Non-affective Acute Remitting Psychosis: a preliminary report from Iran


Objective: To investigate the concept of ‘Non-affective Acute Remitting Psychosis’ (NARP) in a group of patients with first episode psychosis in Iran.

Method: This is a 24-month follow-up study of 54 patients with first-episode psychosis admitted consecutively to a psychiatric hospital in Tehran, Iran. At the end of follow-up, consensus judgments were made on fulfillment of the NARP criteria as well as illness course and treatment. NARP was defined as a psychotic illness with acute onset (developed within 1 week), short duration (remission within 6 months), and the absence of prominent mood symptoms.

Results: Of 49 patients who completed the follow-up, 15 (30.6%) had NARP, accounting for 60% of non-affective psychoses. Ten patients with NARP remained relapse free, four had a very short-lived relapse, and only one developed a chronic illness. Throughout the follow-up, patients with NARP received fewer months of treatment than did patients with other non-affective psychoses.

Conclusion: The high proportion of NARP among patients with first episode psychosis, and the favorable course is in keeping with previous studies in developing countries.

Significant outcomes

- More than 30% of a sample of first episode psychosis in Iran had Non-affective Acute Remitting Psychosis (NARP).
- Patients with NARP had a strikingly favorable 24-month course in comparison with other patients with non-affective psychoses.
- The favorable course in patients with NARP prevailed despite their receiving less months of treatment.

Limitations

- The small sample size brings caution to any conclusions.
- Restricting sampling to an in-patient group in the capital of Iran limits generalizability of the findings.
- Long-term course of patients was not studied.

Introduction

Psychotic states with acute onset and short duration have long been recognized as clinical entities, and several researchers have attempted to classify them under terms such as cycloid psychosis (1), bouffée délirante (2), and reactive psychosis (3). However, descriptive and predictive validities of
the diagnostic categories have not been fully established.

In the last decade, there has been a renewed interest in studying these groups of psychoses. It is reflected in the tenth revision of the International Classification of Diseases and Related Health Problems (ICD-10) (4) that has introduced a group entitled 'acute and transient psychotic disorders' (ATPD). However, there is no equivalent for this group in the other widely used classification system, the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (5), where brief psychoses (i.e. brief psychotic disorder and schizophreniaiform disorder) consider no criterion for acute onset.

The advantage of ICD-10 ATPD for its inclusion of acute onset criterion is very important in developing countries, where acute psychotic disorders are much more common than in the developed countries, comprising larger proportion of psychotic disorders (6). However, it has been shown that ATPD criteria are not readily applicable in developing countries, as acute psychoses with remitting course has been reported of having the modal duration of 2-4 months (7), that is longer than 1-3 months allowed for subtypes of ATPD. In addition, stability of diagnosis and course of ATPD has been a matter of controversy in various follow-up studies (8-11).

Regarding the uncertainties, Susser and Wandering in 1994 introduced a group of non-affective psychoses that are characterized by very acute onset and full remission under the rubric of ‘Non-affective Acute Remitting Psychosis’ (NARP) (12).

Using the data from an international epidemiological study, they found that unlike schizophrenia, the incidence of NARP was 10-fold higher in the developing country settings than in the industrialized countries and two-fold higher in women than in men regardless of settings. Studies have suggested that these acute brief psychoses, in addition to the epidemiological features described above, may exhibit distinctive biological associates (13), temporal stability (14), duration criterion (7, 15), and excellent long-term course, especially in developing countries (16).

Aims of the study
Noting the reported high incidence of NARP in developing countries, we attempted to investigate its demographic and clinical characteristics among a group of first episode psychotic patients, admitted to a psychiatric hospital in Tehran, Iran.

Material and methods
This study is part of an ongoing project on first episode psychosis in Tehran, Iran. The subjects were admitted consecutively over a 2-year period (starting as of 1999) into Roozbeh Hospital, an academic referral psychiatric center in Tehran (the capital of Iran). The hospital has no selective admission policy, admitting patients from all socioeconomic classes, and from all over the country. Yet, it is known that most patients come from middle or lower classes, and from Tehran. The admissions include a diverse range of psychiatric disorders, most being severe mental illnesses. On average, <10% of in-patients in the last few years had a first episode of a psychotic illness. The other available in-patient services in Tehran include a few other academic and private hospitals.

Inclusion criteria were the age range of 15-60 years, presence of any psychotic symptoms (delusions, hallucinations, disorganized speech, and/or grossly disorganized behaviors), and the current episode as being the first episode of any major psychiatric problem. Exclusion criteria were any suspicion of known organic conditions or use of substances as directly contributing to the emergence of symptoms (not merely a comorbid condition), use of any psychotropic medication within 1 week preceding the initial assessment, mental retardation, and non-Farsi-speaking status (Farsi is the official and commonly spoken language in Iran). The ascertainment of these criteria were made by the clinical judgment of a research psychiatrist based on interviews with patients and their families, physical examinations, routine labs, and other paraclinical exams as needed.

