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Differences between first episode schizophrenia and schizoaffective disorder

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ABSTRACT

Background: The diagnostic and clinical overlap between schizophrenia and schizoaffective disorder is an important nosological issue in psychiatry that is yet to be resolved. The aim of this study was to compare the clinical and functional characteristics of an epidemiological treated cohort of first episode patients with an 18-month discharge diagnosis of schizophrenia (FES) or schizoaffective disorder (FESA).
Methods: This study was part of the larger First Episode Psychosis Outcome Study (FEPOS) which involved a medical file audit study of all 786 patients treated at the Early Psychosis Prevention and Intervention Centre between 1998 and 2000. Of this cohort, 283 patients had an 18-month discharge diagnosis of FES and 64 had a diagnosis of FESA. DSM-IV diagnoses and clinical and functional ratings were derived and validated by two consultant psychiatrists.
Results: Compared to FES patients, those with FESA were significantly more likely to have a later age of onset ($p = .004$), longer prodrome ($p = .020$), and a longer duration of untreated psychosis ($p < .001$). At service entry, FESA patients presented with a higher illness severity ($p = .020$), largely due to the presence of more severe manic symptoms ($p < .001$). FESA patients also had a greater number of subsequent inpatient admissions ($p = .017$), had more severe depressive symptoms ($p = .011$), and higher levels of functioning at discharge.
Discussion: The findings support the notion that these might be considered two discernable disorders; however, further research is required to ascertain the ways and extent to which these disorders are discriminable at presentation and over time.

1. Introduction

The term schizoaffective disorder (SAD) was first coined in the 1930s to capture those patients presenting with characteristics of both schizophrenia and affective disturbance (Kasanin, 1933). SAD comprises bipolar or depressive subtypes. There has been much contention as to whether SAD can be considered a distinct and valid nosological entity. On the one hand, it has been argued that SAD is a mood disorder with psychotic features, and as such, should be excluded as a diagnostic category from the 5th edition of Diagnostic and Statistical Manual for Mental Disorders (DSM-5) (Lake and Hurwitz, 2008). On the other hand, as at 30 April 2012, the current DSM-5 proposal is for SAD to be categorised as a schizophrenia spectrum disorder. In order to support this proposal, it is important to delineate the extent of the similarities and differences between SAD and schizophrenia.

There is much contention regarding the extent of difference between SAD and schizophrenia. Some studies have found that patients with SAD are more likely to be female (Cheniaux et al., 2008; Saracco-Alvarez et al., 2009; Bredicean et al., 2011), have a later age of onset (Averill et al., 2004; Cheniaux et al., 2008; Saracco-Alvarez et al., 2009), have better premorbid adjustment (Bottlender et al., 2002; Norman et al., 2005; Saracco-Alvarez et al., 2009), a longer duration of untreated psychosis (DUP) (Sim et al., 2007), higher vocational

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and social functioning (Benabarre et al., 2001; Cheniaux et al., 2008; Bottlender et al., 2010; Bredicean et al., 2011), greater drug and alcohol problems (Nardi et al., 2005), and less severe negative symptoms (Saracco-Alvarez et al., 2009). Some have also reported that the outcomes of SAD are better than those for schizophrenia (Harrow et al., 2000; Tohen et al., 2000; Abrams et al., 2008; Jäger et al., 2011). There are however, other studies reporting no differences in gender ratio (Frazier et al., 2007; Sim et al., 2007; Kao and Liu, 2010), age of onset of illness (Benabarre et al., 2001; Jäger et al., 2004; Nardi et al., 2005; Sim et al., 2007; Kao and Liu, 2010), and long-term symptom and functional outcomes (Tsuang and Coryell, 1993; Lay et al., 1997; Harrow et al., 2000).

An array of methodological issues contributes to the heterogeneity of findings. First, there have been problems associated with definition of SAD (Murru et al., 2011). For example, the ICD-10 criteria for SAD are broader than the DSM-IV-TR criteria (Vollmmer-Larsen et al., 2006; Malhi et al., 2008). Although both diagnostic systems require the combination of a full affective syndrome (either manic or depressive symptoms) in addition to schizophrenic symptoms, DSM-IV-TR additionally requires a 2 week period of prominent schizophrenic symptoms without the presence of affective symptoms (Vollmmer-Larsen et al., 2006; Malhi et al., 2008). In ICD-10 SAD is viewed as episodic in nature whereas DSM-IV-TR conceptualises SAD as uninterrupted illness with schizophrenic symptoms being concurrent to depressive, manic or mixed episodes (Malhi et al., 2008). Consequently, ICD-10 SAD is a more heterogeneous entity.

Second, the timing of the diagnosis can also affect study outcomes. Many studies have erroneously used diagnosis at illness onset (Harrow and Grossman, 1984). The diagnostic stability of SAD is poor (Schwartz et al., 2000; Abrams et al., 2008); patients initially diagnosed as having SAD often later meet diagnostic criteria for schizophrenia, bipolar disorder, or mood disorder with psychotic features. Further, the diagnosis at first presentation cannot be considered definitive, as longitudinal context is required to gauge the temporal overlap between psychotic and affective symptoms (Ledda et al., 2009). There have been other studies that have not specified the timing of diagnosis in relation to illness course; thus, it is difficult to ascertain the validity of the diagnostic categories (Harrow and Grossman, 1984).

