ORIGINAL ARTICLE

PREVALENCE AND ASSOCIATED FACTORS OF INTERNALIZED STIGMA AMONG PATIENTS WITH SEVERE MENTAL DISORDER: THE CASE OF AMANUEL SPECIALIZED MENTAL HEALTH HOSPITAL

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ABSTRACT

This study attempted to examine the prevalence and associated factors of internalized stigma among persons with severe mental illness in Amanuel Specialized Mental Hospital. The study employed cross-sectional design in order to select 114 participants from bipolar, schizophrenia and major depression diagnosed patients using convenient sampling technique. Pre-developed standardized instruments were used in order to measure constructs of internalized stigma, experienced stigma and self-esteem. The results of the study indicated that nearly higher proportion of the participants, which is 49 (43%) of them, experienced moderate level of internalized stigma and 37 (32.5%) and 21 (18.4%) of participants exhibited mild and minimal levels of internalized stigma respectively. This study also indicated that there was a significant positive relationship between internalized stigma and experienced discrimination, r=0.743, p<.05. There was also a very mild positive relationship between internalized stigma and duration of time living with the illness, r=0.367, p<.05. However, internalized stigma was negatively correlated with self-esteem, r-.486,p<.05. Similarly, internalized stigma was negatively correlated with general selfefficacy, r= -.671,p<.05. About 68.9% variation of internalized stigma was explained by the variation of self-efficacy, self-esteem, experiencing stigma, age of the participants, and length of time living with the illness. In conclusion, the study revealed that the internalized Stigma of participants can be explained by the associated factors of age, self-esteem, self-efficacy, length of time living with the illness and experienced stigma.

Keywords: Internalized Stigma, Perceived Stigma, Mental Illness, and Self-esteem

INTRODUCTION

Mental illness has been one of the threatening problems in the life of human beings. It generates undesirable condition which affects more than 25% of population over the world during their life (World Health Organization, 2001).

Individuals with mental illness are challenged by their disruptive symptoms, inadequate skills, and stigma that deter them from engaging in age roles (Corrigan & Watson, 2002). Despite the fact that the advancement

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of psychotropic medications has substantial efficacy for the treatment of mental illness, it has not sufficiently reduced the chance of relapse as it did not improve the quality of life of the patients. Besides, it has not helped the patients for competitive jobs to improve their social standings.

World Health Organization (2006) indicated that most countries have no legislations on mental health. This entails that a legal means of protecting the basic human rights of mentally ill patients is not available. Most countries even legally prohibited mentally ill patients from participating in different social and political affairs of the community, and this is not exceptional to the Ethiopia.

The current research investigated the association of socio-demographic and clinical factors with the experience of stigma. The study also explored the potential relationship that internalized stigma has with the age of the participants, experienced discrimination, general self-efficacy, length of time living with mental illness and, self-esteem of the participants. Thus, the result of the study indicated that internalized stigma is one form of mental illness defined as a subjective process, embedded in a socio-cultural context, characterized by negative feelings (about the self), maladaptive behavior, transformation of identity or application of stereotypes resulting from an individual experience, perceptions or anticipation of negative social reaction caused by their mental illness. On the other hand, the term perceived stigma (knowledge of stereotypes about mental illness) refers to the stigma felt by a person with mental illness (Ritsher , Boyd & Phelan, 2004).

Different researches also indicated that individuals suffering from mental illness in one way or another, faced both internalized and perceived stigma at the same time. For instance, a national survey carried out in London (2007) indicated that 9 out of 10 (90%) people with mental health problems have faced stigma and discrimination, and more than two-third of people with mental health problems (71%) reported that they have stopped doing what they wanted to do because of stigma. More than 73% of the participants revealed that they stopped doing what they liked to do due to fear of stigma and discrimination.

Moreover, mentally ill patients would not develop internalized stigma unless the community they are living in characterizes them in a negative way. For example, Bayrne (2008) revealed that the awareness of mentally ill patients about stigma causes them to develop a sense of shame and alienation. This leads patients to a belief that they do not belong to /are excluded from/ are not a member of/ to the public—ultimately forcing them to develop a sense of shame. Then, patients may begin to compare their perception about themselves with the public's perception of them. And, they try to see themselves through the eyes of the public which create discrepancy between their own perception and the perception of the public.

