Diagnosis and classification of disorders specifically associated with stress:
proposals for ICD-11

Maercker, Andreas; Brewin, Chris R; Bryant, Richard A; Cloître, Marylene; van Ommeren, Mark; Jones, Lynne M; Humayan, Asma; Kagee, Ashraf; Llosa, Augusto E; Rousseau, Cécile; Somasundaram, Daya J; Souza, Renato; Suzuki, Yuriko; Weissbecker, Inka; Wessely, Simon C; First, Michael B; Reed, Geoffrey M

Abstract: The diagnostic concepts of post-traumatic stress disorder (PTSD) and other disorders specifically associated with stress have been intensively discussed among neuro- and social scientists, clinicians, epidemiologists, public health planners and humanitarian aid workers around the world. PTSD and adjustment disorder are among the most widely used diagnoses in mental health care worldwide. This paper describes proposals that aim to maximize clinical utility for the classification and grouping of disorders specifically associated with stress in the forthcoming 11th revision of the International Classification of Diseases (ICD-11). Proposals include a narrower concept for PTSD that does not allow the diagnosis to be made based entirely on non-specific symptoms; a new complex PTSD category that comprises three clusters of intra- and interpersonal symptoms in addition to core PTSD symptoms; a new diagnosis of prolonged grief disorder, used to describe patients that undergo an intensely painful, disabling, and abnormally persistent response to bereavement; a major revision of “adjustment disorder” involving increased specification of symptoms; and a conceptualization of “acute stress reaction” as a normal phenomenon that still may require clinical intervention. These proposals were developed with specific considerations given to clinical utility and global applicability in both low- and high-income countries.

DOI: https://doi.org/10.1002/wps.20057

Posted at the Zurich Open Repository and Archive, University of Zurich
ZORA URL: https://doi.org/10.5167/uzh-85628

Originally published at:
Maercker, Andreas; Brewin, Chris R; Bryant, Richard A; Cloître, Marylene; van Ommeren, Mark; Jones, Lynne M; Humayan, Asma; Kagee, Ashraf; Llosa, Augusto E; Rousseau, Cécile; Somasundaram, Daya J; Souza, Renato; Suzuki, Yuriko; Weissbecker, Inka; Wessely, Simon C; First, Michael B; Reed, Geoffrey M (2013). Diagnosis and classification of disorders specifically associated with stress: proposals for ICD-11. World Psychiatry, 12(3):198-206.
DOI: https://doi.org/10.1002/wps.20057
Diagnosis and classification of disorders specifically associated with stress: proposals for ICD-11

ANDREAS MAERCKER, CHRIS R. BREWIN, RICHARD A. BRYANT, MARYLENE CLOITRE, MARK VAN OMMEREN, LYNEE M. JONES, ASMA HUMAYUN, ASHRAF KAGEE, AUGUSTO E. LLOSA, CÉCILE ROUSSEAU, DAYA J. SOMASUNDARAM, RENATO SOUZA, YURIKO SUZUKI, INKA WEISSBECKER, SIMON C. WESSELY, MICHAEL B. FIRST, GEOFFREY M. REED

1Department of Psychology, Division of Psychopathology, University of Zurich, Switzerland; 2Department of Clinical, Educational and Health Psychology, University College London, London, UK; 3School of Psychology, University of New South Wales, Sydney, Australia; 4Division of Dissemination and Training, National Center for PTSD, Menlo Park, CA, USA; 5Department of Mental Health and Substance Abuse, World Health Organization, Geneva, Switzerland; 6FXB Center for Health and Human Rights, Harvard School of Public Health, Cambridge, MA, USA; 7Institute of Psychiatry, Benazir Bhutto Glenside, South Australia, Australia; 8Department of Psychology, Stellenbosch University, Stellenbosch, South Africa; 9Epicentre, Paris, France; 10Department of Psychiatry, McGill University Health Centre, Montreal, Canada; 11University of Jaffna, Sri Lanka; 12Glenside Mental Health Services, Glenside, South Australia, Australia; 13International Committee of the Red Cross, Geneva, Switzerland; 14National Center of Neurology and Psychiatry, National Institute of Mental Health, Tokyo, Japan; 15International Medical Corps, Washington, DC, USA; 16Institute of Psychiatry, King's College London, London, UK; 17Department of Psychiatry, Columbia University Medical Center, New York, NY, USA

The diagnostic concepts of post-traumatic stress disorder (PTSD) and other disorders specifically associated with stress have been intensively discussed among neuro- and social scientists, clinicians, epidemiologists, public health planners and humanitarian aid workers around the world. PTSD and adjustment disorder are among the most widely used diagnoses in mental health care worldwide. This paper describes proposals that aim to maximize clinical utility for the classification and grouping of disorders specifically associated with stress in the forthcoming 11th revision of the International Classification of Diseases (ICD-11). Proposals include a narrower concept for PTSD that does not allow the diagnosis to be made based entirely on non-specific symptoms; a new complex PTSD category that comprises three clusters of intra- and interpersonal symptoms in addition to core PTSD symptoms; a new diagnosis of prolonged grief disorder, used to describe patients that undergo an intensely painful, disabling, and abnormally persistent response to bereavement; a major revision of “adjustment disorder” involving increased specification of symptoms; and a conceptualization of “acute stress reaction” as a normal phenomenon that still may require clinical intervention. These proposals were developed with specific considerations given to clinical utility and global applicability in both low- and high-income countries.

