

PTSD 30 years after DSM-III: current controversies and future challenges

Il disturbo post-traumatico da stress 30 anni dopo il DSM-III: controversie attuali e sfide future

PTSD towards DSM-V

Post-Traumatic Stress Disorder (PTSD) is an often chronic and invalidating anxiety disorder that is unique among other psychiatric diagnoses (along with acute stress disorder) as it depends upon an etiological agent, namely, a traumatic stressor.

Research in this area has blossomed since the first introduction of PTSD in the DSM (IIIrd edition, 1980), rising increasing interest in psychiatry. The numerous epidemiological, clinical, neurobiological and neuroimaging studies on this disorder have nourished the lively debate on its redefinition in the forthcoming DSM-V. In this regard, PTSD has generated as much controversy as almost no other disorder in the field, on what concerns its boundaries, diagnostic criteria, central assumptions, clinical utility, and prevalence in various populations ¹.

Current diagnostic criteria for PTSD (DSM-IV-TR, 2000) stipulate exposure to an event that threatens serious physical injury of self or others, or that has implicated someone's death (A1 criterion), and that is accompanied by feelings of intense fear, helplessness, or horror (A2 criterion). The diagnosis requires development of symptoms in three domains that persist for at least a month: re-experiencing (Criterion B), avoidance and numbing (Criterion C) and hyper-arousal (Criterion D).

The definition of the traumatic stressor has led to many controversies. In the current definition of the DSM-IV-TR, traumatic events that may trigger PTSD include terribly frightening, life-threatening, or otherwise highly unsafe experiences that involved physical harm or the threat of physical harm for self or others. These include violent personal assaults (mugging, rape, torture, being kidnapped or held captive, child abuse), natural or human-caused disasters (floods, earthquakes, bombings), accidents (car accidents, train wrecks, plane crashes), or military combat. Research on stress reactions has corroborated the relevance of the individual's vulnerability, also derived from a gene-environment interaction, to PTSD onset, leading to the statement that the trauma is a necessary but not sufficient condition to develop the disorder. Other risk factors revealed to play a significant role, such as peri-traumatic dissociation, peri-traumatic negative emotions, social support. Thus, the debate around whether an event can be defined as traumatic has risen controversies, even leading to the suggestion to eliminate the stressor criteria, relying only on the symptomatological aspects of the disorder, as it happens for other mental illnesses.

Some authors demonstrated in fact, how very few people (3.4%-4.5%) meet full PTSD diagnostic criteria without having experienced a traumatic event as defined in DSM-IV-TR. Upon these results, they suggested to avoid a widening of the qualifying A1 events (named the *bracket creep* or *criterion creep*) and to associate less threatening events to adjustment disorder and not to PTSD. On the contrary, other authors showed the need to include a wider range of adverse experiences in order to capture relevant proportions of exposed patients with PTSD.

Starting from the point of view of the A2 criterion, suggesting that the trauma can be relative depending on the reaction of the person experiencing it, other authors have documented the importance of the so-called "low-magnitude" events (e.g., divorce, serious illness and financial reverses) in determining post-traumatic stress reaction ^{2 3} besides the role of continuing or repeated stress ⁴. For what concern this latter, a number of clinicians and researchers have highlighted that despite individuals exposed to this kind of stress meet the diagnostic criteria for PTSD, the most relevant aspects of the syndrome presented are not accounted in the current diagnosis. These include: acting out, self harm, self destructing relationships (interpersonal difficulties) and behaviors, emotional difficulties (e.g., affective lability, rage, depression and panic), cognitive difficulties (e.g., dissociation), and somatization. These conditions, first conceptualized as *complex PTSD*, have been then referred to as Disorders of Extreme Stress not Otherwise Specified (DESNOS) by the DSM-IV work group.

Despite still debated, the DSM-V task force has decided to maintain the A1 criterion in the forthcoming edition, considering it indispensable for the development of intrusion and avoidance symptoms ^{1 5}. This criterion has also been tightened-up to make a better distinction between "traumatic" events and those that, even if distressing, do not exceed the "traumatic" threshold. The DSM-V emphasizes that qualifying events must involve direct exposure to "death or threatened death, actual or threatened serious injury, or actual or threatened sexual violation", and clearly excludes witnessing these events through media "unless this forms part of a person's vocational role". Further, the "learning about" component must involve significant others and also applies to work-related exposure.

