Comparison of Total Self-Stigma Between Schizophrenia and Alcohol Dependence Patients

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Abstract

Background: Self-stigma severely affects individuals suffering from psychiatric disorders such as schizophrenia and alcohol dependence syndrome (ADS) as well as act as a barrier to recovery process.

Objectives: This study attempted to measure and compare self stigma among schizophrenia and alcohol dependence syndrome patients.

Patients and Methods: A cross-sectional study performed on 100 patients, 50 patients with ADS and 50 patients with schizophrenia. A semi-structured data and internalized stigma of mental illness Scale (ISMIS) to assess self-stigma were administered.

Results: Prevalence of self-stigma was more in ADS (66%) than that in schizophrenia (50%). The stigma in schizophrenia was significantly associated with unmarried and divorced; education above 12th standard; those who belonged to joint family, and urban region (P < 0.05) while in ADS, it was associated with education above 12th standard (P < 0.05). Only gender among the socio-demographic correlates was significantly different between schizophrenia and ADS patients with self stigma (P < 0.05). The locality and education status were found to be strong predictors of stigma.

Conclusions: Self stigma is more prevalent in ADS as compared to schizophrenia and it is a significant problem in both. Therefore, there is a need to take specific interventions to improve overall quality of life and reduce stigma.

Keywords: Stigma, Schizophrenia, Alcohol Dependence, Mentally Ill, Risk Factors

1. Background

Stigma is defined as "an attribute that is deeply discrediting," where a person is lowered "from a whole and usual person to a tainted, discounted one" (1). It is divided into public stigma and self-stigma. Public stigma is the reaction of the general population towards people with mental illness. Self stigma is the prejudice, in which people turn against themselves. Stereotypes, prejudice, and discrimination are the three components of both self and public stigma (2). Patients experiencing stigma suffer consequences such as increased social isolation, decreased treatment access, and limited life chances. The sources of stigma include community, co-workers, family, mental health caregivers, religious places, etc. (3, 4). Internalized stigma or self stigma has also been related with negative outcomes such as depression, social avoidance and avoidance coping, decreased hope and self-esteem, decreased access to mental health services and other supports, as well as worsening of psychiatric symptoms (5-8).

A number of previous studies reported rise of self-stigma in psychiatric disorders in recent years (9, 10). These studies were conducted homogenously on schizophrenia and spectrum disorders while others focused on non-homogenous mental disorder groups such as schizophrenia, mood, personality, and anxiety disorder subjects (11, 12). As compared to other psychiatric disorders, the patients with schizophrenia experience more stigma (13, 14). A recent study reported the prevalence of internalized stigma to be 29.4% among schizophrenia patients (15). The literature reported that inter-individual and intra-individual variables might decrease or increase the stigma impact on health-related outcomes (16). It has been found that socio-demographic factors are marginally related to personal stigma and on the other hand psychosocial variables such as quality of life inversely related to personal stigma. The variables such as age of onset, lifetime number of hospitalization, and duration of illness reported significant associations with personal stigma (17, 18).

In contrast to schizophrenia patients, literature inves-

tigating self-stigma in alcoholism is limited. Alcohol dependence is one of the most common mental disorders (19). Alcoholism has a negative impact on social behavior, social environment, and social interactions (20). The stigma related to alcoholism may hinder the seeking of professional help; increasing these effects and experiencing discrimination and loss of status. Therefore, it may lead to social exclusion, particularly in those who need social support (21). As compared to other psychiatric illnesses, people with ADS face strong rejection and negative stereotypes like being unpredictable or being danger (22, 23). Stigma ascribed to patients with substance use contributes to non-completion of treatment, poor mental and physical health, poor reintegration and recovery processes, and increased involvement in risky behavior (24, 25).

This study was done due to the fact that a number of attempts have been made to measure attitude toward psychiatric illness and stigma, particularly held by people in the community, a family member, and a caregiver rather than the patients themselves (26, 27); comparative studies among persons with different mental disorders show that their attitudes are illness specific (23, 28); and we might expect differences in the demographic variables of stigma related to other mental disorders compared with demographic variables of alcohol disorder stigma (29). In our set up, we get patients mostly suffering from schizophrenia and ADS, with higher dropout rates and poor compliance. Therefore, we choose these two groups of patients in this study. To the best of our knowledge, there are no studies comparing stigma in schizophrenia and alcohol dependence syndrome (ADS). Developing an understanding into the stigma of these disorders will be important to help these individuals, their family members, caregivers, and treatment providers. Thus, in this study we tried to find out how stigma of schizophrenia compare with stigma of alcohol dependence syndrome.

