



PTSD Following Suicide Attempts in Adolescents: a Case Series

Liqing Zhang¹ · Michael A Shapiro¹

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Abstract

The Diagnostic and Statistical Manual (DSM) does not specifically identify one's own suicide attempt as a potential source of trauma for the development of posttraumatic stress disorder (PTSD). PTSD following a near death experience in an adolescent may occur in both the adolescent and the parent. However, suicide-attempt-related PTSD (SA-PTSD) is scarce in the literature, particularly in the pediatric population. The authors review three cases of adolescent patients or their parents in an outpatient clinical practice who displayed varying severity of SA-PTSD symptoms. Information was obtained via self-report by adolescent, parent, or both. Screening for SA-PTSD symptoms was not explicitly sought; rather patients or parents volunteered such information de novo during clinical encounters which was then explored further. One adolescent had only brief PTSD-like experiences that faded with time and did not require intervention. A second adolescent reported long-term memory loss around the circumstances of their suicide attempt that may be related to medical morbidity; their parent had significant PTSD symptoms throughout treatment, and the parent was referred to their own therapy. A third adolescent was referred for cognitive-behavioral therapy (CBT) for the treatment of pervasive PTSD symptoms from a previous suicide attempt, with symptoms improving after treatment. A qualitative analysis suggests that more severe SA-PTSD symptoms are associated with 1) multiple prior suicide attempts; 2) more severe/higher morbidity suicide attempt; and 2) previous diagnosis of PTSD in patient or parent. Assessment for SA-PTSD is important to ensure that affected patients and their families are referred for appropriate resources and treatment. Of the very small sample of three cases, two required specific referral to treat PTSD symptoms in either the adolescent or the parent. The literature about SA-PTSD is extremely scarce. Only two studies systematically examined PTSD following suicide attempt, and none of these studies were in pediatric patients, making more robust quantitative or qualitative analysis limited at this time. Therefore, more research regarding epidemiology, risk factors, and treatment is needed.

Keywords Suicide · Adolescent · Parent · PTSD · Trauma

Background

Suicide is a major public health concern and, as of 2019, is the second leading cause of death in the United States among adolescents and young people ages 10–34 years (The Centers for Disease Control and Prevention (CDC), 2020). There are indications that for every person who dies by suicide, there are more than 20 survivors of suicide (Hegerl, 2016). Suicide attempts are inherently life-threatening, and in addition to mortality can lead to severe morbidity including physical injury, hospitalization, and

ongoing medical procedures and surgeries. Common psychosocial sequelae following a suicide attempt include remorse, alienation, shame, or worsening of an underlying mental illness (Wulsin & Goldman, 1993). Studies show that adolescent suicide attempts are more impulsive and tend to be carried out using less fatal methods compared to adults, likely due to restricted means and access. For example, adolescents use significantly more over the counter medications compared to prescription medications in overdose attempts (Lee et al., 2019). Most prevalent psychosocial risk factors for suicide attempts in adolescents include significant psychiatric problems, particularly previous suicide attempts, depressive disorders, substance abuse disorders, and adverse life events such as family conflicts, bullying, academic stressors, and trauma (Carballo et al., 2020).

✉ Liqing Zhang
lzhang32@mgh.harvard.edu

¹ Department of Psychiatry, University of Florida, Gainesville, FL, USA

Little is known about whether a suicide attempt can precipitate the diagnosis of posttraumatic stress disorder (PTSD). The current diagnostic criteria for PTSD stipulate that an individual must have direct or indirect exposure to a trauma resulting in “actual or threatened death, serious injury, or sexual violence” (American Psychiatric Association, 2013). The list of directly experienced events that could precipitate PTSD does not specifically include one’s own suicide attempt (American Psychiatric Association, 2013). Suicide is listed as a potential traumatic incident, but only in the case of “indirect exposure” to a witness of the event or someone learning about an event (American Psychiatric Association, 2013). Medical incidents that may qualify as traumatic events typically involve sudden, catastrophic events such as waking during surgery or anaphylactic shock. Despite the lack of acknowledgement of one’s own suicide attempt being a trauma, there is special mention that PTSD symptoms “may be especially severe or long-lasting when the stressor is interpersonal and intentional” (American Psychiatric Association, 2013). Based on our literature review, there are only two studies that systematically examine PTSD following suicide attempt in adults, both of which support the phenomenon suicide attempt related PTSD (Bill et al., 2012; Stanley et al., 2019). To our knowledge, there have been no studies that examine PTSD following suicide attempt in children or their parents.

