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Behavioral Change in Patients With Severe Self-Injurious Behavior: A Patient's Perspective

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Semistructured interviews were conducted with 12 women who had successfully stopped self-injuring to gain an understanding of the process of stopping self-injury. The data were analyzed based on the grounded theory method. The researchers found that the process of stopping self-injury consists of six phases. Connection was identified as key to all phases of the process. Nursing interventions should focus on forging a connection, encouraging people who self-injure to develop a positive self-image and learn alternative behavior.
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MENTAL HEALTH CARE providers regularly come face to face with self-injurious behavior in patients. Self-injury is defined as "Direct pain or injury inflicted by a person on his or her own body in a repeated pattern, usually with a low risk of fatality and without deliberate suicidal intent" (Broers & de Lange, 1998, p. 4).

Little is known about effective interventions in cases of self-injury (Vandereycken, 2001). Patients and care providers alike have difficulty getting control of self-injurious behavior (Bosman & van Meijel, 2006; McAllister, 2003; Suyemoto, 1998). Nonetheless, there are patients who have successfully stopped self-injuring and have developed other harmless behavior instead. This article describes a qualitative study of patients who have successfully stopped self-injuring. The goal of the study was to determine the factors contributing to their change in behavior.

Little is known about what people experience when stopping self-injury. Several studies of patients have identified a number of elements that play a role in the process of reducing and stopping self-injury. One such key element is the extent to which patients receive actual support (Lindgren, Wilstrand, Gilje, & Olofsson, 2004). Important aspects of patient support include the existence of a therapeutic connection with care providers, helping patients express their emotions, and gaining an understanding of self-injury (Suyemoto, 1998). Patients identify self-esteem and self-confidence as important conditions for reducing self-injury (Bywaters & Rolfe, 2002; Lindgren et al., 2004), indicating that respect on the part of care providers is essential to achieving self-esteem (Bosman & van Meijel, 2006; Bywaters & Rolfe, 2002; Lindgren et al., 2004; Weber, 2002).

It is important to gain a better understanding of the process of stopping self-injury and to identify the determinants contributing to that achievement. This understanding can form the basis for developing new intervention strategies aimed at coaching and supporting patients who self-injure.

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All of these considerations have led to a study of behavioral change in cases of self-injury, based on the following key questions:

1. How does the process of reducing or stopping self-injury develop in patients with a history of severe self-injury?
2. What factors play a role in that process?

METHOD

We conducted a qualitative study of patients with a history of severe self-injurious behavior who eventually succeeded in stopping that behavior. The study is based on the grounded theory method (Strauss & Corbin, 1998). It was conducted at a psychiatric intensive treatment center in an urban area that delivers specialized care for patients with behavioral problems triggered by psychiatric disorders. The center has an inpatient clinic and an outpatient clinic.

The inpatient clinic treats people generally characterized by a long treatment history of closed ward admissions, aggressive behavior toward others and themselves, suicidal behavior, psychotic experiences, and/or serious personality problems. Their behavior often puts the treatment relationship under strain.

The outpatient clinic specializes in treating patients with a dissociative identity disorder (DID). Self-injury is a very common problem at both the inpatient and outpatient clinics, with a number of patients harming themselves repeatedly, severely, and on a long-term basis.

Selection of Respondents

Treatment providers at the intensive treatment center were asked to refer patients for the study who met the following inclusion criteria:

- Patients who historically inflicted self-harm upon themselves on a long-term basis and who no longer or only rarely do so now, with severe harm being defined for this purpose as harm inflicted several times a week and/or necessitating medical treatment;
- Patients who have a sufficient command of the Dutch language;
- Patients with adequate insight to reflect on their own experiences and behavior.

Patients with comorbid psychotic symptoms were excluded from the study.

Based on these inclusion and exclusion criteria, 12 women (26 to 60 years old) were selected. The average age was 39. During the research period, there were no men eligible for inclusion in our study, partly due to the fact that only few men are treated in this center. All of the selected women consented to taking part in the study, both verbally and in writing. Six of the women were (previously) treated at the psychiatric treatment center both as inpatients and as outpatients; the other 6 only received outpatient treatment. For 5 of these 12 patients, treatment has since been terminated, with the remaining 7 still receiving treatment.

Six respondents were diagnosed with DID, three were diagnosed with DID in combination with a personality disorder, two suffered from a borderline personality disorder, and one was diagnosed with a personality disorder not otherwise specified (American Psychiatric Association, 2000) with borderline personality traits.

