Short-term outcome in acute and transient psychotic disorder and its correlate to various sociobiological factors

Sumit Chandak*, Sunil N. Gowda

Department of Psychiatry, Smt. Kashibai Navale Medical College, Pune, Maharashtra, India

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*Correspondence: Dr. Sumit Chandak,
E-mail: drsumitchandak@gmail.com

ABSTRACT

**Background:** There is a higher incidence of acute and transient psychotic disorder, however there are not much data on the course of disease and its association with sociobiological factors. We assessed the outcome in patients who met the ICD 10 DCR criteria for acute and transient psychotic disorder, at a follow up period of 6 months.

**Methods:** We conducted a prospective observational study conducted at out-patient department of the Institute of Psychiatry and Human Behaviour, Bambolim, Goa. Fifty-seven patients were enrolled and were followed up for a period of 6 months from the day of enrollment. The outcome was ‘review of diagnosis and ‘no review of diagnosis at the end of 6 months.

**Results:** The mean age of the study sample was 32.25 years. In three-fourth of the patients, there was no change in the diagnosis. Nearly 65% of the patients were women and 35% of them were men. No review in diagnosis was made in significant proportion of the population. Average duration of education was 7.35 years. Most of them were unskilled laborers and homemakers. A significant number of the study population was migrants. Two-thirds of the population did not have any family history of psychiatric disorder. The onset was acute in majority of the patients. Suicidal thoughts were present at the time of diagnosis in certain patients. The treatment adherence was lower in those whose diagnoses did not change at the end of 6 months. Sleep disturbances, ideas of persecution, and concentration difficulties were the frequently reported symptoms. No repeat episodes were noted in our study.

**Conclusions:** No review in diagnosis was made in significant proportion of the population. The treatment adherence was lower in those whose diagnoses did not change at the end of 6 months.

**Keywords:** Acute and transient psychotic disorder, ACTD, No review in diagnosis, Review in diagnosis, Transient psychotic disorder

INTRODUCTION

Historical concepts of acute psychotic states were based on certain etiological assumptions, and each of the concepts were very specific in nature but with quite different implications. These assumptions often reflected the preferences of their times as well as the underlying ideas of the respective psychiatric schools. To accommodate all the clinical concepts including French bouffées délirantes, cycloid psychosis (Germany), and the Scandinavian reactive and schizophreniform psychoses, the tenth revision of the International Classification of Mental and Behavioural Disorders (ICD-10) introduced the category F23 as acute and transient psychotic disorders.1 Acute and transient psychotic disorders are defined as a heterogeneous group of disorders, with acute onset of psychotic symptoms such as delusions, hallucinations, perceptual disturbances and by the severe disruption of ordinary behavior.2 The onset of acute and transient psychotic disorders is early adulthood and early treatment is necessary to avoid its progression to more devastating disorder. The statistics of the prevalence, its
course of disease and its association with other relevant factors is inadequate. There is a higher incidence of acute and transient psychotic disorder in developing countries, however, most of the findings are accidental and hence, there is need for prospective observational studies to assess the outcome and factors influencing the outcome or the disorder, itself. In this scenario, we assessed the outcome in patients who met the ICD 10 DCR criteria for acute and transient psychotic disorder, at a follow up period of 6 months. In addition, we assessed if any particular sociobiological parameter was associated significantly with any particular diagnostic subgroup or any particular outcome.

METHODS

Our study is a prospective observational study conducted at out-patient Department of the Institute of Psychiatry and Human Behaviour, Bambolim, Goa, India. Patient meeting the inclusion criteria and exclusion criteria, during the 9 months period from 1st June 2007 to 31st January 2008, were enrolled in to the study after obtaining informed consent from patients and relatives. Fifty seven patients were enrolled and were followed up for a period of 6 months from the day of enrollment.

