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Newsletter

Non-Suicidal Self Injury

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What is non-suicidal self-injury?

Non-suicidal self-injury (NSSI) is defined as deliberately injuring oneself without suicidal intent. The most common form of NSSI is self-cutting, but other forms include burning, scratching, hitting, intentionally preventing wounds from healing, and other similar behaviors. Tattoos and body piercings are not considered NSSI, unless they are created with the specific intention to self-harm. NSSI is often inflicted on the hands, wrists, stomach, or thighs, but it can occur anywhere on the body.

SITEMAP

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Rates of NSSI are highest among adolescents and young adults. Although estimates vary, approximately 12%-24% of adolescents and young adults have self-injured, and 6%-8% report current, chronic self-injury. Some individuals continue to engage in these behaviors well into adulthood, especially when they do not receive treatment.

Why do people engage in non-suicidal self-injury?

Unlike suicidal behaviors, people who engage in NSSI report that they do not intend to kill themselves. Instead, NSSI is considered to be a maladaptive or unhealthy attempt to regulate emotions. Individuals who engage in deliberate self-harm report that they do so in response to two types of emotional states: 1) intense negative emotions, such as anger, guilt, shame, self-loathing, or fear of abandonment; or 2) a sense of emotional numbness. Individuals report that deliberate self-harm allows them to express pain, release tension, calm themselves, or feel something rather than nothing at all. To those who engage in NSSI, the behavior can feel effective in the very short term. After NSSI, people often report experiencing some relief from pain or numbness. Interestingly, research has suggested that pain cues the body to release certain endorphins, which have temporary mood-enhancing qualities. This immediate feeling of relief reinforces the behavior, so people are likely to continue hurting themselves in the future.

However, it is extremely important to understand that deliberate self-harm is an ineffective emotion regulation strategy in the long run. The sensation of relief tends to wear off very quickly. Soon after NSSI, people feel more guilty, ashamed, or angry with themselves. Ironically, these are some of the very emotions they were trying to escape in the first place! Additionally, people usually feel that they need to keep their NSSI behaviors a secret from friends and loved ones. Carrying this secret can make people feel more lonely and isolated. After repeated NSSI, individuals may also feel as though they are "addicted" to deliberate self-harm. They want to stop hurting themselves, but they have difficulty breaking the cycle. This sense of lost control over one's own behavior can be distressing. Finally, self-harming behaviors can lead to infections, permanent scars, or accidental death. In the end, NSSI does not truly help people deal with the issues that led them to self-harm in the first place.

What are the risk factors for NSSI?

Clinicians and researchers are still learning about what causes people to begin engaging in NSSI. However, several risk factors are associated with a higher likelihood of these behaviors. One of the strongest predictors of NSSI is a childhood history of abuse or sexual trauma. NSSI is also more common among individuals with eating disorders, borderline personality disorder, post-traumatic stress disorder, substance use disorders, depression, and anxiety disorders. In general, people are at heightened risk for NSSI when they have extreme difficulty regulating emotions, and when they tend to behave impulsively.

Is NSSI dangerous?

Some individuals report that after trying NSSI once or twice, they do not engage in it again. Others find themselves caught in a vicious and almost addictive cycle from which they cannot escape. The severity of NSSI ranges from superficial injuries to those that require medical attention, cause lasting disfigurement, or are life-threatening. In some cases, people accidentally inflict more harm upon themselves than they may have intended. Whatever the physical severity, repeated NSSI indicates that the individual is experiencing a great deal of emotional pain. This should be taken very seriously. Also, although there are important differences between suicide attempts and NSSI, the practice of NSSI is associated with a higher risk of thinking about or attempting suicide.

What is the treatment for NSSI?

If you or a loved one is engaging in deliberate self-harm, it is important to seek help from a mental health professional as soon as possible. A therapist can help you begin to understand how this unhealthy pattern developed, the function of the behaviors, your specific triggers, and how to break the cycle. Ultimately, the goal will be learning to better identify and tolerate your thoughts and emotions, and developing healthier coping strategies. For example, instead of self-cutting to express anger, you may learn to notice when your anger is rising and journal about it instead. Or, you may learn healthy ways to talk to others about how you are feeling. The most effective healthy coping strategies for you will depend on the particular function served by your NSSI behaviors. In addition to talk therapy, a psychiatrist may recommend

medication to help with your emotional distress. With the proper support from treatment providers, you can learn to overcome the cycle of non-suicidal self-injury.

For more information about non-suicidal self-injury, go to:

http://www.mayoclinic.org/diseases-conditions/self-injury/basics/definition/CON-20025897

http://www.mentalhealthamerica.net/self-injury

http://helpguide.org/mental/self_injury.htm

http://www.selfinjury.bctr.cornell.edu/

If you or someone you know is in extreme emotional distress, you can call the National Suicide Prevention Hotline 24-hour Crisis Line at 800-273-8255.

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Self-injury/cutting

Overview

Nonsuicidal self-injury, often simply called self-injury, is the act of deliberately harming the surface of your own body, such as cutting or burning yourself. It's typically not meant as a suicide attempt. Rather, this type of self-injury is an unhealthy way to cope with emotional pain, intense anger and frustration.

While self-injury may bring a momentary sense of calm and a release of tension, it's usually followed by guilt and shame and the return of painful emotions. Although life-threatening injuries are usually not intended, with self-injury comes the possibility of more serious and even fatal self-aggressive actions.

