

CHAPTER 11.

POSTTRAUMATIC STRESS DISORDER

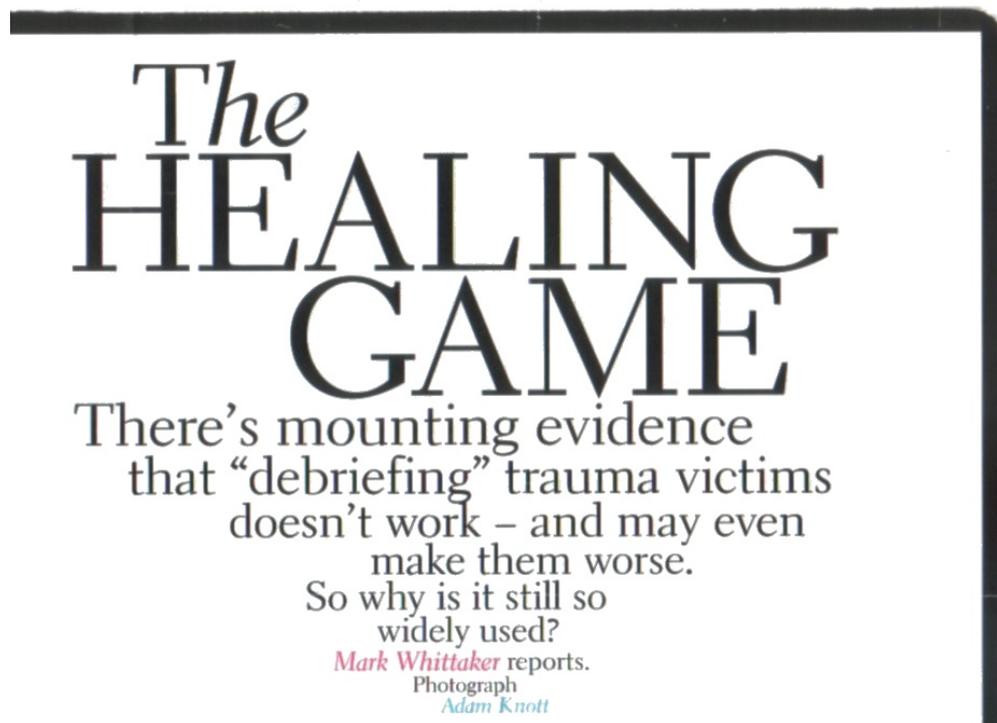


Illustration. Headline in the Weekend Australian Magazine, June 28-29, 2008. The story was critical of the popular (at the time) form of acute psychological treatment of people who have experienced traumatic events.

DSM-5: Trauma- and Stressor-Related Disorders

The DSM-5 has introduced a new chapter – in which posttraumatic stress disorder (PTSD) is the most prominent – and others include Acute stress disorder and Adjustment disorder.

Views of PTSD

PTSD is well accepted as a psychiatric disorder, for which there is effective treatment. It is popular with the media; it ‘makes sense,’ and ‘treatment’ is an expectation of the general public.

An opposing view held by some social commentators and health professionals is that PTSD is greatly over diagnosed and that most treatments are unnecessary and ineffective.

The majority view will be given first, and in detail. Brief mention will then be made of some dissenting views.

THE MAJORITY VIEW

Introduction

Plato described melancholia (major depressive disorder), mania, and dementia >2000 years ago. There is debate about when schizophrenia was first described, but it was probably more than two centuries ago. It is surprising then, that PTSD was first accepted as a legitimate mental disorder only a few decades ago.

The current author (Pridmore, 2011, 2014) has listed old proverbs (probably millennia old) which describe the triggering and re-experiencing of trauma. One states that, having been bitten by a snake, the individual is afraid of a rope on the ground. They suggest PTSD has a long human history.

Following the American Civil War (1861-1865), Dr. Jacob Da Costa described veterans who developed a rapid heart rate. This condition became known as “Da Costa’s heart”; the role of the brain/psychology was not recognized. In World War One (1914-1918) what would now be called PTSD was known as “Shell shock”. At this stage the brain was thought to be involved, and one theory was that powerful explosions propelled metal fragments so small that they could not be seen, into the head. In World War Two (1939-1945) this disorder was called “War neurosis”, and psychological factors were recognized. In the Vietnam War (1965-1973), PTSD was described in Western veterans, and it was first included in the DSM-III in 1980.

