

Social anxiety disorder co-morbid with schizophrenia: a cross-sectional study from India

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Abstract

Introduction: The co-morbidity of various psychiatric disorders with schizophrenia (SZ) is increasingly being recognized, with anxiety disorders (ADs) being no exception. Among the various ADs, the co morbidity of social anxiety disorder (SAD) and SZ is not well studied. We hypothesized that the prevalence of SAD in SZ is high. **Objective:** We aimed to study the prevalence of SAD in patients with SZ, and to determine the associated socio-demographic and clinical correlates. **Materials and methods:** This was an outpatient study on consecutively sampled 64 International Diagnostic Criteria (ICD-10) diagnosed treatment-naive SZ patients, who were rated on the Positive and Negative Syndrome Scale (PANSS), the Social Interaction Anxiety Scale (SIAS), the WHO-5 Well-Being Index (WHO-5) and the Global Assessment of Functioning Scale (GAF). **Results:** The prevalence of SAD in or sample of SZ patients was 26.56%. Compared to the SZ without SAD group, the SZ with SAD group had a lower quality of life (QoL) and GAF scores, but, no significant difference in the PANSS ratings. **Conclusions:** The SAD is highly co morbid with SZ, and appears to be independent of psychosis, and is associated with lower QoL and psychosocial functioning. Future follow-up studies should evaluate whether this SAD co-morbidity has any impact on the treatment outcome of SZ.

Key words: Co-morbidity; Schizophrenia; Social Anxiety Disorder; Social Phobia

Introduction

In schizophrenia (SZ) patients, the currently available pharmacological treatments lead to rapid amelioration of positive symptoms. However, the management of negative and cognitive symptoms continue to be challenging. Co-morbid psychiatric disorders are common in SZ; these may worsen the prognosis and have an impact on the psychosocial functioning. The prevalence of anxiety disorders (ADs) in SZ is reported to be 5.4% to 14.9% [1]. Among various ADs, the prevalence of social anxiety disorder (SAD) is reported in the range of 11% to 38% [2-7].

The International Diagnostic Criteria (ICD-10) diagnostic criteria [8], for social phobia (or social

anxiety disorder) are as follows:

“A. Either (1) or (2): 1. Marked fear of being the focus of attention or fear of behaving in a way that will be embarrassing or humiliating. 2. Marked avoidance of being the focus of attention or situations in which there is fear of behaving in an embarrassing or humiliating way.

These fears are manifested in social situations,.....

F. Most commonly used exclusion criteria:....not caused by delusions, hallucinations or other symptoms of disorders such as..... schizophrenia and related disorders,....”

In patients with SZ, the shyness and fear of negative evaluation that is characteristic of SAD may be confused with social withdrawal and fear consequent to

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delusions and hallucinations. The symptoms of SAD may go unrecognized in SZ under the disguise of delusions, hallucinations or negative symptoms [7, 9]. Pallanti, et al. [2] reported that in SZ, SAD is independent of paranoia and significantly associated with disability.

However, few of the earlier studies [2, 7] assessed SAD in patients who were already on treatment; thus, treatment could have masked the expression of SAD symptoms. It is imperative to systematically study the prevalence of SAD in treatment naive SZ patients, as this may have therapeutic and prognostic implications.

Based on the earlier work, we hypothesised that SAD is highly prevalent in SZ. We aimed to determine the prevalence of SAD in treatment naive patients with SZ, and study the associated socio-demographic and clinical correlates.

Materials and Methods

Ours was an outpatient cross-sectional study from an urban psychiatric clinic from India, on treatment seeking and treatment-naive ICD-10 diagnosed [2] schizophrenia patients aged 18 years and above, of both gender; who were consecutively enrolled and purposively sampled.

The patients who were severely ill, or had major medical, organic or substance use disorders, other Axis-I disorders (including other anxiety disorders and depressive disorders), below average intelligence, and cognitive impairment were excluded.

The study was conducted as per the ethical standards of the Declaration of Helsinki, 1975 and written informed

Results

The final study sample was 64, and the males predominated (n=35, 54.69%). The mean age of the subjects was 33.2 years (SD + 2.28).

Table 1 compares the socio-demographic, clinical and rating scores between the SZ+SAD and SZ-SAD groups. Based on a cut-off score of 34/60 on the total SIAS score, 26.56% (n=17) of our sample was found to have SAD, which was also confirmed on the clinical interview by the psychiatrists.

Thus, the prevalence of SAD in our sample of SZ subjects was 26.56%.

*based on > 34/60 total SIAS score; † P < 0.001; ‡P > 0.05

Schizophrenia = SZ; social anxiety disorder = SAD; Positive and Negative Syndrome Scale = PANSS; WHO-5 Well-Being Index = WHO-5; Global Assessment of Functioning scale = GAF; Social Interaction Anxiety Scale = SIAS

consent was obtained from the subjects and their legally authorized representatives.

