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EDITORIAL

The efficacy of psychotherapy in reducing post-psychotic trauma

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There is now growing evidence to suggest that the experience of psychosis may be so traumatic for some that it can lead to Post Traumatic Stress Disorder (PTSD)-type symptoms or post-psychotic trauma symptoms (PPTS). There is, however, less knowledge about what psychological interventions may be helpful in reducing these symptoms. Evidence from the literature, to date, suggests that of the seven studies that have addressed this issue only four were randomized controlled trials (RCTs). However, all these studies included less than 100 patients with the vast majority reporting positive results. Overall, it seems that although cognitive-behavioural treatment (CBT)-based psychological interventions appear to be efficacious in the treatment of PPTS, the studies are too small to draw any firm conclusions and should be subjected to larger good-quality RCTs. Further research will also need to establish the role of mediating variables such as shame and depression in the treatment of PPTS.

Key words: PTSD, psychosis, Schizophrenia, psychotherapy, post-psychotic trauma.

Introduction

There is now a wealth of evidence to suggest that an episode of psychosis can be so traumatic that it can give rise to PTSD-type symptoms including intrusive re-experiencing, avoidance and hyper-arousal both in patients and carers (Morrison, Frame & Larkin 2003; Seedat *et al.* 2004; Barton & Jackson, 2008, Buckley *et al.* 2009). It is not to say that all people who experience (or have experienced) psychosis or witness it at first hand find it equally traumatic. Some may treat it as an experience for growth, an opportunity to 'take stock', learn lessons and re-build (Jackson & Birchwood, 2006). There is no simple cause and effect relationship between psychosis and trauma (Larkin & Morrison, 2006). Rather, there is an array of mediating and moderating variables such as cognitive appraisals coping style and shame proneness that influences the degree to which the experience of psychosis influences PTSD-type symptoms (Jackson *et al.* 2004). Such mediating and moderating variables will ultimately influence the phenomenology, course and treatment of such symptoms.

Many have questioned the validity of using the concept of PTSD to describe the traumatic reaction that can occur following an episode of psychosis (Tarrier *et al.* 2007). Much of this argument is rooted in the fulfilment of Diagnostic and Statistical Manual-IV (DSM-IV) criteria for a diagnosis of PTSD. According to DSM-IV, for a diagnosis of PTSD, an identifiable stressor that is potentially life threatening needs to be defined and the content of the symptoms should refer to the stressor so-called Criterion A1 (Breslau *et al.* 1998). Evidence suggests, however, that the link between 'objective' (criterion A1) events and traumatic symptoms following psychosis is somewhat tenuous. For example, in a recent study, Mueser *et al.* (2010) found that while 39% of a sample of recent onset cases met the full diagnostic criteria for PTSD (including Criteria A1) 66% could be classified as having a PTSD-type 'syndrome' (i.e. they reported PTSD symptoms but the event did not meet both A1 and A2 criteria). Interestingly, those classified with the full PTSD 'diagnosis' (A1/A2 criteria both fulfilled) were more likely to have better clinical and psychosocial outcomes than those with just the PTSD syndrome (meeting either A1 or A2 criteria). This would, according to Mueser *et al.* (2010), suggest that the DSM-IV criterion for a traumatic event does not help identify a unique group of stressors related to the experience of a psychotic disorder that can induce PTSD symptoms or associated problems. Adherence to the framework of DSM-IV and ICD-10 may mean that we could be overlooking genuine traumatic symptoms and therefore denying some patients with psychosis helpful psychotherapeutic interventions (Jackson & Birchwood, 2006). It may be more helpful to classify the PTSD-type symptoms that occur following an episode of psychosis or as a consequence of having a diagnosis of psychosis as post-psychotic trauma symptoms (PPTS; Jackson *et al.* 2009).

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PPTS occur in approximately one in three people with psychosis (Buckley *et al.* 2009). Although this figure may vary according to methodology, sample and stage of illness, someone with psychosis is approximately four times more likely to experience PTSD symptoms than someone in the general population (Kessler *et al.* 1995). Why so many people with psychosis experience these symptoms is a more complex question and one which ultimately has a baring on appropriate assessment, formulation and the development and delivery of interventions. Most studies on traumatic reactions to psychosis provide four main types of traumagenic explanations of the psychotic experience (Mueser *et al.* 2010): (1) the distressing nature of psychotic symptoms; (2) experiences of treatment received; (3) personal reactions to having a psychosis; and (4) co-morbid traumas made more likely as a result of developing psychosis (i.e. sexual and violent assault, accidents, etc.)

Despite the growing exploration of traumagenic explanations for PPTS, very few attempts have been made to integrate these findings with knowledge of the mediating and moderating variables (appraisals, coping style, previous traumatic experiences, etc.) into a coherent model or framework. For instance, there is some evidence to suggest that people who experience their first admission to hospital following the onset of psychosis as stressful or very stressful will have higher levels of PPT symptoms (Jackson *et al.* 2004). Likewise people with an integrating recovery style may experience higher levels of intrusions (Jackson *et al.* 2004) with poorer clinical and functional outcomes in the early stages (Mueser *et al.* 2010). In a recent study, Beattie *et al.* (2009) found that childhood physical trauma was the best predictor of PPTS (intrusions) in a sample of people admitted to hospital following an episode of psychosis. These researchers also found that affective symptoms (especially depression) and social support (in terms of involvement of mental health providers) were also important in the mediation of PPTS.

