What to do when the diagnosis is a suicide attempt? Multiprofessional treatment for pediatric patients

O que fazer quando o diagnóstico é uma tentativa de suicídio? Tratamento multiprofissional para pacientes pediátricos

¿Qué hacer cuando el diagnóstico es un intento de suicidio? Tratamiento multiprofesional para pacientes pediátricos

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Abstract

Objective: The aim of this study was to describe the profile of patients treated in a pediatric unit after a suicide attempt (SA).
Methods: Conducted retrospectively, data from medical records of patients aged 8 to 18 admitted via the pediatric emergency unit after a SA during the period of July 2018 to April 2023 were analyzed. Data on sociodemographic traits, SA characteristics (e.g., method, nature), psychosocial and familial background, and hospitalization details (e.g., care outcomes) were analyzed.
Results: A total of 87 patients were treated after SA, predominantly female (92%) with an average age of 14.05 years (SD=3.96). Medication overdose/poisoning was the most common method (87%), with 57% of attempts described as impulsive. Notably, 41% had prior suicide attempts, and 62% exhibited self-harming behavior history. Most patients (67%) had a history of psychological/psychiatric treatment, and in 28% of cases, a parent had a psychiatric diagnosis. Additionally, 11% had a family history of suicide. Patients had an averaged stay of 6.12 days in the hospital, with 82% of patients discharged with recommendations for ongoing mental health care and 15% transferred to psychiatric facilities.
Conclusion: The study underscores the pressing need for public health policies and investments in mental health care for children and adolescents across all healthcare settings and levels of complexity.

Keywords
Pediatric nursing; Suicide attempt; Adolescence; Pediatric; Hospital

Resumo

Objetivo: O objetivo deste estudo foi descrever o perfil de pacientes atendidos em uma unidade pediátrica após tentativa de suicídio (TS).
Métodos: Realizado retrospectivamente, foram analisados dados de prontuários médicos de pacientes de 8 a 18 anos admitidos na unidade de emergência pediátrica após um AS durante o período de julho de 2018 a abril de 2023. Foram analisados dados sobre características sociodemográficas, características da SA (por exemplo, método, natureza), antecedentes psicossociais e familiares e detalhes de hospitalização (por exemplo, resultados de cuidados).
Resultados: Um total de 87 pacientes foram tratados após SA, predominantemente do sexo feminino (92%) com idade média de 14,05 anos (DP=3,96). Overdose/envenenamento por medicamentos foi o método mais comum (87%), com 57% das tentativas descritas como impulsivas. Notavelmente, 41% tiveram tentativas anteriores de suicídio e 62% apresentaram histórico de comportamento autodestrutivo. A maioria dos pacientes (67%) tinha histórico de tratamento psicológico/psiquiátrico e, em 28% dos casos, um dos pais tinha diagnóstico psiquiátrico. Além disso, 11% tinham histórico familiar de suicídio. Os pacientes tiveram uma permanência média de 6,12 dias no hospital, com 82% dos pacientes recebendo alta com recomendações de cuidados contínuos de saúde mental e 15% transferidos para instalações psiquiátricas.
Conclusão: O estudo ressalta a necessidade urgente de políticas de saúde pública e investimentos em cuidados de saúde mental para crianças e adolescentes em todos os cenários de assistência à saúde e níveis de complexidade.

Descritores
Enfermagem pediátrica; Tentativa de suicídio; Adolescência; Pediátrica; Hospitalar

Resumen

Objetivo: El objetivo de este estudio fue describir el perfil de los pacientes atendidos en una unidad pediátrica tras un intento de suicidio (AS).
Métodos: Realizado de forma retrospectiva, se analizaron los datos de las historias clínicas de los pacientes de 8 a 18 años ingresados a través de la unidad de urgencias pediátricas tras un AS durante el periodo de julio de 2018

Descriptores
Enfermería pediátrica; Intento de suicidio; Adolescencia; Pediatría; Hospital

