



# Stigma and discrimination in patients suffering with schizophrenia and depression: a comparative study

## Abstract

**Introduction:** Stigma remains a powerful negative attribute in social relationships of people with mental illness. Historically, stigma towards people with schizophrenia or depression has differed. Persons with schizophrenia are seen as violent and dangerous, whereas people with depression are seen as more accountable for their illness. Studies comparing stigma in these two illnesses in a systematic manner are far and few. **Aim:** To study and compare the levels of stigma and discrimination in persons suffering from schizophrenia and depressive disorder.

**Material and methods:** A cross-sectional study was carried out with 30 patients each of schizophrenia and major depressive disorder attending the outpatient department of psychiatry at a tertiary care hospital in Andhra Pradesh, India. Diagnosis was made as part of routine clinical assessment and confirmed using the fifth edition of the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-5) criteria. After obtaining informed consent these patients were subjected to a semi-structured proforma wherein their demographic profiles and additional clinical history was recorded. The main study tool, the discrimination and stigma scale (DISC) was used in all patients. **Results:** The mean DISC score was found to be significantly higher in schizophrenia patients than depression patients, i.e.  $p < 0.05$ , indicating higher stigma and discrimination in patients with schizophrenia, compared to those with major depression. **Conclusion:** For people with mental illnesses, stigma and discrimination adds to the distress and suffering, and hinders their recovery. This plays a greater role in patients with schizophrenia than those with depression.

**Keywords:** Shame. Attitude. Mental Disorders.

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## INTRODUCTION

Stigma is defined as a mark of disgrace or shame associated with a particular circumstance, quality, or person. Stigma in mental illness is related to a negative stereotype that exists in society about mental illness sufferers, and remains a powerful negative influence in all social relations.[1] In spite of centuries of learning, mental illness is often perceived as an indulgence and sign of weakness. Self-stigmatisation has been described, and there are numerous personal accounts of psychiatric illnesses, where shame overrides even the most extreme of symptoms. In two community surveys conducted in the United Kingdom (UK), little change was recorded over ten years, with over 80% people endorsing the statement that "most people are uncomfortable by mentally ill people", and about 30% agreeing "I am embarrassed by mentally ill persons".[2]

Stigma can be conceptualised as having three different elements.[3] First, misinformation regarding the stigmatised condition is seen as ignorance. Second, a negative outlook towards a stigmatised group or individual is seen as prejudice. Third, the behavioural manifestation of stigma is discrimination. Discrimination can occur when stigmatised views of a person or a group of people are acted upon.

Historically, stigmatising attitudes within the general public towards people with schizophrenia or depression have differed. People diagnosed with schizophrenia are seen as more violent and dangerous, while people with depression may be seen as more accountable for their illness.[4] Research at the National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru by Raguram *et al.*, [5] focused on the cultural dimension and cross-cultural comparison of stigma

linked to depression. The study measured illness experience, symptom prominence, and indicators of stigma in 80 outpatients from urban background using the descriptive model interview catalogue. The study found that persons who present with a somatic form of depression have less stigma than those who present with psychological symptoms. The World Psychiatric Association (WPA) stigma project from India,[6] which was conducted in four cities with 463 ill persons with schizophrenia and 651 family members, concluded that two-third of the participants reported discrimination. Males experienced greater discrimination in their job area while women experienced more problems in the family and social areas.

### Aims of the study

To study and compare stigma and discrimination in people suffering with schizophrenia and depressive disorders.

### MATERIAL AND METHODOLOGY

This study was a cross-sectional study that started on the 1st of September 2019 and was carried out until the required patient numbers were obtained, which was until the end of November 2019. After obtaining necessary permission from the ethics committee, subjects were recruited from those attending the outpatient department of psychiatry, Gitam Institute of Medical Sciences and Research, Visakhapatnam, Andhra Pradesh, India. During the study period a total of 30 patients above age 18 years with schizophrenia and major depressive disorder respectively, diagnosed using the fifth edition of American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-5) criteria,[7] having no acute symptoms of the disease (that affects their ability to consent and participate in the assessment process) and willing to participate in the study, were recruited. These patients were interviewed, and their sociodemographic profile and clinical history were recorded on a semi-structured proforma.

The discrimination and stigma scale (DISC)[8] that comprises 32 questions was used on the patients to measure experienced discrimination, anticipated discrimination, coping with stigma, and positive discrimination. The scale was used in original without translations. The questions accordingly were divided into four subscales:

Subscale 1: Unfair treatment (one to 21)

Subscale 2: Stopping self (22-25)

Subscale 3: Overcoming stigma (26 and 27)

Subscale 4: Positive treatment (28-32)

Each item was rated on a four-point Likert scale: zero = no difference, one = a little, two = moderately, and three = a lot. A 'not applicable' option was available for instances where the participant was not involved in a situation where they could have experienced discrimination. Items where no response was provided is noted as 'missing'. Calculation of both mean and total score was recommended for each subscale. 'Not applicable' and 'missing' data were excluded while calculating means.

