

Case Report

Assessment of self-injurious behavior in major depressive disorder: a case report

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Abstract

Introduction: Self-harm and depression are two related mental health issues that often co-occur and can have serious impacts on individuals and their well-being. Major Depressive Disorder (MDD) is a complex and multifaceted mental health condition that is prevalent among young adults. It is a significant public health concern that affects individuals, families and society as a whole, contributing to considerable social, economic, and health-related costs. Despite the high prevalence of depression in young adults, there is a lack of understanding of its etiology, risk factors, and optimal treatment strategies. Self-harm behavior is a concerning manifestation of MDD that can have serious consequences, including injury, infection, or even death.

Methods: In this article, we report a case of an MDD patient with self-harm behavior and discuss the assessment method and treatment options. Our aim is to raise awareness of these pathologies among psychiatrists and the general population and to highlight the importance of early diagnosis and effective treatment in reducing the risk of self-harm behavior and suicide.

Conclusion: In light of the case presented, it is evident that early detection and targeted intervention are crucial in mitigating the risk of self-injurious behavior in MDD patients. The utilization of a comprehensive assessment methodology, inclusive of a thorough review of the patient's clinical history and utilization of standardized rating scales, proved indispensable in the tailoring of an individualized treatment regimen. The amalgamation of pharmacotherapy and psychotherapy proved to be a successful strategy in the amelioration of depressive symptoms and consequent self-harm behavior. As such, we trust that this case report will serve to sensitize clinicians to the importance of early identification and prompt management of these pathologies, in the quest for enhanced mental health outcomes.

Introduction

Depression is a multifaceted mental health disorder, affecting millions worldwide, with the potential to incite an array of devastating symptoms. Beyond the well-established manifestations of persistent sadness, hopelessness, and worthlessness, depression can engender disruptions in appetite, sleep patterns and energy levels. Moreover, afflicted individuals may struggle with concentration, experience a sense of overwhelmingness, and be plagued by negative self-talk and perceptions of their surroundings.

The mechanisms underlying depression are complex and multifactorial, involving genetic, environmental, and psychosocial determinants. Notwithstanding the intricate

pathogenesis, early recognition and management are critical in mitigating the negative impact of depression on the quality of life of those affected.

Self-harm behavior is a common and concerning problem among individuals with depression. It refers to intentional and deliberate behavior that causes injury or harm to one's own body. This can take various forms such as cutting, burning, or excessive scratching. Studies have shown that up to 40% of individuals with depression have a history of self-harm behavior [1]. Self-harm behavior can be defined as any intentional injury to one's own body without suicidal intent.

Several factors have been identified as potential predictors of self-harm behavior in depression. These include younger

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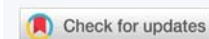
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age, female gender, a history of childhood abuse or trauma, comorbid substance abuse, and a family history of suicide or self-harm behavior [1,2]. Additionally, depression severity and intensity of negative affect have been associated with an increased risk of self-harm behavior.

Self-harm behavior is a maladaptive coping mechanism that individuals may use to deal with emotional distress or overwhelming feelings. Research has shown that individuals with depression who engage in self-harm behavior are at an increased risk for suicide attempts and completed suicide [1,3]. In fact, self-harm behavior is considered a significant predictor of suicide attempts in individuals with depression.

While the precise relationship between self-harm behavior and depression is not fully understood, several theories have been proposed.

One theory suggests that self-harm behavior may be a maladaptive coping mechanism used to manage intense emotions associated with depression [4,5]. For example, an individual who is experiencing intense feelings of sadness or hopelessness may engage in self-harm behavior as a way to distract from these emotions or to provide a temporary sense of relief.

Another theory proposes that self-harm behavior may be a symptom of underlying depression [5]. In this view, self-harm behavior may be seen as a manifestation of the individual's negative self-image and feelings of worthlessness.

