



Perceived Stress and Internalized Stigma among Patients with Mental Disorders in Al Ahsa Governorate – Saudi Arabia

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ABSTRACT

Background: WHO reported that mental disorders is rising all over the world and its burden is significantly impact the individuals' health, even the social and economic status of countries. Mental illness continues to be stigmatized in Arab countries because people in these countries hold negative attitudes toward mental illnesses. Stigma stress is one of the most stressful factors facing patients with mental illness and their families. Perceived stigma by patients with mental illness is associated with different consequences such as feeling of shame, being non-compliant to medications, being socially withdrawn. This study aims to assess perceived stress and internalized stigma among patients with mental disorders in Al-Ahsa governorate – Saudi Arabia. The total number of the subject was 125 patients with mental disorders. The study revealed that there is a significant positive relationship between patients' perceived stress and their feelings of internalized stigma. Understanding how stigma develops and how it interacts with other psychological processes is very important so, it is recommended to develop interventions to reduce internalized stigma to improve the well-being of patients with mental disorders.

1. Introduction

The World Health Organization (WHO) reported that being able to cope with life stressors is a key element for being mentally healthy. It also found that the number of persons suffering from mental disorders is rising all over the world, and the burden of these mental disorders still significantly has an impact on health and major social, human rights and economic consequences in all countries of the world (Galderisi, Heinz, Kastrup, Beezhold, & Sartorius, 2015; WHO 2011). Stress is considered as one of the most important contributors in the development of mental illnesses. People are facing many stressors in all aspects of their life, which occur either directly or indirectly (Salleh, 2008).

Stress is defined as “a process in which environmental demands strain an organism's adaptive capacity resulting in both psychological demands as well as biological changes that could place at risk for illness”. Genetic vulnerability, coping styles, personality type, and social support are some of the variables that affect susceptibility of individuals to stress (Salleh, 2008). Studies have shown that perception of and

exposure to stress for a long time may lead to either physical or mental disorders (Green, DeCourville, & Sadava, 2012; Kaur & Bashir, 2015; Yari beygi, Panahi, Sahraei, Johnston, & Sahebkar, 2017). Also, it was reported that chronic stress has a significant effect on individuals' immune system which increase the vulnerability to many serious physical diseases such as cancer. As well as stress leads to neurotic and psychotic diseases as depression (Salleh, 2008). Other studies confirmed that chronic stress may lead to many mental disorders emphasizing schizophrenia and ever-increasing psychiatric manifestations and morbidity. (Schneiderman, Ironson, & Siegel, 2005; Toussaint, Shields, Dorn, & Slavich, 2016; Winkel, Stefanis, & Germeys, 2008).

Perceived stress is conceptualized as “the extent to which a situation in life is appraised as stressful and related efforts made by the individual to deal with the personal and environmental challenges” (Tendolkar et al., 2016). It was reported that the correlation between stressful life events and psychiatric illness is stronger than the correlation with medical or physical illness. Patients with mental disorders usually perceive their situation as stressful, especially their mental illness, as

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they did not acknowledge their symptoms as a part of their disease. Being stigmatizing with mental disorders is widespread problem which may lead to, social disapproval and devaluation of the patients and their families. Stigma stress is one of the most stressful factors facing patients with mental illness and their families (Zartaloudi and Madianos, 2010).

Stigma is conceptualized as a complex social process of labeling, bothering, devaluation, and discrimination involving an interconnection of cognitive, emotional, and behavioural components. It is defined as a mark of disgrace that sets one apart from others (Pescosolido, 2013). Both self-stigma “internalized” and public “social” stigma are associated with different consequences on the patient’s self-esteem, social relationships, compliance to treatment, and willingness to seek help. All these consequences can worsen the patient’s well-being (Szczepniak et al., 2018). The link between mental illness stigma and stress is complex; as when people experience severe stressful situations, they did not seek help because of the stigma. Also, stigma of mental illness is considered as the main factor that increases the patients’ stress and thus worsens their condition (Corrigan & Watson, 2002).

