Available online at www.sciencedirect.com
ScienceDirect
Schizophrenia Research 91 (2007) 246–253
SCHIZOPHRENIA RESEARCH
www.elsevier.com/locate/schres

Association between psychotic experiences and depression in a clinical sample over 6 months

Alison R. Yung [a,b,*], Joe A. Buckby [a,b], Elizabeth M. Cosgrave [a,b], Eoin J. Killackey [a,c], Kathryn Baker [a,b], Sue M. Cotton [a,b], Patrick D. McGorry [a,b]

[a] *ORYGEN Research Centre, 35 Poplar Rd Parkville 3052, Victoria, Australia*
[b] *The University of Melbourne Department of Psychiatry, Australia*
[c] *The University of Melbourne Department of Psychology, Australia*

Received 19 June 2006; received in revised form 3 November 2006; accepted 30 November 2006
Available online 18 January 2007

Abstract

Psychotic-like experiences (PLEs) are used to identify individuals considered to be at Ultra High Risk (UHR) of, or prodromal for, psychotic disorder. They are also common in the general population and in clinical samples of non-psychotic individuals. Depression has been found to be an important factor in mediating outcome in those with PLEs in both community and UHR populations. It is associated with increased risk of transition to psychotic disorder in the UHR group, and with need for care in relation to PLEs in community samples. In this study we aimed to examine the 6-month outcome of PLEs in a sample of help-seeking young people aged 15 to 24 years in relation to their level of depression. Subjects ($n=140$) were assessed at baseline and 6 months for PLEs and depression. PLEs were measured by the Community Assessment of Psychic Experiences (CAPE). Depression was assessed as a continuous measure using the Mood and Anxiety Symptom Questionnaire (MASQ) and categorically according to DSM-IV diagnosis of mood disorder. PLEs reduced in conjunction with an improvement in depression level and with remission of diagnosis of mood disorder. It is important to assess depression in those with PLEs and consider the need for treatment of the comorbid depressive syndrome. This may reduce the risk of worsening of PLEs and transition to psychotic disorder.

Keywords: Prodrome; Psychosis; Psychotic experiences; High risk; Depression

1. Introduction

Psychotic-like experiences (PLEs) are present not only in clinically unwell individuals with psychotic disorders, but in the general population as well (Eaton et al., 1991; Scott et al., 2006; Tien, 1991; van Os et al., 2001). Some have hypothesised that these PLEs may be milder forms of clinical psychotic symptoms, that is they are quantitatively rather than qualitatively different (van Os et al., 2000; Yung et al., 2005). That is, they may differ, for example, in intensity, frequency, and/or associated distress level, rather than being phenomenologically distinct. There are several strands of evidence for this continuum theory. First, family members of schizophrenic probands show PLEs in higher levels than

* Corresponding author. ORYGEN Research Centre, 35 Poplar Rd Parkville 3052, Victoria, Australia. Tel.: +61 3 9342 2800; fax: +61 3 9342 2921.
E-mail address: aryung@unimelb.edu.au (A.R. Yung).

0920-9964/$ - see front matter © 2007 Elsevier B.V. All rights reserved.
doi:10.1016/j.schres.2006.11.026

controls (Asarnow et al., 2001; Kety et al., 1994). Furthermore, family members with PLEs have been found to have neuropsychological deficits similar to schizophrenia patients, (Cadenhead et al., 1999, 2000, 2002; Chen et al., 1998; Clementz et al., 1998; Laurent et al., 2000; McDowell et al., 2001). Additionally, many of the risk factors for schizophrenia are the same as those for high levels of PLEs, including low level of education, low quality of life (van Os et al., 2000), low socio-economic status (Scott et al., 2006), exposure to influenza (Machon et al., 2002) and urbanicity (Scott et al., 2006; van Os et al., 2001). Finally, PLEs in community samples have been found to be associated with onset of psychotic disorders in longitudinal follow-up studies (Chapman et al., 1994; Poulton et al., 2000).