Mackowiak and Batten (2008) explored the lives of Alexander the Great (356-323 BCE), Captain James Cook (1728-1779), Florence Nightingale (1820-1910), and Emily Dickinson (1830-1886), and made a case for them all having suffered PTSD. All had been highly functioning individuals who appeared to have a change in personality.

PTSD has been described in many cultures: Kalahari Tribesmen, Cambodian, Kosovo, Bosnian, Iraqi and Kurdish refugees, Ugandan child soldiers, Mexican bus accident survivors, Singaporean victims of child sexual abuse, Japanese cancer survivors, and Bam (Iran) earthquake survivors, among many others.

The prevalence of PTSD varies from one country to another; from 3.3% in Australia (McLennan, 1997) to 11% in Mexico (Norris et al, 2003). This may reflect different research methodology, differences in risk of exposure to trauma, or other cultural factors. Even in regions reporting lower rates, PTSD represents a major mental health problem.

How a disorder with a prevalence of 3.3% remained unrecognized until 1980 is a mystery. Part of the answer is probably that in earlier times, PTSD was subsumed under different disorders, predominantly anxiety, major depression, dysthymia and substance abuse. Another part of the answer is probably recent changes in societal attitudes. Until the change to the “caring society” of the present time, individuals anticipated adversity and were expected to shoulder their difficulties without complaint.

DSM-5 PTSD diagnostic criteria

- A) Exposure to actual or threatened death, serious injury or sexual violence in one of the following ways:
- 1) Directly experiencing the traumatic event
 - 2) Witnessing, in person, the event as it occurred to others
 - 3) Learning that the event occurred to a close family member or close friend
 - 4) Experiencing repeated or extreme exposure to aversive details of the events (e.g., first responders collecting human remains)
- B) Presence of one or more of the following intrusion symptoms associated with the event:
- 1) recurrent and intrusive distressing memories of the event
 - 2) recurrent distressing dreams of the event
 - 3) dissociative reactions (e.g., flashbacks) in which the individual feels or acts as if the traumatic event was recurring
 - 4) intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event
 - 5) physiological reactions to internal or external cues that symbolize or resemble an aspect of the traumatic event
- C) Persistent avoidance of stimuli associated with the trauma:
- 1) efforts to avoid thoughts, feelings, or conversations associated with the trauma
 - 2) efforts to avoid external reminders (activities, places, or people) that arouse distressing memories, feelings etc. associated with the trauma
- D) Negative alterations in cognitions and mood associated with the trauma
- 1) inability to recall an important aspect of the trauma
 - 2) negative beliefs or expectations about oneself, others, or the world
 - 3) distorted cognitions about the cause or consequence of the trauma
 - 4) persistent negative emotional state (fear, horror, anger, guilt, or shame)
 - 5) diminished interest or participation in significant activities
 - 6) feelings of detachment or estrangement from others
 - 7) inability to experience positive emotions (happiness, satisfaction, loving feelings)
- E) Marked alterations in arousal and reactivity associated with the event
- 1) irritable behavior and angry outbursts with little provocation
 - 2) reckless or self-destructive behavior
 - 3) hypervigilance
 - 4) exaggerated startle response
 - 5) problems with concentration
 - 6) sleep disturbance
- F) Duration of disturbance (B-E) more than 1 month
- G) Disturbance causes significant distress and impaired function

In summary, the individual must have been exposed to a severe event (life threatening or similar) and there must be intrusive symptoms, avoidance of reminders, negative alterations in cognitions and mood, and alterations in the level of arousal.

Spectrum of mental responses to trauma

To place PTSD in context, immediately following traumatic events, most (95%) exposed survivors experience some mental distress (Norris et al, 2003). Thus, in the early stages, some psychological distress is “normal”. ICD-10 describes “a mixed and usually changing picture” including, “daze, depression, anxiety, anger, despair, over-activity, and withdrawal may be seen, but no one type of symptom predominates for long”. In the following days, these initial responses may be replaced by symptoms resembling PTSD.