Mental illness continues to be stigmatized in Arab countries. Many studies have found that, despite the availability of numerous mental health services in Arab nations, these services are underutilized. Furthermore, people in these countries hold negative attitudes toward mental illnesses and its health services, that’s why; they frequently turn to religious leaders for help when facing mental health issues (Al-Krenawi, 2005; Corrigan, Druss, & Perlick, 2014; Merhej, 2019). Another study revealed that patients with mental illness in Saudi Arabia have a greater tendency to express their symptoms with an emphasis on physicality (Al Noor, 2018). It was revealed that people who suffer from mental health problems, tend to hide these problems for fear of stigmatization (Al-Krenawi, 2005). On the other hand it was observed that familiarity with mental illness has been associated with decreased feelings of shame, lower levels of perceived dangerousness and less desire for social distance (Crowe & Kim, 2020).

Although the reasons for stigmatization are not consistent across cultures and communities; perceived stigma by patients with mental illness is associated with different consequences such as feeling of shame, being non-compliant to medications, being socially withdrawn. So, this study aims to assess perceived stress and internalized stigma among patients with mental disorders in Al-Ahsa governorate.

2. Aim of the study

This study aimed to assess perceived stress and internalized stigma among patients with mental disorders in Al Ahsa governorate – Saudi Arabia.

3. Research question

What is the relationship between perceived stress and internalized stigma among patients with mental disorders in Al Ahsa governorate – Saudi Arabia?

4. Methodology

4.1. Research design

A descriptive correlational research design was utilized in this study.

4.2. Setting

The study was carried out in the outpatient department of The Psychiatric Hospital for Psychiatric Medicine in Al Ahsa governorate - Saudi Arabia. The hospital is affiliated to the Ministry of Health. It serves Al Ahsa governorates and its related rural areas. It has two female and three male inpatients wards in addition to the emergency and the outpatient departments. The services provided at the outpatient units include

psychiatric examination, diagnosis, dispensing medications and admission for needed cases.

4.3. Subjects

The subjects of this study included a convenient sample of 125 patients with mental disorders who attended the outpatient clinic and fulfilling the following inclusion criteria; diagnosed with mental disorders, able to communicate coherently and relevantly, Saudi nationality, and willing to participate in the study.

Patients with mental retardation or drug addiction were excluded from the study subjects.

The program of Raosoft sample calculator was used to estimate the sample size, the minimal sample size was estimated to be 109 patients based on the following; the population size was 150 patients at the time of Covid-19, expected frequency 50 %, acceptable error 5 % and confidence co-efficient 95 %.

Data Collection Tools: Three tools were used to collect the study data, these included:

4.3.1. Tool I: Bio-sociodemographic and clinical data structured interview schedule

This tool was developed by the researchers to elicit bio-socio-demographic data of the patients with mental disorders, concerning age, marital status, occupation, level of education and number of family members. In addition to clinical data, as duration of illness, frequency of hospitalization and type of treatment received.

4.3.2. Tool II: Perceived Stress Scale (PSS)

The Perceived Stress Scale (PSS) was developed by Cohen, Kamarck, and Mermelstein (1983) as a 14-item instrument designed to measure the degree to which situations in a person’s life are appraised as stressful. This scale was modified into a shorter version of 10 items by Cohen and Williamson (1988), to allow assessment of perceived stress without any loss of psychometric quality. The questions in this scale ask about the patients’ feelings and thoughts during the last month. The patient is asked to indicate how often he / she felt or thought a certain way. The responses are rated on a five-point Likert scale ranging from (0) indicating “never” to (4) indicating “very often”. Four statements from the scale are negatively stated and reversely scored. It was translated to Arabic language and tested for its validity and reliability by Abokadom (2012). Individual score in the PSS can range from 0 to 40, with higher scores indicating high perceived stress.

4.3.3. Tool III: Internalized Stigma of Mental Illness (ISMI)

It was developed by Ritsher, Otilingam, and Grajales (2003). It was used to measure the nature of internalized stigma of mental illness among persons with mental disorders. It consists of 29 items divided into five subscales: alienation, stereotypy, endorsement, perceived discrimination, social withdrawal and stigma resistance with four points Likert scale; strongly disagree, disagree, strongly agree and agree. It was translated to Arabic language and tested for its validity and reliability by Halim (2017).

