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**Self-Injurious Behaviour Among Children in the Child Psychiatry Inpatient Unit**

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## 1. ABSTRACT

Nonsuicidal self-injurious behaviour in children and adolescents is a major concern that requires mental health professionals' careful assessment and attention. This thesis aimed to present a comprehensive overview of current knowledge and practises concerning such behaviour. This goal was achieved by presenting information on the epidemiology, etiology, classification, pathogenesis, clinical features, diagnosis, assessment, treatment, and prevention strategies associated with nonsuicidal self-injury. A thorough literature review was

conducted by sourcing studies from Google Scholar, PubMed, and other reputable sources. Additionally, 30 participants were interviewed using a semi-structured questionnaire, including psychiatrists, psychologists, nurses, social workers, and others who work with children in the inpatient unit, with the goal of gaining insight into current clinical practises across various Lithuanian hospitals. According to the interview findings, nonsuicidal self-injury was more common in adolescents than in children and continued to persist among inpatients. Despite the hospital's safety procedures, patients frequently devised alternate methods to self-harm, such as hitting and scratching themselves and using non-specific materials. While most cases resulted in minor physical consequences, some required intensive medical treatment. Self-harm was addressed by staff through risk assessment, observation, and communication. To discourage actual self-injurious behaviour, safety contracts, pain-inducing stimuli such as ice or elastic bands, and other self-harm mimicking behaviours were used. Such methods, however, may be inefficient and, at worst, harmful. As a result, the ultimate objective of this thesis was to inform the development of effective evidence-based interventions for children and adolescents.

**KEYWORDS:** nonsuicidal self-injury, self-injury, self-harm, children, adolescent, child psychiatry, inpatient, clinical setting

## 2. INTRODUCTION

Nonsuicidal self-injury (NSSI) is a common issue among hospitalised children and adolescents. Such behaviour is characterised by intentional self-harm without suicidal intent, typically starting between the ages of 12 and 14 (1). The lifetime prevalence among the general adolescent population is 13–23.2%, with higher rates in clinical settings (50–70%) (2–4). Females may be at higher risk, and gender differences exist for self-injury methods (2,5). Prior NSSI history, cluster B personality disorders, and hopelessness are all significant risk factors (2,6). NSSI can be classified according to behaviour type, which aids in detecting associated comorbidities and formulation of therapy (7). Minor self-injury results in minor scarring, whereas major self-injury has more serious consequences (8). The pathophysiology of NSSI is unclear, but it combines behavioural, psychological, social, and biological aspects (9). NSSI may persist due to the relief or benefits it brings, with childhood abuse, peer influences, and neurobiological characteristics all playing a role (9–11). Prevention and treatment necessitate psychiatric evaluation, which addresses safety, suicide risk, and psychiatric comorbidities (12,13). Early detection is crucial, and psychotherapy is indicated for patients with multiple NSSI episodes, single instances requiring medical care, or clear

signs of NSSI (5,14). Given the high prevalence of self-injurious behaviour among children and adolescents, understanding how healthcare providers evaluate and manage this behaviour is critical. **This thesis aims to investigate self-injurious behaviour as it is described in the literature as well as draw attention to in-field findings acquired through an interview process with employees from several inpatient psychiatric hospitals in Lithuania.**

Characteristics of self-injurious behaviour as it manifests in inpatient units are discussed, and prevalent methods for self-injury and safety measures in place for observing and identifying such acts are presented. Furthermore, the data from the field are compared to existing literature in the hopes of informing the development of future research and effective interventions to address self-injury in children and adolescents.

### **3. LITERATURE REVIEW**

#### **3.1. DEFINITION**

Nonsuicidal self-injury (NSSI) is defined as "intentional, self-effected, low-lethality bodily harm of a socially unacceptable nature performed to reduce psychological distress" (8). Based on this definition, we can distinguish NSSI from suicidal behaviour and other socially acceptable behaviours that may inflict bodily harm (e.g., tattoos, piercings), as well as indirect self-injury as a result of other behaviours such as disordered eating (9). A suicide attempt, on the other hand, refers to self-injurious behaviour accompanied by the intention to die (9). Thus, it is imperative to differentiate nonsuicidal self-injury (NSSI) from suicide, as these require different risk assessments and treatment approaches. While NSSI and suicide both result in physical damage to oneself, they differ in intent, methods, and consequences. Such behaviours are often committed with the primary goal of reducing psychological distress rather than ending one's life. Common methods of NSSI include cutting, burning, scratching, and bruising oneself (15). Suicide, on the other hand, is the intentional act of terminating one's life to escape pain and suffering, for example by hanging or using firearms (16,17). It is worth noting that the presence of NSSI is associated with increased inclination and capability for suicide and has been found to be one of the strongest predictors of future suicide attempts, making it a significant risk factor for suicide attempts (18,19).

#### **3.2. CLASSIFICATION AND TYPES OF SELF-INJURIOUS BEHAVIOUR**

Self-harm is characterised by intentional self-inflicted injuries, and various terms, including self-mutilation, have been used to describe this concept in literature. However, there has been a shift in the terminology used to describe self-harming behaviours. For example, the term "self-mutilation" has fallen out of favour as it is considered too extreme and inaccurate in conveying the extent of damage commonly caused by self-injury (7). This shift is partly

attributed to research demonstrating that most self-inflicted injuries result in minor damage and are not severe enough to warrant the term "mutilation" (8). Instead, the more widely accepted terms such as "self-injury" or "nonsuicidal self-injury" are employed to better reflect the adaptive features of such behaviour as a coping mechanism, providing temporary relief in dealing with psychological distress (20).

Classifying NSSI according to distinct patterns of self-injurious behaviour can be useful as it can help to identify underlying mental disorders, understand the motivations behind such behaviours, and develop appropriate interventions. Simeon and Favazza have proposed a comprehensive classification system for self-injurious behaviours that encompasses four self-injury categories: stereotypic, major, compulsive, and impulsive (7). Table 3 provides an overview of this classification framework.