All 12 respondents had a long history of self-injury stretching back over an average of 22 years (range = 6 to 46 years). See Table 1 for an overview of types of self-injury. Nine respondents could remember at what age they first began to self-injure. On average, they first began at the age of 11 (range= 4 to 24). Three respondents remembered that they were very young but could not give a specific age.

On average, the last episode of self-injury occurred 3 years ago (range = 0.5 to 6 years).

Table 1. Types of Self-Injury Mentioned by the Respondents

Types	Number of Times Mentioned
Cutting	11
Burning/"Branding" (cigarettes, hot objects)	8
Scratching/Picking	5
Banging the head	5
Squeezing	4
Dropping oneself	4
Hitting oneself	3
Hitting with objects (flat iron, whip)	2
Biting	2
Scolding	2
Breaking bones	2
Punching	2
Inserting needles/sharp objects	2
Starving	2
Binding off toes	1
Pulling off nails	1

Data Collection and Data Analysis

Data collection included individual semistructured interviews. A timeline identified the course of self-injurious behaviors for each respondent. On this timeline, the first and the last episode of self-injury were specified, as well as the changes in the pattern of self-injurious behavior that occurred in between (for instance, frequency, severity, type of behavior). The timeline allowed the interviewer to gain an insight into the individual process of self-injury and, particularly, the factors that contributed to reducing or stopping self-injury.

All interviews were audiotaped and typed verbatim. The data were analyzed using WINMAX qualitative text analysis software. The first phase of the analysis consisted of making a detailed reconstruction of how the process of self-injury developed in each of the respondents and describing the factors influencing that process. The researchers used open coding in this context: Anything that seemed important in the light of the research questions was coded "in vivo" (the verbatim rendition of the respondents' statements). The individual interviews were then analyzed as a whole, with the focus being on finding similarities and differences in the recovery processes of the individual respondents. This analysis was used as a basis for designing the phase model presented in this article. Influencing factors at both process and phase level were analyzed and defined. The phase model was designed and the influencing factors were identified by making use of axial coding (Strauss & Corbin, 1998).

Trustworthiness

The credibility and dependability of the study data were ensured by peer debriefing, member checking, and thick descriptions (Polit & Beck, 2004).

Peer debriefing: Both the collection and the analysis of data were discussed extensively among the project members. Three team members read all interviews in their entirety and discussed them in terms of the method of data collection and data analysis. The first draft of the model and the description of influencing factors were presented for discussion to a group of objective, external researchers.

Member checking: The respondents were asked to react to summaries developed from the data. These summaries consisted of brief representations of the facts as presented by the patient and an initial interpretation by the interviewer. Furthermore, the findings of the analysis were submitted to three of the respondents at the end of the study. Their comments have been incorporated into the study results.

Thick description: The process of behavioral change in each patient was documented in great detail and placed within the context of the relevant change. The thick description was used to analyze the common factors that might explain the behavioral change.

RESULTS

The nature and sense of connection that respondents had with themselves and with other people appeared to be the key triggers of self-injury. For many respondents, the lack of connection or, conversely, the existence of a very close connection provided a reason to self-injure. Six of the 12 respondents stated both aspects of connection as a reason for self-injury. Five respondents stated a high-intensity level of connection as a main reason, with only one respondent referring to a lack of connection with herself and the people around her as the sole trigger of self-injury. All respondents indicated that learning how to cope with their inner selves and others was an important skill to reduce and stop self-injury.

The analysis shows that the process of stopping self-injury can be divided into six phases, which are briefly summarized below:

1. The phase of connecting and setting limits. In this phase, feelings perceived as unsafe are explored and ways of strengthening feelings of safety are pursued. This sense of safety allows patients to reach out more to others and themselves;

2. The phase of increased self-esteem with a further deepening of contact with the self;

3. The phase in which patients "learn to understand" themselves: Increased self-understanding makes patients realize that they can control their own lives;

4. The phase of autonomy: In this phase, patients make active choices to increase control of their lives and the immediate environment;

5. The phase of stopping self-injury: Learning experiences from the previous phases are now used to apply strategies other than self-injury to cope with unbearable feelings;

6. The phase of maintenance: This phase focuses on preventing a relapse into self-injurious behavior.

These phases are explained in greater detail in the following sections.