4.3.4. Method of Data Collection

An official approval to carry out the research study was obtained from CON-A (College of Nursing- Al Ahsa) dean, Ministry of health, Psychiatric hospital manager and KAIMRC (King Abdullah International Medical Research Center). Tool I was developed by the researchers. Before embarking on the actual study, a pilot study was carried out in order to ascertain the clarity, applicability of the tools, identify obstacles that may be faced during data collection, and to estimate the time required for interviewing the patients. The pilot study was conducted on five patients in the psychiatric hospital (outpatient clinic) according to the results of the pilot study the required modifications were carried out then the tools were put into their final form. A survey was done to

determine the rate of the patients attending out patient; it was low because of Covid-19 pandemic time. Data collection was done during the period from April 2021 to September 2021 using the Arabic version of the used scales. All patients' medical charts were reviewed to identify those who met the inclusion criteria. Any patient did not meet the inclusion criteria was excluded. Each patient in the study was interviewed individually to explain the aim of the study and taking their approval and consent. The patient fulfilling the study criteria was interviewed individually once to collect the required information using the study tools. Each interview lasted for 10-20 min, sometimes extending to 30 min. The interview was done in private office to protect the patient's privacy and confidentiality. The patient was encouraged to speak freely and was given time for reflection. This process continued for each patient until all subjects were interviewed.

5. Ethical consideration

Patients who accepted to participate in the study were asked to sign an informed consent. Data confidentiality was assured. Patient's privacy and anonymity were maintained and respected.

6. Statistical analysis

The collected data were organized, tabulated and statistically analyzed using SPSS software statistical computer package version 26. For quantitative data, the range, mean and standard deviation were calculated. For qualitative data, comparison was done using Chi-square test (χ^2). For comparison between means for variables pre and post intervention in a group, paired samples T-test was used. For comparison between means for variables during three periods of intervention in a group, or for more than two variables, the F-value of analysis of variance (ANOVA) was calculated. Correlation between variables was evaluated using Pearson and Spearman's correlation coefficient r . A significance was adopted at $P < 0.05$ (*). Also, a highly significance was adopted at $P < 0.01$ (**).

7. Results

7.1. Profile of the Studied patients

Table 1 shows the socio-demographic characteristics of the studied patients. As for patients' age and sex, it was noted that the age of the study subjects is ranged from 16 to 71 years. Males constitute more than half (55.2 %) of the studied patients.

Regarding the marital status of the studied patients, nearly half of the studied patients were married (44.8 %), while more than one third of them were single (36 %). Only 19.2 % were either divorced, widowers or separated.

In relation to patients' education, 27.2 % of the studied patients achieved a secondary school education, while those having a primary education and diploma respectively constituted 16 % and 16.8 %. Patients having university or post grade education constituted 20 %, and 19.2 % of the studied patients were illiterate or were just able to read and write.

According to the patients' work, it was noted that nearly-two thirds of studied patients were not working (62 %) followed by 21.6 % who were working, only 12 % were house wives. Concerning the patients' monthly income, nearly-two thirds of studied patients reported that their income is not enough for their needs (60 %).

Regarding the place of residence, more than half of the studied patients, were living in urban areas (56.8 %) and the majority of them live with their family.

Table 2 shows the medical condition of the studied patients. In relation to the family history of the studied patients, it was noted that more than half of the studied patients had a positive family history of mental illness (56 %).

Table 1

Distribution of the studied patients according to their socio-demographic characteristics.

Characteristics	The studied patients	
	N =(125)	%
Age (in years) 15 < 30 30 < 40 40 < 50 50 ≥ 60	34 33 30 28	27.2 26.4 24.0 22.4
Range	(16–71)	
Mean ± SD	39.11 ± 12.506	
Gender		
Male	69	55.2
Female	56	44.8
Marital status	45	36.0
Single	56	44.8
Married	24	19.2
Divorced /Widow / separated		
Educational level		
Illiterate / Read and write	24	19.2
Primary	20	16.0
Diploma	21	16.8
Secondary	34	27.2
University / post graduate studies	25	20
Occupation		
Student	5	4.0
Working	27	21.6
House wife	15	12.0
Not working	78	62.4
Income		
Enough	50	40.0
Not enough	75	60.0
Place of residence		
Rural	54	43.2
Urban	71	56.8
Living with whom		
Alone	9	7.2
Family	112	89.6
A relative	4	3.2

Table 2

Distribution of the studied patients according to their medical condition.

