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Understanding Self-Injurious Behavior in Eating Disorders

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Although the psychiatric community first recognized self-injurious behavior (SIB) in the 19th Century, SIB has warranted treatment professionals' attention most significantly in the last decade. In recent years, eating disorder professionals are talking about SIB as a common co-occurring condition with both anorexia and bulimia. We do not see this phenomenon mitigating in the near future. Thus, there is a need to increase awareness of SIB's many functions and effective treatment strategies for eating disorder patients who engage in SIB.

To respond to the growing incidence of SIB among eating disorder patients, in fall 2003 Remuda established a multidisciplinary task force to explore SIB in depth. Our objectives were:

1) To come to greater understanding of the conceptual framework of SIB and the functions it serves, i.e., "what is the meaning behind the behavior?"
2) To evaluate areas of risk in our patient care practices.
3) To evaluate current treatments of SIB.
4) To develop a comprehensive bio-psycho-social-spiritual treatment approach for use with Remuda's SIB patients.

The current article describes the work that Remuda has completed in recent years to better understand SIB in eating disorders. The comprehensive treatment program developed for eating disorder patients with SIB is discussed in greater detail in a companion article in the current issue of *The Remuda Review*, Treating Self-Injurious Behavior in Eating Disorders.

Defining SIB

SIB has been analyzed in many publications. It is evident that diversity exists in the terminology used, including *self-harm, self-injurious behavior,* and *self-mutilation*, as well as in how these terms are defined. We prefer the term *SIB*, but will use these several terms interchangeably to reflect authors' preferred usage when citing their works.

Within this article and in *The Remuda Review*, SIB—and the related terms—are defined as: Any socially unacceptable behavior, involving immediate, deliberate, direct, and usually repetitive physical injury to one's own body, resulting in mild to moderate harm, usually without suicidal intent, and not due to psychiatric organicity.

As such, SIB describes individuals' mild to moderate wound infliction on their body surface, encompassing the range of parasuicidal gestures that are generally not truly suicidal in nature but which may mimic suicide attempts. SIB typically includes behaviors such as scratching, cutting, carving, burning, rubbing, abrading, punching, pinching, biting, head banging, and hair pulling. In cutting, the tool most often used is a razor blade and the most common body parts cut are the wrists and forearms, followed by the legs.

A case is made by some (Claes, Vandereycken, & Vertommen, 2004; Favaro & Santanastaso,1996; Favaro & Santanastaso, 2000) to define SIB to include a broader spectrum of self-defeating and damaging behaviors, such as binging and purging, drinking and smoking, substance misuse, and laxative, diuretic, and diet pill abuse. The use of medications to self-injure would also be placed in this category, including diabetics' inappropriate use of insulin to maintain or prolong an eating disorder. For the purposes of this paper and companion articles in this issue of *The Remuda Review*, we do not endorse this broader definition. In addition, we do not include piercing and tattooing in our definition, since most persons in the US who engage in these behaviors do so for cultural and aesthetic reasons, not as a form of SIB.

Favazza (1996) believes there is enough research and knowledge about SIB to argue for the diagnosis of a new disorder, "deliberate self-harm disorder". Favazza's (1996) argument is particularly compelling in that self-injury is not always associated with personality disorders. Those who self-injure simply do not always meet the strict criteria for a personality disorder, and thus, their SIB may not be captured in a diagnosis in spite of its clinical significance. In particular, Favazza (1996) argues that self-mutilation is an impulse disorder, occurring frequently with other impulse disorders such as kleptomania and, in his opinion, eating disorders. In support of this perspective, research suggests that among patients who self-injure, those without personality disorders often have more extensive treatment histories than those with personality disorders or even those who commit suicide (Suyemoto, 1998).

Favazza (1996) divides superficial, moderate self-harm into two categories: compulsive and impulsive. Impulsive SIB includes both episodic and repetitive forms.

Compulsive SIB. Compulsive self-harm differs in character from the impulsive forms and is more closely associated with obsessive-compulsive disorder (OCD). It is a pattern of skin-picking and excoriation that is prompted by anxiety. As such, Favazza (1996) suggests that compulsive self-harm has a different intention and root than do the impulsive forms.