2. Objectives

The present study aimed to comparison of total self stigma between schizophrenia and alcohol dependence patients.

3. Patients and Methods

A cross sectional study was performed on patients attending the Psychiatry unit of Acharya Vinoba Bhave Rural hospital, Wardha, Maharashtra during the period of April-June 2016. The study was conducted on obtaining the institutional ethics committee approval and patient's written informed consent after providing necessary information. A total of 100 patients, aged 18 to 60 years, who were able to read and understand Hindi, were selected through purposive sampling as per the inclusion and exclusion criteria of the present study. Of the total patients, 50 were diagnosed as schizophrenia and 50 as alcohol dependence syndrome for comparison according to international classification of diagnostic criteria (ICD-10). The patients having co-morbid medical or other psychiatric illness, un co-cooperative, organic brain syndrome, mental retardation, and in need of emergency medical care were excluded from the study.

3.1. Tools

1- Semi-structured data was used to collect the socio-demographic and clinical details such as age, gender, education, marital status and employment, type of family, locality, duration, and current status of illness.

2- Internalized stigma of mental illness scale (ISMIS): It is used to assess self stigma/internalized stigma, from the perspective of stigmatized individuals. It comprises of 29 questions divided into five components (alienation, perceived discrimination, stereotype endorsement, social withdrawal, and stigma resistance). All items were assessed on a 4-point Likert-type scale (1 = strongly disagree to 4 = strongly agree). The higher score shows the higher, level of stigma. The originator of the scale used a cut off value of 2.5 for ISMIS to categorize the presence or absence of stigma. The Hindi version of ISMIS used in this study is validated. The Cronbach's alpha was found to be 0.863 for estimation of internal consistency of the Hindi version scale. Accordingly, it can be concluded that the Hindi version of ISMI Scale has a good internal consistency and that the items of the scale assess similar characteristics (30, 31).

3.2. Statistical Analysis

The SPSS version 17.0, graph pad prism 6.0 and EPI INFO 6.0 version were used for statistical analysis of the data collected. Descriptive and inferential statistics, chi-square test, and multiple regression models were used for analysis. P value was calculated considering significant level at 0.05.

4. Results

4.1. Socio-Demographic and Clinical Data

A total of 100 patients were selected in the study, out of which half were diagnosed as schizophrenia and half as alcohol dependence syndrome (ADS). Table 1 reported the socio-demographic and clinical data of both groups. The majority of the patients were 30 - 45 years of age (52% for schizophrenia and 66% for ADS) and married (56% for both

the groups) followed by unmarried and divorced. There were 48% of males and 52% of females among schizophrenia patients, whereas no females among ADS patients. Most of the patients were educated up to 5th standard (32% for schizophrenia and 36% for ADS), employed (58% for schizophrenia and 54% for ADS), and belonged to a nuclear family (74% for schizophrenia and 66% for ADS). Most of them belonged to rural locality (52% for schizophrenia and 68% for ADS). Most of the patients had a duration of illness between 1 to 5 years (40% for schizophrenia and 44% for ADS) and were not under remission (78% for schizophrenia and 68% for ADS).

4.2. Correlation with Socio-Demographic and Clinical Parameters

As shown in Table 2, stigma scores of schizophrenia patients were significantly different for unmarried and divorced, those who were educated above 12th standard, and belonged to a joint family and urban region (P < 0.05). The stigma scores were not significantly affected by the other variables. As shown in Table 3, stigma scores of ADS patients were significantly different for those educated above 12th standard (P < 0.05) whereas none of the other variables reported significant differences (P > 0.05).

4.3. Correlation of Parameters Between Schizophrenia and ADS Patients with Positive Total Stigma Scores

As shown in Table 4, the gender had a significant difference between schizophrenia and ADS patients with positive total stigma scores (P < 0.05). Whereas; age, marital status, educational status, employment status, family type, locality, current status of illness, and duration of illness had no significant difference (P > 0.05).

4.4. Prevalence of Stigma Scores

Prevalence of total stigma scores was 50% and 66% for schizophrenia and ADS patients, respectively. Stereotype endorsement, stigma resistance, and total stigma scores reported a significant difference between both groups of patients (P < 0.05) (Table 5).