Phase 1: Limit Setting and Connecting

Ten respondents indicated that an important condition for reducing or, indeed, stopping self-injury was to perceive limits. Limits were created in many different ways. At first, limits were set externally, by the therapeutic environment. Over time, patients gradually learned to also set limits by themselves, thereby slowly internalizing the skill of setting limits.

Furthermore, patients perceived limits by being confronted directly with the consequences of the self-injury. Sometimes, the injuries inflicted were much worse than intended, so much so that patients realized that the injuries might have been fatal. These confrontations led to a growing realization that limits had to be set to self-injurious behavior. The need to set limits was also prompted by the fact that the injuries were visible to others and induced a negative response. For example, one respondent said that she had been called to account for her injuries by a stranger and had felt very vulnerable as a result. At that point, she understood that she unwillingly had revealed much more of herself than she had previously realized. She put it like this:

> I was so ashamed that a total stranger could suddenly see me, that I had done that, and could see that I was not entirely stable.

In the treatment setting for inpatients, limits were imposed by putting patients in isolation, sometimes at the patient's own request, sometimes on the initiative of staff. Another way of limit setting consisted of patients being referred back to their previous therapist if the many treatment interventions failed to stop the self-injuries. Several respondents indicated that, because they could not set any limits themselves, it was important for them that limits were imposed by others. The perception of limits was strengthened in situations where there was a positive sense of connection with the care providers and others. Respondents indicated that they felt connected when they were listened to and had the feeling they were being taken seriously. To them, this meant that people believed their story

and that they did not have to prove that what they said was actually true. They regarded this as a recognition of themselves and their problems. Respondents stated that being taken seriously by care providers meant that they began to take themselves seriously as well. The ensuing sense of clarity was felt by patients as a limit to self-injury and as something to hold on to. Their sense of safety improved.

Initially, safety was perceived mainly as physical safety. Respondents were assured that there would be no physical violence and that specific language and behavior would not be punished. Physical safety paved the way for emotional safety. Patients felt that they could feel emotions without being judged. On physical and emotional safety, one of the respondents said:

> Safety means that I know nothing horrible will happen, there will be no fighting when I say something to you. Whatever I say I can safely say. There will be no punishment, no consequences. I am not turned down for what I am.

The perception of limits, safety, and connection encouraged patients to feel their emotions, such as pain and sadness. The intensity of these emotions and the difficulty of coping with them, however, triggered strong feelings of unsafety, which, in turn, could give rise to self-injury. By reoffering limits and connection, patients felt that safety was restored. Respondents indicated that, over time, periods of safety grew longer and periods of unsafety became shorter.

Phase 2: Self-esteem

In the second phase, increased self-esteem took center stage. Respondents indicated that their self-esteem increased because they could see and feel that they were recognized by carers and family and friends as full human beings, with all their faults and imperfections. One of the respondents put it like this:

> The carers told me they did not disapprove of me as a person, but because of what I did. For me this meant there was nothing wrong with my character, my personality. When I came out of isolation, they saw me as me and I could just start again with a clean slate.

Many respondents indicated that their self-image changed and became more positive because of this recognition by others. Before, their self-image had

been predominantly negative, in addition to their having a very low self-esteem.

This growing sense of self-esteem allowed patients to discover their own strengths and creative talents, which, in turn, contributed to a more positive self-image. By putting these talents to use, they succeeded in expressing their emotions in ways other than self-injury. In this phase, several patients managed to withstand the strong urge to injure themselves. They surprised themselves: They were stronger than they thought they were. The discovery of inner strength and increased self-esteem encouraged the respondents to stop self-injuring.

Phase 3: Learning to Understand

The discovery of inner strength and increased self-esteem encouraged the respondents to look at why they self-injured. They were in a better position to experience the emotions that contributed to self-injury and understand what triggered those emotions. Connection with their inner self, their bodies, and their existence deepened. Respondents learned to know themselves better and began to understand their own behavior. One of the respondents referred to this as learning to understand oneself.

> I have finally come to terms with myself, in all this chaos I have begun to learn to listen to who I am and what it is that drives me. I now understand, I understand the emotions in me.

By gaining a better understanding of their emotions and behavior, the respondents felt that they were also better able to influence their behavior and to manage their lives.