Impulsive/Episodic SIB. Both episodic and repetitive self-harm are impulsive acts. The difference between them may be only a matter of degree. Episodic self-injury is defined as SIB that is not premeditated and occurs in response to an emotional trigger event. Individuals who engage in episodic self-harm do not typically see themselves as "self-injurers". However, what begins in this manner can escalate under certain stressors into a pattern of repetitive or habitual self-injury.

Impulsive/Repetitive SIB. Distinguishing features of repetitive self-injury are rumination about the self-injury, even when not actually carrying out the behavior, and the self-identification as a self-injurer. Repetitive self-harm becomes an impulsive, reactive response to positive and negative stressors. In a manner similar to how some use tobacco in response to stress, the repetitive self-harmer reaches for a sharp instrument. Several researchers have suggested that repetitive self-harm should be characterized as a separate DSM diagnosis. Short of having its own diagnosis, Favazza (1996) suggests that practitioners diagnose repetitive self-injury as impulse control disorder not otherwise specified.

Functions of SIB

It is incredibly important to understand the functions of SIB—to view the behavior as a message. The practitioner has the opportunity to receive the message and help the patient decode it. The patient may or may not have full insight into why s/he self-injures.

The literature describes various functions at work in SIB (Osuch, Noll, Putnam, 1999; Suyemoto, 1998). The most common functions have been well explained by authors Vanderlinden and Vandereyken (1997) as follows:

Stimulation. Escaping dissociative experiences through an intentional gesture to feel one's body, thereby utilizing SIB as a self-grounding technique.

Punishment. Imposed when feeling guilt, intense shame, weakness, and anger at oneself for demonstrating behaviorally a lack of discipline.

Relaxation. A pleasure response to the warmth of the blood and the physical sensation of pain, a form of tension reduction through direct abreaction and endorphin release.

Diversion. Inducing dissociation or a trance-like state to avoid attending to an emotional trigger, issue, subject, or suicidal thoughts.

Social Motives/Attention. Obtaining self-affirmation by showing oneself and others one's strength, and achieving nurturance and protection through others' responses.

Alteration. To become unattractive to self and others through scarring.

An interesting feature of SIB is that it is often performed with a sense of deliberate control, even when impulsive. In those who repeat the action, there seems to be a sense of empowerment and craft—a definite ownership of the behavior.

There is a great deal of agreement among patient self-reports about SIB. The events that often precipitate SIB are: 1) the perception of loss and abandonment—e.g., canceling an appointment, breaking a date; and 2) the experience of shame—e.g., failure on the job, feedback perceived as judgment or criticism. Isolation almost always occurs before an act of self-injury (Suyemoto, 1998). In one study of 101 eating disorder patients (Claes, Vandereycken, & Vertommen, 2004), the most frequently mentioned motive for SIB was to diminish negative feelings, followed by self-punishment and, to somewhat lesser degrees, to avoid painful memories and place oneself in a trancelike state. For all types of SIB, anger at oneself and sadness were most often mentioned as feelings both preceding and consequent to SIB. 70% of SIB patients report a release of tension and anxiety and a sense of satisfaction following SIB, since they experience the behavior as ending their anger, dissociation, or painful memory intrusion. The vast majority of patients speak of this emotional release as a key reinforcing factor for the behavior (Brown, Comtois, & Linehan, 2002).

One researcher's definition gives a glimpse into the world of those suffering with self-injury, viewing it not as a self-destructive act but one of self-preservation. This applies particularly to those who have trauma history. Favazza (1996) describes habitual self-mutilation as "a purposeful act of self-help which enables the subject to re-establish contact with the world." Self-medication or self-soothing and protection are often evident in the transcendent and sometimes dissociative experience of self-injury. Though the pain of SIB may be horrifically unbearable physically, it is preferred over the mental and emotional anguish and is believed by the injurer to effectively assuage their anguish and deep inner suffering. Imperative to theories surrounding SIB behavior is the understanding that many authorities have today: SIB sometimes, if not most of the time, has the ring of self-saving, not self-rejection and self-annihilation, and should be distinguished from pathologies with clear suicidal and self-destructive intent.

