

Original research Article

Study of social and occupational function in patients of major depressive disorder

¹Dr Rajkiran Arjun Salunkhe , ²Dr Pawan Vilas Khot , ³Dr VinayakP Kale

¹Assistant Professor, Department of Psychiatry, Government Medical College, Miraj, Maharashtra.

²Assistant Professor, Department of Psychiatry, RCSM Government Medical College, Kolhapur, Maharashtra

³Professor&Head, Department of Psychiatry, Grant Government Medical College, Mumbai, Maharashtra.

Corresponding Author: Dr Pawan Vilas Khot

ABSTRACT

Introduction -Depression is a major contributor to the global burden of disease. Symptomatic outcomes of treatment do not necessarily directly correlate strongly with functional outcomes such as work disability. The Social and Occupational Functioning Assessment Scale (SOFAS) focuses on global functioning across a range of activities. Current study carried out to assess a well characterized group of medication-free patients with depression on a scale for socio- occupational impairment.

Methods:Cross-sectional study performed on groups of 30 patients of depression and 30 demographically matched healthy control group.. All the subjects were then rated on Hamilton rating scale for depression (HAM-D). All the group 1 and group 2 subjects were then assessed with socio-occupational function assessment scale.

Results:Average duration of current depressive episode was 8.67(\pm 5.28) months.Average score of Hamilton depression rating scale of depressed group was 17.17(\pm 4.22).Almost 60% of depressed patient had SOFAS score below 60 indicating majority of patient with depression had impairment in the area social and occupational functioning. There was significant association between severity of depression and socio-occupational dysfunction of patient with depression.

Conclusion:Depression is associated with significant morbidity in social and occupational life of patient and it is related to severity of depression in acute stage of illness

Keyword: Depression, social function, occupational function

INTRODUCTION

Depression is a common illness worldwide, with more than 300 million people affected. Depression is different from usual mood fluctuations and short-lived emotional responses to challenges in everyday life. As described in the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-V)¹the hallmark of major depressive disorder (MDD)

is the occurrence of depressed mood (dysphoria) and loss of interest in activities that were rather pleasurable in the past (anhedonia) for a duration of at least two weeks. These symptoms must also be accompanied by at least four of the following manifestations such as changes in appetite or weight, sleep patterns, altered psychomotor activity, feelings of worthlessness or guilt, difficulty concentrating or

making decisions and recurrent thoughts of death or suicidal ideation.

Depression is caused by a combination of genetic, psychological, environmental, and biological factors.² Depression is a major contributor to the global burden of disease and affects people in all communities across the world. The lifetime prevalence rates of depression among women are 10-25%, and for men 5-12%.³ Depression is the third leading cause of global disease burden, accounting for 4.3% of total disability-adjusted life years and if current trends continue, it will become the leading cause of disease burden by the year 2030.⁴

Major Depressive Disorder (MDD) is associated with extensive productivity losses as a result of absenteeism. Despite the importance of work disability in MDD, there has been a strong tendency until recent years to assess outcomes of MDD in terms of symptom measures rather than directly assessing work disability. However, symptomatic outcomes of treatment do not necessarily directly correlate strongly with functional outcomes such as work disability. When patients describe important features of remission, they do not tend to focus primarily on the presence of specific depression symptoms. Instead, patients emphasize positive mental health and a return to usual level of functioning.⁵ During treatment for any type of depression (including the range of depressive disorders and subclinical depressive symptoms), it is important to monitor how depression affects a patient's daily life and interpersonal relationships, rather than only addressing the severity or frequency of somatic and cognitive-affective symptoms.

The simplest of the general functional measures is the Global Assessment of Functioning (GAF) scale.⁶ While the use of a simple, single-item, 100-

point observer rating is intuitively and practically valuable, the GAF scale confounds functional ratings with symptom ratings and risks of harm. A revision of the GAF, the Social and Occupational Functioning Assessment Scale (SOFAS), removes all reference to symptom type and severity and focuses on global functioning across a range of activities.⁷ But these scales have not been routinely incorporated into clinical practice and few studies have made social and occupational dysfunction as a primary outcome. There have been many factors potentially contributing to variations in results of in previous studies. These various confounding factors could be age, hospitalization, severity and subtype of depression; and, most importantly, the effect of psychotropic medication. The current study carried out to minimize these confounding factors by assessing a well characterized group of medication-free patients with major depressive disorder on a scale for socio-occupational impairment.