DISC can be used over different timeframes – lifetime ever, past 12 months, or another time period. Most studies have preferred previous 12 months. The past 12 months were

taken as reference in our study while scoring patients on stigma and discrimination.

### Statistical analysis

All statistical analysis was done by using Statistical Package for the Social Sciences (SPSS) trail version 16 and in Microsoft Excel 2007. Qualitative variables were expressed as frequencies and percentages. Quantitative variables were expressed as means and standard deviations. Student t and analysis of variance (ANOVA) one way was used for comparison of two groups. For all statistical analysis  $p < 0.05$  was considered statistically significant.

### RESULTS

Table 1 depicts the demographic variables of patients with schizophrenia and depression, and their relation with the DISC scale. No significance was observed between the various demographic variables and respective DISC scores in schizophrenia and depression. Here, ANOVA one-way classification was used for more than two groups and student independent sample t test was used for two groups' means comparison.

A similar comparison of subscale scores in schizophrenia and depression, in respect to various demographic variables was also carried out (individual tables are not represented here). In the process, while most of the demographic variable comparisons were not significant, some of them were. They included gender in subscale 2 in schizophrenia (mean for males =  $7.53 \pm 4.121$ , mean for females =  $3.73 \pm 3.535$ ,  $p=0.011$ ), gender in subscale 3 in schizophrenia (mean for males =  $3.33 \pm 1.589$ , mean for females =  $2.13 \pm 1.246$ ,  $p=0.029$ ), family type in subscale 3 in schizophrenia (mean for nuclear families =  $3.67 \pm 1.658$ , mean for joint families =  $2.33 \pm 1.317$ ,  $p=0.026$ ), gender in subscale 1 in depression (mean for males =  $5.47 \pm 4.086$ , mean for females =  $10.60 \pm 6.533$ ,  $p=0.015$ ) and employment status in subscale 2 in depression (mean for employed full time =  $2.31 \pm 1.548$ , mean for student =  $5.33 \pm 1.155$ , mean for unemployed =  $3.14 \pm 1.916$ ,  $p=0.033$ ).

Table 2 shows that there was a significant difference ( $p < 0.05$ ) in DISC mean scores between schizophrenia and depression. The mean DISC score was found to be significantly higher in schizophrenia patients than depression patients. Student independent sample t test was used for comparison.

Table 3 shows that there was a significant difference ( $p < 0.05$ ) in mean subscale scores between schizophrenia and depression. All the four subscales score (mean) were significantly higher in schizophrenia patients than depression patients. Student independent sample t test was used for comparison.

### DISCUSSION

Stigma toward patients with mental illness is common across cultures and socioeconomic strata. It remains a major cause of suffering for patients with mental illnesses even when they are in remission. The prevalence of stigma is influenced by various illness-related, societal, and cultural factors. Studies from the west and India show that there is some hierarchy in