It is estimated that 1 million American children develop PTSD each year (Schreier et al., 2005). Manifestation of PTSD in adolescents after a traumatic event does not differ greatly from adults (Brent et al., 1993). There is data suggesting that adolescents with PTSD experience significant and lasting academic and cognitive impairment as well as impairments in social and familial relationships (Schreier et al., 2005). Parental traumatic stress has been shown to be a strong predictor of children’s posttraumatic psychological distress (Daviss et al., 2000). Multiple studies have shown that higher parental acute distress or post-traumatic symptoms strongly correlate with the severity and course of PTSD symptoms in the child (Landolt et al., 2012; Nugent et al., 2007; Schreier et al., 2005; Winston et al., 2002). A reason for this may be that parents with higher levels of distress are unable to adequately address the child’s needs after the trauma. They may avoid speaking about the trauma themselves and may be less able to assist their children with coping (Landolt et al., 2012). This is relevant as understanding potential child and parental traumatic stress following an event such as a child’s suicide attempt would be helpful for addressing any immediate distress, but also to promote optimal treatment and emotional adaptation for child and parent after the suicide attempt.

Method

The issue of SA-PTSD was raised when, in the outpatient clinical practice, the authors were treating three adolescent patients and family, and either the adolescent or parent

voluntarily and spontaneously disclosed what appeared to be some symptoms of PTSD following a previous suicide attempt. There were no explicit attempts made to screen for these symptoms. Once the patients or families endorsed the symptoms, the clinician explored further, and symptoms were recorded in the general treatment record. Referrals for treatment were made if felt clinically indicated. The authors present the cases below, all of varying severity. Information was obtained via self-report by adolescent, parent, or both. All cases arose de novo without any systematic screening for SA-PTSD, symptoms were divulged in the normal course of treatment.

Results

Three cases of PTSD-like symptoms following a suicide attempt in an adolescent, parent, or both were discovered. Detailed reports are below.

Case 1 A 17-year-old adolescent with no previous documented psychiatric history was admitted to the psychiatric hospital following a suicide attempt by wrist cutting. The patient presented to the primary care physician after the attempt, who provided acute treatment to the wrist injury and then referred the patient to the psychiatric hospital. During the hospitalization, the patient reported a long-standing history of depression. The patient first saw a counselor four years prior for depression, but only had two sessions due to lack of therapeutic engagement. There was no previous history of PTSD symptoms. Outpatient pediatrician had previously tried the medications escitalopram (stopped due to ineffectiveness), propranolol for test anxiety (ineffective), and as-needed alprazolam, which the patient took at the time of the suicide attempt. During the hospitalization the patient was started on sertraline 25mg daily, and was referred to one of the authors for outpatient psychiatric treatment. The patient was seen weekly for psychodynamic psychotherapy and medication management. Two months after the hospitalization, the patient attended an outpatient appointment and reported having a panic attack after experiencing flashbacks of the suicide attempt. The flashbacks and panic attack occurred in the parking lot of the clinic immediately prior to the appointment after the patient saw a diaper on the ground near the trash receptacle. When explored further, the patient disclosed that the primary care physician, when treating the wrist injury immediately after the suicide attempt, had wrapped the patient’s wrist in a diaper to contain the bleeding as it was the only available adhesive large enough to cover the wound. This led to further discussion about the patient’s suicide attempt. The patient reported

disjointed memory, partly attributing this to the effects of the alprazolam, and this was the first flashback the patient had experienced of the event. During treatment, the patient continued to discuss the impact of the suicide attempt and psychiatric hospitalization on their overall mental health, although there were no further flashbacks. The patient demonstrated the ability to handle diapers in the future without incident or recurrence of symptoms. The patient endorsed time-limited symptoms of intrusion/re-experiencing (flashback), and hyper-arousal (hypervigilance and exaggerated startle), but no symptoms of avoidance. Thus this patient never met full criteria for PTSD. The parents were not interviewed as part of routine care to assess for their own symptomatology.

Case 2 A 15-year-old was admitted to the psychiatric hospital following a severe suicide attempt by overdose of over-the-counter pain medication and wrist-cutting that required admission to the medical intensive care unit (ICU) for several days. The patient's suicide attempt occurred in the school bathroom before a standardized school examination. Importantly, the patient had been driven to the school by the patient's parent following a meeting with the psychiatrist. The patient had already had a previous suicide attempt, and there had been a discussion about whether the patient required a hospitalization for suicidal ideation, but the patient was adamant about taking the school examinations. The psychiatrist, parent, and patient all agreed that the patient could take the school examinations and return for treatment the following day. This suicide attempt was the most severe, requiring ICU admission for several days. The history is significant for possible PTSD symptoms from an early childhood sexual assault, and a parent with previous PTSD diagnosis from personal trauma. Immediately following the psychiatric hospitalization, the patient was admitted to a residential treatment facility for continued treatment. Upon return after 6 weeks of treatment at the residential facility during the summer, the patient resumed outpatient treatment. At the start of the next school year during outpatient treatment, both the patient's parent and the patient independently reported intense nervousness, heightened arousal, and flashbacks when the patient eventually returned to the school, despite this occurring several months after the suicide attempt. The patient was able to return to school despite these symptoms. The patient has remained in treatment for three years following this suicide attempt, and over the course of treatment the patient's own memories of the suicide attempt faded. The parent continued to endorse heightened arousal, intrusive thoughts, and flashbacks whenever the parent was required to physically be present at the school. The parent was referred for their own individual therapy and received cognitive-behavioral therapy (CBT), mindfulness-based therapy, and eye-movement desensitization