Studies have shown that self-harm behavior and depression often co-occur [3,6]. Individuals who engage in self-harm behaviors are more likely to experience depression, and individuals with depression are more likely to engage in self-harm behaviors. This may be because both conditions share similar underlying factors, such as difficulty regulating emotions and a tendency towards negative thinking.

It is important to note that self-harm is not a diagnostic criterion for depression, but rather a behavior that often co-occurs with depression and other mental health conditions. When left untreated, self-harm can worsen symptoms of depression and lead to further physical and emotional harm.

Case presentation

The patient is a 25-year-old female who presented to the clinic with complaints of feeling sad, having low energy, loss of interest in activities, loss of appetite, low motivation, reduced ability to focus, and a desire to sleep most of the day. She states: "I felt like suffocating", "I don't want to see anyone" "I'm in no mood to do anything", "I feel unmotivated", "I feel tired all the time", "I just want to stay in bed all day". She reports that these symptoms have been present for the past several months and have gradually worsened. She mentions that these symptoms started to manifest after a stressful event in her life, specifically the break-up with her boyfriend, which affected her greatly.

She reports a past history of a romantic relationship with a jealous boyfriend, which resulted in frequent conflicts. Three years ago, she had an abortion, which caused her significant distress. Since then, she has developed a behavior of self-harm, which has been increasing in frequency and severity.

Family history: The patient has no significant family history of mental health disorders.

Personal physiological background: Her menarche occurred when she was 9. The patient states that she had a pregnancy 3 years ago, followed by a consented abortion due to personal reasons.

Personal medical history: She suffers from chronic gastritis, but currently takes no medication.

Social history: Regarding her working and living conditions, she has worked as a baker in England for over a year, as she moved there with her former boyfriend. She returned to Romania when the breakup occurred and when she started to experience the aforementioned symptoms. She now lives with her parents, who are both in good health. She has no siblings and no children. The patient reports having a few close friends who she does not see regularly.

Drugs and substance use: She has been a smoker for over 7 years, as she smokes 1 pack of cigarettes per day. She denies consuming alcohol and has no prior history of engaging in substance use.

Clinical exam

Vital signs: Blood pressure: 120/80 mmHg, Heart rate: 70 beats per minute, Respiratory rate: 16 breaths per minute, Temperature: 36.4 °C, Oxygen saturation: 99% on room air.

General appearance: The patient appears well-nourished, alert, and oriented to person, place, and time. She is appropriately dressed for the weather and her age, and her grooming and hygiene are good.

Head and neck: The patient's head is normocephalic and atraumatic. Her neck is supple, with no masses or tenderness. There is no jugular venous distention.

Eyes: The patient's pupils are equal, round, and reactive to light. There is no conjunctival injection, discharge, or edema. Visual acuity is normal.

Ears, nose and throat: The patient's ears are without erythema, swelling, or discharge. There is no hearing loss. The patient's nose is patent, with no congestion or discharge. Her mucous membranes are pink and moist. The patient's throat is without erythema, swelling, or exudate. Tonsils are not enlarged.

Chest and lungs: The patient's chest is symmetrical with normal respiratory effort. Lung fields are clear to auscultation bilaterally, with no wheezing, crackles, or rhonchi.



Cardiovascular: The patient's heart rate is regular with no murmurs or gallops. Peripheral pulses are strong and equal bilaterally. There is no edema.

Abdomen: The patient's abdomen is soft and non-tender. During deep palpation, she mentions discomfort in the epigastric area. There is no hepatosplenomegaly or masses. Bowel sounds are normal.

Musculoskeletal: The patient has a full range of motion in all joints without pain or crepitus. There is no tenderness, swelling, or deformity.

Neurological: The patient is alert and oriented to person, place, and time. Cranial nerves II-XII are intact. Strength is 5/5 in all extremities and sensation is intact.

