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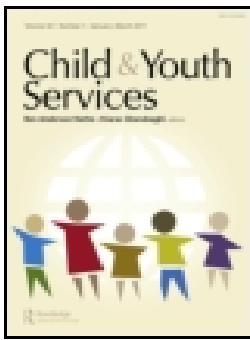


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Treating Adolescent Non-Suicidal Self-Injury: Guidelines for Clinical Practice

Hanni B. Flaherty 

Wurzweiler School of Social Work, Yeshiva University, New York, NY, USA

ABSTRACT

Self-injurious behaviors affect millions of adolescents each year, indicating a public health problem needing attention and intervention. Non-suicidal self-injury (NSSI) is the act of purposefully hurting oneself without the conscious intent to die, such as self-cutting, burning, or carving. As the rate of engagement in NSSI is growing among adolescents, mental health practitioners are increasingly faced with responding to NSSI behaviors among adolescent clients. These mental health practitioners must adequately and efficiently identify the behaviors and determine the course of treatment to best support the client and reduce the NSSI behaviors. This article aims to educate practitioners around NSSI behaviors, assessment techniques, and the current evidence-based interventions available to treat adolescents who struggle with NSSI to determine the best practice for this high-risk population by using a case example. Due to the lack of research on NSSI, there is a significant gap in knowledge related to interventions for adolescents who engage in NSSI. Practitioners often report having little training specific to the issues and needs of adolescents who engage in NSSI.

KEYWORDS

Adolescents; assessment; evidence-based interventions; non-suicidal self-injury (NSSI); self-injurious behaviors

Introduction

Self-injurious behaviors affect millions of adolescents each year, indicating a public health problem needing attention and intervention. The rate of engagement in non-suicidal self-injury (NSSI), the act of purposefully hurting oneself without the conscious intent to die, such as self-cutting, burning, or carving, is growing among adolescents (Jacobson & Gould, 2007). Epidemiological research consistently indicates that approximately 17% of community adolescents engage in NSSI at least once (Muehlenkamp et al., 2012; Ose et al., 2021). ; Swannell et al., 2014; Non-suicidal self-injury (NSSI) affects 15% to 20% of adolescents, disproportionately girls (Beauchaine et al., 2019; Swannell et al., 2014). In clinical samples, prevalence rates approach 50% (Asarnow et al., 2011; Nock, 2010), and over

CONTACT Hanni B. Flaherty  hanni.flaherty@yu.edu  Wurzweiler School of Social Work, Yeshiva University, 2495 Amsterdam Avenue, New York, NY 10033, USA.

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400,000 in the United States receive medical attention for NSSI each year (Beauchaine et al., 2019). NSSI is also associated with marked functional impairment, including poor academic performance, adverse peer relations, and vulnerability to various psychiatric morbidities (Beauchaine et al., 2019; Crowell et al., 2009; Klonsky, 2011). Mental health practitioners are increasingly faced with responding to NSSI behaviors among adolescent clients. These mental health practitioners must adequately and efficiently identify the behaviors and determine the course of treatment to best support the client and reduce the NSSI behaviors.

This article aims to educate practitioners who are working directly with adolescent clients, either in outpatient settings, milieus or inpatient settings, around NSSI behaviors, assessment techniques, and the current evidence-based interventions that are available to treat adolescents who struggle with NSSI to determine the best practice for this high-risk population through the use of a case example. Due to the lack of research on NSSI, there is a significant gap in knowledge related to interventions for adolescents who engage in NSSI. Practitioners often report having little training specific to the issues and needs of adolescents who engage in NSSI (Flaherty, 2018). Therapeutic interventions based on the literature available and designed to address the specific problems of adolescent NSSI are needed as the population of adolescents engaged in NSSI continues to grow in outpatient mental health clinics.

