

Psychosocial Dysfunction and Family Burden in Schizophrenia and Obsessive Compulsive Disorder

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ABSTRACT

This study aimed to assess and compare the extent and pattern of psychosocial dysfunction and family burden in schizophrenia and obsessive-compulsive disorder, and to identify interrelationships between the two variables in these two disorders. First-degree relatives/spouses of 35 schizophrenic and 30 OCD patients were interviewed using the Dysfunction Analysis Questionnaire (DAQ) and the Family Burden Interview Schedule (FBIS). Global score and scores in vocational, personal, familial and cognitive areas on the DAQ, and global score, subjective score, and scores on items such as financial burden, disruption of family-routine, disruption of family leisure and disruption of family interactions on the FBIS were significantly higher in the schizophrenic group. Dysfunction in social area was comparable in two groups. OCD group showed a significant positive correlation between dysfunction and all areas of family burden except physical and mental health. Schizophrenic group showed a significant positive correlation between dysfunction and disruption of family interaction. The implications of these findings are discussed.

Key words : psychosocial dysfunction, family burden, schizophrenia, OCD.

Introduction

The assessment of disability in chronic psychiatric patients has become an increasingly important issue in recent years. The profile and nature of disability, its relationship with clinical symptoms, and its course in schizophrenia (Cooper & Bostok, 1988) and OCD (Khanna et al, 1988; Rapoport et al, 1992; Leon et al, 1995; Jayakumar et al, 2002a) have been reported in recent studies.

Chronic psychiatric disorders pose numerous psychosocial difficulties for the caregivers also. Such difficulties are collectively known as the burden of care. Creer & Wing (1975) found that the commonest behavioural problems reported by the family members of schizophrenic patients were those associated with social withdrawal such as little interaction, slowness, lack of conversation, few leisure interests and self-neglect. Hatfield (1978) noticed that the schizophrenic disrupted the family's social life and leisure, and placed a burden on one member of the family. Later studies (Pai & Kapur, 1981; Platt, 1985; Lefley, 1987; Fadden et al, 1987; Raj et al, 1991; Illango & Nirmala, 1992; Saldanha et al, 2002; Chakrabarty et al, 2002) seem to imply that burden comprises the problems encountered by the family due to the patient's illness. The assessment of burden has become particularly important with the emergence of de-institutionalization and the practice of community

psychiatry.

Recently there has been growing concern to understand the impact of OCD on family functioning. Evidences show that family members are frequently drawn into ritualistic behaviour of their patients (Cooper, 1994; Calvocoressi et al, 1995; Steketee 1997). Veltro et al (1994) assessed the burden perceived by the key relatives of schizophrenics and patients with neurotic disorders, and tried to find association between patient's personal/social disability and family burden. Also, family members often modify the family functioning and routines to accommodate their relative's rituals (Calvocoressi et al, 1995; Amir et al, 2000).

Of the family members, the consequences of caring is high in the life of a family member who bears maximum responsibility (Cooper, 1996). A few studies have also shown that OCD is often connected with marital discord (Emmelkamp et al, 1990; Cooper, 1996), sexual problems (Stabler et al, 1993), financial hardships (Chakrabarty et al, 1993; Cooper, 1996), inability to maintain relationship with others, particularly friends (Cooper, 1996), poor family relationships (Hollander, 1996; Calvocoressi et al, 1998) and decline in family routines including leisure (Chakrabarty et al, 1993). Black et al (1998) have shown that the spouses of the patients with OCD are frequently faced with disrupted family/marital/social life, sexual problems, anger/frustration,

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family conflicts, and disrupted personal life. These authors have also noted that OCD families are less healthy than control families in communication, affective involvement and general functioning.

Indian studies on family burden have chiefly focused on schizophrenia and affective disorders (Nijhawan et al, 1985; Chakrabarti et al, 1992 & 1995; Roychaudhuri et al, 1995; Thara et al, 1998). Studies based on neurotic disorders are very few. Chakrabarti et al (1993) assessed the pattern of burden in families of patients with dysthymia, GAD and OCD. Jayakumar et al (2002b) in a comparative analysis of the burden of care between the key relatives of OCD and schizophrenia reported significantly high mean score for the domains, spouse related factor and care giver's strategy of burden assessment schedule. Spouse and unemployed caregivers in OCD group had significantly elevated mean total burden scores. None of the earlier studies except Black et al (1998) and Jayakumar et al (2002) have examined the impact of OCD on the family members in a comprehensive manner. Besides, even Black et al's study has an important limitation that the instrument used to evaluate caregiver's difficulties has not been a standardized tool.

