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Journal of Affective Disorders 86 (2005) 175–182

JOURNAL OF AFFECTIVE DISORDERS

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Research report

Psychopathology following trauma: The role of subjective experience

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Received 20 July 2004; received in revised form 4 January 2005; accepted 10 January 2005

Abstract

Background: The DSM-IV definition of posttraumatic stress disorder (PTSD) widened the stressor criterion to include objective (A1) and subjective (A2) components. The prevalence of Criterion A2, and its association with traumatic memory and psychopathology, was examined in a large community sample.
Method: The presence of Criterion A2 and traumatic memories, as well as DSM-IV anxiety, affective and substance use disorders, were examined in a community sample of 6104 adults with a history of traumatic exposure.
Results: Most individuals met Criterion A2 (76%), with higher prevalence in females (81%) than males (69%). A2 was more common following certain traumas (such as assaultive violence). Excluding those people with PTSD, prevalence of most psychiatric disorders was higher in those who met Criterion A2 than in those who only met Criterion A1. Only 3% of those who did not meet A2 went on to suffer persistent traumatic memories. The prevalence of psychiatric disorders was higher in those with A2 and traumatic memories than in those with A2 and no traumatic memories.
Limitations: The retrospective nature of the data raises the potential for reporting biases. The data set allowed only one of several possible predictors of posttraumatic adjustment to be examined and only 12-month, and not lifetime, prevalence of psychiatric conditions was available.
Conclusions: The experience of powerful emotions at the time of traumatic exposure is common and is associated with increased prevalence not only of PTSD, but also of a range of other psychiatric conditions. Traumatic memories may mediate this association.

Keywords: PTSD; Stressor criterion; DSM-IV; Trauma; Psychiatric morbidity

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0165-0327/$ - see front matter © 2005 Elsevier B.V. All rights reserved.
doi:10.1016/j.jad.2005.01.015

1. Introduction

With the advent of DSM-IV in 1994 (American Psychiatric Association, 1994), an important modification was made to the stressor criterion in the posttraumatic stress disorder (PTSD) diagnosis. Specifically, it was split into two parts—Criteria A1 and A2. Criterion A1 refers to the objective elements of the trauma, with an emphasis on physical threat to the self or others. Criterion A2 relates to subjective components, requiring that the person's response involved intense fear, helplessness, or horror. These phenomena were included based on the hypothesis that subjective responses at the time of the trauma played an important etiological role (Kilpatrick et al., 1997). Both A1 and A2 must be met for a diagnosis. This was an interesting modification, not least because the DSM-IV field trials indicated that the prevalence of PTSD was not affected by the inclusion of this additional requirement (Kilpatrick et al., 1997). Although surprisingly little research to date has investigated Criterion A2 directly, recent evidence suggests that trauma survivors rarely go on to develop the remaining clinical symptoms of PTSD unless they experienced an acute emotional response as defined by Criterion A2. A recent study of crime victims (Brewin et al., 2000), for example, found that intense fear, helplessness, or horror at the time of the trauma strongly predicted later PTSD. Interestingly, the few individuals who did not meet Criterion A2, yet went on to develop the remaining symptoms of PTSD, reported high levels of other acute emotional reactions such as anger or shame. In a community sample, Breslau and Kessler (2001) also found that individuals who did not meet Criterion A2 rarely went on to develop PTSD. They noted that the likelihood of an individual meeting Criterion A2 varied according to the nature of the stressor, with rape and a child's life threatening illness being the two events most likely to result in fear, helplessness, or horror.

Although it may not have improved diagnostic accuracy, the inclusion of Criterion A2 acknowledges the potentially important role of both cognitive appraisals and acute affective responses as mechanisms in the subsequent development of PTSD, elements that have long been central to theoretical models of the disorder (Janet, 1907). Influential cognitive behavioural models (e.g., Brewin et al., 1996; Ehlers and Clark, 2000; Foa et al., 1989), for example, emphasise the importance of these cognitive and emotional reactions at the time of the trauma in determining both acute and chronic adjustment. The traumatic memories central to the clinical presentation of PTSD are characterized by high levels of fear and other powerful emotions present at the time of, and shortly following, the event (Foa et al., 1989). Similarly, biological models argue that fear conditioning during the trauma leads to excessive noradrenergic reactivity which, in turn, enhances trauma-related memory and results in chronic potentiation within the limbic system (Pitman, 1997). Thus, both models imply that the individual's initial emotional reactions (i.e., Criterion A2) are critical in determining subsequent adjustment: those people who do not experience strong emotional reactions associated with the trauma should be less likely to experience troublesome memories and less likely to develop subsequent adjustment problems. Conversely, powerful acute emotional reactions (A2) increase the likelihood of persistent traumatic memories which, in turn, increase the risk for PTSD and, potentially, for other psychiatric disorders.

While the extent of comorbidity in the context of PTSD has been well established (Creamer et al., 2001; Kessler et al., 1995), recent research suggests that incidence of other psychiatric disorders, in the absence of PTSD, may also increase following traumatic exposure. Although Breslau (1998), in a reanalysis of the Detroit Trauma Survey data, concluded that exposure to trauma per se in the absence of PTSD does not increase the risk of first onset of other disorders, this conclusion is at odds with some other studies that have observed traumatized populations longitudinally (e.g., Kulka et al., 1990; Mayou et al., 2001; McFarlane and Papay, 1992; Schnyder et al., 2001). Shalev et al. (1998), for example, found that 29% of trauma survivors with major depression did not have comorbid PTSD and concluded that major depression and PTSD are independent sequelae of traumatic events. Similarly, Schnyder et al. (2001), in a sample of severely injured accident victims, reported that nearly 20% suffered from depression and/or anxiety independent of PTSD at 12 months post-trauma. Mayou et al. (2001), in a 12-month follow up of motor vehicle accident survivors, report that a sizable proportion of individuals developed psychiatric outcomes in the absence of PTSD.