What differentiates NSSI and suicidal self-injury is the intent to end one's life. Suicidal self-injury includes suicidal ideation, suicidal plans, suicide attempts, and suicide death. NSSI is the direct, deliberate destruction of one's own body with the absence of any intent to die (Nock, 2012). Adolescents who engage in NSSI are not usually intending to cause lasting injury or death. However, the self-inflicted injury may cause serious medical problems, including life-threatening blood loss, deep cuts needing stitches or resulting in fatal blood loss, infections from wounds, and other factors resulting in unintentional death (Flaherty, 2018). Self-inflicted injury is not usually a suicidal behavior, but it may result in accidental death.

The recent increase in prevalence makes it highly likely that mental health practitioners will see an increase in adolescents presenting with this behavior, highlighting the urgent need for research on how to treat NSSI effectively. Despite the prevalence and seriousness of NSSI, there is currently no universally agreed-upon best practice for the treatment of NSSI (Flaherty, 2018; King et al., 2020; Klonsky & Muehlenkamp, 2007; Muehlenkamp, 2006; Nock, 2012; Ose et al., 2021; Turner et al., 2014). This lack of treatment, research, and intervention is a serious concern. NSSI behavior is associated with various adverse physical and mental health

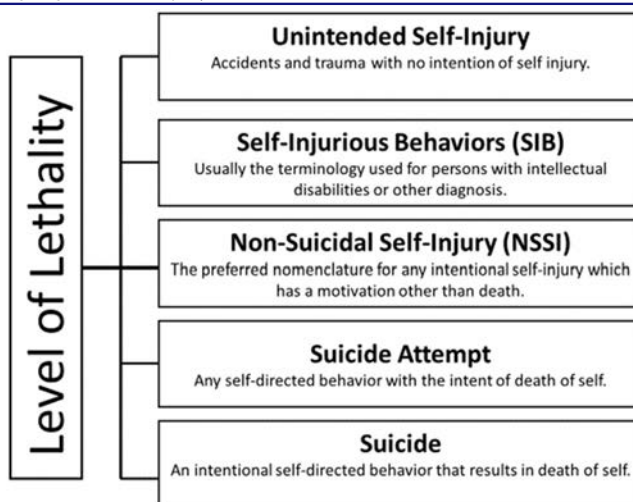
outcomes, and this suggests that mental health practitioners must be able to adequately address this injurious behavior.

What is the function of non-suicidal self-injury?

Non-suicidal self-injury (NSSI) is usually an effort to try to feel better, not to end life. Adolescents may use self-inflicted injuries, such as cutting, carving, scratching, burning, and self-hitting, as a way to cope with (or find relief from) emotional pain. Adolescents who engage in NSSI are often dealing with feelings that they cannot cope with or challenging situations they think cannot change. They often report self-harm as a way to have control over their bodies as they feel they can't control anything else; they replace emotional pain with physical pain, or they want to feel physical pain as they feel numb from a trauma. Adolescents often report that they feel desperate for relief from painful feelings, and self-harm makes them feel better. These adolescents sometimes have other mental health problems that add to their emotional pain. They may have experienced trauma, such as living through abuse, violence, or a disaster (Flaherty, 2018; Kiekens et al., 2019; King et al., 2020; Klonsky & Muehlenkamp, 2007; Nock, 2012; Ose et al., 2021). What NSSI differs from unintended self-injury, self-injurious behaviors, suicide attempts, and suicide are the client's intentions. Table 1 will help to clarify the language of self-injury in relation to the level of lethality.

It is essential to differentiate NSSI apart from suicidal behaviors. It is well documented that suicidal behavior and non-suicidal self-injurious behaviors are different in intent, method, and psychological impact

Table 1. The language of self-injury.



