

OBSESSIVE-COMPULSIVE SYMPTOMS IN CHRONIC SCHIZOPHRENIA: A NEW IDEA OR AN OLD BELIEF ?

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ABSTRACT

Obsessive-compulsive (OC) symptoms during the course of schizophrenia have been reported, yet the incidence and significance of this finding is still unclear. This study was undertaken to determine the prevalence of OC symptoms among chronic schizophrenic patients and to systematically identify them. 101 patients satisfying DSM-IV diagnosis of chronic schizophrenia were assessed for OC symptoms. All patients were also rated on the Yale-Brown Obsessive Compulsive Scale for the severity of their symptoms. The study revealed that 26.7% of the chronic schizophrenic patients had significant OC symptoms with a high prevalence in the age group below 35 years. OC symptoms were more severe in patients with duration of illness more than 5 years. The OC symptoms were more prevalent among paranoid schizophrenics with the frequent obsessions being that of contamination, sexual and aggressive thoughts and frequent compulsion was need to ask or confess.

Key words : Obsessions, compulsions, chronic schizophrenia

Obsessive-compulsive (OC) phenomena has been described in various forms as a part of schizophrenia for over 100 years. Early clinicians considered OC phenomena either as a problem or an integral part of schizophrenia (Stengel, 1945). Gordon (1926) noted that obsessive compulsive symptoms could occur in depressive states as well as in schizophrenia. The clinical and neurobiological implications of OC phenomena in schizophrenia still remains obscure. This is partly due to the traditional criteria for OC symptoms that patients show critical insight and resist the OC symptoms, which is difficult to maintain in schizophrenic patients. Thus the OC symptoms of schizophrenia may offer unique opportunity to evaluate the discrete nature of OC phenomena in schizophrenia (Hwang & Lewis, 1994).

Whether schizophrenia with OC features turns out to be a distinct disorder or schizophrenia has an additional clinically significant

dimension of psychopathology, or a comorbid condition with two distinct and coexisting disorders, is still not clear.

The following study was conducted to look into these aspects and was planned to assess - prevalence, type and severity of OC symptoms in patients with chronic schizophrenia; and various phenomenological factors affecting them.

MATERIAL AND METHOD

The sample was derived from a followup cohort of patients attending psychiatric outpatients section of general municipal hospital. 101 patients were randomly selected from this group on the basis of having a diagnosis of schizophrenia of more than two years duration as per the DSM-IV (A.P.A., 1994) diagnostic criteria. A special proforma was prepared to collect the required demographic, phenomenological and psychometric variables.

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After informed consent, the patients were interviewed in detail. Patients who endorsed having persistent unwanted ideas not related to their delusions were considered to have obsessions. All the patients were also rated on the Yale Brown Obsessive Compulsive Scale (YBOCS) (Goodman, 1989) to assess the severity of their obsessions and compulsions.

The collected data was tabulated and the patients were divided into two groups viz. index group : those schizophrenics having OC symptoms and control group : those schizophrenics not having any significant OC symptoms.

Both the groups were then compared on the various sociodemographic, phenomenological and psychometric variables and tests of statistical significance were applied.

RESULTS

The population under study consisted of 101 patients with mean age of 34.51 years (s.d.=10.43 years) and age ranging from 16 to 63 years. There were 59 males (58.41%) and 42 females (41.58%). Most of the patients were from low or lower middle socioeconomic class with a poor educational background with a large number being unemployed. 27 (26.78%) of 101 patients were found to have obsessions, compulsion or both with most of the patients showing both OC symptoms together (85.2%). Only 4 (14.8%) patients were having obsessions alone while none of them had only compulsions.

The principal obsessions and compulsions endorsed by these patients are listed in table (1a & 1b).

The severity of OC symptoms was rated on YBOCS. The scores ranged from 8 to 36 with mean score of 19.55 (s.d.=7.94). It was interesting to note that the severity of OC symptoms as evident by YBOCS scores increased with the chronicity of the illness. Severity of OC symptoms as measured by YBOCS scores was much higher in patients with duration of illness more than 5 years (mean score = 23) compared to patients with duration less than 5 years (mean

score = 16). This difference was found to be statistically significant as seen in table 2.

When both the groups were assessed on sociodemographic and phenomenological variables, it was noted that the prevalence of OC symptoms was significantly more in the age group of less than 35 years. However, no significant differences were found in the gender, socioeconomic status, educational status, occupational status or marital status of schizophrenic patients with or without OC symptoms (not included in table). A higher incidence of OC symptoms was found among paranoid schizophrenics as compared to the other types, which was statistically significant.

