Stigma resistance and its association with internalised stigma and psychosocial outcomes among psychiatric outpatients

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ABSTRACT

Studies have suggested that stigma resistance plays an important role in the recovery from mental illness. However, there has been limited research in Asian countries that has examined the benefits of stigma resistance among the mentally ill in Asian populations. Hence, this study aimed to assess the prevalence of stigma resistance and establish the socio-demographic correlates of stigma resistance, as well as its association with internalised stigma and psychosocial outcomes among a multi-ethnic population of 280 outpatients with obsessive compulsive disorder (OCD), schizophrenia, depressive disorders and anxiety disorders in Singapore. Prevalence of stigma resistance measured using the Stigma Resistance subscale of the Internalised Stigma of Mental Illness Scale was 82.9%. ANOVA and logistic regressions were conducted and results revealed that: (i) Stigma resistance was positively associated with being separated/divorced/widowed but negatively associated with depression diagnosis; (ii) Psychosocial outcomes such as self-esteem and psychological health were positively associated with stigma resistance; and (iii) Internalised stigma was negatively associated with stigma resistance. Moving forward, treatments could emphasize on improving the self-esteem and psychological health of patients to increase their stigma resistance for counteracting effects of public and internalised stigma.

1. Introduction

Within the context of mental health, public stigma is characterised by the general population endorsing beliefs that devalue people with mental illness (stereotyping), followed by developing unjustified attitudes towards them (prejudice) and thereafter exhibiting biased treatment which segregates them from the rest (discrimination) (Corrigan and Watson, 2002). According to modified labelling theory (MLT) (Link et al., 1989), societal perceptions influence an individual's beliefs on how people with mental illness are regarded i.e. a person with mental illness who perceives that people stigmatize those with mental illness will develop the belief that he will be discriminated against as well and might exhibit behaviours like secrecy and withdrawal to cope with this discrimination. As such, public stigma may lead people with mental illness to develop internalised stigma - they become aware of the public stigma, agree with it and apply the discriminated attitudes to themselves (Corrigan and Rao, 2012).

For those who have yet to seek treatment, the adverse consequences of internalised stigma include 'label avoidance' i.e. refusing any associations with mental illness which consequently results in treatment delays and/or is a barrier to help-seeking (Corrigan et al., 2014, 2009). For patients undergoing treatment, internalised stigma may impede the effectiveness of the treatment as well as the process of recovery as they immerse themselves in feelings of shame and self-devaluation, and subsequently withdrawing themselves from social activities (Ameling et al., 2009). In general, high internalised stigma has been found to be associated with a reduction in hope, empowerment, self-esteem, quality of life (Livingstone and Boyd, 2010; Firmin et al., 2016), readiness to change and poor treatment adherence (Pung et al., 2008; Tsang et al., 2010) as well as increased severity of psychiatric symptoms (Livingstone and Boyd, 2010; Firmin et al., 2016). Given the negative outcomes associated with internalised stigma, efforts to alleviate it are needed.

Stigma resistance in mental health is described as the capacity to resist, counteract or otherwise remain unaffected by mental illness stigmatization (Ritsher et al., 2003). It has been identified to play a beneficial role in fighting against the internalisation process and is likely to facilitate the recovery from mental illness (Sibitz et al., 2011; Brohan et al., 2010b; Firmin et al., 2016). Sibitz et al. (2011) conducted a study among patients with schizophrenia, and found that greater stigma resistance was associated with reduced internalised stigma, greater self-esteem and improved quality of life. Similar conclusions...
were reached in Brohan et al. (2010b)'s study among patients with depression and bipolar disorder.

The stress-coping models of stigma illustrate that a stigmatised individual’s wellbeing is challenged when they view the harm due to stigma (primary appraisal) to be exceeding their perceived ability to cope with the stigma (secondary appraisal) (Lazarus and Folkman, 1984). With stigma resistance, the appraisals might be more positive in which the stigmatised individual views stigma to be less harmful and is less affected, therefore, being more confident in their ability to cope with the stigma. This suggests that stigma resistance may help to deflect negative beliefs associated with mental illness (Thoits, 2011) and may act as a buffer against the internalisation of stigma.