(Kerr et al., 2010; Klonsky & Muehlenkamp, 2007; Muehlenkamp, 2006; Walsh, 2007). Adolescents who engage in NSSI frequently report that the behavior's intention is not to cause death but to reduce adverse effects or emotions (Brown et al., 2002; King et al., 2020; Klonsky, 2007). The research in this area shows that these adolescents also clearly distinguish self-harming behaviors from suicide. Adolescents neither think of killing themselves while engaged in NSSI nor intend their behavior to result in death (Flaherty, 2018; Kiekens et al., 2019; Klonsky & Muehlenkamp, 2007; Nock, 2012; Ose et al., 2021;).

Further, they often even take precautions against it (Kerr et al., 2010). However, the self-inflicted injury may cause unintended, serious medical problems, including infections from wounds or dirty cutting objects, severe scarring, deep cuts needing stitches, nerve damage, significant and life-threatening blood loss, infectious disease risk, and accidental death (Nock, 2010; Selby et al., 2015). Self-inflicted injury is not usually suicidal behavior, but such damage may result in unintended death.

Many authors identify adolescence as a period at risk for NSSI behavior as the behavior often begins during puberty (age of 13 to 15 years), and its prevalence significantly reduces in adulthood (Glenn & Klonsky, 2009; Grandclerc et al., 2016; Hawton et al., 2012; Nock & Prinstein, 2004). Girls have also been identified to begin this type of behavior earlier and at higher rates than boys (Baetens et al., 2011; Grandclerc et al., 2016; Prinstein et al., 2008). Male NSSI could be reported less due to social stigma. NSSI is also harder to diagnose among males as it is often miscategorized as aggressive male adolescent behavior opposes to NSSI.

There is an ongoing mental health dialogue regarding the proper diagnostic organization of NSSI among treatment professionals. Until very recently, NSSI has been categorized as a symptom of Borderline Personality Disorder (BPD) in the DSM-4. NSSI has been linked to Post-traumatic Stress Disorder, Depressive Disorders, and Anxiety Disorders (Jacobson & Gould, 2007) but was only included in the DSM-5 in section 3 as a condition requiring further study (Flaherty, 2018). This change represents a significant step forward in recognizing NSSI as a disorder in its own right and promoting further research.

The functional approach model modified from Nock's (2009) integrated theoretical model of development and maintenance of non-suicidal self-injury suggests that several reinforcement processes maintain NSSI (see Figure 1). These processes include:

- Negative interpersonal reinforcement (NSSI decreases or distracts from hurtful thoughts or feelings).

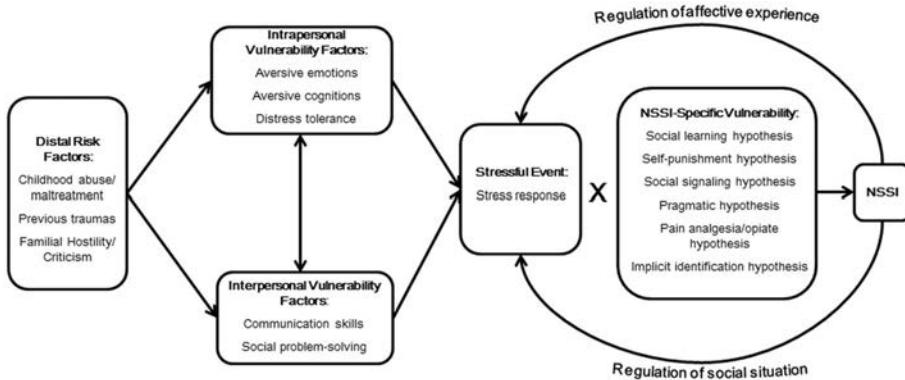


Figure 1. Modified integrated theoretical model of the development and maintenance of NSSI.

- Positive interpersonal reinforcement (NSSI creates desired feelings or stimulation).
- Positive interpersonal reinforcing (NSSI facilitates help-seeking).
- Negative interpersonal reinforcement (NSSI enables escape from undesired social situations).

Empirical evidence supports each of the four processes (Nock, 2009). Figure 1 presents the Modified integrated theoretical model of the development and maintenance of NSSI described above.