Around 10% of New Zealand medical students experienced moderate-extreme psychological difficulties 7 months after a most severe earthquake (Carter et al, 2014).

On the spectrum of responses to trauma, on which “normal” or non-pathological distress is at one end and PTSD is at the other, two other conditions can also be located: Acute stress disorder and Adjustment disorder.

Risk and natural history

40-90% in the general population experience trauma, however, the overall lifetime prevalence for PTSD is 7-12%. This indicates there are individual differences in susceptibility to the disorder (Mehta and Binder, 2011).

Women are at greater risk. Breslau, et al (1999) found the risk of developing PTSD after any kind of trauma is 13% for women and 6% for men.

Family and twin studies show a genetic vulnerability for PTSD, and more than 30% of the variance is related to a heritable component (Skelton et al 2011). A large proportion of the genetic liability for PTSD, anxiety and depression is shared (Goenjian et al, 2008).

Among soldiers (Seifert et al, 2011) and civilians (Breslau et al, 2013), a history of childhood abuse is a risk factor for developing PTSD.

Various studies show around 50% of cases remit by 6 months, and about 75% remit by one year. One year after severe trauma, PTSD will be present in 10-15% of survivors.

There have been claims that some individuals do not develop PTSD until years after the trauma. One study (North et al, 2003) found 98% presented in the first month. The ICD-10 states that, in general, the condition should not be diagnosed if the onset is more than

6 months after a traumatic event. Thus, delayed onset PTSD is a doubtful diagnostic category.

While the symptoms of PTSD frequently resolve over time, established, chronic PTSD, is a serious disorder, causing much suffering for the individual, destroying marriages, and sometimes ending in suicide. PTSD may result in large financial compensations.

Cultural factors may impact on risk. For example, the rate of PTSD for soldiers who served in Iraq and Afghanistan is 1.6-6% for UK forces and two to three times higher in the US forces (Sundin et al 2011).

In a study of cultural factors in Hainan (China) the severity of PTSD symptoms and serum cytokine and cortisol levels in 30 PTSD patients of Li ethnicity and 30 PTSD patients from Han ethnicity (Tao et al, 2014). Li is a disadvantaged ethnic group with low income and education and face discrimination. Their cultural beliefs and practices result in great distress is caused by sudden events. Hainan was hit by a major earthquake in 2008.

On the PTSD Checklist-Civilian Version, patients of Li ethnicity scored significantly higher ($P < 0.05$) than patients of Han ethnicity on each of the re-experiencing, avoidance/numbing and hyperarousal symptoms. They also scored significantly higher ($P < 0.05$) than patients on Han ethnicity on serum levels of interleukin 2 (IL-2), IL-6, IL-8, tumor necrosis factor alpha (TNF- α) and cortisol.

Glucocorticoid binding with glucocorticoid receptors (GRs) can activate release of inflammatory cytokine release – and IL-2, IL-6 and TNF- α are indicators of PTSD. The results suggest an ethnic influence on response to traumatic experiences.

Suicide toll

MORE British veterans of the Falklands War have taken their own lives than were killed in the 1982 conflict with Argentina. A support group said the suicide toll was greater than the 255 killed in action and blamed post-traumatic stress disorder.

Illustration. The term PTSD is loosely applied by lay people and pressure groups. It is unlikely that all the suicides of the British Falklands War veterans can be attributed to PTSD, but it was doubtless a factor in some.

Prediction

It was thought that the severity of the acute stress reactions, and perhaps certain early symptoms, would predict PTSD. Unfortunately, studies have not supported these ideas (Bryant, 2003). Surprisingly, there is some evidence suggesting that most of those who develop PTSD have not had severe acute reactions (Wolfe et al, 2003).

There is some evidence to indicate that the belief (at the time of the trauma) that one is about to die, may predict PTSD (Voges & Romney, 2003). The severity of the traumatic event has been suggested as a predictor, with events such as torture and sexual assault having higher potency than motor vehicle accidents and severe illness. However, there is no standardized means of grading the severity trauma. Also, some people survive what appears to be very severe trauma without developing symptoms, while others have developed convincing PTSD following much less severe episodes. Thus, there appear to be individual factors influencing vulnerability.