Phase 4: Autonomy

All respondents stated that they had become aware that they could actually choose whether or not to continue self-injuring. The realization that they could influence their own behavior increased their sense of autonomy. They felt that they gradually became better able to make independent decisions about their lives, act upon those decisions, and thus take responsibility for their own behavior. In this phase, contact with others changed: Because of their growing sense of autonomy, the respondents chose for themselves with whom they wanted to forge a connection and with whom they did not. They also determined the content and limitations of their contacts with others. As one of the respondents put it:

> I got control of my life because I realised I could make choices, I could and was allowed to want things for myself and, more importantly, I could stop things.

Phase 5: Stopping Self-Injury and Learning New Strategies

To be able to stop self-injuring, the respondents had to learn alternative strategies to control their emotions. To achieve this, they tried different strategies, which was often a matter of trial and error. The respondents identified the following important strategies: (a) expressing emotions directly, (b) physical exercise, (c) creative activities, and (d) establishing a connection with others. Emotions were expressed directly by crying, shouting, cursing, kicking, hitting, or scratching on paper. Physical activities included cycling, walking, horse riding, or washing the dishes. Uncontrolled thoughts and feelings were channeled creatively by writing, drawing, or musical exercises. Many respondents also indicated that it was important to connect with other people: through conversations or sometimes by holding hands. By connecting with others, they kept in contact with themselves.

It was important that these alternative activities should control precisely those emotions for which self-injury was previously adopted as a controlling strategy. For example, a respondent who tried to control her aggressive impulses through self-injury indicated that blowing against a piece of fluff or pulling on a rubber band hardly had any effect. However, she could vent her aggression in an acceptable manner by kicking a cushion. She said:

> I learned that through kicking, beating, and imaginary strangling of a person, I could reduce my tension and aggression, so I didn't have to injure myself.

The successful use of alternative strategies allowed the respondents to increase their self-esteem (see Phase 2). They increasingly improved their ability to control their emotions and behavior. These positive experiences increased their motivation to try even harder to stop injuring themselves.

Phase 6: Maintenance

The last phase of the model was maintenance. The prospect for most interviewees was that they

would remain in this phase for the rest of their lives. Even if they had not engaged in self-injury for a long time, the risk of relapse continued to exist. Three of the respondents last harmed themselves 6 months ago. They indicated that they still found it very difficult at certain moments, especially in situations of increasing tension, not to injure themselves. They said that one of the reasons was that the immediate stress-relieving effect of self-injury could not be achieved in any other way. One respondent said:

> Not to injure myself is still not as satisfactory. Cutting myself or butting my head, it still has a kind of attraction, I find it totally addictive.

For many, self-injury or the urge to self-injure was almost a knee-jerk reaction to rapidly increasing stress levels and emotions. Only three respondents indicated that they were certain that they would never again injure themselves deliberately. The other respondents did not dare to be as certain. Almost all patients still felt the urge to self-injure at certain moments and had developed specific strategies to respond to these moments. One respondent said:

> It is still a daily struggle, but I am taking on the challenge every day. I am like: I know what I am doing this for and it is worth it.

Negative Factors

The respondents listed a number of factors that had a negative impact on reducing or stopping self-injury. The use of medication was mentioned by several respondents as a negative factor, the main reason being that emotions were subdued by the medication, as a result of which patients lost their sense of connection with themselves and others even more. As one respondent said:

> Then I want my medicine, because I don't want to feel. But then I also start to dissociate more quickly and I lose control. The severest damage was done under the influence of drugs.

However, one of the respondents said that the medication had benefited her, mainly because it had helped her feel less anxious.

Several respondents indicated that self-injury was maintained by nurses being very caring when attending to their injuries. This fed their need for love and care that they felt had been withheld from them. One respondent said:

> The nurse said: 'Come, let me bandage your wounds' and then she comforted me. Then I thought, if I cut myself next time, I will get her attention again.

One respondent cited strict rules and high expectations as negative factors. The fear of not being able to live up to expectations particularly triggered anger and resistance: The experience repeated itself because something was imposed upon her as a result of which she no longer knew how to act, except to self-injure.

CONCLUSIONS AND DISCUSSION

The aim of this study was to clarify the process of reducing and stopping self-injury and the factors that influence that process. We described this process in six phases but would point out that this schematic presentation only does limited justice to reality. In practice, the process is much more capricious and, hence, less straightforward. The phase model described provides a prototypical course of the recovery process.