Key words: Classification, mental disorders, ICD, nosology, PTSD, complex PTSD, prolonged grief disorder, cultural appropriateness, DSM

Disorders specifically associated with stress such as post-traumatic stress disorder (PTSD) and adjustment disorder are among the most widely used diagnoses amongst psychiatrists and psychologists worldwide. For psychiatrists who use the ICD-10, PTSD ranks 14th in their day-to-day clinical practice (1). Among global psychologists who use the ICD-10, it is the eighth most frequently used diagnosis. Among psychologists who use the DSM-IV, PTSD ranks third, following only generalized anxiety disorder and major depressive disorder (2).

Stressful events may be risk factors or precipitants for many mental disorders, including psychotic episodes and depression. However, disorders specifically associated with stress are the only diagnoses that include an exposure to a stressful event in their etiology as a qualifying diagnostic requirement.

These diagnoses are also the subject of continuing controversy (3,4). When the DSM-IV broadened the eligibility for the diagnosis of PTSD to include those people whose exposure was indirect (for example, hearing about a stressful event happening to others, or seeing it on television), some pointed out that such diagnostic expansion both diluted the value of the original construct and medicalized normal stress reactions (3,5).

There has been further debate as to the appropriateness of these diagnoses across cultures. The potential overuse of these diagnostic categories is of particular concern in low resource and humanitarian settings, where their apparent simplicity makes them easily applicable to large numbers of people who may be more appropriately viewed as in the midst of normal reactions to extreme circumstances (6). Another concern in these settings is that an emphasis on traumatic stress results in both misdiagnosis and neglect of those suffering from other common and severe mental disorders.

Significant controversy is also associated with the diagnosis of adjustment disorder, in spite of its frequent use by clinicians (1,2). Adjustment disorder is one of the most ill-defined mental disorders, often described as the “wastebasket” of the psychiatric classification scheme (7,8).

The forthcoming revision of the International Classification of Diseases and Related Health Problems (ICD-11), which is currently planned for approval by the World Health Assembly in 2015, has provided an opportunity for the World Health Organization (WHO) to revisit these issues and devise a classification whose aim is to improve clinical utility and global applicability (9,10). In the context of the overall ICD revision structure, a Working Group on
the Classification of Disorders Specifically Associated with Stress was appointed, reporting to the International Advisory Group for the Revision of ICD-10 Mental and Behavioural Disorders (9). This Working Group included a diverse and multidisciplinary set of experts from all WHO regions, particularly including low- and middle-income countries.

The primary tasks of the Working Group were: a) to review available scientific evidence related to disorders specifically associated with stress, as well as clinical and policy information on the use and clinical utility of these diagnoses within various health care settings throughout the world, including primary care and specialist settings; b) to review proposals for the DSM-5 in this area and consider how these may or may not be suited for global applications; c) to assemble and prepare specific proposals, including the placement and organization of relevant categories; and d) to provide drafts of the content of these categories for the ICD-11 and its associated products (e.g., definitions, descriptions, diagnostic guidelines). Particular attention was paid to the presentation of the disorders in diverse settings (e.g., health care facilities, humanitarian aid settings) and regions of the world, including low- and middle-income countries. The group's goal was to specify conditions that had distinct clinical presentations and to describe their core elements.

HISTORY

Disorders specifically associated with stress are relative newcomers to psychiatric classification. The predominant attitude in the UK towards acute stress during the Second World War is encapsulated in a 1942 article in The Lancet by Dr. Henry Wilson, who described his experience of treating 134 patients in a London emergency department: “They were all told that their reaction was due to fear, that this fear was one they shared with all other patients and the first aid workers, and that it was important that they return to their normal work and resist the temptation to exaggerate the experiences through which they had passed” (11). He identified reactions ranging from acute emotional disturbance to stupor and hysterical paraplegia. All of these patients were discharged within 24 hours and only six of them needed further treatment over the next nine months.