OBJECTIVES

1. To assess social and occupational functioning in patients with depression.
2. To find correlation between severity of depression and socio-occupational dysfunction

MATERIALS AND METHODS

Study design: The present study is a cross-sectional study performed on groups of patients (major depressive disorder without any psychotic features) and a healthy control group at conducted in psychiatry outpatient department of tertiary care hospital situated in urban area.

Sample selection:

Group 1: Thirty patients suffering from major depressive disorder without any psychotic features, in

the age group of 18-50years were recruited from psychiatryout-patient department of tertiary care hospital. DSM-IV TR criteria for major depressive disorder were used to confirm the diagnosis. Patients were Free from psychotropic medication for at least 8 weeks before interview. They had not received Electro-Convulsive Therapy for at least 6 months before Test.And they had not been treated for the current episode of depression. Patient with history of previous or current organic disease or with past history or current evidence of substance abuse or with other psychiatric morbidities were excluded from study.

Group 2: Thirty demographically matched healthy volunteers in the age group of 18 to 50years were selected. Controls were excluded if they had history of any psychiatric illness. There was no history of any previous chronic illness or substance abuse in these subjects. Standardized Hindi version of Goldberg's general health questionnaire⁸as used to select control group

Ethical consideration:

1. Before starting the study, approval for this study was obtained from the institute Ethics Committee.
2. Written informed consent was obtained from the patients and their relative after asking them to go through the patient information sheet and verbal explanation by the interviewer.

3. Confidentiality of information provided was maintained.
4. No beneficial treatment was withheld to facilitate intake into study.
5. Participants were free to withdraw from study at any stage.

METHOD OF COLLECTION DATA

Data was collected on semi-structured Performa with information related to socio-demographic profile, rating scale, and questions pertaining to aims of study. Modified kuppuswamy's socioeconomic scale was used to assess socioeconomic status of subjects. All the subjects were then rated on Hamilton rating scale for depression (HAM-D).⁹Group 2 subjects were also screened for any sub-psychiatric illness by standardized Hindi version of Goldberg's general health questionnaire. All the group 1 and group 2 subjects were then assessed with socio-occupational function assessment scale.¹⁰

.Data collected was analyzed statistically with SPSS software (Statistical Package for the Social Sciences (SPSS) software version.)

STATISTICAL ANALYSIS-For each group, mean and standard deviation of the scores were calculated. Inter group mean differences were tested for significance by using Mann-Whitney U test. Chi-square test was used to compare the sex distribution. Pearson's correlation was used to find out significant correlation. The interpretation of P value as follows: P>0.05 - not significant; P<0.05 -Significant; P<0.01- Highly significant; P< 0.001 Very highly significant

RESULTS

Table 1: Demographic details for subjects with depression (Group1) and for control (Group2)

	Parameters	Group1 (n=30)	Group2 (n=30)
Age in years	Mean ± standard deviation	34.73±8.093	34.63±7.76
Age groups	20-29 years	9	8
	30-39 years	11	11
	40-49 years	10	11
Gender	Male	18	18
	Female	12	12
Marital status	Married	16	21
	Unmarried	12	9
	Widowed/Divorced/Separated	2	0
Religion	Hindu	20	24
	Muslim	10	5
	Christen/other	0	1

Table 2: Socioeconomic classification as per revised kuppuswamy's

Socioeconomic scale

Socioeconomic class	Group 1 (n=30)	Group 1 (n=30)
Upper (I)	1	1
Upper middle (II)	10	12
Lower middle (III)	14	16
Upper lower (IV)	5	1
Lower lower(V)	0	0
Socio-economic status total score (Mean ± Standard deviation))	14.90 ±4.49	14.67 ±3.95

Table 3: Educational status of subjects in both groups

Educational status	Group 1 (n=30)	Group 2 (n=30)
Profession or honors	1	1
Graduate or postgraduate	12	14
Post high school diploma	1	0
High school (10 th standard)	16	15
Educational status score (as per kuppuswamy's socioeconomic status scale) (Mean ± Standard deviation)	5.03 ± 1.07	4.93 ± 1.05