**Table 1:** Comparison of total DISC scores in schizophrenia and depression with respect to demographic variables

| Demographic variables |  | Schizophrenia |       |        |           |      | p-value | Depression |       |        |           |      | p-value |
|-----------------------|--|---------------|-------|--------|-----------|------|---------|------------|-------|--------|-----------|------|---------|
|                       |  | N             | Mean  | SD     | F/t value | df   |         | N          | mean  | SD     | F/t value | df   |         |
| Education             | Matriculation or less                          | 12            | 32.58 | 7.937  | 0.252     | 2,27 | 0.779   | 7          | 12.00 | 4.619  | 0.425     | 2,27 | 0.658   |
|                       | Graduation or less                             | 13            | 34.92 | 14.003 |           |      |         | 13         | 14.62 | 5.679  |           |      |         |
|                       | Post-graduation or more                        | 5             | 31.00 | 11.511 |           |      |         | 10         | 15.30 | 10.615 |           |      |         |
|                       | Total  | 30            | 33.33 | 11.208 |           |      |         | 30         | 14.23 | 7.375  |           |      |         |
| Domicile              | Rural  | 13            | 35.62 | 8.332  | 0.974     | 28   | 0.338   | 13         | 14.85 | 6.362  | 0.392     | 28   | 0.698   |
|                       | Urban  | 17            | 31.59 | 12.967 |           |      |         | 17         | 13.76 | 8.227  |           |      |         |
|                       | Total  | 30            | 33.33 | 11.208 |           |      |         | 30         | 14.23 | 7.375  |           |      |         |
| Type of family        | Nuclear  | 9             | 35.22 | 7.120  | 0.597     | 28   | 0.555   | 4          | 9.50  | 1.000  | 1.401     | 28   | 0.172   |
|                       | Joint  | 21            | 32.52 | 12.632 |           |      |         | 26         | 14.96 | 7.671  |           |      |         |
|                       | Total  | 30            | 33.33 | 11.208 |           |      |         | 30         | 14.23 | 7.375  |           |      |         |
| Occupation            | Employed (full time)                           | 6             | 28.33 | 7.312  | 1.316     | 3,26 | 0.290   | 13         | 12.46 | 7.137  | 2.396     | 2,27 | 0.110   |
|                       | Employed (part time - less than 20 hours/week) | 2             | 35.50 | 17.678 |           |      |         | 0          | 0     | 0      |           |      |         |
|                       | Student  | 2             | 46.00 | 9.899  |           |      |         | 3          | 22.33 | 4.726  |           |      |         |
|                       | Unemployed                                     | 20            | 33.35 | 11.435 |           |      |         | 14         | 14.14 | 7.252  |           |      |         |
|                       | Total  | 30            | 33.33 | 11.208 |           |      |         | 30         | 14.23 | 7.375  |           |      |         |
| Gender                | Male   | 15            | 36.47 | 10.967 | 1.569     | 28   | 0.128   | 15         | 11.80 | 5.931  | 1.885     | 28   | 0.070   |
|                       | Female   | 15            | 30.20 | 10.903 |           |      |         | 15         | 16.67 | 8.050  |           |      |         |
|                       | Total  | 30            | 33.33 | 11.208 |           |      |         | 30         | 14.23 | 7.375  |           |      |         |

DISC: The discrimination and stigma scale, SD: Standard Deviation, df: Degree of freedom

**Table 2:** Comparison of total DISC scores between schizophrenia and depression

| Group              | N  | Mean  | SD     | t value | df | p-value |
|--------------------|----|-------|--------|---------|----|---------|
| DISC Schizophrenia | 30 | 33.33 | 11.208 | 7.798   | 58 | <0.001  |
| Depression         | 30 | 14.23 | 7.375  |         |    |         |

DISC: The discrimination and stigma scale, SD: Standard Deviation, df: Degree of freedom

the prevalence of stigma across different psychiatric disorders, with, in general, patients with schizophrenia reporting higher level of stigma than that experienced by patients with bipolar disorder, depressive disorders, and eating disorders.[9-11] There are others studies however, that suggest no difference in stigma and experienced discrimination based on the type of diagnosis.[12,13]

While there are several studies that have evaluated the presence of stigma in various psychiatric disorders, there is very limited literature comparing stigma and discrimination between schizophrenia and depression using DISC, particularly in the Indian setting. While there are scales to measure stigma in an Indian setting, to the best of our knowledge, the same have not been used frequently. DISC being a western one, has nevertheless been extensively used and quoted, and was therefore taken in for the current study.

With regards to association of demographic variables and total severity score of DISC, stigma was not found to be significantly affected by any sociodemographic variables

of the two groups. Literature in other psychiatric disorders have also reported that there is no consistent association of stigma with sociodemographic characteristics.[14] However, when subscale scores were considered for comparison, there were some demographic variables which showed mild but significant impact on some of the subscale scores. Male patients with schizophrenia in comparison to female patients, had a higher negative impact in progressing in life goals and put in greater efforts at overcoming stigma (as reflected in the significantly higher scores on subscales 2 and 3). This may well be reflective of the social expectations and current prevalence in an Indian setting, where males are more frequently the bread earner in a family. Schizophrenia patients coming from a nuclear family had to put in bigger effort in overcoming stigma compared to those coming from a joint family (as reflected in the significantly high scores in subscale 3). This suggests that an extended family setting makes easier acceptance of mental illness in these patients. Male patients with depression suffered more unfair treatment compared to female patients with depression (as reflected in the higher scores on subscale 1), while stigma seemed to stop students in their functioning, more than those who were unemployed or employed (as noted by the higher scores in subscale 3 for students compared to other occupational groups).

