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The Main Factors Responsible for The Onset and Treatment of Self-Injurious Behaviors

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Abstract

The number of individuals who harm themselves is on the rise, and mental health professionals need to respond to this growing epidemic. People who self-harm represent a specialized population of individuals in which diagnosis is often complicated and treatment is limited. The purpose of this paper is to explore the numerous factors contributing to the onset and treatment of self-injurious behaviors. The main categories discussed will include psychological, biological, and environmental factors. Additionally, the focus will be placed on the function of self-injurious behaviors and the consequences of engaging in self-injury. It will also provide practitioners with an overview of the main therapy models being utilized in the treatment of self-injurious behaviors. Additionally, discussions will explore the various evidenced-based practices shown effectiveness in working with individuals who self-injure.

Keywords: Self-injury, youth, practitioners, treatment, therapy, and research

1. Introduction

Self-injury is the deliberate intent to physically harm oneself without the conscious intent to die, for the purpose of regulating emotional stability (Lloyd Richardson, Perrine, Dierker, & Kelley, 2007; Polk & Liss, 2007). Self-injury can occur through a variety of different means, including skin burning, scratching, cutting, wound interference, hair pulling and can occur to areas throughout the body, including the genital area (Nock & Prinstein, 2004; Whitlock, Eckendore, & Silverman, 2006). The number of self-injurious patients has grown at an alarming rate since this behavior was first recognized by the community of practitioners and researchers indicating a need for treatment and prevention.

A research study conducted by Lloyd-Richardson et al. (2007) found that up to 46% of sampled adolescents in a community setting had participated in self-injurious behaviors within the last 12 months. Nock and Prinstein (2004) found that as many as 82.4% of adolescents within an inpatient psychiatric setting had participated in at least one act of self-injurious behavior within the last 12 months. In adult community settings, research has shown that up to 4% of individuals have participated in this type of behavior over various periods of time (Landsverk, Burns, Stambaugh & Reutz, 2009).

In adult clinical populations, research has shown as many as 21% of individuals had participated in self-injurious behavior within the past six months. Among adults, self-injurious behavior is not as frequently reported as it is in adolescents. However, it remains an important clinical issue (Sansone & Levitt, 2004).

Due to the growing epidemic of individuals who self-injure, the treatment community needs to respond to the issue of self-injury by providing effective treatment that focuses on these individuals' special needs. Although there are some inpatient treatment facilities available, there are a limited number of outpatient programs that specialize in treatment of these individuals. Therefore, it is proposed that the development of an outpatient-based treatment model that specializes in the care of the superficial/ moderate category of the self-injurious adult population would be an attempt to resolve some of the identified treatment issues.

This paper will explore the numerous factors contributing to the onset and treatment of self-injurious behaviors. The main categories discussed will include psychological, biological, and environmental factors. Additionally, the focus will be placed on the categories of self-injury, the function of self-injurious behaviors and the consequences of engaging in such harmful and addictive behavior. Additionally, discussions will explore the various evidenced-based practices shown effectiveness in working with individuals who self-injure (Trepal & Wester, 2007). Most importantly, this paper will provide practitioners with a guideline for the development, implementation, and evaluation of a program targeting self-injurious youth.

1. Literature Review

According to Conradi and Wilson (2010), self-injurious behavior is a problem that affects the lives of a large number of individuals. Menninger (1935) was the primary contributor to the introduction of self-injurious behaviors in the research study literature. Menninger used the terms "focal suicide" and "localized self-destruction" to define the use of self-injury in order to avoid actual suicide. Menninger hypothesized that individuals who self-injure intentionally focused their attention on the destruction of one body part as a substitution for the desecration of the whole body through suicide completion. However, Plante (2007) noted that Menninger was ahead of his time as no one was ready to deal with or think about self-mutilation back then. It was not until the late 1970s that research began to explore more specifically these actions as conditions different from a suicide (Conterio & Lader, 1998; Favazza, 1996). The current and relevant literature, however, defines self-injury as the deliberate intent to physically harm oneself without the conscious intent to die, which has been trivialized (wrist cutting), misidentified (suicide attempt), and regarded solely as a symptom (a criterion of borderline personality disorder. This has led to confusion among both mental health professionals as well as individuals dealing with this severe pathology (Klonsky & Moyer, 2008; Lloyd-Richardson, Perrine, Dierker, & Kelley, 2007).