Category	Behaviour Type and Definition	Examples	Associated disorders	Key Components
<b>Stereotyped self-injury</b>	Repetitive, fixed, and seemingly purposeless actions or movements are often found in organic mental disorders, intellectual disorders, and developmental disorders.	Head banging, self-hitting, face slapping, lip and hand chewing, self-biting, and hair pulling.	Tourette's syndrome, Lesch-Nyhan syndrome, autism spectrum disorder, temporal lobe epilepsy, mental retardation, and Cornelia de Lange syndrome.	Can cause mild to severe tissue damage.
<b>Major self-injury</b>	Single or multiple discrete and severe acts of self-injury in response to a profound disorder of perception or through.	Auto-castration, auto-cannibalism, self-amputation, and self-enucleation.	Seen in individuals suffering from severe psychosis, intoxication, or severe character disorders.	Isolated incidents, which can be potentially life-threatening.
<b>Compulsive self-injury</b>	Repetitive, ritualistic acts of mild to moderate severity.  Associated with mild psychiatric disorders	Hair-pulling, skin picking, and nail biting.	Behaviour is associated with individuals suffering from anxiety and the obsessive-compulsive spectrum. (21)	While some report an inability to resist the urge to act on the impulse, others report that the behaviour occurs unconsciously.
<b>Impulsive self-injury</b>  Divided into two types: episodic and repetitive.	Isolated or habitual acts that occur with mild to moderate severity.  The episodic type is characterised by intermittent acts of self-injury.  Impulsive types are more sporadic and	Skin cutting, burning, self-hitting.	Repetitive types are seen in impulse-control disorders (DMS-IV).  Impulsive types are associated with BPD; antisocial, dependent, and histrionic personality disorders; eating	Episodic episodes often result in tension release and boost mood.  Impulsive episodic self-injury can gradually become repetitive, developing an addition-like nature as the person

	often externally triggered.		disorders; posttraumatic stress disorder (PTSD); and dissociative disorders	becomes more fixated on these actions (22).
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Walsh proposes differentiating "common self-injury" from "major self-injury" (8). Common self-injury serves as a coping mechanism, typically causing minor physical harm with little long-term scarring. Examples include behaviours such as cutting, scratching, or burning the skin. In contrast, major self-injury, also referred to as self-mutilation, is more severe and involves potentially life-threatening actions characterised by significant tissue damage. Major self-injury is usually observed in hospital settings and psychiatric units (8,23). Differentiating between these categories enables recognition of the severity of NSSI and the development of tailored interventions.

### 3.3. EPIDEMIOLOGY

Estimates of the prevalence of NSSI among children and adolescents vary across studies. Regardless, there has been an increase in the incidence of NSSI in community settings over the last decades, with the current lifetime prevalence of NSSI in adolescents ranging from 13.0% to 23.2% (3,4). In community samples, the typical frequency of self-injury is 2 to 10 episodes, with approximately 25 to 30% of adolescents engaging in self-injury only once (10). In comparison to community samples, the prevalence of NSSI is found to be higher in clinical settings, with estimates ranging from 50% to 70% (2). Additionally, in clinical samples, adolescents who self-injure may have dozens to hundreds of occurrences throughout their lives (10). This can be attributed to a higher concentration of patients with increased severity of associated risk factors such as anxiety, depression, and a history of abuse in such settings (4). While there is little data on the specific course of NSSI prior to adulthood, the prevalence of NSSI in adolescents is found to be approximately three times higher than in adult samples, indicating that NSSI declines over time (2,4).

The age of onset for NSSI is typically between 12 and 14 years (1). While NSSI can start before the age of 12, this behaviour is rare in children younger than 5 to 7 years (2). Earlier onset of self-harming behaviour, specifically before the age of 12, has been linked to higher self-harm frequency, a broader variety of self-harming methods, and higher rates of hospitalisation (24). Moreover, inpatients exhibited a considerably earlier age of onset for NSSI compared to the outpatient sample (19).

Generally, rates of NSSI are reported to be higher in females than males, although studies examining binary gender differences show inconsistent results (2). Also, gender differences

were found to be greater in clinical samples than in community samples (25). Moreover, differences are notable for specific methods and locations of self-injury. Females are more likely to cut and scratch themselves, and their injuries are typically found on their arms and legs. Whereas males are more likely to burn or undertake hitting-type behaviours, typically injuring their chest, face, or genitals (5). The etiology of NSSI is complex, involving both individual and environmental factors (12). Individual factors include the existence of specific psychiatric conditions and/or emotional dysregulation. Environmental factors might include childhood maltreatment or disruption of attachment (1).

Risk factors for NSSI imply a causative relationship between a specific factor and the risk of future self-harming behaviour, while correlates indicate a statistical association without necessarily assuming causality. Distinguishing between risk factors and correlates is essential, as the majority of previously found correlates are weak risk factors for NSSI (2). Overall, prior history of nonsuicidal self-injury, cluster B personality disorders, and hopelessness were found to be the risk factors with the greatest impact on predicting NSSI (6). A broader list of risk factors for NSSI is shown below in Table 1.

