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Ten-year outcomes in first episode psychotic major depression patients compared with schizophrenia and bipolar patients

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ABSTRACT

We aimed to investigate long-term outcomes in psychotic major depression patients compared to schizophrenia and bipolar/manic psychosis patients, in an incidence sample, while accounting for diagnostic change.

Based on Aetiology and Ethnicity in Schizophrenia and Other Psychoses (ÆSOP and ÆSOP-10), a first episode psychosis cohort was followed-up 10 years after first presentation. The Schedules for Clinical Assessment in Neuropsychiatry, WHO Life Chart and Global Assessment of Functioning were used to assess clinical, social and service use outcomes.

Seventy-two PMD patients, 218 schizophrenia patients and 70 psychotic bipolar disorder/mania patients were identified at baseline. Differences in outcome between PMD and bipolar patients based on baseline and lifetime diagnosis were minimal. Differences in clinical, social and service use outcomes between PMD and schizophrenia were more substantial with PMD patients showing better outcomes on most variables. However, there was some weak evidence (albeit not quite statistically significant at $p < 0.05$) based on lifetime diagnoses that PMD patients were more likely to attempt suicide (OR 2.31, CI 0.98–5.42, p0.055) and self-harm (OR 2.34, CI 0.97–5.68, p0.060). PMD patients have better social and service use outcomes compared to people with schizophrenia, but may be more likely to attempt suicide or self-harm. This unique profile is important for clinicians to consider in any risk assessment.

1. Introduction

Major depression with psychotic features, also known as Psychotic Major Depression (PMD), is defined by ICD–10 (WHO, 1993) as a depressive disorder with the addition of delusions, hallucinations or depressive stupor. A systematic review and meta-analysis by Kirkbride et al. (2012) reported a pooled incidence for PMD in England of 5.3 (95% CI 3.7–7.6) per 100,000 person years. This was compared with 3.7 per 100,000 person years (95% CI 3–4.5) for bipolar with psychotic symptoms and 15.2 per 100,000 person years (95% CI 11.9–19.5) for schizophrenia. These results suggest that PMD is less common than schizophrenia, but more common than bipolar disorder. Despite these incidence rates, PMD is a largely under-researched disorder (Crebbin et al., 2008).

Many studies have investigated the long-term course of illness and outcomes in psychosis (Ciompi, 1980; Harrison et al., 2001; Hill et al., 2012; Takei et al., 1998). However, studies have less often included outcomes on PMD patients (Ciccone and Racy, 1975; Schimmelmann et al., 2005; DelBello et al., 2003; Bromet et al., 1996) and importantly, few have compared outcomes in people with PMD to outcomes in other major psychotic diagnostic groups such as schizophrenia and bipolar patients. Further, many studies which include outcomes for PMD are based on prevalence samples or samples of only inpatients, both of which are biased towards those with longer duration and more severe

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illness (Cohen and Cohen, 1984) and consequently may give a distorted picture of long-term prognosis.

The four studies which have to date examined outcomes in PMD patients in incidence samples (Crebbin et al., 2008; Amin et al., 1999; Baldwin et al., 2005; Whitty et al., 2005) were conducted over a relatively short period of time (6 months–4 years); therefore, knowledge of longer-term outcomes is limited. While, three of these studies examined diagnostic stability only (Amin et al., 1999; Baldwin et al., 2005; Whitty et al., 2005). Crebbin et al. (2008) also reported some clinical and service use outcomes. They found that there was a similar percentage of deaths in the year after first presentation in the people with PMD (9.5%, n10/105) and schizophrenia (9.6%; n7/73). They also reported no difference in number of admissions or admission days between those with PMD and those with schizophrenia, but more use of compulsory admissions in schizophrenia patients. Although the authors state that diagnosis was stable in PMD at 87%, this is contrary to findings in other studies (65% (Amin et al., 1999), 73% (Whitty et al., 2005), <50% (Heslin et al., 2015)). Based on these studies, accounting for diagnostic stability is important for outcome research in PMD patients who change diagnosis may have different outcomes compared to those who start with that diagnosis and retain it over time.

1.1. Aims of the study

Given the paucity of information on long-term outcomes for PMD patients in less biased samples, we aimed to examine long term (10 year) outcomes in people with PMD, while improving on the methodological limitations of previous research by studying an incidence sample (the ÆSOP study), and accounting for diagnostic change. Outcomes in people with PMD were compared to outcomes for schizophrenia and bipolar/manic psychosis patients. Specifically, we chose to investigate the following aspects of outcome in PMD patients: clinical outcomes (symptoms, course of illness, suicide attempts and self-harm); social outcomes (disability, employment, relationship status, close confidants and time in prison); and service use outcomes (days hospitalised and compulsory admissions).