A limitation of this study is that it is conducted among a specially selected, relatively small group of people at a specific location. All of them were capable of analyzing and describing their individual recovery process, which is indicative of developed or highly developed reflective skills. To that extent, they are probably not fully representative of the group of patients who severely self-injure. Despite this limitation, some of our findings are confirmed by previous studies. Lindgren et. al. (2004) and Suyemoto (1998) refer to the importance of patients feeling connected and receiving support as determinants to reduce and stop self-injuring. Support by care providers in constructing a positive identity has been described by Bosman and van Meijel (2006) as a key aspect of care cited by patients. Gaining an understanding of one's emotions and behavior has been described by Suyemoto as essential to stop self-injuring.

Implications for Nursing Practice and Research

Connection is the key strand running through the entire process. Nurses have a constant presence on the ward and are in the position to identify early indicators when a patient is losing contact with herself and her environment. When a patient self-

injures, nurses are the first to deal with the consequence. Accordingly, in addition to attending to the injuries, nurses should create the conditions for restoring a sense of connection in the patient. They can do so by letting patients know, in words and attitude, that they regard them as an important and full person, regardless of their behavior. By working with patients in examining the reasons for and meaning of self-injury, nurses convey to the patients that they have a deeper understanding of the patient as a human being that goes beyond the self-injurious behavior. Patients will feel that their identity is recognized, which, in turn, will have a positive impact on their self-image.

Exerting a positive impact on the self-image of patients is crucial to the recovery process. The patient's negative self-image has been internalized and a positive self-image can only arise after a prolonged period of receiving positive messages. Nurses will, therefore, have to possess a great deal of patience and keep repeating their positive message for a long time before any change in the pattern of self-injury can be achieved.

Nurses will be able to do so, provided that a number of conditions are satisfied. Nurses need sufficient knowledge and understanding of the background to and significance of self-injury. It is necessary for wards to implement a process of supervision for nurses so that they can reflect and analyze their responses to this population of patients. In supervision sessions, nurses may gain more clarity of what emotions self-injurious behavior evoke in them. For instance, they may have felt manipulated and, as a consequence, have broken the connection with the patient. The sessions may also teach nurses what effects their own actions have on patients. If they take a defensive stance, for instance, the patient may relive experiences from the past as a rejected child and feel an increasing urge to self-injure. Finally, counseling must be available on a regular basis for nurses to express their emotions arising from facing self-injurious behavior.

We would recommend developing nursing interventions that reflect and address the key aspects of the recovery process as cited by patients. The effectiveness of these interventions could then be reviewed in a follow-up study.

REFERENCES

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders*. (4th ed.). Washington, DC: American Psychiatric Association.

Bosman, M. & van Meijel, B. K. G. (2006). Betekenis en behandeling van zelfverwondend gedrag (Significance and treatment of self-injurious behaviour). *Maandblad voor de Geestelijke gezondheidszorg*, *05*, 414–426.

Broers, E. & de Lange, J. (1998). *Hulpverlening bij zelfverwonding in de psychiatrie. Achtergronden, verpleegproces en keuzen in de zorg* (*Care for patients with self-injurious behaviour in the mental health care. Backgrounds, nursing process and treatment options*). Utrecht: Trimbos-instituut.

Bywaters, P. & Rolfe, A. (2002). *Look beyond the scars. Understanding and responding to self-injury and self-harm*. London: NCH http://www.nchafc.org.uk/downloads/selfharm.pdf.

Lindgren, B. M., Wilstrand, C., Gilje, F., Olofsson, B. (2004). Struggling for hopefulness: A qualitative study of Swedish women who self-harm. *Journal of Psychiatric and Mental Health Nursing*, *11*, 284–291.

McAllister, M. (2003). Multiple meanings of self harm: A critical review. *International Journal of Mental Health Nursing*, *12*, 177–185.

Polit, D. F. & Beck, C. T. (2004). *Nursing research: Principles and methods*. (7th ed.). Philadelphia: Lippincott Williams & Wilkins.

Strauss, A. & Corbin, J. (1998). *Basics of qualitative research. Techniques and procedures for developing grounded theory.* London: Sage.

Suyemoto, K. L. (1998). The functions of self-mutilation. *Clinical Psychology Review*, *18*(5), 531–554.

Vandereycken, W. (2001). Aanpak zelfverwondend gedrag bij psychiatrische patiënten (Approach to self-injurious behaviour in psychiatric patients). *Psychopraxis*, *3*, 94–98.

Weber, M. T. (2002). Triggers for self-abuse: A qualitative study. *Archives of Psychiatric Nursing*, *16*, 118–124.