Assessment of NSSI

Mental health practitioners are trained in administering risk assessments that include suicidal ideation and risk. However, few are trained in conducting an assessment for NSSI specifically (Fernández Artamendi et al., 2019; Idicula et al., 2020; King et al., 2020). Practitioners should perform an assessment of NSSI to obtain a clear and detailed picture of the behaviors, provide psychoeducation, engage with the client, and destigmatize the behavior.

Often practitioners report hesitation during the assessment of NSSI as they are concerned about asking adolescents about NSSI and other high-risk behaviors as they feel they can cause harm or increase the behaviors by asking about them. Research in the area reports that a practitioner cannot harm a client by asking about NSSI or other high-risk behaviors. One of the most significant studies on the topic was conducted by Gould et al. (2005), who found that none of the 2,342 adolescents studied reported any distress at the time of asking or up to a month after. Adolescents who were depressed, suicidal, or engaging in NSSI reported that they felt better after being asked such questions. It is vital to be assessing for high-risk behaviors, especially NSSI, as research shows that screening is seven times more

likely to uncover NSSI behaviors and suicidal thinking than spontaneous reports. Furthermore, only 25% of completed suicides occur in people who have recently accessed mental health services (Fernández Artamendi et al., 2019; King et al., 2020; Shaffer & Pfeffer, 2001). If practitioners are not assessing for high-risk behaviors, they miss the majority of genuinely high-risk adolescents.

There are well-established evidence-based assessment tools available, including the Inventory of Statements About Self-injury (ISAS), Depression Anxiety Stress Scales (DASS-21), Functional Assessment of Self-Mutilation (FASM), and the Ottawa Self-Injury Inventory (OSI), Inventory of Statements About Self-injury (ISAS). The most commonly used assessment tool is the Inventory of Statements About Self-injury (ISAS). The first section of the ISAS assesses the lifetime frequency of 12 NSSI behaviors performed intentionally (i.e., on purpose) and without suicidal intent. The behaviors the scale assesses are: banging/hitting self, biting, burning, carving, cutting, wound picking, needle-sticking, pinching, hair pulling, rubbing skin against rough surfaces, severe scratching, and swallowing chemicals. Clients are asked to estimate the number of times they have performed each behavior. Five additional questions evaluate descriptive and contextual factors, including the age of onset, the experience of pain during NSSI, whether NSSI is performed alone or around others, the time between the urge to self-injure and the act, and whether the individual wants to stop self-injuring. The questionnaire employs a multiple-choice format for the latter four questions. The behavioral scales have demonstrated good reliability and validity. Those endorsing one or more NSSI behaviors are instructed to complete the second section of the ISAS. The second section assesses 13 potential functions of NSSI: affect-regulation, anti-dissociation, anti-suicide, autonomy, interpersonal boundaries, interpersonal influence, marking distress, peer-bonding, self-care, self-punishment, revenge, sensation seeking, and toughness. Each function is assessed by three items, rated as “0-not relevant,” “1-somewhat relevant,” or “2-very relevant” to the individual’s “experience of [non-suicidal] self-harm”; thus, scores for each of the 13 ISAS functions can range from 0 to 6. (Klonsky & Glenn, 2009, Klonsky & Olino, 2008). Less commonly used but also an evidence-based assessment tool is the Depression Anxiety Stress Scales (DASS-21). The DASS-21 is a reliable and valid self-report instrument, including two scales measuring depression and anxiety. Each scale includes seven multiple-choice items (Henry & Crawford, 2005).

The Functional Assessment of Self-Mutilation (FASM) was developed specifically for use with adolescents and consists of two parts. The first part includes a check list of 11 potential self-injurious behaviors and ask the client to indicate which behaviors they have engaged in in the past year.