4.5. Predictors of Stigma Scores

Multiple regression analysis was done considering a total stigma score as dependent variable, whereas clinical and socio-demographic characteristics were independent variables. The locality of the patient was a predictor of stigma score for schizophrenia patients. Whereas it has been found that education status and locality were predictors of stigma score for ADS patients (Tables 6 and 7).

Table 1. Socio-Demographic and Clinical Characteristics of Participants (n = 50)[a]

Variables	Schizophrenia	ADS
Age, years		
Less than 30	16 (32)	7 (14)
30 - 45	26 (52)	33 (66)
More than 45	8 (16)	10 (20)
Sex		
Male	24 (48)	50 (100)
Female	26 (52)	0 (0)
Marital status		
Married	28 (56)	28 (56)
Unmarried	12 (24)	15 (30)
Divorced	10 (20)	7 (14)
Widow	0 (0)	0 (0)
Others	0 (0)	0 (0)
Education status		
1st - 5th std	21 (42)	19 (38)
6th - 10th std	19 (38)	15 (30)
11th - 12th std	6 (12)	8 (16)
Above 12th std	4 (8	8 (16)
Employment status		
Not working currently	21 (42)	23 (46)
Working currently	29 (58)	27 (54)
Family type		
Nuclear	37 (74)	33 (66)
Joint	13 (26)	17 (34)
Locality		
Rural	26 (52)	34 (68)
Urban	24 (48)	16 (32)
Duration of illness, years		
1 - 5	20 (40)	22 (44)
6 - 10	15 (30)	17 (34)
More than 10	15 (30)	11 (22)
Current status of illness		
Under remission	11 (22)	16 (32)
Not under remission	39 (78)	34 (68)

[a]Values are expressed as No. (%).

5. Discussion

This study attempted to measure and compare self stigma among schizophrenia and alcohol dependence syndrome patients. Researches related to perceived self stigma in psychiatric disorders generally conducted were

Table 4. Association of Variables Between Schizophrenia and Alcohol Dependent Patients with Self-Stigma

Variables	Schizophrenia Patients with Self-Stigma (T[a])	Alcohol Dependent Patients with Self-Stigma (T[a])	Chi Square Test	P Value[b]
Age, y			2.39	0.30, NS
Less than 30	9	6		
30 - 45	12	21		
More than 45	4	6		
Sex			17.92	0.0001, S
Male (n = 24)	14	33		
Female (n = 26)	11	0		
Marital status			2.05	0.35, NS
Married	13	17		
Unmarried	5	11		
Divorced	7	5		
Widow	0	0		
Others	0	0		
Education status			3.43	0.48, NS
1st - 5th std	12	15		
6th - 10th std	7	8		
11th - 12th std	3	5		
Above 12th std	2	1		
Employment status			0.11	0.73, NS
Not working currently	11	16		
Working currently	14	17		
Family type			0.45	0.50, NS
Nuclear	18	21		
Joint	7	12		
Locality			0.02	0.88, NS
Rural	23	30		
Urban	2	3		
Duration of illness, years			2.33	0.31, NS
1 - 5	10	17		
6 - 10	7	11		
More than 10	8	5		
Current status of illness			0.47	0.48, NS
Under remission	9	14		
Not under remission	16	17		

[a]T, Total self-stigma scores.
[b]NS, non significant and S, significant with P value < 0.05.

neither on a homogenous group of illness nor comparative studies. To the best of our knowledge, it is the kind of first study conducted.

A review of literature reported internalized stigma in schizophrenia patients to be 29.4% and 41.7%, respectively (15, 32). Literature of the comparative studies on stigma of alcoholism and other psychiatric disorder show that people suffering from alcohol dependence are severely stigma-

Table 5. Prevalence of Self-Stigma in the Schizophrenia and ADS Groups[a]

Stigma Factors	Schozophrenia Patients		ADS Patients		χ^2 Value	P Value[b]
	Absent	Present	Absent	Present		
Alienation	25 (50)	25 (50)	19 (38)	31 (62)	2.92	0.08, NS
Stereotype endorsement	26 (52)	24 (48)	17 (34)	33 (66)	6.61	0.010, S
Discrimination experience	24 (48)	26 (52)	19 (38)	31 (62)	2.04	0.15, NS
Social withdrawal	26 (52)	24 (48)	20 (40)	30 (60)	2.89	0.08, NS
Stigma resistance scores	23 (46)	27 (54)	31 (62)	19 (38)	5.15	0.023, S
Total	25 (50)	25 (50)	17 (34)	33 (66)	5.25	0.021, S

[a]Values are expressed as No. (%).
[b]NS, non significant and S, significant with P value < 0.05.

