Depression in first episode psychosis: The role of subordination and shame

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ARTICLE INFO

ABSTRACT

Depression in early psychosis is linked to poor outcome, relapse and risk of suicide, yet remains poorly understood. This article aims to examine the development of depression in acute and post psychotic phases of first episode psychosis (FEP), and its relationship to persecutors, voices, insight, and recovery. Data were gathered on 92 patients with acute FEP on depression course, severity and experience of positive symptoms, insight and appraisals of illness using validated semi-structured interviews and questionnaires. Measures were repeated at 12 months. Malevolent voices, use of safety behaviours and subordination to persecutors were associated with depression and suicidal behaviour in acute FEP. Loss, Shame, low level continuing positive symptoms and longer duration of untreated psychosis were associated with post psychotic depression. Negative appraisals remained stable despite recovery in other symptom domains. Thus, depression and risk in early psychosis may be propagated by the personal significance and content of positive symptoms experienced. When in recovery, low level symptoms, longer period of illness and negative appraisals are significant factors.

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1. Introduction

Depression in psychosis has clearly been identified as a significant predictor of unmet need (Landolt et al., 2012), and is strongly associated with poor outcome and suicide (Challis et al., 2013; Upthegrove et al., 2010). Depression in the acute phase of schizophrenia often occurs at higher rates here than at other stages (Tapp et al., 2001), yet the relationship between depression and acute psychotic symptoms is poorly understood (Cotton et al., 2012). Much of the current literature focuses on the post psychotic or chronic phase of illness (Buckley et al., 2009), often with little distinction between the two. We have previously shown that depression in the prodrome to first episode psychosis (FEP) will convey an increased risk of depression and suicidal behaviour at future points, however also that depression can break through at any time unheralded by previous depression (Upthegrove et al., 2010). In post psychotic depression (PPD) few studies have focused on depression occurring after the *first* episode, however those that do show a higher rate of depression here than following relapse in established psychosis (Upthegrove, 2009; Upthegrove et al., 2010). Depression in schizophrenia and "non-affective psychosis" has been described as an intrinsic part of the syndrome itself, "revealed" as positive symptoms abate, or the result of anti-psychotic medication (Siris, 2004). Whether there is overlap between depression and features of negative symptoms, for example ahedonia and lack of volition, has been debated for some time with authors concluding that it is possible to identify depression within non-affective psychotic illness (Addington et al., 1992; Siris, 2004). Yet whether depression with and without psychosis is driven by the same process is under-researched. We have yet to investigate the phenotype of depression in FEP in any real depth. A psychological model of post psychotic depression suggests a cognitive process of regained insight and appraisal of illness, and the impact of diagnosis as a label itself (Birchwood et al., 2005; Freeman and Garety, 2003). Recently increased interest has focused on the role of trauma for increasing the risk of affective instability and psychosis through enduring biological impacts (Collip et al., 2013). Positive psychotic symptoms and illness appraisals can also provide fuel for this traumatic pathway, yet have not been studied in the acute phase, or to date in PPD following the first episode. The early years of psychosis remain high risk in terms of both suicidal behaviour and setting the trajectory for future functional outcome (Crumlish et al., 2009; Nordentoft et al., 2002). A fuller understanding of depression in FEP here has potential to translate in to more accurately targeted therapies and better outcomes for patients. This study aims to address this knowledge gap. Early psychosis, prior to longer term pharmacotherapy and

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during the first experience of acute psychotic symptoms, provides an ideal period to explore potential associations. We propose that psychological appraisals of positive symptoms and illness itself during this first experience will have maximum impact on the presence and persistence of depression.

1.1. Aims and hypotheses

This study aims to provide an in-depth examination of depression in first episode psychosis, its relationship to other symptom dimensions and recovery in a phase specific manner.

We hypothesise that in the acute phase of FEP threat from persecutors and voices, insight and negative illness appraisals will be associated with the presence of depression. In post psychotic depression following FEP, we hypothesise that greater insight and negative illness appraisals will continue to be related to the presence of depression.

2. Methodology

A cohort study using validated questionnaires and semi-structured interviews was conducted. The study was set in the Birmingham Early Intervention Service (EIS), responsible for the assessment and treatment of all FEP presenting to Birmingham and Solihull Mental Health Foundation Trust (BSMHFT). The City of Birmingham, UK, has a population of 1.2 M, and is a city of diverse socio-economic and ethnic communities. All patients meeting inclusion criteria were invited to participate at their first point of contact with the service. Research measures were completed by participants at home or inpatient unit with researchers (RU, KR, KB and RM) trained in the use of all measures to acceptable reliability.

UK National Research Ethics Committee (NRES) approval was obtained for the study, reference number 0205437

2.1. Inclusion and exclusion criteria

Inclusion:

- Age 16–35 years
- Presenting in the acute phase of illness
- Within 4 weeks of onset of treatment
- First episode of psychosis: conforming to any ICD-10 category of psychotic illness (F20–29, F30.2, F31.2, F31.5 and F32.3 (WHO, 1992)). A broad diagnostic range was chosen in order to avoid premature exclusion of participants during a period of diagnostic uncertainty.

Exclusion:

- Any previous treated episode of psychosis
- Organic process as the primary diagnosis
- Unable to communicate verbally in English

2.2. Definitions

Acute phase of FEP was defined as the onset of psychosis and before significant reduction in positive symptoms. Participants were grouped into those with and those without depression in the Acute as defined by a Calgary Depression Scale for Schizophrenia (CDSS) score of > 7 (Addington et al., 1993).