There is also an open ended “other” question to assist with identifying behaviors not represented on the list. Client identify the frequency of engaging in the behavior and the severity. The second section of the scale provides a list of 22 statements intended to describe the potential functions underlining the self-injury, assessing the impulsive nature of the self-injury, age of onset, whether pain is experienced, whether there had been suicidal intent, and whether the behavior took place under the influence of any substances. The FASM has shown strong validity and reliability (Lloyd-Richardson et al., 2007).

The Ottawa Self-Injury Inventory (OSI) was developed specifically as a clinical tool and was developed in collaboration with adolescents who self-injured. The OSI assess both past and present acts of self-injury and can make estimations of how the self-injury behavior has evolved over time. This scale is one of the most comprehensive scales as it assesses all characteristic domains of self-injury, as well as evaluating the addictive features, motivation to stop engaging in the behavior, effectiveness of the self-injury in achieving the reported functions, response for continuing to self-injure, and the current functions served by the most recent act of self-injury. The IOS has shown strong validity and reliability (Nixon et al., 2015).

Despite which standardized tool is used, what is essential is to ask about the behavior by asking such questions as; Where do they damage their bodies? Under what circumstances? When? With what instruments? It is also important for practitioners to explore the rituals, lethality, and cause of the NSSI and evaluate the client’s stress and distress by asking questions such as; How have things been going for you? Anything stressing you out right now? Lastly, practitioners should assess the client’s feelings of despair/hopelessness by asking; How do you think things are going? What things are you looking forward to? Anything you’re worried about? (Fernández Artamendi et al., 2019; King et al., 2020). Practitioners should try to normalize the behavior during the assessment phase. This can be done by making a normalizing statement such as: Now and then, people can have really low, sad thoughts. Practitioners can offer support to their clients by making statements such as; It’s important to reach out during these times to get help. The before mentioned are not intended to be a script but a guideline to conducting an assessment. An effective evaluation of NSSI includes normalizing the behavior, supporting the client, and asking about the details of the behavior. Practitioners should remember the model “normalize, support, and ask.”

Lastly, psychoeducation is vital for adolescents and should begin in the assessment. Practitioners should model compassion and empathy and teach about the functions of self-harm. During the examination, practitioners

should also start to introduce alternative ways of coping as to practice from a harm reduction model.

Evidence-based interventions

“Evidence-based practice (EBP) is a process, a verb, not a noun” (Thyer & Myers, 2011, p. 8). It is a process of examination intended to help practitioners and their clients make important decisions about treatment. Evidence-based practice in mental health services is the delivery of rigorously empirically tested intervention into practice that considers the client’s individual needs and the clinicians’ expertise (Weisz & Gray, 2008). In the field of mental health services research, evidence-based practice refers to a body of scientific knowledge about clinical services (i.e., referral, assessment, and case management) and the impact of the clinical intervention on the mental health concerns of children, adolescents, and adults. This knowledge base is evidence-based, for it is generated using empirical studies that examine the impact of specific interventions on the client’s outcomes (Hoagwood et al., 2001).

There are currently no evidence-based interventions (EBI), or evidence-informed approaches explicitly developed to treat NSSI (Flaherty, 2018; Nock, 2009; Timberlake et al., 2020). Several interventions have been developed to treat self-injurious behaviors, which include both non-suicidal and suicidal self-injury. However, NSSI differs from suicide in several important ways, including intent, frequency, methods used, and severity of injuries (Muehlenkamp, 2005), potentially limiting the effectiveness of interventions for self-injurious behaviors more generally on the specific behavior (Andover et al., 2017). Evidence-based interventions that were developed to treat other presenting problems are being reevaluated to address adolescent NSSI and are starting to be empirically tested specifically for this population. The most promising evidence-based interventions for the treatment of adolescent NSSI include Cognitive Behavioral Therapy (CBT), Dialectical Behavioral Therapy (DBT), Mentalization-Based Treatment for Adolescents (MBT-A), and Developmental Group Therapy (DGT) (Flaherty, 2018).

