



What We've Learned In 160 Years Of Treating PTSD

Photo via simpleinsomnia - Flickr Creative Commons

by **Robert Wilbur and Martha Rosenberg**

on January 28, 2015

Morris was not the same man after returning to civilian life with an honorable discharge and a glowing letter of commendation from his captain. He slept on the floor in a bedroll, with his head on a bunched up fatigue jacket. Under the jacket was a pistol from an enemy officer he had killed. Morris was constantly anxious, tremulous, and drenched in perspiration, with a racing heart and shortness of breath. Sometimes he woke up screaming.

Morris had not fought in the Middle East, but in Europe. He was a veteran of the Battle of the Bulge and he fought to the very end of the war. Now he was suffering the consequences: they called it Battle Fatigue. Today his symptoms are called post-traumatic stress disorder (PTSD), though the condition has paraded through medical literature under a number of other names. All of them are now recognized as essentially the same psychiatric disorder in peace and in wartime: a manifestation of anxiety, sometimes crippling. It is convenient to classify PTSD as an anxiety disorder with “physical” (palpitation, difficulty breathing, sweating, etc) and “mental” symptoms (nightmares, fearfulness, mutism etc).

Credit for the first scientific study of PTSD — although he did not use that term, which came later — goes to [Jacob Mendes Da Costa](#), a professor at Jefferson Medical College in Philadelphia and a military surgeon in the Union Army during the Civil War.

During the war, Da Costa was investigating why some soldiers were unable to take to the field because of debilitating autonomic symptoms like palpitations, shortness of breath, chest pain, fatigue and diarrhea which, upon examination, linked to no physiological abnormalities. The symptoms were accompanied by central nervous system disorders of



As Da Costa lectured and wrote about the syndrome, it became known as “soldier’s heart” in the military, though doctors favored “Da Costa’s Syndrome.”

The peripheral symptoms Da Costa described — left-sided chest pain, palpitations, sweating, breathlessness and fatigue during exertion, sweating — were also observed in [British soldiers](#) between 1864 and 1868 and attributed to their heavy knapsacks tightly strapped to the chest, constricting the action of the heart. In the U.S., Da Costa’s Syndrome was thought to be linked to overexertion, lack of sleep and bad food during the Civil War.

What was the treatment for patients with “soldier’s” or “irritable heart” over 150 years ago? Remedies to calm sufferers were few: alcohol and opium derivatives, notably morphine and laudanum — an extract of opium in alcohol. (The sedative barbital came on the market in 1903 and phenobarbital, in 1912.)

The Age of Neurasthenia

The decades between the Civil War and World War I were a period of relative peace...except for sufferers of Da Costa’s Syndrome, which was beginning to acquire new names. In [1869](#) the American neurologist George Miller Beard coined the term “neurasthenia” to denote a condition with symptoms of fatigue, anxiety, headache, neuralgia and depressed mood, and the term grew in popularity. The term carried a slight pejorative overtone because everyone, except frail ladies, was expected to work in those days. Author [Emily Dickinson](#) was famously said to suffer from the related condition “nervous prostration” and neurasthenia is still a diagnosis in the World Health Organization’s International Classification of Diseases (and the Chinese Society of Psychiatry’s Chinese Classification of Mental Disorders), though it’s [no longer](#) included in the American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders.

Unlike war-related irritable heart, neurasthenia was attributed to the “fast-paced stresses” of modern civilization such as the telegraph and steam power. According to the American philosopher, psychologist and physician William James, who dubbed the condition “[Americanitis](#),” people were born with a finite amount of nervous energy that controls one’s “health, vigor, and rational thinking.” Once their energy stores were depleted, neurasthenia could take hold, appearing in the form of agitation, fatigue, short attention span, bodily pain, worry and other ailments.

Patients with neurasthenia were advised to take to their beds and avoid exertion. Like sufferers of Da Costa’s Syndrome, they were given morphine and laudanum, which were available over the counter at pharmacies along with barbiturates until the 1914 Harrison Act put them on prescription. Many potions and elixirs also surfaced to [capitalize](#) on Americanitis by selling products like Neurosine with cannabis or “hop bitters” an alcohol-heavy tonic marketed to men.

World War I

World War I brought a new perspective and name for Da Costa’s Syndrome, which came to be called “shell shock.” An astounding [80,000](#) WWI soldiers suffered shell shock’s symptoms of hysteria, heart palpitations, contractures, limping, depression, disorientation, nightmares, insomnia and sudden blindness, deafness and paralysis. Soldiers who had not come under fire or even been *near fire* also got “shell shock” which cast doubt on the theory that it resulted from the effect of blast waves on the brain.

Sadly, in WWI, shell shock symptoms were sometimes interpreted as *cowardice*. At least 300 British and Commonwealth soldiers [were executed](#) for the “crime” of what we now know is PTSD. Shaming, physical “re-education” and pain were also used and “treatment” included the application of an electric current to the pharynx of a soldier to “cure” a victim from terror-induced mutism or to the spine of a soldier struggling to walk.

