

# Demographic and Clinical Characteristics of Suicidal Attempts in Children and Adolescents: A Single-Center Emergency Department Evaluation

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## ABSTRACT

**Objective:** The objective of this study was to ascertain the demographic, clinical, and suicide attempt-related characteristics of child and adolescent cases admitted to the emergency department following a suicide attempt. The aim was to contribute to the development of targeted preventive strategies.

**Methods:** This research is a retrospective, observational, and descriptive study conducted at a single center. A total of 70 pediatric and adolescent patients, under the age of 18, who presented to the emergency department over a 1-year period, were included in the study. These patients were classified as medico-legal cases and underwent a child and adolescent psychiatric evaluation at the time of their initial admission. Variables analyzed included patients' demographic information, clinical features, methods of suicide attempts, underlying reasons, and seasonal distribution.

**Results:** A total of 70 cases were included in the study. Of the cases in question, 65.7% were female, and 34.3% were male, with an average age of 16. The most prevalent method employed in suicide attempts was the ingestion of multiple drugs or toxic substances (74.3%). The primary cause of suicide attempts was identified as familial problems (34.3%). The incidence of suicide attempts was found to be higher during the winter season. Additionally, girls were more likely to use drugs and toxic substances, while boys were more prone to using sharp objects and firearms.

**Conclusion:** The study revealed that adolescent girls were more likely to attempt suicide, with the highest incidence occurring during the winter months. The most common method employed was the use of drugs and toxic substances. The risk of suicide was found to be elevated among children with a family history of psychiatric disorders. These findings highlight the necessity of incorporating demographic, familial, and seasonal variables into the development of targeted preventive and management strategies.

**Keywords:** Child and adolescent, clinical characteristics, demographic characteristics, emergency department, psychiatric evaluation, suicide attempt

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## INTRODUCTION

Suicide attempts are defined as events that may result in fatal consequences.<sup>1</sup> In the comprehensive mental health action plan of the World Health Organization, suicide attempts have

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been identified as a public health problem.<sup>2</sup> The majority of suicide attempts that result in many deaths worldwide each year are made by adolescents and young adults. Although suicide attempts are relatively uncommon in children and adolescents, their prevalence increases during adolescence and young adulthood and decreases in later life stages.<sup>3</sup> Studies have shown that age and developmental stage are significant factors influencing the risk of suicide attempts in children and adolescents.<sup>4</sup> The incidence of suicide attempts is influenced by numerous factors, and its occurrence is not solely contingent on developmental stage or economic status. The structure of societies, intra-family relations, environmental factors, and disorders in social relations also play a role.<sup>5</sup> It is established that adolescents and children living in developed countries have more suicidal thoughts, despite enjoying superior family relationships and living conditions compared to those living in developing countries. It is hypothesized that a more religious lifestyle, in conjunction with specific social factors such as family pressure, societal expectations, and the stigma surrounding mental health, may contribute to an increased prevalence of suicidality in developing countries. In these contexts, religious beliefs may sometimes act as a deterrent to individuals seeking mental health support, while social norms can heighten feelings of shame and isolation, thereby further exacerbating the risk of suicidal behavior.<sup>6</sup> Similarly, while the reported suicide rate in Türkiye is lower than in other countries, literature data on the reason for this low rate are limited.<sup>7</sup>

It is crucial that emergency services serve as the initial point of referral in the management of suicide attempts to guarantee that these attempts are addressed with prompt and effective intervention. The first point of admission for the majority of patients after a suicide attempt, regardless of whether they are adults or children, is emergency departments.<sup>8</sup> The management of suicide attempts necessitates a collaborative approach. While emergency departments serve as the initial point of referral for patients, emergency department physicians and child and adolescent psychiatrists also play a pivotal role in this process. The management of pediatric suicide attempts represents a challenging and sensitive area of practice frequently encountered by emergency physicians. It is evident that there is a necessity for the establishment of regional data and definitions within the existing literature pertaining to the management of this vulnerable population. A number of studies have sought to elucidate the relationship between demographic factors, such as age, gender, and socioeconomic status, and clinical presentation characteristics, including the method of suicide attempt and psychiatric history.<sup>2,9</sup> These studies have also sought to establish a correlation between these factors and suicide attempts.