Cognitive-Behavioral Therapy (CBT) has consistently been considered the gold standard for the treatment of non-suicidal self-injury (NSSI) (Peat, 2014; Timberlake et al., 2020) and is the basis for many of the other evidence-based interventions intended to treat NSSI. CBT is a form of psychotherapeutic treatment that helps clients understand the thoughts and feelings that influence behaviors. Based on social learning theory, CBT emphasizes how the client’s thinking interacts with how they feel and what they do. CBT is generally short-term and focused on helping clients deal with a particular problem such as NSSI. During treatment, clients learn

how to identify and change destructive thought patterns that negatively influence emotions and behavior. CBT incorporates the fundamental premise that cognitive factors maintain mental disorders and psychological distress into treatment. Beck (1970) and Ellis (1962), who are the pioneers of CBT, state that the core premise is that maladaptive cognitions contribute to the maintenance of emotional distress and behavioral problems. These maladaptive cognitions include general beliefs, or schemas, about the world, the self, and the future, giving rise to specific and automatic thoughts, in particular, situations (Fenn & Byrne, 2013). The basic model suggests that therapeutic interventions to change these maladaptive cognitions reduce emotional distress and problematic behaviors (Hofmann et al., 2012).

After an in-depth assessment, the CBT begins to focus on identifying the maladaptive behavior and its consequence. Once the behaviors are identified the intervention focuses on teaching replacement skills for the self-harming behavior. The therapist assists the client in identifying skills that will be a good fit for the client and convey a sense of urgency about learning and using these replacement skills. The client's role is to select the skills with the assistance of the therapist and practice them together in session. The goal is for the client to develop a core set of skills that can be recalled when needed. The client can also be asked to track the use of the skills as replacement behaviors to assess any barriers in use. The next step in CBT treatment for NSSI is the cognitive component in which targets the client's thoughts, assumptions, rules, attitudes and core beliefs that support NSSI and to begin to challenge these thoughts in treatment (Walsh, 2012).

Although few EBIs have been developed specifically to treat NSSI, several have been applied to the behavior. DBT was developed to treat BPD and includes an emphasis on the treatment of suicidal behaviors and NSSI (Linehan, 1993). Several studies have evaluated the effectiveness of DBT on NSSI specifically, usually among women diagnosed with BPD. These studies have found significant reductions in NSSI behaviors following a 3-month inpatient DBT program (Bohus et al., 2004) and a 12-month outpatient DBT program (Van den Bosch et al., 2005; Verheul et al., 2003) when compared to treatment as usual (TAU). In addition, brief DBT (B-DBT), a 6-month intervention, was associated with a decrease in NSSI episodes at the end of treatment (Stanley et al., 2007). However, research comparing DBT to treatment by experts found that although NSSI frequency decreased significantly across the sample, there was no difference in rate of decrease between treatment conditions (Linehan et al., 2006). Overall, meta-analyses have indicated small to medium effects for treatment of self-injurious behaviors among individuals with BPD when including both randomized controlled trials (RCTs) and uncontrolled trials (Kliem et al., 2010). Fewer studies have investigated the effect of DBT on decreasing NSSI in samples

without a BPD diagnosis, but the intervention continues to appear effective (Andover et al., 2017).

Dialectical Behavior Therapy for Adolescents (DBT-A) is a comprehensive, multi-modal, outpatient treatment. DBT-A was adapted from standard adult DBT for adolescents by Rathus and Miller (2002). The primary focus of DBT-A is on increasing behavioral skills and decreasing maladaptive behavior. DBT-A was developed to reduce NSSI by addressing the common skill deficits among adolescents with emotion dysregulation and their families (Mehlum et al., 2014). DBT-A is delivered through multiple modalities, including family groups, individual therapy, and telephone consultations. The intervention is a 19-week-long treatment consisting of weekly one h individual sessions and weekly two h multiple family group sessions. The different sessions' focus is on skill application from the multiple family group sessions to real-life situations. The multiple family group sessions focus on teaching core mindfulness, emotion regulation, interpersonal effectiveness, and distress tolerance. Telephone consultations are included between sessions to reinforce therapeutic goals (Rathus & Miller, 2002).

