



Persistent negative symptoms after first episode schizophrenia: A 2-year follow-up study



Alp Üçok*, Ceylan Ergül

Department of Psychiatry, Istanbul Faculty of Medicine, Istanbul University, Millet Street, Çapa, Fatih, Istanbul, Turkey

ARTICLE INFO

Article history:

Received 6 May 2014

Received in revised form 13 July 2014

Accepted 14 July 2014

Available online 5 August 2014

Keywords:

First episode schizophrenia

Persistent negative symptoms

Cognition

Functional outcome

Premorbid functioning

ABSTRACT

Background: The aim of this study is to determine the rate of persistent negative symptoms according to different criteria during two years of follow-up after first-episode schizophrenia.

Methods: The study sample consisted of 105 patients with first-episode schizophrenia who completed at least 12 months of follow-up period. We used 6 different definitions of persistent negative symptoms (PNS) based on the Scale for the Assessment of Negative Symptoms subscale scores at seven time points throughout the follow-up. In some definitions of PNS, patients with suprathreshold depressive symptoms were excluded. Premorbid adjustment and baseline cognitive performances of the patients were assessed.

Results: The PNS rates were between 14.2 and 27.9% in the first year and 11.1 and 25.8% in the second year. Seventy-eight percent of the patients who met the strictest PNS criteria during the first 12 months met the same criteria also during the second 12-month-period. Those with PNS had earlier onset, lower premorbid functioning, worse executive functioning and attention at baseline, and lower rates of working/studying during the 2-year follow-up. Duration of education and untreated psychosis are the independent variables that contribute to the PNS status at the first year of follow-up in logistic regression analysis.

Conclusion: Our findings suggest that PNS has specific predictors and effect on the course of illness after first-episode schizophrenia.

© 2014 Elsevier B.V. All rights reserved.

1. Introduction

It is known that negative symptoms are present in schizophrenia beginning from the prodromal period and that they are more persistent than positive symptoms (Möller, 2007). States in which negative symptoms are continuously present at a level higher than a certain threshold are defined as deficit syndrome or persistent negative symptoms (PNS), depending on the exclusion criteria. It has also been shown that these states are more strongly related with negative outcomes, in studies of chronic cases (Galderisi et al., 2013; Buchanan, 2007). The concept of PNS is more extensive than deficit syndrome and was defined in the NIMH-MATRICES consensus report as symptoms that are primary or secondary, have not responded to the usual treatments for these symptoms, interfere with the ability of the patient to perform normal role functions, persist during periods of clinical stability, and represent an unmet therapeutic need (Kirkpatrick et al., 2006). The rates of PNS in first-episode psychosis samples were reported to be between 3.8 and 1.5% at one-year follow-up (Mayerhoff et al., 1994; Edwards et al., 1999; Malla et al., 2004; Chang

et al., 2011; Hovington et al., 2012; Galderisi et al., 2013). The rate of PNS at the third year of follow-up was reported as 23.7% (Chang et al., 2011).

Factors associated with PNS after FES were reported to be longer duration of untreated psychosis (DUP) (Edwards et al., 1999; Malla et al., 2004; Chang et al., 2011; Galderisi et al., 2013), lower premorbid functioning (Edwards et al., 1999; Malla et al., 2004; Chang et al., 2011), and male sex (Chang et al., 2011). Those with PNS were also reported to have lower levels of functionality and quality of life, worse vocational outcome, less adherence to treatment, and higher levels of symptoms at follow-up (Edwards et al., 1999; Malla et al., 2004; Chang et al., 2011; Hovington et al., 2012; Galderisi et al., 2013). The relationship between baseline neurocognitive functions and PNS was analyzed in two FEP studies and no difference was found between patients with and without PNS (Chang et al., 2011; Galderisi et al., 2013).

The differences between the reported rates of PNS after first-episode schizophrenia (FES) are mainly due to the differences between the definitions of PNS and the studied samples. Edwards et al. (1999) reported that the rates of enduring negative symptoms, which they defined according to 6 different sets of criteria in the one-year follow-up after FES, range between 3.8 and 41%, depending on the strictness of the criteria used. In some studies, having any one of the

* Corresponding author. Tel.: +90 532 687 67 46; fax: +90 212 635 12 04.
E-mail address: alpuçok@gmail.com (A. Üçok).

negative symptoms in the baseline and in the final ratings was sufficient to meet the PNS criteria (Galderisi et al., 2013), whereas in other studies, having at least two negative symptoms was required (Edwards et al., 1999; Hovington et al., 2012). Edwards et al. (1999) reported that more than half of the patients met the negative symptom criteria in at least one of the three evaluations made after the first admission, but they noted that patients who met the criteria in all evaluations should be considered as having enduring negative symptoms. In some of the FES studies (Galderisi et al., 2013; Chang et al., 2011) PNS was defined according to the ratings made at the baseline and at the endpoint, without taking the 12-month course in between into account. Another possible explanation for the differences between the findings is the percentage of schizophrenia patients in samples. The rate of schizophrenia patients in the samples studied ranges between 36 and 80% (Edwards et al., 1999; Chang et al., 2011). In some studies, bipolar/unipolar mood disorder patients were also included and it has been shown that there is an almost 10-fold difference between the rates of PNS in the schizophrenia subgroup and in the other subgroups (Edwards et al., 1999; Hovington et al., 2012). Due to the caveats described for the previous studies, it is important to know the frequency of PNS in a homogenous group of patients with first-episode schizophrenia. A follow-up period longer than one year and more frequent assessment of negative symptoms are also needed to understand the course after FES.