Table 4: Patients with depression: illness characteristics

Parameters		Number of patient from Group 1 (N=30)
Number of previous episodes	0 episode	15 (50.00%)
	1 episode	13 (43.33%)
	2 episode	2 (6.67%)
Average duration of current episode	Up-to 3 months	7 (23.33%)
	4 to 6 months	5 (13.63%)
	7 to 9 months	3 (10.00%)
	10 to 12 months	11 (36.67%)
	>12 months	4 (13.33%)
Severity of depression as per HAM-D(Hamilton depression rating scale) Score	8-13 Mild Depression	6 (20.00%)
	14-18 Moderate Depression	13 (43.33%)
	19-22 Severe Depression	7 (23.33%)
	≥23 Very severe depression	4 (13.33%)

Table 5: Distribution of patient with depression as per SOFAS (social and occupational function assessment scale) Scores

SOFAS score	Group 1 (N=30)
31 to 40	5(16.67%)
41 to 50	1 (3.33%)
51 to 60	12(40.00%)
61 to 70	7 (13.33%)
71 to 80	5(16.67%)

Table 6: Comparison in the HAM-D score and SOFAS score between Group1 and Group 2 subjects

Parameters	Group 1 (N=30)	Group 2 (N=30)	P Value
HAM-D Score (Mean ± SD)	17.17± 4.22	0.40 ± 0.67	P< 0.000***
SOFAS Score (Mean ± SD)	56.73 ± 11.84	91.80 ± 2.17	P<0.000***

Table7: Correlation of severity of depression with socio-occupational dysfunction in depressed patients

	SOFAS score	
	correlation coefficient	Sig.(2-tailed) P value
HAM-D score	-0.893	0.000***

Mean age of patient with depression and control group was 34.73 years and 34.63 years respectively. There was no statistically significant difference in mean years of age (P= 0.949) and sex distribution (P=1) in both groups (Table1).As demonstrated in table 2 both the groups had majority of subjects from middle socioeconomic group. Mean score of revised kuppaswamy’s socioeconomic status scale was 14.90 and 14.67 respectively and difference between both the mean scores was statistically not significant. (P= 0.83).Table 3 shows mean score for education for both groups as per revised kuppaswamy’s socioeconomic status scale. No significant difference was found between scores of both the groups (P= 0.73). Both groups were matched for socio-demographic profile. So the two groups were comparable for the study.

Table 4 describes illness characteristics of group of depressed patients. Out of 30 patients, 6 (20.00%) were having mild depression; 13 (43.33%) were suffering from moderate depression, 7 (23.33%) patients were having severe depression and 4(13.33%) patients had very severe depression.

Social and occupational dysfunction of each subject was done by social and occupational dysfunction assessment scale (SOFAS SCALE).

Table 5 shows that, in group of patients with depression, 5 (16.67%) patients had score between 31-40; 1 (3.33%) had score between 41-50; 12 (40.00%) had score between 51 to 60; 7 (13.33%) had score between 61 to 70 while 5 (16.67%) patients had score in between 71-80.

Table 6 shows that mean HAM-D score of depressed group was 17.17(± 4.22). When assessed for socio-occupational dysfunction by SOFAS scale mean score was found to be 56.73 which was significantly lower than healthy control group, indicating considerable amount of impairment in social and occupational areas of functioning.

Table 7 reflects the statistical significant correlation between HAM-D score and SOFAS score indicating that more severely depressed patient were significantly impaired in the area of social and occupational functioning.

DISCUSSION

The main purpose of this study was to examine the effect of major depressive disorder on social and occupational functioning. This was accomplished by comparing group of patients with depression with healthy control with respect to social and occupational function assessment scale (SOFAS). Both groups did not differ significantly on variable of age, gender, socioeconomic classification and educational level. So they were comparable for the study. In the further discussion, results from the present study are compared with findings from earlier studies followed by inferences and reasons for the above results.

Present study provides evidence for significant impairment in social and occupational functioning of patients with depression. Almost 60% of depressed patient scored less than 60 points on social and occupational function assessment (SOFAS) scale. Almost 16% of patient had score less than 40 indicating difficulty in keeping job and other relationship problems. Previous studies have reported poorer intimate relationship and less satisfying social interaction in patient with depression as compared to healthy control group.¹¹ Studies have shown that depression affects several aspects of work performance, including productivity, task focus and days absent caused by sickness.¹² Present study also indicates that in acute stage of illness, severity of depression is significantly associated with socio-occupational dysfunction of patient. (Table 7). These findings can't be attributed to electroconvulsive therapy, or concomitant administration of psychotropic or CNS-active medication, or to the effects of medication withdrawal since these confounding factors were taken care of while doing this study.