Table 6. Logistic Regression Analysis When Total Stigma Score Was Taken as Dependent Variable in Schizophrenia Patients

Parameters	Unstandardized Coefficients		Standardized Coefficients	t	P Value
	B	Std. Error	Beta		
Stigma score	2.248	0.390			
Age	0.038	0.084	0.051	0.456	0.651, NS
Gender	0.113	0.095	0.112	1.189	0.241, NS
Marital Status	0.016	0.058	0.025	0.266	0.791, NS
Education	-0.009	0.041	-0.020	0.217	0.830, NS
Employment status	0.101	0.098	0.099	1.031	0.309, NS
Family type	0.101	0.108	0.089	0.937	0.355, NS
Locality	-0.827	0.101	-0.827	8.201	0.0001, S
Duration of illness	0.065	0.065	0.107	0.996	0.325, NS
Current status	-0.136	0.121	-0.113	1.126	0.267, NS

Table 7. Logistic Regression Analysis When Total Stigma Score Was Taken as Dependent Variable in Alcohol Dependent Patients

Parameters	Unstandardized Coefficients		Standardized Coefficients	t	P Value
	B	Std. Error	Beta		
Stigma score	3.481	0.421			
Age	-0.095	0.093	-0.117	1.022	0.313, NS
Marital status	-0.030	0.072	-0.045	0.409	0.685, NS
Education	-0.109	0.049	-0.273	2.254	0.030, S
Employment status	-0.046	0.108	-0.049	0.426	0.672, NS
Family type	-0.035	0.116	-0.034	0.299	0.767, NS
Locality	-0.476	0.131	-0.461	3.625	0.001, S
Duration of illness	-0.088	0.071	-0.146	1.250	0.218, NS
Current status	-0.160	0.137	-0.157	1.168	0.250, NS

tized (33-35). Rohit et al., in his study also reported that substance dependence patients had higher stigma scores than schizophrenia patients (36). The present study determined internalized stigma in 50% of schizophrenia patients and 66% of ADS patients. The stereotype endorse-

ment (0.01), stigma resistance (0.023), and total ISMI scores (0.21) were found to be statistically significant between the two groups. Compared with the above studies, a high prevalence of self stigma was found in our study, which could be due to the heterogeneity of the sample and dif-

ferences in severity of illness (37). Our study also reported that the prevalence of stigma in ADS was higher than schizophrenia. This may be due to the fact that they provoke more social rejection and more negative emotions, they are held much more responsible for their condition, less frequently considered as mentally ill, and at risk of structural discrimination (35).

The present study reported significant association of self stigma with marital status, education, type of family, and locality among schizophrenia patients whereas self stigma scores were not significantly affected by other socio-demographic variables. Different studies across the world correlating stigma with socio-demographic variables have found contrasting results. In these studies, self stigma was significantly associated with age and male gender (17) whereas some suggest lack of association with being married, living alone, and education (38-40). In addition, in a study by Rohit Garg et al., significantly higher stigma scores were reported in younger patients than older patients. This may be due to the fact that there are more understanding about their friends and more social interactions focusing on self attributes at a younger age (36). Previous studies also reported more stigma in patients with lower education than those with higher education (41, 42). It may be due to lower socioeconomic status and poverty in individuals with lower education. They are dependent on others for their employment and placed at the bottom in social hierarchy. This may contribute to a greater degree of social rejection, isolation, and internalization of feelings of stigma (36).

A study by Jadhav et al., showed higher stigma scores in rural samples than the urban sample. The reason may be that rural subjects showing supportive tolerant attitude as indicated by not covering up the illness, favorable response to living next door, and expecting the full return to normality (43). The rural individuals experienced more shame, ridicule, and discrimination whereas urban individuals felt the need to avoid and hide their illness in their job application (44). The reason for no significant association found in our study with respect to other variables may be due to socio-cultural and methodological differences.

The present study reported lack of association with clinical characteristics such as current status and illness duration among schizophrenia patients. Previous studies observed higher stigma scores in patients with longer illness duration and those who were not in remission (36). A review by Gerlinger et al., reported that age of onset, lifetime number of hospitalizations, and duration of illness had contradictory associations with self stigma (17). All these factors would be expected to increase the number of symptoms and severity of illness as well as expected to increase the actual stigmatizing responses of others and the

person's stigma (36). The differences found in our study and previous studies in relation to clinical characteristics could be attributed to different questionnaires used to assess the stigma and differences in the psychosocial factors (45, 46).