To have a comprehensive understanding of self-injury as a behavior, it is important to explore a myriad of issues such as, the definition of self-injurious behaviors, who is largely impacted by this phenomenon, why self-injury is performed, and treatment interventions are important considerations. The unique developmental stage of adolescence is another factor to note particularly when focusing on adolescent self- injurers. Furthermore, to understand self-injurious behaviors in context, knowledge of research and literature that factors the occurrence of self-injury within the family unit is important to review. All of these aspects of self-injurious behaviors and the family environment are discussed in the following sections to point out the necessity and importance of a specialized treatment program (Klonsky & Moyer, 2008).

Self-injurious behaviors encompass many factors and considerations. In understanding these actions, it is important to note what self-injury is and how it is classified within the clinical and research community. It is also important to comprehend the nature of self-injurious behaviors as it occurs across ages, genders, ethnicities, psychiatric diagnoses, and certain psychological characteristics. Additionally, the reasons an individual self-injures, how adolescent development plays a role, and available treatment modalities are all crucial aspects to gaining a more thorough scope of the issue (Conradi and Wilson, 2010).

A variety of common expressions exist in the current literature to identify the action of self-injury, such as: Self-mutilation (Favazza, 1996), self-inflicted violence (Laye-Gindhu & Schonert-Reichl, 2005), deliberate self-harm (Klonsky et al., 2003), non-suicidal self-injury (Muehlenkamp, 2006), and self-injurious behavior (Favaro, Ferrara & Santonastaso, 2004). All these terms seek to define self-injury, hint at its function and can impart an emotional message to those who learn or read about it.

In addition to the numerous terms used to discuss self-injurious behaviors, there are varying definitions of the action itself. Klonsky (2007a) provided a comprehensive and current view of self-injurious behavior by defining it as "the intentional destruction of body tissue without suicidal intent and for purposes not socially sanctioned" (p. 1039). This definition implies that there is a deliberate attempt to damage one's physical body by participating in this action with no motivation to die as a result.

According to a research study conducted by Favazza and Conterio (1988), the most frequent actions for injuring the body were cutting, burning, self-hitting, and interference with wound healing and seventy-five percent of individuals who self-injure use more than one method to harm themselves. These actions are used on a variety of locations on the body. The most frequently injured portions of the body are the arms, followed by the legs, abdomen, head, chest and the genitals and the damage is inflicted using common household items such as knives, scissors, razors, hammers, glass, cigarettes, etc. (Conradi and Wilson (2010).

2. Characteristics of Persons Who Self-Injure

It is noteworthy that no single profile of a self-injurer has emerged, although there is a general consensus among mental health professionals that when numerous environmental and individual risk factors are present, the onset and maintenance of SIBS is increased. Recurrently, individuals who have been exposed to environmental factors such as early childhood trauma and disruptions in parental caregiving have been identified as engaging in SIBS at a higher rate than individuals who have not (Gratz, 2006). Additionally, risk factors such as individuals experiencing alexithymia, dissociation, or being within the developmental years of adolescence have been identified as background characteristics of many whom self-injure (Gratz, 2007; Walsh, 2006).

Throughout the literature, SIBS has been widely linked to childhood experiences of trauma including sexual abuse and physical abuse, parental loss or abandonment, and severe neglect (Claes, Vandereycken, & Vertommen, 2005; Walsh, 2006). Additionally, van der Kolk (1991) suggested, "both the severity of the trauma and the age at which it occurs can affect the particular ways in which individuals are self-destructive, suggesting that both psychological and biological maturity play a major role in how the experiences of abuse and neglect are managed" (p. 1670). Thus, abuse and neglect may impair both the capacity for self-regulation of affective states and the ability to utilize interpersonal relations for affect regulation.