SIB and Eating Disorders

Estimates of SIB in the general US population range from 14 to 600 per 100,000 annually, or less than 1% (.014 % to 0.6%). Given the current US population of approximately 280 million, this indicates that between 39,200 and 1,680,000 people engage in SIB each year. Rates seem higher in adolescents and young adults: 1.8% in those aged 15-35, and 12% in college populations (Suyemoto & Kountz, 2000). Research suggests that most persons who self-injure are unmarried and female.

Western culture has long been known for its influence on the rest of the world, and this influence has continued with eating disorders. Recent cross-cultural research has found that eating disorders are emerging in societies, cultures, and ethnic groups that had earlier been presumed immune to these disorders (Becker et al, 2002; Nasser, 1997). Likewise with SIB. When rates of SIB were compared among indigenous populations in Australia, New Zealand, Canada, and the United States, researchers concluded that youth were quite vulnerable to breakdowns in traditional culture and roles spawned by Western influences, and attributed SIB predominantly to this factor (Hunter & Harvey, 2002).

Among patients with mental health disorders, the prevalence of SIB ranges from 4.3% to 13%, higher than in the general population but low in comparison to that found in eating disorders. In eating disorders, prevalence ranges from 25% to 45% (Claes, Vandereycken, & Vertommen, 2003; Herpertz, 1995; Paul et al, 2002). Correspondingly, Walsh and Rosen (1988) found that self-mutilating teens were significantly more likely to have an eating disorder, and Favazza (1996) concluded that as many as 50% of those who self-injure have a documented history of an eating disorder. Evidently, then, there is a high rate of co-occurrence between eating disorders and SIB. Quite interestingly, in one study with 35 patients (Solano et al, 2005), SIB had simultaneous onset with the eating disorder in 48.5% of patients, later onset in 40%, and previous onset in only 11.5%. The authors suggest that perhaps SIB serves differential functions in the three groups.

Differences in SIB rates between patients with anorexia and bulimia have not reached statistical significance (Favaro & Santonastaso, 1998; Fichter, Quadflieg, & Reif, 1994; Matsunaga et al, 2000). Furthermore, although patients with purging symptoms showed a higher frequency of SIB than non-purgers, the difference again did not reach statistical significance (Solano et al, 2005). This suggests that all eating disorder patients, regardless of diagnosis or subtype, have an equal risk of engaging in SIB. What differentiates one eating disorder patient from another in terms of SIB appears to lie beyond the diagnostic categories.

Overall, SIB research leaves us with some lack of clarity. Despite many studies on impulsivity and its relationship to eating disorders, few studies address self-harm specifically, and those that do have unclear clinical implications. Some of the contradictory results in the literature are due to imprecise and divergent definitions of SIB—heterogeneous criteria. Some definitions are very broad. Others include suicidal attempts and other forms of self-harm such as poisoning, which leads to overestimates of SIB. Still others choose to deal with only very mild forms of self-harm, leading to underestimates. Additional problems include limited sample sizes and mixing levels of care such as inpatients and outpatients. Future studies must explore the prevalence of SIB in greater depth and detail. There remains the unanswered question of the role that culture plays in the dynamic of self-injury. What roles do one's geographic, ethnic, socioeconomic, religious, and/or racial backgrounds play in the development of SIB? This requires further study and may affect the prevalence estimates of SIB.

Trauma. A relationship between childhood sexual abuse and SIB has often been raised. The assumption is often made by practitioners that patients who self-injure are likely to have a history of childhood sexual abuse. Among Remuda's eating disorder patients (*N*=6033), 49% report a sexual abuse history prior to age 18. Of those with sexual abuse histories, 37% report engaging in SIB, while only 21% of those without a sexual abuse history report SIB. Sexual abuse thus appears to increase the likelihood of SIB in eating disorder patients. Consistent with Remuda's data, Paul and colleagues (2002) reported a significantly higher rate of trauma in eating disorder patients who engage in self-harm versus those who do not. Researchers and practitioners agree that trauma does appear to play a significant role in the propensity to self-harm.

There is also a substantial body of empirical work demonstrating an association between sexual abuse and eating disorders themselves (e.g., Palmer et al, 1990; Schmidt, Humphries, & Treasure, 1997). In the context of the eating disorder, self-harm has been said to represent a language of its own that crosses cultural, racial, and ethnic barriers. Even as the eating disorder has been called the patient's "voice", SIB is said to express past trauma experiences, repeatedly. In the words of one patient who engaged in self-harm: "When I could not find the words, cutting had become the language to describe the pain, communicating everything I felt" (Pembroke's study, as cited in Takemoto, 2001).