However, this emphasis on normalizing reactions and return to functioning gradually shifted to a greater concern with subtle forms of psychopathology and the introduction of an expanding array of diagnostic categories thought to be etiologically related to stress. The ICD-8, approved by the World Health Assembly in 1965, introduced a “transient situational disturbance” that included adjustment problems, severe stress reactions, and combat neurosis. In the ICD-9, approved in 1975, two such disorders were outlined: acute stress reaction and adjustment reaction. In the ICD-10, approved in 1990, two new disorders appeared as primary diagnoses in addition to acute stress reaction and adjustment disorder: F43.1 Post-traumatic stress disorder (PTSD) and F62.0 “Enduring personality change after catastrophic experiences”, which could appear following exposure to stress of an extreme nature (e.g., torture or concentration camp imprisonment).

It is interesting to note that, due to the influence of military psychiatry, acute stress reaction was typically conceptualized as a transient reaction occurring immediately after exposure to a stressor. It was not intended to describe a mental disorder per se, but rather the general distress reactions that people typically experience in the days after exposure to traumatic events. It was expected that these reactions would normally subside within days (12).

THE WORKING GROUP PROCEEDINGS

The Working Group on the Classification of Disorders Specifically Associated with Stress was tasked with examining and improving the classification of a mixed group of conditions, including both “Reaction to severe stress and adjustment disorders” (ICD-10 code F43) and “Enduring personality change after catastrophic experiences” (F62.0). The time frame for its work partly overlapped with the preparation of the DSM-5.

There was a consensus among the Working Group that a specific group of conditions existed – both normative and pathological – requiring the presence of a stressor as a precipitant. These conditions could be distinguished from other disorders such as depression, anxiety, substance abuse or psychosomatic problems, where stress might be a risk factor or precipitant, but which could also occur in its absence.

PROPOSED CLASSIFICATION

The proposed classification of disorders specifically associated with stress in the ICD-11 addresses the full range of severity from normative reactions to pathological conditions (see also 13). One major change is that acute stress reaction is now conceptualized as a normal reaction and thus classified in the chapter corresponding to “Factors influencing health status and contact with services”. This category is considered a legitimate focus of clinical intervention, but is not defined as a disorder.

The proposed new grouping of “Disorders specifically associated with stress” includes adjustment disorder, PTSD and complex PTSD. In addition, the ICD-11 will include for the first time a separate diagnosis of prolonged grief disorder. This proposed group of disorders specifically related to stress covers a set of conditions that have distinct psychopathology and require prior exposure to an external stressful event, or adverse experiences of exceptional character or degree (Table 1). Events may range from less severe psychosocial stress (“life events”) to loss...
<table>
<thead>
<tr>
<th>Proposed ICD-11 categories</th>
<th>Previous ICD-10 codes</th>
<th>Core diagnostic features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-traumatic stress disorder</td>
<td>F43.1</td>
<td>A disorder that develops following exposure to an extremely threatening or horrific event or series of events characterized by: 1) reexperiencing the traumatic event(s) in the present in the form of vivid intrusive memories accompanied by fear or horror, flashbacks, or nightmares; 2) avoidance of thoughts and memories of the event(s), or avoidance of activities or situations reminiscent of the event(s); and 3) a state of perceived current threat in the form of excessive hypervigilance or enhanced startle reactions. The symptoms must last for at least several weeks and cause significant impairment in functioning.</td>
</tr>
<tr>
<td>Complex post-traumatic stress disorder</td>
<td>F62.0</td>
<td>A disorder which arises after exposure to a stressor typically of an extreme or prolonged nature and from which escape is difficult or impossible. The disorder is characterized by the core symptoms of PTSD as well as the development of persistent and pervasive impairments in affective, self and relational functioning, including difficulties in emotion regulation, beliefs about oneself as diminished, defeated or worthless, and difficulties in sustaining relationships.</td>
</tr>
<tr>
<td>Prolonged grief disorder</td>
<td>New category</td>
<td>A disturbance in which, following the death of a person close to the bereaved, there is persistent and pervasive yearning or longing for the deceased, or a persistent preoccupation with the deceased that extends for an abnormally long period beyond expected social and cultural norms (e.g., at least 6 months, or longer depending on cultural and contextual factors) and that is sufficiently severe to cause significant impairment in the person's functioning. The response can also be characterized by difficulties accepting the death, feeling one has lost a part of one's self, anger about the loss, guilt, or difficulty in engaging with social or other activities.</td>
</tr>
<tr>
<td>Adjustment disorder</td>
<td>F43.2</td>
<td>A maladaptive reaction to a stressful event, to ongoing psychosocial difficulties or to a combination of stressful life situations that usually emerges within a month of the stressor and tends to resolve in 6 months unless the stressor persists for a longer duration. The reaction to the stressor is characterized by symptoms of preoccupation like excessive worry, recurrent and distressing thoughts about the stressor or constant rumination about its implications. There is failure to adapt, i.e., the symptoms interfere with everyday functioning, like difficulties concentrating or sleep disturbance resulting in performance problems. The symptoms can also be associated with loss of interest in work, social life, caring for others, leisure activities resulting in impairment in social or occupational functioning (restriction of social network, conflicts in family, absenteeism and so on). If the definitional requirements are met for another disorder, that disorder should be diagnosed instead of adjustment disorder.</td>
</tr>
<tr>
<td>Reactive attachment disorder</td>
<td>F94.1</td>
<td>See Rutter and Uher (14)</td>
</tr>
<tr>
<td>Disinhibited social engagement disorder</td>
<td>F94.2</td>
<td>See Rutter and Uher (14)</td>
</tr>
<tr>
<td>Acute stress reaction</td>
<td>F43.0</td>
<td>Refers to the development of transient emotional, cognitive and behavioural symptoms in response to an exceptional stressor such as an overwhelming traumatic experience involving serious harm or threat to the security or physical integrity of the individual or of a loved person(s) (e.g., natural catastrophe, accident, battle, criminal assault, rape), or an unusually sudden and threatening change in the social position and/or network of the individual, such as the loss of one's family in a natural disaster. The symptoms are considered to be within the normal range of reactions given the extreme severity of the stressor. The symptoms usually appear within hours to days of the impact of the stressful stimulus or event, and typically begin to subside within a week after the event or following removal from the threatening situation.</td>
</tr>
</tbody>
</table>
of a close other, to single traumatic events, and repeated or prolonged traumatic stress of exceptional severity. The resulting pathology could be conceptualized as ranging from mild to more severe disorders. The diagnoses in this group require a specific recognizable clinical picture that is distinct from other mental disorders, as well as a demonstrable and continuing functional impairment.

