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Pre-treatment, baseline, and outcome differences between early-onset and adult-onset psychosis in an epidemiological cohort of 636 first-episode patients

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Abstract

Objectives: To assess pre-treatment, baseline, and outcome differences of patients with early- (onset < age 18) and adult-onset (onset ≥ age 18) psychosis in an epidemiological cohort of first-episode patients.
Methods: The Early Psychosis Prevention and Intervention Centre (EPPIC) in Australia admitted 786 FEP patients from January 1998 to December 2000. Data were collected from patients' files using a standardized questionnaire. Seven hundred four files were available, 61 of which were excluded owing to non-psychotic diagnoses or a psychotic disorder due to a general medical condition and 7 owing to missing data on age at onset. 636 patients were analyzed.
Results: The mean age at onset was 21.3 years (SD 3.6); the prevalence of early-onset psychosis was 18.6% (onset range 8.2–17.9). Patients with early-onset were likely to have a slightly, but significantly worse premorbid functioning and a significantly longer duration of untreated psychosis (Median 26.3 weeks) compared to patients with adult-onset (Median 8.7 weeks; $p < .001$). After controlling for relevant confounders, no significant outcome differences including CGI-S, GAF, remission of positive symptoms, or employment status were detected between early- and adult-onset psychoses.
Conclusions: Patients with early-onset psychosis may require a different approach to early detection. Outcome differences between early- and adult-onset were minor, but need to be replicated in future (long-term) prospective epidemiological studies in other services.

Keywords: Early-onset psychosis; Juvenile psychosis; Adolescence; Schizophrenia; Follow-up

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1. Introduction

The widespread assumption that early-onset (onset < age 18; AACAP, 2001) differs from adult-onset psychosis has mainly been derived from a few non-comparative cross-sectional and longitudinal studies (Hollis, 2003; Lay et al., 2000; Ropcke and Eggers, 2005). These studies included patients with age at onset and presentation for treatment in adolescence, thereby omitting patients with early-onset who received treatment in adulthood. A few comparative cross-sectional studies suggest that onset in adolescence may be associated with more neurological soft signs and more neuropsychological deficits compared to adult onset (Biswas et al., 2006, 2007; White et al., 2006). Pencer et al. (2005) reported that patients treated in adolescence (age 15–19) compared to those treated in adulthood (age 26–50) had more negative symptoms and substance use at baseline and similar symptomatic and functional outcomes at 2 year follow-up. Ballageer et al. (2005) reported that adolescent-onset (onset ≤ age 18) may be associated with a lower level of premorbid functioning and higher level of negative symptoms at initial presentation as well as a longer duration of untreated psychosis (DUP).

A likely reason for this sparseness of studies is that, traditionally, adolescents and adults are treated in separate settings. In the last two decades, however, a number of first-episode services treating both adolescents and young adults have been implemented and thereby offer the opportunity to study age-related differences. A better understanding of such differences may help to develop treatment more specifically adapted to the needs of adolescent patients in first-episode services. The aim of this large epidemiological file audit study was to assess pre-treatment, baseline, and outcome differences between patients with early-onset and young adult-onset psychosis receiving their first treatment in a specialized early prevention and intervention centre.

2. Methods

2.1. Context and sample

The initial sample comprised a population-based cohort of 786 patients with first-episode psychosis (FEP), consecutively admitted to the Early Psychosis Prevention and Intervention Centre (EPPIC) in Melbourne, Australia between 1998 and 2000. EPPIC had a mandate to treat all patients aged 15–29 with FEP in their catchment area; as such, the study sample represents an epidemiological cohort. The EPPIC program comprises a comprehensive early intervention treatment program with a usual episode of care of 18 months. Adolescents and young adults received the same treatment. The service was described in detail previously (Edwards and McGorry, 2002).

Of the 786 patients admitted to EPPIC 82 files (10%) had been sent to other services after patients were discharged from EPPIC. The excluded patients did not differ in diagnostic distribution and available demographic characteristics (age and gender). 61 (8.7%) of the remaining 704 patients were excluded from the study due to a non-psychotic diagnosis, depressive episode, or psychosis due to general medical conditions at discharge. Further, 7 patients with missing data on age at onset were excluded. Data on 636 patients was analyzed.

2.2. Procedure

For each patient treated at EPPIC, information on pre-treatment, baseline (admission to EPPIC), and outcome characteristics is systematically documented in a structured file. Assessments are based on the Royal Park Multidiagnostic Instrument for Psychosis (McGorry et al., 1990a,b). Patients are treated according to the Australian Guidelines for Early Psychosis (Edwards and McGorry, 2002). Each file contains information compiled during the 18 months treatment period from various sources using high quality assessments carried out by trained clinicians. All files were assessed by two experienced psychiatrists (ML and PC) using a standardized questionnaire (Early Psychosis File Questionnaire, Conus et al., in press). This study was part of a large FEP outcome study (Lambert et al., 2005; Schimmelmann et al., 2005) and approved by the local research and ethics committee.

2.3. Assessment of diagnoses

Clinical diagnoses (psychoses and substance use disorder, henceforth SUD) according to DSM-IV criteria (APA, 1994) are the consensus result of an intensive diagnostic and treatment process within the first 6 weeks of entry into service by trained clinicians of a specialized assessment and crisis intervention team and a second time at discharge. Research psychiatrists assessed all information available in charts with respect to baseline and final diagnoses. In case of disagreement with clinical diagnoses a consensus rating between both research psychiatrists and the case manager of the patient in question was performed. The baseline SCID and file audit diagnoses of 114 patients from prospective studies were compared. The calculated kappa values revealed a good concordance for both psychosis diagnoses (kappa = 0.80) and co-morbid