The role of shame following trauma has attracted recent attention from PTSD researchers (Harman & Lee, 2009; Matos & Pinto-Gouveia, 2009). There is now growing evidence to suggest that conditional risk of PTSD following specific traumas is strongly mediated by the degree to which the traumatic event induces shame (Breslau *et al.* 1998). For example, while only 2.3% of people who experience natural traumatic events (such as earthquakes) will meet diagnostic criteria for PTSD, approximately one out of every two people who are raped, tortured or kidnapped could be so classified. Similarly, 45% of flashbacks in PTSD have shame and not fear themes (Holmes *et al.* 2005).

Recent research with first episode psychosis patients (Turner *et al.* 2010) has also borne witness to the role of shame in the onset and maintenance of PPTS. In a study of 50 patients with recent onset psychosis, a clear relationship was found between shame, depression and trauma (as measured by the Impact of Events Scale-Revised (IES-R)). Moreover, in a regression analysis it was found that external shame (how they felt others saw them in negative way in relation to their psychosis) and not internal shame (negative views of oneself in relation to psychosis) was related to PPTS after controlling for general shame and depression. Less perceived social support was also associated with more traumatic intrusions and more shame.

To date there have been relatively few studies that have evaluated the efficacy of interventions aimed at reducing PPTS. This is unfortunate because PPTS can lead to distress (Mueser *et al.* 2010), increased risk of suicidality (especially among those with a previous history of trauma; Tarrier *et al.* 2007), co-morbidity including substance misuse (Mueser *et al.* 2010) and poor engagement with treatment and services (Tait *et al.* 2003; Beattie *et al.* 2009). Of the seven studies which have been aimed at the reduction of PPTS through psychological intervention (mostly cognitive-behavioural treatment (CBT)), six have evaluated the treatment of PPTS in individuals who have experienced psychosis. Only one has done so with carers. Four of the seven studies were randomized controlled trials (RCTs) but all were relatively small with the largest trial conducted using only 66 people with a diagnosis of psychosis (Jackson *et al.* 2009).

Initial reports concerning the efficacy of psychotherapy in the reduction of post-psychotic trauma have been published in the form of case studies. For instance, Hamblen *et al.* (2004) report a PTSD intervention with three people with psychosis, two of whom demonstrated significant reductions in PTSD symptoms (below caseness levels) and psychiatric symptoms. Likewise, Callcott, Standart & Turkington (2004) describe the successful CBT of two patients with psychosis and a history of trauma, including childhood sexual abuse.

In addition to these early clinical reports, Rosenberg *et al.* (2004) conducted a pilot trial with 12 people with severe mental health problems (five of whom had a psychosis-related disorder) to test the efficacy of a 12–16-week individual CBT programme for PTSD. The programme that included psycho-education, breathing retraining and cognitive restructuring was closely co-ordinated with the client's community support treatment teams. Overall, Rosenberg *et al.* (2004) reported significant reductions in rates of PTSD from 100% to 67% at post-treatment and 50% at 3-month follow-up.

In another open-design trial, Frueh *et al.* (2009) evaluated an 11-week CBT intervention for PTSD that consisted of education, anxiety management therapy, social skills training and exposure therapy on 20 adults diagnosed with schizophrenia or schizoaffective disorder. Although like the Rosenberg *et al.* (2000) trial there was no control condition. The authors demonstrated that significant PTSD symptom improvement could be achieved by a combination of specifically tailored group and individual CBT and such improvements could be maintained at 3-month follow-up.

Based on the work of the original Rosenberg *et al.* (2000) pilot trial, Mueser *et al.* (2008) tested the efficacy of a CBT programme for PTSD in 108 people with severe mental illness under RCT conditions. Mueser *et al.* (2008) demonstrated that clients assigned to the CBT intervention improved significantly more in terms of PTSD symptoms than did clients in the Treatment as Usual (TAU) group at post-treatment and at 3- and 6-month follow-up. The greatest gains from the CBT programme were made by those with the most severe PTSD symptoms. However, the vast majority of this sample comprised people with a diagnosis of major mood disorder (85%). Only 15% met the diagnostic criteria for schizophrenia or schizoaffective disorder making it difficult to draw any firm conclusions as to the efficacy of the intervention in this diagnostic group.

In another RCT that focused on a narrower cohort of young first-episode patients, Jackson *et al.* (2009) randomly assigned 66 people with recent onset of psychosis to either a cognitive therapy trauma processing intervention or a treatment as usual control group. Patients in both arms of the study received ongoing case management and anti-psychotic medication. Followed-up post-treatment at 6 and 12 months results indicated that the cognitive therapy intervention significantly contributed to the reduction of PPTS over and above treatment as usual. This was especially the case for those with high levels of trauma symptoms at baseline.

