

Post-traumatic stress disorder: medicine and politics

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Regrettably, exposure to trauma is common worldwide, and can have serious adverse psychological results. The introduction of the notion of post-traumatic stress disorder has led to increasing medicalisation of the problem. This awareness has helped popular acceptance of the reality of post-traumatic psychiatric sequelae, which has boosted research into the pathogenesis of the disorder, leading to improved pharmacological and psychological management. The subjective experience of trauma and subsequent expression of symptoms vary considerably over space and time, and we emphasise that not all psychological distress or psychiatric disorders after trauma should be termed post-traumatic stress disorder. There are limits to the medicalisation of distress and there is value in focusing on adaptive coping during and after traumas. Striking a balance between a focus on heroism and resilience versus victimhood and pathological change is a crucial and constant issue after trauma for both clinicians and society. In this Review we discuss the advantages and disadvantages of medicalising trauma response, using examples from South Africa, the Armed Services, and post-disaster, to draw attention to our argument.

At some point we all face trauma or loss. Thomas Hobbes¹ famously declared the condition of mankind to be “nasty, brutish and short”, and although life expectancy has increased in many parts of the world, life still remains nasty and brutish for many of us. We continue to experience the violence of both nature and people, through earthquakes, floods, warfare, etc. Mankind has developed a wide spectrum of models for dealing with traumatic events, using medical, legal, and religious ideas and institutions to orchestrate society’s response.

A clear divide exists between the models of response to trauma. On the one hand, there are those who regard trauma in terms of abnormality, using medical terminology to define subsequent disorder. The revival of interest in the psychological consequences of trauma during the second half of the 20th century began with the notion that this behaviour was an understandable response to an abnormal event out of the normal range of human experience, and hence by definition rare. During the past decade, this view has reversed; trauma is now seen as a highly prevalent occurrence, very often accompanied by post-traumatic distress, and less commonly followed by a persistent pathological response or post-traumatic stress disorder.²

On the other hand, there are those who insist that the response to traumatic events is best understood within a sociopolitical framework. In this view, labelling some responses as normal and others as abnormal is merely an attempt to provide credibility and persuade society by adopting the influential rhetoric and political power of the medical model. Several people have argued that post-traumatic stress disorder is not a valid medical entity, and that the language around it should be radically changed.³⁻⁵

In this report we provide a non-systematic review of developments in post-traumatic stress responses with the contrasting models in mind. On the one hand, if post-traumatic stress disorder is a medical disorder, then clearly doctors and health professionals need to be trained in its appropriate diagnosis, assessment, and treatment. On the other hand, if the distress experienced

after trauma is normal rather than pathological, and the notion of the disorder is a rhetorical device, then clinicians choosing to engage in this arena should do so by addressing the particular sociopolitical contexts contributing to the emergence of distress.

Our approach here is integrative, in that we attempt to acknowledge the strengths and weaknesses of both the medical and political models, and try to create a bridge between the two that incorporates the advantages of each. In doing so, we draw on studies of trauma in South Africa, in the Armed Services, and after disaster.

Medicalisation of response to trauma

Physicians have long been associated with responding to the distress of those exposed to severe trauma, such as warfare.⁶ Nevertheless, the formal introduction of post-traumatic stress disorder into the psychiatric nomenclature came only in 1980 with the 3rd edition of the Diagnostic and Statistical Manual of mental disorders (DSM-III).⁷ Furthermore, Yehuda and McFarlane⁸ have argued that even after that time, the disorder was seen only as a normal response to an abnormal event.

Nowadays, however, the predominant view in psychiatric publications is that post-traumatic stress disorder is a medical disorder, characterised by particular psychobiological dysfunction. Although the question of what constitutes a medical disorder is still debated,^{8,9} the identification of both psychobiological dysfunctions and medical interventions that can reverse dysfunctions, provide an important basis to legitimise the medicalisation of a disorder. Several sets of data have provided substantial impetus to the argument that post-traumatic stress disorder is a medical disorder that is characterised by specific psychobiological dysfunctions.²

First, from an epidemiological perspective exposure to trauma is rather common, whereas post-traumatic stress disorder is fairly uncommon.¹⁰ In several community studies in the developed world, more than 80% of individuals have been exposed to severe trauma. Nevertheless, the disorder is seen in less than 10% of

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cases. The more severe the trauma is, the greater the possible development of the disorder. However, even in instances of serious trauma, not all people develop the disorder. Thus, there are specific factors that predict vulnerability and resilience after exposure to trauma, including those that predate the trauma (eg, genetic variation), those during the trauma (eg, severity and duration of the trauma), and those that are present after the trauma (eg, social support).^{11,12}

