Debate/Perspective/Viewpoint

Using International Classification of Diseases 11 "Mental Disorders Specifically Associated with Stress" in Developing Countries

Abstract

This article summarizes the revised criteria for disorders specifically associated with stress in ICD-11 highlighting major differences from previous classification systems. It also examines the main challenges for implementing these diagnostic guidelines in LMIC countries particularly in South Asia. These challenges are described in the context of socio-cultural, healthcare and humanitarian settings. It also discusses the implications of the revised classification on planning, building capacity, service development and setting up a research agenda for improving mental health care in developing countries.

Keywords: *Developing countries, mental health and psychosocial support, stress related disorders*

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Introduction

The newly revised International Classification of Diseases (ICD)-11 is scheduled for release in 2018. The revisions were concurrent with recent developments in the global mental health movement focused on reducing the treatment gap for mental disorders, which can be as high as 75% in low- and middle-income countries (LMICs).[1] In view of these developments, the main objective behind the revision was to enhance clinical utility with a public health perspective.[2] Essentially, this means that health professionals in all settings could use the new diagnostic system, much beyond specialist services. In addition, it should help collect vital health information, which can direct effective health programs and policy.

The revision of disorders specifically associated with stress in ICD-11 is particularly important for South Asia where public mental health services are underdeveloped; yet large populations are subjected to considerable stress and trauma caused by conflicts, natural disasters, and unaddressed mental health needs. The major challenge to the implementation of ICD-10 was the training of specialists in the use of the classification system.[3] Use of ICD-10 showed that at least two categories, stress-related disorders–posttraumatic stress disorder (PTSD) and adjustment disorder, were most widely used around the world, but that their criteria were too broad, which diluted their clinical value. ICD-11 has defined distinct psychopathology for stress disorders, thereby offering more comprehensive criteria for training and clinical use. In line with the public health importance of disorders associated with stress and presence of feasible and effective management options for them, the Mental Health Gap Action Programme (mhGAP) by the World Health Organization,[4] which aims to scale up mental health care, also provides detailed guidelines for training nonspecialist health-care staff in reducing the burden of these disorders. It points out significant implications for policy and service development in relation to these disorders, both in general health care and in humanitarian settings, and states that policymakers and health-care leaders in LMIC need to be actively engaged right from the outset.

Revision of Disorders Specifically Associated with Stress: An Introduction

The following is a brief summary of revised criteria for disorders specifically associated with stress in ICD-11, highlighting major differences from ICD-10 and Diagnostic and Statistical Manual-5 (DSM)-5.[5]

1. Disorders specifically associated with stress have been redefined as a separate category in ICD-11 (and not part of

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anxiety disorders as in ICD-10 and DSM-IV), requiring external events that cause distinct psychiatric symptoms with significant functional impairment. The stressor may range from negative life events within the normal range of experience (in the case of adjustment disorder and prolonged grief disorder) to traumatic stressors of exceptional severity (in the case of PTSD and complex PTSD).[5] While recognizing that the most common mental disorders are potentiated or exacerbated by stress and childhood adversity, disorders in this category arise in specific association with stressful event(s) and are identifiable based on specific psychopathology distinguishable from the symptoms of other mental disorders. Both the ICD-11 proposals and DSM-5 have created a separate grouping of disorders associated with stress. The ICD-11 avoids the DSM-5 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[6]