Post psychotic phase of illness was defined scoring on Positive and Negative Syndrome Scale (PANSS) of less than 14 on positive scale total and less than 3 on any individual P1-7 item occurring following treatment as usual (with antipsychotic medication, case management and supportive therapy). Post Psychotic Depression (PPD) is defined as a depressive episode based on CDSS score of 7 or more at follow up. This in keeping with ICD-10 definition of F20.4 post schizophrenia depression requires that positive symptoms "no longer dominate" (WHO, 1992).

2.3. Research measures

Baseline Measures; data collected at first presentation with FEP, therefore participants were in the acute phase of FEP, defined as the onset of psychosis and before significant reduction in positive symptoms.

2.3.1. Demographic details
Demographic data of age, gender, ethnicity, frequency and type of substance misuse were recorded.

2.3.2. Best-estimate lifetime diagnosis
Schedule for Clinical Assessment in Neuropsychiatry 2.1 (SCAN) (WHO, 1999): This semi-structured interview, supplemented with informant responses and case note information, was used to assess lifetime diagnosis. Interviewers using the SCAN received formal training to acceptable reliability. SCAN diagnoses were generated using the CATEGO algorithms, with any discrepancy between clinical and computer generated diagnoses discussed by at least two researchers and a consensus reached. SCAN was also used to rate presence absence and date of any episodes of self-harm.

2.3.3. Severity of current psychotic symptoms:
Positive and Negative Syndrome Scale (PANSS) (Kay et al., 1987): The current severity of psychotic symptoms, was captured using PANSS ratings, made on the basis of the standard semi-structured interview.

2.3.4. Duration of Untreated Psychosis (DUP)
DUP was calculated using standardised and robust criteria as the interval between the onset of psychosis (the period when the patient experiences prominent psychotic symptoms as identified by the patient or by people observing the patient, equating to a score of 3 or more one any individual PANSS positive item score or 14 or more on the total positive scale) and the onset of criterion treatment (defined as antipsychotic medication for more than 14 days) following Larsen criteria (Larsen et al., 1996).

2.3.5. Depression measures
2.3.5.1. (a) Presence/absence of prodromal depression. The SCAN interview was used to determine the presence/absence of an episode of depression in the prodrome of first episode psychosis, with the prodromal period defined as the 6 month period before onset of psychotic symptoms.

2.3.5.2. (b) Presence/absence of acute depression. Calgary Depression Scale for Schizophrenia (Addington et al., 1993): The CDSS is a structured interview which ensures s-eparation from negative or extra pyramidal symptoms and is scored for the preceding 2 weeks. A score of 7 or more has 82% specificity and 85% sensitivity to predict a moderate or severe depressive episode (Addington et al., 1996).

2.3.6. Insight and illness appraisals
2.3.6.1. (a) Insight Scale (IS) (Birchwood et al., 1994). The self-report Insight Scale (IS) consists of eight questions which measure the three standard dimensions of current insight; awareness of illness, awareness of symptoms and need for treatment. It has demonstrable validity and reliability. A total score is available for overall insight on a 0–12 scale whereby 12 is full insight. Scores over 9 represent "good" insight. The IS compares favourably with other standard measures of insight used in psychosis research and has the benefit of being brief (Sanz et al., 1998).

2.3.6.2. (b) Personal Beliefs about Illness Questionnaire (PBIQ-R) (Birchwood et al., 2000). The PBIQ-R is a self-report questionnaire grounded in social ranking theory, and was designed to evaluate how individuals appraise the personal threat of their illness. The PBIQ-R yields five subscales, assessing appraisals in terms of: 'loss', referring to the loss of social goals, roles and status; 'entrapment', evaluating the degree to which individuals feel unable to escape from their situation; 'shame', assessing the degree of shame experienced; 'control', referring to the degree to which individuals feel in control of their illness; and 'group fit', referring to the extent to which individuals feel that they no longer 'fit in' or are socially excluded because of their illness.

2.3.6.3. (c) Beliefs about Voices Questionnaire – Revised (BAVQ-R) (Chadwick et al., 2000). The BAVQ-R is a validated self-report measure of patient's beliefs and behaviour about auditory hallucinations. It assesses the perceived malevolence, benevolence and omnipotence of voices and patients' resistance and engagement with their auditory hallucinations, and their emotional and behavioural reactions to them. The three sub-scales relate to: malevolence (six items: e.g. 'My voice is punishing me for something I have done' or "My voice is evil"); benevolence (six items: e.g. 'My voice wants to protect me' or "My voice is helping me to develop special powers and abilities"); omnipotence (six items e.g. "My voice is very powerful") in addition to two sub scales reflecting an individuals' reaction and behaviour in relation to their voice: resistance (seven items e.g. in relation to my voice I "tell it to leave me alone") and engagement (eight items e.g. "I willingly do what my voice tells me to do"). All responses are rated on a 4-point scale: disagree (0); unsure (1); agree slightly (2); agree strongly (3). The measure thus assesses degree of endorsement of items. Individuals hearing more than one auditory hallucination complete the questionnaire for their 'dominant voice'.

2.3.6.4. (d) Voice Power Differential Scale (Trower et al., 2004). The perceived power of voices was rated using the Voice Power Differential Scale (VPD). This uses a differential scale linked to the concept of power and omnipotence. The voice hearer is asked the question, "in relation to my voice I feel…..much more powerful than my voice" to "we