Getting appropriate treatment can help you learn healthier ways to cope.

Symptoms

Signs and symptoms of self-injury may include:

- Scars
- Fresh cuts, scratches, bruises or other wounds
- Excessive rubbing of an area to create a burn
- Keeping sharp objects on hand
- Wearing long sleeves or long pants, even in hot weather
- Difficulties in interpersonal relationships
- Persistent questions about personal identity, such as "Who am I?" "What am I doing here?"
- Behavioral and emotional instability, impulsivity and unpredictability
- Statements of helplessness, hopelessness or worthlessness

Forms of self-injury

Self-injury usually occurs in private and is done in a controlled or ritualistic manner that often leaves a pattern on the skin. Examples of self-harm include:

- Cutting (cuts or severe scratches with a sharp object)
- Scratching

- Burning (with lit matches, cigarettes or hot, sharp objects like knives)
- Carving words or symbols on the skin
- Hitting or punching
- Piercing the skin with sharp objects
- Pulling out hair
- Persistently picking at or interfering with wound healing

Most frequently, the arms, legs and front of the torso are the targets of self-injury, but any area of the body may be used for self-injury. People who self-injure may use more than one method to harm themselves.

Becoming upset can trigger an urge to self-injure. Many people self-injure only a few times and then stop. But for others, self-injury can become a long-term, repetitive behavior.

Although rare, some young people may self-injure in public or in groups to bond or to show others that they have experienced pain.

When to see a doctor

If you're injuring yourself, even in a minor way, or if you have thoughts of harming yourself, reach out for help. Any form of self-injury is a sign of bigger issues that need to be addressed.

Talk to someone you trust — such as a friend, loved one, health care provider, spiritual leader or a school official — who can help you take the first steps to successful treatment. While you may feel ashamed and embarrassed about your behavior, you can find supportive, caring and nonjudgmental help.

When a friend or loved one self-injures

If you have a friend or loved one who is self-injuring, you may be shocked and scared. Take all talk of self-injury seriously. Although you might feel that you'd be betraying a confidence, self-injury is too big a problem to ignore or to deal with alone. Here are some ways to help.

- **Your child.** You can start by consulting your pediatrician or other health care professional who can provide an initial evaluation or a referral to a mental health specialist. Don't yell at your child or make threats or accusations, but do express concern.
- **Teenage friend.** Suggest that your friend talk to parents, a teacher, a school counselor or another trusted adult.
- **Adult.** Gently encourage the person to seek medical and mental health treatment.

When to get emergency help

If you've injured yourself severely or believe your injury may be life-threatening, or if you think you may hurt yourself or attempt suicide, call 911 or your local emergency number immediately.

Also consider these options if you're having suicidal thoughts:

- Call your mental health specialist.

- Call a suicide hotline number — in the U.S., call the National Suicide Prevention Lifeline at 1-800-273-TALK (1-800-273-8255).
- Seek help from your primary doctor or other health care provider.
- Reach out to a close friend or loved one.
- Contact a spiritual leader or someone else in your faith community.

Causes

There's no one single or simple cause that leads someone to self-injure. In general:

- Nonsuicidal self-injury is usually the result of an inability to cope in healthy ways with psychological pain.
- The person has a hard time regulating, expressing or understanding emotions. The mix of emotions that triggers self-injury is complex. For instance, there may be feelings of worthlessness, loneliness, panic, anger, guilt, rejection, self-hatred or confused sexuality.

Through self-injury, the person may be trying to:

- Manage or reduce severe distress or anxiety and provide a sense of relief
- Provide a distraction from painful emotions through physical pain
- Feel a sense of control over his or her body, feelings or life situations
- Feel something — anything — even if it's physical pain, when feeling emotionally empty
- Express internal feelings in an external way
- Communicate depression or distressful feelings to the outside world
- Be punished for perceived faults

Risk factors

Certain factors may increase the risk of self-injury, including:

- **Age.** Most people who self-injure are teenagers and young adults, although those in other age groups also self-injure. Self-injury often starts in the early teen years, when emotions are more volatile and teens face increasing peer pressure, loneliness, and conflicts with parents or other authority figures.
- **Having friends who self-injure.** People who have friends who intentionally harm themselves are more likely to begin self-injuring.
- **Life issues.** Some people who injure themselves were neglected or abused (sexually, physically or emotionally) or experienced other traumatic events. They may have grown up and still remain in an unstable family environment, or they may be young people questioning their personal identity or sexuality. Some people who self-injure are socially isolated.
- **Mental health issues.** People who self-injure are more likely to be highly self-critical and be poor problem-solvers. In addition, self-injury is commonly associated with certain mental

disorders, such as borderline personality disorder, depression, anxiety disorders, post-traumatic stress disorder and eating disorders.

- **Excessive alcohol or drug use.** People who harm themselves often do so while under the influence of alcohol or recreational drugs.

Complications

Self-injury can cause a variety of complications, including:

- Worsening feelings of shame, guilt and low self-esteem
- Infection, either from wounds or from sharing tools
- Permanent scars or disfigurement
- Severe, possibly fatal injury
- Worsening of underlying issues and disorders, if not adequately treated

Suicide risk

Although self-injury is not usually a suicide attempt, it can increase the risk of suicide because of the emotional problems that trigger self-injury. And the pattern of damaging the body in times of distress can make suicide more likely.

