consent for participation.

Internalised stigma was measured using the 29-item ISMI scale which had five domains, namely alienation, stereotype endorsement, discrimination experience, social withdrawal and stigma resistance. It had a Likert response options ranging from (1) 'strongly disagree' to (4) 'strongly agree', and the total score was calculated by summing the 29 items[4] and a cut-off ≥2.5, that is, study participants had internalised stigma.[4] We adapted the tool from a study conducted in Jimma, Ethiopia.[23] It showed a high internal consistency and reliability (κ=0.89). We conducted a reliability analysis for the translated Amharic version of the tool and showed a high score (Cronbach's α=0.93).

Social support was measured using the Oslo-3 Social Support Scale with scores ranging from 3 to 14: 3–8=poor social support; 9–11=intermediate social support and 12–14=strong social support.[26]

Self-esteem was assessed by the Rosenberg Self-Esteem Scale and categorised into low and high self-esteem score.[27]

Items on sociodemographic factors (age, sex, ethnicity, marital status, religion, educational and occupational status) were adopted from a variety of literature.

Data processing and analysis
Data were entered into EPI Info V.7 after checking completeness and then exported to SPSS V.20 for analysis. We computed descriptive, bivariate and multivariate

logistic regression analyses to see the frequency distribution and to test the association between independent and dependent variables, respectively. Factors associated with internal stigma were selected during the bivariate analysis with a p value of <0.2 for further analysis in the multivariable logistic regression analysis. In the multivariable logistic regression analysis, the strength of association was evaluated using the adjusted OR (AOR) with a 95% CI, and a p value less than 0.05.

Patient and public involvement
Our study participants were not involved in the study design and recruitment.

RESULTS
A total of 418 participants took part with a response rate of 98.8%. From five participants, four did not voluntarily participate and one discontinued the interview. The mean (SD) age of the respondents was 34.29 (10.4) years, and 164 (39.2%) were in the age range of 25–34 years; 216 (51.7%) were male; 223 (53.3%) were single and 140 (33.5%) were in secondary school. The majority, 311 (74.4%), of the participants were living in an urban setting. According to the World Development Report 2010, 180 (43.1%) were living above poverty benchmark (table 1).

Regarding the clinical characteristics of participants, the majority, 255 (61.0%), developed the disorder before 25 years of age, and 157 (37.6%) have had the illness for more than 10 years. Of the respondents, 220 (52.6%) had treatment duration of less or equal to 6 years, and 251 (60%) of them had more than two episodes. In terms of previous hospitalisation, 218 (52.2%) of the patients were hospitalised because of the disorder.

A small number, 45 (10.8%), of the participants were hospitalised ≥4 times previously, and 310 (74.2%) had manic episodes. About 190 (45.5%) took traditional treatment for their illness; 119 (28.5%) had a family history of mental illnesses and 144 (34.4%) attempted suicide. Of the total 418 participants, 233 (55.7%) discontinued their medication and 25 (10.7%) were discontinuing because of perceived stigma. Regarding psychosocial factors, 176 (42.1%) of the participants had poor social support, and 133 (31.8%) had low self-esteem (table 2).

Magnitude of internalised stigma
The prevalence of internalised stigma among participants was 24.9%, with 95% CI (21.2% to 28.9%). Regarding the subscales of ISMI, 151 (36.1%), 71 (17.0%), 154 (36.8%) and 109 (26.1%) of the respondents had internalised stigma score in alienation, stereotype endorsement, discrimination experience and social withdrawal, respectively.

Factors associated with internalised stigma
To determine the association of independent variables with internalised stigma, bivariate and multivariate binary logistic regression analyses were carried out. In the bivariate analysis, factors including current work status, educational status, residence and marital status, patients taking traditional treatment, duration of the illness, number of

Table 1 Frequency and percentage of patients with bipolar disorder on follow-ups at Amanuel Mental Specialized Hospital, Addis Ababa, Ethiopia, 2016 (n=418)

Variables	Category	Frequency	Per cent
Age	18–24	66	15.8
	25–34	164	39.2
	35–44	120	28.7
	≥44	68	16.3
Sex	Male	216	51.7
	Female	202	48.3
Religion	Orthodox	230	55.0
	Muslim	94	22.5
	Protestant	82	19.6
	Others	12	2.9
Marital status	Single	223	53.3
	Divorced/widowed	65	15.6
	Married	130	31.1
Ethnicity	Amhara	151	36.1
	Oromo	120	28.7
	Gurage	75	17.9
	Others	72	17.2
Educational status	Unable to read and write	62	14.8
	Primary	103	24.6
	Secondary	140	33.5
	College and above	113	27.0
Residency	Rural	107	25.6
	Urban	311	74.4
Currently working	Yes	277	66.27
	No	141	33.73
Type of occupation	Government employee	58	13.9
	Farmer	45	10.8
	Private enterprise	121	28.9
	Others	53	12.7
Household monthly income	Extreme poverty	113	27.0
	Poverty benchmark	125	29.9
	Above poverty benchmark	180	43.1