All consecutively admitted patients who met the eligibility criteria were invited to participate in the study. Fifty-four patients were eligible and all agreed to participate. Written informed consent was obtained from all.

During the initial assessment, two research psychiatrists reached consensus on diagnosis (using checklists of ICD-10 and DSM-IV criteria), mode of onset [using the WHO’s mode of onset rating (17)], and presence of life-events within 4 weeks preceding the onset [using the ‘Social Readjustment Rating Scale’ (18); febrile illness and delivery were added to the list of life events]. In case of disagreements, opinion of a third psychiatrist was solicited. In addition, one of the psychiatrists assessed baseline clinical and functional status of patients using the following instruments: (a) the ‘Scale for the Assessment of Positive Symptoms’ (SAPS) (19), (b) the ‘Scale for the Assessment of Negative Symptoms’ (SANS) (20),
and (c) the ‘Global Assessment of Functioning’ (GAF) (5). The latter was used to estimate the baseline functioning at the worst point during the month before the admission and also to evaluate premorbid functioning that was operationalized as the highest GAF score in the month immediately prior to the onset of psychotic symptoms.

Then, the patients were interviewed in person at the time of discharge (usually 3–7 weeks following admission), as well as 3, 6, 12, 18, and 24 months after admission, usually in an out-patient setting. At each visit, ratings of SAPS, SANS, and GAF were done by the same researcher who had conducted the baseline evaluations. At the end of the 2-year follow-up, consensus was made regarding the fulfillment of the NARP criteria, DSM-IV and ICD-10 diagnoses, as well as on the illness course (including full remission and relapse) and the treatment course.

Non-affective Acute Remitting Psychosis was defined as a psychotic illness with acute onset (change from non-psychotic condition to full-blown symptoms within 1 week and without prodrome), short duration (remission within 6 months after onset with no relapse in the same period), and the absence of prominent mood symptoms (no DSM-IV mood disorder or ICD-10 affective disorder in the course of follow-up) (21). Remission was defined as being symptom free for at least 4 weeks, and relapse was defined as the need to increase the antipsychotic drugs or to hospitalize the patient. Those who did not meet the NARP criteria were assigned to either ‘affective psychosis’ or ‘other non-affective psychosis’ groups based on their 24-month DSM-IV and ICD-10 diagnosis.

The course of treatment from intake to 24-month follow-up was determined at the consensus meeting by using all available information. These included medical records, along with available reports by the patient and/or their families. For this study, we calculated the number of months the patient had received any antipsychotic medications and any form of pharmacological treatment.

Summary statistics were used to describe data, and one-way analysis of variance (ANOVA), post hoc Tukey HSD, and Mann–Whitney U were used to compare data across groups.

**Results**

Baseline demographic and clinical characteristics of patients are given in Table 1. In the course of follow-up, five patients dropped out. These subjects were not different to the rest of sample with regard to demographic or baseline SAPS, SANS, or GAF ratings, with the exception of education; the lost to follow-up group were less educated ($P < 0.05$).

The remaining 49 cases were followed for 2 years. Fifteen patients had NARP that constituted 30.6% of the patients (95% confidence interval = 18.3–43.5%) and accounted for 60%
of non-affective psychoses (95% confidence interval = 40.8–79.2%). Duration of the index episode was <3 months for all of these patients; in eight out of 15 subjects it was <1 month. Two-thirds of NARP patient (10 cases) had experienced one or more significant life events within 4 weeks preceding the onset, including marriage and marital problems (n = 4), febrile illnesses (n = 2), change in financial state (n = 1), change in health of a family member (n = 1), change in school (n = 2), violation of the law (n = 1), and delivery (n = 1).

At 24-month visit, 13 NARP patients received ICD-10 ATPD; two others were diagnosed as schizophrenia or other non-organic psychotic disorders. By using DSM-IV, they were classified into brief psychotic disorder (n = 10), schizophreniform disorder (n = 2), schizophrenia (n = 1), delusional disorder (n = 1) and psychotic disorders not otherwise specified (n = 1). The diagnostic profile was quite different for patients with other non-affective psychosis: by using DSM-IV most had schizophrenia (n = 6), with others having brief psychotic disorder (n = 1), schizophreniform disorder (n = 1), delusional disorder (n = 1) and psychotic disorders not otherwise specified (n = 1); according to ICD-10, diagnoses included schizophrenia (n = 7), ATPD (n = 1), delusional disorder (n = 1), and other non-organic psychotic disorders (n = 1). The affective psychosis patients were diagnosed by using ICD-10 as mania/bipolar affective disorder (n = 19), and depression/recurrent depressive disorder (n = 5). The same held true for DSM-IV where 19 met criteria for a bipolar disorder and five for major depressive disorder.

In the course of follow-up, 10 NARP patients remained relapse free, four experienced a short-lived relapse (<1 month duration) and another developed a more chronic course. The course of non-affective psychosis group was much poorer; of 10 patients, eight had a chronic course, one had a short-lived relapse, and only one patient remained relapse free. The course of NARP was more similar to the affective psychosis group; in the latter, 14 of 24 patients, remained relapse free, nine experienced a short-lived relapse, and only one had a chronic course.