While there is currently no individual scale to measure stigma resistance, the Stigma Resistance subscale of the Internalised Stigma of Mental Illness Scale (ISMI; Ritsher et al., 2003) has been commonly used. The Stigma Resistance subscale comprises 5 items that reflect positivity with regard to mental illness e.g. “I can have a good, fulfilling life, despite my mental illness”. Previous research has shown that the Stigma Resistance subscale is psychometrically distinct from internalised stigma and need not be included in the ISMI total score for analysis (Ritsher et al., 2003; Boyd et al., 2014; Chang et al., 2014).

To our knowledge, there has been limited research on the endorsement and associative factors of stigma resistance among Asian populations with mental illness. A recent study among Chinese patients seeking treatment from a psychiatric outpatient clinic at a general hospital in Taipei explored the relationship between internalised stigma, stigma resistance and psychosocial outcomes. The findings revealed that in contrast to those who endorsed internalised stigma, participants with higher stigma resistance reported better psychosocial outcomes, indicating that stigma resistance could be used to counteract the effects of internalised stigma (Lien et al., 2015).

Noting the potential ability of stigma resistance to counter internalised stigma, it would be beneficial to identify the contributing factors to stigma resistance so as to facilitate the development of appropriate interventions to address the issue of internalised stigma. The current study conducted in Singapore, a multi-racial global city with a resident population of 3.9 million comprising 74.3% Chinese, 13.4% Malays, 9.1% Indians and 3.2% Others (Statistics Singapore, 2016), aims to (1) assess the prevalence of stigma resistance among a multi-ethnic population of outpatients with obsessive compulsive disorder (OCD), schizophrenia, depressive disorders and anxiety disorders; and (2) establish the socio-demographic correlates of stigma resistance and its association with internalised stigma, self-esteem, quality of life and hope.

2. Methods

2.1. Study design and participants

This cross-sectional study was conducted from May 2014 to September 2015 at the Institute of Mental Health (IMH) and its affiliated clinics. IMH is the only tertiary psychiatric care hospital in Singapore. Ethical approval was obtained from the Domain Specific Review Board of the National Healthcare Group, Singapore. Participants of this study were adult outpatients seeking treatment at IMH who fulfilled the following inclusion criterion: Singapore citizens or Permanent Residents (PRs), aged 21–65 years, belonging to Chinese, Malay or Indian ethnicity (the three main ethnic groups in Singapore), capable of providing consent, literate in English language, having a clinical diagnosis of schizophrenia, depression, anxiety or OCD as determined by a psychiatrist using ICD-9 criteria and seeking treatment at IMH for more than one year. OCD was examined as a separate diagnosis from anxiety as it is one of the most common mental disorders in Singapore with a lifetime prevalence of 3% (Chong et el, 2012) and therefore, deserves attention. The questionnaire was administered face-to-face by trained interviewers. A total of 280 participants were recruited via direct advertising in the format of posters at the clinics as well as referrals from psychiatrists and other healthcare professionals. Written informed consent was obtained from all respondents prior to the study.

2.2. Measures

2.2.1. Demographic and clinical data

Socio-demographic variables (i.e. age, gender, ethnicity, education level, marital status, employment status) were recorded and clinical data (i.e. diagnosis, age of illness onset, hospitalisation history) were obtained through medical record review by trained researchers who were members of the study team.

2.2.2. Internalised stigma and stigma resistance

The Internalised Stigma of Mental Illness (ISMI) scale uses a 4-point Likert scale consisting of 29 items grouped into 5 subscales – Alienation, Stereotype Endorsement, Discrimination Experience, Social Withdrawal and Stigma Resistance (reverse-scored).

