# EXPRESSED EMOTIONS IN OBSESSIVE COMPULSIVE DISORDER

## SHANMUGIAH A., MATHEW VARGHESE & SUMANT KHANNA

### **ABSTRACT**

Social factors are recognised to play an important role in Obsessive compulsive Disorder. There is some evidence that expressed emotions may be high in Obsessive Compulsive Disorder. However, no study has looked at the concept of Expressed Emotions in Obsessive Compulsive Disorder in India. In the current study, 35 patients diagnosed as OCD according to ICD-10 DCR were assessed for Expressed Emotions using Family Emotional Involvement and Criticism Scale. The OCD patients had an increased score on expressed emotions with an increase in both subscales of perceived criticism and emotional involvement, as compared to the normative data suggested by the developers of the scale. There was no significant correlation between scores on these scales and Y-BOCS, duration of illness or age. The relevance of these factors in the pathogenesis and maintenance of the illness, and as predictive variables to therapy, needs to be explored.

Key words: Expressed emotions, Obsessive Compulsive Disorder

Various social factors have been implicated to play a role in Obsessive Compulsive Disorder, although this has been poorly studied (Khanna, 1999). Life events preceding onset of illness have been significantly associated with OCD (Khanna, et al., 1988) and these findings have been replicated. The social adjustment of subjects with OCD has also been found to be poor (Khanna et al., 1988a). The fact that factors within the family can influence both the pathogenesis of the disease and effect it's course and outcome has been recognised.

Expressed emotions refers to family members' feelings about an identified patient and includes emotional over-involvement, criticism and hostility. In a meta analysis of research in this area, Butzlaff and Hooley (1998) determined the average effects sizes for prediction of relapse for patients with affective disorder and with schizophrenia to be substantial and statistically significant. Similar results were noted in the few

studies on eating disorders.

Very few studies have explored the role of Expressed emotions in Obsessive Compulsive Disorder. 46% of fathers and 76% of mothers of 49 children with OCD symptoms exhibited high levels of EE (Hibbs & Hamburger, 1991), rates that were 2-3 times higher for parents of OCD children than for parents of non-psychiatric controls. Parents with high EE ratings had more psychiatric diagnosis as well as more family conflict and marital discord. An unpublished study with an adult sample did not find a link between pretreatment OCD symptoms and EE relevant variables (Steketee, 1997).

Methodologically, assessment of EE is classically measured by coding the audiotapes of a 45 minute - 2hour semistructured interview with significant family members (Vaughan & Leff, 1976), a procedure referred to as the Camberwell family Interview. Even when the interview is shortened to a 5 minute speech sample (Gift et

#### **EXPRESSED EMOTIONS IN OCD**

at., 1985), it still requires considerable time to code the audiotapes.

This led to the development of self reporting scales. The level of Expressed Emotion Scale is a scale administered to schizophrenic patients to report on his/her perception of family affective environment (Cole & Kazarian, 1988). However correlations of the scale and its subscales with criterion measures were not reported. The scale is also long and specific to schizophrenia. Another scale which measures critical comments, and emotional over-involvement from the relative's perspective has also been developed (Docherty & Serper, 1990), but this assesses the relative's attitude, not the recipient's attitude. To overcome these lacunae, the Family Emotional Involvement and Criticism Scale (FEICS) was developed (Shields et al., 1992).

The FEICS has two sub-scales: Perceived Criticism and intensity of Emotional Involvement. These two factors are analogous to critical comments and Emotional Over-involvement, the two main factors that are measured through the Camberwell Family Interview. 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 (Olson et al., 1985), Interpersonal Support Evaluation List (Cohen & Hoberman, 1983), SCL-90 depression and anxiety scales and Sociodemographic variables.

Indian studies on expressed emotions have been few. Although high EE was found to predict relapse in schizophrenia, there were differences noted in the subscale involvement in Chandigarh (Wig et al., 1987, 1987a). The need for Indian studies therefore seems valid. The current study explores the relationship between OCD and Expressed Emotions in an Indian population using a self-rating scale.

### **MATERIAL AND METHODS**

The subjects for the study comprised 35

consecutive patients with obsessive compulsive disorder, who presented to the Obsessive Compulsive Disorder Clinic. These patients were diagnosed as suffering from OCD according to the criteria laid down by International Classification of Diseases-10 (WHO, 1993). Patients in the age range of 25-40 years were recruited. Any comorbid personality disorder, organic disorders and substance use disorders were exclusion criteria. Informed consent was obtained and the patients were administered the following tools.

1. Family Emotional Involvement and Criticism Scale(FEICS) (Shields et al.,1992). This is a 14 item scale on which the items are then clubbed to derive two subscales: Perceived Criticism (PC) and Intensity of Emotional Involvement (EI). The initial standardisation of the scale was done on 83 respondents from a Family Medicine Centre (Shields et al.,1992). Both the scales have 7 items each and are scored on a Likert scale ranging from 0-5 (minimum 0 to a maximum of 35 on each scale).

