REVIEW ARTICLE

Prognosis of PTSD in Treated vs. Non-Treated Groups

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ABSTRACT

Post-traumatic stress disorder (PTSD) is a type of anxiety disorder that develops after the exposure to an extreme degree personal or impersonal traumatic experience/ event. The symptoms of PTSD include psychiatric disturbances, social dissociation, physical features and behavioral changes. This condition can be acute, chronic or delay in onset, depending on when the symptoms first appeared after exposure to the traumatic event.

PTSD has a natural tendency to heal (or remit) on its own. Does this invalidate all our efforts in treating this condition? The answer to this question can be obtained by comparing the prognosis of PTSD in people who got treated and those who didn't receive any treatment.

In untreated victims, the remission can be as high as 82% or as low as 9%. Factors that govern poor prognosis include the greater intensity of traumatic event, time elapsed since first encounter, female gender, younger age, and illiteracy. PTSD prognosis in treated patients, on the other hand, is far superior to non-treated individuals. Treatment even improves the outcomes in refractory cases of PTSD. Moreover, treatment modalities that have shown promise in improving PTSD prognosis include psychiatric interventions, psychotherapy and pharmacotherapy. All this proves the superiority of treatment in improving PTSD status in the sufferers.

KEY WORD

PTSD, Trauma, Treatment

INTRODUCTION

The first mention of PTSD dates back to 1871, when Dr. Jacob Mendez Da Costa described a constellation of symptoms in the veterans of war. Symptoms that Dr. Jacob described included hyper-arousal state, tachycardia, breathlessness and anxiety. That condition was first termed as "soldier's heart syndrome", later named after the discoverer as "Da Costa Syndrome" [1] [2]. After the world war I, this condition was named "shell shock syndrome" when the war veterans presented with symptoms like tremors, anxiety, staring eyes, paralysis, blindness and deafness of unknown origin [3] [4]. Later in the 1900s, the American psychoanalysts coined the term "traumatic neurosis" for this condition, which was finally termed as "post-traumatic stress disorder (PTSD)" [5].

The Diagnostic and Statistical Manual of Mental Disorders (DSM) categorizes PTSD as an anxiety disorder that may surface in an individual after he is exposed to a traumatic event or stressor like assault, war, accident, act of kidnapping, terrorism, torture and so on [6]. In addition to personal reasons or experiences, PTSD can hit a rather larger group of community following a natural disaster like earthquake, tornado, hurricane and flood [7]. As for the symptoms of PTSD, they can vary greatly depending on variables like the intensity of traumatic event, time elapsed since exposure to traumatic event, cause of event and provision of treatment provided or not [8]. At any rate, the most common symptoms faced by PTSD sufferers include derealization, anxiety, amnesia, poor concentration, irregularities in sleeping patterns, social dissociation and related physical symptoms like tachycardia and tremors [9]. These symptoms may resolve spontaneously or may worsen over time. The symptoms spanning over 3 months or less make up the group "acute PTSD". While, PTSD lasting for 3 months or more is termed "chronic PTSD". Finally, a third type, in terms of time of onset and duration of symptoms, is the "delayed-onset PTSD" in which the symptoms appear six months or more after the first encounter with traumatic experience/ event [12].

The exposure to traumatic events of varying intensities is somewhat inevitable in one's life. According to some estimates, at least 51.2% women and 60.7% men face at least one traumatic event once in their life time [10] [11]. When the

lifetime prevalence of exposure to traumatic events is so high, it would be quite natural to speculate that prevalence of PTSD is higher in a community than it appears- it may be an "iceberg disease". In a condition with such high incidence and prevalence, it would be interesting to explore the points that would elucidate how a disease progresses (natural history of the disease).