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a abril de 2023. Se analizaron datos sobre rasgos sociodemográficos, características de SA (por ejemplo, método, naturaleza), antecedentes psicosociales y familiares, y detalles de hospitalización (por ejemplo, resultados de la atención).
Resultados: Un total de 87 pacientes fueron tratados tras SA, predominantemente mujeres (92%) con una edad media de 14,05 años (DE=3,96). La sobredosis de medicamentos/envenenamiento fue el método más común (87%), y el 57% de los intentos se describieron como impulsivos. En particular, el 41% había tenido intentos de suicidio previos y el 62% presentaba antecedentes de conductas autolesivas. La mayoría de los pacientes (67%) tenían antecedentes de tratamiento psicológico/psiquiátrico, y en el 28% de los casos, uno de los padres tenía un diagnóstico psiquiátrico. Además, el 11% tenía antecedentes familiares de suicidio. Los pacientes tuvieron una estancia media de 6,12 días en el hospital; el 82% de los pacientes fueron dados de alta con recomendaciones de atención de salud mental continuada y el 15% fueron trasladados a centros psiquiátricos.
Conclusiones: El estudio subraya la necesidad apremiante de políticas de salud pública e inversiones en atención de salud mental para niños y adolescentes en todos los entornos sanitarios y niveles de complejidad.

Introduction

Suicide is the second leading cause of death among young people aged 10 to 17.[1] Globally, over 700,000 suicides occur each year.[2] Recently, the rate of suicide and suicide attempts among young people has risen significantly. In Brazil, a study conducted in major cities found a roughly 25% increase in adolescent suicides from 2006 to 2015.[3] According to the American Foundation for Suicide Prevention,[4] recent research on childhood risk behaviors shows that 8% of children aged 9-12 reported at least one suicide attempt in the past year, with a higher prevalence among females.

Studies conducted in Brazil have also underscored the mental health vulnerabilities faced by children and adolescents. A cohort study conducted in a psychiatric outpatient clinic in Brazil found that 30% of patients with self-harming behaviors were under 18 years old.[5] Research characterizing suicide attempts and self-harm among adolescents showed that the majority of those who attempted suicide were female and had a history of mental disorders, with self-poisoning being the most common method used.[6,7]

During the COVID-19 pandemic, social distancing and school closures negatively impacted children's mental health,[8] with increased rates of depression and anxiety, especially among adolescents aged 13-15 and females,[9,10] as well in suicide attempts and rates.[11,12] In the post-pandemic period, the rates continued higher, specially among 17-18-year-olds females.[13] Impulsive suicide attempts increased across all age groups, with self-poisoning and self-harm notably rising among adolescents, especially those with prior psychiatric conditions and a history of suicide attempts.[13]

Although many studies have emphasized the rise in suicidal ideation and suicide attempts, along with the identification of certain prevalent factors in these cases (e.g., as female gender and self-poisoning),[10-13] little is known about the profiles of these adolescents in terms of their family history, family dynamics, and mental health background. Understanding these variables is crucial for developing effective prevention programs and public policies. Additionally, there is a lack of recent studies focused on adolescents in the Brazilian context. Thus, further investigation into this phenomenon is necessary, as it represents a significant global public health issue and poses classification challenges within health services.[2,14]

This study originated from the growing number of families seeking pediatric emergency care at [excluded for peer review] following a teenager's suicide attempt. Despite not specializing in pediatric psychiatric admissions, [excluded for peer review] experienced a rise in adolescent admissions for suicide attempts during the COVID-19 pandemic. This prompted the need to restructure institutional protocols and provide training to the medical team to ensure appropriate care for these cases. [Excluded for peer review] is a private hospital with comprehensive pediatric services, including a pediatric ward, Pediatric Intensive Care Unit (PICU), and one of the leading private pediatric emergency departments in [city, excluded for peer review]. Recognizing the need to improve understanding of this topic, we aimed to delineate the patient profile treated in the pediatric unit of [excluded for peer review] after a suicide attempt, examining sociodemographic factors, attempt characteristics, psychosocial background, family dynamics, and hospitalization outcomes.

Methods

A retrospective data collection was conducted by reviewing the medical records of all patients aged 8 to

18 admitted through the pediatric emergency department following a suicide attempt (SA) from July 2018 to April 2023. Progress notes from both the medical and multidisciplinary teams were utilized to gather the following data:

