Association between insight and internalized stigma and other clinical factors among patients with depression: A cross-sectional study

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Background: Insight influences treatment adherence among patients with depression. These patients also experience considerable social and self-stigma. The relationship between insight and internalized stigma has been extensively studied among patients with schizophrenia but not patients with depression.

Aim: This study aimed to determine the relationship between the level of insight in illness and internalized stigma among patients with depression and to identify the clinical factors associated with impaired insight.

Materials and Methods: A cross-sectional survey was conducted among adult psychiatric outpatients with depressive disorders at a teaching hospital in Kuala Lumpur for 10 months. Sociodemographic and illness-related data were gathered. Two questionnaires, Mood Disorder Insight Scale (MDIS) and Internalized Stigma of Mental Illness Scale (ISMI), were administered.

Results: Ninety-nine respondents participated in the study (female: 63.6%; Malay: 41.4%; mean age: 46.4 years). The median duration of illness was 6.0 years. More respondents were taking combination therapy (59.6%). There was a statistically significant correlation between ISMI and MDIS scores ($r_s = 0.339$, $P = 0.001$). On bivariate analyses, intact insight was associated with non-Malay race, combination therapy, higher average ISMI scores and subscores for alienation, stereotype endorsement, discrimination experience, and social withdrawal. Combination therapy, higher scores for alienation, and social withdrawal subscales were associated with a greater likelihood for intact insight in logistic regression model.

Conclusions: Significant association exists between insight and internalized stigma in patients with depression. Interventions to reduce the impact of internalized stigma while improving patients’ insight are required.

Key words: Antidepressant, depression, insight, internalized stigma
On the other hand, self-and perceived-stigmatizing responses to help seeking for depression are associated with reluctance to seek professional help. Therefore, it is of considerable importance that the interplay between illness insight and stigma is clearly understood.

Paradoxically, as what has been found especially among patients with schizophrenia, greater insight has been associated with higher levels of dysphoria, lowered self-esteem, and decreased well-being and quality of life. One possible mechanism for this to happen is through an increase in stigma. Patients with schizophrenia who had good insight scored significantly higher for felt stigma compared to patients who lacked insight. Furthermore, it has been shown that self-stigma or internalized stigma, in particular, is the moderating factor for the associations between insight and its detrimental consequences.

Internalized stigma reflects the degree to which a person has internalized societally endorsed stigmatizing beliefs about mental illness. It has been shown that greater internalized stigma among people with severe mental illness was associated with lower levels of self-esteem, self-efficacy, and more severe psychiatric symptoms.

Existing research has confirmed a significant relationship between self-stigma and insight among patients with schizophrenia. Moreover, among patients with very high self-stigma, higher insight is associated with more depressive symptoms. Although the relationship between insight and internalized stigma has been extensively studied in the context of schizophrenia and depression in schizophrenia, it is still comparatively underexplored for patients with depressive disorders. This is despite the fact that internalized stigma can be as or more prevalent among depressive patients compared to patients with psychosis.

A recent Indian study assessing stigma among patients with schizophrenia, bipolar disorder, and recurrent depressive disorder showed that stigma was associated with younger age of onset, shorter duration of illness, and shorter duration of treatment. This suggests that greater degree of stigma is experienced during the early periods of illness. This is supported by a subsequent study in which about 40% of patients with first-episode depression reported stigma, with younger age, longer duration of depressive episode, and comorbid medical illness showing robust association with more stigma.

Insight and stigma do not necessarily correlate with one another across different psychiatric conditions. For instance, a study conducted among Korean men with alcohol dependence reported that the correlation between internalized stigma and insight was not significant. Therefore, the nature of association between insight and internalized stigma in depressive disorders needs to be investigated and clarified, taking into account factors that might modulate the relationship, such as age, duration of illness, and symptom severity. This study aimed to determine the relationship between the level of insight in illness and internalized stigma among patients with depression and to identify the clinical factors associated with impaired insight.

