

Relationship of Dissociation and Childhood Trauma in Patients of Schizophrenia

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Abstract

Original Research Article

The aim of the study was to investigate the relationship between childhood trauma, dissociative symptoms and psychopathology in patients suffering from schizophrenia. Study had a cross-sectional design with purposive sampling with sample size of 60 patients suffering from schizophrenia who were assessed by childhood Trauma Questionnaire-short form (CTQ-SF), dissociative Experience scale-II (DES-II), and positive and negative syndrome scale (PANSS) for schizophrenia. Childhood physical abuse was reported by 30%, emotional neglect by 31.7%, emotional abuse by 43.3%, physical neglect by 33.3% and sexual abuse by 23.3% of the study sample. Positive correlation between dissociative symptoms (measured by mean-DES score) and PANSS (Positive symptoms and total PANSS score) was found. Significant positive correlation between childhood trauma (measured by total CTQ score) and PANSS (positive symptoms) was also found. Childhood trauma, clinical dissociation and schizophrenia are closely related.

Keywords: Schizophrenia, childhood trauma, dissociative symptoms, positive and negative symptoms.

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INTRODUCTION

Schizophrenia is a complex disorder of brain function with wide variation in symptoms and science and the course of illness. The experiential 'Core' of Schizophrenia has been described as a disturbance involving the most basic functions that give the normal person a feeling of individuality uniqueness and self-direction [1].

As many as 1% of people meet diagnostic criteria for the disorder over their lifetime. Frequently with onset coincident with the developmental age of emerging adulthood particularly in young men, its annual incidence is up to .70/1000/y consistently worldwide [2, 3].

Childhood trauma

A number of environmental risk factors have been proposed to act during the intermediate period between the perinatal period and life immediately prior to illness onset; these include child rearing experiences, head injury and possibly child-abuse.

The environment during the childhood is likely to be interacting with the social, behavioral and cognitive antecedents of psychosis known to predate illness in vulnerable children [6].

The world health organization distinguishes four types of childhood maltreatment that may occur before age of 18: physical abuse, sexual abuse, emotional abuse and neglect (i.e. physical and /or emotional).

Dissociative symptoms

The central feature of dissociation is disruption to one or more mental functions. Such disruption may affect not only consciousness, memory and/or identity, but also thinking, emotions, sensorimotor functioning and/ or behavior. Five phenomena constitute the primary clinical components of dissociative psychopathology; amnesia, depersonalisation, derealisation, identity confusion and identity alteration. They are usually accompanied by secondary symptoms of dissociation which may have positive (e.g. hallucinations, schneiderian experiences) or negative (e.g., somatosensory deficits) character [11].

Based on the commonness of trauma and its putative aftermath, dissociation, in schizophrenia, Ross and Keyes have introduced a theory of dissociative schizophrenia which has been demonstrated by subsequent studies as well. These patients have symptoms of dissociative Identity Disorder (DID) and schizophrenia concurrently [16].

Rationale of the study

Most of the evidence linking childhood trauma and adult dissociative symptoms and general psychopathology in patients with schizophrenia has been derived from studies in western cultures.

This study might help to recognize a subgroup of schizophrenia that is environmentally driven rather than endogenously driven.

AIM OF THE STUDY

To study if there is any association between childhood trauma and adult dissociative symptoms and general psychopathology in patients with schizophrenia

Objectives of the study

- To investigate the relationship between dissociative symptoms and psychopathology of patients suffering from schizophrenia.
- To investigate the relationship between self-reported childhood abuse and / or neglect and dissociative symptomatology in patients of schizophrenia.
- To investigate the relationship between self-reported childhood maltreatment and psychopathology of patients suffering from schizophrenia.

MATERIALS AND METHOD

Study population

Patients were taken up for the study from the outpatient and inpatient department of the Institute of Mental Health and Hospital, Agra, a tertiary referral centre and postgraduate teaching and training hospital.

Study Design

Cross-sectional Hospital based study.

Sample size

60 patients with diagnosis of schizophrenia were included in study using purposive sampling method. The patients were diagnosed as a case of schizophrenia as per the criteria laid by ICD-10 DCR (Diagnostic criteria for research).

Inclusion Criteria

- Patients aged between 18-50 years.
- Patients giving written informed consent.
- Minimum education up to 10th pass.

Exclusion Criteria

- Significant Head injury.
- History of major physical and neurological illness.
- Mental Retardation.
- Clinical status leading to potential risks (e.g.

Persisting acute suicidality, severe positive or negative symptoms)

Study tools

- Semi-structured performa for Socio- Demographic and clinical details.
- Positive and negative syndrome scale (PANSS) for schizophrenia.
- Childhood Trauma Questionnaire short form (CTQ-SF).
- Dissociative experiences scale (DES-II).

Study procedure

Patients suffering from schizophrenia (As per ICD-10-DCR criteria), meeting inclusion and exclusion criteria were taken for the study. Sociodemographic clinical data of all subjects were collected. The subjects were asked to fill childhood Trauma Questionnaire-short Form (CTQ-SF), 28 questions, self-report instrument and Dissociative Experiences Scale (DES-II).

Finally all subjects were rated on the positive and negative syndrome scale (PANSS) for schizophrenia. The statistical analysis of data was performed using the computer program statistical package for the social sciences software (SPSS for windows, version 24.0).