1. Sociodemographic characteristics, including age and sex.
2. Characteristics of the SA, by identifying the method employed (medication overdose, hanging, or others), the triggering factors (e.g., family conflict), the occurrence site (e.g., home, school), the nature of the attempt (impulsive or premeditated), and any concurrent use of psychoactive substances.
3. The patient's psychosocial background, which included emotional profile variables, such as identifying gender conflicts, the patient's and family's mental health history (e.g., prior psychological or psychiatric treatment, family history of suicide), the onset of emotional symptoms (whether during the pandemic or before), the school relationship (protective, neutral, or involving bullying), history of violence, previous suicide attempts, and self-harm history.
4. Family characterization, which involved identifying the patient's support network, whether it's protective, has vulnerabilities, or is absent, and classifying the dynamics of family functioning. Family functioning was evaluated based on progress notes in the electronic medical record and through professional observation using the Global Assessment of Relational Functioning Scale (GARF). This scale, validated for use in Brazil,[15] categorizes situations into 5 points, enabling the evaluator to assign a score from 1 to 99 for the family's overall functioning, with higher scores indicating better family functioning.
5. Hospitalization characteristics include the average length of stay and outcomes of care - referrals or transfers made.

Descriptive analyses of the variables were conducted using the Statistical Package for the Social Sciences (SPSS version 20.0).

The present study was approved by the Ethics and Research Committee of [excluded for peer review] (Protocol number 7.019.939) (*Certificado de Apresentação de Apreciação Ética:* 73731423.4.0000.5330).

Results

During the period of July 2018 and April 2023, a total of 87 SAs were attended in the pediatric emergency department. The year with the highest number of SA was 2022, accounting for 36% (n=31) of the cases, followed by 2021 with 33% (n=29). Conversely, 2018 had the lowest rate with only 3 cases. The age of the patients ranged from 8 to 17 years, with an average age of 14.05 years (SD = 3.96). The majority of patients treated were female (n=80, 92%), while only 5 were male.

Characteristics of the AS

The most common method used in the SA was medication poisoning, which was employed by 87% (n=76) of the patients treated at the pediatric emergency department. Only 7 patients utilized alternative methods, including hanging (n=4), using scissors (n=1), and ingesting objects (n=2). Regarding the nature of the attempts, 57% (n=50) were described as impulsive, while 29% (n=25) were premeditated. Additionally, six patients described their attempt as an effort to "sleep," intending to temporarily alleviate their suffering. Triggers for the attempts varied, with 37% (n=32) resulting from family conflicts, 8% (n=7) from psychotic symptoms, 6% (n=5) from friendship conflicts, and 5% (n=4) from romantic relationship issues. The presence of multiple conflicts in their lives was identified as triggers for 37% (n=32) of patients. Psychoactive substance use was associated with only 4 attempts. Most attempts occurred at the family residence (53%, n=46) or a parent's home (31%, n=30), with 25 occurring at the mother's residence and 5 at the father's. Additionally, 2 attempts were made at school, and 2 at grandparents' residences.

Psychosocial background

We identified that 41% of the patients (n=36) had a prior history of suicide attempts, and 62% (n=54) exhibited history of self-harming behavior. The majority of patients had already been under the care of at least one mental health professional, with 58 patients (67%) having a history of prior psychological and/or psychiatric treatment, and 19 (22%) reporting irregular mental health follow-up. Only 3 patients had no history

of mental health treatment at any point in their lives. However, it was not possible to ascertain how many patients were receiving regular mental health care at the time of the suicide attempt.

A notable history of significant emotional distress prior to the COVID-19 pandemic period was observed in 44% (n=38) of the cases treated. The pandemic had a significant impact, with the emergence and rapid worsening of emotional distress symptoms noted in 39% (n=34) of the patients' mental health histories. Merely 9% (n=8) of the patients treated reported that the onset of emotional distress occurred after the acute phase of COVID-19 pandemic restrictions had ended.

In addition to prior mental health records, the psychological and psychiatric interviews delved into any past experiences of stressful events or conflicts that were linked to emotional distress. A notable portion (n=31; 36%) of patients disclosed a history of bullying during their school years, while others (n=22; 25%) reported gender or sexuality-related conflicts contributing to emotional suffering. A history of abuse was confirmed in 14% of the records, (n=12), though it's worth noting that this data may be an underestimate due to the confidentiality of such information, often not documented in the multiprofessional electronic medical records.

Family description

A history of suicide was reported in 11% (n=10) of the cases, while 75% (n=65) reported no such history. Information was unavailable in six records. Concerning the mental health of the parents, we identified at least one parent with a psychiatric diagnosis in 28% (n=24) of the cases, and among these, a considerable number (n=16) were not receiving appropriate mental health treatment.