To summarize, findings in the literature suggest that childhood sexual abuse appears to be a nonspecific risk factor for a range of psychiatric issues, including both eating disorders and SIB (Anderson & Bulik 2002). Among eating disorders, childhood sexual abuse has been found to be most closely correlated with bulimia nervosa (Kendler et al, 2000; Wonderlich et al, 1997), although there are no demonstrated differences in rates of SIB between anorexia and bulimia.

Other Psychopathology. In the general population, SIB is positively correlated with impulsiveness and antisocial behaviors (Simeon et al, 1992; Stephens, 2003), sexual promiscuity and high risk for HIV (Diclemente, Ponton, & Hartley, 1991), and suicide attempts (Dulit et al, 1994). Among psychiatric patients, those with SIB demonstrate significantly more anxiety, depression, hostility, feelings of anger, traumatic experiences, dissociation, and cluster B personality disorders than those without SIB (Claes, Vandereycken, & Vertommen, 2003; Newton, Freeman, & Munro, 1993).

The prevalence of personality disorder is one of several contributory factors to SIB in eating disorder patients. The inability to self-regulate emotions and tolerate distress have been identified as key underlying problems in many Axis II disorders as well as in SIB (Linehan, 1993). Other common features in the backgrounds of those with personality disorders—early abuse histories, high levels of dissociative defenses, highly chaotic family environments, lack of sufficient parental support, extensive psychosocial stressors, and severe mood disorders—are also risk factors for SIB (Levitt, Sansone, & Cohn, 2004).

In the eating disorder population specifically, SIB has been positively linked to neuroticism and conscientiousness, and negatively with extraversion and openness (Claes, Vandereycken, & Vertommen, 2004). There is a very high correlation between substance/alcohol abuse and SIB in all types of eating disorders (Claes, Vandereycken, & Vertommen, 2004). SIB in eating disorders is further associated with purging behaviors, generalized impulsiveness, suicide attempts, mood disorder, sexual abuse history, dissociation, co-morbidity, severity of illness, higher treatment dropout rates, and poor treatment outcome (Favaro & Santonastaso, 2000; Pierloot, Wellens, & Houben, 1975; Solano et al, 2005).

It has also been noted that eating disorder SIB patients are considerably body-focused, demonstrating a love/hate relationship with their bodies. As such, they demonstrate greater body dissatisfaction than those who do not self-injure (Claes, Vandereycken, & Vertommen, 2003). Remuda's data accord with this perspective, in that Remuda's patients who self-harm evidence higher scores on measures of somatization (Minnesota Multiphasic Personality Inventory-2; Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989) and body dissatisfaction (Eating Disorder Inventory-2; Garner, 1991), with both differences being highly statistically significant using analysis of variance. The notion of using one's body as an expressive outlet for emotional tension would seem worthy of continued reflection among eating disorder professionals (Claes, Vandereycken, & Vertommen, 2004).

The Spiritual and Sacred in SIB

The suffering we speak of in SIB is of a profound, almost sacred, type. Most practitioners are no longer shocked or dumbfounded by the behavior itself. That is not to say that one ever becomes immune to hearing about or seeing SIB, but it has indeed become an epidemic among young people across the world (Nasser, 1997; Nasser, Katzman, & Gordon, 2001). SIB tests the limits of normality and rationality from a psychological perspective. And from a spiritual perspective it still causes us to pause, in a quiet, sorrowful grief when we hear the stories told.

The notion that one would need to go to the depths of physically carving, cutting, or burning one's own body to be released from the burden of interior anguish, even for a single moment, is deeply troubling. And so it should be.

In the Hebrew Scriptures, we read of the prophets of Baal who felt the need to mutilate their bodies through acts of carving and cutting their skin. They became agitated and "shouted louder and, as was their custom, cut themselves with knives and swords until the blood gushed out. They raved all afternoon until the time of the evening sacrifice, but there was no reply, no voice, no answer" (1 Kings 18:28-29; *TLB*).