The objective of this study is to contribute to the design of more effective and targeted intervention strategies by identifying high-risk profiles for suicide attempts in children and adolescents. In order to gain insight into the demographic and clinical characteristics of individuals who have attempted suicide and have been admitted to a single emergency department clinic, a detailed analysis was conducted. Additionally, an effort was made to determine the characteristics associated with suicide attempts within this sample. The study hypothesizes that specific demographic and clinical characteristics may increase the risk of suicide attempts in children and adolescents. It is anticipated that the findings of this study will contribute to the development of strategic intervention plans for the prevention of child and adolescent suicide attempts.

## MATERIAL AND METHODS

### Study Design

The objective of this study was to conduct a retrospective, observational, and descriptive analysis with the aim of understanding the demographic and clinical characteristics of suicide attempts among pediatric and adolescent patients. The study focused on individuals under the age of 18 who presented to the emergency department at Ağrı Training and Research Hospital between 1 November 2019 and 1 November 2020, following a suicide attempt. In Türkiye, suicide attempts are legally required to be documented as forensic cases. This regulation stipulates that all healthcare facilities are obliged to report such incidents for inclusion in official records, irrespective of the age of the patient or the circumstances of the incident. Consequently, only those cases recorded as forensic incidents within the hospital's emergency department system were deemed eligible for inclusion in this study. The decision to focus on forensic cases ensured a standardized approach to data collection, given the thorough documentation protocols required for such cases. The forensic classification includes detailed patient information, clinical assessments, and psychiatric evaluations by specialized child and adolescent psychiatrists. This level of detail supports comprehensive analysis, enabling the study to capture critical factors associated with suicide attempts, including demographic characteristics, timing, and clinical presentation at admission.

### Data Collection

The data for this study were gathered through a retrospective review of the electronic records stored within the hospital information system. A range of variables was collected and subjected to analysis, encompassing demographic details (age and gender), temporal factors (month and season of suicide attempt), and various clinical characteristics. The clinical data set included information regarding the method of suicide attempt, the rationale behind the attempt, the number of previous attempts, the presence of a psychiatric disorder in the patient or their family, a family history of suicide attempts, the presence of a death wish, and whether the attempt was premeditated or impulsive. As the study was retrospective in nature, the reasons for suicide attempts were deduced from the medical records and clinical notes, incorporating the patient statements and evaluations provided by child and adolescent psychiatrists.

To ensure a clear differentiation, suicide-related behaviors were categorised with precision. Suicidal ideation and attempts were defined as thoughts or actions with the intention of ending one's life. In contrast, cases without an intent to die were classified as non-suicidal self-injury based on the absence of documented evidence of a death wish. Any action or statement that explicitly expressed the intention to die was classified as a suicide attempt. This categorization was based on comprehensive clinical documentation and patient interviews recorded in the medical files.

### Inclusion and Exclusion Criteria

In order to ensure the reliability and focus of the resulting dataset, the study applied specific inclusion and exclusion criteria. To be included in the study, patients had to be under the age of 18, and their first presentation to the emergency department following a suicide attempt had to be included in the dataset. Furthermore, all participants were required to be registered as forensic cases in accordance with legal requirements. Additionally, each patient was required to have undergone an evaluation by a child and adolescent psychiatrist during their initial admission.

Patients aged 18 years or older and those with missing critical data on defined study variables were excluded from the study. A total of 8 cases were excluded due to the absence of essential information, thus ensuring the completeness and accuracy of the dataset.

### Statistical Analysis

The statistical analyses were conducted using the Statistical Package for Social Sciences version 20.0 software (IBM Corp.; Armonk, NY, USA). Categorical variables were expressed as frequencies (n) and percentages (%). To evaluate the associations among categorical data, Pearson's chi-square and Fisher's exact tests were employed. The normality of the continuous variables was evaluated using the Shapiro-Wilk test and histogram visualizations. In instances where the data did not adhere to a normal distribution, the Mann-Whitney *U* test was employed to ascertain median values. Multiple group comparisons were conducted using the Kruskal-Wallis test. A *P*-value of less than .05 ( $P < .05$ ) was deemed statistically significant throughout the analyses.

### Ethical Considerations

The study was conducted in accordance with the principles set forth in the Helsinki Declaration and was reviewed and approved by the Ağrı Provincial Health Directorate and the Scientific Research Commission of Ağrı Training and Research Hospital (Approval no: 2020/22; Date: November 24, 2020). Given the retrospective nature of the study and the reliance on archival data, individual patient consent was not obtained.

