
Research Article

Acute and Transient Psychotic disorder and Schizophrenia: on a continuum or distinct? A study of phenomenology

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Abstract:

Background: The overview of epidemiology of Acute and Transient Psychotic disorder (ATPD) shows that it is wrong to assume that acute and transient psychotic disorder is somehow rudimentary or attenuated form of schizophrenia.

Aims and Objective: This explorative study was designed to ascertain if there are any phenomenological differences between ATPD and cases of First Episode Schizophrenia (FES).

Materials and Methods: A total of 60 patients (30 patients with ATPD and 30 FES patients) were enrolled. Illness-related variables were rated with the Brief Psychiatric Rating Scale (BPRS) at the time of first encounter and the frequencies of occurrence of various symptoms were compared between the two groups.

Result: The two disorders appear to be different on the basis of phenomenology as affective symptoms and symptoms pertaining to increased PMA were found more frequently in the ATPD group, whereas, all the typical schizophrenic symptoms (delusions, hallucinations, disorganized behavior, speech and negative symptoms) were found to be more in the patients with FES.

Keywords: ATPD, First Episode Schizophrenia, BPRS 4.0

Introduction:

Acute and transient psychotic disorder (ATPD) is included under the psychotic disorders (F23) as a three-digit code as recognized with the advent of ICD-10 in 1992. Results of the three multi-centric international World Health Organization (WHO) studies provided confirmation to the fact that there was evidence for the non-schizophrenia, non-affective remitting psychosis occurring in the setting of stressful events. Acknowledgement of these findings contributed to inclusion of ATP in ICD-10 and also formed the basis for its definitions and description.¹

The prevalence of ATPD varies from 3.9-9.6 per 100,000 population.^{2, 3} The existing literature suggests that ATPDs constitute a composite category of uncommon mental disorders, affecting more frequently females in the early-middle adulthood, which are associated with an increased mortality from both natural causes and suicide.⁴ Varying transition rates have been reported in ATPDs either to schizophrenia and related disorders or affective disorders.^{5, 6} While younger age at onset, male gender and longer hospital admission are features more likely to be associated with increased risk of subsequent diagnosis change to schizophrenia, the effect of acute onset and early remission on diagnostic stability and/or favorable outcome remains unclear.⁷

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The key features that characterize the disorder are an acute (within 2 weeks) onset in all the cases; presence of typical syndromes which are described as rapidly changing, variable, polymorphic states and typical symptoms of schizophrenia could be present in ATPD, its separation from schizophrenia was reflected in the duration criteria where the time limit was of 1 month for schizophrenic symptoms and of 3 months for the total duration of ATPD episode.⁸

The overview of epidemiology of ATPD shows that it is wrong to assume that ATPD is somehow rudimentary or attenuated form of schizophrenia. These are distinct form of psychosis with acute and florid onset, polymorphous symptomatology, are usually short lived and have much better outcome.⁹ The controversies around the nomenclature (ATPD or Brief reactive psychosis) or the existence of subtypes should not distract us from the fact these are different form of psychosis and not a just rudimentary form of schizophrenia.

This explorative study was designed to ascertain if there were any phenomenological differences between ATPD and cases of First Episode Schizophrenia (FES). The findings of the study will help in delineating not only the clinical syndromes but are also likely to give clues to the direction of investigations to ascertain the putative biological underpinnings of ATPD and schizophrenia.

Methodology

Sixty patients of ATPD and schizophrenia attending In and Out Patients Department having age between 18-50 years satisfying ICD-10 diagnostic criteria for the disorder were studied after dividing in to ATPD (n=30) and FES (n=30) patients.

Institutional Ethics Committee Approval and written informed consent was obtained before starting present study.

Patients having age below 18 and above 50 years and patients with significant medical condition which might affect cognition were excluded from the study. Illness-related variables were rated with the Brief Psychiatric Rating Scale (BPRS) at the time of first encounter.¹⁰ This was a non-invasive, one point, comparative study and cognitive functions were assessed after clinical recovery from ATPD and schizophrenia first episode.

Patients were interviewed and assessed for; Speed: mental or cognitive speed was tested using Digit Symbol Substitution Test¹¹, Attention: sustained and divided attention were tested using Digit Vigilance Test¹² and Triads Test¹³ and Executive Functions: working memory was tested using N Back test.

Three domains of cognitive functions including sustained attention, divided attention, cognitive speed and working memory were assessed using Digit Vigilance Test, Triads test, Digit Symbol Substitution Test and N-Back test respectively. Cut-off values for each test were used as provided in the NIMHANS battery. Prevalence of Cognitive impairment amongst the patients of ATPD & FES was tested by various parameters of NIMHANS Neuropsychological Battery.

All the data was analyzed using IBM SPSS Ver. 20 software. Chi square test was applied to calculate the level of significance. Mean scores on different parameters of tests of cognitive functions was compared using student t test. Level of significance was assessed at 5% level.

Results

Mean age of study cohort was 30.65±9.00 years and mean age of ATPD and FES patients was 30.00±8.70 and 31.30±9.39 years respectively (p=0.580). Out of 60 patients, 25(41.66%) were males and 35(58.34%) were females (P=0.432). Out of 60 study subjects, 38 were educated till primary or secondary level and 22 were either graduate or postgraduate.

Distribution of negative symptoms revealed that self-neglect [8 (26.6%) and 18 (60%)], blunted affect [6 (20%) and 19 (63.63%)] and emotional withdrawal [6 (20%) and 13 (43.33%)] were higher in the patients with FES compared to ATPD patients.

In affective symptoms, in ATPD group most common was excitement [28 (93.3%)] followed by distractibility [27(90%)] whereas in FES group these symptoms were less frequent. Grandiosity was present in substantial number of patients in ATPD [22(73.3%)] but was a rare finding in FES group [5(16.6%)].

