



## Research article

## The magnitude and correlates of internalized stigma among people with mental illness attending the outpatient department of Amanuel Mental Specialized Hospital, Addis Ababa, Ethiopia

Asres Bedaso<sup>a,b,\*</sup>, Keralem Workie<sup>a</sup>, Mulugeta Gobena<sup>a</sup>, Emnet Kebede<sup>c</sup><sup>a</sup> Hawassa University, College of Medicine and Health Sciences, School of Nursing, Ethiopia<sup>b</sup> Australian Centre for Public and Population Health Research, School of Public Health, Faculty of Health, University of Technology Sydney, Ultimo, NSW, Australia<sup>c</sup> Hawassa University, College of Medicine and Health Sciences, Department of Midwifery, Ethiopia

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## ABSTRACT

**Introduction:** Internalized stigma is an ongoing process of psychological assimilation of the community labels towards mental illness, in which people with mental illness (PWMI) gradually lose their current positive belief and confidence in themselves and their future wishes. It affects the treatment and help-seeking behavior which leads to poor drug adherence, social marginalization, unemployment, socio-economic devastation, and poor quality of life for PWMI. Therefore, the current study aimed to determine the magnitude and correlates of high internalized stigma among People with Mental Illness (PWMI) attending the outpatient department of Amanuel mental specialized hospital, Addis Ababa, Ethiopia.

**Methods:** Institution based cross-sectional study was conducted from March 03 to March 28, 2019. A consecutive sampling technique was used to select an estimated 406 study participants. Internalized stigma was assessed using a 29 Item Internalized Stigma of Mental Illness (ISMI-29) tool. Data were entered and analyzed using SPSS 22 software. A Binary logistic regression model was fitted to identify correlates of internalized stigma. An adjusted odds ratio (AOR) with a 95% confidence interval was computed to determine the strength of association and the level of significance was declared with a p-value <0.05.

**Result:** Of the total study participants, 388 respondents agreed to participate in the study giving a response rate of 96%. The magnitude of high internalized stigma among the study participants was 61.3% (95% CI: 58.2, 64.4). Poor social support (AOR = 1.973; 95%CI = 1.189, 3.27) and being unemployed (AOR = 2.87, 95% CI = 1.192–6.931) were significant correlates of high internalized stigma among PWMI.

**Conclusion:** Overall, around three in five PWMI experienced high internalized stigma. Poor social support and being unemployed were significant correlates of high internalized stigma. Large scale community-based study supplemented by qualitative design is highly recommended to identify additional correlates of internalized stigma and understand perspectives of PWMI.

## 1. Introduction

Mental illness causes mild to severe disturbances in thought and behaviour which results in poor stress coping ability and ordinary life demands [1]. Globally, there are more than 200 psychiatric disorders and around 450 million people were estimated to be suffering from mental illness [2, 3]. In Ethiopia, mental illness is among the major leading non-communicable disease, and the dominant diagnosed psychiatric disorders were schizophrenia and depression [4].

People with mental illness (PWMI) are experiencing a double burden; both from the illness and the stigma. Stigmatization is an assignment of

negative insights to an individual because of apparent differences from the population at large [5]. Different literatures have used different means to define and classify the concept of stigma. Erving Goffman interpreted Stigma as “a means of spoiling identity”. By this, he referred to the stigmatized trait’s ability to “spoil” recognition of the individual’s adherence to social norms in other facets of self” [6]. He also identified three main types of stigma; (i.e., stigma associated with mental illness; physical deformation; and stigma attached to identification with a particular race, ethnicity, religion, ideology, etc.) [6]. Stigma can also be represented by its empirical nature; (i.e. “stigma is perceived, endorsed, anticipated, received, or enacted”) and reflects an action-oriented

\* Corresponding author.

E-mail address: [asresbedaso@gmail.com](mailto:asresbedaso@gmail.com) (A. Bedaso).

perspective (i.e., “who gives or receives the stigma”). From this concept, classifications of stigma can be; public stigma, structural stigma, courtesy stigma, provider based stigma, and internalized stigma [7]. This last concept of stigma (i.e. internalized stigma) is the focus of the current study.

