

# Stressful Life Events in Onset of First Episode of Acute and Transient Psychotic Disorder.

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## ABSTRACT

**Background:** Acute and transient psychotic disorder (ATPD) characterized by acute onset of polymorphic psychotic symptomatology and rapid resolution. The aim of this study was to identify the role of stressful life events among patients with ATPD. **Methods:** The study included 50 patients attending psychiatric OPD and admitted patients in psychiatric wards, at a tertiary care center of Rajasthan, India who were clinically screened for acute and transient psychotic disorder. The patients, suggestive of suffering from ATPD, were thoroughly evaluated for the diagnosis by using ICD-10 criteria for the ATPD and the diagnosis confirmed by a consultant psychiatrist. All the participants were subjected to presumptive stressful life event scale (PSLE) for assessing the role of stressful life events among patients with ATPD. **Results:** Out of fifty patients, 58% were female and 42% were male. 82% patients were experienced stressful life events before the onset of first episode of acute and transient psychotic disorder. Female experience more stress in areas like death or illness of a family member, marriage or engagement, violence. Whereas male were experienced more stress in areas like marital and family conflicts, financial or occupational problem. **Conclusion:** Present study highlights that the stressful life events have substantial relationship with the onset of acute and transient psychotic disorder.

**Keywords:** acute and transient psychotic disorder, stress, life events, polymorphic state.

## INTRODUCTION

Psychosis is defined as a mental disorder in which the thoughts, affective response, ability to recognize reality and communicate with others are sufficiently impaired. The classical characteristics of psychosis are impaired reality testing, hallucinations and delusions.<sup>[1]</sup>

The term Acute and transient psychotic disorders (ATPD) was first come in ICD-10 but the classification of acute psychosis has a long history. Psychiatrist from different countries proposed alternative classification for these non organic acute psychotic disorders, for examples – schizoaffective psychosis<sup>[2]</sup>, schizophreniform psychosis<sup>[3]</sup>, reactive or psychogenic psychosis<sup>[4]</sup>, cycloid psychosis<sup>[5]</sup>, Bouffée délirante by French and emotional psychosis by Swiss.<sup>[6]</sup>

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In ICD-10 acute and transient psychotic disorder is included under F23 psychotic disorder class. The characteristic features are an acute onset (within 2 weeks), presence of typical syndromes like hallucinations, delusions, and perceptual disturbances are obvious, but which are described as rapidly changing, variable, polymorphic states and complete recovery in most cases within 2-3 months. The abrupt onset and shorter duration of the episode are additional differentiating features between ATPD and schizophrenia.<sup>[7]</sup>

Stressful life events have been associated with an increased risk of mental disorders. There have been few studies examining the specific connection between stressful life events and ATPD.<sup>[8]</sup> Stressful events, especially in the preceding 3 months, may trigger the first episode of ATPD psychosis.<sup>[9]</sup>

Repeated exposure to stress causes dysregulation of the hypothalamic pituitary adrenal (HPA) axis may subsequently give rise to increased dopamine receptor densities and dopamine release, dopaminergic abnormalities commonly thought to be present in psychosis.<sup>[10]</sup>

## MATERIALS AND METHODS

**Sample collection:**

Above study was cleared by institutional ethical committee. Study comprised of cross sectional study design where 50 patients of acute and transient psychotic disorder attending psychiatric OPD and admitted in psychiatric ward at tertiary care center of north India in the time period December 2012 to October 2014 were studied. Subjects fulfilling the inclusion criteria, with age more than 15 years and patient suffering from ATPD according to ICD-10 criteria were included in the study and diagnosis confirmed by consultant psychiatrist. Patients with history of other medical illness, substance induced psychosis; patients with cognitive impairment and mental retardation were excluded from the study. All study subjects were thoroughly interviewed with detailed clinical history along with general physical examination, systemic examination and detailed psychiatric examination including mental status examination and higher mental function. All patients included in study were explained about the procedure, its purpose and were assured for confidentiality of the information.

#### Tools of the study:

All the selected patients were interviewed in detail by using following tools for the purpose of meeting the aims & objectives.

1. Sociodemographic proforma: A proforma, specially designed for this study, was used to record the certain variables such as age, gender, education, marital status, religion, locality, family type and family income.
2. Clinical profile sheet: A proforma specifically constructed for this study was used to get clinical details of acute and transient psychotic disorder e.g. duration of illness, age of onset of illness, family history of mental illness etc.
3. Presumptive Stressful Life Events Scale (Gurmeet Singh et al. 1984): The scale is found to be most suitable for Indian population & it contains 51 stressful life events items relevant to our culture and has been standardized on Indian population. In the present study, consideration was given to the presence of any one or more PSLE in the last one year of onset of illness.

#### Statistical analysis

Data was analyzed using SPSS version 19.0 and statistical analysis was expressed as mean, standard deviation. Data were analyzed by using unpaired t-test and chi-square test. p-value <0.05 was considered as statistically significant.

## RESULTS

#### Sociodemographic variables:

Present study included 50 patients with acute and transient psychotic disorder, out of which 21 patients were male and 29 were female. Majority of patients were young to middle age group (15-35 year) and

the mean age of patient was  $27.38 \pm 12.28$  for male and  $27.65 \pm 11.68$  for female. Most of patients were had more than 3 week of duration of illness, were married, belongs to rural background and studied up to secondary standard [Table 1].