The validity of the A2 criterion is also criticized in the DSM-V, which eliminates it. Most empirical research in fact does not support it as a diagnostic requirement for

PTSD^{1,6}. If on one hand immediate post-exposure fear, helplessness and horror do not seem to predict PTSD after 6 months, other emotions such as anger or shame seem to be relevant. Review studies on the criterion A2 validity suggest the need to consider the subject's immediate response when defining a traumatic stressor, as each one adapts to extreme events by responding in a complex manner. According to these authors in fact, this complex response set involves an individual's appraisal regarding the degree to which the event is a burden for his or her resources, as well as a range of other cognitions (e.g., dissociation), emotions (e.g., fear), physiological reactions (e.g., heart rate increase), and behaviors (e.g., tonic immobility). In the forthcoming fifth edition of the DSM, also PTSD symptom criteria are being redefined. One of the major issues endorsed is related to the substantial overlap of the symptoms encoded in the criteria B-D with those of other disorders such as major depression, specific phobia and dissociative disorders^{1,5}. The elimination of non-distinctive symptoms of PTSD has been proposed¹ so that irritability, insomnia, difficulty concentrating, and markedly diminished interest would be eliminated from the criteria. On the other hand, research studies showed that traumatic events can elicit a myriad of emotions other than fear, such as anger, guilt or shame, disgust, sadness, and numbing, that have been related to the onset of PTSD symptoms⁶. This leads to debate which current or new PTSD symptoms may best identify the syndrome. The proposed revision now includes 20 rather than 17 symptoms. It has retained the basic PTSD structure but four distinct symptom clusters, rather than the three-cluster structure found in the DSM-IV-TR, have been proposed: intrusion symptoms, avoidance, negative affect, hyperarousal. The C criterion (avoidance and numbing) of the DSM-IV-TR has been divided into two criteria: avoidance behavior and negative alterations in cognitions and mood. The proposed criteria expanded the scope of B-E criteria beyond a fear-based concept considering that traumatic exposure is also followed by dysphoric, anhedonic, aggressive/externalizing, guilt/shame, and dissociative symptoms, as well as negative appraisals about oneself and the world. Finally, the DSM-V eliminates the distinction between acute and chronic PTSD in light of the little empirical support.

Partial or subthreshold PTSD

An important challenge to the PTSD construct derived by studies on partial, subthreshold or subclinical PTSD. These concepts have been introduced by authors who argued the inappropriateness of Adjustment Disorder diagnosis for the large number of victims who, even if exposed to DSM-IV-qualified trauma, did not fulfill the symptomatological criteria (B, C and D) for PTSD but reported significant levels of functional impairment and

seek for treatment. Despite the problem of different methodological approaches, studies on partial PTSD agree in reporting significantly less symptoms severity and functional impairment than in patients with full-blown disorder, but significantly more than in no-PTSD subjects, with an associated need for treatment^{7,8}.

The DSM-V does not include any form of partial or sub-threshold PTSD and any utility of these approaches is accounted in the newly proposed Acute Stress Disorder/PTSD subtype diagnosis of Adjustment Disorders, which is now under consideration. This diagnosis should be applied to either individuals who do not meet criteria for PTSD despite being exposed to a criterion A1 qualifying trauma, or to individuals who were not exposed to this kind of event but do fulfill some or all of the B-G new PTSD criteria.

A multidimensional approach to PTSD: the Trauma and Loss Spectrum Questionnaire (TALS-SR)

In light of these data, dimensional approaches to PTSD, similarly to what reported for other mental disorders, have been developed and tested. Moreau and Zisook² first conceptualized a multidimensional approach to PTSD also taking into account the controversies on the definition of the stressor criterion. They developed a multidimensional model along three components: (1) the nature of the stressor, (2) the possible responses to trauma and (3) the symptom severity. Breslau et al.⁹ in a latent class analysis of two large epidemiological samples, suggested the existence of a three-class structure separating trauma exposed persons with pervasive disturbance from those with intermediate or no disturbance.

In the framework of the Spectrum Project (a USA-Italy collaboration), clinicians and researchers of the Department of Psychiatry of the University of Pisa (Italy) developed and validated a questionnaire to assess the "post-traumatic spectrum": the Trauma and Loss Spectrum-Self Report (TALS-SR)¹⁰. Similar to other spectrum measures developed by the Spectrum Project (www.spectrum-project.org), the TALS-SR explores the presence/absence of post-traumatic spectrum that might occur during the lifetime of an individual. The TALS-SR investigates stress response syndromes across three different dimensions: 1) the dimension of the potentially traumatic events, including from extreme to minor ones; 2) the dimension of the peri-traumatic reaction; 3) the dimension of the post-traumatic spectrum symptomatology, including the lifetime occurrence of isolated criterion and non-criterion symptoms and features associated with the DSM-IV-TR diagnosis of PTSD.