Inclusion criteria

- Patients fulfilling the international classification of diseases (ICD) 10 diagnostic criteria for research for acute and transient psychotic disorders.
- Age group of 18 years to 65 years.
- Patients should know at least one of the following languages - English/ Hindi/ Konkani/ Marathi.

Exclusion criteria

- Patients satisfying the symptomatic criteria for affective disorder at any time during the index episode from onset to remission.
- Patients with organic etiology including epilepsy.
- Patients with past history of any psychotic illness including acute and transient psychotic disorder to ensure that the present episode is the first episode.
- Duration of illness is more than one month at the time of first contact with the hospital.
- Patients having history suggestive of mental retardation.
- Any other history obtained later in course of follow up which negates the diagnosis of acute and transient psychotic disorder at onset.

Based on the ICD 10 diagnostic criteria for acute and transient psychotic disorder, patients were classified in to 6 sub-groups.3

- Acute polymorphic psychotic disorder without symptoms of schizophrenia (F23.1 Sub group 1)
- Acute polymorphic psychotic disorder with symptoms of schizophrenia (F23.2 Sub group 2)
- Acute schizophrenia-like psychotic disorder (F23.3 Sub group 3)
- Other acute predominantly delusional psychotic disorders (F23.4 Sub group 4)
- Other acute and transient psychotic disorders (F23.4 Sub group 5)
- Acute and transient psychotic disorders unspecified (F23.5 Sub group 6)

Outcome measures

The outcome was ‘review of diagnosis and ‘no review of diagnosis at the end of 6 months. Patients were assessed with the following tools:

- Presumptive stressful life event scale (PSLES)4
- Comprehensive psychopathology rating scale (CPRS)5
- Positive and negative syndrome scale (PANSS)6
- Global assessment of functioning (GAF)7

In addition, we also recorded the socio-demographic profile using a semi-structured proforma for each patient.

Presumptive stressful life event scale was used to assess the level of stress experienced by the patients. CPRS and PANSS were administered to evaluate the clinical symptoms of psychotic disorders. GAF assessed the psychological, social and operational functioning ability of the patients. The patients were followed-up regularly and were assessed at the baseline and re-assessed at the end of 6 months. In addition, a detailed interview of the patients and their relatives was carried out to rule out any missed episodes and for revising diagnosis.

RESULTS

Sociodemographic profile

The mean age of the study sample was 32.25 years (standard deviation (SD) ± 12.2 years). Nearly 50% of the patients were found in the age group of 18 - 30 years. In nearly three-fourth of the patients, there was no change in the diagnosis (Table 1). Nearly 65% of the patients were women and 35% of them were men. No review in diagnosis was made in 70% (26/37) and 80% (16/20) of women and men, respectively.

Nineteen patients (33.3%) were illiterates and 17 (29.8%) of patients had completed primary education. The mean years of education were 7.35 years (SD±5.4 years). Patients in the subgroup 2 (acute polymorphic psychotic disorder with symptoms of schizophrenia) had significantly less years of education than patients in the other subgroups. The employment status had little influence on the review of diagnosis. In the study population, 18 (31.6%) patients were unskilled laborers.
and 16 (28%) patients were homemakers. Twenty-seven (47.4%) of the patients were married while 25 (43.9%) patients were single.

Majority of the patients were hindus (n=45 (78.8%)). Most of the patients in the study were from rural areas (39 (68.4%)). Majority of the patients owned their living premises (n=28 (68.3%)). Although majority of the patients were local inhabitants (n=45 (78.9%)), a significant number of them were migrants (n=12 (21.1%)). Majority of the patients belonged to the upper-lower socioeconomic status (n=40 (70.1%)). There was a trend of increase in proportion of patients in subgroups 1 and 2 with rising socioeconomic status (p <0.035).

There was no family history of psychiatric illness in 33 (68.8%) of patients. Patient showing presence or absence of stress was equally distributed in the population. Significant number of patients in the subgroup 2 (17 (63%) showed presence of stress (Table 2).