## RESULTS

A total of 70 cases were included in the study. 24 of the cases were male (34.3%) and 46 were female (65.7%). The mean age of the cases was found to be 16 years (Table 1).

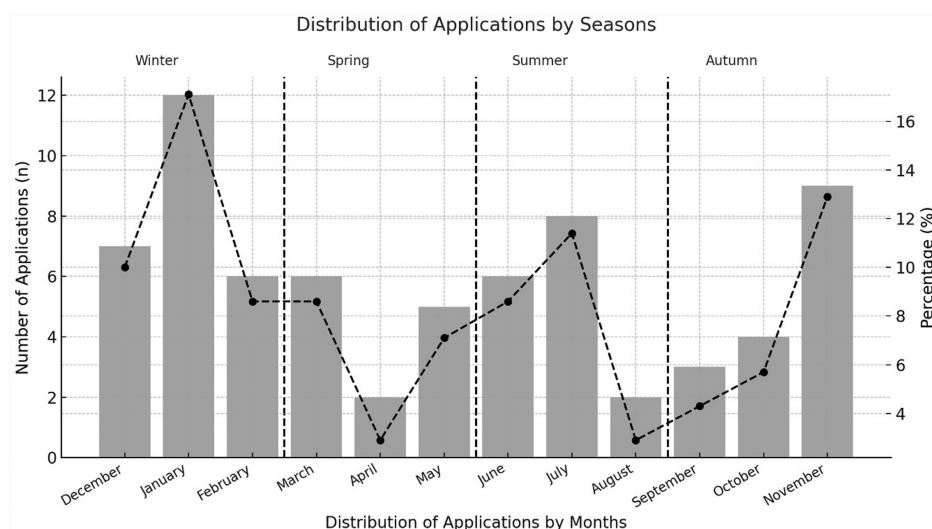
When the application times of the cases were analyzed, it was observed that the most common application was in the winter season with 25 cases (35.7%) and in January with 12 cases (17.1%). The least frequent applications were in the spring season with 13 cases (18.6%) and in April and August with 2 cases each (2.9%) (Figure 1).

When the clinical characteristics of the cases were analyzed, it was observed that the most common type of suicide attempt was

**Table 1. Demographic and Clinical Characteristics of Suicide Attempters**

		n	%
Total		70	100.0
Gender	Male	24	34.3
	Female	46	65.7
Type of suicide (grouped)	Drug/toxic	52	74.3
	Cutting-piercing/firearm	14	20.0
	Jumping from height/into water	4	5.7
Reason for attempt	Familial problem	24	34.3
	Social factors outside family	21	30.0
	Psychiatric disorder	12	17.1
	Negative life events	6	8.6
	Physical illness	3	4.3
	Sexual abuse	2	2.9
	Feeling of loneliness	2	2.9
Number of attempts	First	64	91.4
	Recurrent	6	8.6
Psychiatric illness in the family	Have	9	12.9
	Not have	61	87.1
Suicide attempts in the family	Have	1	1.4
	Not have	69	98.6
Current diagnosis	Not have	23	32.9
	Depressive disorder	12	17.1
	ADHD	7	10.0
	Adjustment disorders	7	10.0
	Generalized anxiety disorder	5	7.1
	Mental disorders	4	5.7
	Psychotic disorder	4	5.7
	OCD	3	4.3
	Bipolar mood disorder	2	2.9
	Conversive disorder	2	2.9
	Post-traumatic stress disorder	1	1.4
Death wish	Have	18	25.7
	Not have	52	74.3

ADHD, attention deficit and hyperactivity disorder; OCD, obsessive-compulsive disorder.



**Figure 1. Time distribution of case admissions.**

**Table 2. The Relationship Between Age and Clinical Characteristics of Suicide Attempters**

		Age (Year)			P	Cohen's d
		Median (IQR)	Percentile 25	Percentile 75		
Type of suicide (grouped)	Drug/toxic	16 (15-17)	15	17	.897*	0.675
	Cutting-piercing/firearm	17 (16-17)	16	17		1.350
	Jumping from height/into water	17 (14-17)	14	17		1.350
Reason for attempt	Familial problem	16 (15-17)	15	17	.654*	0.675
	Social factors outside family	16 (14-17)	14	17		0.900
	Psychiatric disorder	16 (15-17)	15	17		0.675
	Physical illness	17 (16-18)	16	18		0.675
	Feeling of loneliness	15 (12-17)	12	17		0.810
	Sexual abuse	17 (17-17)	17	17		0
	Negative life events	16 (15-17)	15	17		0.675
	Have	16 (14-17)	14	17	.252**	–
Current diagnosis	Not have	16 (15-17)	15	17		–

\*Kruskal–Wallis test.