Prevention

There is no sure way to prevent your loved one's self-injuring behavior. But reducing the risk of self-injury includes strategies that involve both individuals and communities — for example, parents, schools, medical professionals, supervisors, co-workers and coaches.

- **Identify people most at risk and offer help.** For instance, those at risk can be taught resilience and healthy coping skills that they can then draw on during periods of distress.
- **Encourage expansion of social networks.** Many people who self-injure feel lonely and disconnected. Forming connections to people who don't self-injure can improve relationship and communication skills.
- **Raise awareness.** Adults, especially those who work with children, should be educated about the warning signs of self-injury and what to do when they suspect it. Documentaries, multimedia-based educational programs and group discussions are helpful strategies.
- **Promote programs that encourage peers to seek help.** Peers tend to be loyal to friends even when they know a friend is in crisis. Programs that encourage youths to reach out to adults may chip away at social norms that support secrecy.
- **Offer education about media influence.** News media, music and other highly visible outlets that feature self-injury may nudge vulnerable children and young adults to experiment. Teaching children critical thinking skills about the influences around them might reduce the harmful impact.

By Mayo Clinic Staff

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Self-injury/cutting

Diagnosis

Although some people may ask for help, sometimes self-injury is discovered by family members or friends. Or a doctor doing a routine medical exam may notice signs, such as scars or fresh injuries.

There's no diagnostic test for self-injury. Diagnosis is based on a physical and mental evaluation. A diagnosis may require evaluation by a mental health provider with experience in treating self-injury.

A mental health provider may also evaluate you for other mental illnesses that may be linked to self-injury, such as depression or personality disorders. If that's the case, evaluation may include additional tools, such as questionnaires or psychological tests.

Treatment

There's no one best way to treat self-injuring behavior, but the first step is to tell someone so you can get help. Treatment is based on your specific issues and any related mental health conditions you might have, such as depression.

Treating self-injury behavior can take time, hard work and your own desire to recover. Because self-injury can become a major part of your life, you may need treatment from a mental health professional experienced in self-injury issues.

If the self-injury behavior is associated with a mental health disorder, such as depression or borderline personality disorder, the treatment plan focuses on that disorder, as well as the self-injury behavior.

Psychotherapy

Known as talk therapy or psychological counseling, psychotherapy can help you:

- Identify and manage underlying issues that trigger self-injuring behavior
- Learn skills to better manage distress
- Learn how to regulate your emotions
- Learn how to boost your self-image
- Develop skills to improve your relationships and social skills
- Develop healthy problem-solving skills

Several types of individual psychotherapy may be helpful, such as:

- **Cognitive behavioral therapy (CBT),** which helps you identify unhealthy, negative beliefs and behaviors and replace them with healthy, positive ones
- **Dialectical behavior therapy,** a type of CBT that teaches behavioral skills to help you tolerate distress, manage or regulate your emotions, and improve your relationships with others
- **Psychodynamic psychotherapy,** which focuses on identifying past experiences, hidden memories or interpersonal issues at the root of your emotional difficulties through self-examination, guided by a therapist
- **Mindfulness-based therapies,** which help you live in the present, appropriately perceive the thoughts and actions of those around you to reduce your anxiety and depression, and improve your general well-being

In addition to individual therapy sessions, family therapy or group therapy also may be recommended.

Medications

There are no medications to specifically treat self-injuring behavior. However, if you're diagnosed with a mental health condition, such as depression or an anxiety disorder, your doctor may recommend antidepressants or other medications to treat the underlying disorder that's associated with self-injury. Treatment for these disorders may help you feel less compelled to hurt yourself.

Psychiatric hospitalization

If you injure yourself severely or repeatedly, your doctor may recommend that you be admitted to a hospital for psychiatric care. Hospitalization, often short term, can provide a safe environment and more intensive treatment until you get through a crisis. Day treatment programs also may be an option.

Lifestyle and home remedies

In addition to professional treatment, here are some important self-care tips:

- **Stick to your treatment plan.** Keep therapy appointments and take prescribed medications as directed.
- **Recognize the situations or feelings that might trigger your desire to self-injure.** Make a plan for other ways to soothe or distract yourself or to get support, so you're ready the next time you feel the urge to self-injure.
- **Ask for help.** Keep your doctor or mental health care provider's phone number handy, and tell him or her about all incidents related to self-injury. Appoint a trusted family member or friend as the person you'll immediately contact if you have an urge to self-injure or if self-injuring behavior recurs.
- **Take care of yourself.** Learn how to include physical activity and relaxation exercises as a regular part of your daily routine. Eat healthy. Ask your doctor for advice if you have sleep

problems, which can significantly affect your behavior.

- **Avoid alcohol and recreational drugs.** They affect your ability to make good decisions and can put you at risk of self-injury.
- **Take appropriate care of your wounds if you injure yourself or seek medical treatment if needed.** Call a relative or friend for help and support. Don't share instruments used for self-injury — that raises the risk of infectious disease.

Coping and support

If you or a loved one needs help in coping, consider the tips below. If there's a focus on thoughts of suicide, take action and get help immediately.

