

Figure3: Magnitude of caregiver burden.

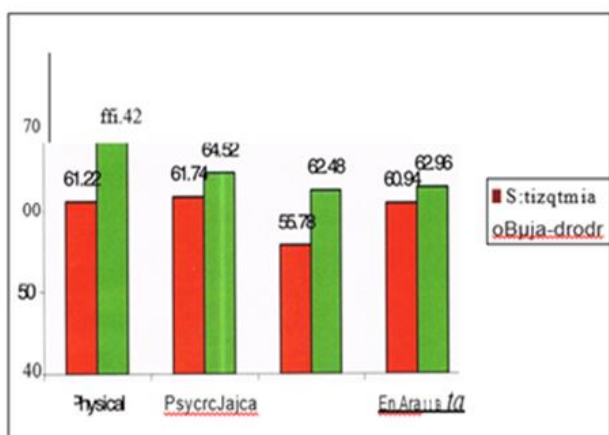


Figure4: Quality of life of caregivers.

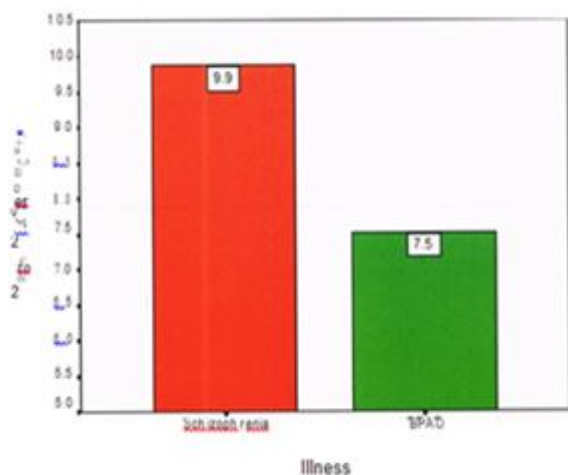


Figure5: Depression in caregivers.

DISCUSSION

The result of the current study gave a comparison between the burden of care of schizophrenia and bipolar disorder and QOL and depression among the caregivers of persons suffering from these disorders. Socio

demographic profile of the person suffering from illness. The mean age of subjects in schizophrenia and bipolar disorder was comparable with the mean age being 34.72 years (S.D. 9.69) and 37.0 years respectively.

With regards to the marital status 78% of the bipolar subjects were married, 20% were single and only 2% were either divorced/separated. The higher rates of marriage and lower rates of divorce/separation can well be explained on the basis of south Asian ethos and reality in general and specifically in relationship to mental illnesses, wherein marriage is a social norm and divorce is not very common.

In contrast, the schizophrenia subjects were less likely to be married as compared to bipolar subjects. Only 50% of persons suffering from schizophrenia were married. This could be partially attributed to the impact of the schizophrenia illness on the ability of the subjects to enter marital relationships.

Most of the subjects in bipolar disorder and all of the subjects in schizophrenia groups were literate. Only 4% of bipolar disorder subjects were illiterate. 28% of schizophrenia and bipolar disorder. Subjects had received at least a degree. This may reflect the recent trend towards literacy and increasing education attainment in the general population.

50% of the bipolar disorder subjects were working. This reflects a considerably high level of employment. This can be attributed to ready availability of unskilled work which our subjects, who were predominantly of the lower socio economic status, were willing to do in the milder stages of mania and depression and during remission.

On comparing the two groups with regards to occupation, a significantly more number of schizophrenia subjects were not working (72%) compared to bipolar disorder subjects(50%). This reflects the severe psychosocial consequences of schizophrenia as well as the fact that bipolar disorder being an episodic illness give the patients greater opportunity to pursue occupation in the periods of remission. Also schizophrenia, especially of longer duration is associated with negative symptoms and decline of social skills which also impact ability to be gainfully employed.

Majority of both bipolar disorder and schizophrenia subjects were from nuclear families. This reflects the prevailing social trend. The nuclear families have lesser number of earning members and caregivers to shoulder the burden. The family income of both groups was similar to majority of subjects having family income less than 11,500 per month (92% in schizophrenia and 94% in bipolar disorder group).

Illness Characteristics

The mean duration of illness was 10.02 years in schizophrenia group and 10.40 years in bipolar disorder group. Thus the relatively higher duration of illness in our study subjects as compared to Roychaudhuri et al could be due to SBMCH being a tertiary institute

receiving a significant number of chronic patients who are likely to have received treatment with other psychiatric and non-psychiatric set ups and who had not responded adequately.

Socio Demographic Profile of the Caregivers

The mean age of caregivers was 49.70 ± 11.61 years in schizophrenia group and 41.94 ± 10.36 . Years in bipolar disorder group. This corresponds to other studies by researchers like Chakrabarti et al in 1995² where the mean age of caregivers of subjects with affective disorders was $39.77 \text{ years} \pm 13.01$. The difference may be explained by the more number of caregivers being parents for the schizophrenia group.