Internalized stigma can be defined as “the process in which a person with mental illness cognitively or emotionally absorbs negative messages or stereotypes about mental illness and comes to believe them and apply them to him/herself” [8]. Also, internalized stigma is an ongoing process of psychological assimilation of the community labels towards mental illness that is said to occur when PWMI gradually lose their current positive belief and confidence in themselves and their future wishes [9]. Also, it is an unreasonable feeling, sentiment, behaviour towards one's own [10, 11] and believes they are undervalued members of society [12]. Currently, there are different explanations given for stigmatizing people with mental illness [5]. Lack of awareness about treatment, apparent fear of injury, cultural misunderstandings about the cause of mental illness, and trying to relate the mental illness with a supernatural explanation are additional contributing factors to stigma [13, 14].

Different studies revealed that the prevalence of internalized stigma among PWMI ranges; 41.7% among patients with schizophrenia from 14 European countries [15], China 25.1% [16], Nigeria 22.5% [17], Iran 40% [18], USA, California 36% [19] and Maryland 35% [20], India 34.1% [21] and Serbia 17.5% [22]. Also, findings from the studies conducted in Ethiopia indicated that the prevalence of internalized stigma was 32.1% in Dilla [23], and 46.7% in Addis Ababa [24]. A global level review conducted by Dubreucq and colleagues found that 31.3% of patients with serious mental illness experienced high self-stigma [25].

The correlates of internalized stigma among PWMI include being female, drug non-adherence, lack of social support [23], rural residence, being single, and having prominent psychotic symptoms [24]. Besides, those with age less than or equal to 45 years, unemployed, don't have long-term friendships and have no hope of cure with medication have a significant correlation with internalized stigma. Lastly, those with comorbid medical illnesses, and psychoactive substance users reported higher odds of internalized stigma [21].

Globally, different studies examined internalized stigma among PWMI. Despite this, only a few studies conducted in Ethiopia address internalized stigma, specifically among PWMI irrespective of their psychiatric disorder. This topic is still not an area of interest for many researchers, and the finding could help in determining the magnitude of the problem. Also, the result could help in designing interventions to combat stigma and minimize its effect. In response to this research gap, our study aimed to examine the prevalence and correlates of high internalized stigma among PWMI attending the outpatient department of Amanuel mental specialized hospital, Addis Ababa, Ethiopia.

## 2. Methods

### 2.1. Study design and setting

An institution-based cross-sectional study design was employed from March 03 to March 28, 2019, at Amanuel mental specialized Hospital (AMSH). AMSH is inaugurated in 1930 and found in Addis Ababa, the capital city of Ethiopia. Currently, the hospital has a total of 300 beds for inpatient and outpatient services. The hospital is providing outpatient services for around 115,000 psychiatric and epileptic patients per year.

### 2.2. Population

All psychiatric patients attending the outpatient department of Amanuel Mental specialized hospital were the source population. Our study included psychiatric patients aged 18 years above. However, those who have difficulty in communicating (severely ill, hearing impairment) were excluded from the study.

### 2.3. Sample size and sampling technique

The sample size was determined using a single population proportion formula considering the recommended assumption (i.e.  $Z =$  standard normal distribution with a confidence interval of 95% ( $Z = 1.96$ ), expected proportion of patients who experienced internalized stigma taken from a previous study (40%) [18] and margin of error ( $d = 0.05$ ). By adding a 10% non-response rate, the final estimated sample size was 406. Then, patients attending the outpatient department of Amanuel mental specialized hospital were randomly selected.

### 2.4. Variables

The outcome variable is internalized stigma (high/low) among PWMI. Independent variables include socio-demographic characteristics (age, sex, religion, marital status, occupation, residence, and educational level), duration of illness, type of psychiatric diagnosis, comorbidities, social support and substance use (alcohol, cigarette or khat).

### 2.5. Data collection and measurement

Data were collected by four trained psychiatry nurses, and supervision was conducted by two mental health professional specialists. The supervisors inspected for the completeness and quality of data collection daily.

