By Colleen M. Lang, Ph.D.

Self-injury: What is it?

Self-injury, also termed "deliberate self-harm," "self-mutilation," and "non-suicidal self-injury," refers to an array of behaviors used to intentionally inflict harm upon oneself, for purposes that are neither socially sanctioned nor with suicidal intent (Favazza, 1998). Cutting, intentional carving of the skin, is the most common form of self-injury, and is most frequently done using razors, pins or other sharp objects on the forearms and upper legs. Other forms of self-injury include burning, pulling skin or hair, severe scratching and self-bruising (typically by punching or using objects to hit oneself) and excessive tattooing (Anderson & Sansone, 2003).

Just as the range of self-injurious acts can vary, the severity, frequency and lifetime duration of these behaviors also are heterogeneous. Although cutting typically results in superficial, non-lethal wounds (e.g., Skegg, 2005), those who self-injure are at high risk of hurting themselves more than intended and of requiring medical attention (Whitlock, Eckenrode, & Silverman, 2006). The dangerousness of self-injury extends beyond the severity of actual injuries. A significant portion of those who self-injure (i.e., adolescents) share cutting implements with others (DiClemente et al., 1991), causing infection and disease. Intuitively, the risk of severe injury increases with the frequency of self-injury. Reported lifetime frequency varies from single to hundreds of self-injurious acts (Laye-Gindhu & Sconert-Reichl, 2005; Whitlock et al.).

Although it can occur for the first time in early childhood, self-injury is most often initiated in middle adolescence, between the ages of 12 and 15 (Yates, 2004). Once self-injury begins, it tends to be episodic. Episodes occur as consecutive periods of weeks, months or years, during which time the frequency of the behavior also varies. Although many adolescents stop self-injuring within five years of starting, it can persist into adulthood (Whitlock et al., 2006). Studies of high school populations consistently show a 13 to 24% lifetime prevalence rate (Laye-Gindhu & Sconert-Reichl, 2005; Muehlenkamp & Gutierrez, 2004) 

Who is self-injuring and why?

Rates of self-injury tend to be similar across races, ethnicities, and socioeconomic groups (Marshall & Yazdani, 1999; Whitlock et al., 2006). Although self-injury, and cutting in particular, has historically been associated more with girls than boys (Laye-Gindhu & Sconert-Richl, 2005; Hawton, Rodham & Evans, 2006; Whitlock et al., 2006), emerging evidence is less consistent (e.g., Muehlenkamp & Gutierrez, 2004).

Exposure to child maltreatment, particularly childhood sexual abuse, is the most common risk factor for self-injury found to date (Brody, Cloitre, & Dulit, 1995; Gratz, 2003). Earlier, more severe abuse and familial association with the abuser(s) are predictive of increased self-injury (Brody et al., 1995) and self-injury persistent into adulthood (Deiter, Nichols, & Pearlman, 2000; Roe-Sepowitz, 2007). Diagnoses of posttraumatic stress disorder (PTSD) and even more strongly, complex PTSD, act as additional risk factors for self-injury, as does the presence of an eating or substance abuse disorder, borderline personality disorder, depression and anxiety (Dyer et al., 2009; Yates, 2004).
Self-injury is viewed as a behavior that occurs in a functional context rather than as a behavior that typifies a specific diagnosis or type of individual. Because self-injury occurs in a variety of ways and among a variety of populations, it is best understood in terms of the reciprocal relations it shares with other psychological events (i.e., thoughts, feelings and behaviors). Conceptual understanding of its function is informed by Marsha Linehan’s (1993) well-established theoretical framework of Borderline Personality Disorder (BPD), a personality disorder in which self-injury is a prominent diagnostic feature. Linehan’s work, and her development of Dialectical Behavior Therapy (DBT) for BPD, has elucidated the role of emotional dysregulation in self-injury. Emotional dysregulation is the inability to effectively manage and control intense emotions, and it underlies posttraumatic stress disorder, depression, anxiety, anger, substance abuse and eating disorders (Yates, 2004). Individuals report practicing self-injury for a variety of reasons, but most prominently in response to emotions perceived as being uncomfortable and overwhelming, or to disrupt a sense of numbness that results from experientially avoiding such emotions (Gratz, 2003). Steven Hayes’s extensive work on experiential avoidance, which refers to attempts made to alter the form or frequency of unwanted emotional experiences, is useful for understanding the emotion regulation function of self-injury (Hayes, Strosahl, & Wilson, 1999).