\*\*Mann–Whitney U test.

multiple drug intoxication and the use of toxic substances in 52 cases (74.3%). When the reasons for suicide attempts were examined, it was found that children and adolescents most frequently attempted suicide due to family problems in 24 cases (34.3%) and social factors outside the family in 21 cases (30%). The majority of suicide attempts were first attempts, and 64 cases (91.4%) were recorded as the first suicide attempt. Additionally, there was a family history of psychiatric disorder in 9 cases (12.9%), while a suicide attempt within the family was observed in only 1 case (1.4%). While there were 23 cases (32.9%) without a current diagnosis of psychiatric disorder, the most common diagnosis of psychiatric disorder was depressive disorder in 12 cases (17.1%). Death wish was present in 18 (25.7%) patients who attempted suicide (Table 1).

When the relationship between the clinical characteristics and age was analyzed, there was no statistically significant difference in the median age according to the type of suicide, reasons for suicide attempt, and current diagnosis ( $P = .897$ ,  $P = .654$ ,  $P = .252$  respectively) (Table 2).

When the clinical characteristics of the cases who attempted suicide were analyzed in terms of gender, it was observed that girls (87%) attempted suicide mostly with drugs/toxic substances, while boys (41.7%) attempted suicide mostly with cutting tools and firearms. There was a statistically significant difference between the groups in terms of the type of suicide depending on gender ( $P = .003$ ). It was observed that there was no difference in terms of the season, number of attempts, and reason for the attempt depending on gender ( $P = .767$ ,  $P = 1.000$ ,  $P = .246$ ,  $P = .951$ , respectively) (Table 3).

**Table 3. The Relationship Between Gender and Clinical Characteristics of Suicide Attempters**

		Gender						
		Male		Female		P	Odds Ratio (95% CI)	Chi-Square ( $\chi^2$ )
		n	%	n	%			
Type of suicide (grouped)	Drug/toxic	12	50.0	40	87.0	.003**	0.15 (0.06-0.39)	8.09**
	Cutting-piercing/firearm	2	8.3	2	4.3			
	Jumping from height/into water	10	41.7	4	8.7			
Season	Winter	10	41.7	15	32.6	.767**	1.48 (0.52-4.20)	0.24
	Spring	5	20.8	8	17.4			
	Summer	5	20.8	11	23.9			
	Autumn	4	16.7	12	26.1			
Number of attempts	First	22	91.7	42	91.3	1.000***	1.06 (0.17-6.74)	0.00
	Recurrent	2	8.3	4	8.7			
Reason for attempt	Familial problem	7	29.2	17	37.0	.246**	0.71 (0.26-1.96)	0.21
	Social factors outside family	8	33.3	13	28.3			
	Psychiatric disorder	7	29.2	5	10.9			
	Physical illness	1	4.2	2	4.3			
	Feeling of loneliness	1	4.2	1	2.2			
	Sexual abuse	0	0.0	2	4.3			
	Negative life events	0	0.0	6	13.0			
Current diagnosis	Have	16	66.7	31	67.4	.951**	0.97 (0.35-2.72)	0.00
	Not have	8	33.3	15	32.6			

\*\*Pearson chi-square test.

\*\*\*Fisher's exact test.

Table 4. Comparison of Death Wish with Type of Suicide Attempt and Reason for Attempt

		Death Wish						
		Have		Not Have		P	Odds Ratio (95% CI)	Chi-Square ( $\chi^2$ )
		n	%	n	%			
Type of suicide (grouped)	Drug/toxic	13	72.2	39	75.0	.048*	0.87 (0.45-1.68)	0.01*
	Jumping from height/into water	3	16.7	1	1.9			
	Cutting-piercing/firearm	2	11.1	12	23.1			
Reason for attempt	Familial problem	2	11.1	22	42.3	.007*	0.17 (0.03-0.77)	2.82*
	Social factors outside family	3	16.7	18	34.6			
	Psychiatric disorder	5	27.8	7	13.5			
	Physical illness	2	11.1	1	1.9			
	Feeling of loneliness	1	5.6	1	1.9			
	Sexual abuse	2	11.1	0	0.0			
	Negative life events	3	16.7	3	5.8			

\*Pearson chi-square test.