Second, there is some evidence that post-traumatic stress disorder is characterised by specific psychobiological changes. Structural and functional brain imaging have, for example, suggested reduced hippocampal volumes in patients with the disorder¹³ (although some data show that this could pre-exist the disorder, and is therefore a marker of vulnerability¹⁴). Further, specific neurotransmitter changes in the neurocircuitry are thought to be important in mediating post-traumatic stress disorder. Thus, there is indirect evidence (from pharmacological challenge and pharmacotherapy trials) of dysfunction in mono-aminergic systems,¹⁵ and direct evidence (from molecular imaging studies) of dysfunction in gamma-aminobutyric acid receptors.¹⁶ Additionally, Yehuda and colleagues¹⁷ suggested that the disorder is characterised by a specific neuroendocrine profile, in which there are reduced concentrations of plasma cortisol, on the basis of enhanced negative feedback within the hypothalamic-pituitary-adrenal axis. Work in animals help underpin results in such models.¹⁸

Finally, there is a growing database^{19,20} to show that medical interventions, whether psychotherapeutic or pharmacotherapeutic, can diminish symptoms of post-traumatic stress disorder, and reduce associated disability. Such interventions might well reverse the postulated psychobiological dysfunctions in the disorder, thereby reducing the sensitivity of glucocorticoid receptors, increasing the volume of the hippocampus, and decreasing overactive temperolimbic activity.^{21,22} Randomised controlled trials^{19,20} have shown that such interventions are both safe and effective.

A model that focuses on assumed psychobiological dysfunction in the disorder has potential strengths. First, as briefly outlined here, such a model would provide a framework for understanding the vast range of findings on the occurrence and pathogenesis of the disorder. Second, it would provide a framework for encouraging the appropriate diagnosis and treatment of symptoms. There is a sound pragmatic argument for encouraging awareness and hence management of the disorder, with the stigmatisation of psychiatric disorders, their almost ubiquitous underdiagnosis and undertreatment,²³ coupled with the availability of reasonably effective and safe treatments.²⁴

A weakness of this model, however, would be that it might encourage the view that trauma responses are entirely universal and fixed, and thus the variable ways in which society can influence the subjective experience

of trauma, and the expression of subsequent symptoms, are ignored.²⁵ Furthermore, a model focused on psychobiological dysfunction in post-traumatic stress disorder may deflect attention away not only from important sociopolitical efforts to prevent violence but also from a range of potentially useful, non-medical interventions to relieve distress after trauma. Certainly, the most appropriate immediate mental health interventions after disaster are practical rather than emotional.²⁶

Narratives of post-traumatic stress disorder

Many researchers remain sceptical of attempts to medicalise responses to trauma. For one thing, historians and anthropologists have emphasised that the response to trauma and even the symptoms of trauma change over space and time. Jones and colleagues⁶ reviewed medical and military histories of British servicemen since 1872, and identified three varieties of post-combat disorder; a debility syndrome, a somatic syndrome, and a neuropsychiatric syndrome. The era in which a war took place was the best predictor of cluster membership. Using the same records, they also suggested that the flashback (ie, a mental vision of a past experience), which was a contemporary hallmark of the disorder, was surprisingly absent from these earlier narratives.²⁷ Marsella and co-workers²⁸ suggested that although the re-experiencing and hyperarousal symptoms of post-traumatic stress disorder are universal, symptoms characterised by avoidant behaviour and numbed emotions are probably experienced mostly in ethnocultural settings in which such behaviour is a common expression of distress.

A more radical view is that post-traumatic stress disorder is merely a social construction, a label that has been applied to distress, for particular sociopolitical reasons. Young⁵ has argued that the diagnosis emerged in the USA in the 1980s, less from a belated recognition of the psychological consequences of war trauma than from attempts to come to terms with the social crisis of Vietnam. The medicalisation of distress by institutions such as the Veterans Association system in the USA, might have provided improper financial incentives that maintain ill health.^{29,30} Others^{31,32} have criticised the attempt to use the language of the disorder in the context of other traumas throughout the world, arguing that this terminology ignores the underlying sociopolitical causes of these traumas and encourages inappropriate interventions.

Data can also be used to argue against the notion that post-traumatic stress disorder is specifically associated with trauma or is characterised by specific psychobiological dysfunctions. The epidemiological data indicate that depression and substance abuse are in fact more common than the disorder after trauma. Frueh and colleagues³³ have documented that some of those who receive treatment for the disorder after warfare have not in fact seen combat. On closer examination,

many of the putative neurochemical (eg, hypocortisol-aemia) and neuroanatomical (eg, diminished hippocampal volume) characteristics of the disorder are also evident in a range of neuropsychiatric disorders. Similarly, selective serotonin reuptake inhibitors (SSRIs) may well be useful in the management of the disorder, but they are also effective in a range of other psychiatric disorders, including depression and anxiety disorders.

