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Original Research Article

Depression and Its Associated Factors among Primary Caretakers of Patients Suffering From Bipolar Affective Disorder

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ABSTRACT

Background: Bipolar affective disorder (BPAD) is characterized by episodes of mania, hypomania, depression and in some cases mixed episodes with recovery occurring during the interepisodic period. Caring of patients with BPAD is an enduring stressor and is associated with significant distress and caretaking burden.

Aims: To study depression and its associated factors among primary caretakers of patients suffering from bipolar affective disorder.

Materials & Methods: The present observational study was conducted in the Government Medical College, Jammu, Jammu and Kashmir, on the caretakers of patients suffering from bipolar affective disorder attending the outpatient department of Psychiatry. After taking informed consent from all the caretakers of bipolar patients, a total number of 130 caretakers of bipolar patients were selected and were assessed by using HAMD scale.

Results: The mean HAMD score of caretakers above 40 years (18.95±7.10) was significant higher than that of caretakers below 40 years (16.06±8.22) with a difference of 2.89 which was highly significant (p-value=0.001). The difference between the mean HAMD score of male and female caretakers (0.61) was also highly significant (p-value=0.001). Similarly the difference between the mean HAMD score of the educated and uneducated caretakers was 2.73 which was highly significant (p-value=0.001). Caretakers who were unemployed had a high mean HAMD score of 17.90 (±9.25) than employed caretakers who had a mean HAMD of 14.75(±7.88) with a difference of 3.15 which was statistically highly significant (p-value=0.001). Moreover the difference in the mean HAMD of caretakers who were parents of their patient and other caretakers was 3.74 which was also highly significant (p-value=0.001). There was a highly significant positive correlation between depression and caretakers who were parents by relation to the patient (p-value=0.001). However there was no correlation of depression with age, gender, educational and occupation of the caretakers.

Conclusion: From present study we conclude that depression was higher among the caretakers who were above 40 years of age, females, unemployed, educated and parents of their patients. There was significant positive correlation of depression with the caretakers who were parents by relation to their patients. So it is suggested that in order to decrease the incidence and prevalence of the depression in the society, the government, mental health professionals and various health organizations should conduct various mental health check up camps so that adequate treatment and proper screening of these caretakers could be done.

Keywords: Age, Caretaker, Correlation, Education, Female.

INTRODUCTION

One of the serious psychiatric disorders of present times is Bipolar which affective disorder (BPAD) episodes characterized by of mania, hypomania, depression and in some cases mixed episodes with recovery occurring during the interepisodic period. Although, in patients with BPAD, functioning reaches to premorbid level in the interepisodic recovery interval, some of them may continue to exhibit residual symptoms in the interepisodic period. The start of illness usually occurs in early adulthood or adolescence and is associated significant negative impact on the life of the patients and their caretakers. Bipolar often encounter interpersonal patients difficulties, marital problems, medication side effects, multiple suicidal attempts, completed suicide, job related problems, difficulties, educational psychosocial dysfunction and disability. There are high psychiatric rates of and physical comorbidities among the patients suffering from bipolar disorder. [1]

Caring of patients with mental disorders including BPAD is an enduring stressor as during their life time, 90% bipolar patients experience recurrences more often during the first two years of the initial episode resulting in caregiving [2] **Psychiatric** burden. disorders are with associated increased physical morbidity [3,4] and reduced quality of life among caregivers. [5] There is twice the prevalence of depression in the caretakers of psychiatric patients, as compared to the [6,7] population. Among general caretakers of patients with psychiatric disorders, the burden of depression includes disturbances in jobs, leisure activities, social interactions and leisure activities. [3-5]

Various factors like age, gender, education, occupation and relation of the caretaker are associated with occurrences of depression among the caretakers of bipolar patients. ^[7] Hence the present study was conducted to study depression and its associated factors among primary caretakers of patients suffering from bipolar affective disorder

METHODOLOGY

After due clearance from Institutional Ethics Committee, the present observational study was conducted in the Government Medical College, Jammu. Jammu and Kashmir. India. on the caretakers of patients suffering from bipolar affective disorder attending the outpatient department of Psychiatry. Before inclusion in the current study, informed consent from all the caretakers of bipolar patients was undertaken. A total number of 130 caretakers of bipolar patients were selected from outpatient department and were assessed by using HAMD scale. [9]

Statistical Analysis:

Analysis of data was done using statistical software MS Excel / SPSS version 17.0 for windows. The statistical techniques t test and Pearson's correlation coefficient were used. The p \leq 0.05 was considered to be statistically significant whereas p \leq 0.001 was considered highly significant.

