

Post-traumatic stress disorder in the DSM-5

Il disturbo post-traumatico da stress nel DSM-5

The fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) of the *American Psychiatric Association* (APA), published last may, brought several changes to current psychiatric classifications. An interesting category that will be subject to change is Anxiety Disorders. Obsessive-compulsive disorder (OCD) and post-traumatic stress disorder (PTSD) will now form two new categories together with related disorders currently placed in other categories: *Obsessive-Compulsive and Related Disorders* and *Trauma and Stressor Related Disorders*, respectively.

PTSD had well-characterized diagnostic criteria starting with the DSM-III (APA, 1980) as a consequence of dramatic evidence of psychic pathologies that, almost epidemic in proportion, manifested in veterans of the Vietnam War: previously, the literature described syndromes related to a variety of traumatic events (prisoner of war syndrome, sexual abuse, battered women, etc.). The numerous studies on clinical characteristics, epidemiology and neurobiology, carried out on Vietnam War veterans, and later in other groups of subjects exposed to other types of traumatic events (physical and sexual violence, concentration camps, etc.), led to the first diagnostic description of PTSD. Following this, epidemiological studies were carried out in several countries, which indicated that the lifetime prevalence of PTSD was around 10.1%¹. This was also extended to studies on victims of mass trauma, such as terrorist attacks – firstly 9/11 in New York² – and natural disasters such as earthquakes³.

These studies have taken into account not only risk factors, resilience and course of disease, but also the complications of PTSD as well as the subclinical and partial forms, which are neither less relevant or invalidating than the syndrome with complete symptomology⁵⁻⁸. This emphasizes the fact that PTSD is characterized not only by a high risk of suicidal and abusive behaviour, but also by other maladaptive behaviours (e.g. dangerous driving, aggressive or self-destructive behaviour, at-risk sexual encounters), which some believe to be the core elements of PTSD⁹⁻¹¹. The large amount of data collected has fuelled debate about the need for better diagnostic criteria. On the basis

of numerous investigations during the last 20 years, the workgroup for *Anxiety, Obsessive-Compulsive Spectrum, Posttraumatic, and Dissociative Disorders* of the task force for the DSM-5 proposed to exclude PTSD from the section on Anxiety Disorders, and to create a new section on Trauma and Stress Related Disorders. According to the task force, the latter should include all those disturbances whose aetiopathogenesis is correlated with a traumatic event, and to modify the current diagnostic criteria (DSM-IV-TR, 2000). In particular, Criterion A, relative to the traumatic event has changed, together with symptomatological criteria, that have been increased from 3 to 4.

A new section: Trauma and Stressor Related Disorders

The placement of PTSD within the section on Anxiety Disorders, such as OCD, was somewhat criticized. As a result, the workgroup felt that such criticisms could be addressed by creating two new sections on *Obsessive-Compulsive and Related Disorders* and *Trauma and Stressor Related Disorders*. This latter includes disturbances that have their aetiopathology in a stressful traumatic event, which represents an essential factor in determining the disorder, and is thus a key element that displays an entire spectrum of psychopathological reactions to environmental stress factors. In fact, in addition to PTSD, 5 new categories have been added: *Reactive Attachment Disorder*, *Disinhibited Social Engagement Disorder*, *Acute Stress Disorder*, *Other Specified Trauma and Stressor Related Disorder*.

Diagnostic criteria of PTSD

The traumatic event

The definition of a traumatic event (Criterion A), necessary to formulate a diagnosis of PTSD, has evolved over time. In its first definition in DSM-III (1980), Criterion A foresaw exposition to “a recognizable stressful event that would provoke significant symptoms of illness in almost

all individuals". Later, in the DSM-III-R (1987), this criterion was the object of a reformulation aimed at clarifying the original definition, adding that the traumatic experience had to be "*outside of the usual human experience*". However, in the attempt to provide typical examples of stressful events, the manual included potential stressors that were not outside of the normal human experience, such as being the victim of a criminal act or being involved in an accident. With the DSM-IV (1994), this criterion was subjected to an additional evolution: the connotation "*would provoke significant symptoms of illness in almost all individuals*" was eliminated, and Criterion A was subdivided in two components, one objective (Criterion A1) and one subjective (Criterion A2). For the first, "*the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others*"; for Criterion A2, "*the person's response involved intense fear, helplessness, or horror*". This division had the aim of balancing the risk of an excess number of diagnoses due to the non-specific nature of Criterion A1, and increasing diagnostic specificity with the introduction of Criterion A2 for the subject's intense emotive reaction.