Disruptions in early parental caregiving have also been identified as having long-term consequences for biological self-regulating systems. Although empirical support for the role of maltreatment other than abuse in the development of self-harm is limited, there is evidence to suggest a link between early bouts of emotional neglect or deprivation from a primary caregiver and later acts of self-harm (Gratz, 2006). Research suggests that individuals who reported prolonged separations from primary caregivers or those who could not remember feeling special or loved were reportedly less able to self-soothe later on in adulthood and more likely to engage in SIBS (Polk & Liss, 2007).

Furthermore, a research study conducted by Klonsky and Moyer (2008) examining the factors leading to the genesis and perpetuation of SIBS, found that 89% of participants reported major disruptions in parental care and 79% reported incidents of childhood traumas such as physical abuse, sexual abuse and witnessing domestic violence. Subsequently, parental neglect became the strongest predicting factor of self-destructive behavior indicating that even though childhood trauma contributes heavily to the initiation of self-destructive behavior, lack of secure attachment sustains the behavior. It is indeed revealing that research on nonhuman primates has demonstrated that self-injury occurs as a common reaction to extreme disruptions of parental care. For example, isolated young rhesus monkeys engaged in self-biting and head slapping and banging after enduring prolonged separation from their mothers (Gratz, 2006).

Although not all persons who experience adverse childhood life events utilize self-injury as a coping mechanism, current research studies indicate that these individuals are more predisposed to self-injure when life events are coupled with numerous individual risk factors and when individuals are within the developmental age of adolescence (Gratz, 2006; Polk & Liss, 2007). The most frequent individual risk factors with the highest structure coefficient found in the relevant research study literature are alexithymia, affect intensity/reactivity and adolescence.

Alexithymia is the inability to identify or express emotional experiences appropriately in words and it has been described by Polk & Liss (2007), as a "difficulty in emotion regulation that stems from childhood trauma may be a risk factor for later self-harm" (p. 569). In other words, abuse appears to be related to self-injury, especially when an individual is unable to verbally express their negative effect.

As such, it was reported that 67% of individuals who self-injure say they do so in order to release emotions (Polk & Liss). Thus, self-injury may be a mechanism to express painful internal emotional states, when words are not available (Klonsky and Moyer (2008).

Affect Intensity/Reactivity is the intensity of an individual's responsiveness to a stimulus. In other individuals who engage in self-harm have been reported to possess emotional vulnerability, thus causing a higher sensitivity to emotional stimuli coupled with a greater intensity of emotion than individuals without a history of self-harming behavior (Gratz, 2006; Linehan, 1993). Reasons for this have been linked to a variety of environmental influences that may have impacted the development of the brain and central nervous system. Thus, Linehan (1993) suggests that the same invalidating, abusive childhood environments that interact with emotional intensity and reactivity to increase the risk of self-injury may also contribute to and/or exacerbate emotional intensity/reactivity.

Throughout the relevant literature, adolescents have been identified as the segment of the population that engages in SIBS with the highest frequency rate, resulting in 'the next teen disorder' (Suyemoto & MacDonald, 1995; Walsh, 2006). While most recent research studies have refuted the idea that average adolescence is characterized by "storm and stress," 10% to 20% of adolescents exhibit severe emotional disturbance, with self-injury being particularly prevalent. One rationale for this high prevalence rate of self-injury amongst adolescents is that SIBS may parallel other problematic behaviors, which also tend to begin during early adolescence, peak during mid-to-late adolescence, and then decline in adulthood, such as difficulties in developing a cohesive and differentiated sense of self (Whitlock, Powers & Eckenrode, 2006).

