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Psychiatric morbidity, functioning and quality of life in young people at clinical high risk for psychosis ☆

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ABSTRACT

Objective: Recent studies suggest that psychotic-like experiences may also act as markers for non-psychotic psychiatric disorders, which may indicate that the focus of research in individuals at high risk (HR) for psychosis needs updating. In this study we thoroughly examined the clinical and functional characteristics of a consecutive cohort of young people at HR for psychosis and compared them to a matched sample of healthy volunteers.

Method: Between February 2010 and September 2012 60 help-seeking HR individuals, aged 16–35, were recruited from CAMEO Early Intervention in Psychosis Service, Cambridgeshire, UK. Forty-five age- and gender-matched healthy volunteers were randomly recruited from the same geographical area. Sociodemographic, psychiatric morbidity, functioning and quality of life measures were compared between both groups.

Results: HR individuals suffered a wide range of DSM-IV psychiatric disorders, mainly within the affective and anxiety diagnostic spectra. In comparison to healthy volunteers, young people at HR reported more suicidal ideation/intention, depressive and anxiety symptoms and presented with remarkably poor functioning and quality of life.

Conclusion: The presence of co-morbid moderate or severe depressive and anxiety symptoms was common in our sample of young people at enhanced risk for psychosis. A HR mental state may be associated not only with an increased risk for psychosis, but also other psychiatric disorders. Our findings may have implications for the future implementation of therapeutic interventions that this population could benefit from.

1. Introduction

There has been a decline in transition rates into psychosis in cohorts of individuals at high risk (HR) of developing psychosis across different centres worldwide, over the last few years (Yung et al., 2007). Different psychological and pharmacological interventions have not significantly reduced transitions in recent randomised controlled trials (McGorry et al., 2012; Morrison et al., 2012). This may suggest that the focus of research in this population group needs updating.

Growing evidence is indicating that psychosis may lie on a continuum, with mild psychotic symptoms or psychotic-like experiences at one end and schizophrenia and related psychotic disorders at the other (Kendler et al., 1996; van Os et al., 2001; Dhossche et al., 2002; Johns et al., 2004; van Os et al., 2009). Recent studies including population-based samples also suggest that nearly 80% of the adolescents who report psychotic-like symptoms may have at least one other psychiatric disorder (Kelleher et al., 2012a, 2012b). Furthermore, co-presence of psychotic symptoms in adolescents and young adults with disorders of anxiety and depression appears to be more prevalent than previously considered, and an etiological and functionally relevant feature (Wigman et al., 2012).

Psychotic experiences may also act as markers for non-psychotic psychiatric disorders in individuals at clinical HR for psychosis. Fusar-Poli et al. (2012) found that 73% of the HR individuals recruited

Abbreviations: BAI, Beck Anxiety Inventory; BDI-II, Beck Depression Inventory, Version II; BLIPS, Brief Limited Intermittent Psychotic Symptoms; CAARMS, Comprehensive Assessment of At-Risk-Mental-States; FEP, First-Episode Psychosis; GAF, Global Assessment of Functioning; HR, High Risk; MANSA, Manchester Short Assessment of Quality of Life; MINI, Mini International Neuropsychiatric Interview; PAF, Postcode Address File; PANSS, Positive and Negative Syndrome Scale; YBOCS, Yale-Brown Obsessive Compulsive Symptoms Scale; YMRS, Young Mania Rating Scale.

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to their study (n = 509) had at least one Axis I comorbid diagnosis, with major depression as predominant diagnosis, followed by anxiety disorders. Similarly, Salokangas et al. (2012) identified comorbid psychiatric disorders in almost 80% of their HR sample (n = 245).

It is therefore important to thoroughly understand the type and severity of psychopathology in people at HR for psychosis in order to develop specific care pathways and interventions that this group could likely benefit from. To achieve this goal, comparisons with healthy volunteers to evaluate the overall psychiatric morbidity and subsequent impact on quality of life and functioning in HR individuals are highly recommended. It is noteworthy that these comparisons are still very limited in the current scientific literature, with only a handful of studies assessing the real impact of HR mental states on functioning and quality of life (Velthorst et al., 2010; Granö et al., 2011; Fusar-Poli et al., 2012).

The aims of this study were to further delineate the clinical manifestations of young people at HR for psychosis at the time of their referral to mental health services and evaluate their level of global functioning, occupational status and quality of life in comparison to a sample of healthy volunteers recruited from the same geographical area.

2. Methods

We compared demographic, psychiatric morbidity, functioning and quality of life measures between help-seeking HR individuals and healthy volunteers recruited from Cambridgeshire, UK.

2.1. Setting

CAMEO (http://www.cameo.nhs.uk) is an early intervention service in psychosis which offers management for people aged 14–35 years suffering from first-episode psychosis (FEP) in Cambridgeshire, UK. CAMEO also accepts referrals of people at HR aged 16–35. Referrals are accepted from multiple sources including general practitioners, other mental health services, school and college counsellors, relatives and self-referrals (Cheng et al., 2011).