A different approach taken by Bernard, Jackson & Jones, (2006) tested the efficacy of an emotional disclosure writing intervention on PPTS. Based on the work of Pennebaker (Pennebaker, 2004), this study examined whether repeated writing about the experiences of a first episode of psychosis approximately two-and-a-half years after the event, significantly reduced PPTS. Compared to the control group that wrote about emotionally neutral topics (e.g. activities that day), the writing disclosure group reported reduced severity and avoidance of traumatic symptoms and an overall reduction in the traumatic impact of these experiences.

Barton & Jackson (2008) replicated this approach for carers of people with psychosis who also report traumatic reactions to the development of psychosis in their relative (Bernard, Jackson & Patterson, 2010). A similar result was found whereby those in the emotional disclosure condition reported fewer traumatic symptoms than those in the control group. Again, this indicates that this relatively brief, inexpensive intervention may be an effective way of reducing PPTS for not only traumatized patients but also carers and relatives with similar symptoms.

Overall, there appears to be two different but at times, overlapping, approaches to the psychological treatment of PPTS. The first approach as taken by researchers such as Mueser *et al.* (2004) includes an emphasis on cognitive re-structuring and psycho-education of the trauma-related symptoms. These are generally targeted at PTSD symptoms arising from multiple traumas that have occurred before, during and following an episode of psychosis. The second approach more typically taken by Jackson and colleagues (Jackson *et al.* 2009; Bernard, Jackson & Jones, 2006; Barton & Jackson, 2008) follows an emotional processing paradigm and is aimed at helping patients and carers in the immediate aftermath of a first episode of psychosis to integrate and emotionally process their experiences of the symptoms and its management. Treatment is focused on PPTS related to the experience of the psychotic episode and not necessarily at the other traumatic events that may have occurred prior to the development of psychosis or as a secondary consequence of it (i.e. assaults, accidents, etc.). People who suffer from severe mental health problems are much more likely to be exposed to traumatic events than those in the general population (Mueser *et al.* 1998; Kilcommons & Morrison, 2005). Whether this constitutes a false dichotomy is unclear and further research should be aimed at establishing how different traumatic experiences in people with psychosis interact and inter-relate to one another (Chisholm, Freeman & Cooke, 2006; Beattie *et al.* 2009).

Irrespective of approach, it seems from the available evidence that psychological CBT-based interventions are an effective way of reducing PPTS, especially in those displaying high levels of these symptoms at baseline. What is less clear is which intervention components are best for which symptoms. This is not helped by the variability with which PTSD is defined and measured in these studies and how it is utilized as an outcome measure. For instance, Frueh *et al.* (2009) used changes on the Clinician Assisted PTSD Scale (CAPS) to measure reductions in PPTs over a 3-month period and then report changes in the status of PTSD diagnosis. In contrast, Jackson *et al.* (2009), Bernard, Jackson & Jones (2006) and Barton & Jackson (2008) measured changes on the IES or IES-R. Less emphasis was given to changes in PTSD diagnosis. In these studies, there is some suggestion that despite evidence for an overall

reduction in PTSD-type symptoms, an emotional processing approach was especially useful for reducing avoidance of the cues and reminders of the traumatic aspects of the first episode. More research is needed to pinpoint the 'active ingredients' of these psychological interventions.

Despite such encouraging results, overall, there are too few, good-quality, large-scale RCTs evaluating the efficacy of psychological treatments for PPTS to draw any firm conclusions. Future RCTs should concentrate on those who meet the 'caseness' criteria for PPTS. As noted previously, both Jackson *et al.* (2009) and Mueser, Hamblen, Rosenberg, (2008) found that their interventions were particularly effective for those with high levels of baseline trauma symptoms. Before this can happen, there needs to be agreement as to what constitutes 'caseness' criteria for PPTS. A diagnosis of PTSD may help guide this decision but should not be the definitive criteria for intervention. Evidence from Mueser's recent study (Mueser *et al.* 2010) discussed above, would suggest that fulfilment of all the diagnostic criteria for PTSD (including the presence of objective trauma), may not be the most helpful way to decide who should receive such psychological interventions. The frequency, duration and distress of the trauma symptoms along with their effect on social functioning may be a better guide.

Future research may also need to focus more on the treatment of affective responses (especially depression) and shame-based appraisals/emotions, which appear to be common in traumatic responses to psychosis (Beattie *et al.* 2009; Turner *et al.* 2010). Where shame is indicated, traditional CBT approaches to PPTS may not be enough. Compassionate focused therapy (Gilbert, 2009) with its emphasis on self-soothing and the development of a compassionate mindset may prove to be a useful adjunct to the CBT-based approaches for PPTS already discussed. This approach has already been successfully applied to help-seeking non-psychotic PTSD samples with shame-based trauma memories (Lee 2005).

Declaration of Interest

None.

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