The aim of the study is to determine the rate of persistent negative symptoms according to different criteria during two years of follow-up after FES. We also aimed to identify the clinical and functional variables associated with persistent negative symptoms. We hypothesize that patients with PNS have poorer functional capacity before and after the first episode.

2. Materials and methods

2.1. Participants

Participants were recruited from an ongoing First-Episode Schizophrenia Follow-up Project in Istanbul Faculty of Medicine. The details of our FES definition, inclusion and exclusion criteria were reported elsewhere (Üçok et al., 2011). The patients who met the DSM-IV diagnosis of schizophrenia according to the Structured Clinical Interview for DSM-IV (SCID I, First et al., 1996) were reevaluated at a consensus meeting to incorporate clinical and SCID data. A patient was accepted to be in a first episode of psychosis if all of the following conditions were met: no history of affective or non-affective psychosis, no antipsychotic treatment longer than 15 days and no inpatient care. Those with another DSM-IV Axis I diagnosis or a serious medical illness were excluded. All hospitalized patients with FES were invited to the follow-up study. Eight outpatients were also included in the study. The diagnosis of schizophrenia was verified by readministration of the SCID six months after discharge. We recruited 181 people to this prospective naturalistic study. After completing the clinical assessments at admission, 24 patients refused to participate or did not come to the first outpatient visit, 13 patients moved to other cities, 23 patients dropped-out before 12 months, 11 patients were excluded because of missing SANS scores data, and 18 patients did not meet the criterion of at least one year of follow-up at the time of the statistical analyses. Two patients committed suicide and another patient died because of an unknown cause during the 24-month follow-up. The final study sample consisted of 105 patients who completed at least 12 months of follow-up period.

After the baseline procedures, the patients received adequate antipsychotic treatment (maintenance doses equivalent to at least 3 mg/day risperidone). During the follow-up, antipsychotic drugs were changed to or combined with other antipsychotics due to reasons such as inefficacy and adverse effects. The first drug used was an atypical antipsychotic for the majority of the patients (74.5% of the

PNS group, 71.4% of the others). The drug used at the last evaluation was also an atypical antipsychotic for the majority of the patients (77.4% of the PNS group, 75% of the others). There was no significant difference between the groups in terms of atypical antipsychotic use at the first and last evaluations. Sixteen percent of the patients used an antidepressant, and 18.4% used biperiden. The adherence to treatment was evaluated considering the first six months of follow-up.

The Ethical Committee of Istanbul Faculty of Medicine approved the study protocol, and the patients gave informed consent.

2.2. Clinical assessments

We evaluated the patients first at admission when they were drug-naïve, then at monthly visits using The Brief Psychiatric Rating Scale-Expanded (BPRS; Lukoff et al., 1986), the Scale for the Assessment of Positive Symptoms (SAPS; Andreasen, 1984), and the Scale for the Assessment of Negative Symptoms (SANS; Andreasen, 1983). All item values were assigned by two trained raters. Inter-rater reliabilities for the BPRS, the SANS and the SAPS total scores were acceptable ($\kappa = 0.78$, $\kappa = 0.76$, and $\kappa = 0.83$ respectively). We used the Premorbid Adjustment Scale (PAS; Cannon-Spoor et al., 1982) to assess premorbid functioning. PAS measures levels of functioning in terms of social accessibility-isolation, peer relationships, school performance, adaptation to school, and capacity to establish social-sexual relationships. We took childhood (up to 11 years) and adolescence (12–15 years) into consideration.

The working/studying status was determined based on information obtained from direct interviews with the patients and their families and from social worker reports. The working/studying status was evaluated for three different time periods: the month prior to admission, the first year, and the second year of follow-up. Full-time students and paid workers were regarded as occupied if they showed a stable performance during at least six months of the year being evaluated. The date of the first identifiable positive symptoms was determined by the senior psychiatrist (AU) on the basis of a best-estimate approach using the data gathered from multiple sources such as patient and family interviews and medical records. We defined the duration of untreated psychosis (DUP) as the time from the onset of positive symptoms until the date of adequate antipsychotic treatment.

A cognitive test battery consisting of the Rey Auditory Verbal Learning Test, the Stroop Test, the Wisconsin Card Sorting Test, the Digit Span Test, the Continuous Performance Test, the Trail Making Test and the n-back test were conducted when the patients were drug-naïve. The details of the cognitive tests were presented elsewhere (Üçok et al., 2013). The cognitive test battery was only administered to the last 53 participants because it was added to the study design later.

2.3. Definition of persistent negative symptoms and proxy for deficit syndrome

We used 6 different definitions of persistent negative symptoms (PNS) based on SANS subscale scores at seven time points (at admission, 3rd, 6th, 12th, 15th, 21st, and 24th month) through follow-up.

PNS.1: a score of 3 or more on at least 1 global item of the SANS. Having any negative symptoms at all evaluations is required to meet this criterion.

PNS.2: a score of 3 or more on at least 1 global item of the SANS. Having the same negative symptom or symptoms at all evaluations is required to meet this criterion.

PNS.3: a score of 3 or more on at least 2 global items of the SANS. Having the same two negative symptoms at all evaluations is required to meet this criterion.

PNS.4: meeting PNS.1 criterion and having a score of 6 or less on the depression subscale of BPRS at all evaluations.

Download English Version:

<https://daneshyari.com/en/article/6824885>

Download Persian Version:

<https://daneshyari.com/article/6824885>

[Daneshyari.com](https://daneshyari.com)