There is a dearth of studies comparing psychosocial dysfunction and the related family burden between psychotic and non-psychotic disorders. Hence, the aim of the present investigation was to assess and compare the extent and pattern of psychosocial dysfunction of patients and family burden in schizophrenia and OCD, and to find relationships between these two constructs in the two disorders.

Materials and Methods

This study was conducted at the Out-Patient Department of Central Institute of Psychiatry, Ranchi, Bihar, India, during the period September 1995 to March 1996. In both the sample groups, consecutive cases fulfilling the following inclusion criteria were taken: (a) patients of either sex in the age range of 15-50 years, (b) ICD-10 diagnosis of schizophrenia and OCD (c) illness of at least two years duration, (d) a first-degree relative/spouse (physically and mentally healthy), aged above 18 years, staying with the patient for atleast the previous three years (e) written informed consent

Patients with co-morbid psychiatric illness, chronic physical illness, and another family member with a psychiatric or chronic physical illness were excluded.

Tools

(a) Dysfunction Analysis Questionnaire (DAQ) developed by Pershad et al (1985).

The DAQ is a standardized scale and has 50 items grouped into five areas viz. social, vocational, personal, familial and cognitive. Each item has five alternate answers, and these are scored from 1 to 5. Higher the scores, more is the dysfunction. The scale has highly satisfactory test-retest and split-half reliabilities that ranged from 0.77 to 0.97.

(b) Family Burden Interview Schedule (FBIS) developed by Pai and Kapur (1981).

This is a semi-structured interview schedule comprising 24 items grouped under six areas viz. financial burden, disruption of routine family activities, family leisure, family interactions, effect on physical and mental health of others. Rating of burden is done on a three-point scale for each item and a standard question to assess the 'subjective' burden is also included in the schedule. The validity and reliability of the scale has been shown to be satisfactory. The inter-rater reliability for all items was reported to be more than 0.78 by the authors of the schedule.

Since the study was planned to have one time assessment, measurement of severity of illness by rating scales was not done. Hence the DAQ was administered to the relative and his/her account was taken in regard to the psychosocial dysfunction of the patients. Qualitative and quantitative variables were compared between groups using Chi-square test and Student's 't' test respectively. Correlations were tested using Pearson's product moment correlation coefficient.

Results

The study sample consisted of first-degree relatives/spouses of 35 schizophrenics and 30 OCD patients. Socio demographic and clinical characteristics of the patients were comparable in both groups except regarding gender and history of substance abuse. Females outnumbered males in the OCD group. There was significantly more number of patients with positive history of substance abuse in the schizophrenic group.

Table 2 shows comparison of global and area-wise DAQ scores in schizophrenia and OCD. The global score and vocational, personal, familial and cognitive area scores were significantly higher in the schizophrenic group.

Table 1

Socio-demographic and clinical characteristics of Schizophrenic and OCD Patients

| Variable | Schizophrenia N=35 | OCD N=30 | Significance |
|----------------------------------|-----------------------|------------------|---------------|
| Age (years) | 31.43 (8.09) | 31.10 (9.75) | t=0.15 NS |
| Gender | | | |
| Male | 28 (80) | 10 (33.33) | c=5.16 *** |
| Female | 7 (20) | 20 (66.67) | |
| Age of onset of illness (years) | 24.34 (6.40) | 24.25 (10.18) | t=0.04 NS |
| Duration of illness (years) | 7.06 (6.83) | 5.13 (5.37) | t=1.28 NS |
| History of substance abuse | | | |
| Yes | 10 (28.57) | 1 (3.33) | c=5.63 * |
| No | 25 (71.43) | 29 (96.67) | |
| Family history of mental illness | | | |
| Yes | 15 (42.86) | 15 (50) | c=0.33 NS |
| No | 20 (57.14) | 15 (50) | |
| Type of family | | | |
| Nuclear | 22 (62.86) | 21 (70) | c=0.37 NS |
| Joint | 13 (37.14) | 9 (30) | |
| Monthly family income | | | |
| Below Rs. 2500 | 7 (20) | 3 (10) | c=4.54 NS |
| Rs.2500-5000 | 17 (48.57) | 10 (33.33) | |
| Above Rs.5000 | 11 (31.43) | 17 (56.67) | |

* p<0.05, *** p<0.001, NS = Not Significant

Table 2

Comparison of Dysfunction Scores between Schizophrenic and OCD Patients

| | Schizophrenia Mean (SD) | OCD Mean (SD) | Significance |
|-----------------|----------------------------|-------------------|----------------|
| Social area | 36.57 (10.54) | 34.26 (5.87) | t=0.112 NS |
| Vocational area | 41.00 (10.89) | 35.93 (7.13) | t=2.250 * |
| Personal area | 41.00 (6.57) | 32.33 (5.66) | t=5.726 *** |
| Familial area | 40.91 (8.06) | 31.93 (6.86) | t=4.861 *** |
| Cognitive area | 37.34 (6.83) | 28.17 (6.85) | t=5.399 *** |
| Global score | 197.37 (31.87) | 163.83 (21.42) | t=5.037 *** |

* p<0.05, *** p<0.001, NS = Not Significant

Table 3 shows comparison of global and area-wise FBIS scores in schizophrenia and OCD. The financial burden, disruption of family routine, disruption of family leisure, disruption of family interactions, effect on physical and mental health, global burden, and subjective burden scores were significantly higher in the schizophrenic group.