Table 1: Age distribution across the six diagnostic subgroups and its association with outcomes.

| Group    | F23.0 | F23.1 | F23.2 | F23.3 | F23.8 | Total | No review of diagnosis | Review of diagnosis |
|----------|-------|-------|-------|-------|-------|-------|------------------------|---------------------|
| Age      |       |       |       |       |       |       |                        |                     |
| 18-30 years | 0 (25.8%) | 16 (51.6%) | 3 (9.7%) | 1 (3.2%) | 3 (9.7%) | 31 (54.4%) | 24 (87.4%) | 7 (22.6%) |
| 31-42 years | 3 (18.8%) | 9 (56.2%) | 3 (18.8%) | 0 (6.2%) | 16 (28.1%) | 31 (54.4%) | 12 (75%) | 4 (25%) |
| 43-54 years | 2 (33.3%) | 3 (50%) | 0 (0%) | 0 (0%) | 1 (16.7%) | 6 (10.5%) | 4 (66.7%) | 2 (33.3%) |
| 55-65 years | 0 (0%) | 3 (75%) | 0 (0%) | 0 (0%) | 1 (25%) | 4 (7%) | 2 (50%) | 2 (50%) |
| Total    | 13 (22.8%) | 31 (54.4%) | 6 (10.5%) | 1 (1.8%) | 6 (10.5%) | 57 (100%) | 42 (73.7%) | 15 (26.3%) |
| Mean age: 32.25 years; Standard deviation: ±12.23 |

Table 2: Presence of stress in the diagnostic subgroup and its association with outcome.

| Stressor | F23.0 | F23.1 | F23.2 | F23.3 | F23.8 | Total | No review of diagnosis | Review of diagnosis |
|----------|-------|-------|-------|-------|-------|-------|------------------------|---------------------|
| Present  | 5 (18.5%) | 17 (63%) | 2 (7.4%) | 0 (0%) | 3 (27%) | 27 (47.4%) | 20 (74.1%) | 7 (25.9%) |
| Absent   | 8 (26.7%) | 14 (46.7%) | 4 (13.3%) | 1 (3.3%) | 3 (10%) | 30 (52.6%) | 22 (73.3%) | 8 (26.7%) |

Table 3. Distribution of PSLES score among the patients with family history of psychiatric illness.

| Family history | PSLES score | Present | Absent | Similar ill | Present | Absent | Similar ill |
|----------------|-------------|---------|--------|-------------|---------|--------|-------------|
| 0              |             | 2 (25%) | 28 (58.3%) | 0 | 2 (25%) | 28 (58.3%) | 0 |
| 1-20           |             | 0 (0%)  | 1 (2.1%) | 0 | 0 (0%)  | 1 (2.1%) | 0 |
| 21-40          |             | 1 (12.5%) | 9 (18.8%) | 0 | 1 (12.5%) | 9 (18.8%) | 0 |
| 41-60          |             | 3 (37.5%) | 7 (14.6%) | 0 | 3 (37.5%) | 7 (14.6%) | 0 |
| 61-80          |             | 2 (25%) | 1 (2.1%) | 0 | 2 (25%) | 1 (2.1%) | 0 |

PSLES: Presumptive stressful life events scale

Patients having family history of psychiatric illness had significantly more history of antecedent stressor being present (p<0.00, Table 3). The onset of disease was acute in 87.5% (n = 50) of the patients.