Patients' medical condition	no=(125)	%
Family history		
Yes	70	56.0
No	55	44.0
Beginning of illness < 10(10-<20)		
≥ 20	68 39 18	54.4 31.2 14.4
No of admission times		
None	94	75.2
< 5 times	14	11.2
≥ 5 times	17	13.6
Diagnosis		
Anxiety disorders	39	31.2
Schizophrenia spectrum disorder	36	28.8
Depression/ Bipolar disorder	47	37.6
Others	3	2.4
Treatment modalities		
Medicines	121	96.8
Psychotherapy Sessions	2	1.6
Medicines and psychotherapy sessions	2	1.6

As for beginning of their illness, more than half of the studied patients had their mental illness in <10 years ago (54.4 %), while one third developed it from 10 to <20 years (31.2 %).

Regarding the number of admission times to psychiatric hospital, it was found that three quarters of the studied patients were not admitted to the hospital, while 13.6 % of them were admitted for more than 5 times, only 11.2 % were admitted for <5 times.

In relation to the studied patients' diagnosis, it was noted that 37.6 % were suffering from either depression or bipolar disorders, followed by 31.2 % who were suffering from anxiety disorders. Patients who were suffering from schizophrenia constituted 28.8 %, followed by 2.4 % suffering from other mental illnesses as delusional disorders, autism and conduct disorders.

As for the studied patients' received treatment; the majority of them are receiving medications as antipsychotic, antidepressant and anti-anxiety. The rest of the studied patients were receiving either psychological interventions or combined medications with psychological intervention.

Table 3 shows the distribution of the studied patients according to their perceived level of stress and internalized stigma of mental illness; it was observed that more than three quarters of the studied patients (78.4 %) had a moderate level of stress, followed by 15.2 % of them who had a high level and only 6.4 % had a low level of stress.

As regard patients' internalized stigma of mental illness level, it was noted that more than three quarters of the studied elders (76 %) had a moderate level of internalized stigma followed by 19.2 % of them who had a low level and only 4.8 % had a high level of internalized stigma of mental illness.

Table 4 reveals the total mean scores of Internalized Stigma of Mental Illness (ISMI) dimensions among the studied patients. Concerning internalized stigma domains 58.25 % of the studied patients had feeling of alienation followed by 56.55 % who had stigma resistance and 55.17 % who had social withdrawal.

In relation to discrimination experience, its mean percent constitutes 54.30 % of the studied patients and 52.36 % was referred to stereotype endorsement.

Concerning the correlation between the perceived level of stress and internalized stigma among studied patients, it was noted in Table 5 that there is a highly significant relationship between level of perceived stress of the patients and their level of internalized stigma of mental illness ($r = 0.311$, $P = 0.000$).

Regarding the relationship between socio-demographic characteristics, medical history and the level of perceived stress among studied patients, it was noted in Table 6 that there is a significant relation between perceived level of studied patients stress and their marital status, place of residence and their income respectively (0.020, 0.048, 0.018). Also, it was noted that there is no significant relation with any item related to the patients' medical history.

Concerning the relationship between socio-demographic characteristics and medical history of the studied patients and their level of internalized stigma of mental illness as shown in Table 7, there were no significant relationships between the socio-demographic data and patients' internalized stigma level. Only there is a significant relation with the number of patients' admission to psychiatric hospitals.

Table 3

Distribution of the studied patients according to their level of perceived stress (PSS) and internalized stigma of mental illness level.