Internalized stigma was assessed using the Internalized Stigma of Mental Illness (ISMI-29 Items on a 4 point Likert scale) tool. It contains five subscales (Alienation (6 items), Stereotype Endorsement (7 items), discrimination experience (5 items), social withdrawal (6 items), and stigma resistance (5 items)). The total score was attained by summing all the answered scores and dividing them by a total number of items. The categorization of stigma is based on severity measured by ISMI as used by Lysaker and colleagues during their study among patients with schizophrenia [26]. For the current analysis, those who reported mild to moderate internalized stigma were categorized as low (ISMI score  $< 2.5$ ) and those who reported moderate to severe stigma were categorized as having a high internalized stigma (ISMI score  $\geq 2.5$ ). The tool has been validated in Ethiopia, and its internal consistency was  $\alpha = 0.90$  [24]. Also, the internal consistency of the overall ISMI scale ( $\alpha = 0.78$ ) and specific domains was satisfactory (i.e., Alienation ( $\alpha = 0.75$ ), Stereotype Endorsement ( $\alpha = 0.72$ ), discrimination experience ( $\alpha = 0.81$ ), social withdrawal ( $\alpha = 0.79$ ), and stigma resistance ( $\alpha = 0.83$ )). Before data collection, the English version of the ISMI scale was translated to Amharic and back translation was performed by language experts who speak both English and Amharic to ensure the understandability of the tool.

Social support among study participants was examined by Oslo 3 items social support scale (OSS-3), which is classified social support as poor (3–8 OSS score), intermediate (9–11 OSS score), and strong (12–14 OSS score) [27]. Current use of the psychoactive substance was assessed by asking if they used any of the following psychoactive substances in the last three months (Yes/No) (i.e., Alcohol, tobacco, cigarette, and others).

### 2.6. Data analysis

We have conducted data entry and analysis using SPSS statistical software package version 22. A Bivariable and multivariable logistic regression analysis was conducted to identify factors associated with the internalized stigma on mental illness (ISMI). During Bivariable logistic regression, variables with a p-value  $< 0.25$  were entered into a multivariable logistic regression model to identify factors significantly associated with the outcome variables (high internalized stigma).

The results of the regression analyses were presented using the crudes (COR) and adjusted odds ratio (AOR) and their corresponding 95% confidence interval (CIs). In the final model statistical significance was set at a p-value  $< 0.05$  and AOR with 95 % CI was used to determine the

strength of association. The model fitness test was conducted using the Hosmer and Lemeshow goodness of fit test [28].

### 2.7. Ethical approval and consent to participate

Ethical clearance was obtained from the Institutional Review Board (IRB) of Hawassa University, college of medicine and health sciences. The data collectors clearly explained the aim of the study to every study participant. Information was collected after obtaining written consent from each study participant. Each participant was informed that they have the right to refuse or discontinue participation at any time they want. For the issue of confidentiality, anonymity was maintained and all other personal information was kept confidential.

## 3. Results

### 3.1. Socio-demographic characteristics

The sociodemographic characteristics of study participants were displayed in Table 1. Of the estimated 406 study participants, 388 participated in the study giving a response rate of 96% (18 questionnaires were incomplete). The majority (65%) of the study participants were

**Table 1.** Socio-demographic profile of study participants (n = 388).

Variables	Frequency	%
<b>Age</b>		
18–24	73	18.8
25–34	172	44.3
35–49	122	31.4
≥50	21	5.4
<b>Sex</b>		
Male	254	65.5
Female	134	34.5
<b>Religion</b>		
Orthodox	199	51.3
Catholic	13	3.4
Protestant	87	22.4
Muslim	89	22.9
<b>Educational status</b>		
Unable to read and write	40	10.3
Primary education	122	31.4
Secondary education	111	28.6
College and above	115	29.6
<b>Marital status</b>		
Single	210	54.1
Married	146	37.6
Divorced	25	6.4
Widowed	7	1.8
<b>Occupation</b>		
Gov. employed	58	15
Private employed	84	21.6
Merchant	63	16.2
Daily labor	25	6.4
Student	43	11.1
Housewife	38	9.8
Unemployed	64	16.5
Other <sup>‡</sup>	13	3.4
<b>Residence</b>		
Urban	267	68.8
Rural	121	31.2

<sup>‡</sup> Other occupation includes a driver (n = 3), farmer (n = 8), and teacher (n = 2).

male (n = 254). The mean age of the study participants was 32.3 years (±8.95 SD) and 172 (44.3%) were between the age group of 25–34 years.