TABLE 1

TYPES OF OC SYMPTOMS IN SCHIZOPHRENIA

Table 1a : Type of obsessions (N=27)

Type	N=27 (100%)
Contamination	7 (25.92%)
Pathological doubt	5 (18.51%)
Somatic	3 (11.11%)
Need for symmetry	2 (7.40%)
Aggression	6 (22.22%)
Sexual	7 (25.92%)
Other	3 (11.11%)

Figure in parenthesis are percentages

Table 1b : Type of compulsions (N=27)

Type	N (%)
Checking	6 (26.08%)
Washing	7 (30.43%)
Counting	2 (8.69%)
Need to ask or confess	10 (43.47%)
Symmetry	1 (4.34%)
Hoarding	1 (4.34%)
Others	2 (8.69%)

Figure in parenthesis are percentages

TABLE 2
SEVERITY OF OC SYMPTOMS IN SCHIZOPHRENIA

Duration of schizophrenia (yrs)	N=27	Y-B score	
		Mean	S.D.
5 years or less	13 (48%)	16	6.68
More than 5 years	14 (52%)	23	8.30

t=2.42; df=25, p<0.05

TABLE 3
PREVALENCE OF OBSESSIONS AND COMPULSIONS IN RELATION TO AGE AND TYPE OF SCHIZOPHRENIA

Variable	Index group (N=27)	Control group (N=74)	Total (N=101)
Less than 35 years	19 (70.37%)	34 (45.95%)	53
35 years or more	8 (29.63%)	40 (54.05%)	48
Type of schizophrenia			
Paranoid	20 (74%)	35 (47.30%)	55
Others	7 (36%)	39 (52.70%)	46

*X²=4.738; df=1, p<0.05

**X²=5.713; df=1, p<0.01

However, the age of onset, number of psychiatric hospitalizations or present symptomatology did not reveal any significant differences between both the groups (table 3).

DISCUSSION

The purpose of this study was to determine the frequency of obsessive compulsive disorder in schizophrenic patients with the use of standardized diagnostic criteria. Several studies have systematically evaluated the frequency of OC symptoms in patients with schizophrenia, with results ranging from a low of 3.5% to a high of 25% (Rosen, 1957; Fenton & McGlashan, 1986; Berman *et al.*, 1995). However most of these studies had not used standardized diagnostic criteria. Hence the percentage of 26.78 which we have found in

our study using standardized criteria is significant.

The differences found in previous study may be explained by differences in method of study.

Earlier workers suggested that obsessions are a preliminary sign of schizophrenia while others think that obsessional thoughts are a neurotic defence against psychotic decompensation. Currently the two disorders are considered different disorders with no true relationship to one another (Shah *et al.*, 1995). However, our study proposes some relationship between schizophrenia and OC symptoms as it was found that severity of OC symptoms on YBOCS increased with the chronicity of schizophrenia. As chronicity per se is one of the most powerful predictor of outcome in schizophrenia, the prognostic significance of presence of obsessive compulsive symptom/s in association with chronicity, still remains unanswered. There are few studies which report a poor outcome in social relationships, psychopathology and global functioning in schizophrenic patients with OC symptoms (Fenton, 1996).

It was evident from the study that the prevalence of OC symptoms is significantly more in young schizophrenics. This finding is in line with that of Berman *et al.* (1995). Fenton and McGlashan (1986) in a long term retrospective review of schizophrenic patients with significant OC symptoms found that these patients suffer from a worse outcome when compared to a match sample of schizophrenics without OC symptoms. High prevalence of OC symptoms in young schizophrenics probably explains this. Studies by Berman *et al.* (1995) have reported the OC schizophrenics to be less often employed and married. This was not found so in our study. This may be because of better social support systems available here.

Regression to anal stage can be considered a psychodynamic etiopathogenic factor behind schizophrenia (McGlashan, 1995). Obsessive compulsive disorder is also proposed to be associated with anal fixation (Jenike,

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1995). This probably explains a very high incidence of OC symptoms in paranoid schizophrenics found in our study. Possible biochemical basis for this finding can be given through post synaptic partial serotonin agonist m-chlorophenyl piperazine (m-CPP) which has found to have effect in exacerbation of OC symptoms as well as psychotic symptoms like delusions (Khanna 1990; Hollander, 1993; Zohar, 1987, Iqbal, 1991).

This can have an implication on the drug treatment of these patients. An exacerbation or de novo occurrence of obsessive compulsive symptoms has been described in schizophrenic patients receiving clozapine (Baker, 1992). A deficient serotonin may explain this, because clozapine causes central serotonergic receptor (esp. 5HT₂ receptor) blockade (Coward, 1992). However, there are several studies contradicting this relationship between OC symptoms and clozapine treatment (Gaertner, 1989; Safferman, 1991; Naber, 1992; Ghaemi, 1995).

OC phenomena in patients of schizophrenia continue to challenge clinicians in terms of differential diagnosis and clinical management. A favourable outcome has been reported with the use of clomipramine or fluoxetine in addition to the psychotropic medication in these patients (Baker, 1992; Zohar, 1993; Hwang, 1993; Tejera, 1993; Sewell, 1994 & Berman, 1995). Hwang (1994) has however, suggested a systematic study of the use of S.S.R.I.'s in patients of schizophrenia with OC symptoms. The patients in our study have been started on clomipramine and response to treatment on follow-up is awaited.

In this study we have found strong clinical and epidemiological evidence of OC symptoms in schizophrenia. There is some evidence suggesting OC symptoms as a part of schizophrenic process. However this cannot be said for sure. Schizophrenics with OC features may be heterogeneous in terms of underlying pathophysiological mechanisms. At present it is not clear whether this subgroup is best conceptualized as a distinct schizophrenic

subtype, as schizophrenia with prominent OC dimension or as a subset of schizophrenic suffering from comorbid obsessive compulsive disorder in schizophrenia. Perhaps given the heterogeneity in its clinical presentation, schizophrenics with OC symptoms may be found to encompass all three of these processes.

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