Table 3

Comparison of Family Burden Scores between relatives of Schizophrenic and OCD Patients

| Variable | Schizophrenia Mean (SD) | OCD Mean (SD) | A. Level of Significance |
|-----------------------------------|----------------------------|------------------|-----------------------------|
| B. Financial burden | 4.54 (2.13) | 3.16 (2.35) | t=2.464 * |
| Disruption of family routine | 5.97 (2.35) | 3.73 (2.39) | t=3.767 *** |
| Disruption of family leisure | 4.23 (1.95) | 3.00 (2.24) | t=2.337 * |
| Disruption of family interactions | 4.91 (2.28) | 3.13 (2.16) | t=3.227 *** |
| Effect on physical health | 0.83 (1.05) | 0.43 (0.67) | t=1.849 NS |
| Effect on mental health | 1.17 (0.91) | 0.90 (0.47) | t=1.543 NS |
| Global burden score | 21.74 (7.50) | 14.23(7.62) | t=3.998 *** |
| Subjective burden score | 1.60 (0.49) | 1.30 (0.46) | t=2.652 * |

* p<0.05, *** p<0.001, NS = Not Significant

Table 4 shows the correlations between objective family burden and other relevant variables in schizophrenia and OCD. Objective family burden score was positively & significantly correlated with subjective burden in both the groups. Psychosocial dysfunction of OCD patients was significantly associated with objective family burden.

Table 4

Correlations between Objective Family Burden and other Relevant Variables in Schizophrenia & OCD

| | Monthly income | Duration of illness | Duration of treatment | Psycho-social dysfunction | Sub-jective burden |
|--|----------------|---------------------|-----------------------|---------------------------|--------------------|
| Objective Family Burden in Schizophrenia | -0.210 | 0.110 | 0.142 | 0.275 | 0.741 |
| Objective Family Burden in OCD | NS | NS | NS | NS | ** |

** p<0.01, NS = Not Significant

Table 5 shows the correlations between psychosocial dysfunction of patients and areas of family burden in schizophrenia and OCD. In schizophrenia, there was a significant relationship only between dysfunction and disruption of family interactions. In OCD, there were significant positive correlations between dysfunction and financial burden, disruption of family routine, disruption of family leisure, and disruption of family interactions.

Table 5

Correlations between Dysfunction of Patients and Areas of Family Burden in Schizophrenia & OCD

| | Financial Burden | Disruption of Family Routine | Disruption of Family Leisure | Disruption of Family Interactions | Effect on Physical Health | Effect on Mental Health |
|---------------------------------------|------------------|------------------------------|------------------------------|-----------------------------------|---------------------------|-------------------------|
| Dysfunction of Schizophrenic patients | 0.194 NS | 0.224 NS | 0.281 NS | 0.665 ** | 0.179 NS | -0.059 NS |
| Dysfunction of OCD patients | 0.466 ** | 0.466 * | 0.775 ** | 0.762 ** | 0.336 NS | -0.012 NS |

Discussion

Research has consistently underlined the importance of the family in psychiatric disorders. Most of the well-designed studies have focused on families of schizophrenic and affective disorder patients. Non-psychotic disorders have been relatively neglected. The present study arose from the concern that non-psychotic patients, particularly OCD patients, also have dysfunction in psychosocial areas and that these families experience considerable burden due to the ill member.

The findings of the present investigation reveal that patients with schizophrenia have more psychosocial dysfunction than the OCD group. However, there was no significant difference between schizophrenic and OCD patients with regard to dysfunction in the ‘social area’. This shows that both schizophrenic and OCD patients were equally impaired in social functioning. Dysfunction in other areas such as vocational, personal, familial and cognitive functioning was significantly high in schizophrenic group. These groups differed significantly with regard to global dysfunction as well. This finding is in conformity with the results of the study by Veltro et al (1994).

