CASE REPORT

Mindfully Cracking The Barcode: An Eclectic Intervention for Adolescent Non-Suicidal Self Injury

Norsuhana Emilinadiah Husin[1,4], Musfirah Abd Fatah[1], Azizah Othman[2,3] ,Tengku Mohd Saifuddin Tengku Kamarulbahri[1,4]

[1] Hospital Sultan Zainal Abidin, Universiti Sultan Zainal Abidin, 20400 Kuala Nerus, Terengganu, Malaysia.
[2] Department of Paediatrics, School of Medical Sciences, Health Campus, Universiti Sains Malaysia, 16150 Kubang Kerian, Kelantan, Malaysia.
[3] Hospital Pakar Universiti Sains Malaysia, Health Campus, Universiti Sains Malaysia, 16150 Kubang Kerian, Kelantan, Malaysia.
[4] Faculty of Medicine, Universiti Sultan Zainal Abidin, 21300 Kuala Terengganu, Terengganu, Malaysia

ABSTRACT

Research on interventions for self-harm in children is limited, emphasizing the potential of an eclectic approach. This case report details the treatment of a 13-year-old female with daily urges to self-harm, driven by stress from an inconsistent family environment, self-consciousness about her appearance, academic pressure, and social criticism. Visible "barcode" marks were noted during the assessment. The treatment integrated mindfulness techniques, including diaphragmatic breathing and art-based mindfulness (tapestry colouring), cognitive restructuring to address negative thoughts, interpersonal effectiveness using "I statements," and psychoeducation for her parents on providing emotional support. By the end of treatment, the patient's urges to self-harm ceased, replaced by emotional expression through art and assertive communication. This case demonstrates the efficacy of an eclectic approach, combining multiple strategies tailored to the individual, and is among the first documented applications of mindfulness and cognitive techniques targeting self-harm in adolescents.
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Corresponding Author:
Tengku Mohd Saifuddin Tengku Kamarulbahri, PhD
Email: tgsaifuddin@unisza.edu.my
Tel: +609-627 5546

INTRODUCTION

Nonsuicidal self-injury (NSSI) refers to intentional, self-inflicted harm to body tissue without suicidal intent, commonly used to alleviate psychological distress. Common behaviours include cutting, bruising, and scratching. Epidemiological studies indicate that NSSI affects 17–18% of adolescents globally, highlighting the need for effective interventions, particularly during adolescence, a period of heightened vulnerability (1).

Despite the increasing rates of NSSI, treatment options are limited. Pharmacological interventions have not shown to be effective for self-harm or suicidal behaviours in youth, while psychotherapy shows promise (2). Adolescents engaging in NSSI often struggle with emotional dysregulation, which exacerbates their ability to manage stress and form healthy relationships (3). It is evident that relying on a single treatment modality is insufficient for addressing the complexity of NSSI, as it limits the therapist's ability to adapt to the patient's evolving needs (4). As a result, therapists often adopt an eclectic approach, integrating multiple therapeutic strategies to provide holistic care (5).

This case study examines the efficacy of an eclectic therapeutic approach in treating WA, a 13-year-old girl with recurrent NSSI. It highlights the potential benefits of integrating mindfulness and cognitive strategies to address emotional dysregulation, cognitive distortions, and interpersonal challenges, supporting long-term recovery.

CASE REPORT

WA, a 13-year-old female, was referred by her school counsellor for psychological treatment due to recurrent NSSI, engaging in the behaviour three to seven times per week. She primarily used scissors to make incisions on her forearms, finding emotional relief from the sight of blood. During the intake, WA had scars resembling barcodes on her forearms. She reported daily urges to self-harm, a decrease in interest in activities, and diminished academic motivation, although she did not meet the criteria for depression. Her primary struggles were emotional dysregulation and low self-worth, which appeared to drive her NSSI behaviour.

WA's vulnerability to non-suicidal self-injury (NSSI) was shaped by familial and developmental factors. A family

history of mental health conditions increased her susceptibility, while inconsistent parenting and emotional neglect contributed to longstanding dissatisfaction and limited opportunities to express vulnerability. Perceived as "independent" due to her calm demeanour, WA lacked support for developing healthy coping and emotional regulation skills. From early adolescence, teasing about her appearance intensified self-doubt and self-criticism, which, combined with peer influence and social media exposure, led her to adopt maladaptive coping behaviours that provided short-term relief during periods of distress.

The behaviour was maintained through negative reinforcement, as temporary emotional relief reduced immediate distress but delayed the development of adaptive strategies. Academic stress and increased parental attention following concerns further reinforced the pattern, while the absence of early intervention prolonged reliance on maladaptive coping. Protective factors included WA's insight, motivation for therapy, and capacity to learn healthier skills. Engagement in art supported emotional expression, and coordinated support from her school counsellor, peers, and family strengthened resilience and facilitated referral to appropriate therapeutic care.

Intervention

An eclectic therapeutic approach was used to address WA's emotional regulation, low self-worth, and NSSI behaviour. The therapy integrated mindfulness, cognitive restructuring, interpersonal skills training, and family involvement. Art-based coping strategies were included to enhance engagement and align with WA's interests.