It is evidenced that internalized stigma is higher among patients with schizophrenia, bipolar, major depression and eating disorders. For instance, a group of researchers indicated that patients with schizophrenia,

bipolar disorder, and substance abusers accounted for 56.1%, 20.6% and 35.4% respectively in Amanuel Mental Health Specialized Hospital (Abebaw, Menelik, Atalay & Martin, 2007). And, another research revealed that 59% of mental health patients in Amanuel Mental Specialized Hospital experienced moderate to severe forms of internalized stigma (Epherem, Abebaw, & Atalay, 2012).

Hence, the existence of controversies and arguments at the international level on the one hand, and the absence of specific studies on internalized stigma and associated factors at the national level on the other hand, encouraged the current researchers to assess the extent and associated factors of internalized stigma among severe mental ill patients attending inpatient mental treatment service at Amanuel Specialized Mental Health Hospital.

Research Methods Research Design

This study employed institutional based cross-sectional survey design. It was conducted on severe mental ill patients admitted to Amanuel Specialized Mental Health Hospital. This design is selected due to the fact that the participants have had different background in terms of psychiatric history and other key demographic data, and those who stayed shortly at the hospital. Thus, the participants answered the questionnaires before they departed from the hospital.

Sample Size Determination and Sampling Techniques

Respondents were selected using convenient sampling technique. Participants of the study were patients who were diagnosed as Schizophrenic, Bipolar and Major Depression Disorder. The patients who followed their treatment in Amanuel Mental Health Hospital in inpatient ward from April 2013 to May, 2013 were included as a sample unit. The data collection was completed within this time range. The researchers selected 114 participants based on the following criteria; patients diagnosed as schizophrenia, bipolar and major depression disorder, those patients whose ages were between 18-65 years old (the norm of the questionnaire includes this age range only) and those who were clinically stable and had better insight about their problem were selected purposefully. However, patients with brief psychosis, substance induced psychosis, substance addicted, psychiatric women patients and patients under forensic investigation were excluded from the study.

Data Collection Instruments

Internalized Stigma of Mental Illness instrument (ISMI) is adopted from Ritsher, Boyd and Phelan (2003), and the self-esteem scale is adopted from Rosenberg (1965) self-esteem scale. Besides, in order to measure the self – efficacy of the patients, Schwarzer and Jerusalem's (1995), General Self-Efficacy Scale (GES) are employed.

Internalized /self/ Stigma of Mental Illness (ISMI) Scale contains 29 Likert items and five sub scales (Alienation, Stereotype Endorsement, and discrimination experience, Social withdrawal, and, Stigma Resistance). It is

a self-report measure of the degree to which participants believe or internalize stigmatizing attitudes about people with mental illness. All the items measured on the score ranges from 1 to 4(1= strongly disagree, 2=disagree, 3= agree and 4= strongly agree) were employed. In this study, four internalized stigma categories were used. These include< 2 = minimal stigma, 2 - 2.5 = low stigma, 2.5 - 3= moderate stigma, and> 3= high stigma. Before calculating the sum of the scores, items ranging from 24 to 28 were re-coded as Score 1 as 4, 2 as 3, 3 as 4, and 4 as 1. The scale also demonstrates good reliability (high internal consistency a = 0.90, test-retest reliability r = 0.92) and validity for medical populations. The internal consistency of the present study was also excellent (a = 0.98). While the internal consistency of the subscales of Alienation was 0.99, it was also found out to be 0.96 for Stereotype Endorsement. What is more, the internal consistency of Discrimination Experience, Social Withdrawal and Stigma Resistance was 0.99, 0.98 and 0.95 respectively. It is, therefore, interpreted as the higher the mean score, the greater the evidence of internalized stigma (Ritsher, Boyd & Phelan, 2003).