Our study demonstrated that self stigma was significantly related to educational status of ADS patients, whereas none of the other socio-demographic variables had a significant difference. Previous studies suggested that stigma was significantly higher for men, individuals with lower income, lesser education, and individuals previously married as compared to those who had never been married (47). Consistent with these findings, the literature also suggested that women and persons with higher education and income are generally more accepting of individuals with mental illness. Corrigan et al., hypothesized that lower endorsement of stigmatizing attitudes towards women may be due to a lower rate of social dominance among women and/or higher rates of social empathy compared with men (48-50).

Stigma in people with substance use disorders lead to non-completion of treatment, poor recovery, and reintegration processes (24, 25). Literature also suggested that stigma lead to more difficulties in recovery, greater chances of relapse, and discontinuation of treatment (51, 52). The above findings conclude that stigma negatively influences the clinical parameters such as duration of the drinking and status of the illness among alcoholics. The present study did not report correlation between clinical variables and stigma among ADS patients. Literature on self stigma is more sparse in addiction and no study showed direct correlation of self stigma among ADS with clinical variables.

The correlation of socio-demographic and clinical variables between schizophrenia and ADS patients with self-stigma in our study reported no significant difference except for gender. This may be due to the fact that male participants outnumber females out of total sample size in this study. The logistic regression analysis showed that locality was found to be a predictor of stigma in schizophrenia, whereas locality and educational status were significant predictors of stigma in ADS in the present study. The results of regression analysis of previous studies demonstrated that current employment, gender, and level of education were not significant independent predictors of self-stigma in schizophrenia (32). Although the personal characteristics are of lesser importance to the formation of self-stigma, drinking related variables such as duration of drinking problem is found to be an independent predictor of stigma in ADS (53). Our scan of literature revealed no studies comparing schizophrenia and ADS patients in terms of having self-stigma. Therefore, further

studies with large number of patients are needed to clarify whether differences occur between these disorders in terms of self-stigma.

5.1. Conclusion

In conclusion, self stigma is a significant problem in both ADS and schizophrenia patients. It is more severe in individuals living with ADS. Among schizophrenia and ADS subjects with self stigma, male patients were found to be more affected. Internalized stigma can have a negative impact on the well-being as well as psychiatric health and may impede the outcome of individuals suffering from the mental illnesses. Our study shows that locality and educational status are strong predictors of self stigma. Therefore, these factors need to be focused and investigated further to improve the overall quality of life and reduce the stigma.

5.2. Limitations

The sample size was small and the study was cross-sectional. The longitudinal studies with larger sample size would be more reliable to infer causality from the findings. The other limitation is that the study was hospital based. Therefore, the studies in the community may provide more detail and reliable data.

Footnotes

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Table 2. Distribution of Self-Stigma in Schizophrenia Patients (N = 50)[a]