**MATERIALS AND METHODS**

This cross-sectional study was conducted among outpatients with depressive disorders attending to the Psychiatry Clinic at National University of Malaysia Medical Centre, which is a teaching hospital located in metropolitan Kuala Lumpur, Malaysia. The study was conducted for 10 months. Simple random sampling was employed and those who fulfilled the study requirement based on the inclusion and exclusion criteria were invited to participate in the study.

The inclusion criteria were: (1) diagnosed with major depressive disorder or dysthymia (based on the Diagnostic and Statistical Manual-IV-TR) by psychiatrists; (2) aged 18–65 years; (3) having been prescribed with antidepressants for at least 1 month; and (4) consent to participate in the study. The exclusion criteria were: (1) inability to read or understand English or Malay; (2) presence of psychotic features; and (3) refusal to participate in the study. Ethical approval was obtained from the Research Ethical Committee of National University of Malaysia Medical Centre prior to conducting the study. Informed consent was taken from all patients who were enrolled in the study.

**Survey instruments**

The study participants were asked to complete a number of questionnaires as listed below:

**Sociodemographic and Illness Information Sheet**

The sociodemographic details included were age, gender, race, marital status, educational level, employment status, and total family income. The following information was gathered regarding participants’ illness: duration of illness (in years), antidepressant used (monotherapy or combination therapy), and type of clinician seen (specialists or medical officers).

**The Beck Depression Inventory**

Additionally, the severity of depression was measured using the Beck Depression Inventory (BDI). This is a 21-question self-rating scale composed of items that relate to symptoms of depression such as hopelessness, guilt, and physical symptoms such as fatigue. It has been shown to have high internal validity, test–retest reliability, and good construct and concurrent validity and discriminant validity in other cultures. The validated Malay-version BDI was used.
Illness insight was measured by the Mood Disorders Insight Scale (MDIS). This questionnaire was adapted from the Birchwood Insight Scale for psychotic disorders, for use in mood disorders. It has a moderately high validity based on clinician ratings ($r = 0.49$) and reliability ($r = 0.75$). It is an 8-item scale that measures the following three dimensions of insight: (1) awareness of illness (two items with original total scores ranging from 0 to 4); (2) attribution of symptoms including re-labeling of psychotic features (three items with original total scores ranging from 0 to 6); and (3) awareness of the need for treatment (three items with original total scores ranging from 0 to 6).

The MDIS items were presented as a series of statements where participants answered if they agreed, disagreed, or unsure of the statements. This scale was also used in previous studies to assess the levels of insight in patients with depressive disorders and bipolar disorder with original total scores for each subgroup adjusted to a range from 0 to 4. Higher MDIS scores indicated greater insight. For statistical purposes, the total insight scores were further divided into dichotomous categories. A participant was considered to have intact insight (i.e., good insight) if the insight score on an individual MDIS dimension was >2; a score of 2 or less was considered to indicate impaired insight.

The Internalized Stigma of Mental Illness Scale

Internalized stigma was measured using the Internalized Stigma of Mental Illness Scale (ISMI). It comprises 29 items that are grouped into five subscales reflecting alienation, stereotype endorsement, discrimination experience, social withdrawal, and stigma resistance. The alienation subscale (six items) measures the subjective experience of being less than a full member of the society. The stereotype endorsement subscales (seven items) measures respondents’ perceptions of the way they tend to be treated by others. The social withdrawal subscale (six items) measures aspects of social withdrawal. The stigma resistance subscale (five items) measures a person’s ability to resist or be unaffected by internalized stigma. The ISMI has been translated into Malay language and used in a previous local study.

Each item is rated on a 4-point Likert-type agreement scale from 1 (strongly disagree) to 4 (strongly agree) except for the stigma resistance subscale which is reversed in scoring. All subscale scores are calculated as an average, with higher scores suggesting greater experience of stigma. Each subscale was further classified into two categories: low internalized stigma (1.00–2.50) and high internalized stigma (2.51–4.00). Evidence of acceptable internal consistency, test–retest reliability, factorial, and convergent validity has been reported.