Irrespective of the presence of stressor, the onset of disease was similar in either of the groups (abrupt vs. acute onset). Patients who presented with suicidal thoughts had higher mean interval at presentation compared to those with no suicidal thoughts (6.63 days vs. 2.98 days). The treatment adherence was lower in those whose diagnoses did not change at the end of 6 months. Almost equal proportion of patient had GAF score in the range of 40-31 and 30-21 respectively.
Table 4. Distribution of symptoms across the diagnostic subgroups.

| Diagnosis                     | F23.0 | F23.1 | F23.2 | F23.3 | F24.8 | Total |
|-------------------------------|-------|-------|-------|-------|-------|-------|
| Symptoms                      | 13    | 12    | 11    | 10    | 2     | 48    |
| Sadness                       | 13    | 12    | 11    | 10    | 2     | 48    |
| Elation                       | 13    | 12    | 11    | 10    | 2     | 48    |
| Suicidal thoughts             | 13    | 12    | 11    | 10    | 2     | 48    |
| Concentration difficulties    | 13    | 12    | 11    | 10    | 2     | 48    |
| Reduced sleep                 | 13    | 12    | 11    | 10    | 2     | 48    |
| Ideas of persecution          | 13    | 12    | 11    | 10    | 2     | 48    |
| Other delusions               | 13    | 12    | 11    | 10    | 2     | 48    |
| Commenting voices             | 13    | 12    | 11    | 10    | 2     | 48    |
| Other auditory hallucinations | 13    | 12    | 11    | 10    | 2     | 48    |
| Labile emotional responses    | 13    | 12    | 11    | 10    | 2     | 48    |
| Lack of emotional responses   | 13    | 12    | 11    | 10    | 2     | 48    |
| Withdrawal                    | 13    | 12    | 11    | 10    | 2     | 48    |
| Pressure of speech            | 13    | 12    | 11    | 10    | 2     | 48    |
| Reduced sleep                 | 13    | 12    | 11    | 10    | 2     | 48    |
| Slowness of movement          | 13    | 12    | 11    | 10    | 2     | 48    |
| Hallucinatory behavior        | 13    | 12    | 11    | 10    | 2     | 48    |

Table 5. Distribution of diagnostic review among the subgroup of patients.

| Diagnosis                        | F23.0 | F23.1 | F23.2 | F23.3 | F24.8 | Total |
|----------------------------------|-------|-------|-------|-------|-------|-------|
| Review diagnosis                 | 13 (31%) | 23 (54.8%) | 1 (2.4%) | 1 (2.4%) | 4 (9.5%) | 42 (73.6%) |
| No change                        | 0     | 5 (55.6%) | 2 (22.2%) | 0     | 2 (22.2%) | 9 (15.8%) |
| Other nonorganic psychotic disorder | 0     | 1     | 2     | 0     | 0     | 3 (5.2%) |
| Paranoid schizophrenia           | 0     | 1     | 2     | 0     | 0     | 3 (5.2%) |
| Dissociative disorder            | 0     | 1     | 2     | 0     | 0     | 1 (1.8%) |
| Depression                       | 0     | 1 (100%) | 0     | 0     | 0     | 1 (1.8%) |
| Bipolar affective disorder       | 0     | 1 (100%) | 0     | 0     | 0     | 1 (1.8%) |

Sleep disturbances in the form of reduced of sleep was present in all the patients. Difficulty in concentration was reported by almost all the patients (n = 56 (98.2%); Table 4). Significant proportion of patients also presented with ideas of persecution (n = 49 (86%)). At the end of 6 months, no review of diagnosis was made in significant proportion of patients (n = 42 (73.6%)). Review in diagnoses was frequently made in the subgroup of non-organic psychosis followed by paranoid schizophrenia (Table 5).

**DISCUSSION**

Fifty seven outpatients were followed-up to study the impact of sociodemographic profile on the outcome of acute and transient psychotic disorders (also known as atypical psychosis). The mean age in our study sample was 32.25 (±12.2) years. In a couple of studies reported from India, the mean age of patients were between 25 (±9.4) and 26.9 (±10.9) years. In general, the onset of acute and transient psychotic disorders is below 30 years. However, in our study and in a study by Jorgensen et al (1996) the mean age of the study population was 33 years.

In our study, the population was predominantly women. This pattern was evident from other Indian studies which ranged from 60% to 80%. In our study, majority of the patients were educated up to primary level. In a study by Das et al, majority of patients were educated beyond high school but in another study more than 50% of the patients were illiterates. In the study by Chakraborty et al, the patients had a mean education of 7.1 years which was similar to our study finding (mean years of education 7.35 years).