and reprocessing (EMDR). The patient endorsed symptoms consistent with PTSD of hyper-arousal (hypervigilance and exaggerated startle), and intrusion/re-experiencing (flashbacks and dissociation), but did not exhibit avoidance. The parent experienced hyper-arousal (hypervigilance, exaggerated startle, and intrusion/re-experience (intrusive memories and prolonged distress); avoidance is questionable, as this largely depended on whether it was required for the parent to revisit the school.

Case 3 A 16-year-old adolescent with a history of depression, anxiety, and suicide attempt by cutting had a suicide attempt by drowning in the home bathtub which was severe enough to present to an emergency room prior to psychiatric hospitalization. During the psychiatric hospitalization, the dose of fluoxetine was maximized. History was significant for previous PTSD following an assault the prior year. Following hospitalization, the patient continued to engage in outpatient psychiatric treatment. Several months after the hospitalization, the patient was discussing with the psychiatrist continued feelings of anxiety and distress. In a discussion of coping skills, the subject of taking baths was brought up. The patient acknowledged they had not taken a bath since the suicide attempt, although they previously found baths relaxing. The patient acknowledged avoidance and heightened arousal around the bathtub, leading to difficulty with bathing and hygiene. This also prevented the patient from engaging in a healthy coping skill. The patient was then referred to the psychology clinic for trauma-focused cognitive-behavioral therapy (TF-CBT) to help the patient re-engage in bathing. The patient did participate in CBT for treatment several months and continued to obtain psychiatric care. The patient was eventually lost to follow-up, and it was unclear whether the patient was able to resume bathing. The patient endorsed the symptom criteria of PTSD, including hyperarousal (hypervigilance), avoidance of trauma-related external reminders (bathing), and intrusion/re-experiencing (flashbacks, dissociation, and nightmares).

These cases all describe adolescents with at least some symptoms of SA-PTSD. In Case 3, the adolescent required specific treatment, and in Case 2 one parent required specific treatment. In terms of qualitative analysis, two of the three cases therefore required specific treatment for these symptoms. These two cases also had a suicide attempt of severe medical morbidity requiring either treatment in the emergency room or ICU. Both of these cases were marked by prior suicide attempts and pre-existing PTSD symptomatology in the adolescent, parent, or both. The one case that did not require specific treatment had less medical morbidity (treatment by primary care), lack of pre-existing PTSD, and no previous suicide attempt. These qualitative themes were similar to that found in the literature review.

Discussion

There is little to no research regarding this phenomenon in the pediatric population. Although there are no current studies or reports showing PTSD in parents following a child's suicide attempt, PTSD symptoms have been reported in non-parent adults who witness suicide (Brent et al., 1993). There are also studies showing acute stress disorder (ASD) or PTSD in parents following the death of a child due to suicide and non-suicide (Hendrickson, 2009; Ljungman et al., 2015; Youngblut et al., 2013) or admission of their child to the pediatric intensive care unit, though not necessarily for a suicide attempt (Balluffi et al., 2004). Such symptoms may last after discharge and were found to be associated with unexpected admission, parent's degree of worry that the child might die, and the occurrence of another hospital admission or traumatic event subsequent to the admission (Balluffi et al., 2004). A 2020 study focused on bereaved parents and the association between feelings of blameworthiness with complicated grief after the traumatic death of a child. It was found that suicide-bereaved parents showed greater feelings of blameworthiness associated with complicated grief and PTSD compared to parents mourning deaths by ordinary accident and natural death causes (Feigelman & Cerel, 2020). It may be reasonable to expect parents of children who attempt suicide to also experience feelings of blame, stigma from socially significant others, and associated symptoms of trauma.

A literature search yielded only two studies that systematically examined PTSD following suicide attempt in adults. A 2012 study (Bill et al., 2012) found that 14 of 30 patients (46.7%) who had been discharged from a psychiatric hospital after a suicide attempt met full criteria for PTSD related to their suicide attempt, and an additional 3 patients (10%) had symptoms of PTSD related to their suicide attempt that did not fully meet diagnostic criteria. Those with suicide attempt-related PTSD (SA-PTSD) were reported to have more severity and seriousness in terms of lethality risk of their suicide attempt compared to those without SA-PTSD, which fits with the authors' cases. There are limitations to this study, including small sample size and prolonged time span between suicide attempt and clinical interview, which was 11 years on average. As evidenced by these cases, earlier clinical assessment may lead to an even higher rate of PTSD, as some cases may have improved over time.

