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IV. 研究成果の刊行物・別刷



Early Intervention in Psychiatry 2013; ••: ••-••

doi:10.1111/eip.12032

Original Article

Poor outcome associated with symptomatic deterioration among help-seeking individuals at risk for psychosis: a naturalistic follow-up study

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Abstract

Aims: It remains debatable whether early intervention for psychosis is capable of meeting the needs of at-risk subjects. The aims of this study were to describe the actual impact of interventions on subjective difficulties and to explore the factors that may be associated with a poor outcome.

Methods: Participants were help-seeking outpatients at a university hospital who met the Criteria of Prodromal Syndromes. Changes in the symptoms, subjective experience and current insight were assessed using the Scales of Prodromal Symptoms, the Subjective Well-being under Neuroleptics, and the Scale to Assess Unawareness of Mental Disorder, respectively. Global functioning, social functioning and subjective quality of life were evaluated using the Global Assessment of Functioning

Scale, the Social Functioning Scale, and the WHO-Quality of Life 26, respectively. These measures were assessed both at baseline and after 1 year.

Results: Forty-six patients agreed to participate. Of the 27 patients who completed the reassessment at the follow-up point, 13 patients (48%) showed little improvement in their positive/negative symptoms, subjective well-being or awareness of their symptoms. Additionally, less severe negative symptoms, more severe general symptoms and lower subjective well-being at baseline significantly predicted a deterioration of positive/negative symptoms after 1 year.

Conclusion: Our findings suggest that the current strategy for reducing psychosis risk based on positive symptoms should be reappraised.

Key words: at-risk mental states, early intervention, prodrome, psychosis, quality of life.

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Received 15 May 2012; accepted 30 September 2012

INTRODUCTION

In the last 15 years, a number of studies have supported the view that the earlier detection and care of psychosis can lead to a better outcome. However, most of these studies were conducted in research settings; thus, the actual *effectiveness* of early intervention for psychosis remains unclear. One of the issues that such studies have raised is that the diagnostic criteria or primary outcomes focus mainly on the attenuated positive psychotic symptoms.

Attenuated psychotic symptoms or psychotic-like experiences have been commonly found in the

general population, and these symptoms or experiences may not necessarily be associated with distress or help-seeking behaviour.⁴⁻⁶ In a previous study comparing help-seeking patients with the general population, the authors reported that psychosis-like experiences do not significantly contribute to help-seeking behaviour.⁷ Attenuated positive symptoms may not always confer subjective difficulties or sufferings; therefore, the current interventions to reduce risk which are focused on the attenuated positive symptoms may not be truly capable of meeting the needs of individuals meeting at-risk criteria.

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To date, longitudinal studies on the outcomes of individuals at risk for psychosis have underlined the considerably high rates of remission⁸ and the low rates of transition to psychosis. 9,10 Given that the criteria for remission and transition are based on the attenuated psychotic symptoms, however, it would be doubtful whether or not these outcomes reflect the actual changes in subjective difficulties of individuals at risk for psychosis. Indeed, a large longitudinal study, the North American Prodrome Longitudinal Study (NAPLS), revealed that most individuals who met the at-risk criteria but did not convert to psychosis continued to suffer from lower levels of functioning or disabilities. 11 Additionally, an approach focused predominantly on the low rate of transition to psychotic disorder can obscure individual treatment effects. Subgroups of participants may respond to individual treatments particularly well or particularly poorly as a result of the participants' characteristics or baseline symptom patterns. A recent report on a randomized controlled trial examining the effect of various therapies on young people with a high risk for psychosis concluded that the interventions were equally effective or ineffective. 12 Thus, the effectiveness of interventions for early psychosis should be clarified in clinical settings, regardless of the transition to full-blown psychosis.

We hypothesized that the current strategy, which is focused on the attenuated positive symptoms, cannot sufficiently ameliorate the subjective difficulties of individuals at risk for psychosis, such as their subjective quality of life (QOL), role/social functioning, interpersonal relationships and subjective well-being. We also assumed that some patients would continue to receive treatment because their symptoms had not been relieved.

The aims of this study were: (i) to describe the actual 1-year outcome of individuals with a high risk of psychosis based on comprehensive assessments including subjective QOL, role/social functioning, interpersonal relationships, insight into illness and subjective well-being; and (ii) to clarify the characteristics of patients who continue to receive treatment for over 1 year so as to explore the factors that may lead to a poor outcome, even without a transition to psychosis.

METHODS

Participants

This study was performed at a university hospital (Toho University) located in a suburb of Tokyo. The participants were eligible for enrolment in the study if they were between the ages of 16 and 40 years and

met the Criteria of Prodromal Syndromes (COPS).¹³ Patients were excluded from the study if they had: (i) any lifetime DSM IV (Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition) diagnosis of any psychotic disorder; (ii) symptoms fully accounted for by an Axis 1 disorder or sequelae arising from drug/alcohol use; or (iii) abuse of alcohol or drugs. All the participants were help-seeking outpatients. Each adult participant provided his or her written informed consent and each minor provided written informed assent in addition to consent from a parent or guardian. Data were collected between June 2007 and October 2009.