Self-Esteem Scale (SES) is used to measure the level of self-esteem of participants. It consists of 10 Likert items. All the items are measured on a 4-point scale (0= Strongly Disagree, 1= Disagree, 2= Agree, and 3= Strongly Agree). The scores are calculated as follows: For items 1, 2, 4, 6, and 7: Strongly agree = 3, Agree = 2, disagree = 1, Strongly Disagree = 0, and for items 3, 5, 8, 9, and 10 were reversely coded. In this study, three self-esteem categories were used. While the sum of the scores less than 15 indicated low self-esteem, the sum of the scores from 15 to 25 indicated normal self-esteem. And the scores of 25 demonstrated high self-esteem (Rosenberg, 1965). The internal consistency of the present study was also found out to be 0.74.

Perceived Self-Efficacy Scale (GSE) measured self-beliefs of whether mentally ill patients able to cope up with a variety of difficult situations in life. It consisted of 10 Likert items, and the sum of which yields the final composite score with a range from 10 to 40. All the items were measured on a 4-point scale (1= not at all true, 2= hardly true, 3 = moderately true and 4 = exactly true). In this study, two categories were used by taking the median value of low self-efficacy and high self-efficacy. In samples from over twenty nations, Cronbach *a* ranged from 0.76 to 0.90 with the majority were as high as 0.80. The internal consistency for this sub scale was 0.91 (Schwarzer &Jerusalem, 1995).

Data Collection Procedures

After receiving research proposal approval from Amanuel Specialized Mental Hospital research ethical review board, the researcher strained ward case managers, psychiatric nurses and other imperative staff members as how to collect the data from mentally ill patients. Then, 114 participants were selected based on the inclusion criteria using convenient sampling technique which comprises deferential diagnosis groups. Accordingly, participants from schizophrenia spectrum disorder, bipolar disorder and major depression accounted for 44, 42 and 28 respectively. These participants were informed about the research objectives, the process and

confidentiality of the information.

Pilot Testing

A total of 12 mentally ill patients, four from each category of schizophrenia spectrum disorder, bipolar disorder and major depression were included for pilot testing. The age ranges of the participants were from 19-47 years. The internal consistency (reliability) of the instruments for internalized stigma, experienced stigma, self-esteem and general self-efficacy were 0.89, 0.86, 0.76 and 0.79 respectively. This shows that the instruments have strong internal consistency. It indicated that Cronbach's Alpha Coefficients of reliability were found out to be strong. Then, following pilot testing, minor

Table 1: Socio-demographic Background of Respondents

Charac	teristics	Mean (x)	Standard Deviation(SD)
Age	18-48	31	6.7
		Frequency	Percentage
Sex	Male	114	100
	Single	63	55.3
Marital Status	Married	33	28.9
	Others*	18	15.8
	Total	114	100
Religion	Orthodox Christian	63	55.3
	Muslim	35	30.7
	Protestant	10	8.8
	Others**	6	5.2
	Total	114	100
	Illiterate	23	20
Level of Education	Primary School	34	30
	Secondary School	37	32.5
	Tertiary School	20	17.5
	Total	114	100
	Employed	31	27
Employment Status	Unemployed	83	73
Status	Total	114	100
Residence	Urban	71	62
	Rural	43	38
	Total	114	100

modifications were made on the instruments.

^{*}Widowed= 7, and Divorced=11. **Catholic=2, Atheist =1, and Pagan =3

The above table shows that all the participants of this study were male patients who were admitted as inpatient of mental illness to Amanuel Mental Specialized Hospital. The average age of the respondents was Mean=31 with a Standard Deviation of (6.7). While single and married participants together accounted for 55.3%, those who were divorced and widowed constituted 28.9% and 15.8% respectively. And, 55.3% of the participants were Orthodox Christian, and those who were Muslims and Protestants accounted 30.7% and 8.8% respectively. Furthermore, it was found out that 73% of the participants had not any formal job while 27% of the participants were employed at private businesses, governmental and nongovernmental organizations.

Data Analysis

In order to compute the mean and the standard deviation with frequency and/percentage of internalized stigma, self-esteem and general self-efficacy across socio-demographic variables, descriptive statistics was used. Pearson correlation was also used to compute if internalized stigma has relation with the dependent variables: self-esteem, self-efficacy, duration of living with mental illness and internalized stigma. Moreover, linear regression was used to test whether or not internalized stigma has association with self-esteem, perceived self-efficacy, age of respondent and duration of time living with mental illness.