Contrary to expectations, soldiers who were attacked but did not shot at the enemy, have less severe symptoms than those who have returned fire (McLay et al, 2014)

With respect to soldiers, nightmares before deployment indicate and increase risk for PTSD (Van Liempt, et al, 2013).

People with pre-existing psychological problems have more post-trauma physical and psychological difficulties (Dirkzwanger et al, 2006) and as already mentioned, a history of childhood abuse is a risk factor (Seifert et al, 2011).

The most powerful predictor is female gender. People with personal or family histories of anxiety and mood disorder, and people with disorganized early life are at greater risk. Finally, lower intelligence is associated with higher levels of PTSD in both children and adults.

Using mice, Ding et al (2013) found that, soon after trauma, diffusion tensor imaging (DTI) can detect microstructural changes in brain regions which mediate fear conditioning. This may have potential in the management of individuals at risk of developing PTSD.

Epigenetics

Chapter 37 provides a more detailed account of this subject. Epigenetics refers to the molecular mechanism by which environmental circumstances modify gene expression

(without influencing the DNA sequence) to produce different phenotypes. Traumatic stress is a pre-eminent environmental circumstance, thus a role for epigenetics in the diagnosis and as a guide to treatment (physical and psychological) is anticipated.

The functional state of genes (whether they are physically available for the process of transcription) is dictated by the tightness of the chromatin. Chromatin is DNA wound around histones 9 (protein) cores. The tightness of chromatin is influenced in particular by the attachment of methyl groups to DNA, and methyl, acetyl and other molecules to the tails of the histone proteins.

Newly acquired memories are unstable initially, and then become 'consolidated'. Retrieval of memories results in another period of instability, until they are 're-consolidated'. It is proposed that the periods of instability provide an opportunity for a therapeutic agent to treat persistent, unhelpful memories, as are found in PTSD and drug addiction. Such agents may target the epigenetic processes.

Maddox et al (2013) have shown that systemic administration of garcinol disrupts fear conditioning in mice, and suggest it may have a place in the treatment of PTSD in humans. Garcinol is a naturally-occurring agent which interferes with epigenetic modifications.

The influence of experience on gene expression is observed in the offspring of high quality nurturing rat mothers - their pups display significantly reduced levels of DNA methylation (Weaver et al, 2004). In a spectacular human study, McGowen et al (2009) demonstrated that DNA methylation led to decreased glucocorticoids receptors in the hippocampus of people who had been victims of childhood abuse.

Pathophysiology

Stress is mediated by a wide range of systems [neurological, endocrine, immunological, genetic/epigenetic] acting in concert.

The hypothalamic-pituitary-adrenal (HPA) axis is of central importance in homeostasis. Stress triggers release of corticotrophin-releasing factor (CRF) from the hypothalamus; ACTH released from the pituitary in turn triggers the release of cortisol from the adrenal glands. In a negative feed-back loop, elevated levels of cortisol act on the brain to reduce the release of ACTH and cortisol. CRF plays a key role in modulating the autonomic, immune and behavioral effects of stress. Increases in CRF are associated with increased symptoms of depression and anxiety (Nemeroff et al, 2006).

Cortisol prepares the individual to respond to sudden stress. Additionally, activation of the glucocorticoid receptor (GR) regulates availability of brain derived neurotrophic factor (BDNF) – a crucial factor for neural plasticity. Hence, stress induces neuroplastic changes, which include the formation of long-lasting memories (Deppermann et al, 2014).

Negative feed-back (to reduce cortisol levels) activates GRs in the hippocampus and medial prefrontal cortex. However, high levels of cortisol over sustained periods may damage these structures, in which case positive-feedback is established and chronic high cortisol levels cause progressive damage the CNS.

[Brief revision: pyramidal cells extend throughout the cortex. Dendrites extending from the apex of cell bodies are termed apical, and those extending at the level of the cell body are termed basal dendrites. The axon extends from the base of the cell.]

