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Differences in trauma and posttraumatic stress symptoms in clients with schizophrenia spectrum and major mood disorders

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ABSTRACT

The current study of 371 community mental health clients with severe mental illness examined differences in frequency of common lifetime trauma and other stressful events in clients with schizophrenia spectrum and major mood disorders in order to gauge the unique variance in posttraumatic stress symptoms explained by trauma/stressful events when controlling for other psychiatric measures. The overwhelming majority (88.1%) of these clients reported at least one stressful/traumatic event in their lifetime with a median of seven such events. Regression modeling revealed that physical abuse was uniquely predictive of posttraumatic stress symptoms when controlling for gender, psychiatric symptoms, and other problems in functioning. Suggestions for future trauma research include measuring multiple types and frequencies of traumatic events, including "non-criterion A" stressors, and controlling for other psychiatric symptoms and indicators of psychosocial functioning in order to better isolate the unique effects of trauma. Limitations of the study include the lack of a structured interview schedule for diagnosis and the cross sectional design.

1. Introduction

Rates of lifetime trauma in people with severe mental illness (SMI) have been reported to be up to about 90% (e.g., Mueser et al., 1998; O'Hare and Sherrer, 2009; Grubaugh et al., 2011) compared with 60–70 % in the general population (Kessler et al., 1995). Rates of posttraumatic stress disorder (PTSD) in people with severe mental illness have been shown to be up to several times higher than the roughly 8% found in the general population (Kessler et al., 1995), ranging from 29% to 43% (Mueser et al., 1998; Resnick et al., 2003; O'Hare et al., 2006).

Rates of having experienced interpersonal violence, including physical and sexual abuse or having witnessed extreme violence, among people with severe mental illnesses are particularly high and have been the focus of increased research interest in recent years. A growing body of literature has focused on interpersonal violence (e.g., physical and sexual abuse; violent assault) and the relationship between SMI and PTSD. Nationally representative surveys in both Great Britain (Bebbington et al., 2004) and the United States (Shevlin et al., 2007) have linked childhood violent victimization with psychosis. Depending on gender and age at which the abuse took place, rates of sexual and physical abuse in patients with severe mental illnesses have ranged from one-third to two-thirds of cases in larger clinical samples (e.g., Mueser et al., 1998; Resnick et al., 2003; O'Hare et al., 2006, 2010). Comparable results have been found for clients with bipolar disorder (Goldberg and Garno, 2005) and both schizophrenia and schizoaffective disorder (Lysaker et al., 2001). In one large prospective study of adolescents, Spauwen et al. (2006) found that trauma predicted onset and severity of psychotic symptoms when controlling for a range of other confounding factors (e.g., gender, substance abuse). With a sample of 70 patients with schizophrenia spectrum disorder, Newman et al. (2010) found that those who experienced interpersonal violence compared with non-interpersonal trauma showed greater dysphoria, anxiety and cognitive/autistic symptoms of schizophrenia, but not greater psychosis. Other studies have shown that abused clients with SMI reported more severe symptoms of both SMI and PTSD and more co-morbid diagnoses in addition to more substance abuse and engagement in high risk behaviors (e.g., suicide attempts, self-injury) than non-abused clients (Goodman et al., 2001; Gearon et al., 2003; O'Hare et al., 2006, 2010; Rosenberg et al., 2007; Lu et al., 2008).

Despite this growing body of research, the associations among trauma, posttraumatic stress symptoms, and symptoms of severe mental illness remain poorly understood (Auxemery and Fidelle, 2011; Grubaugh et al., 2011). Theoretical explanations for higher rates of trauma and PTSD in this population include shared genetic and environmental vulnerabilities, correlated or shared

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symptoms (e.g., depression) (Brady and Sinha, 2005), and the possible mediating effects of PTSD (Mueser et al., 2002) linking the effects of trauma to psychiatric symptoms and other psychosocial problems. Vauth and Nyberg (2007) reviewed the growing literature on the relationships between psychosis and PTSD and found evidence supporting a number of possible links: psychosis could be a risk factor for PTSD, PTSD as risk factor for psychosis, or both disorders are part of a continuum of responses to trauma. Currently, there is little consensus regarding which model is most valid.

Inter-diagnostic comparisons could help illuminate the possible relationships among trauma and symptoms of both posttraumatic stress and SMI, and offer clues to improvements in assessment and treatment. Clients with major mood disorders, for example, have reported more lifetime trauma including physical and sexual abuse, witnessing violence, and experiencing serious illnesses and accidents as well as greater posttraumatic stress symptoms (O'Hare et al., 2006, 2010; O'Hare and Sherrer, 2009). Mueser et al. (1998) found PTSD to be more prevalent in those with major depression (58%), bipolar disorder (40%), and lower in schizoaffective disorder (37%) and schizophrenia (28%). However, in addition to shared genetic risk factors noted above, people with severe mental illnesses and PTSD also share many social–environmental risk factors including poverty, stigma, and increased risk of trauma from being victimized by or witnessing extreme violence (Goodman et al., 2001; Mueser et al., 2002; O'Hare and Sherrer, 2009). Furthermore, symptoms of depression, anxiety, thought disorders, and substance abuse tend to correlate moderately (Kilcommons and Morrison, 2005; Marshall et al., 2010; O'Hare and Sherrer, 2011a). Given these common and correlated factors, sorting out the consequences of what are often multiple types of traumatic events for purposes of assessment, diagnosis, and intervention remains challenging.