OBSERVATION & RESULTS

Table no. 1 shows that the mean HAMD score of caretakers above 40 years was $18.95~(\pm 7.10)$ and that of caretakers below 40 years was $16.06~(\pm 8.22)$ with a difference of 2.89 between the two groups with a p-value of 0.001 which was statistically highly significant. The mean HAMD score of the male caretakers was $16.60~(\pm 6.32)$ whereas female caretakers had a mean HAMD score of 17.21. The difference between the two was 0.61 which was statistically highly significant (p-value=0.001).

Table no. 1 also shows that educated caretakers had a higher mean HAMD score i.e.18.42 (±8.22) whereas uneducated caretakers had a low HAMD score i.e. 15.69 (±8.91). Also the difference between the two was 2.73 and the p-value of comparison between the two groups was 0.001 which was highly significant. As per the employment status of the caretakers, higher mean HAMD score was observed in unemployed caretakers i.e. 17.90 (±9.25)

whereas low HAMD score was observed in employed caretakers i.e. 14.75(±7.88). Moreover there was statistically highly significant difference of 3.15 (p-value=0.001) between them. Caretakers who were parents of their patient had a higher mean HAMD score of 18.87 (±8.54) compared to other caretakers with a mean HAMD score of 15.13 (±8.17) with a statistically significant difference 3.74 (p-value=0.001).

Table no. 1 shows mean HAMD score according to age, gender, education, occupation and relation of the caretaker.

| | | Number | of | Mean HAMD | Standard | Difference in mean | P-value |
|---------------------|------------|------------|----|-----------|-----------|--------------------|---------|
| | | caretakers | | score | deviation | HAMD score | |
| Age (in years) | ≤40 | 21 | | 18.95 | 7.10 | 2.89** | 0.001 |
| | >40 | 109 | | 16.06 | 8.22 | | |
| Gender | Males | 52 | | 16.60 | 6.32 | 0.61** | 0.001 |
| | Females | 78 | | 17.21 | 9.81 | | |
| Educational status | Educated | 57 | | 18.42 | 8.22 | 2.73** | 0.001 |
| | Uneducated | 73 | | 15.69 | 8.91 | | |
| Employmental status | Unemployed | 68 | | 17.90 | 9.25 | 3.15** | 0.001 |
| | Employed | 62 | | 14.75 | 7.88 | | |
| Relation | Parents | 59 | | 18.87 | 8.54 | 3.74** | 0.001 |
| | Others | 71 | | 15.13 | 8.17 | | |

^{*}P-value significant at the level of 0.05

Table 2 shows that there was no significant correlation of the resilience with the age, sex, occupation and education of the caretakers. However there was a statistically highly significant positive correlation between depression and the caretakers who were parents of their patients 0.458 and p-value of 0.001.

Table no. 2 shows correlation of depression with age, gender, education, employment and relation of the caretaker

| | Number of caretakers | Pearson's correlation | P-value |
|------------|---|---|---|
| ≤40 | 21 | 0.165 | 0.475 |
| >40 | 109 | -0.041 | 0.669 |
| Males | 52 | -0.133 | 0.346 |
| Females | 78 | -0.005 | 0.962 |
| Educated | 57 | 0.015 | 0.906 |
| Uneducated | 73 | 0.099 | 0.469 |
| Unemployed | 68 | -0.092 | 0.439 |
| Employed | 62 | -0.075 | 0.567 |
| Parents | 59 | 0.458** | 0.001 |
| Others | 71 | -0.123 | 0.307 |
| | >40 Males Females Educated Uneducated Unemployed Employed Parents | ≤40 21 >40 109 Males 52 Females 78 Educated 57 Uneducated 73 Unemployed 68 Employed 62 Parents 59 | ≤40 21 0.165 >40 109 -0.041 Males 52 -0.133 Females 78 -0.005 Educated 57 0.015 Uneducated 73 0.099 Unemployed 68 -0.092 Employed 62 -0.075 Parents 59 0.458*** |

^{*}P-value significant at the level of 0.05

DISCUSSION

In the present study the mean HAMD score of the caretakers below 40 years was 18.95 (±7.10) whereas the mean HAMD score of caretakers above 40 years was 16.06 (±8.22). The difference in the mean HAMD score of the two groups was 2.89 which is highly significant with p-value of 0.001. Our finding shows that among the younger caretakers, the average level of depression was more as compared

to older one's. Both poor life skills and lack of experience of caretaking are the two main factors which predisposes younger caretakers to higher levels of caretaking burden resulting in more depression. [10] Our finding is in accordance with Manhas RS et al who also observed that depression was higher in younger caretakers as compared to caretakers of older age group. However no association between depression and age of the caretakers was found as the Pearson's

^{**}P-value highly significant at the level of 0.001

^{**}P-value highly significant at the level of 0.001

correlation value between depression and caretakers above 40 years was -0.041 and between depression and caretakers below 40 years of age was 0.165 and both these values were non significant. Our finding is in agreement with Manhas RS et al and Sintayehu M et al as both of them had found no association between depression and age of caretakers in their respective studies. [11,12]