In animal studies, stress is associated with reduced length and complexity of the apical branches of the pyramidal cells of region CA3 of the hippocampus (McKittrick et al, 2000), and the medial prefrontal cortex (Radley et al, 2004). In people with PTSD, structural abnormalities have been demonstrated in both of these regions (Nutt et al, 2004). The startle reaction and flashbacks of PTSD may be related to failure of these regions to dampen an overactive amygdala.

Cook et al (2009) report that people who had experienced trauma in childhood had significantly higher EEG abnormality than people who had experienced trauma in adulthood, and people with no experience of trauma.

There is much interest in the role of immune system in various mental disorders. PTSD has not been immune, some evidence has suggested low-grade inflammation (Gola et al, 2013) and lower than normal levels of C-reactive protein (Spitzer et al, 2013).

The development of PTSD in combat veterans is associated with an increase in the methylation of the promoter regions of the IL-18 and H19 genes (H19 is a long non-coding RNA with an apparent role in cancer) (Rusiecki et al, 2013.) Methylation of the FKBP5 gene (FKBP5 is a protein with a role in immunoregulation) in combat veterans with PTSD decreases with psychotherapy induced recovery (Yehuda et al, 2013).

The study of the influence of ethnicity on PTSD by Tao et al (2014) is discussed above under **Risk and Natural History**. Exposed to the same earthquake, Li (compared to Han) Chinese demonstrated statistically increased psychological symptoms, and serum levels of interleukin 2 (IL-2), IL-6, IL-8, tumor necrosis factor alpha (TNF-a) and cortisol.

A study in Hainan (Chin) a compared severity of PTSD symptoms and serum cytokine and cortisol levels in 30 PTSD patients of Li ethnicity and 30 PTSD patients from Han ethnicity (Tao et al, 2014). Li is a disadvantaged ethnic group with low income and education and face discrimination. Their cultural beliefs and practices result in great distress is caused by sudden events. Hainan was hit by a major earthquake in 2008.

Combat veterans with PTSD have a significantly increased risk for autoimmune disorders (O'Donovan et al, 2014). This may reflect altered immune function, lifestyle or other factors.

Imaging studies

Smaller hippocampal volumes predispose to PTSD (Gilbertson et al, 2002), and PTSD then causes further (secondary) hippocampal volume reductions (Felmingham et al, 2009).

A similar process (smaller structure predisposing to PTSD, followed by secondary size reductions) may also apply to the anterior cingulate (Kasai et al 2008).

PET studies (Shin et al, 2009) suggest an increased metabolic rate in the anterior cingulate may precede the onset of PTSD, which increases further, as a consequence of the disorder.

Geuze et al (2008) found that people with PTSD had reduced frontal and temporal cortical thickness and performed significantly less well on memory tasks. There was a correlation between cortical thickness and memory performance.

Sailer et al (2008) found people with PTSD displayed lower activation in the nucleus accumbens and medial PFC, which are both critical structures in the reward pathway. This suggested that people with PTSD may not experience the same intensity of reward as others, and this could be expected to impact on responses and behavior.

Falconer et al (2008) studied inhibition in PTSD. They found people with PTSD made more errors than a matched healthy sample on tests of inhibition, and the number of errors was directly related to the PTSD severity. Using fMRI, they also found that, in contrast with the healthy sample, which predominantly activated right brain structures during inhibitory tasks, people with PTSD predominantly activated left brain structures.

Zhang et al (2011) found people with PTSD had significantly decreased gray matter volume in left anterior hippocampus, left parahippocampal gyrus and bilateral calcarine cortex. And, PTSD severity was associated with gray matter density in the hippocampus and calcarine cortex.

Structural MRI studies of adults and children have evaluated volumetric alterations in PTSD. In adults hippocampal volumetric reduction has been repeatedly demonstrated, while in children and adolescents, the main finding is smaller medial and posterior portions of the corpus callosum. This may indicate that the neurobiological effects of stress vary with developmental stage (Jackowski et al, 2009).

Resting-state fMRI has demonstrated reduced functional connectivity between the middle prefrontal cortex, amygdala and hippocampus, and between the inferior orbitofrontal cortex and the hippocampus (Jin et al, 2013).