2. The status of acute stress reaction in ICD-10 needed a revision because (1) It referred to a transient "reaction" but was positioned as a (pathological) disorder; (2) It needed to be differentiated from a parallel (but conceptually distinct) category of "acute stress disorder" that exists in the DSM system; and (3) There was a need to recognize, less pathologizing but commonly occurring, range of transient emotional, cognitive, behavioral, and somatic reactions in the immediate aftermath of an acute stressful event. As a result, acute stress reaction is now recognized as a normal (and not a pathological) entity, which tends to subside within days and has been moved to the chapter of ICD-11, which contains categories that need clinical recognition but are not defined as disorders or diseases. The public health implications are that health-care workers could still be trained to recognize these reactions and offer practical psychosocial interventions without these being considered mental "disorders"
3. While ICD-11 reinforces the significance of adjustment disorder as part of the continuum of stress disorders, it also identifies that despite wide prevalence, the existing diagnosis has largely become a provisional or residual category. This warranted a more specific definition, which is "a maladaptive reaction to an identifiable stressor in terms of positive symptoms such as intrusive preoccupation with the stressor and inability to adapt." Since there was no evidence for the validity or clinical utility of subtypes of adjustment disorder in ICD-10, these have been removed in ICD-11
4. Compared to previous versions of ICD and DSM, the ICD-11 offers a stricter criterion for PTSD to improve utility. The number of symptoms has been reduced to conform to a 3-factor structure (compared to 4 in DSM-5), and the removal of symptoms found in other conditions such as anxiety and depression has enhanced specificity. Unlike its definition in DSM-5, trauma is defined as an extremely threatening or horrific event or a series of events. Three core symptom clusters include (1) re-experiencing the traumatic event(s) in the present in the form of vivid intrusive memories, flashbacks, or nightmares, with each episode of re-experiencing accompanied by fear or horror; (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. The re-experiencing criterion requires that the traumatic event is not just remembered involuntarily but is experienced as occurring again in the present, as vivid, intrusive images or memories, flashbacks, or repetitive dreams or nightmares. As in DSM-5, flashbacks can occur with complete loss of awareness to vivid intrusive images and memories experienced as happening in the present. In addition, there may be partial or complete dissociation. General intrusive memories (e.g., DSM-5 symptom B1) or thoughts, which may be found in other psychiatric disorders, have been excluded.[7,8] Many other symptoms that overlap with other disorders have also been removed. For example, hyperarousal symptoms of sleep disturbance, concentration problems, startle reactions, and irritability may be present in generalized anxiety disorder or depressive disorder. The latter may also present with guilt and diminished interest in activities, detachment, and emotional numbing. Memory difficulties are also common in all of these conditions. It is, therefore, unsurprising that rates of comorbidity for PTSD (according to earlier ICD and DSM versions) were very high, particularly with depression.[9] The simplified, reduced, and more specific criteria for PTSD aim to enhance clinical as well as public health utility
5. The ICD-11 diagnosis Complex PTSD is a development from the ICD-10 diagnosis F62.0 "Enduring Personality Change after Catastrophic Experience" and Appendix of DSM-IV, "Disorders of Extreme Stress Not Otherwise Specified". There are many similarities to malignant PTSD described by Rosenheck[10] in Vietnam War veterans and Somasundaram[11] in Sri Lankan child militants. Complex PTSD arises after exposure to a stressor typically of an extreme or prolonged nature and from which escape is difficult or impossible (e.g., childhood abuse, domestic violence, torture, issues related to child soldiers, war, and imprisonment). The disorder is characterized by the core symptoms of PTSD as well as disturbance in self-organization, namely 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. The new definition would help recognize persistent dysfunctional personality impairments in those exposed to long-term childhood abuse or experiences of prolonged combat such as child soldiers and be able to offer structured management possibilities and psychological,[12] social, and cultural support and rehabilitation. Earlier, these disturbances in self-organization necessitated the inclusion of comorbidities such as borderline personality disorder, dysthymia or major depressive disorder, and social phobia, making these complex presentations more difficult to identify and treat[13]

6. In view of evidence for validity (across cultures), specificity (a distinct symptom profile), and treatability, ICD-11 also introduces prolonged grief as a disorder. There is no equivalent of this category in the DSM-5, although an earlier proposal did include it as a subcategory of adjustment disorder (just as in the ICD-10). However, the defining characteristics and duration requirements of prolonged grief disorder are not compatible with the timeframe of adjustment disorder. Presently, "prolonged complex bereavement disorder" is allocated to disorders requiring further study in the DSM. Prolonged grief disorder describes intensely painful, disabling, and persistent responses to bereavement with specific symptoms such as pervasive yearning or preoccupation with the deceased and associated emotional pain lasting for durations much beyond a normative grief reaction (e.g., 6 months or more after the death).[6] Maercker *et al*. quoted evidence to support that a significant number of people (but <10% of grieved population), both in the East and the West, struggle to recover from grief and suffer marked functional impairment. Prolonged grief may also be associated with serious health problems such as suicidality and substance abuse, harmful health behaviors, and physical disorders (e.g., hypertension and cardiovascular disorder). There are evidence-based psychological treatments for grief, and anti-depressants should not be prescribed routinely, unless there are depressive symptoms. A particular challenge would be to utilize this definition clinically with an aim to offer treatment in the community while respecting the cultural variability in expressions of grief and mourning in this region.

Challenges and Barriers for Implementing the Classification on Disorders Specifically Associated with Stress in South Asia

The main challenges for implementing the diagnostic guidelines for stress disorders in South Asia as in much of other LMIC countries is the need to consider the broader context of (1) sociocultural setting, (2) health-care system, (3) clinical practices, and (4) humanitarian emergencies.

