The Effects of Post-Traumatic Stress Disorder on Sleep Patterns

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I have neither given nor received help on this work, nor am I aware of any infraction of the Honor Code.

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Post-Traumatic Stress Disorder (PTSD) is a psychiatric condition that can occur after experiencing a traumatic event, injury, or witnessing death (Kobayoshi, Cowdin, & Mellman, 2012). Post-Traumatic Stress Disorder mostly effects people serving in the war, a sexual trauma victim, or childhood abuse victims. Post-Traumatic Stress Disorder is often seen in Veteran’s when returning from war. However, in the army it is described as a negative factor to be diagnosed with PTSD. Those that experience this disorder have symptoms of flashbacks from the war, insomnia, nightmares, aggression, and emotional break downs. PTSD is a very serious disorder that can be very hard to treat with some patients. The most common symptoms that a person can experience when dealing with Post-Traumatic Stress Disorder is disturbed sleep.

Post-Traumatic stress disorder and disturbed sleep have severe overlap with each other that increases the symptoms of this disorder (Pfeiffer et al., 2017).

When experiencing Post-Traumatic Stress Disorder, it is most common to see trauma related nightmares within a month of experiencing a serious injury or violent act (Kobayoshi et al., 2012). It is difficult for Veteran’s to face the stigma surrounding PTSD that has caused soldiers to give up their military careers and create a barrier on whether or not a soldier should seek treatment or not (Buchanon, Kemppainen, Smith, Mackain, & Cox, 2011). Studies have shown that returning combat veterans are at greater risk of decreases in their psychological wellbeing (Buchanan et al., 2011). Also, studies have also found that spouses were unaware and uneducated about the effects and symptoms Post-Traumatic Stress Disorder can have on their loved ones (Buchanan et al, 2011). Although, there has been research studies trying to find treatment to ease the symptoms and disturbed sleep problems of PTSD. However, these studies have had difficult with treatment as there was no change in nightmare frequency between the time periods of before and after the study (Gellis & Gehrman, 2011). Researchers have classified three clusters of symptoms to better understand this disorder. They are characterized as re-experiencing, avoidance, and hyperarousal (Kobayoshi et al., 2012). Furthermore, Post-Traumatic Stress Disorder is a continued battle of facing stereotypes, education on the subject, and finding treatment that is effective to help these Veteran’s. With this constant battle Post-Traumatic Stress Disorder remains one of the most prevalent mental health disorders that Veteran’s and people dealing with trauma face (Buchanan et al., 2011).

## Awareness of PTSD

In many PTSD cases there is a disconnect between the patient and education of what Post-Traumatic Stress Disorder is. PTSD is often seen as a negative aspect of what can happen to a veteran, that leads to denial of wanting to accept that have a disorder because of the stigmas that surrounds it. Many Veterans try to deal with the issue on their own that leads to marital problems. Also, during these situations spouse feels as if they are unable to help because they are just not informed after the effects of Post-Traumatic Stress Disorder. As many Veterans return home from serving their country, they will face physical and psychological aftereffects of their combat experience (Buchanan et al., 2011). It’s often hard for spouses to notice difference in their soldiers after deployment, because sometimes it takes months before these symptoms appear within the Veteran (Buchanan et al., 2011). So, spouses must look for changes in behavior and daily routines, such as disturbed sleep and nightmare that are closely linked to Post-Traumatic Stress Disorder (Buchanan et al., 2011). Sometimes after realizing that there is a problem with their soldier it is hard to seek treatment, because of the barriers of harming their military career (Buchanan et al., 2011).

**Disturbed Sleep**

Post-Traumatic Stress Disorder is closely linked to Disturbed Sleep. During these disturbed sleeping periods patients experience sleep impairment that includes insomnia, nightmares, rapid eye movement sleep fragmentation (Kobayoshi et al., 2012). Sleep problems have been linked to immune function and depressive symptoms (Kobayoshi et al., 2012). There have been treatment options of disturbed sleep such as, Cognitive Behavioral Therapy. Cognitive Behavioral therapy involves techniques to increase relaxation during nighttime hours, decrease behaviors that cause the inability to sleep, and to create learned associations between the bed and sleep (Gellis & Gehrman, 2011). They use these techniques to help treat initial sleep problems related to stress, psychiatric illness, and medical factors (Gellis & Gehrman, 2011). This treatment was available to veterans with long standing PTSD that have been battling this disorder for ten years were recruited from mental health and sleep disorder clinic’s (Gellis & Gehrman, 2011). Some treatment techniques used on these subjects were sleep diaries, five-week sessions of CBT-I, and sleep compression (Gellis & Gehrman, 2011). This study found improvements in sleep-wake time, total sleep time, overall insomnia severity in Veteran’s dealing with PTSD for over ten years (Gellis & Gehrman, 2011). Even though, there was improvements the majority of patients still had significant problems of insomnia and nightmares after treatment (Gellis & Gehrman, 2011). So, they have been improvements dealing with the chronic sleep problems that come with Post-Traumatic Stress Disorder many patients are still dealing with symptoms for many more years following treatment.

