

Posttraumatic stress disorder: what have we learned in 3000 years?

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Received 12 February 2013; Accepted 14 February 2013

Key words: trauma, recovery, therapy, prevention, innovation, history.

In his 1994 masterpiece, *Achilles in Vietnam*, Dr. Shay taught us that posttraumatic stress disorder could, at least in part, be the result of "betrayal of what's right," informed by the lessons of Homer's *Iliad*, written nearly 3000 years ago.¹ The timeless lessons brought on by the ancient Greek stories of Ajax, Achilles, and Odysseus indicate great insight into the human condition and the psychological consequences of trauma.² Since then, posttraumatic stress disorder has been known by many names, the most well-known examples being "soldier's heart," as well as "war neuroses" and "shell shock." In each case, the disorder was thought to be something that profoundly affected people, sometimes even on a physical level in the example of soldier's heart, also known as "Da Costa's Syndrome," which was thought to possibly be a cardiac disease brought on by combat stress.³ Most people, when asked, will certainly express a belief that severe trauma, whether related to combat or otherwise, severely changes a person. Most people agree that it is "simply common sense" to believe that "no sane person could be the same" after such an experience, but the understanding of trauma and how it affects the human organism typically ends there.

Treatment for posttraumatic stress disorder throughout history has largely revolved around psychotherapy, processing through narrative expression, and attempting to understand and cope with the different sort of person that someone becomes after severe trauma. In general, the experience has traditionally been that these patients are extremely difficult to treat, and many mental health professionals give off a certain sense of hopelessness, seeming to accept the idea that after any severely traumatic experience, a person will never "be the same."

In the last decade, however, there has been an immense explosion of knowledge regarding posttraumatic stress

disorder, its causes, and possible treatments. It has been fairly well established that there are measurable changes in the hypothalamic pituitary axis as well as the hippocampus, and a small number of medications have been found to be efficacious, beyond simply clouding the sensorium in order to reduce symptom severity. Prazosin, the humble blood pressure medication, has been found to have a significant positive impact on the nightmares that typically torment posttraumatic stress disorder sufferers, while possibly even improving overall sleep quality.⁴ Some antidepressants have been found to be helpful with anxiety and even the irritability so often found in these patients, enabling some patients to return to many activities that they have found completely impossible to tolerate prior to treatment. Psychotherapy for posttraumatic stress disorder has also advanced substantially. Cognitive behavioral therapy modalities, specifically cognitive processing therapy and prolonged exposure therapy, as seen in this issue, have shown significant efficacy in reducing the symptoms of posttraumatic stress disorder, and the data supporting this are only increasing. While it continues to be controversial whether or not these therapies can be effectively added in with other interventions to bring about any cumulative benefit, the research to answer this question has certainly begun, and some early results are encouraging.

Furthermore, even greater insight is being gained into the pathogenesis of posttraumatic stress disorder, and there is even some hope of secondary prevention with pharmacologic intervention. Some of the highlights in this issue will be that the type of trauma matters, potentially making a difference as to the severity and the course of posttraumatic stress that follows, perhaps someday even pointing to what treatments may be more effective. It is also noted that attention and cognitive deficits may be demonstrable as part of posttraumatic stress disorder, independent of the traumatic brain injury that often accompanies them. Electroencephalographic changes have been observed in posttraumatic stress disorder sufferers,

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and it is also noted that secondary prevention of posttraumatic stress disorder may be possible with low-dose hydrocortisone that is first administered in the hours following a traumatic event.

While all of these emerging data are extremely exciting, and even encouraging, they also underline the importance of remembering from whence we came. It's tempting to focus on biological phenomena and empirical data, and reduce an entity such as posttraumatic stress disorder down to quantified biological brain changes that can be measured with cognitive testing and instruments such as electroencephalography. But continue for a moment, to entertain the notion that at its core, posttraumatic stress disorder may still very well be caused fundamentally by "a betrayal of what's right." When thinking of posttraumatic stress disorder sufferers following the disaster at Chernobyl, can more of a fundamental betrayal of any person's concept of what's right than a severe dose of radiation poisoning be imagined? An invisible, mysterious enemy that cannot be fought in any way, hurting the body all over from the inside, the potential consequences of which are limited only by people's imaginations? Radiation poisoning is a force the strikes at one's DNA—at the very self! If we consider how horrified most people are, educated or otherwise, by the prospect of being irradiated, it seems hardly surprising that victims of a disaster such as this would present with severe posttraumatic disorder, with some symptoms that appear to be somewhat unique to the traumatic mechanism.

Also consider the increasing evidence that measurable changes may be noted in the brain, and that measurable cognitive deficits may be demonstrable in

the posttraumatic stress disorder sufferer, independent of any other neurological pathology. Is this not reminiscent of Da Costa's thinking that severe combat-related trauma during the American Civil War may have brought about the observable cardiac phenomena known as "soldier's heart?" Is it possible that what we're learning, 3000 years after the writing of Homer's *Iliad*, is that in the context of a severe enough "betrayal of what's right," significant changes can be brought about not only in the human being's mind, but also the human being's very biology? With mind and body appearing to be increasingly inseparable, such severe trauma is not discriminating. It hurts us everywhere.

With that in mind, is it possible for victims of trauma to ever return to any semblance of their former selves? That is certainly difficult to say, but considering the new knowledge that is coming about with every passing year, some of which will be found in this very issue, as a clinician I am becoming increasingly encouraged all the time.

References

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