The mean HAMD score of female caretakers was 17.21 (±9.81) whereas that of male caretakers was 16.60 (± 6.32). The difference between the mean HAMD score of the two groups was 0.61 with a highly significant p-value of 0.001 which shows that the depression among female caretakers significantly higher than caretakers. In Indian culture, there are many evidences which show that there is higher emotional attachment of female caretakers to their patients as compared to male caretakers which may result in low selfesteem. Moreover loss of self esteem may also be associated with maternal depression which can be due to subjective caregiving burden and contribution of other factors which includes the affective nature of their responses to hormonal changes and stressors and due to low social status. [12] Moreover double burden of caring of sick patients and management of household works may be the other contributing factors for development of depression among the females. [8] Manhas RS et al had also observed that depression female caretakers as higher in compared to male caretakers. [11] The between person's correlation value depression and male caretaker was -0.133 (p-value=0.346) whereas that of between female caretakers and depression was -0.005 (p-value=0.960). As p-value of both these correlations was negative, which shows that there is significant correlation of depression with gender of the caretaker. However our finding is in contrast to Derajew H et al, Manhas RS et al and Sintayehu M et al who found significant association of depression in female caretakers in their respective studies. [8,11,12]

The mean HAMD score of educated caretakers was 18.42(±8.22) and that of uneducated caretakers was 15.69(±8.91). The difference between the mean HAMD score of the two groups was 2.73, which was highly significant with p-value of 0.001. Our finding shows that depression was significantly higher in those caretakers who are educated as compared to uneducated caretakers. The reason for this could be that the educated caretakers may have to face more stigma and shame in the society associated with the violent, abusive and disinhibited behaviour of their patient. The finding of our's is in accordance with Manhas RS et al who also had observed similar results. [11] Moreover the Pearson's correlation values between depression and educated caretakers. and between depression and uneducated caretakers were 0.015 and 0.009 respectively. The p-values of both these correlations were non significant which suggests that depression among caretakers has no correlation with the educational status of the caretakers. Our finding is in agreement with Manhas RS et al who also had found no significant association between depression educational status of the caretakers. [11] Similar results were also found by Derajew H et al [8] whereas a significant positive association between depression uneducated caretakers was observed by Sintayehu M et al. [12]

The mean HAMD score unemployed caretakers i.e. 17.90 (±9.25) was significant higher than that of employed caretakers who were having mean HAMD score of 14.75 (\pm 7.88). The difference between the mean HAMD of the two groups was 3.15 which was statistically highly significant (p-value=0.001) which shows depression was significantly higher in unemployed caretakers than in employed caretakers. The reason for this could be that unemployed caretakers especially peoples doing household works and farmers may have lower income, exposed to stressful life experiences, were inaccessible to media/information/lack of knowledge and

were more stigmatized in the society than the employed caretakers or those who have been managing their business establishments. [12] However the Pearson's correlation value between depression and unemployed caregivers was -0.092 (pvalue=0.439) and between depression and employed caretakers was -0.75value=0.567) which suggests there was no significant association between depression and occupation of the caretaker. Our finding is in accordance with Derjew H et al who also had observed no association between depression and occupation of the caretakers whereas other studies had found association depression and unemployed caretakers. [8] However Manhas RS et al and Sintayehu M et al had found a significant positive association between depression and those caretakers who were unemployed.

In present study the mean HAMD score of parent caretakers was $18.87 (\pm 8.54)$ which was significantly higher than that of other caretakers who were having mean HAMD score of 15.13(±8.17) with a difference of 3.74 and p-value of 0.001. The finding in this study shows that the average levels of depression were significantly higher in caretakers who were parents of their patients than the other caretakers. About the future of their patients, the parents are more concerned compared to other caretakers. With the progression of the age, larger amounts of distress and stress were experienced by the parents as they start thinking about who will take care of their patient in the absence of other family members. [13] Our finding is in accordance with Manhas et al who also had similar observation. [11] Moreover the Pearson's correlation value between depression and caretakers who were parents was 0.458 which has a high significant p-value of 0.001. Hence the finding in the present study suggests that there is highly significant positive correlation between depression and parent caretakers. Our finding is in accordance with the other studies which also found significant correlation between depression

caretakers who were parents of the patient. [8,11,12]

CONCLUSION

From present study we conclude that depression was higher among the caretakers who were above 40 years of age, females, unemployed, educated and parents of their patients. There was significant positive correlation of depression with the caretakers who were parents by relation to their patients. So it is suggested that in order to decrease the incidence and prevalence of the depression in the society, the government, mental health professionals and various health organizations should conduct various mental health check up camps so that adequate treatment and proper screening of these caretakers could be done.

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