These men did many of the things we hear about self-injurers doing today. But one thing was quite different: their motivation was not to avoid a painful memory or to reject themselves in some way. Their self-injurious acts were done as a ritual sacrifice to a god named Baal. They believed that if they could show this god devotion by imposing severe physical suffering upon themselves they would be seen as worthy. They believed their actions would render a response from Baal, a figure of power in their lives. In return they believed they had the power to convince this god to be moved by their actions: he would respond to their cries and show himself to be real and true, validating their identity as belonging to him, and delivering them from their difficulties. But he did not validate their beliefs or reinforce the identity they had in relation to him. As the story goes, Baal did not show up for dinner. They had a whole bull ready to be barbecued in his honor, but he never came. He abandoned them in their hour of need. But Jehovah did show up that day. "Then, suddenly, fire flashed down from heaven and burned up the young bull, the wood, the stones, the dust, and even evaporated all the water in the ditch! And when the people saw it, they fell to their faces upon the ground shouting, 'Jehovah is God! Jehovah is God!'" (1 Kings 18:38-39; *TLB*).

It is imperative to know to whom one belongs and in whom one can trust. Adolescents and young adults often experience a loss of trust in significant others. There is a constant theme of being left, abandoned, and betrayed that pours forth from those who self-injure. It is a repetitive theme, and their response to this repetitive injury is to repeat the injury on themselves. They are searching for meaning and identity. When their world is shaken and they are left or abandoned in one form or another by those they trust, they punish themselves, then search for something or someone else to believe in, someone to believe in them, and someone or something to help them control their inner chaos. As Suyemoto and Kountz (2000) reflect:

> "Youth who self-mutilate may choose this behavior because it meets a multitude of needs at one time. The most common functions of self-mutilation reported by clients and practitioners are *expressing and controlling overwhelming emotions*, and maintaining a coherent sense of self when threatened with *the loss of identity*" (emphasis added).

From a Biblical viewpoint, we can teach patients that God already believes in them and that they belong to him. He sent his son, Jesus Christ, to die for them. Jesus gave his life for theirs, sacrificing all he was and all he had. "Once for all time he took blood into that most holy place, but not the blood of sacrificial goats and calves, he took his own blood and with it he secured our salvation forever" (Hebrews 9:11-12; *NLT*). He did this so that we might have peace, identity, and a secure future through eternal life. This is a powerful relationship based on unconditional love, not simply a metaphor of exchange.

There is much to explore in the spiritual life, but chasing after false gods, whatever they may be, is not going to bring the acceptance, identity, and inner security one desires. Many who self-injure are searching not only for a cure from the pain inflicted upon them, but also for meaning and purpose in their lives. What they find in Jesus Christ is one who loves them unconditionally, has a purpose for their lives, and delivers on his promises. They are searching for God, an authentic relationship of love, and when they find it, we see lives restored.

Those who are suffering with self-injury need to have a new tool put in their hands to replace the razor blades and matches. The word of God is meant to be that tool which renews our minds, restores our emotions, establishes our identity, and guides our decisions for life. The author of Hebrews uses this telling analogy: "For the word of God is full of living power. It is sharper than the sharpest knife, cutting deep into our innermost thoughts and desires. It exposes us for what we really are. Nothing in all creation can hide from him. Everything is naked and exposed before his eyes" (Hebrews 4:12,13; *NLT*).

God knows our thoughts before we think them, and understands our suffering to the deepest extent possible. He is the source of healing. As patients expose their deepest sorrow to him, God restores them, bringing comfort and true healing (e.g., Psalm 71).

The research reviewed in the earlier part of this article is helpful in aiding us to come to greater awareness of … what to call it? *… more than a malady, more than a disorder, from the depths of hell pain?* Clearly, by additionally reflecting on the spiritual dimension of self-injury, we recognize that comprehensive understanding and treatment must be derived from a holistic perspective. If we fail to do that, we have failed the patient because there is an undeniable aspect of her person that is spiritual (Wall & Eberly, 2002). As such, in addition to a careful scientific understanding of SIB drawn from the latest research and theoretical endeavors, the spiritual dimension must be recognized. Within the comprehensive bio-psycho-social-spiritual model of treatment, we can best offer patients tools and understandings that can guide them into healthier lives free of self-mutilating behavior.

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