Tools used:

The Positive and Negative Syndrome Scale (PANSS) [10] is a 30 itemed, seven-point instrument for evaluating the severity of positive, negative and general psychopathology domains in SZ patients.

The Social Interaction Anxiety Scale (SIAS) [11] is a 20-itemed, five-point instrument to assess the prevalence and severity of SAD. A score of 34 or more indicates social phobia.

The WHO-5 Well-Being Index (WHO-5) [12] is a 5-item, six point scale to measure the mental well-being of the individual within the previous two weeks, with the higher scores indicating better quality of life (QoL).

The Global Assessment of Functioning scale (GAF) [13] rates the social and occupational functioning of patients from 0 through 100; higher the score better is the functioning.

Statistical analysis: The subjects with SZ were grouped into those with SAD (SZ + SAD) and those without SAD (SZ-SAD).

The unpaired T test was used for comparing the independent groups and chi-square test was used for comparing the qualitative data. P value less than 0. 05 was considered statistically significant.

A total of 122 patients with SZ were screened; only 64 subjects fulfilled the assessment criteria.

Table-1: Comparison of socio-demographic and other parameters between the SZ+SAD and SZ-SAD groups (N = 64).

Variable	SZ + SAD* (n=17)	SZ – SAD* (n=47)	Statistical significance
	Mean (SD)	Mean (SD)	
Age (years)	31.8 + 11.2	29.4+10.9	P = 0.443, t = 0.77
Gender			Chi square = 0.938, P = 0.333
Males	11	24	
Females	6	23	
Past history of suicidal attempts	9	5	Chi-square = 13.073, P = 0.000†
PANSS			
PANSS Positive	31.23 + 2.21	32.01 +1.18	P = 0.074, t = 1.82
PANSS Negative	29.19 + 2.28	29.35 + 3.21	P = 0.851, t = 0.19
PANSS General psychopathology scale	57.28 + 4.47	56.19 + 3.39	P = 0.302, t = 1.04
PANSS Total	117.7 + 10.18	117.55 + 11.08	P = 0.961, t = 0.05
WHO-5	12.18 + 1.15	14.35 + 3.28	P value = 0.010‡, t = 2.66
GAF	22.6 + 7.31	27.9+ 9.18	P value = 0.036‡, t = 2.1437

Discussion

The studies assessing co-morbidity of SAD and SZ are sparse. In our sample of 64 treatment-naïve patients with SZ, the prevalence of SAD was 26.56%, which was confirmed, both clinically as well as on SIAS. Our rates are in tune with the studies by Lowengrub, et al (38%) [7], Pallanti et al. (36.3%) [2], Tibbo et al. (23.3%) [14] and Braga et al. (17%) [4]. These variations could be due to the methodological issues, patient selection and use of different rating scales.

Consistent with Pallanti et al. [2] and Lowengrub, et al. [7], we too found lower QoL (WHO-5 scores) in SZ+SAD group. However, our SZ+SAD group also had lower GAF scores; while in those studies the difference in GAF scores was not significant. This variation could be because ours was a treatment naïve sample; while the subjects in the earlier studies had already sought some treatment probably leading to better social and occupational functioning.

A question worth pondering is whether the SAD symptoms are a function of paranoia or because of the negative symptoms? This issue was addressed by the fact that the PANSS positive and negative scores were not different between the two groups; thus, indicating that the SAD was independent of paranoia and negative symptoms. Thus, we confirmed the findings of earlier studies [2, 7, 15].

Similar to Pallanti et al. [2], significantly more number of our SZ + SAD subjects attempted suicide in past. This cannot be attributed to depression as this was our exclusion criterion. This higher rate of suicidality could be due to the social deficits in the context of SZ which is further compounded by social anxiety.

The strengths of our study include its naturalistic setting; also, we could assess baseline level of SAD symptoms in treatment-naïve SZ patients. This is important because, dopamine antagonists such as clozapine can precipitate SAD symptoms [16], thus making it difficult to ascertain whether SAD is part of SZ or is drug-induced.

The limitations of our study include its cross-sectional design with no control group; hence, the results cannot be generalized to the community dwelling SZ patients. We used convenience sampling and did not use structured diagnostic schedule for diagnosing SZ and co-morbidities. Also, we could not ascertain which symptoms started first, SAD or psychotic. The SIAS is not standardized for Indian population.

Thus, the SAD co-morbidity may compound the disability, and impair the QoL and psychosocial functioning of patients with SZ. All patients with SZ should be screened and treated for SAD. The drugs such

as specific serotonin-reuptake inhibitors [17], oxytocin [18] and psychosocial therapies such as cognitive behavioural therapy [19, 20] have been used with success.

Conclusion

The clinicians should be vigilant of the high SZ-SAD co-morbidity. There is a need for prospective studies to further establish this association, and to assess how these patients progress with treatment.

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