Coping tips if you self-injure include:

- **Connect with others who can support you so you don't feel alone.** For example, reach out to a family member or friend, contact a support group, or get in touch with your doctor.
- **Avoid websites that support or glamorize self-injury.** Instead, seek out sites that support your recovery efforts.
- **Learn to express your emotions in positive ways.** For example, to help balance your emotions and improve your sense of well-being, become more physically active, practice relaxation techniques, or participate in dance, art or music

Coping tips if your loved one self-injures include:

- **Get information.** Learning more about self-injury can help you understand why it occurs and help you develop a compassionate but firm approach to helping your loved one stop this harmful behavior. Know the strategies and relapse prevention plan your loved one has developed with the therapist so you can encourage it.
- **Try not to judge or criticize.** Criticism, yelling, threats or accusations may increase the risk of self-injuring behavior. Offer support, praise efforts to express emotions in healthy ways and try to spend positive time together.
- **Let your loved one know you care no matter what.** Remind the person that he or she is not alone and that you're available to talk. Recognize that you may not change the behavior, but you can help the person find resources, identify coping strategies and offer support during treatment.
- **Support the treatment plan.** Encourage your loved one to take prescribed medication and stress the importance of keeping therapy appointments. Remove or limit access to matches, knives, razor blades or other items that may be used for self-injury.
- **Share coping strategy ideas.** Your loved one may benefit from hearing strategies you use when feeling distressed. You can also serve as a role model by using appropriate coping strategies.
- **Find support.** Consider talking to people who've gone through what you're going through. Share your own experiences with trusted family members or friends. Ask your friend or loved

one's doctor or therapist if there are local support groups for parents, family members or friends of people who self-injure.

- **Take care of yourself, too.** Take some time to do the things you enjoy doing, and get adequate rest and physical activity.

Preparing for your appointment

Your first appointment may be with your family doctor, another health care provider, a school nurse or a counselor. But because self-injury often requires specialized mental health care, you may be referred to a mental health provider for evaluation and treatment.

Be ready to provide accurate, thorough and honest information about your situation and your self-injuring behavior. You may want to take a family member or friend along, if possible, for support and to help you remember information.

What you can do

To help prepare for your appointment, make a list of:

- **Symptoms you've had,** including any that may seem unrelated to the reason for the appointment
- **Key personal information,** including any major stresses or recent life changes
- **All medications,** vitamins, herbs or other supplements that you're taking, including the doses
- **Questions to ask** to make the most of your time with your doctor

Some basic questions to ask your doctor include:

- What treatments are available? Which do you recommend for me?
- What side effects are possible with that treatment?
- What are the alternatives to the primary approach that you're suggesting?
- Are there medications that might help? Is there a generic alternative to the medicine you're prescribing?
- What should I do if I have an urge to self-injure between therapy sessions?
- What else can I do to help myself?
- How can I (or those around me) recognize that things may be getting worse?
- Can you suggest resources that would help me learn more about my condition and its treatment?

Don't hesitate to ask any other questions during your appointment.

What to expect from your doctor

Your doctor is likely to ask you a number of questions, such as:

- When did you first begin harming yourself?

- What methods do you use to harm yourself?
- How often do you cut or injure yourself?
- What feelings and thoughts do you have before, during and after self-injury?
- What seems to trigger your self-injury?
- What makes you feel better? What makes you feel worse?
- Do you have social networks or relationships?
- What emotional issues are you facing?
- How do you feel about your future?
- Have you had previous treatment for self-injury?
- Do you have suicidal thoughts when you're feeling down?
- Do you drink alcohol, smoke cigarettes or use recreational drugs?

By Mayo Clinic Staff

Nonsuicidal Self-Injury CE

Gail Hornor, RNC, DNP, CPNP

ABSTRACT

Nonsuicidal self-injury (NSSI) is a serious and prevalent problem within the adolescent population. NSSI is associated with a variety of psychiatric diagnoses and behavioral concerns. The *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition, has recognized NSSI as its own separate diagnosis. Although there are unique differences between NSSI and suicidal behaviors, a link exists between these behaviors. It is crucial that pediatric nurse practitioners who provide care for adolescents possess a thorough understanding of NSSI. In this continuing education article, NSSI will be discussed in terms of epidemiology, diagnosis and co-morbidity, risk factors, relationship with suicidal behaviors, and implications for practice. J Pediatr Health Care. (2016) *30*, 261-267.

KEY WORDS

Self-injury, mental health, adolescent

OBJECTIVES

1. Identify diagnostic criteria for nonsuicidal self-injury (NSSI) from the *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition.
2. Discuss risk factors related to NSSI.
3. Understand the relationship between NSSI and suicidal behaviors.
4. Understand possible motivations for NSSI behavior.
5. Describe assessment and screening questions for NSSI.
6. Identify NSSI prevention strategies the pediatric nurse practitioner can incorporate into practice.

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Nonsuicidal self-injury (NSSI) is defined as the deliberate infliction of damage, pain, or both to one's own body tissue without the intention of suicide (Nock & Favazza, 2009). NSSI is a serious and prevalent problem within the adolescent population. It is crucial that pediatric nurse practitioners (PNPs) who provide care for adolescents possess a thorough understanding of NSSI. This continuing education article will explore NSSI in terms of epidemiology, diagnosis and comorbid symptomatology, risk factors, relationship with suicidal behaviors, and implications for practice.