3. Need for Intervention Program

Self-injury is harmful not only to the patient but also to all those who have contact with this person. The self-injurious patient often sustains permanent physical harm due to repetitive tissue damage. Self-injurers believe their behavior represents the preservation of life; to others this behavior appears harmful, contradicting the self-preservation that most people experience. This is confusing to many family members, friends, and caretakers of self-harming individuals (Trepal & Wester, 2007). Self-injury can also be disruptive in treatment settings. Self-injurious behavior is difficult to treat; thus, many individuals injure for an extensive portion of their lives. At times, self-injurious behavior can affect staff morale while the contagion factor may create an epidemic amongst the treatment population. Treatment professionals should also be concerned about non-injuring patients since many patients injure for the first time while in combined treatment settings after witnessing self-injurious behavior (Yip, 2005). The treatment community needs to respond to the issue of self-injury by providing effective treatment that focuses on these individuals' special needs. Although there are some inpatient treatment facilities available, there are a limited number of outpatient programs that specialize in the treatment of these individuals. Therefore, it is paramount for the mental health community to engage in the development of an outpatient-based treatment model which specializes in the care of the superficial/ moderate category of the self-injurious adult population as an attempt to resolve some of the identified treatment issues.

4. Current Treatment Alternatives

Self-Injurious behavior is often difficult to understand and difficult to treat (Trepal & Wester, 2007). This lack of understanding has resulted in multiple theories and techniques for treating individuals with these destructive behaviors. Multiple treatment techniques make it difficult for clinicians trying to treat this delicate population and to choose appropriate treatment interventions (Conradi and Wilson, 2010). However, true outcome studies examining the efficacy of treatment options that are currently available have not been completed (Gratz, 2006). It is important that the diagnostician accounts for the individual's cultural factors when identifying that person as a self-injurer (Plante, 2007). Hospitalization should be considered for the injurer whose behavior has increased in severity and intensity or for someone whose pattern of injury occurs several times a week (Plante, 2006).

The therapist must provide a supportive environment for the self-injuring individual to verbalize situations that bring about intense negative feelings and trigger self- injurious acts. The therapist should foster a relationship with the patient that doesn't recreate the empathic failure and loss issues typically experienced by these individuals (Klonsky & Muehlenkamp, 2007). Conradi and Wilson (2010) suggest that therapists should engage in ego strengthening through verbal and nonverbal reinforcements. This technique increases the patient's motivation for change and enhances the therapeutic alliance by demonstrating a genuine sense of interest in the individual. A description of treatment techniques and theoretical orientations that research has proven useful follows. Given the complexity of each theory, a complete description of each theoretical orientation is too broad for the scope of this paper.

In surveying 58 clinical members of the American Mental Health Counselor Association, Trepal and Wester (2007) found that 40.5% of the respondents utilized Cognitive Behavioral Therapy, 17.6% used Dialectical Behavior Therapy, 10.8% used Behavioral Therapy, 6.8 % used Cognitive Therapy, and 6.8% utilized Group and family therapy. The sample for the study was recruited from a variety of settings including outpatient practices, community agencies, inpatient units, and school settings which assists in the generalizability of these results. Consequently, the following discussion will focus on the most popular models of therapy associated with self-injurious behaviors: Pharmacological Treatment, Group Therapy, Family Therapy, Behavioral Therapy, Cognitive Therapy and Dialectical Behavior Therapy (DBT).

5. Cognitive behavioral therapy.

A great deal of research is available on the effectiveness of utilizing cognitive-behavioral therapies in the treatment of self-injurious behaviors (Muehlenkamp, 2006; Williams & Wallace, 2006). Not only have cognitive-behavioral therapies been shown as being effective in treatment, but clinicians are using this type of therapy more frequently with clients that self-injure (Trepal & Wester, 2007). Walsh & Rosen (1988, p. 156) identified maladaptive cognitions held by self- injurers that differed from the general population: A) Self-injury is acceptable, B) One's body and self-care disgusting and deserving punishment, C) Action is needed to reduce unpleasant feelings and bring relief, D) Overt action is necessary to communicate feeling to others. The first maladaptive cognition, self-injury is acceptable, creates an allowance for a behavior that others view as unacceptable and disgusting to occur. Addressing this belief will be the key to changing the maladaptive behavior. The second belief, one's body, and self-care disgusting and deserving punishment demonstrate the disturbance in body image. The third maladaptive cognition, Action is needed to reduce unpleasant feelings and bring relief works in combination with the destructive power of the first two cognitions and triggers the self-destructive behavior that reduces tension. This cognitive style is difficult to change since most tension reduction techniques are not action- oriented. The fourth cognition, the overt action is necessary to communicate a feeling to others, focuses on the injurer's struggle to understand and communicate his or her feelings to others. Without the action, the self-injurer is unsure that he or she is communicating the intensity of the experience and often misinterprets the intensity of others' communication.