The TALS-SR is based on a multidimensional approach to post-traumatic stress reactions that includes a range of

threatening or frightening experiences, as well as a variety of potentially significant losses, to which an individual can be exposed. The revised stressor criterion of the DSM-V specifies that besides witnessing someone's death, learning about the death of a close friend or a relative can be considered to be traumatic when the actual or threatened death has been violent or accidental. In the last decades, increasing efforts were aimed at identifying whether syndromes of unresolved grief are a form of stress response^{11,12}. A growing literature, in fact provides evidence that a minority of individuals (9-20%) who experience the loss of a close relative or significant other may report symptoms of unresolved grief that are associated with significant distress and impairment, heightened risk for depression, anxiety, alcohol and tobacco consumption, and suicidal ideation. Symptoms include emotions over the death such as a sense of disbelief, anger, bitterness and preoccupation often associated with distressing intense thoughts, besides intense yearning and longing for the deceased. This condition, named Complicated or Traumatic Grief or, more recently, Prolonged Grief Disorder, is identified by symptoms of both separation and traumatic distress which are distinctive from other Axis I mental disorders, primarily Major Depression¹². Thus, the TALS-SR divides two specific sessions exploring loss events and potentially traumatic events.

The second and third dimensions of the TALS-SR explore the spectrum of the peri-traumatic reaction and post-traumatic symptoms, respectively, that may ensue from either type of life events (those that entail exposure to a negative threatening like event and those that entail exposure to a significant loss). These dimensions provide a dimensional approach to the patient's psychopathology by incorporating information related to soft signs, subthreshold symptoms and atypical manifestations that may cause serious distress, as well as a broad array of clinical features associated with trauma and loss events. All these manifestations are commonly seen in clinical populations, but, except for the core or criterion symptoms, are not mentioned in current psychiatric classifications. In line with the new perspectives of the DSM-V also feelings of guilt, anger and shame, besides those of fear, helplessness and horror were added. Somatic and psychic symptoms of anxiety, that might be experienced in the immediate aftermath of the trauma, are also investigated. Consistently with the new proposals of the DSM-V, no distinction is added between acute and post-traumatic stress reactions¹³.

The TALS-SR also targets temperamental and personality traits that may constitute risk factors or prodromal symptoms of the disorder. Many researchers have postulated that personal variables (e.g., personality traits) or environmental factors (e.g., level of perceived social support) influence the specific patterns of PTSD expression. Self-perception of changes in personality as a result of the

traumatic experience is not uncommon among patients with PTSD. For these reasons the TALS-SR includes a specific domain exploring personality characteristics and risk factors where it is also investigated whether the patient perceived a change in his/her personality after the trauma had occurred. Further, in line with the changes proposed in the new criterion E of the DSM-V and accordingly with the growing evidence on reckless and maladaptive behaviors occurring in patients with PTSD, the TALS-SR includes a specific session addressing these symptoms (maladaptive coping).

The spectrum approach also allows to identify relevant subclinical comorbidities that may contribute either to the "complex" presentation of PTSD (e.g., the DESNOS) or to the frequent complex behavioral outcomes and complications, such as self-harm behavior and suicidality, also addressed by the DSM-V. By means of a spectrum comorbidity approach we could in fact show the impact of subthreshold mood symptoms on suicidality in patients with PTSD¹⁴, consistently with previous findings in patients with Axis I comorbidity¹⁵.

Future perspectives

Over time, and particularly over the last decades, the understanding of PTSD has evolved and changed. Thus, the redefinition of the PTSD criteria represents one of the most challenging aspects of the forthcoming DSM-V. Not only the triggering events that can be defined as "traumatic" are still debated and controversial, but also the core assumptions that underlie the diagnostic construct of this disorder need to be further investigated.

Despite in the last 30 years of research, since DSM-III, the knowledge on PTSD has significantly implemented, many aspects related to post-traumatic stress conditions still need to be refined. These latter are even showing an increasingly nuclear role in psychiatry research nowadays, as we take into account the results of the last decade of studies on the human genome project aimed at investigating correlates of mental disorders. Initially viewed as potentially determinant for an etiological definition of psychiatric disorders, genetic research has in fact progressively yield to conflicting results highlighting the need to include the research for environmental etiological factors in a gene x environment interactive view. This has led to highlight not only the role of genetics but also of the environment and of subject's development. Thus concepts such as the "exposome" have been introduced to refer to the totality of environmental exposures including the body's internal and external chemical environment such as hormones, diet, pollution, occupation, stress, and behavior¹⁶. As a result, it is still debated whether most (70-90%) of the disease risks are probably due to differences in environments or if genetic factors play a

critical role not only in the etiology of individual disorders but also in their structure^{16 17}. Some researchers of our group recently gave further evidence to corroborate the relevance of this interaction¹⁸. In this context, further studies are needed, but we consider that dimensional assessments, such as the spectrum approach developed in the TALS-SR, may give substantial contributions for a better understanding of post-traumatic reaction and thus, for redefining PTSD.

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