<b>Table 2 – Risk factors for nonsuicidal self-injury in children and adolescents (2)</b>	
<b>Risk Factor</b>	<b>Examples and clarification</b>
Prior history of nonsuicidal self-injury (6)	
Cluster B personality disorders (6)	Borderline, histrionic, narcissistic, or antisocial personality disorders
Hopelessness (6)	
Psychopathology (2,6)	-Depression, -Disordered eating -Emotional/internalising problems (e.g., depressed affect, social withdrawal, and negative attributional style) -Behavioural or externalising problems (e.g., aggression, delinquent behaviours, and substance use)
Sleep problems (26,27)	Insomnia, short sleep duration, long sleep onset latency, wake after sleep onset, large differences between weekdays vs. weekends, difficulties initiating sleep/early morning wakening
Affect dysregulation (6)	Emotional suppression, emotional reactivity, and negative affect
Distress (28)	Such as psychological distress
Impulsivity assessed by self-report (6)	
History of childhood maltreatment (2)	
Other negative life events or stressors (2,29)	Including bullying and peer victimization
Prior suicidal thoughts and/or behaviours (2)	
Exposure to peer's nonsuicidal self-injury (2)	
Self-reported likelihood of engaging in future nonsuicidal self-injury (6)	
Parental psychopathology (6)	
Impaired family functioning (2,6)	

Several protective factors have been identified that might protect adolescents from NSSI, as shown in Table 2. The studies marked with an asterisk (\*) focused on adolescents who identify as members of a sexual minority.

Table 3 – Protective factors for nonsuicidal self-injury in children and adolescents (2)	
Protective factor	Examples and clarification
Self-worth or self-compassion (30,31)	
Personality traits of agreeableness and conscientiousness (32)	Warmth and friendliness
Personality traits of conscientiousness (32)	Carefulness and vigilance
Satisfaction with social support (30)	Parents, nonparental adults, friends
Feeling connected to others (33)*	Parent connectedness and feeling connected to nonparental adults
Feeling safe at school (33)*	

### 3.4. PATHOGENESIS

The pathogenesis of NSSI is multifactorial and not clearly understood. However, we can draw upon behavioural, psychological, social, and biological factors to gain a better understanding of this behaviour (9). These factors have been summarised in Table 4.

Table 4 – Pathogenesis of nonsuicidal self-injury in children and adolescents (9)	
Factors	Description
<b>Function of Behaviour</b>	NSSI begins or continues because it serves a specific function: reinforcement (positive and negative) and/or consequences (intrapersonal or interpersonal). Positive reinforcement generates a pleasant state, whereas negative reinforcement eliminates or alleviates negative emotions, thoughts, or situations. Intrapersonal consequences can regulate negative thoughts or emotions or generate desirable feelings, while interpersonal consequences impact social interactions, allowing escape from undesirable social demands or situations or eliciting a desired response from others.
<b>Attributional Style and Hopelessness</b>	Adolescents may be more susceptible to NSSI if they attribute negative life events to internal (vs. external), stable (vs. transient), and global (vs. specific) causes. Hopelessness regarding the future and the chances of circumstances improving is a significant risk factor for NSSI.
<b>Self-criticism (negative self-image, negative self-evaluation, self-disgust, and self-hatred)</b>	Self-criticism is associated with NSSI. Individuals with a history of NSSI are more susceptible to such behaviour, making self-criticism a potential predictor for NSSI. Additionally, negative interpersonal experiences might enhance self-criticism, increasing the likelihood of NSSI.
<b>Implicit Identification</b>	Individuals can begin to associate themselves with NSSI over time, causing adolescents to identify more with such behaviours and engage in NSSI rather than more adaptive coping strategies during times of distress.
<b>Childhood maltreatment</b>	Associated with NSSI, particularly sexual abuse. The association between maltreatment and self-injury may be explained by trauma symptoms or psychiatric illnesses (e.g., depressive and anxiety disorders).
<b>Peer influences</b>	Both socialisation (emulating friends' behaviour) and selection effects (befriending peers with similar interests and behaviours) may be involved in pathogenesis. Social learning may be more significant for the onset of NSSI, while other reinforcement factors may be more relevant for its continuation.



<b>Relationships and interpersonal stressors</b>	Associated with both the onset and continuation of NSSI. Peer victimisation (bullying and cyberbullying), loneliness and social isolation, interpersonal loss, parental criticism, and difficulty communicating with family members are all factors related to NSSI.
<b>Genetics</b>	NSSI may be influenced by genetic factors, with heritability estimates of 37% for males and 59% for women. Although there may be overlapping genetic influences on NSSI and suicidal ideation, the familial transmission of suicide attempts and nonsuicidal self-injury appears distinct.
<b>Neurotransmitters</b>	Inconsistent evidence for serotonin and dopamine involvement in NSSI. In individuals with reduced baseline levels of endogenous opioids, opioid release during NSSI may assist in regulating negative affect, and the endogenous opioid system may mediate the emotion regulation function of NSSI.
<b>Hypothalamic-pituitary-adrenal axis</b>	Diminished stress response and greater morning cortisol levels have been observed in adolescents engaging in NSSI.
<b>Neuroimaging</b>	Adolescents who engage in NSSI have altered neural circuitry and distinct neural responses to social rejection and emotional cues. Atypical amygdala-frontal connectivity and a possible mechanism linking unpleasant affect to NSSI. Pain processing and alleviation are distinct in youth who engage in NSSI.

### 3.5. CLINICAL FEATURES, DIAGNOSIS AND ASSESSMENT

Nonsuicidal self-injury includes a variety of techniques such as cutting, burning, scratching, and introducing things beneath the skin (10). Injury is mainly observed on the arms, hands, wrists, and thighs, but it can appear anywhere on the body (10,34). Short-term relief from negative emotions such as anxiety, anger, and grief is associated with NSSI and it is often followed by emotional suffering such as guilt and shame (9–11). The majority of NSSI cases are minor and do not require medical attention (35). Adolescents who engage in NSSI frequently fulfil criteria for psychiatric disorders, and such behaviour is more common among individuals with psychiatric disorders than those without (10,35). NSSI is different from suicidal behaviour in that it is primarily used as a coping method to regulate negative feelings (10,32). However, NSSI is also a strong risk factor for subsequent suicidal behaviour (10,36). While NSSI is common during adolescence, most people who engage in repetitive NSSI discontinue the behaviour as they transition into adulthood (37). The ICD-11 lists intentional self-harm as a standalone diagnosis under Section 23: External Causes of Morbidity or Mortality (38).