PLEs in ultra high risk (UHR) (ie putatively prodromal) populations are also associated with onset of psychotic disorders in longitudinal follow-up studies (Haroun et al., 2006; Mason et al., 2004; Miller et al., 2002; Yung et al., 2003, 2004). These UHR samples differ from community samples in that individuals are help-seeking and usually distressed, in addition to having PLEs. Their psychosocial functioning is generally low and they often have other psychiatric syndromes in addition to PLEs such as major depression or anxiety disorders (Rosen et al., 2006; Svirskis et al., 2005).

PLEs have also been found in non-psychotic patient populations (Olfson et al., 2002; Verdoux et al., 1998, 1999; Yung et al., 2006a,b). The relationship between these samples and UHR groups is not distinct and is becoming increasingly blurred as detection of UHR individuals expands into general psychiatric services and primary care (Yung et al., 2006b). The degree of risk PLEs represent in non-psychotic populations needs further examination. In over 10 years of clinical experience with UHR patients we find that PLEs can wax and wane against a background of non-psychotic symptoms or disorder. This further blurs the division between UHR groups and non-psychotic patient populations.

Given the above considerations, we have previously proposed that a continuity exists between community PLEs, PLEs in non-psychotic populations, UHR groups and threshold psychotic disorder (Yung et al., 2006b). Clearly, not all people with PLEs in the community will go on to develop psychiatric syndromes, and not all people with PLEs and non-psychotic disorders will progress to UHR status or frank psychotic disorder. Mediating factors such as distress and depression may influence the outcome (Johnstone et al., 2000, 2005; Owens et al., 2005; Yung et al., 2003).

Within this theoretical background, this study set out to examine the influence of depression on PLEs present in a clinical sample of non-psychotic young people aged 15–24. We previously studied a population of young people presenting to a mental health service with non-psychotic disorders (Yung et al., 2006a). We found that PLEs were common in this group: 78.6% of participants endorsed at least one positive psychotic symptom at least 'often' in a self-report measure, the Community Assessment of Psychic Experiences (CAPE). PLEs consisted of three types: Bizarre Experiences (BE; e.g. 'Do you ever hear voices when you are alone?'), Persecutory Ideation (PI; e.g. 'Do you ever feel as if there is a conspiracy against you?') and Magical Thinking (MT; e.g. 'Do you think people can communicate telepathically?') (Yung et al., 2006a). BE and PI were found to be significantly correlated with poor functioning and depression, but MT was not. Thus we hypothesised that BE and PI may be maladaptive and possibly associated with high risk of transition to full blown psychotic disorder, but that MT may be benign and not associated with the same degree of risk. However one issue which needed further exploration was the association of PLEs with depression. There was a high prevalence of depressive disorders and symptoms. However, because this was a cross sectional study, we were unable to draw conclusions about the association between PLEs and depression. People with PLEs may have become depressed as a result of their unusual and sometimes frightening experiences, or the depression may have resulted in PLEs, for example exaggerated self-consciousness and low self-esteem leading to persecutory fears. There is evidence that PLEs may be an intrinsic part of a depressive syndrome (Verdoux et al., 1998, 1999). Alternatively, an emerging psychotic disorder may be initially manifested by depressive symptoms and low level PLEs (Krabbendam et al., 2005; Moller and Husby, 2000; Owens et al., 2005; Yung and McGorry, 1996). Depression is a common prodromal symptom in schizophrenia and other psychotic disorders (Hafner et al., 2005), and may increase the likelihood of transition to full blown psychotic disorder in individuals at high risk (Yung et al., 2004). Thus the relationship between PLEs and depression is important to explore. In order to further investigate this we undertook a longitudinal study of the previous cohort (Yung et al., 2006a). We wished to discover if PLEs persisted even if depression level reduced. It was hypothesised that when participants experienced an improvement in their depression, that levels of PLEs would likewise reduce.