Reframing and cognitive restructuring are used to help individuals change their maladaptive beliefs and examine how they view the behaviors they are trying to change. Walsh and Rosen (1988) identified techniques to help reframe the maladaptive cognitions identified above. One technique is to teach the individual to differentiate between thoughts, feelings, and actions. Another reframing technique fosters an increase in self- respect, self-esteem and its incompatibility with the destructive self-injurious behaviors in which they have been engaging. After developing a sense of self-respect for their bodies and the ability to differentiate thoughts, feelings, and actions, individuals then need to change the need to act on their emotions to reduce tension. One reframing technique Torem (1996) found useful that of Cognitive Syllogism. In this technique, the patient learns to change negative statements to affirmative reinforcing statements. Torem uses the example of a self-injurer's negative self-statement, " Don't cut yourself." Reframing this statement positively " I want to live my life to the fullest, I owe my body this respect and protection" reinforces individuals' commitment to themselves and helps develop a sense of respect for their bodies.

6. Behavioral Therapy

Behavior therapy is also effective in stopping the harmful behavior. The majority of research on self-injury has been done within this theoretical framework. Polk & Liss (2007) believes that behavioral techniques are a necessary component in changing the self-injuring habit which remains even after the psychodynamic conflict is resolved. Moreover, Yip (2005) suggests aversive conditioning, systematic desensitization, general relaxation techniques, and hypnosis as effective techniques. The reinforcement pattern for self-injuring individuals occurs both internally and externally (Muehlenkamp, 2006). This reinforcement can be either positive or negative. The relief the injurer receives from removing the stressor or tension negatively reinforces the internal component for the self-injurious act. Every self-injurious act that reduces the tension or discomfort strengthens the reinforcement of the behavior. Other people can influence a negative reinforcement pattern through unpleasant interpersonal interactions. These interactions may come in the form of criticism or intense affection that is perceived as unpleasant.

The self-injurious individual often is attempting to elicit a nurturing response from others through action rather than through appropriate social interactions.

This communicates a strong need for closeness during a time when the individual feels alienated. This need is met when others respond to his/her self-destructive behavior, positively reinforcing the action. These reinforcement patterns need to be changed through behavior modification.

Behavioral modification can be used to change the maladaptive self-harming behavior through extinction. In order to succeed, new healthy behaviors must be implemented to replace self-harming behaviors and must be reinforced (Conradi and Wilson, 2010). The individual must develop new ways to discharge and tolerate emotions, thus achieving the sought- after tension reduction provided by the self-injurious actions. Once the behavioral modification begins, natural reinforcement will occur. As individuals become more competent in living life without the use of self-injury, they will feel successful due to their accomplishments. While replacing maladaptive behaviors, one technique found to be helpful is pairing incompatible behaviors with self-injurious behaviors. In fact, This technique has shown decrease destructive acts (Walsh & Rosen, 1988; Polk & Liss (2007).

7. Behavioral Contracts

Behavioral contracts are another technique that many researchers have found helpful. Contracts can be used to set boundaries and limits on an individual's behavior and establish a sense of control and responsibility for his or her actions (Polk & Liss (2007). They are developed jointly and can be short or long term. The contract addresses a specific target behavior and the limitations or conditions implemented on the behavior, including rewards or consequences (Walsh & Rosen, 1988). Some contracts address self- injury directly through both short-term and long-term techniques. An example of a short-term self-injury contract may involve a promise to not self-injure while in the shower (Conradi and Wilson, 2010; Muehlenkamp, 2006).

A longer self-injury contract used by the S.A.F.E. program states that the individual will not injure while in the treatment program or may potentially eliminate from the program. However, some authors believe that these contracts need to be short-term as long-term contracts set the injurer up for failure (Walsh, 2006). Additionally, contracts can be used to facilitate the utilization of a positive alternative behavior such as expressing feelings. Developing assertiveness and other interpersonal skills provide the injurer with concrete ways to solve problems. These skills encourage the expression of emotions and facilitate discussion, rather than action to express the intensity of the situation (Walsh & Rosen, 1988). Acquiring these skills will also facilitate the development of a support system and provide the individual with stronger relationships.