ICD-11 PTSD, complex PTSD, prolonged grief disorder, and adjustment disorder can occur in all age groups, including children and adolescents. In addition, the group includes specific attachment disorders in children that are discussed elsewhere (14).

SPECIFIC DISORDERS

PTSD

PTSD is a well-recognized clinical entity that has distinct psychological correlates. It has been criticized for the broad composition of the symptom clusters, the high levels of comorbidity, and, for the DSM-IV criteria set, the fact that over 10,000 different combinations of the 17 symptoms could result in the diagnosis. Several authors have called for the diagnosis to be refocused on a smaller number of core symptoms (3,15).

Studies have suggested that the threshold for an ICD-10 diagnosis of PTSD is relatively low (e.g., 16,17). A diagnostic requirement for functional impairment has been proposed to help differentiate PTSD from normal reactions to extreme stressors. In addition, evidence-based critiques suggested the removal of the statement that traumatic events are “likely to cause pervasive distress in almost everyone”; the clarification that intrusive memories are not synonymous with re-experiencing in the present; an increased emphasis on the importance of deliberate avoidance; and a more explicit recognition of delayed-onset PTSD (5,18). All these suggestions have been considered in formulating the new proposal.

The proposal also attempts to improve the ease of diagnosis and to reduce comorbidity, by identifying the core elements of PTSD rather than the “typical features” of the disorder. The first core element consists of re-experiencing the traumatic event(s) in the present, as evidenced by vivid intrusive memories accompanied by fear or horror, flashbacks, or nightmares (see Table 1). Flashbacks are defined as vivid intrusive memories in which re-experiencing in the present can vary from a transient sensation to a complete disconnection from the current environment. The second core element is avoidance of these intrusions, as evidenced by marked internal avoidance of thoughts and memories, or external avoidance of activities or situations reminiscent of the traumatic event(s). The third core element is an excessive sense of current threat, as evidenced either by hypervigilance or by exaggerated startle, two arousal symptoms that tend to cluster together (19).

The effect of these changes is to greatly simplify the diagnosis and direct clinicians’ attention to the co-occurrence of three core elements all of which should be present, each assessed by two symptoms. PTSD may not be diagnosed if the person also meets criteria for complex PTSD, since the latter is a more encompassing diagnosis that includes all the features of PTSD.

Complex PTSD

Complex PTSD is a new disorder category describing a symptom profile that can arise after exposure to a single traumatic stressor, but that typically follows severe stressors of a prolonged nature or multiple or repeated adverse events from which separation is not possible (e.g., exposure to genocide campaigns, childhood sexual abuse, child soldiering, severe domestic violence, torture, or slavery).

The proposed diagnosis is comprised of the three core features of PTSD in addition to disturbances in the domains of affect, self-concept and relational functioning. These additional domains reflect the presence of stressor-induced disturbances that are enduring, persistent and pervasive in nature and that are not necessarily bound to trauma-related stimuli when appearing. The construct replaces the overlapping ICD-10 category of “enduring personality change after catastrophic experience”, which has failed to attract scientific interest and did not include disorders arising from prolonged stress in early childhood. The specific symptoms proposed are based on recent research (20,21) and expert opinion (22).