Statistically significant association was found in the present study between mean education years of patient and the diagnostic subgroups, with majority of the patients with acute polymorphic psychotic disorder with symptoms of schizophrenia having significantly less education years compared to other subgroups. In our study, 5% of the patients were unemployed however, majority of them were engaged in unskilled labor or were homemakers. This finding was similar to the one reported by Das et al.
There was no difference in the marital status in our study, equal proportion of patients were married or single. Das et al also reported a similar trend Das SK and the study by Pillmann et al reported significant number of patients with acute psychoses had a stable heterosexual relationships. In the study by Chakroborty et al, 73% patients were married. Majority of the patients in our study were Hindus. In a study, equal proportion of patients was Hindus and Sikhs. About 68% of the patients in our study were from the rural area. Other studies have also reported higher incidence in the rural areas (58-85%).

Majority of the patients in our study population resided in their own houses (72%). Migrants accounted for 21% of the patients in the current study population. In some studies, acute psychoses was observed more frequently in immigrants, A study from Qatar by Shaltout et al reported that 67% patients were expatriates. Significant proportion of patients in our study belonged to higher-lower socioeconomic status. The prevalence of significantly higher proportion of patients diagnosed with acute polymorphic psychotic disorder without psychotic disorders or acute schizophrenia-like psychosis correlated to rising socioeconomic status (p <0.035). Nearly two-third of patients was living in nuclear family.

Family history of psychiatric illness was not a clinical significant correlate in our study. In other studies the influence of family history of psychiatric illness on prevalence of acute and transient psychotic disorders was variable. Das et al found higher risk of acute and transient psychosis among family members of patients suffering from acute and transient psychosis as compared to those with family history of schizophrenia. Das et al, Sajith et al and Marneros et al reported that one-third of their sample population had a positive history of psychiatric disorders in their families.

The present study found that a stressor was present in slightly fewer patients 27 (47%) when compared to those who did not have an antecedent stressor 30 (53%). When the Presumptive Stressful Life Event Scale scores were compared with respect to the family history of psychiatric illness, a statistically significant association was seen between the presence of a stressor and positive family history (p < 0.00). The study by Das et al found that one-third of the patients had an antecedent stressor, however when assessed with regard to a positive family history, 84% of patients who had an antecedent acute stressor had a positive family history of psychiatric illness. Sajith et al found that 68% patients had an acute stressor prior to the onset; however Marneros et al found the frequency to be quite low. The study by Chakraborty et al found a mean PSLES score of 69 for the preceding 3 month period.

The present study found majority of the patients had an acute onset 50 (87%) and the remaining 13% patients had an abrupt onset. This is in contrast to findings reported in other studies Jorgensen et al reported abrupt onset in 42% patients, and Sajith et al in 67%. Onset of the disorder was not influenced by either the absence or presence of an antecedent stressor. Jorgensen et al however found significant difference, with the onset being abrupt in 59% of the patients having an antecedent stressor.

The mean interval of presentation from the time of onset was 3.5 days. However statistically significant association was seen in the present study between the presence of suicidal thoughts and the interval at presentation (6.6 days), which was much more than the patients who presented without suicidal thoughts (3 days). In our study, 14% of the patients had suicidal symptoms at presentation. In the present study, the mean period of inpatient treatment of the patients was 5.5 days. When the patients were reassessed after 6 months, 19% of patients had adhered to treatment.

A significant association was observed between the duration of medication and review diagnosis status. Diagnosis was not reviewed in most of the patients who did not complete the treatment for 6 months. A trend was noticed with greater proportions of patients with no review diagnosis stopping their medications as the duration since onset increased. In the study by Jorgensen et al, it was seen that 44% of the patients did not receive treatment at the end of 1 year period. In our study, 80% of the patients did not adhere to treatment at the end of 6 months.Majority of the patients in the current sample had GAF scores in the range of 21-40 (76%). Sajith et al reported a mean score of 17.3 while Rad A et al reported a mean score of 30.9.