Measures

The Structured Interview for Prodromal Syndromes (SIPS)13 was performed for patients identified as having an 'at-risk mental state', including the Scale of Prodromal Symptoms (SOPS). The SOPS items consist of four symptoms: positive symptoms, negative symptoms, disorganized symptoms, and general symptoms, although the COPS focuses upon merely positive symptoms. We used the SIPS/ SOPS Japanese version, which we previously reported to have an excellent interrater reliability.14 The developers of this SIPS/SOPS Japanese version (H. Kobayashi and M. Mizuno) trained the staff to score these tests with accuracy, and the interviews (including the SIPS and the other assessments) were conducted by experienced psychiatrists (K. Morita, K. Takeshi and N. Tsujino).

Changes in subjective experience were assessed using the Subjective Well-being under Neuroleptics Short version (SWNS). ¹⁵ The SWNS is a 20-item test that uses a 6-point Likert-type self-rating scale. Naber *et al.* found a five-factor solution for the scale, which was interpreted as emotional regulation, self-control, mental functioning, social integration and physical functioning. We used the SWNS Japanese version, which has been shown to have a good reliability and validity. ¹⁶

Current insight was measured using the Scale to Assess Unawareness of Mental Disorder (SUMD).¹⁷ The SUMD rates awareness of 20 items was based on a 5-point Likert scale. To assess current insight, we used the 3 global insight items (awareness of mental disorder, awareness of achieved medication effects, and awareness of social consequences of medications) and the 17 subscales (awareness of symptoms).

Global functioning, social functioning and subjective QOL were evaluated using the Global Assessment of Functioning Scale, the Social Functioning Scale, and the WHO-Quality of Life 26, respectively.

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These measures were assessed both at baseline and after 1 year. The Institutional Review Board at Toho University approved the study protocol and the procedure for obtaining informed consent.

Interventions

During the follow-up period, all the patients received usual supportive therapy and/or psychotropic medication, with the main aim of reducing the severity of psychotic symptoms. Psychotropic medication included the use of antipsychotics for positive symptoms, anxiolytics for anxiety symptoms, and antidepressants for comorbid depressive symptoms, if necessary. The administration of antipsychotics was generally judged according to the International Clinical Practice Guidelines for Early Psychosis. The nature of the psychological intervention was left to the discretion of the psychiatrist in charge; cognitive therapy, psychoeducation, or family therapy, if used, were thus provided in diverse forms.

Clinical outcome

To determine the factors that may lead to a poor outcome, even without a transition to psychosis, the sample was subsequently split into two groups according to the degree to which either positive or negative symptoms had developed. At the follow-up point, patients with improvements from the baseline in both the SOPS positive and negative symptom scores without transitioning to psychosis were defined as 'improved', and patients with no improvements from the baseline in the SOPS positive or negative symptoms or who fulfilled the criteria for psychosis were defined as 'not improved'. The transition to psychosis was operationally defined using the Presence of Psychotic Symptoms criteria. ¹³

Statistical analyses

All the statistical analyses were conducted using the Statistical Package for Social Sciences (SPSS) version 18.0 for Windows (SPSS Inc., Chicago, IL, USA). The baseline variables were compared between the patients who were lost because of attrition and the patients who were followed up after 1 year with the help of Mann–Whitney *U*-tests for continuous variables and with chi-square tests for categorical variables. Also, clinical variables at baseline were compared between the 'improved' group and the 'not improved' group using the Mann–Whitney *U*-tests for continuous variables and the chi-square tests for categorical variables. In addition, we com-

pared clinical outcomes between the 'improved' group and the 'not improved' group using the analysis of variance, adjusting for age, duration of illness and baseline scores. To explore variables that can predict poor outcomes, multiple linear regression analysis was conducted. For each comparison, a value of P < 0.05 was considered statistically significant without any consideration for multiple comparisons.

RESULTS

At baseline, 46 treatment-seeking patients who had been clinically diagnosed as having clinical high risk of psychosis agreed to participate in the study and to be assessed. The demographic characteristics of the sample at baseline are presented in Table 1.

At the 1-year follow-up point, 27 participants (59%) completed the reassessment. Table 2 shows the sample characteristics of these 27 patients and the patients who withdrew from the study, indicating that the withdrawn patients were younger and had a shorter duration of illness, less negative/general symptoms and a higher QOL.

During the follow-up period, three patients, or 12% of the followed sample, converted to psychosis: two were diagnosed as having schizophrenia and one was diagnosed as having a schizoaffective disorder. According to the criteria mentioned above, 14 patients were defined as 'improved' (in both the SOPS positive and negative symptoms), but 13 patients, including the 3 psychotic cases, were defined as 'not improved' (in either the SOPS positive or negative symptoms). Detailed comparisons of these two groups are shown in Table 3, suggesting that although few differences in the clinical variables were found between the two groups at baseline, all the patients in the 'not improved' group had past treatment histories and had fewer family members with mental health illness.

Table 4 shows that 'not improved 'group demonstrated a decline of the SWNS total score and the SUMD sub-score (awareness of symptoms) over time, even after adjusting for age, duration of illness and baseline scores. Twenty-one (78% of the followed) patients had received antipsychotic medication at the follow-up point (aripiprazole: n = 13; quetiapine: n = 5; perospirone: n = 2; risperidone: n = 1), whereas only six patients (22%) were administered antipsychotic treatment at baseline (quetiapine: n = 2; risperidone: n = 2; aripiprazole: n = 1; perospirone: n = 1) (Table 3).

Multiple linear regression analysis was used to explore variables at baseline that can predict poorer

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