An approach that focuses on the normality of distress in the context of trauma has both strengths and weaknesses. This approach emphasises that trauma does cause distress, but not all distress is pathological; resilience is also important. Since society's narratives play a part in framing our experience and expression of distress, a narrative that focuses on resilience could encourage health improvement. Conversely, perhaps too much of a focus on illness can unwittingly create the paradox of health, in which populations who are in fact well, but also well informed about disease, complain more about disorder than do unwell but uninformed groups.³⁴ We need to avoid the iatrogenic part played by medicalisation of distress and by inappropriate governmental responses to trauma.^{35,36}

At the same time, this approach runs the risk of downplaying the important similarities in symptoms and psychobiology in all people with post-traumatic stress disorder, and by ignoring the medical model, failing to offer them effective treatment. Social determinants could mould the expression and experience of illness, but their power to affect universal psychobiological dysfunction is limited. Furthermore, although a model that emphasises psychobiology dysfunction in the disorder leads directly to a consideration of pharmacotherapy and psychotherapy for treatment, it can also be used to add emphasis to sociopolitical efforts to prevent not only violence but also provide a range of non-medical interventions to relieve distress after trauma.³⁷

Integration

In medicine and psychiatry there is a distinction between the aspects of the profession that are based in the natural sciences (focused on the underlying biological mechanisms and their consequence, ie the disease), and those that are based in the humanities (focused on the context of the doctor-patient relationship and the patient's experience—ie, the illness).³⁸ Similarly, a comprehensive approach to trauma should be based on not only appreciation of the underlying associated psychobiological mechanisms, but also the specific psychosocial context within which the response to trauma is embedded. On the one hand, we need to explain why specific drugs and their particular mechanisms of action could be useful in the treatment of post-traumatic stress disorder. There is growing interest in taking basic lessons on the neurobiology of

the disorder and applying them to understanding resilience,³⁹ and to developing pharmacological prophylaxis to diminish the risk of onset after trauma.⁴⁰

On the other hand, we need to be aware of the sociopolitical context in which trauma arises, its effect on the experience of trauma, and the expression of subsequent responses. Violent events can be regarded as entertaining, and for some even warfare remains thrilling.⁴¹ Cultural and social factors can be important determinants of susceptibility to the disorder by shaping ideas of what constitutes a trauma and what constitutes abnormal responses to trauma, and by affecting known vulnerability factors such as early childhood experiences, co-morbidity (eg, alcohol abuse), and social resources for responding to trauma. Post-traumatic stress disorder, like all psychiatric disorders, is bound by culture.

An emphasis on both the mechanisms and meanings of the disorder has important implications for treatment. After trauma, we need to recognise that distress is normal, and a range of symptoms and disorders (most notably, mood and substance-use disorders, in addition to other anxiety and psychotic disorders) can occur, including persistence of post-traumatic symptoms in the form of post-traumatic stress disorder. We therefore need to provide effective interventions for those with such disorders. At the same time, we need to avoid medicalisation of all distress after trauma. Debriefing is ineffective⁴² and could lead to consolidation of traumatic memories, and labelling of distress as post-traumatic stress disorder could serve to deflect attention not only away from resilience but also from important sociopolitical factors contributing to distress. Particular cultural narratives and rituals in response to trauma exposure, could well play a part in prevention of the disorder,⁴³ whereas other types of response, either overly repressive or overly encouraging, can perhaps exacerbate post-traumatic distress.⁴⁴

Consider, for example, the trauma of apartheid operating in South Africa until 1994. There were those who argued that apartheid was related to a pathological society, which was important to understand the resulting psychopathology. However, others emphasised the resilience of people who partook in the struggle against apartheid; participants with an ideological commitment to their cause seem less likely to complain of stress-related psychiatric symptoms than were those without such commitment.^{45,46} Similar controversy has arisen around the question of whether perpetrators of human rights violations might have post-traumatic stress disorder; although they could also have a psychiatric disorder, there has been reluctance to extend compassion and compensation to such individuals.⁴⁷

Similarly, the Truth and Reconciliation Commission (TRC) held at the end of apartheid showcased contrasting social responses to trauma, emphasising the idea that survivors deserved compensation for their

trauma (a medical model), but also suggesting that acknowledgment of the trauma was more important than retributive justice (this attitude was to some extent determined by a focus of the TRC on forgiveness). Clearly, there is an obligation to offer those with post-traumatic stress disorder appropriate compensation (and too much focus on the possibility of testimony therapy could have downplayed this obligation). However, by focusing on resilience, the TRC offered acknowledgment to many individuals, and provided a useful social model of how to address massive trauma.^{48,49}