### Statistical analysis

The recorded data were checked, cleaned, and edited for inconsistencies. The relationship between parameters was analyzed using Statistical Package for Social Sciences version 20.0 (IBM Corp., Armonk, NY, USA). First, descriptive statistics were generated. Correlations between continuous variable were measured using Spearman’s correlation coefficients. In bivariate analyses, independent $t$-test was used for normally distributed continuous data, namely respondents’ age. Chi-square test and Fisher’s exact test were used for comparisons of categorical data. Mann–Whitney $U$-test was used for comparison of nonnormally distributed continuous data (e.g., duration of illness, BDI score, and ISMI scores). As duration of illness could potentially modulate some of the responses to the ISMI scale, we performed analyses of covariance comparing ISMI scores between impaired insight and intact insight groups, with duration of illness as the covariate factor. Subsequently, logistic regression analysis was conducted to test the association between the variables found to be significantly associated with impaired insight from bivariate analyses.

### Table 1: Characteristics of the respondents ($n=99$)

| Variable | Value |
|----------|-------|
| Age (years), mean (SD) | 46.4 (12.3) |
| Gender, n (%) | |
| Male | 36 (36.4) |
| Female | 63 (63.6) |
| Race, n (%) | |
| Malay | 41 (41.4) |
| Chinese | 47 (47.5) |
| Others | 11 (11.1) |
| Marital status, n (%) | |
| Single | 20 (20.2) |
| Married | 60 (60.6) |
| Widowed/divorced | 19 (19.2) |
| Educational level, n (%) | |
| Secondary and below | 51 (51.5) |
| Diploma/STPM and above | 48 (48.5) |
| Employment status, n (%) | |
| Employed | 68 (68.7) |
| Unemployed | 31 (31.3) |
| Total family income, n (%) | |
| <RM 1999 | 29 (29.3) |
| RM 2000-2999 | 20 (20.2) |
| RM 3000-3999 | 27 (27.3) |
| ≥RM 4000 | 23 (23.2) |
| Antidepressant use, n (%) | |
| Monotherapy | 40 (40.4) |
| Combination therapy | 59 (59.6) |
| Clinic type, n (%) | |
| Specialist | 20 (20.2) |
| Medical officer | 79 (79.8) |
| Duration of illness (years), median (IQR) | 6.0 (2.0–12.0) |
| BDI score, median (IQR) | 15.0 (6.0–23.0) |

BDI – Beck Depression Inventory; IQR – Interquartile range; SD – Standard deviation
RESULTS

A total of 99 respondents participated in the study [Table 1]. There were more females (63.6%) than males (36.4%), and the mean age of the respondents was 46.4 years. Ethnic Malay and Chinese respondents accounted for 41.4% and 47.5% of the sample, respectively. Most of the respondents were married (60.6%) and working (68.7%). Nearly half of them achieved above-secondary education. More than three-quarters had a family income of RM 4000 and below.

Majority of the respondents were taking combination therapy of either multiple antidepressants or an antidepressant with other psychotropics (mainly benzodiazepines) compared to antidepressant monotherapy (59.6% and 40.4%, respectively). The respondents had a median duration of illness of 6.0 years. The median total score for insight among the respondents was 10.0 out of the maximum score of 12.0 [Table 2], and most participants had low internalized stigma (n = 76, 76.8%) [Table 3].

There was a weak-to-moderate correlation between ISMI and MDIS total scores, which was statistically significant (Spearman’s correlation coefficient, \( r_s = 0.339, P = 0.001 \)). Age correlated negatively weakly with stereotype endorsement (\( r_s = -0.205, P = 0.042 \)) and discrimination experience (\( r_s = -0.289, P = 0.004 \)) subscores of ISMI, whereas duration of illness did not correlate with any of the ISMI subscores and MDIS score. BDI score, on the contrary, showed statistically significant correlations with all the ISMI subscores and MDIS score (\( r_s \) ranged between 0.314 and 0.622, all \( P < 0.001 \)).

On bivariate analyses, non-Malays were more likely to have an intact insight than Malays. Patients on combination therapy were also more likely to have an intact insight than those on monotherapy [Table 4]. There was no significant difference in the duration of illness. Significant difference in BDI score was found between the impaired insight and intact insight groups. With regard to internalized stigma, the respondents with intact insight were significantly more likely than respondents with impaired insight to have higher average ISMI scores, as well as higher subscores for alienation, stereotype endorsement, discrimination experience, and social withdrawal [Table 5].