The current study measured stigma resistance using the Stigma Resistance subscale and measured internalised stigma by summing the averages of the remaining four subscales of the ISMI (Ritsher et al., 2003). In the study conducted by Chang et al. (2014), the ISMI (without Stigma Resistance subscale) had demonstrated excellent internal consistency with a Cronbach’s alpha of 0.94, while the Stigma Resistance subscale reported a Cronbach’s alpha of 0.66. In the current study, Cronbach’s alpha for internalised stigma measured by the four subscales and Stigma Resistance subscale was 0.93 and 0.61 respectively. While it may be noted that some studies (Brohan et al., 2010c; Chang et al., 2016) had identified Discrimination Experience as a measurement of perceived stigma instead of internalised stigma, we had still integrated the domain to measure internalised stigma considering the high internal consistency reported (alpha = 0.93).

A cut-off point at 2.5 and above on the mean item score of the Stigma Resistance subscale was applied to define moderate to high (referred to as “high”) stigma resistance, and less than 2.5 for low stigma resistance (Sibitz et al., 2011; Biffu et al., 2014). The extent of internalised stigma and its subscales were defined using the same cut-off point on its item mean score. This cut-off point has been used in several other studies (Brohan et al., 2010a; Boyd et al., 2014; Kao et al., 2016).

2.2.3. Self-esteem

The Rosenberg Self-Esteem Scale (RSES) contains 10 items which are answered using a Likert scale from strongly agree (1) through to strongly disagree (4). Items 2, 5, 6, 8, 9 are reverse-scored. All item scores are summed and higher scores indicate higher self-esteem (Rosenberg, 1965). The results from the study conducted by McKay, Boduszek and Harvey (2014) supported the unidimensionality of the RSES. The Cronbach’s alpha in our study was 0.84.

2.2.4. Quality of life

The World Health Organization Quality of Life –BREF (WHOQOL-BREF) is a 26-item scale which measures overall quality of life (QOL) and general health. It also measures four distinct domains covering physical health (7 items), psychological health (6 items), social relationships (3 items) and environmental aspects (8 items). Participants respond to the items on a 5-point Likert scale. Item 3, 4 and 26 are reversed scored. Mean score of items within each domain are multiplied by 4 to make domain scores comparable with the scores used in the WHOQOL-100. Higher domain scores indicate higher quality of life (WHOQOL, 2004). Studies have indicated support for the psychometric properties of the WHOQOL-BREF in people with mental illness (Mas-Expósito et al., 2011; Su et al., 2014). The Cronbach’s alpha in our study for each of the four domains was: physical health, 0.81; psychological health, 0.84; social relationships, 0.63 and environmental aspects, 0.78.
2.2.5. Hope

The Dispositional Hope Scale (DHS) is a 12-item scale (8 hope items and 4 fillers items) where respondents indicate how true or false each statement is on an 8-point continuum scale from definitely false (1) to definitely true (8) (Synder et al., 1991). The scores of the 8 hope items are summed, where higher scores indicate an increased sense of hope. The Cronbach’s alpha in our sample was 0.89.

2.3. Statistical analysis

All statistical analyses were conducted using SPSS Version 21. All quantitative variables were tested for normality which revealed satisfactory skewness and kurtosis values (between –1 and 1). In addition, stigma resistance and internalised stigma (including each of the four subscales) were transformed to binary variables according to their mean scores: 0 = mean score < 2.5 (low), 1 = mean score ≥ 2.5 (high). Descriptive analyses were conducted for study sample characteristics. Pearson correlations were used to describe the relationships of stigma resistance with internalised stigma (and its subscales) and psychosocial variables - self-esteem, hope and quality of life. This was followed by analysis of variance (ANOVA) to identify differences in the internalised stigma and psychosocial variables scores between high and low stigma resistance. Logistic regression analysis was performed to determine the socio-demographic and clinical correlates of stigma resistance. After which, four different logistic regression models were explored with the following respective independent variables: (1) four domains of WHOQOL-BREF; (2) RSES; (3) ISMI and (4) the four subscales of ISMI to establish variables associated with the dependent variable - stigma resistance. The independent variables were entered into different models so as to avoid multicollinearity and examine their true effect on stigma resistance. The logistic regression analyses were controlled for socio-demographic and clinical characteristics including age, gender, ethnicity, employment status, marital status, education level, hospitalisation history, diagnosis and age of onset of mental illness. All statistically significant results were reported at p-value < 0.05.