Problems in the affect domain include a range of symptoms resulting from difficulties in emotion regulation. They can become manifest in heightened emotional reactivity or in a lack of emotions and lapses into dissociative states (23). Behavioural disturbances can include violent outbursts and recklessness or self-destructive behaviour (24).

Problems in the self-concept domain refer to persistent negative beliefs about oneself as diminished, defeated or worthless. They can be accompanied by deep and pervasive feelings of shame, guilt, or failure related to, for example, not having overcome adverse circumstances, or not having been able to prevent the suffering of others.

Disturbances in relational functioning may present in a variety of ways, but are exemplified primarily by difficulties in feeling close to others. The person may consistently avoid, deride, or have little interest in relationships and social engagement more generally. Alternatively, the person may occasionally experience close or intense relationships but have difficulties sustaining them.

Complex PTSD can be distinguished from the construct of borderline personality disorder (BPD) by the nature of the constellation of symptoms, by differences in the risk for self-harm, and by the type of treatment required for a good outcome. BPD does not require the presence of a stressor event or the core symptoms of PTSD to be
diagnosed. These are both essential for a diagnosis of complex PTSD. BPD is strongly characterized by fear of abandonment, shifting identity, and frequent suicidal behaviours. In complex PTSD, the fear of abandonment is not a requirement of the disorder, and self-identity is consistently negative rather than shifting (22).

**Prolonged grief disorder**

Prolonged grief disorder is a new diagnosis being proposed for ICD-11, which describes abnormally persistent and disabling responses to bereavement. It is defined as a severe and enduring symptom pattern of yearning or longing for the deceased or a persistent preoccupation with the deceased. This reaction may be associated with difficulties accepting the death, feelings of loss of a part of oneself, anger about the loss, guilt or blame regarding the death, or difficulties in engaging with new social or other activities due to the loss.

Importantly, prolonged grief disorder can only be diagnosed if symptoms are still apparent after a period of grieving that is normative within the person’s cultural context (e.g., 6 months or more after the death), the persistent grief response goes far beyond expected social or cultural norms, and the symptoms markedly interfere with one’s capacity to function (see Table 1). If normative grieving in the person’s culture goes beyond 6 months, the duration requirement should be extended accordingly.

The introduction of prolonged grief disorder is a response to the increasing evidence of a distinct and debilitating condition that is not adequately described by current ICD diagnoses. Although most people report at least partial remission from the acute pain of grief by around 6 months following bereavement, those who continue experiencing severe grief reactions beyond this time frame are likely to have a significant impairment in their general functioning (25). Many studies from around the world, including both Western and Eastern cultures, have identified a small but significant portion of bereaved people who meet this definition (26).

There are multiple sources of evidence supporting the introduction of prolonged grief disorder. This entity has been validated across a wide range of cultures, including non-Western settings, as well as across the lifespan (26). Factor analyses repeatedly demonstrated that the central component of prolonged grief disorder (yearning for the deceased) is distinct from non-specific symptoms of anxiety and depression. People with prolonged grief disorder experience serious psychosocial and health problems, including other mental health difficulties such as suicidality and substance abuse, harmful health behaviours, or physical disorders such as high blood pressure and elevated rates of cardiovascular disorder (27). Finally, there are distinctive neural dysfunctions and cognitive patterns associated with prolonged grief disorder (26,28).

Concerning treatment, prolonged grief disorder does not respond to antidepressant medication though bereavement-related depressive syndromes do (29). Importantly, psychological therapy that strategically targets the symptoms of prolonged grief disorder has been shown to alleviate their occurrence more effectively than treatments that target depression (30).

The introduction of prolonged grief disorder as a diagnosis has caused debate because of concerns that it could pathologize normal grief responses (31). The Working Group considered this issue thoroughly and emphasized several points. First, the diagnostic requirements have been drawn very carefully to respect the variation of “normal” processes and to pay attention to cultural and contextual factors. Second, the diagnosis only applies to that minority (<10%) of bereaved people who experience persistent impairment. Third, it has been recognized that there is marked cultural variation in the manifestation of grief that has to be taken into account for diagnostic decisions. Fourth, many people will experience fluctuating distressing grief responses beyond 6 months from the death of close persons, but these are not necessarily candidates for a prolonged grief disorder diagnosis due to a lack of persistence and debilitation.

Epidemiological findings show that prolonged grief disorder represents a public health issue. Accurately identifying people with this disorder could reduce the likelihood of inappropriate treatment. Provision of evidence-based interventions directed to prolonged grief disorder symptoms can ease the burden and reinforce the rationale for introducing this diagnosis.

