Expressed Emotions in Patients with Obsessive Compulsive Disorder: A Case Control Study

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ABSTRACT

Background: Expressed emotion (EE) is the attitude that the relatives show towards the illness and the person. EE is identified as a direct factor in the relapse of patients with psychological disorders. Literature on EE in anxiety disorders is limited. Role of EE in obsessive compulsive disorder (OCD) may help in better understanding of the role of social factors in OCD. Aim: To compare EE in patients with OCD and compare with controls. Materials and Methods: The sample included 30 cases and 30 age and sex matched controls. The patients were diagnosed as having OCD using International Classification of Diseases-10 Diagnostic Criteria for Research (ICD-10 DCR) criteria. Yale-Brown Obsessive Compulsive Scale (Y-BOCS) was used to assess severity of OCD among patients. General health questionnaire (GHQ) was used to rule out any psychiatric disorder among control population. EE was assessed in cases and controls using Family Emotional Involvement and Criticism Scale (FEICS). Chi-square test and t-test were used to assess the difference between two groups. Results: OCD patients in comparison controls had significantly increased total FEICS score ($P = 0.001$). There was an increase in both subscales of perceived criticism (PC) with $P = 0.001$ and emotional involvement (EI) with $P = 0.001$ in patients with OCD than controls. Conclusion: EE are significantly increased in patients with OCD. EE should be assessed regularly in patients with OCD.

Key words: Emotional involvement, expressed emotions, obsessive compulsive disorder, perceived criticism

INTRODUCTION

Obsessive compulsive disorder (OCD) is anxiety disorder which usually has chronic and follows a waxing and waning course. A majority of patients who are diagnosed with psychological disorders go through rehabilitation during the process of treatment. Relapses and recurrences are common in psychological disorders including OCD. One factor that contributes to such a relapse is expressed emotions (EE) from the relatives that they are living with after initial treatment. EE is the attitude that the relatives show towards the illness and the person. Patients undergo criticism from relatives for not having adequate occupational and interpersonal functioning during the process of recovery.

Various studies have explored the role of psychosocial factors in OCD. An EE is a concept developed to quantify the impact of family factors in schizophrenic relapse. Families are also pathologically involved with OCD patients. Initially the concept and measurement of the EE within families were developed for use in schizophrenia. They were subsequently used for a number of physical and psychiatric conditions, ranging from dementia to diabetes and Parkinson’s.
disease. Assessment of EE has played a major role in the development and evaluation of social treatments of schizophrenia.[5] The family’s EE has been shown to be predictive of outcome in mental and physical illnesses in a variety of cultural settings.[6]

Studies on EE are few among Indian population. High EE was found to predict relapse even in Indian patients with schizophrenia.[7] There is a single cohort study from India on EE in OCD.[8] In view of limited data on EE in OCD we designed this study to compare the EE in OCD patient and normal controls.

MATERIALS AND METHODS

The study sample included 30 patients with OCD and 30 normal individuals in the control group. Purposive sampling method was used in this study. The samples were collected from psychiatry outpatient department. The patients fulfilling International Classification of Diseases-10 Diagnostic Criteria for Research (ICD-10 DCR) for OCD were included as cases. Patients with age range of 18-60 years who gave informed consent for study were taken up for the study. Patients were excluded if they were found to have organic mental disorder or other comorbid psychiatric disorder (except for depression). Thirty normal individuals were matched for age and sex and who had no history of psychiatric disorder were included as control group.

A semi-structured proforma was prepared for this study, which included registration number, age, sex, education, marital status, domicile, mother tongue, type of family, occupation, and family income. Each patient was administered with Yale-Brown Obsessive Compulsive Scale (Y-BOCS).[9] This scale is used to assess the severity of OCD. Family Emotional Involvement and Criticism Scale (FEICS)[10] was used to assess the level of EE in OCD group and same was administered to normal controls group. The FEICS is a self-reporting scale to measure EE. The FEICS has two subscales: Perceived criticism (PC) and intensity of emotional involvement (EI). These two factors are analogous to critical comments and emotional overinvolvement, the two main factors that are measured through the Camberwell Family Interview.[11] Cronbach’s alpha for both the subscales was 0.74-0.82. Confirmatory factor analysis showed that each item loaded on its proposed factor and not with the other factor. The subscales exhibited correlations and partial correlations with various scales, such as the Family Adaptability and Cohesion Evaluation Scales,[12] Interpersonal Support Evaluation List,[13] and Symptom Checklist-90 (SCL-90).