Table-1: Socio-demographic profile of study sample (Patients with schizophrenia)

Variable		N	%
Age in (years)	18-34	33	55
	35-50	27	45
Gender	Male	30	50
	Female	30	50
Marital Status	Single	27	45
	Married	30	50
	Others	3	5
Religion	Hindu	58	96.7
	Others	2	3.3

Education	High School	21	35
	Intermediate	20	33.3
	Graduate & above	19	31.7
Occupation	Employed	19	31.7
	Unemployed	41	68.3
Socio-economic status	Lower	30	50
	Middle	26	43.3
	Upper	04	6.7
Residence	Rural	18	30
	Urban	42	70

Table-2: Descriptive statistics of CTQ-SF in 60 patients with schizophrenia

CTQ subscales	Minimum	Maximum	Mean	Std. Deviation	N-Low to moderate (%)
Physical abuse	5.00	20.00	7.29	2.00	18 (30.0)
Emotional Neglect	3.00	17.00	8.25	3.14	19 (31.7)
Emotional abuse	5.00	21.00	8.65	3.53	26 (43.3)
Physical Neglect	5.00	16.00	7.13	2.87	20 (33.3)
Sexual abuse	5.00	19.00	6.15	3.21	14 (23.3)
Total CTQ score	24.00	63.00	37.40	9.27	45 (75.0)

Table-3: Descriptive statistics of DES-II in 60 patients with schizophrenia

DES variables	Minimum	Maximum	Mean	Std. Deviation
Absorption and imaginative involvement	0.00	36.00	12.0	8.79
Amnesia	0.00	28.00	8.70	7.47
Depersonalization/Derealization	0.00	32.00	5.49	6.60
Taxon	0.00	36.00	11.10	8.68
Mean DES score	0.00	40.36	14.67	9.90

Table-4: Descriptive statistics of PANSS in 60 patients with schizophrenia

PANSS	Minimum	Maximum	Mean	Std. Deviation
Positive Symptoms	7.00	25.00	13.63	5.39
Negative Symptoms	7.00	29.00	15.31	6.62
General psychopathology	16.00	44.00	25.41	6.50
Total PANSS score	33.00	86.00	54.20	13.39

Table-5: Pearson's correlation between CTQ subscales and means DES score in 60 patients with schizophrenia

CTQ Subscales	Correlation coefficient	P value
Physical abuse	0.257	0.02*
Emotional neglect	0.306	0.01*
Emotional abuse	0.190	0.73
Physical neglect	0.487	0.01*
Sexual abuse	0.303	0.01*
Total CTQ score	0.511	0.01*

*Correlation is significant at the 0.05 level (2 tailed)

DISCUSSION OF RESULTS

The present study divided age of subjects into two categories. 33 patients were in 18-34 years age group while 27 patients were in 35-50 years age group. The mean age of the study sample is 33.69 years with a standard deviation of 9.01. In 60 patients of the study sample, minimum age of onset of schizophrenia was 14 years and maximum age of onset of schizophrenia was 40 years. Mean age of onset of sample population was 23.07 years with standard deviation of 6.64.

The interface between early psychological trauma and psychosis is unknown, but reported

association of positive symptoms in patients with schizophrenia [22, 23] and child sexual abuse could suggest early trauma to be significant for schneiderian symptoms. The rates of physical, sexual and emotional abuse reported by our patients are comparable to those reported in a meta-analytic study done by Bonoldi *et al.* [24]. In present study, child emotional abuse was found to be the most common type of child maltreatment.

Table 3 shows the mean DES score having a mean of 14.67 and standard deviation of 9.90. This finding concurs with the finding of other studies that

report mean DES score range from 11.9 to 21 points [17, 25]. Our study included out-patients who attended scheduled visits and stable in-patients, which excludes recruitment of most severe cases. This may have decreased the presence of dissociative symptoms.

That overlaps acute symptoms of psychosis. Sar *et al.* Documented the existence of a dissociative sub group among patients suffering from schizophrenia [17].

In our study, as shown in Table 5, we found significant positive correlation between total CTQ score and means DES score ($r = 0.511$, $p = 0.01$). Although genetic, prenatal and perinatal factors tend to be implicated as risk factors for schizophrenia; our results suggest that an event occurring during childhood may influence the profile of symptoms in adult schizophrenia patients. The relationship between early trauma and dissociation in patients with psychosis is in line with similar findings for many other diagnostic groups [26].

The major finding of the present study is that of five distinct forms of maltreatment reported, child physical neglect was most strongly correlated ($r = 0.487$) with the experience of dissociative symptoms in adult schizophrenia patients. Our results suggest that other forms of early trauma (particularly child physical neglect) may be more important with regard to dissociation than previously suspected. Our finding that child physical neglect is highly correlated with dissociation was observed in a schizophrenia population.

CONCLUSION

Childhood trauma is one of the non-hereditary factors intimately related to the development of schizophrenia in adulthood. The concept of dissociation or dissociative symptomatology is widely associated with childhood trauma. The relationship between childhood trauma and positive symptoms in patients on the schizophrenia spectrum may be mediated by dissociation.

Hence these may be a subgroup of patients suffering from schizophrenia who have dissociative symptoms and childhood trauma history more frequently than the remaining patients.

The present study emphasizes the importance of assessing past history of childhood adversity and dissociative symptoms in patients suffering from schizophrenia in order to ensure that most appropriate and effective interventions are provided to this patient group.

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