The support network for patients was considered protective in 57% (n=51) of the cases. This classification applies when family members or close individuals are present during emergency care and hospitalization, providing emotional and/or practical support to the patient. In contrast, 36% of the patients (n=31) had a fragile support network, where the members struggled to offer the necessary emotional and/or practical support to meet the patient's needs.

According to GARF,[15] in 57% (n=51) of the cases, families experienced difficulty and distress in certain functioning areas, indicating unresolved conflicts but showing efforts from members to overcome existing tensions and obstacles. Dysfunctional or unsatisfactory relationships were prevalent in 24% (n=21) of the cases, where families struggled to share joy due to feelings of pain, anger, and emotional paralysis, with unresolved conflicts impeding communication and interaction. Only 3% (n=3) of the families exhibited seriously dysfunctional functioning, with few satisfying moments in their relationships. Satisfactory relationships were identified in 3% (n=3) of the families, which demonstrated the ability to express their feelings freely and share values.

Treatment outcome

The patients had an average hospital stay of 6.12 days (SD = 9.65), with the longest admission lasting 22 days, while the shortest admissions were just 1 day, with care resolved in the pediatric emergency unit. Many patients continued their hospitalization for clinical monitoring, medication adjustments, detailed emotional risk assessments, or arranging necessary mental health follow-ups. Referral for psychiatric hospitalization at another institution was required in 15% of the cases (n=13). Discharge from the hospital with a recommendation for ongoing external mental health care was the predominant outcome for the patients, accounting for 82% of cases attended (n=71).

Protocol for Care in the Pediatric Unit for SA

At [excluded for peer review], patients and their families are supported by a multidisciplinary team consisting of pediatricians, pediatric residents, a psychiatrist, psychologist, nutritionist, nurses, and nursing technicians. Within this model of care, the pediatrician, who typically represents a focal point of healthcare in the developmental history of children and adolescents, takes on the role of coordinating the patient's care alongside the team, providing daily monitoring and addressing any symptoms or clinical consequences resulting from the SA.

The psychological care plan involves daily sessions with no set time limit, often requiring a full work shift to address the case demand adequately. Both the

patient and their family receive support from the assigned psychologist, who conducts a comprehensive psychological assessment, offers emotional support, manages behavioral symptoms, and educates the family about the seriousness of the emotional condition and necessary mental health care, as well as environmental care (e.g., inability to remain alone and prevent access to sharp objects). Additionally, the psychologist coordinates necessary referrals and contacts external mental health professionals if they are already involved in the patient's care.

The psychiatrist's role involves correctly assessing and diagnosing the patient, as well as managing their symptoms with appropriate medication. Many patients come to the hospital with prior medication prescriptions but without proper adjustments or regular monitoring. Additionally, the psychiatrist identifies potential risks and recommends adapting the environment, such as allowing patients to take walks in specific areas of the hospital and permitting the use of TV or other items in their hospital room.

Regarding the nursing team, their focus is on safeguarding the patient by adhering to the suicide risk protocol, which involves modifying the patient's surroundings, such as removing wires, equipment, and potentially harmful items from the room. Additionally, they adjust meal arrangements and other factors that could pose a risk. Apart from learning techniques for managing severe psychiatric cases and administering Clonazepam "if necessary," the nursing team had also developed the skill of providing support during patient crises and addressing family concerns, particularly through verbal reassurance. They distinguish between different expressions of emotional distress and symptoms that indicate the need for psychiatric medication, all while understanding the broader context of the patient's suffering.

Hospital discharge occurs once the issues that can be addressed within the pediatric setting have been resolved, as the institution does not have established psychiatric rooms and specialized services. If the risk of suicide persists, patients are transferred to a psychiatric facility. However, the goal is always to facilitate discharge with a prearranged and agreed-upon referral for ongoing psychological and psychiatric care, with prior communication between the hospital and external teams responsible for continuing the patient's treatment. Additionally, if needed, a plan for home care is organized during hospitalization. In this context, where most cases do not require transfer, this patient-centered approach emerges as a model of mental health care in pediatrics, emphasizing all-inclusive well-being.

Discussion

The present study aimed to describe the profile of patients treated after a SA in a pediatric unit of a general hospital. Our findings underscore the critical need for mental health care from childhood through adolescence, including all settings and levels of complexity in healthcare: from primary care and its role in schools, to emergency and intensive pediatric care.