3. Results

3.1. Socio-demographic & clinical characteristics

Socio-demographic and clinical characteristics of the study sample are presented in Table 1. Participants were mostly male (54.6%), never married (63.1%), of Chinese ethnicity (53.6%) and employed (55.7%). The prevalence of high stigma resistance was 82.9% with a mean score of 2.87 (SD = 0.477).

3.2. Correlates of stigma resistance

Bivariate analysis showed that there was no significant relationship between each of the socio-demographic and clinical characteristics and high or low stigma resistance. Logistic regression of socio-demographic and clinical characteristics revealed that marital status (widowed/separated/divorced) and diagnosis (depression) were significant correlates (p-value < 0.001) of stigma resistance (Table 2).

3.3. Correlations of stigma resistance with internalised stigma and psychosocial outcomes

The results of the Pearson correlation analysis are presented in Table 3. Stigma resistance was negatively correlated with internalised stigma and all four subscales of ISMI. The lower correlations with internalised stigma and its subscales highlighted that stigma resistance is indeed conceptually distinct from internalised stigma and could be considered as a separate construct. Stigma resistance was positively correlated with the psychosocial outcomes - self-esteem and all four domains of Quality of Life. The hope scale did not correlate with stigma resistance and hence, was excluded from the logistic regression analyses.

3.4. ANOVA of internalised stigma and psychosocial outcomes by stigma resistance

Results revealed that high stigma resistance reported higher self-esteem and quality of life scores, while low stigma resistance reported lower scores (Table 4).

The mean scores of internalised stigma and all the subscales were significantly different between those with low and high stigma resistance. Results showed that those with high stigma resistance reported lower scores, while those with low stigma resistance reported higher scores. The mean scores of Alienation for both low and high stigma resistance were higher that the cut-off of 2.5, whereas the mean scores of Stereotype Endorsement for both low and high stigma resistance were lower than the cut-off.

3.5. Internalised stigma, self-esteem and psychosocial outcomes as predictors of stigma resistance

Separate logistic regressions revealed that while internalised stigma...
and stereotype endorsement were negatively associated with stigma resistance, self-esteem and psychological health were positively associated with stigma resistance after controlling for socio-demographic and clinical characteristics (Table 5).

4. Discussion

This study sought to determine the factors contributing to stigma resistance as well as its association with internalised stigma, self-esteem and quality of life among outpatients with OCD, schizophrenia, depressive disorders and anxiety disorders in Singapore. Stigma resistance was found to be significantly associated with marital status [widowed/divorced] and diagnosis [depression]. Psychosocial outcomes such as self-esteem and psychological health (quality of life domain) were found to be positively associated with stigma resistance, while internalised stigma and experiences of alienation and withdrawal were negatively associated with stigma resistance.

82.9% of the current sample had high stigma resistance. This high prevalence is not dissimilar to that reported by Lien et al. (2015) who found the prevalence of stigma resistance to be 76% among Chinese outpatients with schizophrenia, schizoaffective disorder, bipolar disorder, depression, dysthymia disorder, social phobia, panic disorder or OCD. The mean stigma resistance score in the current study was 2.8, which is also similar to the mean score of 2.7 reported in the meta-analysis by Firmin et al. (2016). The meta-analysis included 48 studies from 2003 to 2015, of which 45 studies used the ISMI scale, and the majority of studies comprising participants with schizophrenia-spectrum disorders. The high prevalence and mean stigma resistance scores
ISMI was calculated using the following subscales: Alienation, Stereotype Endorsement, Discrimination Experience and Social Withdrawal.

Alienation, Stereotype Endorsement, Discrimination Experience, Social Withdrawal and Stigma Resistance are subscales of the ISMI.


clinical pro... health related treatments, regardless of their di... across studies might suggest that patients who are undergoing mental health related treatments, regardless of their differences in clinical profile, would possess similar ability to resist stigma. Whilst a study conducted by Chang et al. (2016) among Chinese psychiatric patients from clinics and hospitals had also found that there was no significant difference in the stigma resistance scores between patients of differing clinical profile i.e. patients who had and had not been hospitalised, and those who were and were not suicidal, further research is required to better understand this association.