Paraclinical assessment: Blood tests were also performed, as well as an EEG, which revealed no abnormal results. A brain MRI (Magnetic Resonance Imaging) has also been performed on our patient, in order to rule out any underlying medical conditions that could be contributing to the patient's symptoms and to provide further information on the possible underlying neurological processes associated with depression. The following findings indicated a normal brain MRI:

- No evidence of brain tumors or abnormal growths
- No evidence of cerebral hemorrhage or stroke
- No evidence of brain lesions or areas of abnormal tissue
- No evidence of inflammation, infection, or abscesses in the brain
- No evidence of hydrocephalus

Based on the clinical exam and also the paraclinical examinations, the patient appeared to be in good health with no acute medical concerns.

Presenting symptoms: The patient reports feeling depressed and sadly most of the time. She has difficulty sleeping and has been waking up several times during the night. She has also experienced a loss of interest in activities that she once enjoyed, such as going out with friends, reading, and watching movies. She also reports decreased appetite and a lack of motivation to do daily tasks, such as showering or getting dressed.

Assessment: During the clinical interview, the patient was observed to have a sad and flat affect, with slow and hesitant speech. She reported feelings of worthlessness and hopelessness and had difficulty identifying any positive aspects of her life. Her thoughts were also negative and self-critical. Subsequently, the patient was screened for suicidal ideation and denied any current thoughts of suicide.

After establishing a trusting relationship with her physician, the patient revealed that after she had the abortion, she started to cut herself in less visible areas, such as the interior side of both thighs. This behavior was triggered most of the time by the conflicts she had with her boyfriend. She stated that she never cut herself with the thought of dying, but rather to provide some tension relief. After a dramatic break-up, as stressful events unfolded, she felt the urge to cut herself even more frequently, therefore engaging in stress-reducing behaviors. When examined, the clinical findings concurred with what the patient had declared, revealing multiple old and new self-inflicted cuts, ranging from 3 cm up to 12 cm.

Discussion

Stress and depression are common psychological reactions to a variety of life events, including medical procedures like abortion. However, the experience of these emotions can be particularly complex for women who have had an abortion due to the unique emotional, social, and cultural factors surrounding the decision to terminate a pregnancy.

One potential contributing factor to stress and depression after an abortion is the experience of loss and grief. Women who have had an abortion may have had hopes and plans for the future of their pregnancy, and the termination of the pregnancy can cause feelings of sadness and despair. This sense of loss and grief can be compounded by the societal stigma and taboo surrounding abortion, which can make it difficult for women to process their emotions and seek support.

In addition to feelings of loss and grief, the negative stigma surrounding abortion can also contribute to stress and depression in women. Women who have had an abortion may feel ashamed or guilty, either due to internalized societal attitudes or the disapproval of family, friends, or religious communities. This can create a sense of isolation and exacerbate negative emotions.

Furthermore, hormonal changes that occur during and after an abortion may also contribute to feelings of depression and anxiety. Hormonal shifts can affect mood, and the sudden drop in hormones following an abortion may lead to feelings of sadness and hopelessness. Women who have a history of mental health conditions, such as depression or anxiety, may be particularly susceptible to these hormonal changes and the subsequent emotional impacts.

Finally, lack of support can also contribute to stress and depression after an abortion. Women who do not have a support system or who feel isolated may struggle to manage their emotions and cope with the aftermath of the procedure. Without the support of friends, family, or mental health professionals, these women may be at increased risk of experiencing ongoing emotional difficulties.



In the case of our patient, she dealt with all the aforementioned phenomena, as she went through this psychological turmoil all on her own. She didn't inform any member of her family, nor the child's father about the pregnancy or the abortion at that time, therefore lacking any social support on their part. As those events unfolded, she was navigating through an unstable period, as she was having difficulties finding a job and a place to live.