A third issue relates to the phase and severity of psychotic illness. During phases of acute versus stabilised symptoms, the degree of difference between schizophrenia and schizoaffective disorder may fluctuate. Use of chronic inpatient populations treated with neuroleptics and longstanding illness may also confound group differences. Using patients at their index inpatient admission (e.g., Bottlender et al., 2002; Jäger et al., 2004; Bredicean et al., 2011) could also be considered problematic; such studies exclude patients at the less severe spectrum of illness and chronicity of illness is not necessarily controlled with some patients already developing a deteriorating illness course (Harrow and Grossman, 1984).

Finally, in many studies, the two diagnoses are often combined for statistical analyses and there is no consideration of differences between groups (Ledda et al., 2009). On the basis of these methodological issues, research findings depicting any group differences (or the lack of such differences) are inconclusive; they may apply to only ill-defined sub-populations.

The nature of the differences between these diagnostic groups in the early phase of illness is particularly unclear. However, studying clinical and functional differences between these two diagnostic groups in the early stages of illness avoids confounds such as duration of illness, relapses and medications (Conus et al., 2007).

Understanding differences in patients with these disorders in the first episode is also an important strategy to facilitate early differential diagnosis (Benabarre et al., 2001). Accurate diagnosis is important for the provision of targeted interventions; the psychopharmacological and psychosocial interventions that maximise outcomes for patients with schizophrenia and SAD might differ (Murru et al., 2011).

Thus, the aim of this study was to compare, within a treated epidemiological cohort of FEP patients, the clinical characteristics of patients with schizophrenia (FES) or schizoaffective disorder (FESA).

2. Material and methods

2.1. Sample and setting

The sample was part of a larger file audit study (the First Episode Outcome Study, FEPOS) of a treated epidemiological cohort of 786 patients with FEP (Conus et al., 2007). Patients were treated for their first episode of psychosis at the Early Psychosis Prevention and Intervention Centre (EPPIC), Melbourne, Australia between 1998 and 2000. At the time of the study, EPPIC served a catchment area of approximately 880,000. This catchment area covered the north-west and western suburbs of Melbourne. There was an absence of other treatment facilities for the target population and a virtual absence of private psychiatrists in the area. There was little, if any leakage to private facilities outside the catchment area. Thus, this was a truly epidemiological cohort (Conus et al., 2007). For this study, the sample comprised 283 patients with a discharge diagnosis of FES and 64 patients with FESA.

2.2. Materials and procedure

To systematically assess consecutive medical files we used the Early Psychosis File Questionnaire (EPFQ, see Conus et al., 2007 for a full description). This questionnaire was a specifically designed file audit tool and included questions derived from the following assessment tools and scales: the Royal Park Multi-diagnostic Instrument for Psychosis (RP-MIP, McGorry et al., 1990a,b); the Drug and Alcohol Assessment Schedule (DAAS, McGorry et al., 1990a,b); the Duration of Untreated Psychosis Scale (McGorry et al., 1996); the Clinical Global Impressions-Severity of Illness Scale (CGI-S, Guy, 1976); the Clinical Global Impressions-Severity of Illness Scale-Bipolar Illness (CGI-BP, Spearing et al., 1997); the Global Assessment of Functioning Scale (GAF); the Modified Vocational Status Index (MVSI, Tohen et al., 2000); and the Modified Location Code Index (MLCI, Tohen et al., 2000). More specific details follow.

2.3. Diagnosis

Diagnosis was based on DSM-IV-TR criteria. For FESA, patients needed to satisfy Criterion A for schizophrenia (e.g. delusions and hallucinations) as well as the criterion that there was a period of at least two weeks of psychotic symptoms after remission of mood symptoms.

Clinical diagnoses at EPPIC are derived by consensus, following an intensive diagnostic and treatment process over the first 6 weeks of admission, conducted by well-trained clinicians working in a specialised assessment and crisis intervention team (Conus et al., 2007). Eighteen-month discharge clinical diagnoses are based on an iterative process involving clinical assessments performed by a treating team that includes a case manager, psychiatric trainee, and consultant psychiatrist. This team is likely to have on average 94 treatment contacts with the patient and/or family over 18 months (Schimmelmann et al., 2005).

Two research psychiatrists (ML and PC) assessed all information available in medical records with respect to baseline and 18 month diagnoses. This is based on all elements contained in the file over the entire span of treatment. In the event of disagreement with clinical diagnoses, a consensus rating between both research psychiatrists and the case manager was performed. For a subset of 115 randomly selected patients, SCID-I/P diagnoses were available and were used to determine the validity of FEPOS discharge diagnoses (see Conus et al., 2007). There was good concordance for both psychotic ($\kappa = 0.80$) and substance use ($\kappa = 0.74$) diagnoses (Conus et al., 2007).