

# Obsessive Compulsive Symptoms as Co-morbidity among Schizophrenics

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**Background.** Co-morbidity with obsessive-compulsive symptoms is often misdiagnosed or even neglected by psychiatrists. It has been suggested that obsessive-compulsive co-morbidity leads to a poorer clinical course, lower levels of functioning, and longer periods of hospitalization compared with schizophrenics who are not obsessive-compulsives. Present study aims to address the issue by exploring the co-morbidity of obsessive-compulsive symptoms in schizophrenia and to see their relationship in clinical setting.

**Methods.** The study was conducted at Department of Psychiatry, Services Institute of Medical Sciences & Services hospital, Lahore from September 2003 to May 2004. One hundred and eighty patients with schizophrenia diagnosed on the basis of DSM-IV were included in the study. Positive and Negative Syndrome Scale for Schizophrenia (PANSS) was administered to assess the severity of the positive and negative symptoms. Same patients were evaluated for obsessions and compulsions using Padua Inventory (PI).

**Results.** Sample of the patients having schizophrenia co-morbidity with obsessive compulsive symptoms was having mean age of 32 years. Among them, 45.6 % were males, 54.6 % were females and 78 (43.3 %) patients with schizophrenia were having Obsessive Compulsive symptoms. Results show that Obsessive Compulsive symptoms were significantly comorbid with schizophrenia. The correlation was significant for positive and general psychopathology symptoms, where as, no significant relationship was found for negative symptoms.

**Conclusion.** Obsessive Compulsive symptoms significantly co morbid in patients suffering from schizophrenia with positive symptoms.

**Keywords.** Obsessive compulsive, Schizophrenia.

## Introduction

Co-occurrence of psychotic and obsessive compulsive symptoms was first reported nearly 70 years ago<sup>1</sup>. Obsessive compulsive symptoms have been observed in a substantial proportion of schizophrenic patients<sup>2</sup>. Epidemiological reviews of schizophrenia revealed that the probability for co-morbidity with Obsessive Compulsive Disorder (OCD) is 3.5% to 15%<sup>3</sup>. One study showed significant correlation of schizophrenia with obsessive compulsive symptoms and frequency of obsessive compulsive symptoms in schizophrenia was found to be around 40%<sup>1</sup>. Another study examining obsessive-compulsive phenomenon in schizophrenic and schizoaffective disorders has shown a prevalence of such phenomena in 1% to 60% of schizophrenic or schizoaffective patients<sup>3</sup>. One of the study conducted in local clinical setting showed significant high correlation between OCD and psychosis<sup>4</sup>. On the contrary, the findings of one of the previous study showed no correlation between obsessive compulsive symptoms and the type and severity of psychosis<sup>5</sup>. In developing countries the co-morbidity is often

neglected and patients suffering from these disorders sometimes never recover completely. The treatment modality is more focused on the schizophrenic symptoms and not on the associated illnesses.

Co-morbidity with obsessive-compulsive symptoms is often misdiagnosed or even neglected by psychiatrists. Saxena et al suggested that obsessive-compulsive co-morbidity leads to a poorer clinical course, lower levels of functioning, and longer periods of hospitalization compared with schizophrenics who are not obsessive-compulsive<sup>6</sup>. In the light of the above - mentioned researches, present study aims to address the issue by exploring the co-morbidity of obsessive - compulsive symptoms in schizophrenia and to see their relationship in clinical setting. This will help in the better understanding of the illness, which might lead to improved therapeutic strategies.

## Methods

This was a descriptive study conducted at Department of Psychiatry, Services Institute of Medical

Sciences and Services Hospital, Lahore from September 2003 to May 2004.

One hundred and eighty patients suffering from schizophrenia, diagnosed on the basis of DSM- IV were included. This was a purposive sampling. To measure the intensity and severity of schizophrenia, sample was assessed on Positive and Negative Syndrome Scale for Schizophrenia (PANSS)<sup>7</sup>. PANSS is a 33 items, seven points rating instrument that evaluates positive, negative and general symptoms on the basis of formal semi structure clinical interview. These seven points represent increasing level of psychopathology. Same patients were evaluated for obsessions and compulsions by administrating Padua Inventory (PI)<sup>8</sup>. PI is a standardized instrument to measure OCD. It has been translated in Urdu language and validated as well. PI consists of 60 scored items, each with 5 response levels. Patients rate each item based on the level of distress it produces (0: not at all to 4: very much). PI evaluates the tendency to worry and doubt (obsessions) and perform behaviour intended to ward off those doubts (compulsions). Summing all the responses scores the test.