EPIDEMIOLOGY

It is estimated that 7% to 14% of adolescents deliberately injure themselves at least once (Wilkinson, 2013). Recent studies suggest NSSI is on the rise, perhaps up to a 24% 1-year prevalence (Miller & Smith, 2008). Onset of NSSI typically occurs in early adolescence between the ages of 11 to 15 years and can continue into adulthood (Rodav, Levy, & Hamdan, 2014). It is estimated that 4% of the adult population engages in NSSI (Selby, Bender, Gordon, Nock, & Joiner, 2012). The prevalence of NSSI is slightly higher in females than in males. Common forms of NSSI include cutting, skin carving, biting, scratching, hitting, head banging, and interfering with wound healing (Rodav et al., 2014). Gender differences exist for the methods of NSSI employed: burning and self-hitting are endorsed more frequently by males, with cutting and scratching more common in females (Rodav et al., 2014). Persons who engage in NSSI tend to use more than one method and repeat the behavior. Behaviors such as body piercing or tattoos, which are more socially accepted, are not considered examples of NSSI. Scab picking or nail biting are also not considered forms of NSSI.

DIAGNOSIS AND COMORBID SYMPTOMATOLOGY

NSSI is associated with a wide range of severe clinical psychiatric diagnoses and other dysfunctional behavioral problems (Vaughn, Salas-Wright, Underwood, & Gochez-Kerr, 2015). NSSI is in fact a diagnostic criterion for borderline personality disorder (Selby et al., 2012). However, NSSI can also be present in persons without borderline personality disorder. NSSI can occur as a

symptom of other psychiatric diagnoses including anxiety and depressive disorders, substance abuse, eating disorders, post-traumatic stress disorder, and personality disorders other than borderline personality disorder (Vaughn et al., 2015).

NSSI can exist in persons with no other diagnosable psychopathology. The *Diagnostic and Statistical Manual of Mental Disorders,* fifth edition (DSM-V; American Psychiatric Association [APA], 2013), lists NSSI as a separate diagnosis, whereas prior editions of the DSM included NSSI only as a symptom of borderline personality disorder and not as a distinct diagnosis (APA, 1994). According to the DSM-V, in order to meet the criteria for the NSSI diagnosis, a person must engage in 5 or more days of intentional self-injury to the body surface without suicidal intent within the past year. The self-injurious behavior must be associated with one of the following criteria: interpersonal difficulties or negative thoughts/feelings (such as depression or anxiety) occurring right before the act, premeditation (i.e., planning the self-injury), and repetitive thoughts or rumination on the NSSI. Premeditation means that right before the act of self-injury, the individual was preoccupied with thoughts about the planned act. Even when the individual does not engage in the self-injurious behaviors, he or she is frequently thinking about them. Crucial to the behavior meeting the criteria for the NSSI diagnosis is that the self-injurious behavior is not socially acceptable and often can result in significant distress to the individual's life. In addition, the self-injurious behavior does not take place during psychosis, delirium, substance intoxication, or substance withdrawal.

RISK FACTORS

Adolescence is a vulnerable period of development when changes occur that can result in stress for the individual. Stress occurs when mental, emotional, and/or physical demands exceed the regulatory capacity of the organism (Cohen, Tottenham, & Casey, 2013). Adolescents are transitioning from dependence on parents to relative independence, which places new demands on them (Cohen et al., 2013). It is a time marked by incredible change with increased responsibility and choices that can result in rewards as well as stresses. Most adolescents have adequate coping mechanisms to process their changing lives and can transition through adolescence without experiencing NSSI. However, a variety of external factors (e.g., adverse childhood experiences, poor parenting practices, and negative peer influences) and internal factors (e.g., emotional dysregulation and psychological distress) can place adolescents at risk for NSSI.

Adolescents who experience adverse childhood experiences are at increased risk to develop cognitive distortions that can lead to the endorsement of NSSI behaviors (Vaughn et al., 2015). Severe childhood adversity is linked to psychopathology, leading to more frequent or severe NSSI behaviors (Vaughn et al., 2015). See Box 1 for familial psychosocial factors that can place a person at increased risk for NSSI. Parenting behaviors that are not necessarily abusive in nature can also influence NSSI. Problematic caregiver-child attachment can predispose to the development of NSSI (Gonzales & Bergstrom, 2013). Studies have shown that high parental support coupled with low parental control are associated with higher levels of child/adolescent adaptive psychosocial functioning (Barber, Stolz, & Olsen, 2005; Bureau, Freynet, Poirier, Lafontaine, & Cloutier, 2010). Parental control is defined as behavior wherein a parent wishes to influence the behavior of the child either by harsh physical punishment or psychological control (Baetens et al, 2014). Parental support refers to a parent showing warmth, acceptance, and understanding to the child. Parenting styles reflecting high behavioral control and low support have been found to be a risk factor for the development of NSSI behaviors (Baetens et al., 2014).

> Persons with a diagnosis of borderline personality disorder, dissociative disorders, eating disorders, and major depressive disorders have more NSSI symptomatology.

As previously discussed, the existence of certain mental health disorders can certainly predispose an adolescent to engage in NSSI behaviors. Persons with certain psychiatric disorders have a higher prevalence of NSSI than do persons with other disorders. Persons with a diagnosis of borderline personality disorder, dissociative disorders, eating disorders, and major

BOX 1. Psychosocial risk factors for nonsuicidal self-injury

- Child maltreatment
  - Sexual abuse
  - Physical abuse
  - Emotional abuse
  - Neglect
- Parental drug/alcohol use
- Exposure to domestic violence
- Parental mental health concerns
  - Mental retardation/low functioning
  - Anxiety
  - Depression
  - Other diagnosis
- Poverty

depressive disorders have more NSSI symptomatology. The prevalence of NSSI among adolescent psychiatric patients is high, ranging from 40% to 80% (Kerr, Muehlenkamp, & Turner, 2010).