Both nonsuicidal and suicidal self-injury should be assessed during the clinical examination. This evaluation should include a review of the patient's psychiatric history, medical problems, mental and physical status, and any necessary laboratory testing. As part of the psychological examination, the clinical interview can use self-report questionnaires or be a structured interview focusing exclusively on NSSI. The initial assessment may last longer than the first session and be complemented with self-monitoring of self-injurious thoughts and behaviours

in between sessions (39). In fact, the use of multiple assessment approaches (self-report, checklists, and structured and unstructured clinical interviews) is encouraged (40).

While NSSI can go undetected, a clinician may suspect NSSI in patients who have frequent unexplained injuries to body parts such as forearms, wrists, and hands, particularly if these injuries occur in the nondominant arm. Unusual or inappropriate clothing may also provide hints, since patients may cover the afflicted area with accessories, long sleeves, or large jackets (41). Reluctance to participate in activities requiring less clothes, as well as a history of NSSI, are all factors to consider when investigating potential self-harming behaviour (39).

It is recommended that clinical interviews be conducted both separately and in the presence of carers to obtain a more candid response from the patient (39,40). Direct inquiries regarding NSSI should be made, and such acts should be distinguished from suicidal behaviours by determining whether there is a intent to die (39). When discussing NSSI, being mindful of one's tone can be beneficial, as communicating empathy, understanding, and support while avoiding criticism, judgement, or anger can reduce stigma and encourage patients to disclose information and engage in treatment (39,42). Having established engagement in NSSI, further assessment outlining aspects related to NSSI should be conducted to guide treatment. Table 5 illustrates key points when investigating events related to current and past self-harming behaviour.

Table 5 – Key points to consider during clinical interview (34,39,42,43).

Onset	Past and current frequency of the behavior	Past and current methods of self-injury	Medical severity/lethality of the injuries
Location of the injuries on the body	Context of self-injury behavior	Duration of an episode	Antecedents (triggers)
Consequences of the behavior	Function of the behavior	Protective factors	Impact on functioning
Previous attempts and current desire to stop the behavior	Current interpersonal and academic stressors	Other psychiatric symptoms and disorders	Social support

Questions about the course of onset and the context during the initial episode, the frequency with which NSSI occurs over the past year, month, and in times of stress, the number of

injuries that occur during a single episode, if frequency has changed recently, methods of injury, caring for wounds, and seeking help, where injuries occur on the body, does the behaviour occur alone or around others, how long does an episode last, and what triggers the behaviour should be included in the assessment (34,39,42,43). Additionally, other assessment tools, such as the Functional Assessment of Self-Mutilation and Self-Injurious Thoughts and Behaviours Interview, exist to aid in the assessment and evaluation of NSSI (39,44,45).

### **3.6. PREVENTION AND TREATMENT**

Treatment involves a thorough psychiatric assessment, focusing on addressing acute safety concerns (e.g., stitches, surgery, medical attention), the risk of suicide, and identifying underlying mental comorbidities (12,13). Psychotherapy is indicated for patients who have multiple NSSI episodes, a single NSSI incidence for distress relief requiring medical attention, or obvious NSSI indicators (e.g., characteristic scarring) (17). For a single incidence of experimental self-injury that does not require medical intervention, watchful waiting and a mental health examination can be implemented (46).

Many patients struggling with NSSI are unable to stop the behaviour instantly or completely. Recovery requires gradual improvement, such as reducing the frequency and intensity of self-injury and adopting other coping strategies (46). Furthermore, family involvement in treatment has been shown to be effective in reducing NSSI (47).

Preventive measures for self-harm centre around formal programmes and research-based strategies that aid in assessing and evaluating NSSI. Currently, there is a lack of randomised trials that have successfully demonstrated the effectiveness of prevention programmes for NSSI (48). Nonetheless, raising awareness about self-injury, such as through school-based programmes like Signs of Self-Injury, has been shown to improve accurate knowledge of NSSI and foster greater receptivity to such behaviours in others (49). In addition, Table 6 presents several research-based measures for reducing NSSI (48,50). Overall, early detection is critical to preventing self-harming behaviour from becoming established (14).

Treatment guidelines for reducing NSSI frequently rely on adult-focused or broader self-harm studies (including suicide attempts) due to the scarcity of randomised trials aimed specifically at adolescents. While treatment approaches (see Table 6) recommend a specific intervention sequence (1st, 2nd, and 3rd line therapy), using an intervention out of order is valid as many psychotherapy packages share similar components. Dialectical behaviour therapy (DBT), the first-line treatment for NSSI, has shorter and adapted versions for inpatient or partial hospitalisation periods, despite its original longer duration (48).

Additionally, psychoeducation, addressing treatment motivation, examining triggers and functions, and teaching coping skills such as problem-solving, communication, cognitive restructuring, mindfulness, and distress tolerance are common components of psychotherapies that have proven beneficial in addressing NSSI (48). Therapists should also enhance family dynamics, include parents, address comorbid problems, give adequate sessions, and coordinate care with the treatment team (47,48).

<b>Table 6 – Prevention and treatment strategies for nonsuicidal self-injury</b>	
<b>Prevention Strategies (48,50)</b>	<b>Treatment approaches (12,48)</b>
Improving adaptive coping skills and emotion regulation	Dialectical behaviour therapy adapted for adolescents (1 <sup>st</sup> line)
Improving social connectedness	Cognitive-behavioural therapy (alternative to dialectical behaviour therapy) (2 <sup>nd</sup> line)
Promoting positive help-seeking attitudes and mental health discussions	Psychodynamic psychotherapy with a family- or emotion-regulation component (3 <sup>rd</sup> line)
	Interpersonal psychotherapy (3 <sup>rd</sup> line)
	Emotion regulation group therapy (3 <sup>rd</sup> line)
	Family therapy (specifically, parent training) (3 <sup>rd</sup> line)
	Adjunctive pharmacotherapy (for non-responsive patients) targeting the serotonergic, dopaminergic, and opioid systems, accompanied with a course of different psychotherapy (3 <sup>rd</sup> line)

#### 4. METHODOLOGY

This study design utilised interviews and a literature review as methods of investigation. Participants included psychiatrists, psychologists, nurses, and other staff who interacted with the patients during their stay in the hospital. The data was collected using semi-structured interviews and analysed qualitatively. The patient population consisted of children and adolescents between the ages of 6 and 17. They presented with various mental health conditions such as depression, anxiety, eating disorders, conduct disorder, obsessive-compulsive disorder, autism, attention deficit/hyperactivity disorder, schizophrenia, psychosis, and a background of trauma and/or abuse.