Sociocultural challenges

South Asia is characterized by diverse sociocultural contexts, dynamics, and other determinants of stress disorders. Sociocultural (and personality) factors can mold, modify, and determine how stress is perceived, framed, interpreted, experienced (even whether it is experienced as stress), and manifested (even to the point of disorder) and its course, recovery, and prognosis. Some forms of extreme stressors such as natural disasters and war trauma are known to cause disorders in a high percentage of those exposed. In addition, torture and rape may lead to high rates of PTSD in survivors.[14,15]

Stress disorders might be manifested through socioculturally mediated idioms of distress, somatization, or local explanatory beliefs. For example, in the Asian context, manifestations could include *perumuchu* (deep, sighing breathing as an expression of distress in Tamil culture); weakness association with *Dhat* syndrome; bodily pain among tortured Bhutanese refugees; possession states; and Khyal attacks, *kit chraen* (thinking too much), and *sramay* (flashbacks of past traumas in the form of dreams and imagery that spill over into waking life) in Cambodia. Similarly, sociocultural factors and practices influence outcomes and may be used to prevent, mitigate, and treat stress. Cultural beliefs about possessions and predominant practices of consulting faith healers and oracles are quite common. Traditional methods of healing or help seeking can provide meaning, mobilize social support, instill hope, and prescribe healing rituals that create structure and frameworks to navigate stressful periods. These disorders cause considerable personal (cognitive, emotional, and behavioral), familial, social, and occupational impairments manifesting through multifarious sociocultural narratives of distress but with an overriding stigma attached to mental disorders in these countries.

Collectivistic communities characterize South-Asian region and other parts of the developing world. The DSM and earlier ICD versions were exclusively individualistic, biomedically oriented diagnostic systems that failed to account for the wider ramifications of stress disorders at the family and community levels.[16-18] There is a need to "understand the complex interaction, interdependence, and issues related to mental health and illness"[19] in a holistic way that situates the individual within the family, community, socio-economical, political, and ecological systems. This approach has significant implications for treatment, management, and prognosis of stress disorders. For the first time, the ICD-11 introduces the collectivistic dimension by describing the need to consider phenomena such as loss of communality, tearing of the social fabric, cultural bereavement, and collective trauma. From a public mental health perspective in LMICs after large-scale disasters and war, families and whole communities are likely to be affected. Therefore, indigenous mental health

interventions need to be designed to help individuals and rebuild broken communities by promoting positive mental health and preventing further problems.[17,20] These techniques focus on cultural and spiritual restorative processes, establish trust and collective efficacy, and mobilize family and social networks and support systems.

Challenges related to health-care setting

Countries in South-Asian region struggle for mental health resources including basic mental health infrastructure, budget, and trained personnel.[21] In addition, there are high levels of poverty and social deprivation, complex demographics (including internally displaced and refugee populations), recurring natural disasters and armed conflicts, immense stigma and discrimination against people with mental illness, limited community awareness, and diverse explanatory models, which may influence the acceptability and use of whatever services exist.[22]

The health-care systems are often marred by a lack of priority for mental health care; governance issues such as inflexible bureaucracy and lack of accountability; and poor health management information systems (HMIS).[23] Some LMICs do have a routine HMIS which includes some indicators of mental health,[24] but even the high-quality indicators, for example, those described by Jordans *et al*.,[25] tend to focus on priority disorders only.

Mental health care is predominantly based on a biomedical model.[23] Most mental health interventions focus on prescribing psychotropic medicines.[26,27] Not only is there an inconceivably low ratio of mental health professionals to people with mental disorders, but even the few mental health professionals present have limited skill in psychotherapeutic intervention.[28]