However, adolescents without a mental health disorder can possess certain intrinsic personality factors that make them vulnerable to NSSI. The most important of these factors to consider when discussing risk for NSSI are emotional regulation and psychological distress (Baetens et al., 2014). Emotional regulation is defined as the external and internal processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one's goals (Matthews, Kerns, & Ciesla, 2014). Dysfunction in the monitoring processes of emotional regulation can result in emotional hypervigilance or a lack of emotional self-awareness. Faulty emotional evaluation can result in biased evaluation of emotional stimuli. Difficulties in the modification processes of emotional regulation can result in an individual being unable to adjust his or her emotions to fit the context appropriately (Matthews et al., 2014). Adolescents with emotional dysregulation are at risk for NSSI. Adolescents who experience higher levels of subjective psychological distress in response to adverse or stressful situations and who are less capable of tolerating distress are at increased risk to engage in NSSI (Anestis, Knorr, Tull, Lavender, & Gratz, 2013; Najmi, Wegner, & Nock, 2007). These adolescents who are experiencing higher levels of subjective psychological distress may engage in NSSI to cope with their distress (Baetens et al., 2014).

MOTIVATION AND CONSEQUENCES

It is important for the PNP to understand why individuals engage in NSSI. The most common reason is to relieve intense distressing feelings such as sadness, guilt, flashbacks, or depersonalization (Wilkinson & Goodyer, 2011). The NSSI behaviors help them escape from negative thoughts and/or emotions (Nock & Prinstein, 2005). The sharp physical pain caused by NSSI can help to distract from their unbearable feelings. Adolescents may think they need to punish themselves by engaging in NSSI. NSSI may also be a vehicle to gain attention so that others can see their distress. Adolescents may engage in NSSI to make other people feel guilty and change their behavior or to fit in socially with self-injuring peers (Wilkinson & Goodyer, 2011). Another motivation for NSSI is to elicit feelings, "to feel something because the adolescent was feeling numb or empty" (Klinsky, 2011). These adolescents want to feel something, even if the feeling is pain. Other self-injurers state that they engage in NSSI to feel positive sensations such as satisfaction. It is hypothesized that NSSI results in the release of endogenous opiates in response to tissue damage, which yields feelings of euphoria (Selby et al., 2012). The ability to elicit these feelings tends to reinforce or promote the NSSI behavior (Selby, Nock, & Kranzler, 2014). The sight of blood while self-injuring may be a reinforcing aspect of NSSI because it is reported that seeing blood helps the adolescent feel real and to focus (Selby et al., 2014). Other motivations for NSSI include fun and excitement (Laye-Gindhu & Schonert-Reichl, 2005).

Zetterqvist, Lundh, Dahlstrom, and Svedin (2013) discuss NSSI motivation in terms of four functions: automatic negative reinforcement (to stop feeling numb or empty or to feeling an undesired emotional state); automatic positive reinforcement (to feel something, even pain); social negative reinforcement (to avoid doing something they do not want to do or find unpleasant); and social positive reinforcement (to get a reaction even if it is negative). Automatic reinforcement (negative greater than positive) appears to be the primary motivation for NSSI. Selby et al. (2014) found that persons who are motivated to engage in NSSI due to automatic positive reinforcement engaged in NSSI more frequently and that these persons may be at increased risk for suicide. This increased risk for suicide stems from habituation to sensations of pain over time, the development of fearlessness in the process, and the erosion of the barrier to suicide of fear of pain (Selby et al., 2014). This phenomenon is especially true for persons who engage in NSSI to feel pain.

NSSI AND SUICIDAL BEHAVIORS

Suicide is a major pediatric health concern. Suicide is the third leading cause of death among 10- to 24-year-olds in the United States (Kim & Dickstein, 2013). Studies suggest that up to 70% of persons engaging in NSSI have had at least one previous suicide attempt (Kim & Dickstein, 2013). It is crucial for PNPs to understand the relationship between NSSI and suicide. NSSI differs from suicidal behaviors in three essential ways: intention, repetition, and lethality (Hamza, Stewart, & Willoughby, 2012). The fundamental distinction between NSSI and suicide can be found in intention. As opposed to adolescents engaging in suicidal behavior, adolescents who engage in NSSI do not intend to end their own lives, nor do they perceive that their injuries will result in death (Andover & Gibb, 2010). Both behaviors may be engaged in because of a desire for relief from a distressing affective state; however, the end intention differs. Adolescents who engage in NSSI have a more positive attitude about life compared with adolescents who engage in suicidal behavior, and they also have a more negative attitude toward death; their end intent is not death (Muehlenkamp & Gutierrez, 2004). NSSI tends to occur more frequently than suicidal behaviors. In a sample of adolescent psychiatric inpatients, Nock and Prinstein (2005) found that the mean number of NSSI incidents occurring in the past year was 80, whereas the mean number of suicide

attempts for adolescents with a prior suicide attempt was 2.8. NSSI behaviors are also low in lethality when compared with suicidal behaviors. Frequent NSSI behaviors include cutting (not on the wrist), burning, scratching, or biting, compared with much more lethal suicidal behaviors such as overdosing, cutting wrists, using firearms, and hanging. NSSI rarely requires medical attention, whereas suicidal behaviors frequently do require medical attention (Whitlock et al., 2011).