Problem-solving Therapy has shown varied results in the research in regard to its effectiveness with individuals who participate in self-injurious behaviors (Muehlenkamp, 2006). The therapy seeks to assist clients in identifying main life issues and potential solutions by educating the individual in coping skills and problem-solving skills. Research originally identified the therapy as being effective in working with self-poisoning (Sim, Adrian, Zeman, Cassano, & Friedrich, 2009). It is noteworthy that Townsend, Hawton, Altman, Arensman, Gunnell, Hazell, et al. (2001) conducted a meta-analysis of research available on problem-solving therapy, deliberate self-harm, and the experience of depression, hopelessness, and improvement of problems. The authors reported that this form of treatment is more successful at improving the issues associated with deliberate self-harm and thus a useful treatment for this issue. However, the authors could not determine whether a decrease in deliberate self-harm actually occurred based on the research reviewed. An additional concern in looking at this metanalysis is that the studies used included small sample sizes. A larger study with more participants and randomized treatment groups using problem-solving therapy was noted by the authors as being needed to determine the true success of this treatment with self-injury.

8. Psychodynamic therapy.

According to research reviewed by Klonsky and Meuhlenkamp (2007), Psychodynamic Therapy has shown to be effective in treating self-injurious behavior, although often as a characteristic feature of Borderline Personality Disorder. Using a psychoanalytic therapeutic approach within a partial hospitalization program, the researchers found that subjects with a diagnosis of Borderline Personality Disorder involved in the experimental treatment group had significantly less reported self-injurious behaviors than their control group counterparts. This was noted after six months, 24 months, 30 months, and 36 months. Klonsky and Muehlenkamp (2007) identified three common therapeutic themes that presented among the research on Psychodynamic Therapy and treating self-injurious behaviors. "Processing past relationships and building new, positive interpersonal relationships; increasing awareness and expression of affect; and focusing upon the development of a client's self-image" (p. 1052) was discussed as dominant aspects of his therapeutic approach.

Klonsky and Meuhlenkamp (2007) further noted that no research has been conducted "to identify the core mechanisms of therapeutic change" (p. 1052) when utilizing Psychodynamic Therapy in treating self-injurious behaviors.

9. Pharmacotherapy.

Medications are often used as a means of managing the symptoms and features of specific psychiatric disorders or other presenting mental health issues including depression, anxiety, impulsivity, or mood instability. As noted previously, self-injurious behaviors are often associated with these experiences. There is currently no medication identified that specifically targets the occurrence of self-injurious behaviors among clinical and non-clinical populations (Klonsky & Muehlenkamp, 2007). The majority of research noting the use of psychiatric medications and their efficacy with self-injurious behaviors has focused on individuals with developmental disabilities such as mental retardation (Mace, Blum, Sierp, Delaney & Mauk, 2001). More clinical research is needed in this area with a focus on the use of medication alone as well as medication in conjunction with some form of psychotherapy**.**

10. Family Therapy.

There is no found empirically supported research for the use of family therapy alone in the treatment of self-injurious behaviors. There have been studies that look at the use of family therapy with individuals who have a substance abuse or eating disorders which could be classified as self-injurious behavior depending on the definition used (Sim, et al., 2009). However, family therapy is often used in conjunction with or as a means to disseminate the tenets of another therapy modality. Walsh and Rosen (1988) wrote on the importance of therapists working with the family to identify the signs of self-injurious behaviors, identifying the purposes of the self-injury including family responses, and identifying alternative less-reinforcing ways to respond. Townsend et al. (2001) note that family therapy among this population deals with increasing positive communication and problem-solving skills within the family unit. Additionally, the authors report that family therapy helps to get the adolescent to learn how to cope with issues in the family without self-injuring. Family therapy also seeks to recreate stability as self-injurious behaviors can influence the homeostasis of the family (Crowell, Beauchaine, & Lenzenweger, 2008)**.**