On analyses of covariance, there were significant differences in the mean ISMI alienation subscore [\( F (1,96) = 12.308, P = 0.001 \)], social withdrawal subscore [\( F (1,96) = 7.689, P = 0.007 \)], and average total score [\( F (1,96) = 7.553, P = 0.007 \)] between groups with intact and impaired insight, after adjusting for duration of illness. Meanwhile, no significant differences were found for stereotype endorsement, discrimination experience, and stigma resistance after adjusting for duration of illness.

### Table 2: Summary of scores for Internalized Stigma of Mental Illness and Mood Disorder Insight Scale

| Variable                        | Range  | Mean (SD)   | Median (IQR) |
|---------------------------------|--------|-------------|--------------|
| ISMI                            |        |             |              |
| Average total score             | 2.5    | 2.0 (0.6)   | 1.9 (1.6-2.5)|
| Alienation subscore             | 3.0    | 2.2 (0.8)   | 2.2 (1.5-2.8)|
| Stereotype endorsement subscore | 2.6    | 1.8 (0.6)   | 1.9 (1.3-2.3)|
| Discrimination experience subscore | 3.0    | 1.9 (0.9)   | 1.8 (1.0-2.4)|
| Social withdrawal subscore      | 3.0    | 2.0 (0.8)   | 2.0 (1.2-2.8)|
| Stigma resistance subscore      | 3.0    | 2.2 (0.7)   | 2.0 (1.6-2.6)|
| MDIS                            |        |             |              |
| Total score                     | 9.0    | 9.0 (2.3)   | 10.0 (8.0-10.5)|
| Awareness of illness subscore   | 4.0    | 3.7 (1.1)   | 2.0 (2.0-3.5)|
| Attribution subscore            | 4.0    | 2.9 (1.4)   | 4.0 (2.0-4.0)|
| Need for treatment subscore     | 4.0    | 2.4 (0.7)   | 4.0 (4.0-4.0)|

IQR – Interquartile range; SD – Standard deviation; ISMI – Internalized Stigma of Mental Illness; MDIS – Mood Disorder Insight Scale

### Table 3: Summary of categories for Internalized Stigma of Mental Illness and Mood Disorder Insight Scale

| Variable                        | \( n \) (%) |
|---------------------------------|-------------|
| ISMI                            |             |
| Internalized stigma (overall)    |             |
| Low                             | 76 (76.8)   |
| High                            | 23 (23.2)   |
| Alienation                      |             |
| Low                             | 69 (69.7)   |
| High                            | 30 (30.3)   |
| Stereotype endorsement          |             |
| Low                             | 82 (82.8)   |
| High                            | 17 (17.2)   |
| Discrimination experience       |             |
| Low                             | 77 (77.8)   |
| High                            | 22 (22.2)   |
| Social withdrawal               |             |
| Low                             | 69 (69.7)   |
| High                            | 30 (30.3)   |
| Stigma resistance               |             |
| Low                             | 72 (72.7)   |
| High                            | 27 (27.3)   |
| MDIS                            |             |
| Insight (overall)               |             |
| Impaired                        | 15 (15.2)   |
| Intact                          | 84 (84.8)   |
| Awareness of illness            |             |
| Impaired                        | 54 (54.5)   |
| Intact                          | 45 (45.5)   |
| Attribution                     |             |
| Impaired                        | 30 (30.3)   |
| Intact                          | 69 (69.7)   |
| Need for treatment              |             |
| Impaired                        | 9 (9.1)     |
| Intact                          | 90 (90.9)   |

ISMI – Internalized Stigma of Mental Illness; MDIS – Mood Disorder Insight Scale

Race, antidepressant use, duration of illness, ISMI average total score, alienation, stereotype endorsement, discrimination experience, social withdrawal subscores, and BDI score were included in a multivariate logistic regression model. Combination therapy, alienation, and social withdrawal subscales of ISMI turned out to be
statistically significant. Respondents on combination therapy were more likely to have an intact insight (odds ratio = 10.31, 95% confidence interval: 1.96–54.14). Higher scores for alienation and social withdrawal subscales were associated with a greater likelihood of intact insight [Table 6].