Psychological exam: The clinician asked the patient to complete self-report measures such as the Beck Depression Inventory (BDI) or the Patient Health Questionnaire (PHQ-9) to assess the severity of their depressive symptoms. She scored 45 on BDI, respectively 21 on PHQ-9, which corresponds to severe depression. The clinical psychologist also used self-report measures to assess the patient's risk of self-harm, such as the Self-Injurious Thoughts and Behaviors Interview (SITBI) or the Columbia-Suicide Severity Rating Scale (C-SSRS). The patient had not reported any suicidal ideation, but only a grim and pessimistic outlook on life.

Psychiatric exam

Appearance and general behavior

Attitude: Cooperative, wary of the surroundings and people around.

Gait: Hesitant

Clothing: Casual, neat, good hygiene status.

Appearance: Crouching position, uncombed hair, unkempt nails

Idiosyncrasies: Noticeable scars on the interior side of both thighs

Voice: Diminished verbal flow, the voice of medium tonality and decreased intensity, emotionally modulated voice, mood-congruent inflections

Look: Doesn't engage in visual contact at first, maintains intermittent visual contact with the examining physician, tends to look away

Facies: Sad, hypomobile

Mimics and pantomime: Decreased gestural activity, in consistence with her story-telling.

Cognitive functions

Sensation: Hyperaesthesia, irritability, irascibility.

Perception: Denies the presence of hallucinatory phenomena.

Attention: Spontaneous and voluntary hypoprosexia, reduced ability to concentrate, selective hyperprosexia towards past traumas or new unforeseeable events, low attentional distributivity or dispersion.

Memory: Fixation and evocation hypomnesia.

Thinking: Slightly slowed, coherent, organized, ideas of guilt, pessimistic outlook, existential dilemmas, demobilization.

Imagination: Normal, but tends to catastrophize various situations.

Affective and motivational functions

Mood: Negative hyperthymia, depressive disposition, emotional lability, cries easily, low tolerance towards frustration, increased anxiety, panic attacks

Feelings: Sadness, emptiness, hopelessness, worthlessness, guilt, depreciation, maladjustment, low self-esteem, the low will live.

Passions: Loss of interest in prior enjoyable activities

Motivation: Diminished drive, delay in initiating activities, indecision

Instincts: Eating-lowered (loss of appetite), preservation-diminished (negative thoughts), sexual-diminished, social-lowered, social isolation, maternal-diminished.

Executive functions

Volition: Hypobulia, impaired willpower

Motor activity: Low energy, asthenia, slow movements, delayed reaction time

Verbal activity: Fluent speech, soft volume, a slow but pressured rate.

Behavior: Slight psychomotor retardation.

Sleep: Hypersomnia.

Judgment and Insight

Conscience: Orientated in time, space, person, and situation.

Insight over illness: Present

Intellect: High, in accordance with educational background.

Character: Appropriate attitude.

Diagnosis: Based on the patient's symptoms and clinical assessment, she was diagnosed with major depressive disorder.

Treatment plan: Treatment for self-harm behavior and depression typically involves a combination of therapy and medication. Antidepressant medication has been shown to be effective in reducing depressive symptoms and may also reduce the frequency and severity of self-harm behavior.



Psychotherapy, such as cognitive-behavioral therapy (CBT) and dialectical behavior therapy (DBT), can also be effective in reducing self-harm behavior and improving depressive symptoms. CBT focuses on identifying negative thought patterns and replacing them with more positive, adaptive ways of thinking. On the other hand, DBT is a specific type of CBT that includes skills training in emotion regulation, distress tolerance, and interpersonal effectiveness.

Therefore, the patient was prescribed antidepressants-SSRIs, initiated with a low dose and then gradually increased over time. She was also given an anxiolytic drug, a mood stabilizer, and a sedative.