Sullivan et al (2013), using PET, demonstrated higher brainstem and forebrain serotonin-1A binding in PTSD.

Thus, exposure to severe stress results in structural and functional brain changes. In adults, there is evidence of reduced hippocampal volume, and thinning of frontal temporal and occipital cortex, and reduced functional connectivity between the frontal cortex and limbic structures. There may also be increased serotonin-1A binding in some areas. These changes have been associated with reduced cognition, altered inhibitory and reward functions, and PTSD symptoms in general.

Treatment of established PTSD

World Federation of Societies of Biological Psychiatry guidelines for the pharmacological treatment of PTSD (Bandelow et al, 2008) list the first line treatments as the SSRIs, the serotonin and noradrenalin reuptake inhibitors (SNRIs), and the calcium channel modulator pregabalin. But, positive findings are not universal. Drugs may not help the individual with all symptoms (they are often more helpful with intrusive thoughts). However, they frequently enable patients to participate in treatment plans and get on with their lives. Benzodiazepines and antipsychotic medications may have a place for non-specific symptoms.

Cognitive-behavior therapy (CBT) has been found helpful (Harvey & Bryant, 1998; Bandelow et al, 2008). Such treatment involves relaxation and stress management techniques, education and cognitive restructuring. The optimal length of a course of treatment is not yet clear; research studies usually involve 10 to 18 sessions. CBT needs to be tailored to the individual as there may be various complicating symptoms such as depression and survivor guilt.

Future treatments will almost certainly include agents which influence chromatin function (epigenetic agents).

Prevention – “debriefing”

In 1983, the concept of “critical incident stress debriefing” was proposed as a method of preventing the adverse psychological consequences of trauma (Mitchell, 1983). In this approach, a single session of “debriefing” was provided, immediately after exposure to trauma. A central feature was ventilation, or unrestrained talking about the individual’s experience. Debriefing was promoted as a simple and economical preventative technique. It became very popular and many mental health professionals, and even volunteers with no mental health training, were eager to be involved in this dramatic and apparently important work.

Debriefing grew in importance in public opinion. In some workplaces, employers provided compulsory debriefing (to prevent being sued at a later date, for having failed to take preventive action).

Some mental health professionals, however, believed single session debriefing, focusing on the reliving and verbalization about traumatic events to be a questionable “therapy”.

In the period immediately after trauma, victims may experience a range of reactions. Some do not want to be involved in discussions, while for others, there is an irresistible outpouring of words and emotion. People seeking to assist victims must be well trained to recognize the different reactions. They must also be assisting for the benefit of the traumatized individuals, and not to gratify their own psychological needs.

Opponents of the debriefing industry have drawn an analogy with physical trauma. The argument is that if trauma results in a gash, the doctor does not keep poking his/her finger into the wound, asking if it still hurts. The doubters conclude that the debriefing industry has the potential to disturb the healing process. No metaphor is perfect and this one is perhaps less perfect than most. Nevertheless, some people do not want to talk about their trauma, they want to forget, and there is concern that compulsory debriefing could lead to unnecessary psychological scars (Zohar et al, 2009).

Controlled trials of debriefing indicate that debriefing was of no benefit (Sijbrandij et al, 2006) and may actually harm patients (Bisson et al, 1997; Mayou et al, 2000). Consequently, authorities have strongly recommended that debriefing should cease and that intervention should not be provided to unscreened populations (McFarlane, 2003).

Attention has been drawn to “social referencing” (Klennert et al, 1986), the concept that the meaning children attach to events is greatly influenced by the reactions of those around them. Drawing attention to the frightening nature of traumatic events can be expected to inadvertently increase the risk of ongoing distress in children. This would be even more likely if conducted in group settings, which is one method by which debriefing was delivered.

“Caution is required in the immediate response to avoid revisiting the traumatic events through ‘debriefing’ as this may compound the trauma. Attention is directed instead to assisting people to recover with appropriate support and acknowledgement of loss and grief.”

Australian and New Zealand College of Psychiatrists

Illustration. This media release of February 9, 2009, followed devastating bush-fires in Victoria (Australia) which cost 200 lives and great loss of property.