In the present study, families of schizophrenic patients reported greater burden than the OCD group. This finding is not in line with assessment by Veltro et al (1994) who found only modest qualitative and quantitative difference between key relatives of schizophrenic and neurotic patients with regard to their perception of burden. In the present

investigation, it was found that family finances, family routine, family leisure and family interactions were particularly affected. Financial burden was primarily a direct outcome of the loss of the patient’s income, and secondarily due to expenses of treatment. In the present study many relatives of schizophrenics had reported that the illness of their kin had considerably reduced their savings; some families were even forced to take loans. Jayakumar et al (2002b) in a comparative analysis of the burden of care between the key relatives of OCD and schizophrenia reported significantly high burden in OCD group especially in spouse and unemployed caregivers. Some possible reasons for the greater extent of burden in OCD could be due to longer duration and increased severity of symptoms, which the authors have not specifically addressed. However, in this study the difference was not due to the duration of illness or duration of treatment as they were comparable in both groups.

Disruption of family routine was another area in which burden was experienced in schizophrenia. Most families found the patient’s inability to work distressing and inconvenient. Disruption of family interactions was another important and significant aspect of burden in schizophrenics. As a consequence of the patient’s illness, family members tended to be tense and irritable, and had frequent misunderstandings among themselves about caring for the patient. A significant number of caregivers of schizophrenic patients reported reduced interaction with friends and neighbours. Creer & Wing (1975) reported that families of schizophrenics experienced a great deal of internal distress and physical, financial and emotional burden. Hatfield (1978) found that schizophrenic patients disrupted the family’s social life and leisure. Tynes et al (1990) found that relatives experienced frustration with the symptomatic behaviour of their family member with OCD.

The mental and physical health of family members can be affected if an index patient has a psychiatric disorder. The burden of illness on mental and physical health of the family members was, however, comparable in the two groups, suggesting an equal impact in both the illnesses.

The extent and pattern of family burden in schizophrenia in this study is in conformity with the findings reported from India (Gautam & Nijhawan, 1984; Ali & Bhatti, 1988; Gopianth & Chaturvedi, 1992; Chakraborti et al, 1993; 1995; and Roychaudhuri et al, 1995). Certain socio-cultural factors unique to the Indian setting (Giel et al, 1983) would have contributed to this particular pattern of burden. For generations, life in India revolved around the joint family

system that acted as a buffer against stress. But due to rapid industrialization and urbanization, the joint family system is disintegrating and now more and more nuclear families are emerging. Since there was an over representation of nuclear families in the present study, the observation that disruption of family routine and leisure activities as a significant part of burden is not unexpected.

The present study did not show any significant association between psychosocial dysfunction of patients and family burden in schizophrenia. This is not in conformity with the finding of Veltro et al (1994) that the burden perceived by the relatives of schizophrenics was more closely related to the patient's personal/social disability. However, there was found to be a significant association between dysfunction of schizophrenic patients and disruption of family interactions in this study.

Dysfunction of OCD patients was significantly and positively correlated with four main areas of family burden, namely financial burden, disruption of family routine, disruption of family leisure and disruption of family interactions. This is in line with the findings of Leon et al (1995), who conducted a study on the social cost of anxiety disorders, and found that the burden of anxiety disorders extend beyond the direct cost treatment to the indirect costs of impaired social functioning. Cooper (1996) has revealed that about half of the family member of patients with OCD face financial hardships. Another comparative study (Chakrabarty et al, 1993) has documented that financial burden encountered by families of patients with OCD was comparable to that of families of patients with dysthymia and generalized anxiety. Jayakumar et al (2002b) noted deterioration in the quality of relationship of OCD patients with other family members and friends and family stability, although the degree of impairment was comparable to that of schizophrenia.

Before concluding some of the methodological limitations of this study have to be considered. First, the study had relied on the hospital population than the community sample. Second, the study was limited by a small sample size. Third, global rating of the patients' illness could not be done. This could have been correlated with psychosocial dysfunction of patients and family burden. Fourth, emotional climate and interaction patterns within the family, and the social support perceived by both patients and relatives could not be assessed.

An important conclusion of this study is that, though the extent of psychosocial dysfunction in schizophrenic patients

was more, OCD patients were also significantly impaired in their psychosocial functioning with a positive correlation with the burden of care. Similarly, though the extent and pattern of burden among families of schizophrenic patients was more than that among the families of OCD patients, there was considerable burden in the families of OCD patients as well. There appears to be some consensus regarding the measures to reduce burden and increase awareness among caregivers of patients with schizophrenia. These include imparting information, using a problem solving approach to help caregivers to cope more effectively, and offering support both emotional and practical. Psychoeducational interventions that have proved useful in schizophrenia are also based on similar principles of providing education, support and focused help with solving problems. Similar strategies could also be employed with good effort in caregivers of OCD patients. For clinicians dealing with such patients, an awareness of the psychosocial functioning of the patients and the burden of care faced by their families will help in dealing more effectively with these disorders.

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Psychosocial Dysfunction and Family Burden

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