11. Dialectical Behavior Therapy

Dialectical Behavior Therapy (DBT) was developed by Marsha Linehan specifically to treat individuals diagnosed with Borderline Personality Disorder. Since Borderline Personality Disorder is the diagnosis most associated with self-injurious actions, this model is accepted as a proven treatment model. The premise of DBT requires that the therapist creates a context of validation rather than blaming the patient, and within that context the therapist blocks or extinguishes bad behaviors, drags good behaviors out of the patient, and figure out a way to make good behaviors so reinforcing that that patient continues the good ones and stops the bad ones (Linehan, 1993).

DBT uses the dialect between 3 dimensions: a) Emotional vulnerability versus self-invalidation, b) Unrelenting crises versus inhibited grief, c) Active passivity and apparent competence. The borderline individual is expected to look at each situation to the extreme, ensuring that he or she will bounce back and forth between the extreme of each dialectical dilemma. Therapy focuses on synthesizing these dilemmas and locating the midpoint through a biological and social perspective (Linehan, 1993). Treatment is separated into the following steps: setting the stage, staying dialectical, applying core strategies, balancing interpersonal communication styles, combining consultation on the patient strategies with interventions in the environment and treating the therapist (Linehan, 1993) The first step, setting the stage, consists of setting realistic goals with patients and orienting them to treatment expectations, followed by the establishment of a relationship between the therapist and the client (Linehan, 1993).

In utilizing DBT with adolescents, Miller, Rathus, & Linehan (2007) discussed involving families in treatment to provide an opportunity for the family to interact in front of a therapist and receive "coaching" on appropriate problem-solving. Additionally, the authors noted providing the family with DBT skills training so that they can interact with and endorse their positive use within the family environment. This family therapy is provided in addition to the individual and group therapy that the family's identified patient receives. The treatment of self-injurious behaviors is often connected to a specific mental health disorder. Cognitive Behavioral Therapy, particularly Dialectical Behavior Therapy, Problem-solving Therapy, and a multimodal approach have shown positive results at decreasing self-injurious behaviors.

It has been discussed in the literature that involvement of family members in treatment can be useful in the treatment of self-injurious behaviors (Sim, et al., 2009; Miller et al., 2007).

Klonsky & Muehlenkamp (2007) suggests that a "multidisciplinary" approach is probably the most effective therapy model when working with individuals who self-injure. The "multidisciplinary" therapy model includes problem-solving interventions, cognitive restructuring, relationship skills, coping skills, medication management, group therapy, and family therapy. Over a four-year period, fifty-eight individuals were treated. Thirty-two of these participants were reported to have "significantly reduced frequency" of self-injury by their date of discharge. Twenty-three participants saw "no change" and three participants "increased frequency" of self-harm by their date of discharge. This specific study has a relatively small sample size particularly considering the time duration of the research gathered. Additional limitations to this research include minimal demographic data influencing the external validity of the study as well as the lack of a randomized control group which impedes the internal validity or degree to which one can determine a causal relationship between the treatment and its effects on the sample.

12. Practical Implications

The increasing prevalence of Self-Injurious Behavior makes it critical for mental health professionals to be familiar with the characteristics and behaviors related to self-injury. Although all Self-injurious individuals are unique, knowing the commonalities among those engaging in Self-Injurious Behavior enables mental health professionals to have an initial frame of reference to begin working with the client. By understanding common family backgrounds and problems encountered by Self-injurious individuals, mental health professionals are better prepared to piece together the story of the client in front of them. Clinically, it is understood that not all mental health professionals may be equipped to provide the in-depth counseling needed by Self-injurious individuals, however, they still can benefit from understanding the process Self-injury are undertaking to overcome Self-Injurious Behavior. For effective treatment, it is crucial for mental health professionals to understand the client and the reason Self-Injurious Behavior has become a coping mechanism (Barth, Green, Webb, Gibbons, & Craig, 2008). Medication might be a strategy to pursue, but it should only play a secondary role in counseling. The goal of counseling is for clients to find avenues other than self-injury to express themselves and cope with life's hardships.

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