#### Stressful life events:

Stressful life events in ATPD patients were reported by using PSLE scale, out of 50 patients 41 (82%) had experienced stressful life events in last 1 year [Table 2]. The common areas in which stress experienced by the patients were physiological (Fever, Exam, Sleep deprivation), death / illness of family member, violence, Financial / occupational problem [Table 3].

**Table 1: Distribution of patients according to socio-demographic variables.**

Variables	Male N=21 (%)	Female N=29 (%)	Statistics
Mean age	27.38±12.28	27.65±11.68	t=0.079, p=0.93
Duration of illness			
<1 week	04 (19%)	03 (10%)	$\chi^2=1.082$ p=0.35
1 – 2 week	07(33%)	13(45%)	
≥ 3 week	10(48%)	13(45%)	
Onset of illness			
Abrupt (within 2 days)	11 (52%)	16 (55%)	$\chi^2=2.06$ p=0.15
Acute (within 2 weeks)	10 (48%)	13 (45%)	
Marital status			
Married	10 (48%)	26 (90%)	$\chi^2=10.67$ p=0.001
Unmarried	11 (52%)	03 (10%)	
Family type			
Joint	08 (38%)	14 (48%)	$\chi^2=1.145$ p=0.56
Nuclear	08 (38%)	07 (24%)	
Extended nuclear	05 (24%)	08 (28%)	
Domicile			
Rural	16 (76%)	26 (90%)	$\chi^2=1.643$ p=0.19
Urban	05 (24%)	03 (10%)	
Education			
Sr. sec. and above	04(19%)	00(00%)	$\chi^2=7.512$ p=0.02
Upto secondary	15(72%)	21 (72%)	
Illiterate	02(9%)	08(28%)	

**Table 2: Presumptive stressful life events (PSLE) and Gender.**

PSLE	Male	Female	Statistics
Present	17 (81%)	24(83%)	$\chi^2=0.027$ p=0.86
Absent	04 (19%)	05 (17%)	

## DISCUSSION

The present study was aimed to understand various associated socio-demographic factors and identifying the role of stressful life events among patients with Acute and Transient Psychotic Disorder. Out of 50 patients evaluated for ATPD, 21 patients were male and 29 were female, age range of patients was from 15 to 60 years. Mean age was  $27.65 \pm 11.68$  year. Majority of the patients were in the economically productive age group of 20-45 yrs.

There was no statistically significant difference among male and female in age at onset of illness. The results of present study were similar to the previous study.<sup>[11, 12]</sup> Duration of illness before seeking help shows that 14% cases presented within one week, 40% within one to two weeks, and 46 % within three weeks to four weeks. Gender wise distribution show that among males 19% cases presented within one week, 33% within one to two weeks and 48 % presented in three to four weeks.<sup>[11, 13]</sup> Our study show that 52% patients had abrupt onset (with in 2 day) of illness while 48% patients had acute onset (within 2 week). 48% male patients were married while 90% female patients were married the finding of our study were supported by older study.<sup>[14]</sup>

**Table 3: Gender and area in which stress were experienced.**

Area in which stress experienced	Male	Female	Total
Marital or family conflict	02 (10%)	01 (03%)	x <sup>2</sup> =3.54 p=0.73
Death / illness of family member	03 (14%)	05 (17%)	
Financial / occupational problem	04 (19%)	02 (07%)	
Marriage / Engagement	01 (05%)	04 (14%)	
Physiological (Fever, Exam, Sleep deprivation)	04 (19%)	07 (24%)	
Violence	03 (14%)	05 (17%)	
None ( No Stress)	04 (19%)	05 (17%)	
Total	21 (100%)	29 (100%)	

In the present study 44% patients were belongs to joint family, 30% belongs to nuclear family and 26% to extended nuclear family. Gender wise distribution show that among males 38% were from nuclear family, 24% were from nuclear family and 38% were from joint family. The respective figure for females were 24%, 28%, 48%. The data were statistically not significant (p=0.556).<sup>[11, 15]</sup> 84% patients in our study were belongs to rural background and 16% were from urban. Gender wise distribution show that among males 76% were from rural and 24% were from urban area and respective figure for females were 90% and 10%. The results of our study were similar to result of previous study.<sup>[15, 16]</sup> Eight percent of patients were educated up to senior secondary and above, 72% educated upto secondary and 20% patients were illiterate. Gender wise distribution show that among males 19% educated up to senior secondary and above, 72% upto secondary, 9% were illiterate and the respective figures for females were 0%, 7 2%, 28%. In the present study stressful life events present in 82% of patients while in 18% of patients, stressful life events were absent. Gender wise distribution

shows that among males PSLE was present in 81%, absent in 19%. The respective figures for females were 83% and 17%. This finding was supported by earlier study.<sup>[13]</sup>

In our study area in which stress were experienced show that female experience more stress in areas like death or illness of family member, marriage or engagement, violence. Whereas male were experience more stress in areas like marital and family conflicts, financial or occupational problem. The difference was statistically not significant (p>0.05).

## CONCLUSION

We found that a large proportion of patients in our study had experienced stressful life events prior to their first psychotic episode. The study also concludes that the stressful life events are an important factor that can facilitate development of acute psychosis. Thus as a clinicians we should consider the person's life events as a trigger for illness and make decisions regarding treatment accordingly.

### Limitations and Future Directions:

The major limitation of this study is its small sample size hence information cannot be generalized. It's a cross-sectional study, longitudinal and prospective studies with larger sample size from different centre may be studied to explore role of stressful life events in development of illness in different population.

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