Prevention – preferred action

In the immediate aftermath of trauma, the most necessary and suitable assistance is social and practical support (Ehlers & Clark, 2000). Helpers should reinforce to survivors that they are now safe and the situation is under control. Survivors should be provided with food, shelter, transport and emotional support.

Education is recommended. People may benefit from being informed about the “normal reaction” to trauma. For example, visual flashbacks may be misunderstood, by victims, as evidence of psychosis or moral weakness. Some may be distressed by their own reactions, particularly when these have involved loss of control, freezing, or surrender. However, a randomized controlled trial has failed to show any advantage for education compared to debriefing and no-treatment (Sijbrandij et al, 2006). Further work is necessary.

Initiation of active treatment

Treatment should be available when needed. But, it is important not to impair the spontaneous adjustment/recovery which occurs in the majority of survivors. It is unclear when active/intrusive treatment should commence. Initial post trauma screening should be to be done by a trained mental health professional and not left to teachers, police or employers. There is some evidence that screening at 10 days post trauma can identify individuals at risk of PTSD (Ehlers & Clark, 2000). Treatment should be provided when there is delayed adjustment or clear evidence of significant symptoms.

International Medical Corps guidelines

These guidelines for a recent disaster have come to hand - they are an example of a sensible response.



BRIEF MENTAL HEALTH GUIDELINES FOR ASSISTING THOSE AFFECTED BY HURRICANE KATRINA

These guidelines have been summarized by IMC's Mental Health Advisor, Dr. Lynne Jones, for organizations working with Katrina-affected populations. They represent lessons learned regarding mental health activities from IMC's international experiences in disaster response, such as the recent tsunami, as well as best-practices identified by international agency consensus.

The guidelines are provided for first responders, relief volunteers and primary care givers helping those affected by Hurricane Katrina. They focus on the acute phase of the response and are basic principles.

ACUTE PHASE, PSYCHOSOCIAL SUPPORT FOR THE AFFECTED POPULATION:

The whole evacuated population can be expected to be suffering from psychological stress. However the worst affected will be those who have suffered the multiple tragedies of both the hurricane and then being trapped in the city. They will have been terrified, angry, despairing, frustrated as well as suffering all the feelings that follow overwhelming loss. The best way to assist is by attending to their **basic needs through social interventions that provide the following**

- Security** (people are terrified). In setting up temporary accommodation particular attention needs to be paid to the safety of women and children and other vulnerable people.
- Food, water, medical care**

An ongoing, reliable flow of credible information on the emergency and associated relief efforts: People want to know what has happened. What is going to happen next? Where are we going? Who is in charge? Where can I get more information?

Access to information is a right and also reduces unnecessary public anxiety and distress.

Information should be provided on the nature and scale of the emergency; efforts to establish physical safety for the population; the specific types of relief

¹ These guidelines also draw on the Sphere Project's Minimum Standards in Disaster Response <http://www.sphereproject.org>, and WHO Guidelines for Mental Health in Emergencies, http://www.who.int/mental_health/prevention/mnhemergencies/en/

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activities being undertaken by the government, local authorities and aid organizations, and their location.

Information should be disseminated according to principles of risk communication: e.g., it should be uncomplicated (understandable to local 12-year olds) and empathic (showing understanding of the situation of the disaster survivor)

Family reunification:

Establish effective accessible systems for tracing missing relatives and friend and reuniting families

Shelters for those displaced should be organised with the aim of keeping family members and communities together.

Respectful treatment of the dead. Including respectful treatment by media. Families should have the option to see the body of a loved one to say goodbye, when culturally appropriate. If possible, unceremonious disposal of the bodies of the deceased should be avoided.

Access to appropriate religious and cultural support, including mourning activities.

Rapid reestablishment of normal routines and activities as far as possible, these include:

School and recreation for children

Meaningful work or concrete, purposeful, common interest activities for adults and adolescents – such as participation in relief efforts

Participation and consultation regarding organization of shelters, which should include space for recreation and religious practice

Attention to isolated persons, such as separated or orphaned children, widows, widowers, elder persons or others without their families are particularly vulnerable to security risks and greater adjustment problems. They should be identified, supported and given access to all activities that facilitate their inclusion in social networks

ACUTE PHASE: PSYCHOLOGICAL AND PSYCHIATRIC INTERVENTIONS

Self recovery and resilience in the face of disaster are the norm. However a proportion of the population (and some of those involved in the relief effort) will experience **acute mental distress** and will limit their ability to function. They should have access to psychological first aid from health care providers or relief workers.