In reality, epidemiological studies have demonstrated that "*intense fear, sentiments of impotence, or horror*", if not present in the immediacy of exposition to the trauma, moderately reduce the estimated prevalence of PTSD; if present, they are weak predictors of PTSD at 6 months compared to other post-traumatic emotive reactions, such as anger or shame. Moreover, some authors have highlighted the risk of recall bias in the evaluation of Criterion A2: cases of PTSD are often evaluated months or even years after the traumatic event, thus implying a retrospective evaluation of Criterion A2, which is influenced by the current psychopathological state of the patient.

Considering this, the task force of the DSM-5 changed Criteria A1 and A2 into a single Criterion A with the aim of eliminating the existing ambiguity and adopting a restrictive approach for the selection of traumatic events. In recent years, in fact, among PTSD experts two points of view have formed. One sustains the importance of including low magnitude traumatic events, such as divorce, physical illness, bankruptcy, abortion, continuous

or recurrent stress. The other underlines the importance of more restrictive definitions to avoid the risk of excessive subjectivity. The DSM-5 has opted for the second hypothesis, favouring more restrictive criteria.

The new Criterion A^a foresees, in fact, the actual exposition to, or threat of, death, severe injury or sexual violence, which may be either direct through personal experience; direct testimony of a traumatic event occurring to others; become aware that the victim of a traumatic event is a family member or close friend (whose death, real or threatened, must have been violent or accidental); the repeated experience or exposure to extreme repulsive details of a traumatic event (as in the case of emergency services for the collection of human remains; police officers repeatedly exposed to details of child abuse), but with the specification that this condition does not apply to exposure via electronic instruments, television, movies or photographs, unless it is linked to work activity.

Symptomatological criteria

The DSM-IV-TR foresaw, for a diagnosis of PTSD, the presence of a symptomatological triad that included: re-experiencing (Criterion B), avoidance or emotional blunting (Criterion C) and an increase in arousal (Criterion D). The validity of this structure based on these three symptomatological clusters was investigated in numerous studies, based on factorial analyses, that allowed for the identification of models with two, three or four factors. These studies suffered from methodological limitations since different instruments for evaluation were used in cohorts of patients with PTSD who experienced different levels of trauma. However, the majority appeared to support the four-factor model in which re-experiencing, avoidance and hyperarousal retain their identity, while the fourth factor appears less well defined.

Several studies indicated a fourth factor, emotional blunting, characterized by symptoms included in DSM-IV Criterion C (avoidance) and numbing, while a small percentage indicated dysphoria, which is considered a combination of a relative emotional blunting and symptoms of hyperarousal also associated with depression. Both hypotheses demonstrated to be valid, with a slight advantage favouring dysphoria as a fourth factor. However, the task force chose emotional blunting for the pos-

^a Exposure to actual or threatened a) death, b) serious injury, or c) sexual violation, in one or more of the following ways:

1. directly experiencing the traumatic event(s);
2. witnessing, in person, the traumatic event(s) as they occurred to others;
3. learning that the traumatic event(s) occurred to a close family member or close friend; cases of actual or threatened death must have been violent or accidental;
4. experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders collecting human remains; police officers repeatedly exposed to details of child abuse); this does not apply to exposure through electronic media, television, movies, or pictures, unless this exposure is work-related.

sible overlap of symptoms of PTSD associated with the dysphoria factor and similar ones that are observed in other disturbances that are often comorbid, such as depression or anxiety disorders. In the DSM-5, therefore, the symptomatological structure of PTSD has gone from three to four criteria. The fourth criterion has been named *Negative alterations in cognition and mood*, which derives from the separation of some of the symptoms formerly present in Criterion C of the DSM-IV-TR. There are also minor changes to the other criteria.

Criterion B

Considering that the former formulation of Criterion B1 (*recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions*) carried excessive weight for ruminative, depressive symptoms, and as shown by many studies that due to the non-specific nature of the criterion this led to an overlap of symptoms with other psychiatric disorders, in particular with depression, the DSM-5 decided for the following: *recurrent, involuntary, and intrusive distressing memories of the traumatic event(s)*.