### 3.2. Clinical and psychosocial factors

Table 2 presents the clinical characteristics of the study participants. Of the total participants, 140 (36.1%) have a duration of psychiatric illness of less than one year, and 24 (6.2%) study participants have a chronic medical condition.

Of the total study participants, 192(49.5%), 104(26.8%), 61(15.7%) and 31 (8%) of study participants were diagnosed with schizophrenia, Bipolar I, and major depressive disorder (MDD) and other comorbid psychiatry disorder, respectively. Of the total study participants, 188(48%), 136(35%) and 64 (17%) reported poor, moderate and good social support respectively.

Of the total study participants, 94 (24.2%) use a psychoactive substance. Among those who use a psychoactive substance, 62 (66%) use more than one psychoactive substance in the last three months of the study. Among the total substance users, 52 (55.4%), 49 (52.1%), 64 (68.1%) and 6 (6.4%), drink alcohol, smoke cigarette, chew khat and use other substances (i.e., Weed and Marijuana) respectively.

### 3.3. Internalized stigma scores and associated factors

The item scores and domain scores of internalized stigma were presented in Supplementary file 1. The highest score of internalized stigma was reported in stereotype endorsement domain (mean (SD) = 2.73 (0.41), followed by discrimination experience domain (mean (SD) = 2.66 (0.57)).

The categorization of stigma is based on severity measured by ISMI as used by Lysaker and colleagues during their study among patients with Schizophrenia [26]. For the current analysis, those who reported minimal to mild internalized stigma were categorized as low and those who reported moderate to severe stigma were categorized as a high internalized stigma. Of the total study participants, 61.3 % (n = 238) and 38.7% (n = 150) experienced high (moderate to severe) and low (minimal to mild) internalized stigma respectively (Table 3).

Of the variables included in the multivariable logistic regression model, poor social support and being unemployed were identified to be significantly associated with high internalized stigma (p < 0.05). Study participants who reported poor social support have an odds of two times more likely to experience high internalized stigma compared with those who have good social support (AOR = 1.973; 95% CI = 1.189, 3.27).

**Table 2.** Clinical characteristics study participants (n = 388).

Variables	Frequency (N)	Percent (%)
<b>Duration of illness</b>		
<1 year	140	36.1
>1 year	248	63.9
<b>Any comorbid chronic medical illness</b>		
Yes	24	6.2
No	364	93.8
<b>Hypertension only</b>		
Yes	10	2.6
No	378	97.4
<b>Diabetes mellitus only</b>		
Yes	7	1.8
No	381	98.2
<b>Other chronic medical illness<sup>‡</sup></b>		
Yes	9	2.3
No	379	97.7

<sup>‡</sup> Other chronic medical illness (TB = 3, HIV/AIDS = 5, Epilepsy = 1, Both HTN and DM = 2).

**Table 3.** Severity of internalized stigma among study participants (n = 388).

Stigma Severity	Cut-off point	N (%)
Minimal to no internalized stigma	1.00–2.00	18 (4.6)
Mild internalized stigma	2.01–2.50	132 (34)
Moderate internalized stigma	2.51–3.00	180 (46.4)
Severe internalized stigma	3.01–4.00	58 (14.9)

Also, unemployed participants were 2.8 times more likely to experience high internalized stigma than government employees (AOR = 2.87, 95% CI = 1.192–6.931) (Table 4).

#### 4. Discussion

In the current study, the prevalence of internalized stigma among study participants attending Amanuel mental specialized hospital was 61.3%. The finding in the present study was lower than the study conducted at Amanuel Mental specialized hospital in 2012, where 83.5% of the study participants experienced internalized stigma [29]. The possible reason for the discrepancy might be due to the difference in the assessment tool used to examine internalized stigma and the psychiatric diagnosis of study participants. For instance, the previous study employed the perceived devaluation and discrimination scale (PDD) to examine stigma and data were collected only from patients with the diagnosis of schizophrenia.