DISC also captures individual patient statements related to the four subscales. While a formal qualitative analysis of these was not carried out, we felt the below statements capture the essence of the impact that stigma

**Table 3:** Comparison of subscale (SS) scores of DISC between schizophrenia and depression

| Subscales (SS) | Group         | N  | Mean  | SD    | t value | df | p-value |
|----------------|---------------|----|-------|-------|---------|----|---------|
| SS1            | Schizophrenia | 30 | 21.97 | 7.845 | 7.747   | 58 | <0.001  |
|                | Depression    | 30 | 8.03  | 5.957 |         |    |         |
| SS2            | Schizophrenia | 30 | 5.63  | 4.238 | 3.112   | 58 | 0.003   |
|                | Depression    | 30 | 3.00  | 1.875 |         |    |         |
| SS3            | Schizophrenia | 30 | 2.73  | 1.530 | 2.515   | 58 | 0.015   |
|                | Depression    | 30 | 1.87  | 1.106 |         |    |         |
| SS4            | Schizophrenia | 30 | 3.00  | 1.339 | 5.614   | 58 | <0.001  |
|                | Depression    | 30 | 1.33  | 0.922 |         |    |         |

DISC: The discrimination and stigma scale, SD: Standard Deviation, df: Degree of freedom

and discrimination has on patients with schizophrenia and depression.

### Subscale 1 - Unfair treatment: schizophrenia vs depression

In the depression group, unfair treatment was not observed in the participants as frequently or severely as in schizophrenia patients, who reported having experienced unfair treatment from friends, neighbours, finding a job, social life, dating relationships, and finding a spouse.

#### Examples of schizophrenia patient quotes

“Whenever a function happens in our house I will be dropped in the neighbour’s house”

“My spouse left me after I was diagnosed with schizophrenia as I was sleeping excessively”

“Before this illness neighbours used to come and visit my house and talked to me, now they are not doing that”

### Subscale 2 - Stopping self: schizophrenia vs depression

Both the groups reported that they felt inferior when compared to others, majority of the participants in the two groups reported that they had concealed their illness from others.

#### Patient quotes

“I didn’t apply for any job as I thought I won’t be selected because of my disease” was a response from a patient with schizophrenia.

One of the patients with depression stated, “I hid my illness when I was taken for a marriage proposal.”

### Subscale 3 - Overcoming stigma: schizophrenia vs depression

In both groups, patients who had undergone some form of psychological therapy only tried to overcome stigma with inputs from the psychological sessions. This clearly shows the importance of psychotherapy in overcoming stigma in their day to day life. Patients also reported that statements of people with mental illness are the inspiring words for them to overcome their stigma.

### Subscale 4 - Positive treatment: schizophrenia vs depression

Patients in the schizophrenia group reported that they did not get any favourable treatment because of their illness and many faced difficulty in getting a house for rent.

#### Patient quotes

“We were asked to vacate the house as the owner came to know about my illness” and the patient asked whether this happens to people with hypertension or diabetes mellitus.

### Overall mean scores of DISC: schizophrenia vs depression

Schizophrenia group had a mean score of 33.33% and depressive group had mean score of 14.23%. This shows that people suffering with schizophrenia experience greater stigma and discrimination when compared to people suffering with depressive disorder.

### Comparisons of our study with other studies done on stigma in India

With the scales used to measure stigma being different in various studies, it is difficult to compare with the present study. Nevertheless some commonalities were noted. Murthy[15] evaluated stigma in 1000 patients in four cities as a part of the Indian initiative of WPA programme to reduce the stigma and discrimination because of schizophrenia. Assessment instrument was a semi-structured interview which was developed by a national working group for India by WPA steering committee.[16] He reported that urban respondents in large centres try to hide their illness hoping to remain unnoticed whereas rural respondents in smaller regions experience greater ridicule, shame, and discrimination as anonymity is more difficult. Another study from Bengaluru,[17] which evaluated the urban-rural differences, reported that urban participants felt the need to hide their illness and avoided illness histories in job applications whereas rural participants experienced more ridicule, shame, and discrimination. As we did not carry out the item-level analysis of various scales, we cannot comment on their urban-rural differences; however, for total DISC scores and subscale scores, in respect to various demographic components, no significant rural-urban difference was noted.

## Limitations and future directions

While the mix of rural and urban patients in our study can be generalised to other settings in India, the small sample of the study limits the same. This study is also limited to studying stigma in patients only, and future studies may benefit from extending the impact of stigma in members of the family as well. Given the significant differences in stigma noted in the two diagnostic groups of depression and schizophrenia in the study, future studies looking into stigma in other mental disorders may provide some insight into the process and associations with stigma.

## Conclusion

Patients with schizophrenia experienced more stigma and discrimination when compared to patients with depressive disorder. The stigma experienced in mental illnesses seems largely unaffected by demographic variables. Clinicians treating major mental illnesses should be aware of the impact of stigma experienced by patients, evaluate the same and provide them and carers with information about the illness and reducing stigma-related distress.

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