2. Yale-Brown Obsessive-Compulsive Symptoms Scale (Goodman et al., 1989). This is a 10 item scale used to measure severity of obsessive compulsive symptoms in diagnosed patients having this disorder. The reliability and validity of this scale has been established, and it has been used in various different cultures.

#### RESULTS

This study was conducted on 35 patients with the obsessive compulsive disorder. The mean age of patients was  $25.86\pm6.8$  years. Majority of the patients were male (83%). The mean duration of the illness was  $6.23\pm5.17$  years. The mean Y-BOCS total score was  $7.4\pm5.17$  and FEICS score (total) was  $39.46\pm8.96$ . The mean score on the Perceived Criticism (PC) scale was  $18.8\pm4.7$  and on the intensity of Emotional Involvement (EI) scale was  $20.66\pm6.19$ . The comparative data from the original study by Shields et al. (1992) refers to a mean score of  $1.66\pm0.67$  for PC and  $3.05\pm0.91$  for EI. As the two samples were not strictly comparable, no statistical analysis was applied for abnormality

#### SHANMUGIAH et al.

on these scales, although the scales in the OCD population were many fold higher.

The scores obtained on the two scales were then subjected to Pearsons correlation. No significant correlation was obtained between sample variables, Y-BOCS total scores and FEICS total scores as well as subscales scores and severity of illness (Table1)

TABLE 1

CORRELATION CO-EFFICIENT BETWEEN FEICS AND

OTHER VARIABLES.

	Y-BOCS	AGE	Duration of Illness
EE Total	0.264	0.325	0.919
PC	0.144	•	-
EI	0.768	•	
Y-BOCS	•	0.328	0.071

All values are not significant.

#### DISCUSSION

Various studies have explored the role of social factors in OCD (Steketee et al., 1993). However the role of Expressed Emotions in OCD specifically has not been addressed. Expressed Emotions is a concept developed to quantify the impact of family factors in schizophrenic relapse (Vaughn et al., 1982, 1984; Warner & Atkinson 1988; Parker et al., 1988). Families are also pathologically involved with OCD patients (Hibbs & Hamburger , 1991). The present study found high levels of Expressed Emotions in OCD families. Both Perceived Comments and Emotional Involvement seem to indicate significant family pathology, but their relationship to pathogenesis or maintenance has not been adequately addressed in this study design.

Some studies have looked at EE and related concepts in relationship with treatment outcome in OCD. Using unvalidated interview measures, Steketee (1993) examined patient's and relatives perceptions of family interactions in relation to outcome 9 months after behaviour therapy. Poor family functioning assessed

pretreatment, as well as negative household interactions (especially anger and criticism). predicted fewer gains at follow-up. In a study of children with OCD treated with pharmacotherapy. it was found that children living with high EE parents had poorer global adjustment at 2-7 year followup compared with children in low EE households, but EE failed to predict OCD symptoms per se (Leonard et al., 1993). About one third of the patients also received exposure and response prevention, so treatment outcome as a function of the therapeutic strategy used is not clear. Relative's over involvement and hostility was also found to predict higher rates of dropout from behaviour therapy in 60 OCD subjects (Chambless) & Steketee, 1999). Higher hostility, as measured by the Camberwell Family Interview, was related to poorer outcome ratings and poorer social adjustment: Higher perceived criticism was also predictive of worse response on target ratings. In contrast, non-hostile criticism was associated with better outcome on the behavioral avoidance test. The relationship of EE to outcome was not moderated by type of relative, diagnosis, amount of contact with relative, or use of psychotropic medication.

The current study being exploratory in nature suffers from certain pitfalls. An adequately matched normal control sample would have made the findings more robust, rather than comparing with the norms from the report by Shields et al. (1992). Longitudinal assessments and control for treatment interventions would have addressed the issue of the impact of Expressed Emotions on the course of OCD. The population of OCD studied was at various phases of therapy, which were not controlled for, and was actually mildly symptomatic as reflected by YBOCS scores. Untreated patients or patients who were unresponsive to pharmacological interventions. or longitudinal assessments are further refinements which can be incorporated in future research designs.

With these limitations, the current exploratory study establishes that Expressed Emotions are raised in the families of OCD

#### **EXPRESSED EMOTIONS IN OCD**

probands. Subsequent studies will have to explore prognostic and therapeutic implications of these findings.