# Women Facing PTSD

Current studies have shown that women experience Post-traumatic Stress Disorder symptoms differently than men. Women are twice as likely to develop PTSD than men, after being exposed to a trauma (Kobayoshi et al., 2012). This has been proven due to the differences in sex hormones that also affect the menstrual cycle to influence PTSD symptoms, such as influence over disturbed sleep (Kobayoshi et al., 2012). Due the hormone imbalance women are more likely than men to experience the inability to fall asleep, nightmares, and maintain a health sleep schedule (Kobayoshi et al., 2012). Although, women experience more sleep problems that men, women have very little respiratory problems during sleep that can cause them to continuously keep waking up (Kobayoshi et al., 2012). Also, while women had more sleep problems that men, a change in sleep patterns is only shown in men who experience a reduction in deep sleep (Kobayoshi et al., 2012). Ultimately, women experience PTSD at a higher rate than men, yet men are more exposed to traumatic events than women (Kobayoshi et al., 2012). Although, men see more traumatic events they are less likely to be readmitted than women to a hospital or medical treatment facility after receiving a PTSD diagnosis (Pfeiffer et al., 2017). Furthermore, men are exposed to trauma more than women, however women have a higher improvement rate in treatment of Post-Traumatic Stress Disorder (Pfeiffer et al., 2017). This study analyzed the effects of sleep duration and physical health of men and woman to better understand how individuals are influenced by the symptoms of post-traumatic stress disorder (Kobayoshi et al., 2012).

##### **Men Dealing with PTSD**

The purpose of this study was to analyze sleep structures in male veterans with and without any psychiatric comorbidities from the Department of Psychiatry (Yekin, Aydin & Ozgen, 2010). This study also looks at patients dealing with major depressive disorder along with the symptoms of post-traumatic stress disorder (Yekin et al., 2010). The results showed that most males have issues initiating sleep, maintaining sleep, and decreasing their numbers of awakenings (Yekin et al., 2010). Researches found that disturbed sleep is the most significant when analyzing sleep disturbances in PTSD (Yekin et al., 2010). In this study they used a sleep laboratory and conducted EEG on patients to better understand their symptoms of long-standing post-traumatic stress disorder (Yekin et al., 2010). This study concluded that all patients had combat related post-traumatic stress disorder, a high degree of disturbed sleep, and REM sleep dysfunction.

##### **Virginia Veterans**

In Virginia there is currently many veteran’s seeking treatment, although the cost for treatment is continually rising (Pfeiffer et al., 2017). With the cost of treatments rising current data has shown that African American and Latino veterans treatment rates have decreased (Pfeiffer et al., 2017). There are more veterans seeking care for post-traumatic stress disorder, yet researchers are finding the veterans who engage in care are not responding to treatment (Pfeiffer et al., 2017). This study analyzed over 2,237 veteran’s diagnosis with trauma related PTSD (Pfeiffer et al., 2017). These Veterans have a lower quality of life because of disturbed sleep symptoms (Pfeiffer et al., 2017).

#### Discussion

All these studies found that post-traumatic stress disorder is a disorder that everyone is still becoming familiar with. While PTSD has been shown in Veterans for years it is still a disorder that scientist and researches are trying to understand better to come up with the best treatment possible. The treatments currently being used on individuals are showing a disconnect between men and females. So, now there are studies just to analyze the affects of PTSD of women and men, then comparing those results. Although, more Americans are becoming aware of the symptoms of PTSD many still refuse to seek treatment because of the stigmatisms attached to this disorder. Also, while in Virginia the rates of veteran’s looking for a cure are increasing, the steadily rising cost of treatment, is not helping this medical situation. All these studies are in comparison with each other about the effects of disturbed sleep on post-traumatic stress disorder. Disturbed sleep leads to the effects of insomnia, sleep-wake cycle, impaired sleep, decreased sleep time, and poor sleep efficiency.

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