Predominantly, the sample comprised female patients, indicating their higher vulnerability to suicide risk. This observation is consistent with prior research both within Brazil[6,7] and globally.[11,13,16] However, it's importante to avoid gender-based assumptions about adolescents suicide risks. Research shows that while females are more likely to attempt suicide, males often use more lethal methods and have completion rates, though this pattern is gradually changing.[17-19]

A significant emotional distress related to gender identity and sexuality was observed in both female and male patients. Adolescence is a period marked by sexual exploration and identity formation, which can lead to conflicts in this áreas.[20,21] Yet, few studies examine the connection between these conflicts and suicidal behavior. Notably, one study found that adolescents girls with suicidal behavior faced more gender-related conflicts than boys,[22] suggesting that such conflicts may significantly contribute to suicidal behavior. This underscores the need to address these issues in clinical interviews and emphasizes that adolescent care should recognize and tackle the inherent conflicts of this developmental stage, as they can lead to psychological distress.

While most families were present in a supportive role, the adolescent's hospitalization revealed overlooked issues within the family dynamic. In particular, 10 cases showed a history of suicide in the family, and 16 patients had at least one parent with a psychiatric condition who was not receiving regular treatment.

One father shared, "I know there's a history of suicide in my wife's family, but we've never discussed it until today, when our daughter attempted suicide in the same way as her grandmother." Factors like parental conflict, lack of support, and inadequate monitoring are linked to suicidal ideation and self-harm,[23-25] and can affect adolescents' responses to treatment.[26] Therefore, involving families in care interventions is crucial.

During hospitalization, psychological support explored family history and conflicts, effectively relieving tension and emotional blockages. It also revealed that routine activities and basic healthcare were often hindered by rigidity and emotional instability in both married and separated parents. This setting allows for identifying family dynamics and gradually rebuilding healthier relationships and communication. To achieve this, the multidisciplinary team holds family meetings with the adolescent's primary caregivers, a practice shown to be effective for treating adolescents with a history of suicidal behavior.[27]

We acknowledge that the COVID-19 pandemic affected our study sample, with a rise in cases handled in 2021 (pandemic peak) and 2022 (resumption of activities). This trend mirrors the global context, which has shown an increase in depression rates and suicide attempts among adolescents compared to the pre-pandemic period.[10-12,28-30] Several explanations have been proposed for this phenomenon, including social restrictions, school closures, and the resulting separation from peers[8]. The heightened rates of anxiety and depression may have also contributed.[9] It's also possible that increased family time exacerbated existing conflicts and dysfunctions, or that adolescents found themselves lacking their usual emotional outlets, such as school and socializing with peers. This isolation made it challenging for adolescents to seek peer support to address identity conflicts typical of adolescence, which seemed to persist even after activities resumed in 2022.

Despite a short average hospital stay (6.12 days), significant emotional improvement was often achieved. Emotional improvement was defined by patients gaining a deeper understanding of their self-harm, expressing remorse for suicidal actions, making future plans, and actively participating in psychotherapy, often leading to broader symptom relief. For families, progress was seen in their recognition of the patient's emotional severity, improved coordination of care, and active involvement in the patient's mental health treatment. This outcome, seen in 82% of cases, is a source of satisfaction for the multidisciplinary team, which has improved care over the years. In our experience, teams can become as skilled in managing these cases as in treating severe conditions like oncology or trauma.

The study's limitations include its descriptive, retrospective design, which may lead to data loss, and the fact that it used data from a single private hospital, limiting generalization. Despite this, we believe the findings can contribute to discussions on suicide risk in pediatrics and the treatment of SA in clinical and hospital settings. Combined with other studies, these results may help inform public health policies for child and adolescent mental health care.

Conclusion

Unfortunetly, the shortage of mental health services for children and adolescents presents a challenge in the referral process. We struggled to find psychiatric facilities for this age group, leading to longer hospital stays. There is also a shortage of specialized outpatient services in both public and private sectors, making referrals difficult. Notably, 67% of our patients had seen at least one mental health professional, but many lacked proper follow-up, likely due to the scarcity of specialized services, which may have worsened their symptoms.

Contributions

Bolasell LT, Hermel JS, Zegarra NRM, Marcantonio SP, Iuchno CW, Rocha TBM, Lorenzi J and Krauzer JRM declare having contributed to the conception of the study, the collection, analysis and interpretation of data, the writing of the article, the critical and pertinent revision of the intellectual content and the approval of the final version to be published.

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