The majority of caregivers in both the groups were females- 56% in schizophrenia and 60% in bipolar disorder group. This is similar to the findings of largely female care givers, in other studies by Chakrabarti et al (1995)², Perlick et al (1999)⁵⁹, Dore and Romans (2001)⁸² where females were caregivers in 50%, 66 % and 61% cases respectively. 48% of caregivers of schizophrenia subjects and 62% of caregivers of bipolar disorder were employed.

Regarding the relationship of caregivers with the subjects, the bipolar disorder group had greater number spouse as caregivers, while schizophrenia group had greater number of parents as caregivers. 32% of schizophrenia subjects had spouse as the caregivers while for the bipolar disorder subjects it was 66%. This correlates with the finding by Chakrabarti et al where it was 33.3% and 62.8% respectively.

Global Assessment of Functioning

The mean GAF score for schizophrenia subjects was 40.20 and bipolar disorder subjects was 45.6. This is statistically significant. The number of persons with bipolar disorder who were in remission was only two, among the fifty subject's studies, which is insignificant.

The severity of illness has a positive correlation with the caregiver burden. This would mean that the actual burden experienced by caregivers of bipolar disorder may be higher if matching for GAF between the two groups was done.

Caregiver Burden

Our study evaluated the burden experienced by the caregivers of persons suffering from two severe mental illnesses- schizophrenia and bipolar disorder, using the Burden Assessment Schedule. The burden of schizophrenia was found to be significantly higher than bipolar disorder with mean normalized BAS scores of 64.25 and 57.92 respectively. This correlates with the results of similar studies by Chakrabarti et al², Roychoudhuri et al⁴, 6, Nehra et al³⁹ and Chadda et al⁷².

It is found that financial difficulties were experienced by caregivers in both the groups without significant differences. This is comparable to the findings by Nehra et al³⁹ But worsening of families finances and worries

regarding the patients future financial situation is significantly more with caregivers of schizophrenia. High financial burden in schizophrenia has been established by researchers such as Giel et al¹³, Moiley et al¹⁷ and Saldhana et al¹⁹

The caregivers who formed our study group experienced disruption of relations with other family members and friends, and disruption of family stability. The relationship with friends was significantly affected in schizophrenia. This reflects the findings of early studies by Chakrabarti et al, and Gowtham and Nijhawan³⁰

Symptoms of depression and anxiety were reported by almost 90% of caregivers of both the groups. But frustration over slow improvement of patient and feelings of isolation and loneliness are more with caregivers of schizophrenia than bipolar disorder. The severe toll on the mental health of caregivers correlates with the findings of researchers such as Rodrigo et al⁷⁷ and Li Yu Song et al⁷⁸.

Appreciation for caring is a positive factor which reflects the satisfaction caregivers receive from the appreciation and acknowledgement of their good care from the friends and family members. Caregivers of schizophrenia and bipolar disorder do not significantly differ in this aspect, though a significant number of caregivers reported lack of appreciation, which has been described by Ghadge et al³⁴ as rejection and discrimination in personal and social contexts.

Quality of Life of Caregivers: The quality of life of caregivers had significant differences in the physical domain with caregivers of schizophrenia subjects scoring low. This may be attributed to the fact that the schizophrenia subjects had more number of parents as their caregivers who suffer from various minor physical ailments that causes pain, and who require varying degrees of medical help to lead their lives. The caregivers of schizophrenia subjects have poorer quality of life in the social domain as well, and there is no statistically significant difference in the psychological and environmental domains.

Depression in Caregivers:

The mean MADRS score for caregivers of schizophrenia subjects was 9.88 and that of bipolar disorder subjects was 7.52. The difference was not statistically significant. Taking the cut off score as 14 which is the norm in most studies, 14 caregivers of schizophrenic subjects ie. 28% and? Caregivers of bipolar subjects ie 14% were found to have clinical depression. Of the 100 caregivers assessed, 21 had clinical depression. This is concurrent with the findings of Li Yu Song et al. ⁷⁸ where more than 20% of caregivers of chronic mental illnesses suffered from depression, but less than the study from Mexico⁷⁶ where the rate was 40%.

LIMITATION AND SUGGESTIONS

Although this study was limited with time constrain, manual-steps process but it was good to establish such a

study in Saudi Arabia where SCD affects many patients particularly in Eastern and South Western areas.

Further studies are recommended to identify the specific compounds of different parts of these herbs that pharmacologically cause their therapeutic activity. Moreover, dose and additive effects as well as drug-interactions are suggested in future evaluation. In addition, in vivo researches with more objective, practical and validated advanced techniques are recommended, also, to correlate all of that with the disease phenotypes in multicentre analysis on larger cohort groups to provide more understanding of the beneficial effects of such plant products.

CONCLUSION

The study showed that though the burden of care of bipolar disorder is less when compared to schizopemia, it cannot be neglected. The QOL of caregivers of persons suffering from schizophrenia and bipolar disorder are comparable at least in the psychological and environmental domains. A significant number of caregivers of both schizophrenia and bipolar disorder suffer from clinical depression. Poverty and disruption of relationships and family integrity remain major factors in adding to the burden of both schizophrenia and bipolar

disorder. No treatment of any chronic mental disorder is complete until the burden of care is assessed and addressed.

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