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 Hobbes 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.

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.

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. 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). Furthermore, Yehuda and McFarlane 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, 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.

First, from an epidemiological perspective exposure to trauma is rather common, whereas post-traumatic stress disorder is fairly uncommon. 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...
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).15,16

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 disorder14 (although some data show that this could pre-exist the disorder, and is therefore a marker of vulnerability15). 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 monoaminergic 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 database19,20 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 trials19,20 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,19 coupled with the availability of reasonably effective and safe treatments.23

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.24 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.25

**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 colleagues26 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 Others30,31 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 colleagues32 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 hippo-
campal 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 unwrittely 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. We need to avoid the iatrogenic part played by
medicalisation of distress and by inappropriate govern-
mental responses to trauma.

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 deter-
minants could mould the expression and experience of
illness, but their power to affect universal psycho-
biological 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.

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). 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, and to developing pharmacological prophyl-
axis to diminish the risk of onset after trauma.

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. 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
ineffective 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, whereas other types of response, either overly
repressive or overly encouraging, can perhaps exacerbate
post-traumatic distress.

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. 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.

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.46,49

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.49 Post-traumatic symptoms in security forces can emerge only in the context of later social dissatisfaction with the violence inflicted.46

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).60-63

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 researchers62,64-66 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 under-
standing of the pathogenesis of the condition, and our
ability to reduce its associated symptoms with specific
pharmacotherapies and psychotherapies."19,20 We need to
courage the appropriate use of these interventions for
those with this disorder.

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