The SAPS, SANS, and GAF ratings in the course of follow-up are shown in Fig. 1 and Table 1. As seen, clinical and functional status of NARP is in sharp contrasts with the non-affective psychosis group, being more similar to the patients with affective psychosis. Moreover, the patients with NARP received less months of antipsychotic treatment than did the patients with other non-affective psychoses. NARP patients were also less on any pharmacological treatment in comparison with the non-affective group, however non-significantly (Table 1).

**Discussion**

In our study, 30.6% of first episode psychotic patients and 60% of those with non-affective psychosis were diagnosed as NARP, which is in line with previous research reporting high incidence of NARP in developing country settings (12). Susser et al. (16) and Mojtabai et al. (7) showed that NARP constituted between 21% and 25% of non-affective psychoses referred to any help agency in developing countries. Their subjects differed from our sample which consisted of in-patients; it should be noted that the patients
with acute brief psychosis may never seek treatment and are less likely to be hospitalized (14). Therefore, they might have been under-represented in our study and the estimate in the community could be even higher. Our findings is in marked contrast with a more recent research on an in-patient sample in a developed country that reported a prevalence of NARP as equal to 5% among first admission patients with psychosis admitted to psychiatric facilities in Suffolk County in the US (21). In another study in the UK (10), only 9% of an inception cohort with first episode psychosis experienced an acute non-affective psychosis whose recovery took place within 6 months (that is comparable with our definition of NARP).

We found that NARP was more common in women (however non-significantly), consistent with the findings of Susser and Wanderling (12) and Mojtabai et al. (21). In none of our 15 NARP patients did psychosis last more than 3 months, in contrast to the study by Mojtabai et al. (7), in which only 31% of NARP patients had <3 months duration of illness. Our finding is seemingly compatible with the duration criteria in ICD-10 for ATPD (1–3 months, depending on the subtype).

In the NARP group, most had experienced a significant life event preceding their illnesses. Associations between stressors and NARP or other acute psychoses are reported elsewhere as well (22). In our sample, two NARP patients had experienced a febrile illness occurring prior to and remitting in the first week of their illnesses. Association between antecedent fever and acute psychosis in developing country settings has been suggested by others, considering fever as a biological correlate of acute brief psychosis (13).

Non-affective Acute Remitting Psychosis patients had a distinctly benign course: 67% were relapse-free in the 24-month follow-up and most others experienced a very short-lived relapse with complete recovery. This favorable course is in keeping with previous studies in both developing (7, 12, 15, 16) as well as developed (14, 21) countries. In contrast, the patients with other non-affective psychosis had much poorer prognosis with more severe symptoms and lower functioning at 2-year follow-up. This is despite the fact that our NARP patients were less on antipsychotic treatment as compared with other non-affective psychoses; therefore, the favorable course of NARP could not be explained by more intensive and prolonged treatment. Furthermore, the current evidence (15, 21) confirms that the response to medication cannot explain the excellent long-term prognosis of NARP patients. Our patients with NARP were not different from other groups in terms of premorbid functioning that is known as a prognostic indicator; however, our assessment of this variable was not comprehensive and it is shown that poor functioning prior to the onset of psychosis has a significant relationship with the outcome in patients with first episode psychosis (23). Further exploration of this issue is suggested in future studies.

Our study has a few limitations. The most important one is our small sample size that brings caution into any conclusion drawn from the study. We are now continuing the study by enrolling new subjects and extending the follow-up period. Restricting sampling to admitted patients is another limitation. Although hospitalization facilitates evaluation and follow-up in the initial weeks of the study, this may bias the representativeness of our sample. This issue should be addressed in an epidemiological study in general population of our country.

Some have doubted the advantage of NARP over prevailing diagnostic entities such as ATPD or brief psychotic disorder (24). We could not support the argument for longer duration of acute psychosis (i.e. one of the main supporting evidence for NARP), and most NARP patients met the ICD-10 criteria for ATPD. However, our ATPD patients were not easily classifiable into any specific ATPD subcategory, and most received ‘other ATPD’ according to ICD-10. As stated elsewhere, this subclassification is based on little evidence, and its removal has been suggested recently (7). The situation is more problematic in DSM-IV, which has no category for patients with acute brief psychoses and these patients receive a range of diagnoses. Moreover, NARP could have other advantages when compared with other entities for brief psychosis, such as distinctive sex distribution, quite favorable and stable course, and relationship with life events, as observed in this study.

In conclusion, our findings support the existence of a group of patients with acute brief psychosis that constitutes a greater proportion of non-affective psychoses in developing countries. This group has distinctive clinical and demographic features, quite different from other forms of non-affective psychosis. The concept could imply the existence of a group of psychotic disorders different from either affective psychoses or other non-affective psychoses such as schizophrenia. The existence of such a concept has utmost importance, especially for developing country settings, and it would merit much attention in the next revisions of DSM. Further studies are needed to elucidate the epidemiological and clinical features of this group of psychotic disorders.
References

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