Conceptual challenges

There have been concerns that disorders specifically associated with stress, PTSD in particular, are culture-bound syndromes found only in Western cultures or that they are merely Western constructs.[29] However, robust research has established the universality of the disorders and the cross-cultural prevalence of the clusters (i.e., re-experiencing, avoidance, and hyperarousal) in PTSD. Cross-cultural variations have been reported in occurrences of the individual items, for example, lower reporting of numbing and guilt (which is believed to be a more Judeo–Christian construct associated with the concept of sin) and higher rates of hyperarousal, dissociative manifestations, and somatization compared to Western populations.[30,31] Perhaps, one of the conceptual dilemmas for clinicians in developing countries is that while dissociative disorder is a widely used clinical diagnosis related to stress in their settings, it is not included as a separate stress-associated disorder in ICD-11, but it is instead a part of the symptomatology of PTSD. However, DSM-5 does recognize dissociation as a subtype of PTSD. In the pathognomonic phenomena of reliving under ICD-11, there may be complete dissociation from the current reality to the past traumatic situation. It is well established that dissociation is a regular feature of posttraumatic conditions independent of the main psychiatric diagnosis.[32] Adjustment disorder and dissociative disorders were the most common stress disorders found in populations exposed to natural and conflict-related disasters in Pakistan.[28,33] A clinical concern remains that, in the absence of focus on this commonly encountered presentation as a stress category, the widely practiced unscientific interventions might not be challenged (e.g., ammonia techniques in primary care, use of antipsychotics, cortical stimulation, and even electroconvulsive therapy in specialist care). While Western medical models have little to offer as specific treatment for dissociation, people seek and use a variety of traditional cultural practices in South Asia that appear to provide some relief, reducing the treatment gap. In some instances, dissociation, possession, or trance states in the healer become part of the healing ritual.

Challenges related to humanitarian settings

Jordans and Tol[34] highlighted the need to prioritize mental health assessments and develop health systems in the context of humanitarian settings. Despite ongoing humanitarian challenges, mental health is often a low priority for governments and donors and, as a result, most mental health and psychosocial (MHPSS) interventions are not even part of the national health systems.[35] MHPSS interventions would include a wide variety of psychological and social methods.[17,36] Sometimes, the commonly practiced interventions may not be evidence based. For example, despite strong caution,[37] harmful use of benzodiazepines is not uncommon after exposure to a natural disaster in developing countries.[34]

The wide cultural variations in manifestation could account for differences in prevalence rates in the South-Asian context[38] such as after the Asian Tsunami in India,[39] most states reporting expected high rates, whereas low prevalence was found in Tamil Nadu.[40] The training and past experiences of mental health workers may influence recognition and diagnosis. Political, economical, and ideological factors may also play a part in acknowledging the adversity caused by trauma.[17,41] For example, in postwar North-East Sri Lanka, MHPSS and recovery programs were not permitted for war-affected populations for 6 years in the heavily militarized postwar context that denied any serious stress disorders needing help.[42,43]

Future implications

The main objective of the revised classification is to reduce burden of disorders specifically associated with

stress. For this, effective mental health interventions must be accessible in primary care and humanitarian settings. Considering the challenges faced by the South-Asian region, present health-care systems do not offer an ideal template for implementing the best practices for stress disorders. Perhaps, the greatest challenge to implement ICD-11 is to broaden services from the traditional biomedical model of practice to incorporate psychotherapeutic interventions into mainstream health care. At the same time, it would be essential to consider various care delivery frameworks that could strengthen the capacity of specialists to train and supervise other health professionals to deliver psychotherapeutic interventions.[35] Formal teaching to recognize and deal with stress disorders should be an integral part of training health-care staff and preservice training.[44] PTSD and complex PTSD will need extra emphasis as the new criteria have been modified further. Another challenge for LMIC would be to develop HMIS that could include indicators for monitoring stress conditions and evaluate the impact of integrated mental health care.

The mhGAP-Humanitarian Intervention Guide guidelines would be particularly valuable for training and supervising primary care staff following a humanitarian crisis, which offers individual modules on acute stress, grief, and PTSD.[45] From a public mental health perspective, it would be useful to train frontline workers to recognize stress reactions well in time as interventions such as psychological first aid can help alleviate distress and prevent mental health complications. Transdiagnostic behavioral activation like the culturally adapted Problem Management Plus has been found effective and well suited in LMIC like Pakistan that can be used by nonprofessional field workers for individuals and groups.[46,47] Cultural practices such as traditional calming or relaxation techniques can be used not only to treat patients in the affected communities, but also as preventive strategies in public mental health care.[20,48] Their practice can produce the calming, sense of collective efficacy, and social and cultural connectedness that the trauma experts recommend.[49] A useful strategy is to start with a Training of Trainers (ToT) who can then go onto train other workers.[17,27,50]

Research in the South-Asian region will be needed to establish the prevalence, cultural reliability, validity, and utility of the ICD-11 disorders specifically associated with stress, particularly PTSD, complex PTSD, and prolonged grief disorder. The differences and variations in presentations across the region, particularly regionally significant idioms of distress; symptoms such as somatization, dissociation, local explanation, and belief systems; and traditional practices merit further research.[35] Further qualitative and quantitative evidence is needed to understand collectivistic phenomena and implications of trauma. It is known that the research and evidence in LMICs focuses on interventions that are infrequently implemented, whereas the most commonly used interventions have not been researched adequately.[35]

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