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Although NSSI and suicidal behaviors differ in fundamental ways, they often co-occur (Victor & Klonsky, 2014). When compared with their non-NSSI peers, adolescents who self-injure tend to have more suicidal ideation with more suicidal attempts (Rodav et al., 2014). Numbers vary according to different studies, which report that from 33% to 70% of adolescents who self-injure have at least one suicide attempt (Asarnow et al., 2011; Nock, Joiner, Gordon, Richardson, & Prinstein, 2006). NSSI is in fact considered one predictor of suicidal behavior (Rodav et al., 2014). Victor and Klonsky (2014) explored which suicide risk factors, when present in adolescents engaging in NSSI, are most predictive of suicidal behavior (see Box 2). Persons who engage in NSSI more frequently are at increased risk to engage in suicidal behavior. The more different methods of NSSI employed, the higher the risk for suicidal behaviors. Nock and colleagues (2006) also found having a longer history of engaging in NSSI and an absence of physical pain when engaging in NSSI to be predictive of suicidal behavior. Symptoms of or the diagnosis of borderline personality disorder in a person who engages in NSSI also increases the likelihood of suicide attempts. The existence of higher levels of hopelessness and impulsivity among persons engaging in NSSI also increases the frequency of suicide attempts (Doughterty et al., 2009; Victor & Klonsky, 2014).

BOX 2. Risk factors for suicidal behaviors in adolescents who engage in nonsuicidal self-injury

Strong and moderate correlates
- Increased NSSI longevity
- Increased NSSI frequency
- Higher number of methods of NSSI employed
- Increased severity of NSSI methods employed (e.g., cutting vs. hair pulling)
- Borderline personality disorder
- Hopelessness/depression
- Impulsivity
- Posttraumatic stress disorder
- Other mental health diagnosis
- Sexual and physical abuse

Note. *NSSI, nonsuicidal self-injury.*
Data from Victor and Klonsky (2014).

Different theoretical explanations exist to explain the link between NSSI and suicidal behaviors. One theory describes NSSI as a gateway to suicidal behaviors (Brausch & Gutierrez, 2010). NSSI and suicidal behaviors exist on a continuum, with NSSI at one end of the spectrum and suicidal behaviors at the other. Both behaviors involve intentional acts to harm one's own body. NSSI behaviors act as a gateway to more extreme suicidal behaviors, much in the same way as marijuana use acts as a gateway to more extensive drug use.

Another theory suggests the existence of a third variable to explain the co-occurrence of NSSI and suicidal behaviors. The existence of a diagnosable psychiatric disorder (Jacobson, Muehlenkamp, Miller, & Turner, 2008), higher level of psychological stress (Brausch & Gutierrez, 2010), and biological markers such as serotonin system dysfunction (Sher & Stanley, 2009) have been suggested as possible third variables.

Joiner (2005), in exploring the possibility for an acquired capability for suicide, hypothesizes that in order to commit suicide, a person must overcome the fear and pain associated with killing oneself. NSSI may be one way to become desensitized to the fear and pain of suicide. However, Joiner (2005) does not believe that NSSI is the only desensitizer to suicidal behaviors and believes that other behaviors can be a precursor to suicidal behavior. Joiner (2005) also states that these behaviors, including NSSI, that tend to decrease pain and fear associated with suicide, are not enough to lead to suicide unless they lead to perceived burdensomeness (i.e., feelings that one is a strain on others) and social isolation. According to Joiner's theory of acquired capability, the reason why some persons who engage in NSSI do not attempt suicide is because of a lack of the development of feelings of perceived burdensomeness or social isolation.

Hamza, Stewart, & Willoughby (2012) integrate aspects of the three previously discussed theories exploring the link between NSSI and suicidal behaviors. The Integrated Model states that NSSI may uniquely and directly predict suicidal behavior in persons who are currently engaging in only NSSI behaviors but are also demonstrating greater levels of depression, hopelessness, and negative self-esteem. The level of intrapersonal distress felt by the individual moderates

his or her own personal relationship between NSSI and suicidal behavior. Thus persons who are experiencing greater psychological distress are at increased risk to engage in suicidal behaviors. The Integrated Model envisions the expression of both NSSI and suicidal behaviors to be influenced by linkage with a latent third variable or shared risk factors such as borderline personality disorder, hopelessness, dysfunctional family functioning, posttraumatic stress, and a history of child abuse. These shared risk factors can predict both NSSI and suicidal behaviors. The Integrated Model also views an indirect path from NSSI to suicidal behavior, similar to descriptions in Joiner's theory. This indirect link is moderated by acquired capability and suicidal desire. The severity of NSSI behaviors (cutting versus hair pulling) moderates the link between NSSI and acquired capability, with persons engaging in more severe forms of NSSI having a stronger link between the two and being more likely to engage in suicidal behavior. The link between NSSI and suicidal behavior is also moderated by suicidal desire. Suicidal desire will be higher in persons endorsing higher feelings of burdensomeness and social isolation.