Table 2 Frequency and percentage of clinical and psychosocial factors among people with bipolar disorder at Amanuel Mental Specialized Hospital, Addis Ababa, Ethiopia, 2016 (n=418)

Variables	Category	Frequency	Per cent
Age at onset of illness	≤25 years	255	61.0
	>25 years	163	39.0
Duration of illness	<5 years	147	35.2
	5–10 years	114	27.3
	>10 years	157	37.6
Treatment duration	≤6 years	220	52.6
	>6 years	198	47.4
Number of episodes	<2	167	40.0
	≥2	251	60.0
Presence of hospitalisation	Yes	218	52.2
	No	200	47.8
Number of hospitalisations	<4	175	41.9
	≥4	45	10.8
Current episode	Manic	310	74.2
	Depressive	108	25.8
Ever had traditional treatment	Yes	190	45.5
	No	228	54.5
Family history of mental illness	Yes	119	28.5
	No	299	71.5
Previous suicidal attempt	Yes	144	34.4
	No	274	65.6
Ever had discontinuation of medication	Yes	233	55.7
	No	185	44.3
Contribution of stigma to discontinuation of medication	Yes	25	5.9
	No	208	49.8
Social support	Poor	176	42.1
	Intermediate	148	35.4
	Strong	94	22.5
Self-esteem	Low	133	31.8
	High	285	68.2

previous hospitalisations, number of episodes and type of current episode, social support and low self-esteem were significantly associated with internalised stigma at p value less than 0.2. These factors were entered into the multivariable logistic regression model to control confounding effects.

The result of the multivariate analysis showed that unemployed (AOR=2.3, 95% CI: 1.0 to 5.0), unable to read and write (AOR=3.3, 95% CI: 1.0 to 10.7), poor social support (AOR=5.3, 95% CI: 1.9 to 15.0), previous hospitalisations (≥4 times) (AOR=2.6, 95% CI: 1.1 to 6.1) and low self-esteem (AOR=2.4, 95% CI: 1.1 to 5.1) were significantly associated with internalised stigma (table 3).

DISCUSSION

This study found that a number of patients were experiencing internalised stigma. Some 24.9% of people with the disorder had internalised stigma according to ISMI scale. Our finding was consistent with reports of studies across 13 European countries, 21.7%[10]; in Shanghai, China, 24.2%[11]; Iran, 26.7%[12] and the USA, 28%.[4]

Conversely, this finding was lower than 33.7% noted in Nigeria,[13] 38.7% in India,[14] 46% in Turkey[22] and 36% in the USA.[15] The variation might be due to the difference in sample size and study subjects. In Turkey, they used only 100 participants, and in the USA patients with schizophrenia and other psychotic disorders were included in addition to patients with bipolar disorder. The inclusion of patients with schizophrenia disorder in that study may increase internalised stigma because of the continuous nature of the illness. The other variation might be that in our study most of the participants were from an urban setting and in college and had above educational level, which in turn reduces level of internalised stigma.

On the other hand, our finding was higher than 18.5% in Turkey.[9] The discrepancy might be due to different study designs and study subjects they used. In Turkey, they used a comparative cross-sectional study design and all the participants were literate. This is due to the fact that those patients with lower educational status may have more internalised stigma.

The odds of internalised stigma among unemployed were 2.3 times higher than employed participants. This is consistent with the study conducted across 13 European countries,[10] in Shanghai, China,[11] Iran[12] and Jimma.[23] Studies showed that unemployed persons were found to have higher stigma.[28–30] They also have less self-tolerance and are resistant to stigma. As a result, patients might face problems related to employment opportunities,[31–33] and be less likely to apply for jobs because they might be preoccupied with thoughts of being unable to achieve their jobs.[34]

Participants who could not read and write were 3.34 times more likely to experience internalised stigma compared with those in college and have above educational level. This is also supported by studies across 13 European countries,[10] in Shanghai, China,[11] Iran[12] and Turkey.[9] High level of education might protect people from applying devaluing judgement to them. Literacy might also increase the possibility of using multiple sources of information to increase one's knowledge about

Table 3 Bivarate and multivariate analysis of internalised stigma and explanatory variables among people with bipolar disorder at the outpatient department of Amanuel Mental Specialized Hospital, Addis Ababa, Ethiopia, 2016 (n=418)