In behavioral terms, self-injury is theorized to be negatively reinforcing, or associated with termination of an undesirable or aversive state, in that it provides a way to either distract or relieve oneself from intense emotions, as well as positively reinforcing, in that it produces an “adrenalin rush” and a sense of being “real.” Self-injury can also be secondarily reinforced by the attention of others drawn to cuts and scars for individuals who are otherwise limited in their capacity to communicate their needs (Levenkron, 1998). Other cited functions of self-injury include self-punishment, expression of self-hatred, enhancement of a sense of control, and “punishment” of or “proving something” to individuals perceived as hurtful (Gratz, 2003).

What is the link between maltreatment and self-injury?
Linehan (1993) argued that among children, the interaction between biological vulnerability to intense emotionality and growing up in an invalidating environment results in self-injury. Invalidating environments include those in which children’s emotions are denied, punished or neglected, which prohibits the development of the capacity to identify, accept and modulate uncomfortable emotions. Childhood sexual and physical abuse experiences represent the grossest forms of emotional invalidation, while abusive caregivers fail to model or teach effective emotional regulation strategies. Additionally, hyperarousal is a common posttraumatic stress response, making regulation of intense emotional states even more challenging. As noted, the most frequently described function of self-injury is relief from undesirable feelings (Gratz, 2003); traumatized youth may respond as such to flashbacks that produce intense negative affect (Briere & Gil, 1998). Because self-injury also functions to disrupt a sense of derealization, the link between trauma and self-injury may, in some cases, be mediated by dissociation, often used as a method of experientially “escaping” ongoing, severe trauma (Gratz, 2003). Over time, it lends individuals a sense of emotional numbness that triggers the impulse to self-injure. Finally, trauma engenders self-hatred and shame, a perceived lack of control, and marked anger in interpersonal relationships, all of which contribute to self-injury (Gratz).

What should we do about child and adolescent self-injury?
Step 1: Detection: Detection of self-injury is difficult because of its secretive nature; children and adolescents who self-injure tend to be secretive about who they tell. The Cornell Research Program on Self-Injurious Behaviors in Adolescents offers guidelines on their website (www.ccrpib.com/ whatissi.asp). As noted, cutting most frequently occurs on the forearms and upper thighs, as well as on the stomach, not only because these body parts are easily accessed, but also because they are easily hidden. The forearm opposite the dominant hand is the most commonly observed target of cutting; individuals may try to keep scars hidden by wearing long sleeves even in heat, by cutting a hole at the end of sleeves so that they can slip their thumbs through and keep sleeves taut, or by wearing wrist bands/coverings in warmer seasons. Other signs of self-injury may include unwillingness to participate in events (e.g., gym class) that require less bodily coverage, frequent use of bandages, small spots of bleeding through clothes, and carrying odd but sharp objects such as pins, razor blades and pencils with broken erasers. Because adolescents, in particular, tend to learn from their peers different ways of conducting and concealing maladaptive behaviors, an awareness of changing trends in self-injury is always warranted.

Child care professionals accustomed to detecting physical abuse may have difficulty discerning when injuries are self-versus other-inflicted, particularly when the method of self-injury is bruising or skin burning. For this reason, careful assessment of the nature of injuries is warranted. Open-ended questions are strongly recommended, so as not to lead the injured youth to attribute self-injury to physical abuse, or vice versa.

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Step 2: Response: Anyone interacting professionally or personally with children and adolescents are advised to prepare their responses to indicators of self-injury. Reacting emotionally is often counterproductive. Shock and excessive emotional attention or pity often serve as reinforcers of the behavior, and harsh, judgmental responses that come out of a sense of frustration and/or confusion can facilitate a sense of shame or of being perceived as "crazy." These reactions prevent children from disclosing self-injurious behavior to others, including potential sources of help. More importantly, self-injurers are often without the capacity to more appropriately express and cope with negative affect; First responders to self-injurious behavior can model and reward better communication by reserving judgment, listening empathically and clarifying the dangerousness and limits that will be set upon the behavior.