**DISCUSSION**

The results of the present study showed a relatively high level of intact overall insight (84.8%) among patients with depressive disorders. However, rates of intact awareness of illness (45.5%) and attribution (69.7%) were low compared to intact insight for the need for treatment (90.9%). For comparison, Yen et al.[20] also using MDIS reported an intact insight for awareness of illness, attribution, and need for treatment at 63.2%, 62.8%, and 84.2%, respectively, in their study.

The majority of the participants had a low level of internalized stigma, with the proportions of patients reporting high stigma for different subscales of ISMI ranging from 17.2% to 30.3%. Still, it shows that internalized stigma is common among depressive patients. Similarly, a Malaysian study among patients with depression in another university hospital revealed that 70% of the patients experienced internalized stigma, ranging from mild to severe in severity.[23] Local cultural factors might have important influence on stigma toward mental illness. The predominant Malay Muslim community, in general, are reluctant to express their psychological problems, as this is not socially sanctioned and runs against Islamic values that emphasize expressing emotions in moderation.[25,26] Individuals tend to attribute the cause of mental illness to fate and religion, preferring folk therapies, which are socially acceptable, over psychiatric treatment.[27] In contrast, receiving psychiatric treatment for mental illness such as depression is viewed as an abnormality as it may reflect possible genetics or biological failure,[28] accentuating stigma experienced by the patients.

This study also demonstrated a significant correlation between internalized stigma and insight. Bivariate analyses showed that all subscales of ISMI were associated with insight except for stigma resistance. After adjusting for duration of illness and symptom severity, alienation and social withdrawal subscores of internalized stigma remained significant for intact insight. Meanwhile, the clinical feature significant for intact insight was the type of pharmacotherapy, namely combination therapy.

One Indian study found no association between stigma assessed using ISMI and insight assessed using the Scale to Assess Unawareness of Mental Disorder among patients with schizophrenia in remission.[29] Another study conducted later at the same center among patients with schizophrenia in all stages of illness discovered that cognitive insight in

**Table 4: Comparisons between respondents with impaired insight and with intact insight (categorical variables)**

| Variable                  | Impaired insight, n (%) | Intact insight, n (%) | P   |
|---------------------------|-------------------------|----------------------|-----|
| Gender                    |                         |                      |     |
| Male                      | 6 (16.7)                | 30 (83.3)            | 0.751* |
| Female                    | 9 (14.3)                | 54 (85.7)            |     |
| Race                      |                         |                      |     |
| Malay                     | 10 (24.4)               | 31 (75.6)            | 0.031** |
| Non-Malay                 | 5 (8.6)                 | 53 (91.4)            |     |
| Marital status            |                         |                      |     |
| Married                   | 12 (20.0)               | 48 (80.0)            | 0.095* |
| Not married               | 3 (7.7)                 | 36 (92.3)            |     |
| Educational level         |                         |                      |     |
| Secondary and below       | 9 (17.6)                | 42 (82.4)            | 0.475* |
| Diploma/STPM and above    | 6 (12.5)                | 42 (87.5)            |     |
| Employment status         |                         |                      |     |
| Employed                  | 12 (17.6)               | 56 (82.4)            | 0.378* |
| Unemployed                | 3 (9.7)                 | 28 (90.3)            |     |
| Total family income       |                         |                      |     |
| <RM 3000                  | 8 (16.3)                | 41 (83.7)            | 0.747* |
| ≥RM 3000                  | 7 (14.0)                | 43 (86.0)            |     |
| Antidepressant use        |                         |                      |     |
| Monotherapy               | 10 (25.0)               | 30 (75.0)            | 0.024** |
| Combination therapy       | 5 (8.5)                 | 54 (91.5)            |     |
| Clinic type               |                         |                      |     |
| Specialist                | 2 (10.0)                | 18 (90.0)            | 0.729* |
| Medical officer           | 13 (16.5)               | 66 (83.5)            |     |