The Armed Services provide another example. There are important differences between those whose job includes exposure to risk and danger, and those whose job does not. The post-traumatic stress disorder model may be less appropriate for professionals exposed to danger than for those whose exposure to trauma came accidentally. For some, danger or trauma is part of their reason for existence—eg, the war veterans for whom post-war existence becomes dull and monochromatic, and the police officers who thrive on working in dangerous situations. In elite British combat units who took part in the invasion of Iraq, there was no increase in post-traumatic stress disorder; rather there was evidence of a slight improvement in mental health.⁵⁰ Post-traumatic symptoms in security forces can emerge only in the context of later social dissatisfaction with the violence inflicted.⁴⁷

Another example from the armed services helps to address the difference between traumatic memories and psychiatric disorder. A 50-year study of US World War II combat veterans showed that almost no one who had been exposed to combat ever forgot it, and that most continued to have dreams and memories, often distressing, for the rest of their lives. However, these manifestations were very different indeed from disorder, which was both rare and associated with pre-service variables. Those exposed to combat were actually more likely to be high achievers in their subsequent careers than those who were not in the services, probably because of the selection bias towards elite units.⁵¹ However, some World War II veterans benefited from the introduction of SSRIs several decades later.⁵²

More recently post-traumatic stress disorder has been highlighted after terror attacks (such as the attack on the World Trade Center⁵³ in 2001) and after natural disasters (such as the Asian Tsunami⁵⁴ in 2004). Both events were very complex, with many antecedents and consequences. Thus, although for internal and external agencies to focus on the disorder might be important, too narrow a response could miss the mark (more basic types of aid, such as food and shelter, could be required) or oversimplify matters (societies that have been exposed to several traumas might still have a great deal of social capital and demonstrate resilience after trauma exposure). As emphasised earlier, the best immediate

mental health interventions in response to terrorism or disasters are practical rather than emotional.^{55,56}

An integrative approach here retains many of the advantages of the view that post-traumatic stress disorder is both a medical disorder and a political label. Thus, the disorder can be approached in terms of the underlying psychobiological mechanisms that result in its symptoms. At the same time, the integrative approach is able to acknowledge that trauma is experienced and expressed in different ways in space and time. A balance is needed in our clinical and social approach to those who have been distressed by trauma; we need not only to diagnose individuals with the disorder and treat them appropriately, but also emphasise narratives that celebrate resilience and create the expectation that distress and dissipation of distress after trauma are normal.^{57,58}

Such an approach attempts to address a fundamental debate in consideration of individual and social response to severe traumas—we need to achieve a balance between emphasis on heroism and resilience for the majority of people, and at the same time being compassionate to the few who need additional sympathy because they are not coping. This is a difficult balance; we need to promote and reward bravery and resilience, as well as look after and compensate victims. We need to respect courage, but not stigmatise breakdown.

Conclusion

The issue of trauma leads to a fundamental dilemma for clinicians and societies; we want to remain strong in the face of adversity and create heroes who are defined by what they do, but we also want to show compassion to victims who are defined by what has been done to them. This tension is shown not only in psychiatry's response to trauma (Freud,⁵⁹ for example, vacillated between regarding trauma as the cause of all psychopathology, and viewing all memories of trauma in ill patients as fantasy) but also in society's response to trauma (during World War II, there was a refusal to medicalise those who broke-down—so-called pitiless psychology—but after the Vietnam War there was extensive medicalisation of the response to trauma, with the pendulum arguably swinging too far).^{60,61}

Clinicians are, however, familiar with being able to balance these types of tension. For any particular patient, they need to consider both the relevant disease aspects (ie, the underlying psychobiological mechanisms) and the illness aspects (ie, the person's experience of the disorder). This tenet holds true for trauma and for many other conditions, including controversial personality disorders and chronic fatigue syndrome. Thus researchers^{37,62,63} have argued for the benefit of an approach that emphasises the medicalisation of distress, provided that this approach is the starting point for treatment rather than its aim.

We emphasise that the experience of traumatic events and the expression of subsequent symptoms varies

considerably over space and time, and that not all disorders or distress after trauma are post-traumatic stress disorder. There are limits to the extent to which distress can be medicalised, and there is value in focusing on resilience during and after traumas. At the same time, medicalisation of the response to trauma has been important insofar as the development of the notion of post-traumatic stress disorder has advanced our understanding of the pathogenesis of the condition, and our ability to reduce its associated symptoms with specific pharmacotherapies and psychotherapies.^{19,20} We need to encourage the appropriate use of these interventions for those with this disorder.

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