The scale consists of 14 items marked 1 to 5. The PC subscale score is obtained from the total of odd numbered items and the EI subscale score is obtained from the total of odd numbered items of FEICS. General health questionnaire (GHQ) was used to screen for any psychiatric morbidity among control population. Statistical analysis was done using Statistical Packages for Social Sciences (SPSS) version 13 software. Chi-square test and t-tests were used to assess the difference between two groups, P < 0.05 is considered as statistically significant.

RESULTS

Sociodemographic details among groups are described in Table 1. The mean age of patients with OCD was 25.57 ± 4.79 and 26.50 ± 4.83 years in control group. Both groups had 21 males (70.0%) and nine females (30.0%). There was no difference among two groups in educational status and socioeconomic status. There was significant difference (P = 0.004) of marital status among two groups. More of OCD patients were single and individuals in control group were married. OCD patients lived in nuclear family than control group (P = 0.044). Most of the OCD patients were unemployed.

| Table 1: Comparison of the sociodemographic variables |
| Variables                      | OCD group (n=30) | Control group (n=30) | χ² | P-value |
|-------------------------------|------------------|----------------------|----|---------|
| Age (years)                   | 25.57±4.79       | 26.50±4.83           | -0.752 | 0.455  |
| Sex                           |                  |                      |     |         |
| Male                          | 21 (70.0%)       | 21 (70.0%)           | 0.000 | 1.000   |
| Female                        | 9 (30.0%)        | 9 (30.0%)            |     |         |
| Education                     |                  |                      |     |         |
| Primary                       | 2 (6.7%)         | 1 (3.3%)             | 4.762 | 0.313   |
| High school                   | 3 (10.0%)        | 9 (30.0%)            |     |         |
| PUC                           | 12 (40.0%)       | 9 (30.0%)            |     |         |
| UG                             | 10 (33.3%)       | 10 (33.3%)           |     |         |
| PG                             | 1 (3.3%)         | 3 (10.0%)            |     |         |
| Marital status                |                  |                      |     |         |
| Single                        | 22 (73.3%)       | 11 (36.7%)           | 8.148 | 0.004   |
| Married                       | 8 (26.7%)        | 19 (63.3%)           |     |         |
| Type of family                |                  |                      |     |         |
| Nuclear                       | 29 (96.7%)       | 24 (80.0%)           | 4.043 | 0.044   |
| Non-nuclear                   | 1 (3.3%)         | 6 (20.0%)            |     |         |
| Occupation                    |                  |                      |     |         |
| Working                       | 7 (23.3%)        | 27 (90.0%)           | 27.149 | <0.001 |
| Nonworking                    | 23 (76.7%)       | 3 (10.0%)            |     |         |
| Family income                 |                  |                      |     |         |
| 500-1,000                     | 1 (3.3%)         | 0 (0%)               | 1.267 | 0.867   |
| 1,001-3,000                   | 3 (10.0%)        | 4 (13.3%)            |     |         |
| 3,001-10,000                  | 9 (30.3%)        | 9 (30.3%)            |     |         |
| 50,001-10,000                 | 10 (33.3%)       | 11 (36.7%)           |     |         |
| >10,001                       | 7 (23.3%)        | 6 (20.0%)            |     |         |
| Domicile                      |                  |                      |     |         |
| Urban                         | 30 (100%)        | 30 (100%)            |     |         |
| Rural                         | 0                | 0                    |     |         |

OCD – Obsessive compulsive disorder, PUC – Pre-university college, UG – Under graduate, PG – Post graduate
(P < 0.001). All the cases and controls were from urban background. The mean scores of Y-BOCS [Table 2] of patients with OCD are 12.87 ± 3.94 (obsessions), 11.97 ± 3.37 (compulsions), and 25.37 ± 6.96 (total score). EE were assessed in both the groups using FEICS [Table 3]. The mean score of PC in patients with OCD was 24.53 ± 5.89 and control group had 15.10 ± 0.48 with P = 0.001. The mean scores of EI in patients with OCD was 25.33 ± 4.59 and control group had 15.07 ± 0.45 with P = 0.001. The overall mean FEICS scores were 50.70 ± 6.71 and 30.17 ± 0.59 for OCD group and control group, respectively; this was also statistically significant (P = 0.001) between two groups.