To better reveal intrusive symptoms and dissociated reactions, generally considered as core symptoms for diagnosis, Criteria B2 and B3 were modified. Criterion B2 (distressing nightmares) was better defined such that the content or worries of the nightmare must be correlated with the traumatic event [*recurrent distressing dreams in which the content and/or affect of the dream is related to the event(s)*]. Criterion B3 now specifies that flashbacks are dissociative reactions in which the subject feels or acts as if the traumatic event reoccurs, and that this reaction takes place along a continuum whose extreme expression is represented by a complete loss of awareness of the surrounding environment^b. Criteria B4 (“intense or prolonged psychological distress at exposure to internal or external cues that symbolize or resemble some aspect of the traumatic event”) and B5 (“marked physiological reaction at ...”) were not substantially changed.

Criteria C and D

Criterion C (avoidance and emotional blunting) of the DSM-IV-TR, due to the adoption of a structure with four factors, underwent the most radical changes. In fact, it is now divided into two distinct clusters. The new Criterion C, named *Persistent avoidance of stimuli associated with the traumatic event(s)*, comprises symptoms of persistent avoidance of stimuli associated with the

traumatic event. A new symptomatological cluster, new Criterion D, is defined as *Negative alterations in cognitions and mood associated with the traumatic event(s)*, which includes symptoms of emotional blunting of the DSM-IV-TR, emphasizing selected aspects. It also includes two new symptoms, namely *pervasive emotional state* and *persistent negative distorted blame of self or others about the cause or consequences of the traumatic event*.

New Criterion C leaves Criterion C1 (avoidance of distressing memories, thoughts, or feelings about, or closely associated with, the traumatic event) and C2 (avoidance of external stresses, such as people, places, conversations, activities, objects, or situations that evoke distressing memories, thoughts or feelings about the traumatic event, or which are closely related) of the DSM-IV-TR relatively unaltered.

New Criterion D includes 7 items that are derived from previous Criterion C and new criteria. The DSM-5 specifies the primary role of dissociative amnesia in impaired memory and the characteristics of psychic blunting, typical of patients with PTSD, that is extended to include not only the feelings of a shortened future, but also the negative expectations about oneself, others and the world. Thus, the cluster includes: difficulty in remembering important aspects about the traumatic event, seen in terms of dissociative amnesia (D1); persistent beliefs and negative expectations about oneself, others, or the world (D2); unwarranted feelings of blame related to the causes and consequences of the traumatic event (D3); persistent negative emotional state (D4); marked decrease in interest or participation in significant activities (D5); feelings of detachment or estrangement from others (D6); and persistent inability to express positive emotions (D7).

Criterion E

Criterion E is simply the previous Criterion D, relative to “persistent symptoms of increased arousal”, to which symptoms of hyperarousal and increased responsiveness, new aspects of risk-taking behaviours, maladaptive and self-destructive or aggressive behaviours have been added⁹⁻¹². The inclusion of aggressive behaviour (Criterion E1) stems from growing evidence, especially in studies of war veterans, that aggressive behaviour, more than other symptoms of PTSD, is often the core of the disorder. Considering self-destructive behaviours (Criterion E2), a marked increase in the propensity to risk-taking behaviour, including for example reckless driving, has

^b Dissociative reactions (e.g. flashbacks) in which the individual feels or acts as if the traumatic event(s) are recurring (such reactions may occur on a continuum, with the most extreme expression being a complete loss of awareness of present surroundings).

been shown, especially among adolescents exposed to terroristic acts and probably suffering from PTSD. The following are unchanged: hypervigilance (E3), exaggerated response to threat (E4), problems in concentration (E5) and sleep disturbance (E6).

One likely consequence of the reformulation of this criterion is that there is the possibility to interrelate PTSD to substance abuse and aggression in the family and social context, which are especially frequent in post-traumatic situations¹⁰. It should be noted that the DSM-5 considers two clinical subtypes of PTSD, *Dissociative Subtype* for patients with persistent or recurrent symptoms of depersonalization and/or derealization and *With Delayed Expression Subtype*, with onset at least 6 months after the event. An important change, lastly, is related to the course of disease, with the elimination of the specifier "acute" vs. "chronic" which currently classifies PTSD depending on its duration, with a cut-off of 3 months.