A total of 30 participants were interviewed for the purposes of this thesis. The participants were recruited from five different psychiatric units across Lithuania. The participants were selected based on their availability and willingness to participate in the study. The primary participants included psychiatrists, psychologists, nurses, and, when available, social workers, occupational therapists, teachers, physiotherapists, and other staff who care for and work with the patients directly.

Data was gathered in person through interviews using a semi-structured questionnaire, as shown in Table 6. Additionally, additional follow-up questions were presented to explore a topic further or provide clarification. When necessary, the order of the questions was changed to provide continuity. Interview responses were analysed qualitatively.

To protect anonymity, the specifics of the hospitals, such as their locations, are not disclosed in this study. The interview was conducted in accordance with ethical standards. To obtain informed consent, prior to the interviews, the participants were informed about the purpose of the study, the voluntary nature of participation, and the right to withdraw at any time.

A thorough literature review was performed by sourcing studies from Google Scholar and PubMed using keywords such as nonsuicidal self-injury, self-injury, self-harm, children, adolescent, child psychiatry, inpatient, clinical setting, to find articles related to the clinical setting. The keywords were selected in accordance with their relevance to the research topic. Additionally, a more extensive online search strategy was utilised to explore literature addressing self-harm without applying specific criteria. Renowned platforms such as UpToDate were further used to obtain an overview of specific concepts. The research presented in this paper was carefully selected, using reputable and acknowledged studies and literature to maintain the credibility and quality of the work.

## **5. INTERVIEW FINDINGS**

The following questionnaire (see Table 7) served as the foundation for the interviews, with follow-up questions added as needed for clarification or deeper exploration of a topic. The sequence of the questions may have been adjusted for consistency's sake, and certain questions may have been modified based on the interviewees' roles in the department. The resulting data is presented in the following section of this thesis. The interview findings are separated into discrete subject areas and presented in the following section according to each topic, allowing for comparison of findings and practises across hospitals.

Almost all the interviewees recalled dealing with patients who self-harmed, except for a staff member who had only started working there three days prior but had heard reports of self-harm in patients. Furthermore, self-harm was reported to be more common in females and adolescents than in children.

Table 7 - Semi-Structured Interview Questionnaire for Hospital Personnel

- 1 What is your role or position?
- 2 Have you encountered self-harming patients or behaviours while in the hospital?
- 3 What methods of self-harm have you observed or heard of in unit patients?
- 4 What are the consequences of self-harm?
- 5 How do you identify at-risk patients?
- 6 Is the patient's body and/or belongings examined? Who is responsible for this, and what warrants it?
- 7 How do you approach a potentially affected child about self-harm?
- 8 How is the incidence of self-harm addressed (e.g., protocol, interventions)?
- 9 Are there any preventive or other measures in place to address self-harm?
- 10 How do employees collaborate to report and respond to self-harm?
- 11 How do you feel about patients' self-harming behaviour?
- 12 Do you have any suggestions for improving self-harm management in the department?

## 5.1. ASSESSMENT

Self-harm seemed to be a prevalent issue among patients in clinical settings. Upon admission, the assessment of self-harm risk and suicidality is standard practise. To improve patient safety and effectively monitor those at risk, one hospital implemented a system where all inpatients were listed on a whiteboard in the staff area. Those with a high risk of suicide were marked with an "S". Additionally, a separate column on the board listed specific behaviours to watch out for according to each patient's individualised treatment plan. These behaviours included eating (for people with eating disorders), sleeping patterns, and self-harm tendencies, among other things. Throughout the inpatient period, the treatment plans and objectives were adjusted based on the patient's presentation and progress.

Clinicians took a proactive approach to self-harm by asking about it directly during sessions or as part of the interview process. Furthermore, patients would occasionally disclose self-harm behaviours on their own, especially if they were participating in self-harming group activities or saw such behaviour in others. Additionally, upon admission, patients' skin was thoroughly examined to detect any signs or indications of self-harm.

## 5.2. NURSES AND SOCIAL WORKERS

A nurse was often the initial responder to the event of self-harm, assessing the seriousness of the problem and providing necessary medical treatment. Subsequently, these incidents were reported to other relevant staff members and clinicians during scheduled reporting sessions or, if necessary, immediately.

During waking and sleeping hours, nurses attempted to closely monitor patients. While patients were permitted to sleep with their doors closed, one department frequently left the doors to patients' rooms open until patients fell asleep to ensure their safety. The frequency of night-time check-ins varied across hospitals, although high-risk patients were monitored more frequently during those hours. Nurses would also observe patients during mealtime, ensuring a safe environment and preventing any incidents. One nurse described developing an "intuition" when it came to identifying at-risk patients. They emphasised that abrupt changes in a patient's demeanour, such as increased withdrawal, were cause for concern and prompted proactive engagement. In such cases, the nurse would approach the individual to check in on them and, if necessary, initiate a discussion regarding potential self-harming behaviours.

The nurses' station was almost always located in the centre of the department, which facilitated effective patient monitoring. Most hospitals strategically placed high-risk patients, including those at risk of suicide, closer to the nurses' station. One hospital featured a room adjacent to the nurses' station with glass walls (and curtains for privacy if needed) to allow for continuous observation. Patients who were at risk of self-harm were subjected to increased monitoring, with nurses performing more frequent checks during the night and throughout the day as needed.