Ethical Considerations

Data were collected after the approval of ethical clearance from the ethical panel at the hospital. The Ethical panel confirmed that the research will not any harm on the research participants. Then training was delivered to the data collectors on ethical issues such as confidentiality and other related procedures. Patient confidentialities were maintained during data collection and management. Before the actual data collection, the participants were also informed on the purpose of the research, procedures of data collection, potential threats, and benefits of the research findings.

Results

Clinical Characteristics of Respondents

Table 2: Clinical Characteristics of Respondents

Variables		Frequency	Percentage
	Schizophrenics	44	38.6
Diagnostic History	Bipolar I and II	42	36.8
	Major Depression	28	24.6
	Total	114	100
Length of time living with Illness	< 2 years	39	34.2
	2-5 years	32	28.1
	6-10 years	31	27.2
	10 years	12	10.5
	Total	114	100

The identification of patients' clinical status was done by taking diagnostic history from their respective wards.

The above table depicted patient's clinical characteristics which were taken from the respective wards of the hospital. As can be observed from the table, patients with schizophrenia accounted for 44 (38.6%), bipolar disorder for 42(36.8%) and major depression disorder for 28 (24.6%). Regarding length of time they lived with the illness, while 39(34.2%) of the patients were living with mental illness less than 2 years, and 32 (28.1%) of

Table 3: Respondents' Level of Internalized Stigma, Self-esteem and General Self-efficacy

Level of Internalized Stigma	Frequency	Percentage	Mean	Standard Deviation
Minimal (<2)	21	18.4		
Mild (2-2.49)	37	32.5		
Moderate (2.5-3)	49	43	2.44	.39
Severe (>3)	7	6.1		
Total	114	100		
Level of Self-esteem				
Low (<15)	54	47.4	16.56	4.46
Normal (15-25)	59	51.8		
High (>25)	1	.9		
Total	114	100		
General Self-efficacy				
Low <30	79	69.3	2.29	.499
High >30	35	30.7		
Total	114	100		

them from 2 to 5 years. The remaining 31(27.2%) and 12(10.5%) patients were living with mental illness from 6 to 10 and more than 10 years respectively.

Table 3 shows the extent of internalized stigma on the participants. Accordingly, while participants with severe internalized stigma accounted to 7(6%), those with moderate internalized stigma constituted 49 (43%). Moreover, participants with mild and minimal levels of internalized stigma accounted for 37(32.5%) and 21(18.4%) respectively. This implies that more than half of the participants experienced moderate and severe levels of internalized stigma after diagnosis.

The table also shows that 59 (51.8%) of the participants experienced normal self-esteem and 54 (47.4%) of them showed low self-esteem, but no participant had high self-esteem. This implies, nearly half of the participants' self-esteem was low.

Table3 also depicted that 79(69.3%) and 35(30.7%) of the patients experienced low and high general self-efficacy respectively. The current finding indicated that mentally ill patients showed significantly lower level of general self-efficacy.

Correlation and Association of Internalized Stigma with Self-esteem and Duration of time

Table 4: Pearson Correlation between Internalized Stigma with Self- esteem and Duration of time with Mental Illness

Variables	Internalized Stigma	Self-esteem	P-value	
Internalized Stigma	1			
Self-esteem	486	1	.00	
Variables	Internalized Stigma	Duration of Time		
Internalized Stigma	1			
Duration of Time	.367	1	.00	
Variables	Internalized Stigma	Self efficacy		
Internalized Stigma	1.			
Self efficacy	671	1	.00	
Variables	Internalized Stigma	Experienced stigma		
Internalized Stigma	1			
Experienced Stigma	.743	1	.00	

The table indicted that there was a significant negative correlation between self-esteem and level of internalized stigma, r= -.486, p<.05. The magnitude of the relationship was nearly moderate.

The above table also shows that there is positive correlation between internalized stigma and duration of time patients living with mental illness, r=0.367, p<0.05. As the duration of time patients living with mental illness increases, the degree of internalized stigma also tends to be higher.

There is also a significant negative correlation between general self-efficacy and internalized stigma, r=-.671, p<.05. This is to imply that when patients exhibited lower levels of General self-efficacy, they tend to have higher score

on Internalized stigma.