Conclusions

It should be highlighted that the changes contained in the DSM-5 can be summarized in three major points. The first is the removal of PTSD from the section on Anxiety Disorders and the creation of a new section, *Trauma and Stressor Related Disorders*, which contains the following categories in addition to PTSD (*Reactive Attachment Disorder*, *Disinhibited Social Engagement Disorder*, *Acute Stress Disorder*, *Adjustment Disorder*, *Other Specified Trauma and Stressor Related Disorder*) whose aetiopathogenesis is caused by traumatic stress. This is undoubtedly an interesting change as it places the trauma at the centre of a variety of disorders, highlighting the different possible reactions to psychotraumatic events. The second major change is the attempt to redefine the traumatic event, which in the relatively short existence of PTSD, has undergone a series of changes related to the difficulty in finding the right equilibrium between the need to limit the risk of an excessive number of diagnoses due to the lack of highly specific criteria with diagnostic sensitivity. Lastly, the third key change is the restructuring of symptomatological criteria: the symptomatological structure of PTSD has gone from three to four clusters, with the separation of Avoidance from Numbing, and the revision of several symptoms in order to better identify the disorder. The addition of aggressive (Criterion E1) and self-destructive (Criterion E2) behaviours, which were not foreseen, but which recent studies have shown are clearly correlated with PTSD: aggressive behaviours often manifest in family and social settings, and self-destructive behaviour, which ranges from substance abuse to maladaptive and suicidal gestures. In summary, while the new revisions in the DSM-5 are not a revolution in PTSD, they undoubtedly

represent definite forward progress in better definition of the disorder.

Liliana Dell'Osso¹, Alessandro Rossi²

¹ *Sezione di Psichiatria, Dipartimento di Medicina Clinica e Sperimentale, Università di Pisa;*

² *DISCAB (Dipartimento di Scienze Cliniche Applicate e Biotecnologiche), Università dell'Aquila*

References

- 1 Kessler RC, Petukhova M, Sampson NA, et al. *Twelve-month and lifetime prevalence and lifetime morbid risk of anxiety and mood disorders in the United States*. *Int J Methods Psychiatr Res*. 2012;21:169-84.
- 2 Yehuda R, Cai G, Golier JA, et al. *Gene expression patterns associated with posttraumatic stress disorder following exposure to the World Trade Center attacks*. *Biol Psychiatry* 2009;66:708-11.
- 3 Dell'Osso L, Carmassi C, Massimetti G, et al. *Full and partial PTSD among young adult survivors 10 months after the L'Aquila 2009 earthquake: gender differences*. *J Affect Disord*. 2011;131:79-83.
- 4 Rossi A, Carmassi C, Daneluzzo E. *Community Assessment of Psychic Experiences (CAPE) and Trauma and Loss Spectrum (TALS) 12 months after an earthquake in Italy*. *Journal of Psychopathology* 2013;19:68-72.
- 5 Dell'Osso L, Carmassi C, Massimetti G, et al. *Age, gender and epicenter proximity effects on post-traumatic stress symptoms in L'Aquila 2009 earthquake survivors*. *J Affect Disord* 2012 Oct 22.
- 6 Stratta P, Capanna C, Riccardi I, et al. *Suicidal intention and negative spiritual coping one year after the earthquake of L'Aquila (Italy)*. *J Affect Disord* 2012;136:1227-31.
- 7 Dell'Osso L, Carmassi C, Massimetti G, et al. *Impact of traumatic loss on post-traumatic spectrum symptoms in high school student after the L'Aquila 2009 earthquake in Italy*. *J Affect Disord* 2011;131:54-69.
- 8 Dell'Osso L, Carmassi C, Rucci P. *Lifetime subthreshold mania is related to suicidality in posttraumatic stress disorder*. *CNS Spectrums* 2009;14:262-6.
- 9 Friedman MJ, Resick PA, Bryant RA, et al. *Considering PTSD for DSM-5*. *Depress Anxiety* 2011;28:750-69.
- 10 Dell'Osso L, Carmassi C, Stratta P, et al. *Gender differences in the relationship between maladaptive behaviors and post-traumatic stress disorder. A study on 900 L'Aquila 2009 earthquake survivors*. *Front Psychiatry* 2012;3:111.
- 11 Dell'Osso L, Carmassi C, Conversano C. *Post traumatic stress spectrum and maladaptive behaviours (drug abuse included) after catastrophic events: L'Aquila 2009 earthquake as case study*. *HA&RCP* 2012;14:95-104.
- 12 Dell'Osso L, Carmassi C, Rucci P, et al. *A multidimensional spectrum approach to post-traumatic stress disorder: comparison between the Structured Clinical Interview for Trauma and Loss Spectrum (SCI-TALS) and the Self-Report instrument (TALS-SR)*. *Compr Psychiatry* 2009;50:485-90.