*Chi-square test; †Fisher’s exact test; *Statistically significant

**Table 5: Comparisons between respondents with impaired insight and with intact insight (continuous variables)**

| Variable                      | Impaired insight | Intact insight | P   | 95% CI          |
|-------------------------------|------------------|----------------|-----|-----------------|
| Age, mean±SD                  | 49.9 (12.0)      | 45.8 (12.3)    | 0.235* | −2.716–10.939 |
| Duration of illness, median (IQR) | 3.0 (13.0)      | 6.0 (9.8)     | 0.618* |                |
| BDI score, median (IQR)       | 11.0 (11.0)      | 16.5 (17.0)    | 0.009** |                |
| ISMI, median (IQR)            |                  |                |     |                 |
| Average total score           | 1.6 (0.8)        | 2.0 (1.0)      | 0.006** |                |
| Alienation                    | 1.3 (1.0)        | 2.2 (1.3)      | 0.001** |                |
| Stereotype endorsement        | 1.3 (1.0)        | 1.9 (0.9)      | 0.047** |                |
| Discrimination experience     | 1.0 (1.0)        | 1.8 (1.6)      | 0.035** |                |
| Social withdrawal             | 1.0 (0.7)        | 2.0 (1.5)      | 0.003** |                |
| Stigma resistance             | 2.0 (1.0)        | 2.1 (1.0)      | 0.485*  |                |

*t-test; †Mann-Whitney U-test; *Statistically significant. CI – Confidence interval; ISMI – Internalized Stigma of Mental Illness; BDI – Beck Depression Inventory; IQR – Interquartile range; SD – Standard deviation
the form of self-reflectiveness (as assessed using the Beck Cognitive Insight Scale) was associated with a higher level of stigma in all the domains except for stigma resistance in this patient group.\cite{5} It is interesting to note that in the Indian study cited earlier that included schizophrenic patients in all stages of illness, lack of remission was associated with higher ISMI scores,\cite{20,29} suggesting that effective treatment to achieve symptom remission can be an important measure in stigma reduction. Similarly, in their study, Vidović \textit{et al.} found no correlation between insight and the stigma resistance subscale of ISMI.\cite{10} It is possible that stigma resistance is a construct related to some other variables yet to be identified other than the individuals’ awareness of their illness.

Patients on combination therapy were found to be more likely to have intact insight. While current depression severity as measured with BDI scores was not a significant factor in logistic regression analysis, combination therapy can be viewed as an indicator for greater overall illness severity in contrast to monotherapy. Seen in this light, this study finding concurs with that of previous researches\cite{20,29} suggesting that effective treatment to achieve symptom remission can be an important measure in stigma reduction. Similarly, in their study, Vidović \textit{et al.} found no correlation between insight and the stigma resistance subscale of ISMI.\cite{10} It is possible that stigma resistance is a construct related to some other variables yet to be identified other than the individuals’ awareness of their illness.

The findings of this study have clinical implications in relation to the fine balance between ensuring treatment adherence and containing adverse consequences of self-stigma. Lower perceived stigma was observed to be significantly associated with antidepressant nonadherence.\cite{32} This is consistent with studies of other mental disorders which reported self-stigma as a significant factor associated with treatment nonadherence.\cite{33} On the other hand, adherence was significantly positively correlated with the level of self-stigma among a group of patients with depressive disorders.\cite{34}

There were several limitations to this study. Definitive conclusions regarding causality internalized stigma and insight cannot be drawn from this study due to the cross-sectional design of the study. This study is conducted at a single site, which might also limit the generalizability of the study findings to the entire population of patients with depression in Malaysia. In addition, we did not collect the data on depression subtypes, which might also have influenced response to ISMI and MDIS.

**CONCLUSIONS**

This study revealed significant associations between patients’ insight and aspects of internalized stigma as well as antidepressant use. This study warrants more in-depth research on the topic, particularly to understand the factors involved in stigma and insight among patients with depression in Malaysian multi-ethnic multicultural population. It is important to develop and implement interventions to mitigate the deleterious impact of internalized stigma while improving patients’ insight.

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There are no conflicts of interest.

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