Posttraumatic Stress Disorder and Suicide Risk

By Carlo A. Giacomoni, PsyD, ABPP

Abstract

Suicide is currently the 10th leading cause of death in the United States, and its crude mortality rate has been steadily increasing in recent years. Though suicide is commonly caused by depression, research has shown that post-traumatic stress disorder (PTSD) is also a common risk factor for suicide. It is increasingly important for mental health professionals and medical providers to be aware of the impact that PTSD has on suicide ideation and attempts, and to be aware of the treatment options available for PTSD.

Introduction

Nearly 45,000 people died by suicide in 2016. Suicide is the 10th leading cause of death in the United States (Drapeau & McIntosh, 2017). Moreover, the crude mortality rate of suicide has increased 29.9 percent between 2000 (10.7 per 1000,000) and 2016 (13.9 per 100,000) (Drapeau & McIntosh, 2017; Miniño et al., 2002). By comparison, the top two causes of death have decreased by 23.8 percent (diseases of heart) and 7.9 percent (malignant neoplasms) during that same period of time (Drapeau & McIntosh, 2017; Miniño et al., 2002). The almost 30 percent increase in suicide
deaths is an alarming indication of the growing concern that suicide plays in our society, and that mental health professionals need to keep working to educate the public about suicide and its prevention.

Suicide is typically attributed to depression. This is understandable, given that thoughts of death and suicide are a specific symptom of major depressive disorder (APA, 2013). Research has found, however, that post-traumatic stress disorder (PTSD) is also a significant risk factor for suicide attempts and deaths.

In an early study with a community sample, Davidson et al. (1991) found that 19.8 percent of people with PTSD had a reported suicide attempt and were 14.9 times more likely to have attempted suicide that people without PTSD. More recently, Tarrier et al. (2004) found that 9.6 percent of civilians in a clinical trial for PTSD treatment had attempted suicide, and that two-thirds of these people had made multiple attempts. By means of comparison, Kessler et al. (1999) found that only 4.6 percent of the general population reported having made a suicide attempt. Kessler et al. also found that people with PTSD were six times more likely to attempt suicide than a demographically matched control sample. In a sample of urban youths, Wilcox et al. (2009) found that 10 percent of participants with PTSD had attempted suicide, as compared with 2 percent of participants who had been exposed to trauma but did not develop PTSD. In one of the few studies to examine suicide deaths, Gradus et al. (2010) found that prevalence rate of PTSD was 9.8 times higher among those that died by suicide than in the general population.

As can be seen in this cursory review of the data, the prevalence of suicide attempts among those with PTSD varies greatly across studies. This is likely due to various factors. First, depending on the era of the study, differing definitions/criteria of PTSD would have been used (i.e., DSM-III-TR, DSM-IV, DSM-5). Hoge et al. (2014) found slightly differing prevalence rates of PTSD in soldiers when using the two editions of the DSM. Though relatively minor, the differences in diagnostic criteria could have led some people to be included in the PTSD group in one study, but in the control group of a different study. Secondly, as Gradus (2017) observed, depression is often comorbid with suicide, but inconsistently accounted for in studies examining PTSD and suicide. Given that depression is itself a risk factor for suicide, inadequately accounting for it could artificially elevate the prevalence rates for suicide among people with PTSD.

Mediating Factors

In finding that PTSD is associated with an elevated risk for suicidal behaviors, it is important to understand the underlying mechanism linking PTSD to such suicidal behaviors. In exploring this, Poindexter et al. (2015) found that a diagnosis of PTSD itself was not associated with higher rates of suicidal ideation. Rather, they found that the experience of perceived burdensomeness (i.e., the belief that one is a burden or liability on others) was a mediating factor between PTSD and suicidal ideation. Poindexter et al. further posited that PTSD was associated with self-hatred, which led to increased suicidal thoughts. Similarly, McKinney et al. (2017) found that PTSD was associated with elevated levels of depression and internal hostility, and that these factors were related to elevated suicide risk. There is also indication that the type of trauma mediates the relation between PTSD and suicide risk. Wilcox et al. (2009) found that PTSD resulting from assaultive behavior led to higher rates of suicide attempts than people whose PTSD developed after a trauma that did not involve an assault (e.g., a motor vehicle accident).
Although there is an identified correlation between a diagnosis of PTSD and elevated risk for suicidal behavior, and intermediary factors have been identified, this does not prove causation. It has been reasoned that PTSD contributes to such factors as increased depression, internalized anger, perceived burdensomeness, and/or self-hatred, and that these factors mediate the elevated risk for suicide. However, there is another dynamic that is common to all these factors, but not directly addressed in the research. This underlying dynamic is that of coping mechanisms.