Mental health services (described below) often are warranted for individuals who self-injure. However, medical attention is often a primary need, and can include emergency room medical and psychiatric evaluation. Once the child or adolescent is out of danger, a discussion about the behavior should take place. Those responding to self-injury are wise to adopt a harm-reduction rather than abstinence approach, given the persistent nature of the behavior. To this end, the self-injuring individual should be educated about the potential consequences of sharing cutting implements and/or of using more dangerous self-injurious acts (e.g., cutting close to the veins in the wrists, using contaminated or rusted objects to cut, bruising oneself in more sensitive areas of the head/brain, and prolonged burning).

Step 3: Treatment: Treatment options available for children and adolescents who self-injure are variable, and include individual, family, and group therapy modalities across different theoretical orientations. As summarized by Kress, Gibson and Reynolds (2004), structured and consistent therapeutic plans are recommended, in which the following are emphasized: a) harm-reduction; b) identification of the antecedents and consequences of self-injurious behavior; c) tolerance of and/or more effective coping with triggers and physical cues; d) the responsibility of the self-injuring individual to control the behavior; and e) mobilization of appropriate social supports from whom the individual can seek assistance with self-injurious impulses.

Of such therapeutic approaches, DBT has been widely evidenced as being efficacious in reducing self-injurious behaviors (Walsh, 2006), and its basic tenets have been informative in directing treatment specifically of traumatized youth. In targeting the posttraumatic reactions that may mediate the relation between child maltreatment and self-injury (i.e., avoidance and re-experiencing symptoms; Weireich & Nock, 2008), trauma-focused cognitive behavioral therapy (TF-CBT) has been shown to be highly effective (Cohen & Mannarino, 1996, Cohen & Mannarino, 1998; Cohen et al., 2004, Deblinger et al., 1996, Deblinger et al., 2001, King, 2000). Recently, TF-CBT approaches in which DBT skill-building intervention strategies have been systematically incorporated, have gained popularity and promise for the treatment of chronically traumatized adolescents, specifically. These approaches include the Structured Psychotherapy for Adolescents Responding to Chronic Stress (SPARCS; DeRosa et al. 2006) and the Skills Training in Affective and Interpersonal Regulation/Narrative Story-Telling (STAIR/NST; ) group therapy programs, Integrative Treatment of Complex Trauma for Adolescents (ITCT-A; Briere & Scott, 2006) and PARTNERS with Teens: An Integrative Cognitive-Behavioral Treatment Package for Traumatized Adolescents (Lang & Brown, 2008). Information about these and other empirically supported and promising practices is provided by the National Child Traumatic Stress Network (http://www.nctsn.org/ncts/nav.do?pid=ctr_top_trmnt_prom).

In summary, both DBT and TF-CBT aim to provide a validating therapeutic environment while fostering the development of more effective affect regulation skills. The development of healthier coping skills for handling distress and the promotion of social connectedness are particularly important. Trauma is associated with difficult and painful memories that can be triggered by a multitude of cues in the daily life of youth, and trauma-based approaches often include exposure to memories as a principal intervention. Limiting self-injurious behaviors without developing and assuring the consistent capacity for tolerating negative affect may put youth at risk of relying on other self-destructive behaviors, such as substance use. Additionally, traumatized youth characteristically experience diminished self-esteem and feelings of shame and/or depersonalization. Because these feelings often underlie reasons for self-injuring, services should incorporate recognition and maximization of youth's strengths and establishment and reinforcement of meaningful interpersonal connections. At the same time, mental health providers have the opportunity to continuously monitor self-injurious behavior and the individual's physical safety generally.

Finally, psychopharmacological approaches may also be helpful. Specifically, anti-depressant medication has been associated with reductions in self-injurious impulses (Walsh, 2005).


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