Studies have shown that cognitive impairment plays substantial role in disability associated with depression.¹³ Mood symptoms do not account for the magnitude of disability resulting from depression.

The social impairments could partly result from social emotional dysfunction, like difficulties in understanding and controlling social emotions.¹⁴ Further, the interpersonal difficulties might be a result of reduced motivation, altered empathic responding in social interactions and a reduced capacity to come up with effective solutions for interpersonal problems.

Some of studies have revealed that improvement in functioning does not follow improvement in depressive symptoms to a similar degree.¹⁵ It indicates that there are several factors responsible for socio-occupational dysfunction other than mood symptoms for which there is need of study in remitted depressed patients.

Assessing the social-occupational area in depressed patients may enable to start and focus corrective strategies as early as possible in order to prevent long term poor recovery and functioning.

CONCLUSION

This study has extended the available knowledge on cognitive dysfunction in depression by including group of medication free patients of depression.

Findings from this study suggest that major depressive disorder is associated with significant morbidity in social and occupational life of patient. Socio-occupational dysfunction is related to severity of depression in acute stage of illness. Deficits in performing and fulfilling normal social roles are a major reason for social withdrawal in patients suffering from depression. Findings from above demonstrate that recovery from depression requires

not only a significant decrease of depressive symptoms but also an improvement in domains such as, social decision making and social skills and occupational functioning. Therefore, we recommend

that when screening for depression, treatments should target not only core mood symptoms but also should integrate an assessment of social and occupational function.

REFERANCES

1. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 5th ed. Washington, DC: APA; 2013
2. The National Institute of Mental Health. Depression Booklet. Available at: <http://www.nimh.nih.gov/health/publications/depression/depression-booklet.pdf>. Accessed 02/04, 2016.
3. Thirunavukarasu M, Thirunavukarasu P. Training and National deficit of psychiatrists in India - A critical analysis. *Indian J Psychiatry* 2010;52:838
4. Üstün TB, Ayuso-Mateos JL, Chatterji s, Mathers C, Murray CJL. Global burden of depressive disorders in the year 2000. *British Journal of Psychiatry* 2004; 184:386-92.
5. McKnight PE, Kashdan TB. The importance of functional impairment to mental health outcomes: a case for reassessing our goals in depression treatment research. *Clin Psychol Rev.* 2009; 29: 243-259.
6. Spitzer RL, Forman JB. DSM-III field trials: II. Initial experience with the multiaxial system. *Am J Psychiatry.* 1979; 136: 818-820.
7. Goldman HH, Skodol AE, Lave TR. Revising axis V for DSM-IV: a review of measures of social functioning. *Am J Psychiatry.* 1992; 149: 1148-1156.
8. Gautam S, Nijhawan M, Kamal P. Standardization of Hindi version of Goldberg's General Health Questionnaire. *Indian J Psychiatry* 1987; 29: 53-66.
9. Hamilton M. A rating scale for depression. *J Neurol Neurosurg Psychiatry* 1960;23: 56-62
10. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 4th ed. Text Revision. Washington, DC: APA; 2000
11. Fredman L, Weissman MM, Leaf PJ, Bruce ML. Social functioning in community residents with depression and other psychiatric disorders: results of the Newhaven Epidemiologic Catchment Area Study. *J Affect Disord* 1988;15:103-12
12. Wang PS, Beck AL, Berglund P, McKenas DK, Pronk NP, Simon GE, et al. Effects of major depression on moment-in-time work performance. *Am J Psychiatry* 2004;161:1885-91.
13. Jaeger J, Berns S, Uzelac S, Davis-Conway S. Neurocognitive deficits and disability in major depressive disorder. *Psychiatry Res* 2006;145:39-48.
15. W.S. Tse, A.J. Bond The impact of depression on social skills *J. Nerv. Ment. Dis.,* 192 (2004): 260-268
16. Viinamaki H, Koivumaa-Honkanen H, Honkalampi K, Haatainen K, Tolmunen T, Antikainen R, et al. Hopelessness and Low Social and Occupational Functioning are Associated with Non-Recovery from Depression—Results of a 6-Year Follow-Up Study. *Clinical Medicine: Psychiatry* 2008; 1:1-6.