Variables	Alienation	Stereotype Endorsement	Discrimination Experience	Social Withdrawal	Stigma Resistance scores	Total	χ^2	P value[b]
Age, y								
Less than 30							4.03	0.40, NS
Absent	7 (43.75)	8 (50.00)	7 (43.75)	8 (50.00)	9 (56.25)	7 (43.75)		
Present	9 (56.25)	8 (50.00)	9 (56.25)	8 (50.00)	7 (43.75)	9 (56.25)		
30 - 45							0.76	0.94, NS
Absent	14 (53.84)	13 (50.00)	13 (50.00)	14 (53.84)	14 (53.84)	14 (53.84)		
Present	12 (46.15)	13 (50.00)	13 (50.00)	12 (46.15)	12 (46.15)	12 (46.15)		
More than 45							5.42	0.24, NS
Absent	4 (50.00)	5 (62.50)	4 (50.00)	4 (50.00)	4 (50.00)	4 (50.00)		
Present	4 (50.00)	3 (37.50)	4 (50.00)	4 (50.00)	4 (50.00)	4 (50.00)		
Sex								
Male							1.31	0.25, NS
Absent	10 (41.66)	9 (37.50)	10 (41.66)	10 (41.66)	11 (45.83)	10 (41.66)		
Present	14 (58.33)	15 (62.50)	14 (58.33)	14 (58.33)	13 (54.16)	14 (58.33)		
Female							3.03	0.55, NS
Absent	15 (57.69)	17 (65.38)	14 (53.84)	16 (61.53)	16 (61.53)	15 (57.69)		
Present	11 (42.30)	9 (34.61)	12 (46.15)	10 (38.46)	10 (38.46)	11 (42.30)		
Marital status								
Married							1.33	0.85, NS
Absent	16 (57.14)	15 (53.57)	14 (50.00)	16 (57.14)	15 (53.57)	15 (53.57)		
Present	12 (42.85)	13 (46.42)	14 (50.00)	12 (42.85)	13 (46.42)	13 (46.42)		
Unmarried							9.75	0.044, S
Absent	7 (58.33)	7 (58.33)	7 (58.33)	7 (58.33)	9 (75.00)	7 (58.33)		
Present	5 (41.66)	5 (41.66)	5 (41.66)	5 (41.66)	3 (25.00)	5 (41.66)		
Divorced							9.52	0.049, S
Absent	2 (20.00)	4 (40.00)	3 (30.00)	3 (30.00)	3 (30.00)	3 (30.00)		
Present	8 (80.00)	6 (60.00)	7 (70.00)	7 (70.00)	7 (70.00)	7 (70.00)		
Widow	0	0	0	0	0	0	-	
Others	0	0	0	0	0	0	-	
Education status								
1st - 5th std							1.73	0.78, NS
Absent	9 (42.85)	10 (47.61)	9 (42.85)	9 (42.85)	10 (47.61)	9 (42.85)		
Present	12 (57.14)	11 (52.38)	12 (57.14)	12 (57.14)	11 (52.38)	12 (57.14)		
6th - 10th std							5.33	0.25, NS
Absent	12 (63.15)	14 (73.68)	10 (52.63)	14 (73.68)	12 (63.15)	12 (63.15)		
Present	7 (36.84)	5 (26.31)	9 (47.36)	5 (26.31)	7 (36.84)	7 (36.84)		
11th - 12th std							0.00	1.00, NS
Absent	3 (50.00)	3 (50.00)	3 (50.00)	3 (50.00)	3 (50.00)	3 (50.00)		

Present	3 (50.00)	3 (50.00)	3 (50.00)	3 (50.00)	3 (50.00)	3 (50.00)		
Above 12th std							50.00	0.0001, S
Absent	1 (25.00)	2 (50.00)	2 (50.00)	2 (50.00)	3 (75.00)	2 (50.00)		
Present	3 (75.00)	2 (50.00)	2 (50.00)	2 (50.00)	1 (25.00)	2 (50.00)		
Employment status								
Not working currently							4.36	0.35, NS
Absent	10 (47.61)	11 (52.38)	9 (42.85)	10 (47.61)	12 (57.14)	10 (47.61)		
Present	11 (52.38)	10 (47.61)	12 (57.14)	11 (52.38)	9 (42.85)	11 (52.38)		
Working currently							0.28	0.99, NS
Absent	15 (51.72)	15 (51.72)	15 (51.72)	16 (55.17)	15 (51.72)	15 (51.72)		
Present	14 (48.27)	14 (48.27)	14 (48.27)	13 (44.82)	14 (48.27)	14 (48.27)		
Family type								
Nuclear							2.24	0.69, NS
Absent	19 (51.35)	21 (56.75)	18 (48.64)	21 (56.75)	19 (51.35)	19 (51.35)		
Present	18 (48.64)	16 (43.24)	19 (51.35)	16 (43.24)	18 (48.64)	18 (48.64)		
Joint							12.32	0.015, S
Absent	6 (46.15)	5 (38.46)	6 (46.15)	6 (46.15)	8 (61.53)	6 (46.15)		
Present	7 (53.84)	8 (61.53)	7 (53.84)	7 (53.84)	5 (38.46)	7 (53.84)		
Locality								
Rural							6.68,	0.15, NS
Absent	4 (15.38)	6 (23.07)	3 (11.53)	3 (11.53)	5 (19.23)	3 (11.53)		
Present	22 (84.61)	20 (76.92)	23 (88.46)	23 (88.46)	21 (80.76)	23 (88.46)		
Urban							10.05	0.039, S
Absent	21 (87.50)	20 (83.33)	21 (87.50)	23 (95.83)	22 (91.66)	22 (91.66)		
Present	3 (12.50)	4 (16.66)	3 (12.50)	1 (4.16)	2 (8.33)	2 (8.33)		
Duration of illness, years								
1 - 5							0.80	0.93, NS
Absent	10 (50.00)	10 (50.00)	10 (50.00)	10 (50.00)	11 (55.00)	10 (50.00)		
Present	10 (50.00)	10 (50.00)	10 (50.00)	10 (50.00)	9 (45.00)	10 (50.00)		
6 - 10							3.40,	0.49, NS
Absent	8 (53.33)	8 (53.33)	7 (46.66)	8 (53.33)	9 (60.00)	8 (53.33)		
Present	7 (46.66)	7 (46.66)	8 (53.33)	7 (46.66)	6 (40.00)	7 (46.66)		
More than 10							1.15	0.88, NS
Absent	7 (46.66)	8 (53.33)	7 (46.66)	7 (46.66)	7 (46.66)	7 (46.66)		
Present	8 (53.33)	7 (46.66)	8 (53.33)	8 (53.33)	8 (53.33)	8 (53.33)		
Current status of illness								
Under remission							5.42	0.24, NS
Absent	3 (27.27)	3 (27.27)	2 (18.18)	3 (27.27)	2 (18.18)	2 (18.18)		
Present	8 (72.72)	8 (72.72)	9 (81.81)	8 (72.72)	9 (81.81)	9 (81.81)		