**DISCUSSION**

This was a case control study to find the severity of EE among OCD patients in comparison to normal controls. There are no studies on EE in normal adult general population. However, high EE during childhood is predictive of adolescent depressive, aggressive, and delinquency symptoms. This suggest that even in a family without any kind illness may have some baseline EE which may or may not lead to future psychological symptoms. There were more male patients than females. OCD involving Indian patients had reported similar findings with males constituting 67.30% of the sample and female only 32.70% of the sample. There was significant difference between two groups with regards to marital status. A study reported that female OCD patients are as likely to be married as their nonpsychiatric counterparts, but male OCD patients are more likely to remain single. This difference may be due to the early onset of OCD in males and it is likely that people with OCD choose not to get married, as it can lead to adjustment problem for the partner and for themselves to adjust in the marital life. There was a significant difference between the two groups in the type of family.

**Table 2: Y-BOCS severity rating of OCD patients**

| Variable (n=30) | Mean±SD |
|----------------|---------|
| Obsession      | 12.86±3.936 |
| Compulsion     | 11.96±3.368 |
| Total          | 25.36±6.960 |

Y-BOCS-Yale-Brown Obsessive Compulsive Scale, OCD – Obsessive compulsive disorder

**Table 3: Rating of EE using FEICS scale**

| Variables                  | OCD group | Control group | t     | P-value   |
|----------------------------|-----------|---------------|-------|-----------|
| Perceived criticism (PC)   | 24.53±5.89| 15.10±0.48    | 8.746 | 0.001     |
| Emotional involvement (EI)| 25.33±4.59| 15.07±0.45    | 12.196| 0.001     |
| Total score                | 50.70±6.71| 30.17±0.59    | 16.705| 0.001     |

EE – Expressed emotion, FEICS – Family Emotional Involvement and Criticism Scale, OCD – Obsessive compulsive disorder

However, both groups were dominated by nuclear families. As a result of industrialization, there is an increasing trend towards changing to nuclear families. Earlier observations show that the neurotic disorder occurs more in nuclear families, this is due to the joint family system breaking up and this transitional period in the social life was responsible for higher neurotic disturbances. There was significant difference between two groups with regard to occupation. Hollander et al. reported that 41% were unable to work due to OCD symptoms, with an average loss of 2 years of wage. There was no difference in family income among two groups. This could be because all the samples were from an urban background and most of the key caregivers were either skilled government employees or businessmen.

Among the five EEs; critical comments, hostility, and emotional over involvement have been shown to be the most predictive of relapse. The FEICS was used to assess EE. Mean scores of PC, EI, and total FEICS were significantly more in patients with OCD (P = 0.001 for all the three areas). The present study indicates high level of EE in OCD families. Both PC and EI seem to indicate significant family pathology. There is a single Indian study on EE in OCD patients with similar findings. This was a cohort study and FEICS scores were compared to normative data suggested by the developer of the scale. This study included 35 patients with OCD and patients were assessed for EE using FEICS. The Y-BOCS was used to measure severity of obsessive compulsive symptoms. The OCD patients had an increased score on EE with an increase in both subscale of PC and EI. There was no significant correlation between scores on these scales and Y-BOCS duration of illness or age. Patients are more likely to relapse when there is high EE present in their living environment. The patient falls back into a cycle of relapse and rehabilitation. Educating the family about mental illness is one way that EE can become lower and no longer an issue. Knowledge of the disorder will help them to understand and recognize certain behavior and adjust to them. In a study on model of relapse in OCD, it is hypothesized that relapse is likely when patients lack coping skills and social support or when they experience high EE.

**CONCLUSION**

The present study has shown that patient with OCD experienced considerable degree of EE. This has important implication for management of patient with OCD. For psychiatry professionals dealing with OCD, an awareness of the nature of the problem faced by the patient and family will help them in dealing more effectively with the patient and his family.
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