2.2. Sample

A consecutive cohort of 60 help-seeking individuals, aged 16–35, referred to CAMEO Early Intervention in Psychosis Service from February 2010 to September 2012 met criteria for HR, according to the Comprehensive Assessment of At Risk Mental States (CAARMS) (Yung et al., 2005). From this assessment, HR individuals were divided into three groups based on whether they were mainly characterised by: i) vulnerability traits (family history of psychosis in first degree relative plus significant drop in functioning levels within past 12 months), ii) attenuated psychotic symptoms, or iii) brief limited intermittent psychotic symptoms (BLIPS). In our sample, all individuals fulfilled criteria for the attenuated psychotic symptoms' group. Seven individuals (11.7%) also qualified for the vulnerability traits' group. Intake exclusion criteria included: i) acute intoxication or withdrawal associated with drug or alcohol abuse or any delirium, ii) confirmed intellectual disability (Wechsler Adult Intelligence Scale — tested IQ <70), or iii) prior total treatment with antipsychotics for more than one week.

During the same period (February 2010–September 2012), a random sample of 45 healthy volunteers was recruited by post, using the Postcode Address File (PAF®) provided by Royal Mail, UK. Healthy volunteers interested in the study could only participate if they were aged 16–35, resided in the same geographical area as HR participants (Cambridgeshire), and did not have previous contact with mental health services. They were recruited for the exclusive purpose of this research.

2.3. Ethical approval

Ethical approval was granted by the Cambridgeshire East Research Ethics Committee.

2.4. Measures

All participants were assessed with sociodemographic (age, gender, ethnicity, education level, marital status, and living accommodation), psychiatric morbidity, functioning and quality of life measures at the time of their referral to CAMEO. The assessments were carried out by senior research clinicians trained in each of the measurement tools. HR participants were also interviewed by senior trained psychiatrists working in CAMEO, using the Mini International Neuropsychiatric Interview (MINI), Version 6.0.0, a brief structured diagnostic interview for DSM-IV Axis I psychiatric disorders (Sheehan et al., 1998).

The Positive and Negative Syndrome Scale (PANSS) for psychotic symptoms was employed to capture the severity of positive symptoms (7 items), negative symptoms (7 items) and general psychopathology (16 items) in a 7-point scale, with higher scores indicating greater severity of illness (Kay et al., 1987). Summary score and sub-domain scores of positive, negative and general psychopathology symptoms were computed.

The Beck Depression Inventory Version II (BDI-II) (Beck et al., 1996) and the Beck Anxiety Inventory (BAI) (Beck et al., 1988) were used to assess depressive and anxiety symptoms respectively. The BDI-II is a widely used self-complete instrument to assess depressive symptom severity in the past two weeks. It consists of 21 items rated on a 4-point scale from absent (0), mild (1), moderate (2) to severe (3). In addition to item scores, a composite score (range 0–63 points) was calculated by summing individual items in the BDI-II. The composite score was used to further divide participants into 4 groups in which scores of 0–13 indicates minimally depressed, 14–19 mildly depressed, 20–28 moderately depressed and 29–63 severely depressed (Dolle et al., 2012). For the purpose of this study, the BDI-II item 9 on current suicidal thoughts or wishes was used to categorize subjects into absent (scoring 0) or present (scoring 1–3) suicidal ideation. Likewise, the BAI is a 21-item self-complete measure of anxiety symptoms also rated on a 4-point scale, from 0 indicating absent to 3 indicating severe. Individual item scores and composite score (range 0–63) were computed. Participants were further divided into 4 groups according to their BAI composite score: scores of 0–7 indicates minimal anxiety, 8–14 mild anxiety, 16–25 moderate anxiety, and 26–63 severe anxiety (Beck and Steer, 1993).

Manic symptoms were assessed using the Young Mania Rating Scale (YMRS) (Young et al, 1978). The scale has 11 items — while 7 items on elevated mood, increased motor activity–energy, sexual interest, sleep, language–thought disorder, appearance and insight were rated from 0 (absence) to 4 (severe), the remaining 4 items on irritability, speech, content and disruptive–aggressive behaviour were rated from 0 (absent) to 8 (severe). A summary score of all the items of the YMRS was calculated (range 0–60).

The Yale–Brown Obsessive Compulsive Symptom Checklist and Severity Scales (YBOCS) (Goodman et al., 1989) were used to examine the presence and severity of obsessions and compulsions. The proportion of subjects having obsessions and/or compulsions in each group was calculated. For those who had at least one obsession and/or compulsion, the mean total severity scores were also generated.

The Global Assessment of Functioning (GAF) is a commonly used functioning scale in psychiatric research (Hall, 1995). The GAF assesses global functioning in the past month. Both symptoms and disability dimensions were assessed using an impression score of 1 to 100, with 10 points separating each level (Endicott et al., 1976), and lower scores representing higher severity of symptoms and poorer level of functioning respectively. Occupational status was also recorded.