Variables	Internalised stigma		COR (95% CI)	AOR (95% CI)	P value
	High	Low			
Current working status					
Yes	55	209	1.0	1.0	
No	49	105	1.8 (1.1 to 2.8)	2.3 (1.0 to 5.1)*	0.007
Residence					
Rural	32	75	1.4 (0.9 to 2.3)	1.1 (0.5 to 2.5)	0.244
Urban	72	239	1.0	1.0	
Marital status					
Single	64	159	1.5 (0.9 to 2.6)	1.86 (0.73 to 4.75)	0.356
Divorced or widowed	13	52	1.0 (0.5 to 2.0)	0.4 (0.1 to 1.3)	0.871
Married	27	103	1.0	1.0	
Ever had traditional treatment					
Yes	53	137	1.3 (0.9 to 2.1)	0.9 (0.4 to 1.8)	0.532
No	51	177	1.0	1.0	
Educational status					
Unable to read and write	24	38	2.2 (1.1 to 4.4)	3.3 (1.1 to 10.7)*	0.016
Primary	24	79	1.1 (0.6 to 2.0)	1.6 (0.6 to 4.3)	0.913
Secondary	31	109	1.0 (0.6 to 1.8)	0.8 (0.3 to 2.2)	0.238
College and above	25	88	1.0	1.0	
Current episode					
Manic	84	226	1.0	1.0	
Depressive	20	88	0.6 (0.4 to 1.1)	1.3 (0.4 to 3.9)	0.332
Number of episodes					
<2	33	134	1.0	1.0	
≥2	71	180	1.6 (1.0 to 2.6)	1.0 (0.4 to 2.7)	0.894
Duration of illness					
<5 years	29	118	1.0	1.0	
5–10 years	23	91	1.0 (0.6 to 1.9)	0.8 (0.3 to 2.2)	0.901
>10 years	52	105	2.0 (1.2 to 3.4)	2.1 (0.8 to 5.5)	0.143
Self-esteem					
Low	45	88	2.0 (1.2 to 3.1)	2.3 (1.1 to 5.1)*	0.001
High	59	226	1.0	1.0	
Previous hospitalisation					
<4	38	137	1.0	1.0	
≥4	20	25	2.9 (1.5 to 5.8)	2.6 (1.1 to 6.1)*	0.031
Social support					
Poor	67	109	2.8 (1.5 to 5.1)	5.3 (1.9 to 15.0)**	0.002
Intermediate	20	128	0.7 (0.4 to 1.4)	1.1 (0.4 to 3.2)	0.938
Strong	17	77	1.0	1.0	

*P<0.05, **p<0.01, Hosmer-Lemeshow test=0.78.
AOR, adjusted OR; COR, crude OR.

mental illness. Conversely, people who could not read and write might relate the cause of their mental illness to supernatural explanations like demon possessions, or bewitchment by an evil spirit, ancestor's spirit or evil eye, which might contribute to increased internalised stigma.[23]

This study found that participants who had more than three hospital admissions have higher internalised stigma than those who had less number of hospital admissions. This is supported by results of a study conducted in India.[14] Repeated hospitalisations in the past might show the seriousness of the patients' symptom that could

be easily seen by the public and exposed the patient to public stigma. Repeated absences from social situations because of frequent hospitalisations might also make the patients easily stigmatised.

Regarding social support, the odds of developing internalised stigma were 5.3 times higher among patients with poor social support compared with those with strong social support. People with good social support might have increased self-esteem which conversely reduces stigma. Moreover, patients with good social support might have good medication adherence which contributes to controlling of symptoms. This finding was consistent with other study findings.[16]

Concerning self-esteem, patients who had low self-esteem were 2.4 times more likely to develop internalised stigma than patients with high self-esteem. This finding was supported by results of studies conducted in various countries.[35–38] Patients with severe mental illness could have low self-esteem which reduces their ability to resist stigma.[35]

Limitation of the study

The cross-sectional design of the study prevented us from concluding the causal relationships of the associations we found.

Social desirability and recall bias might also be the other limitations, since the data collection method was a face-to-face interview, which might lead individuals to respond in socially acceptable ways during the process.

The findings of this study could not be generalised to patients in other health facilities.

The tool, ISMI, was not validated although it was widely used as a screening tool for internalised stigma in Ethiopia.

CONCLUSION

In the current study, more than one-fourth of the sample experienced high internalised stigma. Unemployment, low educational status, ≥4 previous hospitalisations, poor social support and low self-esteem had a significant association with internalised stigma. Thus, it is necessary to give emphasis on a stigma-reduction programme to improve individuals' self-esteem and stigma-resistance capability, and expand their social support.

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