Another treatment was a kind of early aversion or flooding therapy, which forced sufferers to endure their worst fears like placing a soldier afraid of being alone in a solitary room or a soldier with agoraphobic-like fear of open spaces near a window over a road. A [New York Times](#) op-ed published in January 2015 by a former Marine infantry officer finds prolonged exposure therapy, a cousin of flooding, not helpful with PTSD.

Once it was determined the shell shocked soldiers did not have organic damage, psychotherapy was also sometimes offered however, as the military history source [Spartacus](#) reports, “Many doctors refused to use this form of therapy on Shell shock victims as it sometimes took patients years to recover and very few returned to the war.” The available drugs for shell shock were similar to those for neurasthenia — morphine, laudanum and barbiturates.

World War II and Korea



Jones and Veronica Mellersh who studied British citizens suffering anxiety from the terrifying V-raids toward the end of the European war.¹

The researchers found that the blood lactate of anxious patients, a normal product of muscular exertion, was significantly higher when patients exercised than in the controls who were not exposed to the V raids. Significantly, this was a delayed and possibly permanent result of their exposure to the V raids or “PTSD.”

Subsequently, the American team of [Mandel Cohen and Paul Dudley White](#) noted that during exercise, abnormalities became greater in those suffering from De Costa Syndrome. The experiment was simple: subjects were told to step on and off a box for as long as they could, and when they could do so no longer were asked: “What stopped you?” The answer turned out to be palpitations, shortness of breath and other symptoms of anxiety or, as Cohen and White called it, neurocirculatory asthenia (NCA) which became yet another term for the condition. Most army psychiatrists, however, favored the term “battle fatigue.”

As the Korean War followed (in which the term “battle fatigue” was still in use) and then the Vietnam War (in which it was called “[In Country Effect](#)” and PTSD, for the first time) there was not much progress advancing Jones and Mellersh’s or Cohen and White’s research until Ferris Pitts, Jr. and James McClure, Jr., published an ingenious experiment in the [New England Journal of Medicine](#) in 1967. The researchers infused lactate into an arm vein of normal controls and patients suffering from chronic anxiety and found that, whereas the lactate had no effect on controls, patients with anxiety “neurosis” experienced full-blown panic attacks!

Up to the Present

Of course since the Vietnam War, both war and war-related PTSD are still a U.S. medical and social scourge contributing to drug addiction, homelessness, suicide, permanent emotional and psychiatric conditions and the phenomenon sometimes called the “walking wounded.”

Whether they participated in Vietnam or more recent wars, many veterans’ PTSD has clearly prevented or delayed their return to the workaday world. At an anonymous military PTSD self-help group that one of the authors (Martha) attended in Charleston, West Virginia, a participant said his PTSD manifested as “hypervigilance” — always being on the lookout for an IED. Several participants said their conditions were getting worse not better over time.

“I was a police officer after Vietnam, and it never dawned on me when I stuck a Magnum in someone’s face and told them I would kill them and meant it, that it was the PTSD talking,” said Ted, a group regular who now works with other veterans suffering from the condition. His PTSD got so bad, Ted told the group, he found himself on a bridge contemplating a jump. “You can’t shoot at people and be shot at by people, and *not* get PTSD.”

The period between the end of the Korean war and the Iraq wars saw an explosion in drug development. The most important categories of drugs used for PTSD included:

Benzodiazepine (Valium, Klonopin, Librium, others)

First-generation antipsychotics (Thorazine, Haldol, others)

Second-generation antipsychotics (Seroquel, Zyprexa, others)

Selective Serotonin Reuptake Inhibitors [SSRIs] (Prozac, Zoloft, others)

During the Afghanistan and Iraq wars the military relied on a standard three-drug cocktail for PTSD of Zoloft, Klonopin and Seroquel, which became the subject of debate — some believing veterans were overmedicated and that the pricey drugs reflected government/Big Pharma [conflicts of interest](#). Prazosin (Minipress) a drug that treats hypertension, has also been used to help veterans with PTSD-related insomnia and nightmares.

In the last few years, there is revived interest in the use of marijuana and [psychedelic](#) drugs for PTSD. [Hyperbaric oxygen](#) therapy, in which a patient breathes in oxygen at very high pressure, is also being researched. Psychotherapy such as cognitive-behavioral, insight-orientated therapy, group therapy and 12-step support groups may also be effective in PTSD.

While 160 years of treatment for PTSD have provided no sure-fire treatments, they have contributed to what we *do* about the disorder. PTSD is an acquired disease of the nervous system not a question of malingering. Whether it be soldier’s heart, De Costa’s Syndrome, PTSD or neurasthenia, PTSD is real.