**Adjustment disorder**

Adjustment disorder has been a poorly defined area of psychopathology, owing to the variety of presenting symptoms that may be involved and the relative absence of distinctive features. It has usually been regarded as consisting of a group of sub-threshold disorders related to a provoking event or situation. Often the identification of such a precipitating event is made post hoc. Adjustment disorder has been mostly used as a residual category for patients who do not meet the diagnostic criteria for depressive or anxiety disorders, or as a provisional diagnosis when it is not clear whether or not a post-traumatic or mood disorder will emerge (e.g., 7,8).

The ICD-11 proposal focuses on the notion that an adjustment disorder is a maladaptive reaction to an identifiable psychosocial stressor or life change. It is characterized by preoccupation with the stressor and failure to adapt, as shown by a range of symptoms interfering with everyday functioning, such as difficulties concentrating or sleep disturbance. Symptoms of anxiety or depression, or impulse control/conduct problems are commonly present. The symptoms emerge within a month of the onset of the
stresor(s) and tend to resolve in around 6 months unless the stressor persists for a longer period. The disorder causes significant distress and impairment of social or occupational functioning (32).

Adjustment disorder is viewed as continuous with normal adaptation processes, but distinguished from “normal” by the intensity of distress and resulting impairment. Unlike PTSD, the severity of the stressor is not considered for diagnosis. However, adjustment disorder can result from extreme traumatic distress when symptoms do not meet the full criteria for PTSD.

There is no evidence for the validity or clinical utility of subtypes of adjustment disorder described in the ICD-10, so these have been omitted in the ICD-11. Such subtypes may be misleading through putting the emphasis on the dominant idiom of distress and obscuring the underlying commonality of the disorder. Subtypes are not relevant for treatment selection and are not associated with a specific prognosis (7). The characteristic feature is often a mixture of emotional and behavioural symptoms (8). Although internalizing or externalizing symptoms may predominate, they often coexist.

**ACUTE STRESS REACTION AS A NON-DISORDERED RESPONSE**

Acute stress reaction as currently defined in ICD-10 is ambiguous. Its name (“reaction”) and its diagnostic description suggest its transience, but its position in the ICD-10 chapter on mental and behavioural disorders labels it as pathology. The confusion is compounded by the parallel existence of the “acute stress disorder” diagnosis in the DSM-IV and DSM-5.

Acute stress disorder is similar to PTSD in many respects, and sometimes was considered as a precursor to PTSD, but it differs from PTSD in the greater prominence of dissociative symptoms. In the DSM-5 it can only be diagnosed in the first month post-trauma, while PTSD can only be diagnosed after one month. A review of the available literature on acute stress disorder has cast doubt on the notion that it is a good predictor of later PTSD (33). An important reason for inclusion of acute stress disorder in the DSM-5 may be the particular sensitivity to reimbursement concerns in the US, in the context of which the claim is made that treatment would not be provided for non-disorders, even following a severely traumatic experience when basic psychological interventions may be strongly indicated. However, the WHO’s position has been that health care financing and reimbursement policy are separate issues from disease definition, and that it is not helpful to the project of reducing global disease burden to conflate them (34). Therefore, reimbursement considerations were not considered a valid reason to define a normal reaction as a disorder.

Moreover, within the ICD-10 and the proposed ICD-11 there is no strict minimal time limit for PTSD; this diagnosis could therefore be used within the first month post-trauma, provided that the symptoms are sufficiently persistent and cause impairment. Therefore, within the ICD-11 there is no need for an acute stress diagnosis along the lines of acute stress disorder in the DSM-5, particularly bearing in mind clinicians’ requests for a substantial reduction in the overall number of diagnoses in diagnostic systems (1, 2).

At the same time, clinical and public health experience has shown that there is a need for a non-pathological category to define a wide variety of transient emotional, cognitive, behavioural and somatic reactions in the immediate aftermath of an acute stressful event such as a violent attack or a natural disaster. The Working Group has therefore recommended that acute stress reaction be placed in the chapter for conditions that are not considered to be diseases or disorders but which may be reasons for health encounters (the Z chapter in ICD-10). Placement of acute stress reaction in this chapter of the ICD-11 would allow health care workers to be trained to recognize and assist those with such reactions, without the other implications of conceptualizing them as mental disorders. Such reactions often benefit from practical psychosocial interventions rather than psychiatric ones. This includes the approach currently labeled as psychological first aid (35). The ICD-11 conceptualization of acute stress reaction addresses the needs highlighted by commentators who have argued for a less pathologizing means than the DSM-5 acute stress disorder diagnosis to describe and identify acutely distressed people who may need assistance (36).