SPSS (version 10) was used for statistical analysis. The Frequencies, Means, Standard Deviations, Chi square Analyses and Pearson's Product Moment Correlations were calculated.

## Results

In the present study, the mean age of the total sample was  $31.85 \pm 5.67$  years. Among them 82 (45.6%) were male and 98 (54.4%) were female. Mean age of patients with schizophrenia co-morbid obsessive compulsive symptoms was  $32.05 \pm 6.11$ . Males were 42 (54%) with mean age of  $33.00 \pm 5.76$  years and females were 36 (46%) with mean age of  $31.06 \pm 6.44$  years. Among the total sample of patients with schizophrenia co-morbid with obsessive compulsive symptoms, 24 (31 %) were primary by education, 32 (41%) were middle, 12 (16%) were matric, 8 (10%) were intermediate and 2 (3%) had completed their graduation. Chi square analysis shows significant difference in the educational status.

Categories of patients with schizophrenia co-morbid with obsessive compulsive symptoms ( $\chi^2 = 37.55, p < .05$ ), indicate that majority of patients were primary by education. Most of the patients with obsessive compulsive symptoms in the present study were the eldest 26 (33 %) and 20 (26 %) were second in birth order. Eighteen (23%) were unmarried, 42 (54%) were married while 18 (23%) were divorced.

Chi square analysis shows that there was a significant difference in the marital status of patients co-morbid with obsessive compulsive symptoms ( $\chi^2 = 14.77, p < .05$ ) and 28 (36 %) of the total sample was issueless and 14 (18 %) were having two children.

Table 1 show that 78 (43.3%) schizophrenic patients were having obsessive compulsive symptoms. The frequency of obsessive compulsive symptoms was more in patients with schizophrenia having predominantly negative symptoms (82%), whereas, with positive symptoms were only 32 (18 %).

**Table 1:** Frequency and percentage of co-morbidity with OCS in patients with schizophrenia.

| Comorbid illness              | s   | n  | f %  |
|-------------------------------|-----|----|------|
| Obsessive Compulsive Symptoms | 180 | 78 | 43.3 |

Note: n = total number of cases with schizophrenia

**Table 2:** Pearson's Product Moment Correlation between the scores of PI and PANSS.

| PANSS                   | PI  |        |
|-------------------------|-----|--------|
|                         | R   | p      |
| Positive subscale       | .17 | < .05* |
| Negative subscale       | .02 | > .05  |
| General psychopathology | .18 | < .05* |
| Total scores            | .20 | < .05* |

Note: r = Pearson product moment correlation, ns = non significant, \* $p < .05$

A significant Pearson's Product Moment Correlation was found between the total scores of the PI and positive subscale, general psychopathology and total scores on PANSS,  $r(180) = .17, p < .05$ ;  $r(180) = .18, p < .05$  and  $r(180) = .20, p < .05$ . Suggesting that patients, who scored high on the PI also scored high on positive subtype, general psychopathology subtype and total scores on PANSS, hence support comorbidity of obsessive compulsive symptoms with schizophrenia. On the contrary, non significant Pearson's Product Moment Correlation was found between the scores of PI and negative subscale of PANSS,  $r(180) = .02, p < .05$ , which suggests that patients, who scored high on PI, scored low on the negative subscale of PANSS (Table 2).

## Discussion

Earlier investigations reported a low rate of co-morbidity between schizophrenia and obsessive compulsive symptoms<sup>3</sup>. More recent studies in which systematic diagnostic criteria is used have suggested that the rate of co-occurrence is higher than was previously thought<sup>9,10</sup>.

Present study gives the figures similar to study carried out by Poyurovsky et al<sup>9</sup>. The co morbid diagnosis of schizophrenia and OCD in such a high frequency is reported in the recent studies of other authors and our study shows no difference in the developing and developed countries<sup>3</sup>.

However, there are some studies showing results contrary to the present study. One study showed no correlation between obsessive compulsive symptoms and the type and severity of psychosis<sup>5</sup>. Another study carried out in the local setting found the frequency of the schizophrenia in OCD to be 2%. However, a strong correlation was reported between the two disorders<sup>4</sup>. The differences in the findings were due to different methodologies of present study and above-mentioned study. The previous research primarily included patients having obsessive compulsive disorders and frequency of schizophrenia was recorded, whereas, the present study primarily included patients with schizophrenia and frequency of obsessive-compulsive symptoms was observed.

Another research studied the demographic characteristics and observed that patients with OCD and psychotic features were more likely to be male and single<sup>11</sup>. The findings of the present study are in alignment with the previous study regarding gender, but show contradictory results regarding marital status as it was observed more in the married patients. This may be due to the cultural background of clinical setting from which the study sample has been taken.