It is also interesting to note that the prevalence of high internalised stigma in our earlier study using the same sample was 43.6% (Picco et al., 2016), meaning that some patients (n = 88) have both high internalised stigma and stigma resistance i.e. internalised stigma and stigma resistance are not mutually exclusive. Sibitz et al. (2011) explained that stigma resistance is a form of personal strength (and also a separate construct from internalised stigma) and with that, patients might overcome their internalised stigma and be able to lead life the way they want. Therefore, a patient could have high internalised stigma, but it is essential that he also has sufficient stigma resistance to counter the impact. Hence, regardless of high or low internalised stigma, treatments should focus on enhancing stigma resistance in patients since it could help reduce the effects of internalised stigma, playing a central role in recovery (Firmin et al., 2016).

Participants who were separated/divorced/widowed were about 4 times more likely (OR = 3.865, p-value = 0.039) to have high stigma resistance as compared to those who were single. Rutter (1981) theorised that a person who had undergone stressful experiences would develop greater resistance to future stress. As such, having gone through difficult life events such as separation, divorce or the loss of loved ones could have built up one’s strength to overcome challenges or adversities. This logically could aid in developing greater resistance towards stigmatising beliefs, given that stigmatization could be perceived as a form of adversity (being discriminated) in the social context.

Participants who were diagnosed with depression were about 4 times less likely (OR = 0.259, p-value = 0.034) to have high stigma resistance as compared to those diagnosed with schizophrenia. Studies have found that as compared to patients with schizophrenia, patients with depression have greater awareness of their mental illness and a clearer perception of the consequences of mental illness (Amador et al., 1994; Pini et al., 2001). Furthermore, the symptoms of depression are characterised by depressed mood, anhedonia, feelings of worthlessness, etc. (American Psychiatric Association, 2013) with the cognitive tendency to negatively appraise circumstances or even oneself. In this regard, a patient with depression might feel even more despaired given the public stigmatization and therefore, lose the ability to resist stigma.

Stigma resistance was negatively correlated with internalised stigma and all of its subscales. High alienation and low stereotype endorsement were observed for both low and high stigma resistance. The findings
from logistic regression analyses revealed that only internalised stigma and stereotype endorsement were significantly associated with stigma resistance; participants with high internalised stigma or stereotype endorsement were 4.2 times ($OR = 0.241, p-value < 0.001$) or 4.8 times ($OR = 0.210, p-value < 0.001$) less likely to develop high stigma resistance, respectively. A study conducted by Nabors et al. (2014) on outpatients with schizophrenia had also found that lower stereotype endorsement contributed to greater stigma resistance. This implies that discrimination experience (Lysaker et al., 2008), alienation and social withdrawal do not influence stigma resistance the same way in which stereotype endorsement do.

The items in the Alienation subscale asked about the respondent's subjective experiences of being different from the general population (e.g. “I feel out of the place in the world because I have a mental illness”); the items in the Discrimination Experience subscale asked about the respondent's perception on the treatment they received (e.g. “Nobody would be interested in getting close to me because I have a mental illness”) (Ritsher et al., 2003). It could be possible that feelings of alienation arose from experiences of discriminating treatments from the general population against people with mental illness. Some might then develop social withdrawal (e.g. “I avoid getting close to people who don't have a mental illness to avoid rejection”) (Ritsher et al., 2003) as a form of coping towards the stigmatised beliefs to protect themselves. Hence, even though they were aware of the stigmatised beliefs, they might not apply such beliefs upon themselves yet. In contrast, the Stereotype Endorsement subscale asked about respondent's agreement to the perception of others on people with mental illness (e.g. “Mentally ill people tend to be violent”) (Ritsher et al., 2003) - agreeing to the statements would imply that one had already accepted and internalised the stigmatising beliefs (Bititu et al., 2014). In this regard, we could deduce that possessing awareness of and experiencing stigma does not impact one's stigma resistance; it is only when one agrees with and applies these stigmatising beliefs to them, that their stigma resistance would be negatively affected. It would be interesting to explore stigma resistance as an independent variable in future studies to establish if stigma resistance is an outcome or a predictor of internalised stigma.