Table 4 affirms that internalized stigma was significantly positively correlated with experienced stigma, r=0.743, p<.05. This is to imply that higher level of experienced stigma was an indicative of higher level of experienced stigma.

Predicting internalized stigma as a function of other variables

Table 5: Multiple linear regression predicting internalized Stigma

Variables	β	Standard	t	Sig.
		error		
Length of time	205	.008	2.87	.005
Age of respondent	.281	.003	4.70	.000
General Self- efficacy	427	.066	5.09	.000
Experienced stigma	.585	.079	6.85	.000
Self-esteem	.149	.071	1.85	.067
R2	.689*			
F	51.04			

Note *P<.05

As depicted in table 5, multiple regressions were conducted to see if the length of time, age, self esteem, general self efficacy and experienced stigma have predicted internalized stigma. The multiple regression revealed that the participants experiencing stigma, age , length of time, self esteem and general self efficacy have significantly predicted internalize stigma by R2= .689 F (5, 108) =51.04, p <.05). Among the independent variables, experienced stigma (β =.585, t=6.85, p<.05) was the strongest predictor of internalized stigma followed by general self efficacy (β =-.427, t=-5.09, p<.05). As general self efficacy decreases by .427 units, internalized stigma increases by 1 unit. From the five predictors age of respondents comprise as third predictor (β =. 281, t=4.7, p<.05), this implies that when age of respondents of patients increase their internalized stigma also increases. The length of time living with illness also predicts (β = -.205, t=-2.87, p=.005)

Discussion

The main objective of this study was to investigate the extent of and associated factors of Internalized stigma among severe mentally ill patients attending Amanuel Specialized Mental Hospital. To achieve this objective, 114 mentally ill patients/participants were selected using convenient sampling technique. Among them, 44 participants were schizophrenic, 42

were bipolar patients and 28 patients were living with major depression. The participants were measured using standardized instruments of internalized stigma of mental illness, experienced stigma, self-esteem, and general self-efficacy.

Prevalence of Internalized Stigma and Associated Psycho-social Variables

One of the findings of the study showed that 56 (49.1%) of the mentally ill patients demonstrated moderate and severe internalized stigma, and the remaining 37(32.5%) and 21(18.4%) experienced mild and minimal levels of it respectively. This finding is nearly consistent with the findings of Ephrem, et al. (2012) and Assefa, Laura and Abebaw (2012). The findings indicated that 59% and 60% prevalence of internalized stigma experienced by patients with mental illness.

The finding of the present study also showed that most mentally ill patients 59 (51.8%) experienced normal self-esteem, and 54 (47.4%)of them experienced low level of self-esteem. Moreover, the study revealed that 79 (69.3%) of the participants experienced low level of general self-efficacy while 35(30.7%) of them manifested higher level of general self-efficacy. This shows that mental illness related stigma affects the level of self-esteem and general self-efficacy of the participants. In this regard, different literatures show the existence of lower self-esteem and general self-efficacy among severely ill mental patients. For example, leveling theories explain that mentally ill patients endorse devolution from the public and they see themselves via the mirror of the public. As a result, patients depleted their general efficacy of handling difficult situations and their sense of 'I can'.

Associated Factors for Internalized Stigma

The finding suggests that there is a strong positive correlation between internalized stigma and experiencing stigma and longevity of time patients living with mental illness. However, internalized stigma was found out to be negatively correlated with self-esteem and general self-efficacy. In line with this, various studies in the area have indicated the potential relationship of internalized stigma with experiencing stigma, self-esteem and general selfefficacy of patients with mental illness. For example, a study by Ritsher, Boyd& Phelan, (2003) indicated that internalized stigma affects variables related to recovery from illness, including; social relationships, self-esteem, self-efficacy, social participation, and willingness to seek help and employment. In fact, not everyone with mental illness experience internalized stigma as some people react to stigma overwhelmingly while others remain relatively unaffected towards stigma related circumstances. Corrigan & Watson (2002) also argued that negative attitudes towards persons with mental illness reduce the patients' participation in social interactions, and their recovery from the illness, which again leads to a higher degree of stigma. When patients experienced lower levels of selfesteem and general self-efficacy (personal factors), they would have exhibited high level of stigma. The public's positive attitude towards mentally ill patients and patient's positive self-esteem and self-efficacy reduce the degree of stigma. It is also evident that mental illness related stigma is partly determined or predicted by internalized stigma and

experienced stigma; however, it is negatively related with self-esteem and general self-efficacy. This shows that the higher level of internalized stigma affects the general self-efficacy and self- esteem of mentally ill patients.