NURSING IMPLICATIONS

NSSI is a significant problem in the adolescent population. NSSI may be a symptom of an underlying psychiatric illness, or it may be the psychiatric illness. NSSI can result in physical harm to the adolescent and has been linked to suicide attempts. Adolescents must be assessed for NSSI. A thorough head to toe skin assessment should be completed, with an exploration of causation for any injuries noted. Adolescents should be asked screening questions related to NSSI (see Box 3). The potential for lethality must also be considered. If screening questions reveal suicidal ideation, it is crucial to explore this issue thoroughly. Is the suicidal ideation coupled with social isolation, hopelessness, or burdensomeness? Does the adolescent believe that his or her family and friends would be better off if he or she were not around? Does the adolescent have an actual plan for killing himself/herself? Has he or she had past suicide attempts? Can the teen promise the PNP that he or she will not hurt or kill himself/herself? Any adolescent endorsing current suicidal ideation must be linked immediately with emergency mental health care and may require an inpatient admission. Knowledge of local mental health resources is vital.

It is important to gather a thorough psychosocial assessment for all adolescent patients, and this step is crucial in adolescents who report engaging in NSSI (see Box 4). It is vital to link adolescents and their families to appropriate resources to address any concerns revealed in the psychosocial assessment. If a concern of suspected child maltreatment is revealed, a report to child protective services is indicated. Bergen, Hawton, Waters, Cooper, and Kapur (2010) suggest that performing the psychosocial assessment may actually decrease the future incidence of NSSI for that adolescent. It is vital that parents/caregivers be made aware of the NSSI if they were previously unaware of it to ensure the safety of the patient. Appropriate steps must be made to eliminate safety risk based on the patient's method/methods of NSSI behaviors. Access to knives, razors, pins, or other sharps should be limited for adolescents engaging in cutting behaviors. The PNP must inform the adolescent that he or she needs to inform his or her parent of the NSSI for his or her safety. The PNP should also ask the teen if he or she believes he or she can promise not to engage in the NSSI in the future.

> Although no treatment for NSSI can be considered evidence-based, some treatment modalities show promise.

Any teen who reports engaging in NSSI behaviors must be linked with appropriate mental health services. If the teen is already linked with mental health services, the PNP must ensure that the therapist is aware of the

BOX 3. Nonsuicidal self-injury screening questions

Have you ever thought about hurting yourself?
Why/when/what did you think about doing?
Have you ever hurt yourself?
Last incident
- When?
- What method did you use?
- Why?
- Suicidal intent?

First incident
- When?
- What method did you use?
- Why?
- Suicidal intent?

Explore frequency and severity of methods for NSSI
- When/how often?
  - Last week/last month/last year
- Methods used?
- Medical care ever required?
- Suicidal intent?
- Parental awareness?

Explore social isolation
- Friends
- Family

Explore hopelessness
- Plans for future
- Things you like to do/activities

Explore burdensomeness
- Do you ever think your parents/family/friends would be better off if you were not around?

Note. *NSSI, nonsuicidal self-injury.*

BOX 4. Psychosocial assessment

Draw a family tree
- Mother's name and age
- Father's name and age
- Children they have together and ages
- Children they have with other partners and ages
- Who lives with the child
- Who lives in the home that the child visits

Parental drug/alcohol concerns
Parental mental health/mental retardation
Parental involvement with law enforcement
Exposure to domestic violence
Parental child maltreatment history as a child
- Sexual abuse/physical abuse/emotional abuse/neglect
  - Did you receive treatment?
- Involvement with child protective services as a child

Parental concerns of sexual abuse/physical abuse or neglect for this child
Involvement with child protective services for the child or child's siblings
Mental health/behavioral/developmental concerns for the child

NSSI and feels comfortable addressing the problem. Although no treatment for NSSI can be considered evidence-based, some treatment modalities show promise. A modification of dialectical behavioral therapy for adolescents has been found to decrease both NSSI and other symptoms of BPD (Fleischhaker, Bohme, Sixt, & Bruck, 2011). Cognitive behavioral therapy has also been found to decrease NSSI symptoms (Taylor, Oldershaw, Richards, & Davidson, 2011). Emotionally focused family therapy may be helpful in the treatment of NSSI given the existing scientific evidence for family-based interventions for other adolescent and child disorders (Schade, 2013). If the psychosocial history reveals a history of trauma exposure, trauma exposed care is necessary. Gonzales and Bergstrom (2013) discuss stages in patient recovery from NSSI: limit setting for safety (initially inpatient care or close caregiver supervision but gradually transitioning to the patient himself or herself); developing self-esteem; discovering why the NSSI took place and what role it served for the patient; realization by the patient that he or she can choose whether or not to self-injure; replacing NSSI with other coping skills; and a period in which the patient is able to maintain an NSSI-free state.

Adolescence can be a difficult developmental period. PNPs must be alert to the development of behavioral and mental health disorders, including NSSI. It is crucial for PNPs to possess a thorough understanding of their patient's behavioral/mental health history, including any family history of mental illness. A patient's psychosocial assessment, including screening for child maltreatment, can provide vital insight into their health and well-being. Identification of a familial psychosocial concern and linking the family with appropriate resources can prevent the development of NSSI and other behavioral/mental health concerns. Prompt identification of NSSI coupled with appropriate intervention can result in cessation of the behavior, failure of progression to suicidal behavior, and improved emotional health for the adolescent.

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