The magnitude of high internalized stigma in the current study was found to be higher than the magnitude reported in China 25.1% [16], Nigeria 22.5% [17], Iran 40% [18], USA 36% [19], India 34.1% [21], Ethiopia, Dilla (32.1%) [23], and Addis Ababa (46.7%) [24]. This difference might be because of the variation in socio-cultural and environmental factors. The difference in the data collection method and the assessment tool used to investigate internalized stigma could be an additional reason for the observed discrepancy across studies. The higher prevalence of internalized stigma in this study might be because health professionals are more focused on prescription rather than providing strong psycho-education, counselling and psychotherapy sessions to combat internalized stigma among follow up patients. Also, the self-concept of internalized stigma may vary by culture and knowledge of a given community [31].

To combat the burden of internalized stigma among PWMI, it is essential to develop feasible and culturally adaptable targeted interventions [32]. Nonetheless, in low and middle-income countries (LMICs), there is limited evidence of effective interventions against stigma [33]. Particularly in the Ethiopian context, interventions such as improving health literacy, providing health education and creating awareness of stigma are crucial [32]. Besides, integrating mental health services into primary health care can help narrow the current mental health treatment gap [34]. Also, increasing the number of mental health care workers and providing capacity building training [32, 35] and establishing anti-stigma initiatives can play a crucial role in reducing stigma among PWMI [32]. Considering the current global covid-19 pandemic, interventions that can be applied given social distancing are vital. In this regard, a controlled study conducted on the effectiveness of an online multi-component program in reducing stigma toward mental illness found that online programs can play a role in reducing stigma toward mental disorders [36].

In the current study, there was a positive association between high internalized stigma and poor social support. Study participants who report poor social support were two times more likely to experience internalized stigma compared to those who have good social support (AOR = 1.97; 95% CI = 1.189, 3.27). Social support can benefit people with mental illness, mainly by helping them gain insight and get ideas for action to address their internalized stigma. Also, it assists them to consider new and more effective ways of confronting stigma by sharing their experiences and supporting each other to handle their stigma [37].

**Table 4.** Factors associated with internalized self-stigma among psychiatric patients attending Amanuel mental specialized hospital 2019 (n = 388).

Category	Internalized stigma		COR(95% CI)	AOR(95%CI)
	Low	High		
<b>Age (year)</b>				
18–24	32	41	1	1
25–34	73	99	1.06 (0.61, 1.84)	0.97 (0.51, 1.85)
35–49	41	81	1.54 (0.85, 2.79)	1.67 (0.77, 3.62)
≥50	4	17	3.32 (1.02, 10.83)	3.33 (0.76, 14.55)
<b>Marital status</b>				
Single	89	121	1	1
Married	44	102	1.81 (0.29, 3.56)	4.69 (0.68, 32.16)
Divorced	13	12	1.23 (1.09, 2.67)	6.31 (0.98, 40.65)
Widowed	4	3	1.23 (0.12, 2.53)	2.82 (0.38, 20.70)
<b>Educational status</b>				
Unable to read & write	19	21	1.43 (0.79, 3.38)	1.97 (0.84, 4.62)
Primary school	50	72	1.61 (0.77, 3.34)	1.67 (0.74, 3.79)
Secondary school	40	71	1.30 (0.64, 2.67)	1.29 (0.58, 2.83)
College & above	41	74	1	1
<b>Occupation</b>				
Government	24	34	1	1
Private	28	56	1.04 (0.71, 2.82)	1.61 (0.73, 3.56)
Merchant	28	35	1.13 (0.83, 3.76)	1.42 (0.60, 3.35)
Daily labor	12	13	1.84 (0.30, 1.96)	1.15 (0.39, 3.43)
Student	24	19	1.23 (0.47, 1.73)	2.43 (0.65, 2.78)
Housewife	15	23	0.79 (0.47, 2.49)	1.46 (0.53, 4.02)
Unemployed	19	45	1.47 (0.39, 1.73)	2.88 (1.19, 6.93)*
Other <sup>‡</sup>	7	6	0.85 (0.47, 1.96)	1.69 (0.72, 3.93)
<b>Comorbid Hypertension</b>				
Yes	2	8	1.56 (0.35, 1.38)	3.26 (0.50, 21.08)
No	148	230	1	1
<b>Substance Use</b>				
Yes	44	50	1.38 (0.59, 2.89)	1.12 (0.40, 3.11)
No	106	186	1	1
<b>Drinking Alcohol</b>				
Yes	24	28	1.43 (0.64, 2.1)	1.25 (0.49, 3.19)
No	126	210	1	1
<b>Smoking Cigarette</b>				
Yes	25	24	1.56 (0.25, 1.90)	1.23 (0.50, 3.00)
No	125	211	1	1
<b>Khat Chewing</b>				
Yes	32	32	1.75 (0.36, 2.51)	1.34 (0.54, 3.36)
No	118	206	1	1
<b>Social support</b>				
Poor	88	99	1.92 (1.21, 3.05)	1.97 (1.19, 3.27)*
Moderate	43	93	2.30 (1.23, 4.21)	1.89 (0.96, 3.27)
Good	18	46	1	1
<b>Psychiatric Disorder</b>				
Schizophrenia	84	108	1	1
Bipolar I	27	77	2.21 (1.31, 3.74)	3.01 (0.91, 4.72)
MDD	25	36	1.12 (0.62, 2.01)	2.41 (0.73, 4.01)
Other <sup>‡</sup>	14	17	0.94 (0.44, 2.02)	0.53 (0.65, 3.06)