The purpose of this review article, therefore, is to establish the effect of treatment and no treatment on the prognosis of PTSD. We'll further discuss how different factors alter the outlook of PTSD after treatment or no treatment. A complete understanding of these factors may add to our current understanding of the disease. Understanding these factors may help us answer the fundamental questions like "Why do some people develop PTSD while others do not?" or "Why PTSD in some people resolves spontaneously while others respond poorly to even rigorous treatment?" and so on. Once we've in depth understanding of these variables, it may then help us complete the natural history of PTSD, which is still poorly understand. Moreover, a better understanding of these factors may change our perspective of the disease and its ways of treatment/ management.

Discussion

It is a general understanding that PTSD has a natural tendency to heal or go away on its own. Does that make all the current psychiatric treatments employed invalid and useless? This is what this review article is meant to explore. In the subsequent section we'll discuss the difference of treatment and no treatment on the outlook of PTSD. We'll further discuss the variables in both groups (treatment and no treatment) that might change the outlook PTSD.

PTSD Prognosis in Untreated Victims

One of the most important variables that determines the severity of symptoms in untreated victims is the severity of trauma, as occurs in war victims [13-16]. War trauma makes untreated PTSD victims more prone to follow a chronic course of the disease. The validity of this act was proved by Priebe et al, 2009. Researchers interviewed 264 subjects from former Yugoslavia. All of the interviewed individuals suffered PTSD of varying degree during or after the war, but never received any treatment for their PTSD during the course of their illness. All interviewees were approached within 11 +/- 3 years of their traumatic experience (war). Thorough analysis of the results showed that the prevalence of PTSD in interviewees was 84%, which is quite high for an event that has occurred so long ago. Therefore, researchers concluded that lack of treatment alongside severity of traumatic event are the basic predictors of long term prognosis of PTSD[17].

On an average, females are 2 times more likely to suffer from PTSD as compared to males i.e. there is 2:1 female to male ratio. This ratio includes an overall male and female prevalence of 13% and 27% respectively. This ratio changes with age and by the time females age i.e. become more than 65 years old, the female to male ratio almost becomes the same i.e. 1.15:1 [18]. Moreover, results from different epidemiological studies have shown that, in the absence of treatment, the persistence of PTSD is higher in younger females than in males of same age group [19,20].

Spontaneous remission of PTSD is believed to be time dependent with the condition eventually getting better over time. But, in reality things are a lot different. The actual remission of PTSD symptoms is not as high as one might think. PTSD symptoms might persist in sufferers several decades after the traumatic event. Dana et al, 2005 studied the long term consequences of traumatic experience on 59 former political detainees in Romania and compared their clinical picture with 39 normal individuals. The sufferers didn't receive any treatment for their condition. Researchers found that at least 1/3 individuals had the symptoms of PTSD even after four decades of their first encounter with traumatic experience [21]. Another study that shows the long term outlook of PTSD in untreated victims was done by Kuch et al, 1992. The study included judging of case files of 124 Jewish Holocaust survivors. It was found that most of the people were untreated and at least 46% of the sample population showed symptoms of PTSD [22].

Another factor that determines the prognosis of PTSD is the rate of remission with specific treatments employed. While it is true that the long term remission of PTSD is as high as 92% in general population with mild PTSD [23], but it can also be as low as 8% in some instances [24]. Furthermore, it has been proved through repeated studies that a set of variables cause a downhill in the percentage of PTSD sufferers that might face spontaneous remission with time. Such variables include severity of traumatic incidence, younger age, illiteracy and lack of treatment. Such variables can significantly compromise the spontaneous remission in PTSD victims [23-28].

PTSD PROGNOSIS IN TREATED VICTIMS

As per general perception, PTSD can follow two courses over time. It can either become chronic or resolve spontaneously even in the absence of treatment. But, what is the effect of using several interventions (psychiatric, pharmacological and psychological) on PTSD prognosis? Are the current treatments any superior to no treatment in improving the outlook of PTSD? Do these interventions shorten the course and improve the prognosis of PTSD?