Psychosocial interventions are a critical component of treatment for a young female with depression and self-harm behavior. The patient also started attending therapy sessions, while also participating in support groups. During the time she spent in the hospital, the patient attended 2 sessions of CBT per week, in order to help her identify and challenge negative thinking patterns, develop coping strategies, and make positive changes in her life. For our patient, this type of psychotherapy is aimed at helping her feel more in control and empowered, while setting a specific goal and developing an individualized treatment plan, together with the therapist. It also enabled her to focus more on the present and future, rather than dwelling on past experiences, thus allowing her to move forward without baggage. The patient was encouraged to make positive changes in the present, thus providing a clean slate for the future. One of the goals of the therapy process was to equip her with healthy coping strategies in order to manage her symptoms short-term, and also long-term. With resilience-building techniques, we believe she would manage future stressful events in a better way.

In addition to therapy and medication, individuals who engage in self-harm behaviors may benefit from developing adaptive coping skills to manage their emotions. This may include engaging in regular exercise, practicing relaxation techniques such as meditation or yoga, and seeking social support from friends and family.

Therefore, our patient was also advised to engage in regular physical exercise and to improve her sleep hygiene. The patient was educated about the nature of depression and the importance of adhering to treatment. She was encouraged to involve her family and friends in her recovery process and to reach out for support when needed. The patient's symptoms were closely monitored over the time she spent in the hospital, and her treatment plan was adjusted as needed.

At discharge, she had a favorable prognosis, as she managed to overcome most of her symptoms with the help of the aforementioned interventions. Objectively, her scores on psychological tests such as BDI, PHQ-9 and SITBI improved significantly. Subjectively, through interview evaluation, she appeared to have a more positive outlook on life, as her desire

to engage in social situations and reclaim her job became more vivid. She was advised to keep a tight connection with her physician and periodically come for an evaluation, as well as continue the therapy sessions for an indefinite period of time.

In this case, a combination of drug treatment and psychotherapy proved to be the most effective approach to treating depression and self-harm behavior. As research suggests, a combination of antidepressant medication and CBT can lead to greater improvement in symptoms of depression and self-harm behavior than either treatment alone.

Interventions for self-harm behavior depend on the individual's specific needs and underlying issues that may be contributing to their self-harm behavior. One of the beneficial interventions is safety planning, which involves developing a plan with the individual to help them manage and cope with self-harm urges. This plan can include identifying triggers and warning signs, developing distraction techniques, and identifying people and resources to reach out to for support in times of crisis.

It's important to note that the best approach to managing self-harm behavior associated with depression will vary depending on the individual's needs and the severity of their self-harm behavior. It is recommended that individuals struggling with self-harm seek support from a mental health professional who can help develop an individualized treatment plan.

Conclusion

Self-harm behavior and depression are two complex and interrelated phenomena that have been extensively researched in the field of psychology. Self-harm is a behavior characterized by intentional, self-inflicted harm to one's body tissue that is not intended to be suicidal in nature. It is often associated with emotional distress and can serve as a coping mechanism for individuals experiencing difficult emotions or situations. While the behavior may provide temporary relief from emotional pain, it can have serious physical consequences, including scarring, infection, and even death.

Research has consistently shown a strong association between self-harm behavior and depression. In fact, studies suggest that 70% of individuals who engage in self-harm behavior also experience symptoms of depression.

Overall, self-harm behavior is a significant concern in individuals with depression and requires prompt and effective treatment to prevent serious consequences. Both medication and psychotherapy have been shown to be effective in reducing self-harm behavior and improving depressive symptoms, and a combination of both may be most effective. Early identification and intervention are crucial in reducing the risk of suicide and promoting recovery in individuals with



depression and self-harm behavior. There are several factors that may contribute to self-harm behavior in individuals with depressive disorder. One of the most significant factors is the presence of intense emotional pain, which can lead individuals to engage in self-harm as a way of coping with their feelings. Other factors may include a history of trauma or abuse, a lack of social support, and a history of substance abuse.

In conclusion, self-harm behavior and depression are complex issues that are often intertwined. While the relationship between these phenomena is not fully understood, effective interventions have been developed to manage both depression and self-harm behavior. With the right support and treatment, individuals struggling with these issues can learn to manage their symptoms and improve their quality of life.

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