The proposed ICD-11 description of acute stress reaction does not meet the definitional requirements for a mental disorder, but refers to the development of transient emotional, cognitive, somatic and behavioural symptoms in response to an exceptional stressor involving exposure to an event or situation of an extremely threatening or horrific nature. For example, this might include actual or threatened serious injury or harm to self or a loved one (e.g., natural catastrophe, accident, battle, criminal assault, rape), or an unusually sudden and threatening change in the social position or network of the individual, such as displacement to a different country or refugee camp setting.

Symptoms of acute stress reaction may include being in a daze, a sense of confusion, sadness, anxiety, anger, despair, overactivity, stupor and social withdrawal. Autonomic signs of anxiety (e.g., tachycardia, sweating, flushing) are commonly present and may be the presenting feature. They appear within hours to days of the impact of the stressful stimulus or event and typically begin to subside within about a week after exposure, or following removal from the threatening situation in cases where this is possible. Where the stressor continues or cannot by its nature be reversed, the symptoms may persist, but they are usually greatly attenuated within approximately one month.

This time frame helps to distinguish acute stress reactions from more pathological reactions associated with
more severe disorder. If symptoms do not begin to diminish within about a week after their onset, consideration should be given to a diagnosis of adjustment disorder or PTSD, depending on the presentation. Although acute stress reaction in help-seeking individuals can be accompanied by substantial interference with personal functioning in addition to subjective distress, impairment is not a required feature.

**DEVELOPMENTAL PRESENTATIONS**

PTSD may occur in individuals of all ages, but responses to traumatic events can differ by developmental stage. The ICD-11 Working Group has included descriptions of age-related symptom presentations for children and adolescents. In children, responses may include disorganization, agitation, temper tantrums, clinging, excessive crying, social withdrawal, separation anxiety, distrust; trauma-specific re-enactments such as in repetitive play or drawings; frightening dreams without clear content or night terrors; sense of foreshortened future, and impulsivity. Self-injurious or risky behaviours are more frequent among adolescents (37,38). Some of these symptoms – such as re-enactments, or repetitive play, or generalized distrust – are also common in prolonged grief disorder among children or adolescents. Complex PTSD symptoms such as emotion dysregulation and interpersonal difficulties may be observed in children in form of regressive and/or aggressive behaviours towards self or others. In adolescence, substance use, risky behaviours (unsafe sex, unsafe driving) and aggressive behaviours may be particularly evident as expressions of emotion dysregulation and interpersonal difficulties (39).

**SIMILARITIES AND DIFFERENCES BETWEEN ICD-11 PROPOSAL AND DSM-5**

In the DSM-IV, acute stress disorder and PTSD were categorized as anxiety disorders. Both the ICD-11 proposal and DSM-5 have created a separate grouping of disorders related to stress. The ICD Working Group has recommended avoiding the widely used but confusing term “stress-related disorder”, given that numerous disorders may be stress-related (e.g., depression, alcohol and substance use disorders), but may also occur in the absence of identifiable stressful or traumatic life events. In an attempt to convey this distinction, the term “disorders specifically associated with stress” for the grouping of conditions described in this article has been proposed for the ICD-11.

Both the ICD-11 proposal and DSM-5 include PTSD and adjustment disorder as part of this grouping. Prolonged grief disorder is represented in the DSM-5 as “prolonged complex bereavement disorder” in the section on disorders requiring further study. Acute stress disorder is retained in this grouping in the DSM-5, but, recognizing the heterogeneity of stress responses, it no longer requires specific symptom clusters and is not intended to predict PTSD.

The new DSM-5 definition of PTSD may be regarded as positioned between the PTSD and complex PTSD diagnoses proposed for ICD-11. The DSM-5 description identifies a new symptom cluster and adds three additional symptoms to the diagnostic criteria, reflecting research evidence of enduring changes in affect and behaviour among PTSD samples. In contrast, the ICD-11 proposal responds to criticisms of complexity and high comorbidity by attempting to define the core features of the disorder and make PTSD more easily distinguishable from other mental disorders. The intention is to enhance clinical utility and prevent unwarranted PTSD diagnoses by focusing more narrowly on a small set of easily identifiable symptoms. At the same time, the marked stress-induced changes that impact on personality, affect regulation, and interpersonal functioning are represented in the separate diagnosis of complex PTSD. It is hoped that using the proposed ICD-11 PTSD and complex PTSD diagnoses in parallel will offer significant gains to clinicians and accelerate the scientific understanding of these disorders.

**CONCLUSIONS**

The ICD-11 Working Group was given the task of revising the description of disorders specifically associated with stress in the light of the most recent scientific evidence, responding to criticisms levelled at the characterization of these disorders in the ICD-10 and DSM-IV, and maximizing the clinical utility and applicability of the diagnoses. As previously noted, many of these criticisms concerned the symptom structure and the susceptibility of PTSD to overdiagnosis.