#### REFERENCES

- Butziaff, R.L. & Hooley, J.M.(1988) Expressed emotions and psychiatric relapse: A meta-analysis. *Archives of General Psychiatry*, 55, 547-552.
- Chambless, D.L. & Steketee, G.(1999) Expressed emotion and behaviour therapy outcome: A prospective study with Obsessive Compulsive and Agoraphobic outpatients. *Journal of Consulting and Clinical Psychology*, 67, 658-665.
- Cohen, S. & Hoberman, H. (1983) Positive events and social supports as buffers of life change stress. *Journal of Applied Social Psychology*, 13, 99-125.
- Cole, J.D. & Kazarian, S.S. (1988) The level of Expressed Emotion scale: a new measure of expressed emotion. *Journal of Clinical Psychology*, 44, 392-397.
- Docherty, N.M. & Serper, M.R. (1990) Development and preliminary validation of a questionnaire assessment of expressed emotion. *Psychological Reports*, 67, 279-287.
- Gift, T.E., Colle, R.E. & Waynne, L.C. (1985) A hostility measure for use in family contracts. *Psychiatry Research*, 15, 205-210.
- Goodman, K., Price, L.H., Rassmussen, S.A., Lazure, C., Fleischmann, L., Hill, C.L., Heninger, G.R. & Charney, D.S. (1989) The Yale-Brown Obsessive Compulsive scale II: validity. *Archives of General Psychiatry*, 46, 1012-1016.
- Hibbs, E.D., & Hamburger, S.D. (1991)
  Determinants of expressed emotions in families
  of disturbed and normal children. *Journal of*

Psychology and Psychiatry, 32, 757-770

- Khanna, S. (1999) Psychosocial issues in the management of Obsessive Compulsive Disorder. Presented at 13th Annual Conference of Indian Association for Social Psychiatry, Bangalore.
- Khanna, S., Rajendra, P.N. & Channabasavanna, S.M. (1988) Life events at onset of Obsessive Compulsive Disorder. *International Journal of Social Psychiatry*, 34, 305-309.
- Khanna,S., Rajendra, P.N. & Channabasavanna, S.M. (1988a) Social adjustment in Obsessive Compulsive Disorder. International Journal of Social Psychiatry, 34, 118-122.
- Leonard, H. L., Swedo, S. E., Lenane, M.C., Rettew, D.C., Hamburger, S.D., Bartko, J.J. & Rappaport, J.L. (1993) A 2-7 year follow up study of 54 obsessive compulsive children and adolescents. *Archives of General Psychiatry*, 50, 429-439.
- Olson, D.H., McCubbin, H.I., Barnes, H., Larsen, A., Muxem, M. & Wilson, M. (1985) Family Inventories. St. Paul, MN: University of Minnesota, Family Social Science.
- Parker, G., Johnston, P. & Hayward, L. (1988) Parental Expressed Emotion as a predictor of Schizophrenic relapse. *Archives of General Psychiatry*, 45, 806-13.
- Shields, C.G., Franks, P., Harp, J.J., McDaniel, S.H. & Campbell, T.L. (1992) Development of the Family Emotional Involvement and Criticism Scale (FEICS)- A self report scale to measure Expressed Emotions. *Journal of Marital and Family Therapy*, 18, 395-407.
- Steketee, G. (1993) Social support and treatment outcome of Obsessive Compulsive Disorder at 9 month follow up. Behavioral

#### SHANMUGIAH et al.

Psychotherapy, 21, 81-95.

**Steketee, G. (1997)** Disability and Family burden in Obsessive-Compulsive disorder. *Canadian Journal of Psychiatry*, 42, 919-928.

Vaughn, C. & Leff, J.P.(1976) The influence of family life and social factors on the course of psychiatric illness: a comparison of schizophrenic and neurotic patients. *British Journal of Psychiatry*, 129, 125-137.

Vaughn, C.E., Snyder, K.S., Freeman, W., Jones, S. & Faloon, R. (1982) Family factors in schizophrenic relapse - A replication. Schizophrenia Bulletin, 8, 425-426.

Vaughn, C.E., Snyder, K.S., Jones, S. Freeman, W.B, & Faloon, R. (1984) Family factors in schizophrenic relapse - Replication in California of British Research on EE. Archives of General Psychiatry, 41, 1169-1177.

Warner, R. & Atkinson, M. (1998) The relationship between schizophrenic patient's

perceptions of their parents and the course of their illness. *British Journal of Psychiatry*, 153, 344-53.

Wig, N.N., Menon, D.K., Bedi, H., Ghosh, A., Kuipers, L., Leff, J., Korten, A., Day, R., Sartorius, N., Ernberg, G. & Jablensky, A. (1987) Expressed emotions and schizophrenia in North India I. Cross-cultural transfer of ratings of relatives expressed emotions. *British Journal of Psychiatry*, 151, 156-160.

Wig, N.N., Menon, D.K., Bedi, H., Leff, J., Kuipers, L., Ghosh, A., Day, R., Korten, A., Ernberg, G., Sartorius, N., & Jablensky, A. (1987a) Expressed emotions and schizophrenia in North India II. Distribution of expressed emotions components among relatives of schizophrenic patients in Aarhus and Chandigarh. British Journal of Psychiatry, 151, 160-165.

World Health Organization (1993) The ICD-10 Classification of Mental and Behavioural Disorders' Diagnostic Criteria for Research. Geneva: WHO.

SHANMUGIAH.A., D.P.M..M.D., Senior Research Officer, MATHEW VARGHESE, M.D., Additional Professor, SUMANT KHANNA\*, M.D., Ph.D., M.A.M.S., M.R.C. Psych, Additional Professor, Department of Psychiatry, National Institute of Mental Health and Neuro Sciences, Bangalore-560029

<sup>\*</sup> Correspondence