Self-esteem and quality of life domains scores were significantly different between those with high and low stigma resistance – higher scores were observed in those with high stigma resistance, while lower scores were observed in those with low stigma resistance. After controlling for all socio-demographics and clinical characteristics, results from logistic regression analyses showed that self-esteem and psychological health were associated with high stigma resistance i.e. for every unit increase in the self-esteem score, the odds of developing high stigma resistance increased by 40% ($OR = 1.40, p-value < 0.001$), and for every unit increase in the Psychological Health domain score, the odds of developing high stigma resistance increased by 4% ($OR = 1.04, p-value = 0.022$). This finding resonates with Thoits's (2011) theory that a person with higher levels of psychosocial outcomes is more likely to demonstrate higher stigma resistance. In addition, the study by Kim et al. (2015) had concluded that promoting self-esteem in patients with mental illness is essential in managing their internalised stigma. As such, we infer that it would be beneficial if patients could be managed holistically by strengthening and improving self-esteem and psychological health, either to boost their resistance to stigma or to help them cope with internalised or public stigma.

Interpretation of these findings should take into consideration several limitations. Firstly, the participants in this study were all outpatients recruited using a convenient sample and restricted to only English-speaking patients aged 21–65 years; hence, they might not be representative of all patients, both inpatient and outpatient, with OCD, schizophrenia, depressive disorders and anxiety disorders in the population and also in the institution. In addition, the participants were all outpatients and their level of stigma resistance is likely to differ from that of inpatients' due to the different severity of mental illness. Secondly, it is important to acknowledge the heterogeneity of the current sample which comprised participants with four different diagnoses, however we did control for diagnosis in the logistic regression analyses. Thirdly, as the study was conducted in a clinic setting, all participants were already seeking treatment for their mental illness and the reported stigma resistance could be inflated and might not have reflected the true stigma resistance profile of people with mental illness. Fourthly, the internal consistency of the stigma resistance subscale in the present study is relatively low (Cronbach's alpha = 0.61). Despite this, it is still considered acceptable by psychometric standards (Kline, 2000). Furthermore, several other studies have also reported low internal consistency for stigma resistance (Brohan et al., 2010a, 2010b) and recommended that it would be useful to develop a robust scale to assess stigma resistance for more in-depth research on this topic in the future (Sibitz et al., 2011). Lastly, given the cross-sectional design of the study, we are unable to conclude any causal inferences from our results.

Notwithstanding these limitations, this study provides insight into development of future clinical interventions with regards to stigma resistance. Our findings have revealed that patients diagnosed with depression were less likely to have high stigma resistance. This is possibly attributed to its unique symptoms not present in other mental illness e.g. feelings of worthlessness resulting in the lack of ability to resist stigma. As such, the characteristics of depression may play a substantial role in determining the ability and how much the patient wants to counteract stigma. Therefore, future studies may consider exploring the stigma coping mechanism in patients with depression to develop interventions targeted at managing the negativity derived from the symptoms in order to build their stigma resistance. Furthermore, given the heterogeneity of the current sample, future research may also consider specifically exploring how stigma resistance may differ across diagnoses which could possibly facilitate the development of more effective treatments. In addition, interventions could focus on building self-esteem and psychological health aspects of the patients, found to positively influence stigma resistance, whilst at the same time, these aspects could counteract internalised stigma. The results also highlighted the importance of disrupting the internalisation of stigma as early on as possible given that the ability to resist stigma is found to be affected only after the stigmatising beliefs have been applied upon oneself. As pointed out by Rusch et al. (2014), “Stigmatized individuals are not passive recipients of stigma, and their response can augment or reduce stigma’s negative impact” (p. 487). Timely intervention to help patients respond to stigma would prevent them from internalising the stigma and maintain adequate stigma resistance.

**Conflict of interest**

The authors declare that they have no competing interests.

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