The social workers served as a liaison between the family, the school, and the patients. The social worker would become involved with patient cases as needed to assist with social concerns, coordinate court documents, and plan post-release treatment. Voluntary groups such as Big Brothers Big Sisters were proposed for connecting patients with elder mentors. While most social workers maintained a physical boundary with patients, one spent a significant amount of time with children and was not afraid to be close to and hug them. They even kept their door open most of the time so that patients could come to them with their concerns. They wanted to create a safe bond with the patients and show them physical compassion. In this scenario, the social worker appeared to take on a broader role, serving as an occupational therapist and even as a friend. Patients frequently confided in them, and while they sought to respect patients' privacy, they occasionally informed those responsible for treatment of vital

information. However, clear boundaries were maintained outside of the workplace, and while patients occasionally wanted to form contacts on social media, they limited these connections to maintain their privacy.

### **5.3. METHODS AND CONSEQUENCES OF SELF-INJURY**

It was agreed that individuals who are determined to harm themselves may find alternative methods to do so even if safety measures are in place and tools are removed. These methods included hitting themselves against a wall, punching a wall, scratching themselves, or using other non-specific items. Patients frequently injured themselves using materials found in the hospital or brought in from outside, such as pins, wires, razors, and broken glass. There were isolated reports of broken Christmas ornament and shattered phone screen protectors being used as cutting instruments. Mugs have also been destroyed and used as implements of self-harm. In one example, a patient gravely injured themselves with a knife during mealtime, and another swallowed a spoon. During COVID, the use of medical masks became prevalent, and patients began harming themselves with metal strips from the masks. Erasers were also rubbed on the skin to cause a burn. Patients would also scratch themselves with their nails or hit themselves against a surface. One patient drank excessive amounts of water, placing them at risk of water intoxication. Patients had also strangled themselves with clothing, such as a bra, or cut themselves with the steel support of the bra. Spiral notebook metal had also been used for self-harm. Patients could also create tools from materials and food brought in for them by visitors. One patient, for example, injured themselves by using the metal base of a Pringles bottle, and another by using a metallic bread bag clip. Patients were also said to have coordinated the delivery of items to the department, either for themselves or for friends who were admitted or were soon to be admitted.

Self-harm often happened alone, although it could also be a group activity, with some injuring themselves in private, while others do so in front of other patients and even personnel. In one case, someone had smuggled a cutter into the department and given it to three other people with a history of self-harm so they could all harm themselves together. While self-harm was frequently thought to be an existing behaviour that persisted in the department, staff members mentioned instances where it may have emerged as a new behaviour, such as when it was learned from others. These incidents included self-cutting and rubbing their skin with rubber. Arms were among the commonly injured areas, but skin on thighs and chest areas was also harmed (for example, because these areas were easier to hide). Younger children were reported to direct their distress outwardly, either through verbal or physical measures (for example, by instigating fights). Several factors were said to



influence the timing of self-harm during the hospitalisation period. While self-harm could occur at any stage, such as the beginning, middle, or end, it was thought that such incidents were more common following admission and before discharge, especially if patients were reluctant to leave. Patient meetings and conversations with parents were often seen as triggering events for self-harm. Most physical consequences following a self-harm incident were described as superficial and not needing medical treatment (e.g., surgical dressing). However, treatment (disinfection, bandaging, etc.) was provided if the observed wounds did require medical attention. No cases of suicide were reported in any of the hospitals. However, there were a few cases of major self-injury that required surgical or more intensive medical treatment. If a patient was found to self-injure, this behaviour would be reported to the attending clinician, and additionally, the behaviour would be addressed in therapy sessions and/or additional sessions would be administered as indicated.

#### **5.4. SAFETY MEASURES**

Every instance of self-harm appeared to be a teaching opportunity. Hospitals, for example, where mugs and utensils were used as means of self-harm either changed the materials to plastic and/or restricted or prohibited the use of certain utensils (such as knives and forks). Moreover, all hospitals monitored the patients during mealtime, making sure there were no incidents. Such observation also considered patients' individual disorders, for example, making sure those with eating disorders ate slowly without disruption. Moreover, patients with similar problems, such as those with eating disorders or suicide risk, were placed in different rooms to prevent patients from encouraging such behaviour in each other and discussing strategies.

During admission, nurses almost frequently checked the patients' belongings. This was especially true if the patient was suspected of carrying an item that could be used for self-harm (for example, wearing baggy clothes or having a history of self-harm). Patients often devised creative methods to conceal materials that could be used for self-harm. For example, they could stitch hidden pockets into their clothing to conceal items, or they might conceal something in their bra or hair. Using bras with metal support was specifically prohibited, and if metal sections were discovered, they were either removed or parents were encouraged to bring metal-free alternatives, such as athletic bras. Some personal items, such as necklaces and earrings, were permitted given that they were not used for self-harm. Permission to have such personal items also depended on the individual's risk of self-harm. Additionally, visitors were instructed not to bring materials that could be used for self-harm, and nurses would inspect items brought in by parents to ensure they could not be used for self-harm. The doors

leading outside were always locked, and patients were not permitted to leave the department at their leisure. Within the department, offices and spaces that were not redeemed freely accessible were also kept locked to ensure patient safety. One department had removed the doorknobs to stop patients from entering forbidden areas or leaving without permission, with staff only having access to a universal doorknob. Doors often had a glass window that would allow staff to check on occurrences inside the room. One hospital implemented live video surveillance in all patient rooms for monitoring. A person in charge reviewed the footage in the nurses' station. Another hospital also had video surveillance, but the footage was limited to hallways visible only to general hospital security.