							1.76	0.77, NS
Not under remission								
Absent	22 (56.41)	23 (58.97)	22 (56.41)	23 (58.97)	25 (64.10)	23 (58.97)		
Present	17 (43.58)	16 (41.02)	17 (43.58)	16 (41.02)	14 (35.89)	16 (41.02)		

^aValues are expressed as No. (%).
^bNS, non significant and S, significant with P value < 0.05.

Table 3. Distribution of Self-Stigma in ADS Patients (N = 50)[a]

Variables	Alienation	Stereotype Endorsement	Discrimination Experience	Social Withdrawal	Stigma Resistance Scores	Total	χ^2	P value[b]
Age, y								
Less than 30							6.52	0.16, NS
Absent	3 (42.85)	2 (28.57)	3 (42.85)	3 (42.85)	3 (42.85)	1 (14.28)		
Present	4 (57.14)	5 (71.42)	4 (57.14)	4 (57.14)	4 (57.14)	6 (85.71)		
30 - 45							0.78	0.94, NS
Absent	12 (36.36)	11 (33.33)	12 (36.36)	13 (39.39)	12 (36.36)	12 (36.36)		
Present	21 (63.63)	22 (66.66)	21 (63.63)	20 (60.60)	21 (63.63)	21 (63.63)		
More than 45							0.00	1.00, NS
Absent	4 (40.00)	4 (40.00)	4 (40.00)	4 (40.00)	4 (40.00)	4 (40.00)		
Present	6 (60.00)	6 (60.00)	6 (60.00)	6 (60.00)	6 (60.00)	6 (60.00)		
Sex								
Male							0.81	0.93, NS
Absent	19 (38.00)	17 (34.00)	19 (38.00)	20 (40.00)	19 (38.00)	17 (34.00)		
Present	31 (62.00)	33 (66.00)	31 (62.00)	30 (60.00)	31 (62.00)	33 (66.00)		
Female	0	0	0	0	0	0		
Absent	0	0	0	0	0	0		
Present								
Marital status								
Married							1.61	0.80, NS
Absent	12 (42.85)	10 (35.61)	12 (42.85)	12 (42.85)	12 (42.85)	11 (39.28)		
Present	16 (57.14)	18 (64.28)	16 (57.14)	16 (57.14)	16 (57.14)	17 (60.71)		
Unmarried							0.00	1.00, NS
Absent	5 (33.33)	5 (33.33)	5 (33.33)	5 (33.33)	5 (33.33)	4 (26.66)		
Present	10 (66.66)	10 (66.66)	10 (66.66)	10 (66.66)	10 (66.66)	11 (73.33)		
Divorced							0.00,	1.00, NS
Absent	2 (28.57)	2 (28.57)	2 (28.57)	2 (28.57)	2 (28.57)	2 (28.57)		
Present	5 (71.42)	5 (71.42)	5 (71.42)	5 (71.42)	5 (71.42)	5 (71.42)		
Widow	0	0	0	0	0	0	-	
Others	0	0	0	0	0	0	-	
Education status								
1st - 5th std							0.00	1.00, NS
Absent	5 (26.31)	5 (26.31)	5 (26.31)	5 (26.31)	5 (26.31)	4 (21.05)		
Present	14 (73.68)	14 (73.68)	14 (73.68)	14 (73.68)	14 (73.68)	15 (78.94)		
6th - 10th std							1.79	0.44, NS
Absent	5 (33.33)	6 (40)	5 (33.33)	7 (46.66)	6 (40)	7 (46.66)		
Present	10 (66.66)	9 (60)	10 (66.66)	8 (53.33)	9 (60)	8 (53.33)		
11th - 12th std							4.61	0.32, NS
Absent	4 (50.00)	3 (37.50)	4 (50.00)	4 (50.00)	4 (50.00)	3 (37.50)		