It is well known that the majority of people who experience a significant traumatic event do not subsequently develop PTSD. It could be that these people have better coping mechanisms (social support network, ego strength, problem solving, intrapsychic integument, etc.) that helped them manage their experiences and symptoms in a manner as to not develop PTSD. These coping mechanisms similarly serve as a prophylactic against the subsequent intermediary factors such as depression and perceived burdensomeness, which subsequently reduces suicide risk. This notion is partially supported by the interesting finding by Wilcox et al. (2009) that participants who had been traumatized but did not subsequently develop PTSD had a lower rate of suicide attempts (2 percent) than participants who had never been traumatized (5 percent).

**Treatment Implications**

Although it is always important to assess for suicide, there is an elevated importance for thoroughly assessing for suicide with patients diagnosed with PTSD. This assessment should go beyond simply asking if the patient is having suicidal thoughts and should include an inquiry about mediating factors linking PTSD to elevated suicide risk. In particular, it is important to ask about factors such as depression, internalized anger, self-hatred, and perceived burdensomeness. If any of these factors are identified, they should be directly addressed over the course of therapy. As always, it is important to develop a safety plan any time a patient expresses overt suicidal ideation.

Cognitive approaches (e.g., cognitive processing therapy, trauma focused cognitive behavioral therapy) have shown good efficacy at treating PTSD. These approaches typically address the avoidance (memories, reminders) and emotional (blame, estrangement) symptoms. It is important to note that addressing blame can help reduce the self-hatred, internalized anger, and depression that is associated with elevated suicide risk in PTSD. Addressing estrangement can help reduce the perceived burdensomeness that is associated with elevated suicide risk. Additionally, addressing the estrangement can help increase the patient’s social support network, which can be a preventative factor against depression.

Exposure therapies (e.g., imaginal exposure therapy, prolonged exposure therapy) have also been shown to work well to address PTSD. These approaches tend to focus more on the intrusive (nightmares, flashbacks) and arousal (hypervigilance, startle response) symptoms. Although these symptoms have not been specifically identified as mediating suicide risk, they can contribute to the depression that does mediate suicide risk. Exposure therapies also help alleviate the anxiety and physiological arousal that often causes distress among people with PTSD. Reducing this distress can potentially reduce the sense of internalized anger and self-hatred in some people, thus indirectly helping to reduce their risk for suicide.
Psychiatric medications, particularly the selective serotonin reuptake inhibitors, have also gained empirical support in the treatment of PTSD. However, Krystal et al. (2017) recently expressed concern over the lack of advancement in pharmacological approaches to treating PTSD. Furthermore, psychiatric medications would not directly address the underlying cognitive processes that are have been identified as mediating suicide risk among people with PTSD. However, as with exposure therapies, psychiatric medications can help address the underlying depression, anxiety, and physiological arousal that causes distress among people with PTSD.

Conclusion

Post-traumatic stress disorder has been shown to be associated with elevated risk for suicidal behaviors. Moreover, factors such as depression, internalized anger, self-hatred, and perceived burdensomeness have been identified as mediating factors between PTSD and suicide risk. It is therefore important to assess not only the presence of PTSD, but also for these intermediary factors when working with patients. When any of these mediating factors are identified, it should be assessed whether they are appropriate targets for intervention. Although cognitive approaches are likely to be the most directly useful in addressing these mediating risk factors, exposure therapies and psychiatric medications could have indirect benefits as well.

Author Biography

Carlo A. Giacomoni, PsyD, ABPP, is board certified in clinical psychology and maintains an active practice in forensic psychology at North Star Mental Health, LLC. His forensic evaluations cover such topics as criminal responsibility (insanity), competence to stand trial, malingering, disability, and personal injury. He has previously conducted evaluations related to guardianship, child custody, parenting, and civil commitment. He has particular expertise working with and evaluating people with traumatic histories such as PTSD, child abuse, sexual abuse, emotional abuse, and domestic violence.
References