One hospital required patients to sign a no-harm contract, agreeing not to injure themselves while in the hospital. Another department advised patients not to engage in this practise, but no official agreement was in place. During the hospitalisation period, at least two hospitals worked with the patients to develop a crisis plan that included emergency contact in the event of a crisis, warning signs that typically precede or accompany self-harming urges, coping strategies that can be used as an alternative to self-harm, safety measures, and distractions to reduce distress. Patients often filled out these forms with the assistance of social workers. Another department instituted a reward system for a consistent record of non-harm and good behaviour. This was a ladder system, with higher levels of advancement resulting in more lucrative rewards, such as a field trip. Although there were no direct consequences for self-harm, certain actions could potentially impede progress, affecting the track record.

## **5.5. PREVENTION AND TREATMENT**

Methods for reducing self-harm incidents included observation, risk assessment (carried out during admission and throughout the stay), and communication between staff members regarding patient behaviour. There appeared to be no formal training provided for hospital workers on dealing with self-harm. Those working in direct patient care, on the other hand, reported learning about self-harm through their basic educational programmes or learning how to deal with self-harming occurrences through work-related experiences (first-hand and otherwise). Teachers often hoped they had more training in dealing with specific disorders. One staff member reported seeking and engaging in self-harm seminars on a voluntary basis to improve their ability to understand and address such situations. Regardless, the staff were united in their attempts to deal with self-harm, even if they weren't directly involved in patient care. For example, a senior cleaner lady described being approached by patients because they "perceived her as a familiar elderly person" in whom patients could confide or converse with. Another cleaner lady was said to have discovered sharp glass while cleaning

and reported it to the personnel. One person adopted an open and friendly demeanour towards patients, as seen by their inclusive practises. For example, they had a large mirror in their office, and they said patients often came in to look at themselves and interact with them. They also had an emotion jar where patients could write down their emotions. This person created an environment in which patients felt comfortable approaching them, and they warmly embraced such interactions. During the interviews, there were concerns about a staffing shortage, and this seemed to have a significant impact on the personnel. A nurse shared a telling anecdote, saying how she could try to have a conversation with a group of children about self-harm, unaware that one child might be engaging in such behaviours "behind her back," unbeknownst to her. This narrative underscores the inherent challenges of appropriately monitoring all patients at all times. Furthermore, all hospitals restricted the presence of sharp objects in common areas. Rooms were checked for items that could potentially be used for self-harm, especially following an incident, and such items were removed. When patients were in places with potential access to sharp objects, such as classrooms, offices, and occupational therapy settings, it was made sure that such items were clearly accounted for, and patients were never left in the room alone.

To replace self-harming behaviours, methods for producing a pain stimulus were frequently adopted. These methods included putting ice, cold water, spices, or lemon on hands to heighten senses, snapping a rubber band around the wrist to provide pain stimulus, and drawing pretend wounds on themselves. Alternatively, one person had girls draw a beautiful butterfly on their hands so they could be reminded not to hurt the beautiful butterfly in case they had an urge to hurt themselves. Another approach was to draw a "hurt person" and describe what parts of this person were beautiful.

Several other discoveries emerged during the interview process. For example, a social media group called "Suicide Squad" was known to exist on an unspecified platform. The speculated purpose of this group was for patients to connect and discuss various topics, including self-harm, outside of the clinical setting. Patients were known to exchange contacts during their stay. It was thought that while there is potential for harm, doing so can also have benefits as patients form support groups where they can talk to peers with similar experiences. The restrictions placed on the use of smartphones varied by department. During the inpatient period, one department strictly prohibited the use of any smart device. Other departments had time limits ranging from 30 minutes to 2 hours for phone use. One department did not monitor smart phone usage at all.

## 5.6. INSIGHTS FROM STAFF

When confronted with or dealing with patients' self-harm, interviewees expressed a wide range of emotions. The emotions ranged from neutral and indifferent to extremely negative. Those who reported feeling indifferent rationalised their feelings by claiming that while self-harm is tragic, a professional often becomes accustomed to such situations and learns to stay impartial to effectively manage the circumstance and the patient. Others felt emotional during such circumstances but attempted to regulate their feelings to better handle such occurrences. Others reported feeling bad, sad, or distressed. According to an experienced clinician, such occurrences always feel "awful," and the sentiment doesn't ease with time. Perceived motives for why a child engages in self-harm also seemed to affect the emotional reaction of staff members. Additionally, most staff did not fear for their safety during work hours. However, there were incidents where patients injured staff members. Those working with adolescents felt more concerned for their safety. The general advice was to move in pairs and refrain from moving alone in the department. Also, most rooms were equipped with phones, so help could be called if needed.

Staff were interviewed for ideas on how to improve dealing with self-harm. These recommendations and concerns are detailed below. The common consensus was that eliminating self-harm instances may be unattainable. However, the focus should be on helping patients with emotion regulation, positive reinforcement, and devising alternative coping strategies. Not putting blame on the patient for their situation is essential. One person thought it might be useful if patients had a dedicated journal where they could express themselves and write down their feelings at different times. An increasing sense of autonomy was considered crucial. Also, the departments often had a mix of different patients, and such a mixture was considered to hinder treatment. There was hope that concentrating specific patient groups into a different department might prove beneficial as it allows tailoring and better management of disorders, especially among those not directly involved in patient treatment. While it was agreed that in-field experience improves observation methods and skillsets in dealing with self-harm, there was a wish for further training in addressing and understanding self-injurious behaviours and disorders associated with them, especially by those not directly involved in patient care. The majority of the nurses and some of the other staff felt there was a staff shortage and thought this affected how well children could be monitored and helped. One interviewee said they feel their job is "hard sometimes" (due to staffing problems, a low salary, and work pressure), but the supportive work environment and the need to help children make them stay. They also hoped there would be more support for healthcare workers. Other people said that their job is "emotionally demanding," "draining,"

and/or overwhelming. Not everyone thought staffing was a problem. Moreover, there was a notion that psychiatric disorders are stigmatised and that there is a lack of education regarding such problems. Thus, patients and families should be provided with proper information and education to improve understanding and awareness regarding mental health disorders and consequently change attitudes as an essential part of treatment. In cases of dysfunctional family dynamics, appropriate interventions should be in place, with social workers following up on the situation.