Present	4 (50.00)	5 (62.50)	4 (50.00)	4 (50.00)	4 (50.00)	5 (62.50)		
Above 12th std							10.37	0.034, S
Absent	7 (87.50)	6 (75.00)	7 (87.50)	7 (87.50)	7 (87.50)	7 (87.50)		
Present	1 (12.50)	2 (25.00)	1 (12.50)	1 (12.50)	1 (12.50)	1 (12.50)		
Employment status								
Not working currently							1.79	0.77, NS
Absent	8 (34.78)	7 (30.43)	8 (34.78)	9 (39.13)	8 (34.78)	7 (30.43)		
Present	15 (65.21)	16 (69.56)	15 (65.21)	14 (60.86)	15 (65.21)	16 (69.56)		
Working currently							0.80	0.93, NS
Absent	11 (40.74)	10 (37.03)	10 (37.03)	11 (40.74)	11 (40.74)	10 (37.03)		
Present	16 (59.25)	17 (62.96)	17 (62.96)	16 (59.25)	16 (59.25)	17 (62.96)		
Family type								
Nuclear							1.91	0.75, NS
Absent	15 (44.11)	13 (38.23)	14 (41.17)	16 (47.05)	15 (44.11)	13 (38.23)		
Present	19 (55.88)	21 (61.16)	20 (58.82)	18 (52.94)	19 (55.88)	21 (67.16)		
Joint							1.49	0.82, NS
Absent	4 (25.00)	4 (25.00)	5 (31.25)	4 (25.00)	4 (25.00)	4 (25.00)		
Present	12 (75.00)	12 (75.00)	11 (68.75)	12 (75.00)	12 (75.00)	12 (75.00)		
Locality								
Rural							1.73	0.78, NS
Absent	6 (17.14)	5 (14.28)	7 (20.00)	7 (20.00)	6 (17.14)	5 (14.28)		
Present	29 (82.85)	30 (85.71)	28 (80.00)	28 (80.00)	29 (82.85)	30 (85.71)		
Urban							4.42	0.35, NS
Absent	13 (86.66)	12 (80.00)	12 (80.00)	13 (86.66)	13 (86.66)	12 (80.00)		
Present	2 (13.33)	3 (20.00)	3 (20.00)	2 (13.33)	2 (13.33)	3 (20.00)		
Duration of illness, years								
1 - 5							0.99	0.91, NS
Absent	6 (27.27)	6 (27.27)	7 (31.81)	6 (27.27)	6 (27.27)	5 (22.72)		
Present	16 (72.72)	16 (72.72)	15 (68.18)	16 (72.72)	16 (72.72)	17 (77.27)		
6 - 10							4.86	0.30, NS
Absent	7 (41.17)	5 (29.41)	7 (41.17)	7 (41.17)	7 (41.17)	6 (35.29)		
Present	10 (58.82)	12 (70.58)	10 (58.82)	10 (58.82)	10 (58.82)	11 (64.70)		
More than 10							7.29	0.12, NS
Absent	6 (54.54)	6 (54.54)	5 (45.45)	7 (63.63)	6 (54.54)	6 (54.54)		
Present	5 (45.45)	5 (45.45)	6 (54.54)	4 (36.36)	5 (45.45)	5 (45.45)		
Current status of illness								
Under remission							0.00	1.00, NS
Absent	2 (12.5)	2 (12.5)	2 (12.5)	2 (12.5)	2 (12.5)	2 (12.5)		
Present	14 (87.50)	14 (87.50)	14 (87.50)	14 (87.50)	14 (87.50)	14 (87.50)		

							0.00	1.00, NS
Not under remission								
Absent	19 (55.88)	19 (55.88)	19 (55.88)	19 (55.88)	19 (55.88)	19 (55.88)		
Present	15 (44.11)	15 (44.11)	15 (44.11)	15 (44.11)	15 (44.11)	15 (44.11)		

[a]Values are expressed as No. (%).
[b]NS, non significant and S, significant with P value < 0.05.