Patients Level of Perceived Stress (PSS) and internalized stigma	The studied patients	
	N(125)	%
Level of Perceived Stress	8	6.4
Low	98	78.4
Moderate	19	15.2
High		
Range	(0–34)	
Mean $\pm$ SD	21.47 $\pm$ 5.625	
Internalized Stigma of Mental Illness		
Low	24	19.2
Moderate	95	76.0
High	6	4.8
Range	(39–105)	
Mean $\pm$ SD	66.30 $\pm$ 12.916	

Table 4

Total mean scores of Internalized Stigma of Mental Illness (ISMI) dimensions among the studied patients.

ISMI dimensions	The studied patients (n = 125)					
	No items	Min	Max	Mean $\pm$ SD	Mean percentage	Ranking
Alienation	6	6	24	13.98 $\pm$ 4.247	58.25	1
Stereotype endorsement	7	7	28	14.66 $\pm$ 4.258	52.36	5
Discrimination experience	5	5	20	10.86 $\pm$ 3.930	54.30	4
Social withdrawal	6	6	24	13.24 $\pm$ 4.245	55.17	3
Stigma resistance	5	8	20	13.57 $\pm$ 2.677	56.55	2
Total ISMI score	29	39	105	66.30 $\pm$ 12.916		

Table 5

Correlation between level of Perceived Stress (PSS) and Internalized Stigma of Mental Illness (ISMI) level among the studied patients.

Total ISMI Level	The studied patients (n = 125)						χ^2 P
	Level of Perceived Stress (PSS)						
	Low stress (n = 8)		Moderate stress (n = 98)		High stress (n = 19)		
	N	%	N	%	N	%	
Low IS	6	4.8	14	11.2	4	3.2	17.677
Moderate IS	2	1.6	79	63.2	14	11.2	
High IS	0	0	5	4	1	0.8	0.001*
r, P	0.311, 0.000**						

r: Pearson' correlation coefficient.

(*) Statistically significant at level $P < 0.05$.

(**) Highly statistically significant at level $P < 0.01$.

Table 6

Relationship between the studied patients Perceived Stress (PSS) score and their socio-demographic characteristics.

Characteristics	The studied patients (n = 125) Perceived Stress (PSS) score	F/t P
Marital status		
■ Single	19.64 $\pm$ 6.471	4.035 0.020*
■ Married	22.29 $\pm$ 4.682	
■ Divorced/Widow/ Separated	23.00 $\pm$ 5.242	
Place of residence		
■ Rural	22.61 $\pm$ 5.574	3.993 0.048*
■ Urban	20.61 $\pm$ 5.546	
Income		
■ Enough	20.02 $\pm$ 5.204	5.767 0.018*
■ Not enough	22.44 $\pm$ 5.719	

Table 7

Relationship between the studied patients' feelings of internalized stigma of mental illness score and their socio-demographic characteristics and their medical history.

Characteristics	The studied patients' internalized stigma of mental illness (n = 125)	F/t P
No of admission times		
None	65.57 $\pm$ 13.195	3.1 0.049*
< 5	62.93 $\pm$ 13.223	
≥ 5	73.12 $\pm$ 8.738	

8. Discussion

Stigmatization of individuals with mental illness is widespread and poses a major barrier to treatment. As a result of prejudiced, stereotyped beliefs and attitudes, stigmatization causes individuals to feel excluded from society and lose their social status (Subu et al., 2021). In developing countries in Asia, there is a widespread tendency to stigmatize and discriminate against people with mental illness (AlAteeq et al., 2018). This may lead to lacking of treatment and increasing the level of stress among the patients which in turn increase the risk for relapse (Wang, Zhu, Jiang, & Li, 2021). Therefore, the current study was developed to investigate the relationship between perceived stress and internalized stigma among patients with mental disorders.

In the present study the majority of the studied patients 78.4 %were having a moderate level of perceived stress as some of them expressed that they have limited income, in addition to their feelings of alienation and discrimination experience in their life due to their mental illness (Table 3). This was consistent with a study done by Borgohain, Bhuyan, and Chandel (2020) in India who reported that financial problems are considered as a main life event that affects the patients and their length of duration in the psychiatric hospitals.