## **6. RESULTS**

Self-harm seemed to be a prevalent issue among patients in clinical settings. Nonsuicidal self-injury was assessed upon admission through interviews, questionnaires, and an examination of the skin. Patient safety and monitoring were prioritised, with high-risk patients under stricter observation. Treatment plans were adjusted based on patient progress, and clinicians proactively discussed self-harm during sessions. Nurses played a crucial role in responding to incidents and providing medical treatment. Social workers acted as liaisons between patients, families, and schools, offering support and planning post-release treatment.

The study revealed that individuals found alternative methods to harm themselves despite safety measures. Materials like pins, razors, and erasers were used, and during the COVID pandemic, metal strips from medical masks became common tools. Self-harm occurred alone or in groups, and the most injured areas were the arms and thighs. Hospitals implemented strategies such as using plastic materials, restricting utensils, and closely monitoring patients during mealtime. Regardless, patients devised ways to conceal materials, and visitors were instructed not to bring harmful items. Safety contracts, restricted access to areas, video surveillance, and reward systems were employed to combat self-harm.

Hospitals employed observation, risk assessment, and communication among staff and with patients to address self-harm incidents. While most staff felt safe during work hours, precautions such as moving in pairs and having phones in rooms were advised. Moreover, staff members had varied emotional responses to instances of self-harm, ranging from indifference to distress. Recommendations focused on promoting emotion regulation, positive reinforcement, and alternative coping strategies. Suggestions included keeping dedicated journals for patients, increasing patient autonomy and awareness, and tailoring treatment for specific patient groups. Further training, addressing staff shortages, improving support for healthcare workers, and enhancing education and awareness regarding mental health disorders were emphasised.

## 7. DISCUSSION AND RECOMMENDATIONS

Overall, self-harm was thought to be a common issue on wards and prevalent in patients with comorbid psychiatric conditions. The incidence of self-harm seemed higher in females and adolescents compared to younger patients. This is consistent with the literature (2).

Furthermore, younger patients were reported to direct their distress outward rather than towards themselves. This difference can be the subject of further study, outlining differences between self-harming methods among different age groups and sexes.

All departments used some form of replacement strategy that either generated a pain stimulus or mimicked self-harming behaviour to decrease or get rid of the urge to self-harm. While such substitutes for self-harm are widely used, their use remains controversial due to concerns about their paradoxical potential to reinforce self-harming behaviours and thus inadvertently induce them rather than reduce them (51,52). This is because painful stimuli may give reinforcement by boosting attention or relieving distress, resulting in a reinforcement loop and repeated self-harming behaviours (53). In addition, self-reported polls show that substitution behaviour may increase the impulse to self-injure among those with prior self-injurious behaviour (52). Instead, promoting positive coping methods, emotional regulation strategies, and therapeutic interventions aimed at addressing the underlying causes of self-harm may be more beneficial (54,55). These findings suggest that more research is needed to establish the efficacy of self-harm alternatives, such as substitution activities.

In addition, some departments used no-harm contracts with patients, making them promise not to harm themselves. However, evidence suggests that these contracts are ineffective for preventing suicide and may even be harmful (56,57). Currently, the effectiveness of safety contracts in the context of non-suicidal self-injury is not well established. However, given the concerns regarding the limited applicability and potential harm of safety contracts, further research and alternative approaches for the treatment and prevention of non-suicidal self-injury are required. Instead of no-harm contracts, safety plans or crisis plans can be implemented. Safety plans entail specific commitments to actions that individuals will take during a crisis. Relaxation techniques, stress-reduction exercises, family and therapist support, and contact information for crisis centres and emergency clinics are all part of these plans. Safety plans are collaborative, individualised, and make use of existing social support. They offer a list of coping skills and contact information to help reduce the risk of self-harm behaviour. While research on safety plans is limited in comparison to no-harm contracts, anecdotal evidence suggests that they work. It is critical to incorporate safety plans into a

comprehensive framework that includes a detailed risk assessment and an integrated treatment strategy (57,58).

Moreover, the inpatient environment itself might contribute to self-harm due to the polarisation of high-risk patients and those with severe mental disorders. Psychological distress is a consistent factor for triggering self-injurious behaviours, and factors that can induce distress, such as a sense of isolation, feeling disconnected from others, and exposure to self-harm, can trigger the urge to self-harm among young people (59). Furthermore, the inpatient environment itself, involuntary admission, and negative interactions with others are among other things that can cause distress in patients and induce self-harming behaviour (60). Because individuals are shown to engage in self-harm for a variety of reasons, it is important to customise self-help strategies and interventions that take into account each individual's unique characteristics, such as their personal circumstances, the specific triggers they encounter, their emotional state, and the level of distress they experience (59,61).

Participants felt that patient care requires collaboration, and while it is not always simple, a supportive work atmosphere helps staff deal with patients who present with self-harm and other psychiatric problems. More training and protocols for dealing with self-harming behaviours were wished for. Raising public awareness regarding self-harm and psychiatric illnesses was viewed as a critical step in treating such problems, with some initiating a dialogue outside of the workplace within their inner circle.

## **8. CONCLUSION**

In conclusion, nonsuicidal self-injury remains prevalent among individuals receiving psychiatric inpatient care. Despite efforts to decrease such behaviour, this study's findings indicate that such behaviour often persists within the clinical setting. Therefore, treatment should focus on addressing the underlying causes rather than eliminating the behaviour, considering such behaviour often has minor physical consequences and is usually a side effect of a larger problem. Additionally, strategies like safety contracts, mimicking behaviour, and inducing pain stimulation may not be effective and could even have adverse consequences. Further research is needed to explore alternative therapeutic approaches for effectively managing nonsuicidal self-injury in a clinical setting.

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