In spite of questions raised about the cross-cultural validity of the diagnosis (3,4), recent evidence is consistent with the conclusion of the Working Group that PTSD does have wide cross-cultural validity (40), albeit with some variations in presentation. The Working Group concluded that a universal description of this condition is clinically useful and important for public health. While acknowledging the existence of cultural variations, there was a high degree of consensus on the core features, clinical utility, and applicability of the diagnoses proposed within the ICD-11 grouping of disorders specifically associated with stress.

The proposals of the Working Group include several changes with respect to the ICD-10 that have potential consequences for public health and health care provision. Mental health workers caring for survivors of natural or human-made disasters or conflicts would be encouraged to consider a more normative, non-disorder designation of acute stress reaction instead of immediately diagnosing
initial stress reactions as mental disorders. This change further clarifies the definition of acute stress reaction in the ICD-10 as a transient but essentially non-pathological response, and differentiates it further from the acute stress disorder concept utilized in the DSM-IV and DSM-5.

The proposed changes to the PTSD definition imply a considerable simplification of the diagnosis, especially compared to the many thousands of possible combinations of symptoms qualifying for the diagnosis according to the DSM-IV and DSM-5. It is hoped that this will lead to greater clarity about the syndrome’s characteristics, and improved recognition of the disorder in both specialist and primary health care settings. Under the ICD-11 proposals, following a stressful event, clinicians will be guided to pay attention to three clearly distinct types of specific symptoms that, if persistent and causing impairment, could lead to a diagnosis of PTSD. At the same time, the requirement for impaired functioning is intended to set a higher threshold compared to the ICD-10, aiming to focus more clearly on individuals in need of care.

The inclusion of complex PTSD is partly a response to demands from clinicians for a greater recognition of the effects of enduring severity of some post-traumatic reactions. This diagnosis would be given when the core PTSD features are accompanied by persistent and pervasive disturbances in emotion regulation, self-organization, and relationship to the environment. This diagnosis may be particularly valuable in groups exposed to exceptionally high levels of trauma, such as torture survivors or victims of repeated sexual violence and abuse.

The greater specificity now afforded to PTSD and complex PTSD is accompanied in the ICD-11 proposals by additional attention given to alternative diagnoses for those exposed to stress. The revised description of adjustment disorder places now greater emphasis on the presence of impairment, while removing subtypes of the disorder that had not proven practically useful and thus undermined clinical utility. The introduction of prolonged grief disorder is also in response to a perceived clinical need and the recognition that individuals may require a form of treatment directed at this specific pattern of symptoms. As with the other proposed diagnoses, the intention is to strike a balance between retaining continuity with ways of categorizing distress that are already familiar to clinicians, and taking the opportunity to revise, clarify, and differentiate them in the service of clinical utility.

The next steps in the development of ICD-11 proposals for disorders specifically associated with stress will be public review and comment, and field testing.

Review and comment will be by means of the ICD-11 beta platform (http://apps.who.int/classifications/icd11/browse/en). Field studies will examine clinician acceptability, clinical utility (e.g., ease of use and goodness of fit), reliability and, to the extent possible, validity of the draft definitions and diagnostic guidelines, particularly in comparison with the ICD-10.

The WHO will use two basic approaches for field-testing of proposals for ICD-11: an Internet-based approach and a clinical settings (clinic-based) approach. Internet-based field testing will be implemented primarily through the Global Clinical Practice Network, a global network currently consisting of more than 7,000 individual mental health and primary care practitioners (www.globalclinicalpractice.net). A field study on disorders specifically associated with stress is already planned. Clinic-based studies will be implemented through the network of collaborating international field study centers appointed by the WHO.

The Working Group looks forward to collaboration with colleagues throughout the world in the testing and further refinement of its proposals of diagnostic descriptions for disorders specifically associated with stress in the ICD-11.

Disclaimer

A. Maercker, C.R. Brewin, R.A. Bryant, M. Cloitre, A. Humayan, L.M. Jones, A. Kagee, C. Rousseau, D.J. Somasundaram, S.C. Wessely and Y. Suzuki are members of the WHO ICD-11 Working Group on the Classification of Disorders Specifically Associated with Stress, reporting to the WHO International Advisory Group for the Revision of ICD-10 Mental and Behavioural Disorders. G.M. Reed and M. van Ommeren are members of the WHO Secretariat, Department of Mental Health and Substance Abuse. A.E. Llosa, R. Souza, I. Weissbecker and M.B. First are special invitees to Working Group meetings. The views expressed in this article are those of the authors and, except as specifically noted, do not represent the official policies or positions of the International Advisory Group or the WHO.

References

10. Reed GM. Improving the clinical utility of WHO’s international classification of mental disorders. Prof Psychol Res Pract 2010;41:457-64.

DOI 10.1002/wps.20057