Being stigmatized with your illness is a bad experience because you have nothing to do and it has many negative consequences on the patients' feelings as low self-esteem, shame and anxiety (Xu et al., 2018). The results of the current study revealed that the majority of the studied patients 76 %, were having a moderate level of internalized stigma (Table 3), this may be due to the culture value that enforces the patients to internalize their feelings of shame, hopelessness and the fear of discrimination. This goes in the same line with Halim (2017) who reported that in her study on patients with schizophrenia in Egypt, they had a moderate to high level of internalized stigma. Moreover, Pico et al (2016) found that under half of the psychiatric outpatients experienced moderate to high level of internalized stigma (Picco et al., 2010).

In relation to the domains of internalized stigma among the studied patients in the current study, it is found that the patients experienced the feelings of alienation followed by stigma resistance and social withdrawal and ended with stereotype endorsement (Table 4) and this was expressed by the patients as they are avoiding situations that might be potentially stigmatizing and they are being marginalized in their family. They are not involved in family decisions or any other family concerns or issues. Also, families hide that they have a patient with mental illness. This is consistent with a study done by Erdner et al in Sweden (2005) who indicated that patients with mental illness are suffering from alienation and social withdrawal.

As regard stigma resistance; the patients expressed that they try to fight their internalized stigma as they try to live their life with satisfaction as much as possible and try to neglect other people attitudes toward them and follow up their condition to avoid being instable or relapsed. This is consistent with Halim (2017) who found that the patients have a good fulfilling life, and they fight the stigma, despite their mental illness.

In relation to stereotype endorsement in the current study, it was the lowest affected component of internalized stigma. This is similar to a study done in western countries by Ritsher et al. (2003) which reported the same results. This is properly because the majority of the studied patients were living with their families which significantly impact self-stigmatization as shown in table 1.(rational) In addition, the patients expressed that their families refused to admit them in psychiatric hospitals and they are receiving their treatment via outpatient clinic services in the psychiatric hospital. This is congruent with Link, Bruce, Phelan, and Sullivan (2018) who reported that patients who receive their treatment in outpatient clinics by their own had less feelings of perceived devaluation–discrimination. Also, it is consistent with a study done in Saudi Arabia by AlAteeq et al in (2018) who found that family involvement in patient's care could significantly impact self-stigmatization among people with mood disorders. Also, these results

are consistent with Assefa, Shibre, Asher, and Fekadu (2012) who conducted his study on patients with mental disorders who are receiving their treatment at outpatient clinics in Ethiopia.

In the current study, there is a significant positive relationship between patients' level of perceived stress and level of internalized stigma. These results show that as the level of stress increased, the level of the internalized stigma increased. This may be due to the controlled manifestations of the patients which help them and their families to cope with their stressors including the stigma stress. the level of stress This is consistent with a study done by Xu et al. (2018) who reported that stigma of mental illness causes stress to the patients and had negative consequences including suicidal ideation.

Regarding the relationship between socio-demographic characteristics and perceived level of stress, the results of the current study revealed that patients who are divorced or separated, who live in rural areas and who have limited income have experienced higher level of stress than those who were married, with a significant statistical relationship, this may reflect the significance of relationship and family support on decreasing patients' level of stress. This is in the same line of a study done by Vaingankar et al. (2020) who indicated that patients who are married have less mental disorders. No doubt that being supported in your life is one of the coping mechanisms against stress for all people with or without mental disorders.

In relation to the relationship between socio-demographic characteristics and level of internalized stigma, it was found in the current study that there is a significant relationship between the level of internalized stigma and number of admission time to psychiatric hospitals as patients who admit for more than 5 times to psychiatric hospitals have increased level of internalized stigma, this was in the same line with Sayed et al in Egypt (2021) who confirm that mental stigma has a parallel correlation with psychiatric disorder duration, number of psychiatric hospital admissions, as well as diagnosis of psychotic disorder.

In general, it can be concluded from the present study that patients with mental disorders experienced a moderate level of both internalized stigma and perceived stress. Being separated or divorced, have limited income and living in rural areas considered as factors that contribute to increase patients' level of stress and being admitted to psychiatric hospitals more than five time increase the level of patients' level of internalized stigma. So, it is recommended that developing interventions to reduce stress and internalized stigma to improve patients with mental disorders well-being.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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