Abbreviations: COR: Crudes Odds Ratio, AOR: Adjusted Odds Ratio, ISMI: Internalized Stigma of Mental illness, HTN: Hypertension, MDD: Major Depressive Disorder.

ISMI score ≥2.5 was categorized as having High Internalized stigma.

\* P < 0.05 in multivariable logistic regression, 1: Reference Category.

‡ Other occupation includes a driver (n = 3), farmer (n = 8), and teacher (n = 2).

‡ Other disorder includes substance use disorder, General Anxiety disorder and Thoughts of self-harm.

Providing Social support helps people with mental illness by improving their coping ability and reducing the negative effect of stress. Also, people with mental illness getting poor social support had poor prognosis and poor treatment outcomes. People with a more severe illness may have worse social relationships (and thus receive less social support) and higher levels of internalized stigma [30,31]. The finding in the current study is consistent with a study conducted at Dilla University referral hospital, Ethiopia [23].

The finding also revealed that those who were unemployed had an odds of three times more likely to experience high internalized stigma than government-employed individuals. The possible explanation might be due to the fact that when the patients are jobless, they feel inferior to others and withdraw from society. Also, they feel embarrassed about having a mental disorder, which incorporates self-stigma [38]. A study evidenced that individuals with no regular employment have economic scarcity and have been presented for social exclusion, social network withdrawal, and marital dissolution [39]. Because of the shortage of financial resources, social exclusion and self-isolation from the community could lead to the feeling of loneliness and other mental health problems that might lead them to experience high internalized stigma [40]. It is also possible that the severity of the mental illness is acting as a covariate in the linkage between internalized stigma and occupational status, as people with more severe illnesses probably have a harder time finding and keeping stable jobs.

## 5. Conclusion

Overall, around three in five PWMI experienced high internalized stigma. Having poor social support and being unemployed were significant correlates of high internalized stigma. Routine psychosocial support should be given to follow-up patients with poor social support and unemployed occupational status. Finally, a large scale community-based study supplemented by qualitative design is recommended to identify additional correlates of internalized stigma and understand the perspectives of PWMI. Also, during the selection of participants, screening for illness severity among PWMI deserves to be looked into in future research works.

### 5.1. Limitations

Among the limitations of our study; first, there was no screening of study participants' severity of illness, as an inclusion criterion using the global clinical impression (CGI) scale which might result in response bias. Second, we used the non-probability sampling technique (a consecutive sampling) and excluding those with a hearing impairment might introduce participant selection bias. Third, due to the cross-sectional design of the study, the factors identified in the present study are devoid of any causality while interpreting the associations with high internalized stigma.

## Declarations

### Author contribution statement

Asres Bedaso; Keralem Workie; Mulugeta Gobena: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Emnet Kebede: Contributed reagents, materials, analysis tools or data; Wrote the paper.

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## Data availability statement

Data will be made available on request.

## Declaration of interests statement

The authors declare no conflict of interest.

## Additional information

Supplementary content related to this article has been published online at <https://doi.org/10.1016/j.heliyon.2022.e09431>.

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