The most frequent symptoms in the patients in the present study were reduced sleep (100%), concentration difficulties (98%) and ideas of persecution (86%). In the study by Sajith et al, the most common symptoms were reduced sleep (98%) and reduced appetite (96%), while the most common psychotic features were other auditory hallucinations (91%) and delusions of persecution (82%). In the study by Marneros et al, anxiety was significantly more frequent, with delusion of reference (79%) and delusion of persecution (62%) also being quite common. Delusion of misidentification was seen in 38% patients.

No significant association was found in the present study between the positive and negative syndrome scale (PANSS) score and the general psychopathology scores and the acute and transient psychotic disorder subgroups.

In the present study, a review diagnosis was made in almost 26% of the patients and 74% of the patients retaining their original diagnosis. The major diagnostic changes at the end of 6 months were to other nonorganic psychosis 9 (16%) and paranoid psychosis 3 (5%), with the other changes being to depression, dissociative disorder and bipolar affective disorder one patient in each diagnosis. In the diagnostic subgroups, 83% of the acute
schizophrenia-like psychotic disorder underwent a diagnostic change, while all the patients in acute polymorphic psychotic disorder without symptoms of schizophrenia and in other acute predominantly delusional psychotic disorder retaining their original diagnosis. The above findings varied when compared with other studies, especially with regard to the duration of the study. In the 1-year study by Jorgensen et al, 48% patients had a diagnostic change and the major changes were to affective disorder (28%) and to schizophrenia (15%). In the 3-year study by Amin et al, 35% of the patients retained their diagnosis of acute and transient psychoses. In the 3-year study by Sajith et al, 73.3% patients retained index diagnosis of acute polymorphic psychotic disorder, with the changes being made to bipolar affective disorder 22.2% and unspecified non-organic psychosis 4.4%. In the study by Castagnini et al, the major changes were to schizophrenia and related disorders 29.3% and affective disorder 11%. 20

No repeat episodes were noted in our study. Perris et al stated that the average cycle period for the next episode was 2 years. In the study by Sajith et al of the patients no further episodes, had one further episode of acute and transient psychotic disorder, and 1 patient had two episodes of acute and transient psychotic disorder.8,9,22

CONCLUSION

Except for immigrant status and level of education, none of the sociodemographic parameters had influence on the prevalence of acute and transient psychotic disorders. Family history of psychiatric illness was not associated with occurrence of acute and transient psychotic disorders. Stressor was a significant trigger and had a significant association with family history of psychiatric disorder. The onset of the disorder was acute and history of an antecedent stressor had no effect on the onset of the disorder. The onset was acute rather than abrupt in most of the study population. Suicidal thoughts were present at the time of diagnosis in certain patients. Diagnosis was not reviewed in most of the patients who did not complete the treatment for 6 months. Significant proportion of patients failed to adhere to treatment. Patients predominantly experienced reduced sleep concentration difficulties, ideas of persecution, perplexity, hallucinatory behavior and other auditory hallucinations as the main symptoms. Diagnostic review was made in 25% of the patients. None of the patient had repeat episodes of acute and transient psychotic disorder.