MBT-A is a manualized, yearlong treatment consisting of 50-min weekly individual sessions and 50-min monthly family sessions. MBT-A is based on a CBT model as it focuses on improving self-control and the ability to regulate affect by increasing both the adolescent's and the family's ability to understand behaviors in terms of thoughts and feelings. The intervention aims to improve the clients' ability to accurately identify and represent their feelings and others' feelings in emotionally challenging situations (Rossouw & Fonagy, 2012). The MBT-A intervention is conducted in three phases. First, each client undergoes a psychosocial assessment in the assessment phase, including a formal DSM diagnosis and assessment of risk. Each client also receives a written crisis plan tailored to the individual's needs. Second, in the treatment phase, sessions are unstructured and focus on the client's current interpersonal experiences and mental states likely to have been evoked by these experiences. Lastly, in the termination phase, the maintenance of learned techniques, anticipated challenges, and separation issues are addressed. During the family sessions, the aim is to improve the family's ability to mentalize, particularly in the context of family conflict (Rossouw & Fonagy, 2012). Mentalizing is the "process by which we make sense of each other and ourselves, implicitly and explicitly, in terms of subjective states and mental processes. It is a profoundly social construct in the sense that we are attentive to the mental states of those we are with, physically or psychologically" (Bateman & Fonagy, 2010, p. 11).

Developmental Group Therapy (DGT) is a manualized intervention explicitly developed to treat self-harming adolescents age 12–18. The principles that inform the intervention are cognitive behavior therapy,

dialectical behavior therapy, social skills training, interpersonal psychotherapy, and group psychotherapy. The intervention is developmental as the sessions' focus is on adolescents' needs and assisting adolescent development through difficulties using a positive corrective therapeutic relationship (Muehlenkamp et al., 2014; Wood et al., 2001). The DGT intervention is conducted in two phases. The first is the acute phase, consisting of six group sessions with a new theme each week. These themes are based on previous research that suggests their impact on reducing NSSI among adolescents and includes relationships, school problems and peer relationships, family problems, anger management, depression and self-harm, hopelessness, and negative feelings about the future. In the second phase, the long-term period, which begins immediately following the acute phase, results from the participant's choice and can continue for up to 12 months (Wood et al., 2001). This phase focuses on general group processes and reinforces the techniques and strategies learned in the acute phase. Group-based techniques, such as role-playing, are used to help teach adolescents adaptive ways of coping with intense emotions and thus preventing NSSI (Hazell et al., 2009).

The field of research into NSSI is still in the early stages of knowledge development. While researchers continue to seek empirical support for effective interventions, clinicians in the field have practical knowledge that is not being disseminated to the broader mental health network. Self-harming behaviors often come to light while the client is in a mental health setting (James et al., 2012; Timberlake et al., 2020), at which point interventions must be implemented swiftly and with a proper assessment of the behaviors. All of the interventions mentioned above can be effective alone or in combination, depending on the client's needs. What is seen to be the most important is the quick and adequate assessment of the behaviors and choosing the best fit between client and intervention.

As discussed previously, when choosing the appropriate evidence-based interventions to treat NSSI among adolescents, the practitioner must consider the best available research evidence, their own clinical or practice expertise, and the client's individual and family's values and preferences. Evidence-based practice is the process of integrating clinical decision-making regarding evidence-based interventions (Spring, 2007). Again, EBP is a verb; it is a process with which clinical decisions are made.