In a more recent study (Stanley et al., 2019), researchers aimed to empirically study survivors of suicide attempts and assess for symptoms of SA-PTSD. The study included 386 adult survivors of suicide attempt and found that 27.5% of these survivors screened positive for probable SA-PTSD. Similar to the previous study, patients with more lethal SA within the last year were more likely to meet criteria. Patients with a prior

diagnosis of PTSD were 9 times more likely to develop SA-PTSD after a SA compared to those without. These cases would appear to support this, as the two cases with the more protracted symptoms had pre-existing diagnostic considerations for PTSD from previous traumas. Other risk factors identified by this study, and exhibited by these cases, were younger age, more severe suicidal intent at the time of attempt, and attempts with higher risk of medical morbidity. The study also implied that individuals who met criteria for SA-PTSD may be at higher risk for a future suicide attempt based on survey responses. In these cases, the two cases with the most severe SA-PTSD symptoms also had previous suicide attempts. Limitations to this study include having a predominantly female-identified sample of patients (80.8% female), limited pre-attempt symptom data, and lack of clinical instruction for patients to determine the medical lethality of their prior suicide attempts.

There is enough evidence to suggest that parents may develop symptoms of SA-PTSD as well. The implication of parents developing PTSD after a child attempts suicide is significant as there have been multiple studies describing a strong association between parental PTSD and a child's PTSD following a traumatic event (Landolt et al., 2012; Nugent et al., 2007; Schreier et al., 2005; Winston et al., 2002). A meta-analysis also showed a significant association between parental PTSD symptoms and child PTSD symptoms (Morris et al., 2012), with higher effect sizes found with parent gender (mother > father), assessment type (parent interview > self-report), and study design (longitudinal).

The concept of intentionality may be one reason for the scarcity of research examining whether one's own suicide attempt could fulfill diagnostic criteria for PTSD. Wulsin and Goldman (1993) report a case of a 44-year-old man who appeared to develop symptoms of PTSD following a suicide attempt by firearm while intoxicated. Symptoms included recurrent, intrusive, fearful images and nightmares, and avoidance of firearms and the specific location where the suicide attempt occurred. These authors suggest that PTSD has rarely been reported following suicide attempts partly because, it has rarely been looked for. However, they also note that this patient experienced the suicide attempt as impulsive and unpremeditated due to being intoxicated and suggested that future research on PTSD in this area focus specifically on "impulsive" suicide attempts (Wulsin & Goldman, 1993).

The traditional viewpoint of suicide as "intentional" and PTSD as the result of unintentional trauma may preclude mental health professionals from considering suicide as a precipitant for PTSD. To wit, there is nothing in the DSM which requires the traumatic event to be unexpected or unintentional; examples include those who work in fields in which exposure to trauma would be anticipated such as first responders, police officers, and the military (American Psychiatric Association,

2013). Additionally, studies have shown that psychiatry trainees may develop PTSD symptoms following suicidal behaviors of psychiatric patients (Leaune et al., 2019), and certainly psychiatry trainees might expect to encounter suicide in their line of work. As previously mentioned, the DSM even makes mention that a trauma perceived as intentional may produce worse symptoms. Whether suicide is viewed from a patient perspective as “intentional” or not is beyond the scope of this paper, but it appears important to highlight there may be a bias that trauma be subjectively interpreted as unintentional, and suicide may be interpreted by others as intentional. Literature review was conducted in Pubmed by searching “PTSD from suicide,” “parent PTSD,” and “child/adolescent PTSD suicide.”

Study limitations include the lack of systematic clinical screening for SA-PTSD, which may contribute to the low number of identified cases. These cases were “discovered” during the normal course of outpatient treatment. Additionally, symptomology derived solely from self-report is a limitation, as the use of validated rating scales or instruments would be helpful in determining severity of PTSD symptoms.

Conclusion

Currently, there are no known published cases or studies examining the development of SA-PTSD in children, adolescents, or their parents. The authors see indications that this clinical concern may be underreported and under treated. Clinicians may not be properly evaluating for these symptoms, which may be missed if the dominant symptoms are being attributed to pre-existing disorders that preceded the attempt (Wulsin & Goldman, 1993). Parents of these children may experience symptoms of PTSD which can directly and indirectly impact their child’s development of PTSD symptoms. Subsequent research is needed to help clinicians understand and evaluate these symptoms independently in children after suicide attempt and their parents to ensure that patients are recommended appropriate resources, treatment, and clinical follow-up. As this phenomenon has not been systematically studied or reported in the pediatric population, a sufficiently robust analysis is lacking at this time. Greater awareness, screening, and eventual research about this phenomenon is needed.

Declarations

Conflict of interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

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