The linear regression model also confirmed that internalized stigma is positively associated with age of patients who experienced stigma. This entails that when the age of the patients increases, the degree of internalized stigma increases simultaneously. Similarly, when the patients faced experienced stigma, they also endorsed the stigma which leads to higher level of internalized stigma. On the contrary, internalized stigma was negatively associated with perceived self-efficacy and patients' duration of time living with mental illness and that of self-esteem.

Conclusions

The results of the present study showed that patients living with severe mental illness experienced higher level of internalized and perceived stigma, lower level of self-esteem and general self-efficacy. And, self-esteem, age of the participants, duration of time living with the mental illness and general self-efficacy are some of the associated factors which determine the level of patients' internalized stigma. Moreover, internalized stigma is positively associated with experienced stigma; however, self-esteem and self-efficacy of mentally ill patients is negatively associated with the patients' internalized stigma. The relation of internalized stigma with self-esteem and general self-efficacy indicated that internalized stigma of the patients with mental illness showed negative relationships with self-esteem and general self-efficacy of the participants.

Recommendations

- Nearly half of the participants of this study reported that they have experienced higher level of stigma. They perceive themselves as leading a spoiled life and perceived as they are a load to the society. Accordingly, their self-esteem and self-efficacy is highly affected. Therefore, mental health practitioners should work to improve the self-esteem, self-efficacy and social participation of these stigmatized segments of the society through psychosocial education and trainings.
- Mental health professionals such as psychiatrists, psychologists and social workers should work towards enhancing the self-esteem and self -efficacy of mentally ill patients by targeting distorted thoughts and related dysfunctions of the patients. In addition, they should also intervene in the community and family levels through the promotion of psycho-education and integration programs.
- People living with severe mental illness should establish self-help associations in order to safeguard their rights included to different developmental, economic, and social policies and programs.
- We also recommend further researchers to assess the lived experience of people with mental illness by employing culturally specific and contextualized instruments.
- Finally, intervention- based researches should be conducted to investigate the potential effectiveness of such types of researches in order to decrease the psychological challenges of the mentally ill patients.

References

Abebaw Fekadu, Menelik Desta, Atalay Alem, & Prince, M. (2007). A descriptive analysis of

admissions to Amanuel Psychiatric Hospital in Ethiopia. *Ethiopian Journal of Health Development, Vol.*, 21(2), pp, 173-178.

Assefa Teshome, Asher, L. & Abebaw Fekadu. (2012). Internalized stigma among patients

with schizophrenia in Ethiopia: a cross-sectional facility-based study. *BMC psychiatry Journal*, Vol, 12; p., 239.

Byrne, P. (2008). Stigma of mental illness and ways of diminishing it: Psychiatric Treatment.

The Royal College of Psychiatrists. Retrieved on April 19, 2013, from http://apt.rcpsych.org/content/6/1/65.full.

Corrigan.P.W & Watson AC. (2002). The paradox of self-stigma and mental illness. *Clin. Psychol.:Sci. Pract.* 9:35–53

Epherem Mebrate, Abebaw Fekadu, &Atalay Alem. (2012). "Internalized stigma in patients with

severe mental disorder and co-morbid substance use disorder". Unpublished master's thesis.

Ritsher, Boyd, J. B., & Phelan, J. C. (2004). Internalized Stigma Predicts Erosion of Morale

among Psychiatric Outpatients. Psychiatry Research, 129(3).

Rosenberg (1965). Commentary: Sampling in Social Networks. *Emory University School of*

Medicine. Vol, 18(1), pp, 104-10.

Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy Scale; Measures in health

psychology: A user's portfolio Causal and control beliefs. *Windsor: NFER-NELSON*; p. 35–37.

World Health Organization (2001). World health ministers call for action to mental health.

World Health Organization (2006). WHO-AIMS Report on Mental System in Ethiopia, WHO

and Ministry of Health, Addis Ababa, Ethiopia.