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REFERENCES

1. Castagnini A, Berrios GE. Acute and transient psychotic disorders (ICD-10 F23): a review from a European perspective. Eur Arch Psychiatry Clin Neurosci. 2009;259(8):433-43.
2. Shaltout T, Bener A, Abdullah M. Acute and transient psychotic disorders in a rapidly developing country, state of Qatar. Medicina. 2007;43(7):575-9.
3. World Health Organization. The ICD-10 classification of mental and behavioural disorders clinical descriptions and diagnostic guidelines. Available from http://www.who.int/classifications/icd/en/bluebook.pdf. Accessed on 9 July 2016.
4. Singh G, Kaur D, Kaur H. Presumptive stressful life events scale (PSLES): a new stressful life events scale for use in India. Indian J Psychiatry. 1984;26(2):107-14.
5. Asberg M, Montgomery SA, Perris C, Schalling D, Sedvall G. A comprehensive psychopathological rating scale. Acta Psychiatr Scand Suppl. 1978;271:5-27.
6. Kay SR, Fiszbein A, Opler LA. The positive and negative syndrome scale (PANSS) for schizophrenia. Schizophr Bull. 1987;13(2):261-76.
7. Jones SH, Thornicroft G, Coffey M, Dunn G. A brief mental health outcome scale-reliability and validity of the global assessment of functioning (GAF). Br J Psychiatry. 1995;166(5):654-9.
8. Das SK, Malhotra S, Basu D. Family study of acute and transient psychotic disorders: comparison with schizophrenia. Soc Psychiatry Psychiatr Epidemiol. 1999;34(6):328-32.
9. Sajith SG, Chandrasekaran R, Sadanandan KE, Sahai A. Acute polymorphic psychotic disorder: diagnostic stability over 3 years. Acta Psychiatr Scand. 2002;105(2):104-9.
10. Remberk B, Bogumil B, Bronowska Z, Namyslowska I, Potocki P. Acute and transient psychotic disorder: comorbidity with personality disorder. Acta Psychiatr Scand. 1996;94(6):460-4.
11. Alaghband J, Boroumand M, Amini H, Sharifi V, Omid A, Ashtiani R, et al. Non-affective acute remitting psychosis: a preliminary report from Iran. Acta Psychiatr Scand. 2006;113(2):96-101.
12. Chakraborty R, Chaterjee A, Choudhary S, Singh AR, Chakraborty KP. Life events in acute and transient psychosis a comparison with mania. German J Psychiatry. 2007;10:36-40.
13. Pillmann F, Haring A, Balzuweit S, Marneros A. A comparison of DSM-IV brief psychotic disorder with “positive” schizophrenia and healthy controls. Compr Psychiatry. 2002;43(5):385-92.
14. Chavan BS, Kulhara P. Outcome of reactive psychosis: a prospective study from India. Acta Psychiatr Scand. 1988;77(4):477-82.
15. Littlewood R, Lipsedge M. Acute psychotic reactions in caribbean-born patients. Psychol Med. 1981;11(2):303-18.
16. Sabine EC, Mann AH, Jacoby RJ, Wood KH, Magnan P, Olié JP, et al. Boufféedélirante: an examination of its current status. Psychol Med. 1983;13(4):771-8.
17. Marneros A, Pillmann F, Haring A, Balzuweit S, Blöink R. The relation of "acute and transient psychotic disorder" (ICD-10 F23) to bipolar schizoaffective disorder. J Psychiatr Res. 2002;36(3):165-71.
18. Jørgensen P, Bennedsen B, Christensen J, Hyllested A. Acute and transient psychotic disorder: a 1-year follow-up study. Acta Psychiatr Scand. 1997;96(2):150-4.
19. Marneros A, Pillmann F, Haring A, Balzuweit S, Blöink R. Is the psychopathology of acute and transient psychotic disorder different from schizophrenic and schizoaffective disorders? Eur Psychiatry. 2005;20(4):315-20.
20. Amin S, Singh SP, Brewin J, Jones PB, Medley I, Harrison G. Diagnostic stability of first-episode psychosis. Comparison of ICD-10 and DSM-III-R systems. Br J Psychiatry. 1999;175:537-43.
21. Castagnini A, Bertelsen A, Berrios GE. Incidence and diagnostic stability of ICD-10 acute and transient psychotic disorders. Compr Psychiatry. 2008;49(3):255-61.
22. Perris C. The concept of cycloid psychotic disorder. Psychiatr Dev. 1988;6(1):37-56.

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