2. Methods

This paper is based on the ÆSOP-10 study which is fully described in Morgan et al. (2014) In brief, ÆSOP-10 is a 10 year follow-up of a cohort of people with a first episode of psychosis. The original cohort was identified from all inpatient and outpatient mental health services in two well defined catchment areas in the UK (Kirkbride et al., 2006). At baseline, detailed information was collected to enable re-contact for all patients. We aimed to trace, re-contact and re-interview all patients at approximately 10 years. Patients were contacted via current mental health services, if in contact with services, by inviting them to participate through their clinical teams. For those not in contact with services, letters were sent to their last known address inviting them to participate. Non-responders were sent a further letter two weeks later with a maximum of three visits to the address if needed to make initial contact. For those believed to have moved address, we sought to make contact and invite them to participate through their GP if known.

2.1. Measures

At baseline, data on demographics (age, gender, ethnicity, centre, place of birth) were collected using the Medical Research Council Socio-demographic Schedule (Mallett, 1997). The Schedules for Clinical Assessment in Neuropsychiatry (SCAN version 2 (WHO, 1994)) was used to elicit symptom-related data at the time of presentation. Symptom data plus all available clinical information (excluding diagnosis) was used to assign ICD-10 (WHO, 1993) psychotic diagnoses within consensus meetings involving the research team. These meetings involved at least one senior psychiatrist. Diagnosis was made as soon as possible after first contact (generally within a few weeks). Diagnoses were made blind to ethnicity and diagnosis from the clinical notes.

A range of measures were used to collect data at follow-up. Relevant to this paper are the SCAN, the WHO Life Chart and the Global Assessment of Functioning (GAF). The SCAN was repeated where interview with patients were possible, and completed in relation to the preceding month. An extended version (detailed in Morgan et al. (2014)) of the WHO Life Chart (Harrison et al., 2001; Sartorius et al., 1996; Burns et al., 1999) was completed for each patient using where possible, clinical interviews with patients and information from treating clinicians plus clinical notes, to map course of illness and symptom history. The Life Chart collates information on course of illness and three key areas of outcome: clinical; social; and service use. Items from the Life Chart relevant to this paper were: course of illness (episodic, continuous or neither); occurrence of suicide attempts and self-harm; relationship status, employment status, presence of a close confidant and whether the person spent any follow-up time in prison; and number of days as an inpatient and ever compulsorily admitted. Suicide attempts were defined as a deliberate act of self-harm with the intention of ending one's life. If there was any doubt about the intention, then it was rated as self-harm. Self-harm was defined as intentional injury to one's body. If there was any doubt about whether something was deliberate, it was not counted. The split GAF was used to characterise overall symptomatology and function in the month prior to follow-up (Harrison et al., 2001, adapted from Endicott et al., 1976) based on presentation at follow-up: the GAF symptom scale; and the GAF disability scale. Higher GAF scores indicate fewer symptoms or a better level of functioning. Information from the SCAN at follow-up and Life Chart were used to determine lifetime diagnosis using the consensus approach as at baseline, and blind to ethnicity and baseline diagnosis.

2.2. Ethics

Full ethical approval for all aspects of the follow-up was provided by the local research ethics committees in South East London and Nottingham. All researchers had substantive or honorary contracts with either the South London and Maudsley National Health Service (NHS) Foundation Trust or the Nottingham Healthcare NHS Trust, the primary participating service providers.

2.3. Analyses

All data were analysed using STATA (version 11; StataCorp, 2009). Data were described using means and standard deviations, medians and interquartile ranges or frequencies and percentages as appropriate. Outcomes for PMD patients were compared with outcomes for bipolar disorder and schizophrenia patients. Categorical outcomes were analysed using logistic regression. Continuous outcomes were analysed using bootstrap regression (1000 replications) to account for the skewed nature of the data (Kielhorn and Graf vonSchulenberg, 2000). Bootstrap regression analyses produce the same coefficients are interpreted in the same way as linear regressions but produce more robust confidence intervals.

3. Results

A total of 557 first episode patients were identified at baseline. Data presented here are based on the incidence sample (n, 505) collected over the first 2 years (excluding: non-incidence patients collected for the brain imaging component of the study; patients oversampled in the 3rd year in order to increase the numbers for the ethnicity component of the study; and patients excluded post baseline). Data presented here are for the PMD, schizophrenia and bipolar disorder/mania patients only (n360) (i.e., excluding delusional disorder, schizoaffective disorder, acute & transient psychoses, drug induced psychoses and psychoses NOS).