Case study

Jenny was a 16-year-old Hispanic female referred to treatment due to acting out behaviors, family conflict, substance use, and truancy. During the initial assessment, Jenny reported that she self-harmed by cutting her arms

and legs with a razor to self soothe when managing intense emotions. Jenny reported no suicide attempts, suicide ideation, or any other symptoms of Borderline Personality Disorder. Jenny reported that she had no intention of ending her life. Jenny took precautions to prevent her body's deadly areas to reduce lethality and clean her cutting utensils to prevent infection. Jenny stated that at times of high stress, she would isolate herself and take out her "cutting kit," which included her razor, band-aids, and rubbing alcohol pads. She would clean the blade and then make small cuts on her arms and legs just deep enough to see the blood. Jenny would then quickly cover it with a band-aid. Jenny stated that the sight of the blood would make her feel better as she felt in control of her pain. That the physical pain made the emotional pain go away.

After an in-depth biopsychosocial assessment of Jenny and assessed her self-injurious behaviors using the Inventory of Statements About Self-injury (ISAS), the therapist obtained a good understanding of Jenny's NSSI and was prepared to create a treatment plan. In collaboration with Jenny, the clinician and Jenny contracted for a two-prong intervention approach to follow evidence-based intervention protocol. First, the clinician discussed a harm reduction technique that included snapping a rubber band instead of cutting in stressful times.

Second, Jenny agreed to attend weekly Cognitive-Behavioral Therapy (CBT) psychotherapeutic treatment sessions to help Jenny understand the thoughts and feelings that influence her cutting behaviors. Researchers have suggested the utility of cognitive interventions, which target the maladaptive thoughts and beliefs underlying NSSI, in addressing NSSI behaviors (Muehlenkamp, 2006). In support of this, the therapist integrated Manual Assisted Cognitive Therapy (MACT), a 6-session adjunctive cognitive-behavioral intervention focusing on problem solving therapy and relapse prevention, was developed for the treatment of both suicidal and non-suicidal self-injury (Andover et al., 2017). Studies of the intervention have demonstrated mixed results in the reduction of suicidal and non-suicidal self-injury (Evans et al., 1999; Salkovskis et al., 1990; Tyrer et al., 2003). However, only one study has investigated NSSI specifically as an outcome, reporting that MACT in addition to TAU was more effective in decreasing NSSI behaviors than TAU alone (Weinberg et al., 2006). Researchers continue to explore cognitive interventions for NSSI, including the adaptation of mindfulness-based cognitive therapy (MBCT) for young adults, which targets emotion regulation, distress tolerance, and attention to negative thoughts in order to decrease NSSI behavior (Rees et al., 2015). Based on social learning theory, CBT emphasizes how the client's thinking interacts with how they feel and what they do. During treatment, Jenny learned how to identify and change destructive thought patterns that negatively

influence emotions and behavior. Jenny's mother was also notified of her behaviors and the intervention plan to support the change at home.

With time and support from both the therapist and her family, Jenny was able to identify more adaptive ways to manage her intense emotions and ultimately refrain from NSSI. If the therapist did not conduct such an in-depth assessment resulting in misdiagnosing the NSSI behaviors as either SI or as a symptom of Borderline Personality Disorder, Jenny would have received a very different intervention that may not have been as effective. CBT

Conclusion

Further understanding of NSSI behaviors and research focused on the development of theory-driven and empirically informed treatment approaches are required to address the need for an effective treatment for adolescent clients engaging in NSSI behaviors. As the prevalence of adolescents involved in NSSI increases, mental health practitioners will likely see an increase in adolescents presenting with this behavior in treatment. Not only is there an urgent need for research on how to further understand and effectively treat NSSI, but it is also essential that mental health practitioners be trained in how to assess and treat NSSI based on the current research. Mental health counselors are increasingly faced with the task of responding to NSSI behaviors among adolescent clients, and mental health counselors must be able to adequately and efficiently identify the NSSI behaviors through proper assessment and determine the course of treatment to best support the client and reduce the NSSI behaviors to provide best practice and services to this high-risk population.

ORCID

Hanni B. Flaherty  <http://orcid.org/0000-0003-0977-0549>

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