Intervention Phase One: Mindfulness Skills (Sessions One to Three)

The first phase aimed to increase WA's emotional awareness and reduce her reliance on NSSI. WA had difficulty articulating her emotions and described feeling "mindless" during self-harm episodes. Mindfulness techniques, such as diaphragmatic breathing and grounding exercises (e.g., 5-4-3-2-1), were introduced to promote self-awareness. Additionally, an art-based mindfulness activity, tapestry colouring, was incorporated to improve rapport and engagement. Self-compassion exercises were also included but met initial resistance, as WA struggled to identify her strengths. This phase highlighted the need for deeper emotional exploration to foster self-acceptance.

Intervention Phase Two: Cognitive Restructuring (Sessions Four to Six)

In the second phase of therapy, WA demonstrated improved emotional awareness. The focus shifted to addressing the negative cognitive patterns contributing to her self-criticism and the belief that she deserved punishment through self-harm. Cognitive restructuring techniques from Cognitive Behavioural Therapy (CBT), including connecting emotions to thoughts, identifying unhelpful thought patterns, and developing skills to generate more balanced perspectives, were introduced. WA began to exhibit early signs of self-compassion and acknowledged her personal strengths, signalling a positive shift in her self-perception.

Intervention Phase Three: Interpersonal Skills and Parental Involvement (Sessions Seven to Eight)

The final phase of the therapy focused on addressing WA's interpersonal challenges, key triggers for her NSSI. WA reported struggles in expressing her feelings, particularly in relation to stress from hurtful comments made by her friends and sister, including one instance where her sister said she did not deserve to live. Meanwhile, WA's parents expressed uncertainty about how to respond when she reached out for help. Therefore, assertiveness training, based on Dialectical Behaviour Therapy (DBT), was used to teach WA how to use "I statements" for better communication and setting boundaries. Psychoeducation was provided to WA's parents to improve their listening skills, emotional responses, and consistency in parenting. Positive changes were observed, including WA's mother offering emotional support during a stressful exam period, leading to improved mood and family dynamics.

Outcome and Future Recommendations

By the end of therapy, WA had ceased self-harming entirely, although she continued to experience occasional urges. The timeline of the reduction in NSSI frequency is summarised in Table I. She reported a significant decrease in the frequency and intensity of these urges, even during stressful periods like exams, and demonstrated improved ability to manage them using strategies like tapestry colouring and expressing her emotions through art, such as drawing hands and flowers. Additionally, she managed the urges through diaphragmatic breathing, reframing her thoughts to gain a more balanced perspective, and communicating her emotions to her parents and friends for emotional support.

The integration of mindfulness, cognitive restructuring, art-based activity, and family involvement resulted in notable improvements in WA's emotional regulation,

Table I: WA's Therapy Session and Frequency of NSSI

Session	Frequency of NSSI Per Week
Intake interview	7
Intervention session 1	5
Intervention session 2	3
Intervention session 3	0
Intervention session 4	3
Intervention session 5	1
Intervention session 6	0
Intervention session 7	0
Intervention session 8	0

self-awareness, and coping abilities. Moving forward, WA is encouraged to continue practising the coping skills learned in therapy, maintain family involvement, and explore art-based activities to reinforce her progress. Periodic follow-up sessions are recommended to sustain her emotional well-being and address emerging challenges.

To support long-term recovery and prevent relapse, a safety plan was co-developed with WA, identifying her triggers, early warning signs, coping strategies, and emergency contacts. She was also introduced to the BE N.I.C.E (*Belajar dan Latih Sehingga Cekap Emosi*) app, which stores personalised coping reminders and contact information, providing immediate support and reinforcing therapy skills. This approach enhanced her autonomy and preparedness during high-stress situations.

DISCUSSION

This case study demonstrates the effectiveness of an eclectic approach in treating NSSI in adolescent by integrating emotion regulation, cognitive restructuring, creative modalities, and family engagement. The findings align with evidence supporting the use of an eclectic approach that combines components of DBT, CBT, and psychoeducation (1). The DBT components for emotion regulation and interpersonal effectiveness were tailored to WA's needs, enhancing emotional awareness through grounding exercises and diaphragmatic breathing, and improving interpersonal skills via assertiveness training. However, DBT alone did not address the cognitive distortions that contributed to WA's NSSI risk. While effective for emotional regulation and interpersonal challenges, DBT lacked a focus on self-criticism and maladaptive thought patterns, which exacerbated self-harming behaviours (3). To address this limitation, cognitive restructuring techniques from CBT were incorporated to target and challenge these thought patterns.

The use of art-based coping skills, such as tapestry colouring, provided WA with a constructive outlet for emotional expression, effectively reducing her reliance on self-injury. Incorporating therapeutic methods aligned with the patient's interests improved rapport and engagement in treatment (4). Additionally, family intervention addressed WA's inconsistent and critical family dynamics, which had contributed to her NSSI. By providing psychoeducation to her parents on providing emotional support, the family environment shifted from a risk factor to a protective factor, strengthening WA's recovery process.

Despite its effectiveness, the eclectic intervention has limitations. WA's protective factors, such as her artistic interest and supportive parents, may limit the generalizability of the findings to adolescents with fewer resources or more challenging environments. Additionally, the short duration of the intervention restricts insights into long-term outcomes. Future research may explore the applicability of this approach in populations with fewer protective factors and assess long-term sustainability through longitudinal studies.

CONCLUSION

The eclectic approach shows promise in addressing the complex nature of NSSI in adolescents. By integrating evidence-based therapies such as CBT, DBT, and psychoeducation, therapists can effectively alleviate distress and promote recovery across both psychological and physical domains. The eclectic approach offers a comprehensive, flexible solution that enhances clinical outcomes in the management of NSSI.

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