Table 1: Psychotic Symptoms in ATPD and Schizophrenia patients

| Symptoms | ATPD | FES | ATPD | | FES | |
|----------------------------|-----------|------------|-----------|------------|------------|-----------|
| | | | Male | Female | Male | Female |
| Suspiciousness | 23 (76.6) | 21 (70) | 8 (72.72) | 15 (78.94) | 11 (78.57) | 10 (62.5) |
| Hallucinations | 19 (63.3) | 17 (56.6) | 6 (54.54) | 13 (68.42) | 8 (57) | 9 (56.25) |
| Unusual Thought Content | 25 (83.3) | 20 (66.66) | 9 (81.81) | 16 (84.2) | 9 (64.28) | 11 (68.7) |
| Conceptual Disorganization | 19 (63.3) | 21 (70) | 3 (27.27) | 16 (84.21) | 10 (71) | 11 (68) |

Data is expressed as no of patients (percentage)

Discussion

ATPD is more common in females but diversities exist across ATPD subtypes, polymorphic psychotic disorder is more common in females and acute schizophrenic features are more common in males.⁵ The peak Incidence of ATPD in the males is seen in their mid-20s, whereas the highest rates for women occur 10 years later and are significantly greater than those for men over 45 years of age, this pattern is likely to reflect, not only the putative effect of female sex hormones on the brain but also the diversities across ATPD subtypes. Female preponderance in acute psychoses has been observed as a consistent finding across different studies conducted over the past four decades, and even in recent studies using the ICD-10 diagnostic criteria.¹⁴ This is in stark contrast to schizophrenia, which is observed to have an equal prevalence across genders.

In our study also 63.3% of sample comprised of females but due to our strict inclusion and exclusion criteria many of the patients were excluded. So the finding of gender distribution in our study does not represent the trend in the general population. However, the exclusion and inclusion criterion (most important educational level) was common to both the genders so this pattern of gender distribution in ATPD population cannot be completely ignored.

As far as phenomenology is concerned, negative symptoms have been found to be the discriminating factor for schizophrenia and ATPD. Jager et al in 2003 in their study reported that the patient with ICD-10 schizophrenia differed significantly from patients of other non-affective psychotic disorders with respect to the mean total score of the negative symptoms was higher in the patients of schizophrenia than in the patients of other non-affective psychotic disorders.¹⁵

In our study we assessed the negative symptoms in the following three domains of BPRS i.e., self-neglect, blunted affect, and emotional withdrawal. In present study, negative symptoms were the differentiating feature between the two disorders as far as phenomenology is concerned. Negative symptoms have found to be associated with greater cognitive impairment.¹⁶ A higher frequency of negative symptoms was found in FES group in our study.

The two disorders appear to be different on the basis of phenomenology as affective symptoms and symptoms pertaining to increased PMA were found more frequently in the ATPD group, whereas, all the typical schizophrenic symptoms (delusions, hallucinations, disorganized behavior, speech and negative symptoms) were found to be more in the patients with FES.

The substantiating affirmation for the validity of ATPD came from the WHO multi-centered collaborative studies conducted for the study of schizophrenia (IPSS)¹⁷, first onset psychosis (DOSMeD)¹⁸ and Acute Psychoses (CAP)¹⁹. Although the nomenclature and nosology of acute psychosis was still uncertain, the findings of the above major WHO studies were confirmatory and the evidence was powerful. Thus, ATPD came to be recognized as a disorder in ICD-10 in 1992.

Though identified as a distinct syndrome, there is a broad dichotomy of views on the nosological status of ATPD. Western workers claim that ATPD is a diagnostically unstable entity with majority transforming either into schizophrenia or mood disorders.²⁰ Asian investigators aver that these conditions are diagnostically stable.^{19, 20}

In our study we differentiated schizophrenia and ATPD patients, presenting with psychotic symptoms on the temporal basis. As per ICD-10 the symptoms of schizophrenia can be present in ATPD, its separation from schizophrenia is on the basis of duration, that is one month for the schizophrenic symptoms and three months for the total duration of ATPD. Acute psychotic episodes that are beyond these time limits are diagnosed as schizophrenia. ATPD was diagnosed in patients with illness of less than one-month duration and those with duration of more than one month were diagnosed as schizophrenia.

The duration criteria of the current ICD-10 to diagnose ATPD poses a likelihood of excluding a large number of conditions which could be grouped under acute and transient psychotic disorders. There seems to be a need to modify the duration criteria for acute and transient disorder in ICD-10 and expand them to approximately 6 months.^{21, 22}

The proposed revision for ICD-11 would introduce a major change by restricting the ATPD category to acute polymorphic psychotic disorder defined by criteria similar to those currently used and duration shorter than 3 months. The remaining subtypes with schizophrenic and delusional dominant symptoms would be redistributed into other categories of newly renamed section 'Schizophrenia spectrum and other psychotic disorders'. ICD-11 proposes to add qualifiers for symptoms, course, cognition, and functional impairment in order to identify further distinctive features and provide the useful information about the patients. In icd-10 all this is still not clear.

We did not assess the level of stress in our study because the temporal relationship between the stress in ATPD is limited to two weeks which is so restrictive as to have underestimated the number of cases associated with the life events.

Conclusion

ATPD appears to be a different entity phenomenologically as affective symptoms and symptoms pertaining to increased PMA were found more frequently in the ATPD group, whereas, all the typical schizophrenic symptoms (delusions, hallucinations, disorganized behavior, speech) and like in the previous studies, the negative symptoms, which are considered to be the discriminating feature between ATPD and schizophrenia were found to be more in the patients with FES.

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