Psychiatric interventions, like cognitive behavioral therapy (CBT), are proven to improve PTSD prognosis in slow remitting cases [29-31]. A study in this respect was conducted by Isaac et al, 2013. The researchers tried to establish the efficacy of interventions, like CBT, in treating the symptoms of PTSD. The study included 957 individuals that reported to an Emergency Department (ED) after facing a traumatic event. Those individuals were assessed for their psychological status ten day, 1 month, 5 months, 9 months and 15 months post-trauma. Out of the sample population, 125 people received CBT sessions, spanning over a period of 12 weeks, between 1 to 9 months of trauma. Based on their observations, researchers divided the participants (whole sample) into three groups. The first group was labeled as "rapid remitting group" that included 56% individuals who showed rapid decrease in symptoms within 1 to 5 months. Whereas, 27% showed progressive decrease in symptoms over the period of 15 months (slow remitting). The remaining 17% didn't show any improvement in their symptoms (non-remitting). Furthermore, the study also evaluated the efficacy of psychiatric modalities in improving the status of patients. Results showed that provision of psychiatric treatment improved the rate of recovery in slow remitting patients and didn't have much effect on the other two groups [32]. This shows that psychiatric interventions can be used as an effective tool in improving the outlook of disease, especially in slow remitting cases of PTSD.

Interventions like CBT, PE and pharmacotherapy have shown to

improve PTSD outlook in several clinical studies [33-38]. Shaley et al, 2012 studied the relative efficacy of different treatment methods, including prolonged exposure therapy (PE), cognitive behavior therapy (CBT) and the use of drugs like escitalopram, selective serotonin reuptake inhibitors (SSRIs)/placebo. Some victims were kept in the waiting list for 12 weeks while for others, there were twelve weekly sessions in which the victims/survivors of traumatic events received therapies like PE, CBT or double blinded treatment with 2 tablets of escitalopram, or SSRI/placebo. Results concluded that after 5 months, almost 22% individuals getting PE therapy had PTSD as compared to 57% individuals that were on the waiting list. Similarly, after 5 months, only 20% individuals who received CBT showed PSTD symptoms as compared to almost 59% individuals on waiting list. The use of drugs/placebo has no effect on the prevalence of PTSD symptoms in survivors. After 9 months, 21% individuals that got PE therapy showed PTSD as compared to 22% individuals that were on waiting list. It was concluded that PE, and CBT can significantly improve PTSD prognosis in victims.[39]

If individual treatments improve the outlook of PTSD, is there a chance that combing some treatment regimens would further improve the prognosis? This question might be answered by a case report of Markowitz et al, 2007. The report included an elderly war veteran who had chronic PTSD- as he remained untreated for 60 years. The techniques employed for the treatment of that veteran included a combination of graded exposure to psychotherapy and medications. Results showed that the victim under study showed significant reduction in the symptoms of PTSD[40].

If the sufferers receive treatment soon after the trauma, the long term prognosis and remission of PTSD tend to improve. This fact is supported by a study conducted by Ouimetter et al, 2003. The study included 100 males that had substance use PTSD. Those males attended the treatment sessions and follow up sessions 1, 2 and 5 years later. Some individuals received treatment in the first 3 months after the trauma, while others got treatment within 12 months. Individuals who received treatment in the first 3 months after trauma showed enhanced long term remission of symptoms as compared to the group that received treatment after a delay[41].

One research shows the improvement in prognosis and rapid remission of symptoms with the use of SSRIs like Sertraline. It was found that Sertraline is much superior to placebo in treating the symptoms of PTSD. The overall remission of symptoms improves with the use of this drug- further validating the efficacy of using pharmacotherapy in improving PTSD prognosis[42].

CONCLUSION

The overall prognosis and course of PTSD depends on a number of variables including severity of trauma, age, presence or absence of therapy and type of therapy used. In most cases, untreated PTSD remits on its own. But in severe cases, untreated PTSD can lead to chronicity. The progression, prognosis and remission of PTSD significantly improve with the use of psychiatric, pharmacological and psychological interventions.

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