The present study had some limitations. One major problem in studying the association between obsessive compulsive symptoms and schizophrenia

is the nosology of obsessive compulsive symptoms. Clearly, these symptoms may be overlooked in patients who experience persistent psychotic symptoms, in part because severe obsessions and compulsions resemble psychosis symptoms<sup>12</sup>. Analysis of the phenomenology of this small patient group raises interesting questions. Do these patients having OCD with psychotic symptoms form a distinct group, a subgroup of OCD, or a subgroup of psychosis? Given the recently reported high prevalence of Obsessive Compulsive symptoms in cases of schizophrenia (20% to 50%), co morbidity per se would be unusual, because the prevalence of OCD in the general population is less than 3%<sup>10</sup>. Increasing evidence suggest that obsessive Compulsive symptoms are not simply expressions of persistent schizophrenic psychosis but that they actually constitute a cluster of symptoms that resembles OCD. Do obsessive compulsive symptoms represent an additional dimension to the existing positive, negative, and disorganization dimensions of schizophrenia? These are the issues, which need to be addressed in subsequent studies in the future.

If obsessive compulsive symptoms in schizophrenia are expressions of OCD and are more than just manifestations of chronic psychosis, the treatment of many patients would be changed to include an anti-obsessional agent<sup>13</sup>. This question also needs attention in future considerations of treatment strategies. Present study may be helpful as a preliminary work for future research in this regard in our own clinical setting.

## Conclusions

The findings of the present study show a high co-morbidity of obsessive-compulsive symptoms in schizophrenia that may have important implications for the application of effective treatment approaches in this difficult-to-treat subgroup of schizophrenic patients.

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## Reference

1. Hwang MY, Losonczy MF, Lee M, Chrichton J. Management of obsessive-compulsive schizophrenia. Program and abstracts from the 153<sup>rd</sup> Annual American Psychiatric Association Meeting: 2000; 13-18.
2. Poyurovsky M, Fuchs C, Weizman A. Obsessive-com-pulsive disorder in patients with first-epi-sode schizophrenia. Research Unit, Tirat Carmel Mental Health Center, Israel. Am J Psychiatry 1999; 156: 1998-2000.
3. Dowling FG, Pato MT, Pato, CN. Comorbidity of obsessive-compulsive and psychotic symp-toms: a review. Department of Psychiatry, SUNY at Stony Brook, USA. Harv Rev Psychiatry 1995; 3: 75-83.

4. Rahman Nk, Chaudhary S, Demographic characteristics of obsessive compulsive disorder and its co morbidity with schizophrenia. Unpublished Manuscript, Centre for Clinical Psychology, University of the Punjab, Lahore: 2000.
5. Eisen JL, Rasmussen SA. Obsessive compulsive disorder with psychotic features. *J Clin Psychiatry* 1993; 54: 373-9.
6. Saxena S, Wang D, Bystritsky A, Baxter, LR Jr. Risperidone augmentation of SRI treatment for refractory obsessive-compulsive disorder. *J Clin Psychiatry* 1996; 57: 303-306.
7. Fiszbein A, Opler LA, Kej SR. Positive and negative syndrome scale (manual). New York Multi Health System, Inc: 1988.
8. Rahman NK, Zafar S. Translation and standardization of padua inventory for obsessions and compulsions. Unpublished manuscript, Centre for Clinical Psychology, University of the Punjab, Lahore: 1989.
9. Poyurovsky M, Hramenkov S, Isakov V, Rauchverger B, Modai I, Schneidman, et al. Obsessive-compulsive disorder in hospitalized patients with chronic schizophrenia. *Eur Psychiatry* 2001; 16: 336-41.
10. Venkatasubramanian G, Ramesh K, Sumant K. Obsessive compulsive disorder and psychosis. *Can J Psychiatry* 2001; 46: 750754.
11. Berman I. Obsessive compulsive symptoms in schizophrenia. *Psychiatric Times. J Clin Psychiatry* 2001; 18: 373-379.
12. Dowling FG, Pato MT, Pato CN. Comorbidity of obsessive compulsive and psychotic symptoms: a review. Department of Psychiatry, SUNY at Stony Brook, USA. *Harv Rev Psychiatry* 1995; 3: 75-83.
13. Fabisch K, Fabisch H, Langs G, Huber HP, Zapotoczky HG. Incidence of obsessive compulsive phenomena in the course of acute schizophrenia and schizoaffective disorder. *Eur Psychiatry* 2001; 16: 336-41.

## Picture Quiz

### What is the diagnosis?

This young man presented with history of generalized seizures and mental retardation.

What is the diagnosis?



Answer on page 35.