Psychological first aid is simple, easily taught and involves a practical and compassionate approach based on the following points:

Listen

3

Convey compassion

Do not force talk

Assess needs and ensure that basic needs are met

Encourage but do not force company from significant others

Protect from further harm.

Avoid widespread prescription of benzodiazepines because of the risk of dependence.

A smaller proportion of the population will be suffering from **acute or chronic psychiatric disorders**.

This is a needy and extremely vulnerable group. Particular attention needs to be paid to:

Those who have been in institutions: Those on long term medication

Those with previous disorders vulnerable to exacerbation in the current conditions

All these groups require access to skilled psychiatric care and support. Institutionalised patients including those in custodial care require the urgent establishment of continuing care that attends to their basic needs, respects their dignity and their human rights.

The sudden discontinuation of psychotropic medication, particularly anti-psychotics, antidepressants and antiepileptic medication is harmful, in some cases potentially fatal and should be avoided. Frontline health care workers and primary health care facilities accessible to the displaced population should ensure a supply a continuing supply of such medications and their inclusion in emergency medical kits.

LONG TERM EFFECTS

The long term effects on whole affected population depend very much on how the current crisis is handled now. Taking care of people humanely and treating them with dignity and respect is essential. The failure to do this is as traumatising as the initial hurricane and likely to lead to anger and frustration that will compound and prolong any stress reactions. People are much less likely to need counselling if they are helped appropriately on the issues described above as soon as possible.

Longer term interventions with displaced populations should be based on the following and principles:

- An accurate assessment of the specific community's needs and circumstances
- Collaboration with the community in addressing those needs
- Particular attention to minorities with different needs within the community
- A focus on interventions that foster the rebuilding of normal life and reintegration into society, whether through return to an original living situation or starting anew elsewhere.
- Continuing access to social and psychological services and support as required.

THE MINORITY VIEW

A minority of mental health professionals and social scientists have complaints about the status of PTSD.

The leading complaints are that PTSD is “over diagnosed” and “over treated”, and that unnecessary treatment may do harm rather than good. This introduces the term “medicalization” by which is meant, non-medical problems are wrongly managed using medical concepts and resources, as though they are medical issues (Summerfield, 2001; Pupavac, 2001; Lerner and Micale, 2001; see in Chapter 32).

Ethan Watters, in his 2010 book, “Crazy like us: the globalization of the American psyche”, has a chapter, ‘The wave that brought PTSD to Sri Lanka’, in which he tells of the aftermath of the tsunami which hit Sri Lanka in 2004. It makes upsetting (not quite PTSD level) reading, describing how Western trauma experts invaded the country and applied Western “treatments” where they were unnecessary, and culturally damaging.

Social scientists Horwitz and Wakefield (2011) drew attention to earlier versions of the DSM and state that “trauma has moved from the battlefield into the realm of everyday life”.

The treatments of PTSD have received criticism. “At this time, we can make no judgment about the effectiveness of most psychotherapies or about any medications in helping patients with PTSD” (Institute of Medicine, 2007). Some reports state that traumatized soldiers who did not enter treatment had better outcomes than those who received treatment (Milikan et al, 2007). There are also reports that treatment can worsen

symptoms and interpersonal problems (McHugh, 2008). This may be because messages are given that normally painful emotions are ‘evidence’ of sickness/disorder which require treatment. In this way there may be focusing on and retention of symptoms which may otherwise have dissipated (Horwitz and Wakefield, 2011).

Many of the arguments raised by critics of PTSD diagnosis and treatment are persuasive. However, clinical experience is that PTSD is a distinct disorder which can have serious effects on the individual, family and community. Separating normal from pathological reactions remains a challenge. More work is needed to ensure accurate diagnosis and appropriate management can be provided.

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