1.1. Purpose of this study

Although diagnostic comparison studies of severely mentally ill people have been useful for identifying similarities and differences in trauma/posttraumatic stress symptoms, we believe it is important to conduct similar analyses while controlling for a range of symptoms of severe mental illness given that schizophrenia spectrum disorders and major mood disorders share, to one degree or another, a range of common symptoms (e.g., psychosis, depression and mania) (Baynes et al., 2000; Abrams et al., 2008). Examining the relationship between trauma, other stressful events, and posttraumatic stress symptoms while controlling for symptoms of SMI (an approach rarely utilized to date) might make it possible to better explain the unique variance in posttraumatic stress symptoms associated with certain types of trauma/stressful events given that posttraumatic stress symptoms and those associated with severe mental illness tend to be generally correlated. In addition to not controlling for co-occurring symptoms, there has been considerable controversy regarding how trauma are defined and measured (Tolin and Foa, 2008). These problems include ambiguities regarding what constitutes a Criterion A event (American Psychiatric Association, 2000) as compared with other highly stressful events (e.g., sudden loss of loved ones), and an over-reliance on the client's self-reported "worst" (i.e., index) trauma rather than assessing the effects of both multiple types of trauma/stressful events and clients' self-reported estimates of lifetime frequency of trauma and other highly stressful events. The primary purpose of this study is to determine the unique explanatory power of specific forms of trauma and other stressors while controlling for other known correlates of posttraumatic stress symptoms including symptoms and other psychosocial indicators associated with SMI. We expect, based on previously cited literature, that interpersonal abuse (physical abuse, sexual abuse, and having witnessed violence) will be more strongly associated with posttraumatic stress symptoms when these other factors are controlled. We will also control for gender given previous evidence that women report more sexual and physical (Mueser et al., 1998; Goodman et al., 2001; O'Hare and Sherrer, 2009), greater self-reported subjective distress related to physical and sexual abuse (O'Hare et al., 2006) and sudden loss of loved ones (O'Hare and Sherrer, 2011b), greater perceived threat from trauma (Olff et al., 2007) and negative appraisal of trauma (Sherrer, 2011), and, in some cases, greater posttraumatic symptoms (O'Hare et al., 2010).

2. Method

2.1. Sample and procedure

The original target sample for this study was 500 clients interviewed consecutively as part of their routine 6-month re-assessments in four participating community mental health centers in Rhode Island. Four-hundred and sixty-six clients (93.2%) provided sufficiently useful data for the study. Analysis for this study began with a sub-sample of 371 clients who assigned a diagnosis of primary Axis I SMI disorder by staff psychiatrists: schizophrenia (109, 29.4%), schizoaffective (82, 22.1%), major depression (105, 28.3%), and bipolar I disorder (75, 20.2%). One hundred and ninety (51.2%) of these clients were women, and 178 (48.0%) were men. Mean age was 47.57 (S.D.=12.49) (all were 18 or older). The sample is about three-quarters white (270, 72.8%), followed by African–American (41, 11.1%) and Hispanic clients (33, 8.9%), with the remaining clients identifying themselves as Asian, Pacific Islander, Native American, of mixed race, "not applicable," or not responding all within a range of 0.3% to 3.0%. Median annual household income was $9000, with most (332, 89.5%) clients covered by public health insurance, and the remainder by another third party insurance (9, 2.4%) or "no insurance" (19, 5.1%). The median level of education was a high school diploma. Most clients (349, 94.1%) had been hospitalized at least once in their lifetime for a mental health or substance use problem, and almost all (355, 95.7%) were taking psychiatric medication at the time of the study. Clients had been involved with the agency for a median of 9 years, and the average Global Assessment of Functioning (GAF) score was 47.18 (S.D.=7.68).

Four licensed and nationally accredited community mental health centers in Rhode Island participated in this unfunded study. The general purpose of the project was to incorporate brief, valid and reliable measures into assessment and 6-month re-assessments in order to enhance the routine monitoring and evaluation of client care. Data were collected between the Fall, 2008 and Spring, 2009 by members of clinical teams, (i.e., social workers, psychiatric nurses, case managers) using a combination of face-to-face interviews for key clinical measures and medical records to extract client background data. Procedures for the study were approved by each individual community mental health center's quality assurance department and the Institutional Review Board of Boston College.

2.2. Measures

The Risky Behavior and Stressful Events Scale (O'Hare et al., 2006) is an inventory of items that includes measures of well-documented traumatic events as well as common stressful events (i.e., adverse events that are likely to cause stress) (Mueser et al., 1998; O'Hare and Sherrer, 2009). A subset of four of the more frequently occurring trauma were used in this study: "physical abuse," "sexual abuse," "saw another person seriously harmed or killed in combat, home or crime situation," and "suffered a life-threatening injury, or illness that caused you to fear for your life." Stressful events included having "experienced the unexpected death of a friend, family member, or loved one," and "was homeless for more than a day." For each item, the client reported how many times they "experienced that event in their life" (*none, one time, two–five times, six–ten times, and more than 10 times*).

To measure posttraumatic symptoms, we used a brief three-item version of the PSS-I (O'Hare et al., 2012) derived from the well-validated PTSD Symptom Scale-Interview version (PSS-I) (Foa et al., 1993), which has been shown to have good concurrent validity and reliability in a previous SMI sample (N=275) (O'Hare et al., 2007). The brief PSS is composed of three items that correlated highest with their respective subscales: [re-experiencing (0.85)—"Have you been feeling very emotionally upset when you were reminded of the trauma (for example, feeling scared, angry, sad, guilty)?"; numbing/avoidance (0.86): "Have you been feeling distant or cut-off from people around you since the trauma?;" and, hyper-arousal (0.85): "Have you been having trouble concentrating (for example, drifting in and out of conversations, losing track of a story on television, forgetting what you read)?" In that study, the initial three-item scale revealed a Cronbach alpha of