When the type of suicide and the reasons for suicide attempts are compared according to death wish, it was found that those who had death wish more often attempted suicide by jumping from a height, and this difference was statistically significant ( $P = .048$ ). When the reasons for suicide attempts were analyzed, it was found that children and adolescents with a history of psychiatric and physical disorders, sexual abuse, and negative life events had more frequent death wish, and this difference was statistically significant ( $P = .007$ ). A planned suicide attempt was present in only 1 case who was a 17-year-old with post-traumatic stress disorder due to sexual abuse and attempted suicide with medication (Table 4).

When the current diagnosis status of the suicide attempters was compared according to the presence of psychiatric disorder in the

family, it was found that all 9 cases with a family history of psychiatric disorders had a current diagnosis and there was a statistical significance between the groups ( $P = .025$ ). It was determined that the presence of psychiatric disorder in the family did not show a significant difference according to the subtypes of the current diagnosis ( $P = .090$ ) (Table 5).

## DISCUSSION

This study is of value as it presents 1 year's data on 70 children and adolescents who attempted suicide, from an emergency department clinic in a region where no previous research on this sensitive population has been conducted. The findings provide valuable insights into the regional risk factors and clinical characteristics associated with suicide attempts in this vulnerable group. Upon conclusion of the study, it was observed that female participants exhibited a higher frequency of suicide attempts, with a notable increase during the winter months. The most prevalent method of suicide attempt was the ingestion of toxic substances and drugs, with female participants demonstrating a greater proclivity for this method compared to males. Conversely, males demonstrated a higher frequency of suicide attempts involving firearms and cutting tools. It was found that those with a desire for death were more likely to attempt suicide by jumping from a height. Those with a death wish were more likely to have a history of physical and psychiatric disorders, and a family history of psychiatric disorder was identified as a risk factor for psychiatric disorders in children and adolescents.

In previous studies, completed suicides have been found to be more common among males, while suicide attempts are more prevalent among females.<sup>10</sup> Similar findings have been reported from various research centers across different countries. A multitude of risk factors have been identified for both completed suicides and suicide attempts, including disturbances in social relationships (both within and outside the family), psychiatric disorders, and adverse life events such as harassment.<sup>5,11</sup> In a study conducted in 2023, it was also demonstrated that disruptions in family and social relationships contribute significantly to both suicide attempts and other forensic cases in children.<sup>12</sup> Another study has indicated that communication difficulties within the family and exposure to stressful life events are significant contributors to an increased risk of suicide.<sup>13</sup> The aforementioned risk factors have the potential to impair children's emotional regulation, which may result in the manifestation of impulsive

Table 5. Comparison of Current Diagnoses of Suicide Attempters with Family History of Psychiatric Disorder

		Family History of Psychiatric Illness				<i>P</i>
		Have		Not Have		
		<i>n</i>	%	<i>n</i>	%	
Presence of any current diagnosis	Have	9	100.0	38	62.3	<b>.025*</b>
	Not have	0	0.0	23	37.7	
Type of current diagnosis	Not have	0	0.0	23	37.7	.090
	Depressive disorder	0	0.0	5	8.2	
	ADHD	4	44.4	8	13.1	
	Adjustment disorders	0	0.0	7	11.5	
	Generalized anxiety disorder	0	0.0	2	3.3	
	Mental disorders	2	22.2	5	8.2	
	Psychotic disorder	1	11.1	3	4.9	
	OCD	1	11.1	2	3.3	
	Bipolar mood disorder	1	11.1	1	1.6	
	Conversive disorder	0	0.0	1	1.6	
	Post-traumatic stress disorder	0	0.0	4	6.6	

ADHD, attention deficit and hyperactivity disorder; OCD, obsessive-compulsive disorder.

\*Fisher's exact test.



behaviors. Additionally, feelings of helplessness and hopelessness may emerge, contributing to suicidal behaviors.

While the age at which girls attempt suicide and experience suicidal ideation is earlier than that of boys, the former exhibits these behaviors at a later age. Our findings also lend support to this conclusion. While no gender-based difference is observed for completed suicide and suicide attempts before adolescence, girls dominate in suicide attempts after adolescence.<sup>14</sup> Additionally, a history of psychiatric disorder and family and social pressure are observed more frequently in girls during adolescence. In one study, the authors concluded that girls' suicidal attempts can be conceptualized as a form of "a call for help."<sup>15</sup> These gender-based results are influenced by social dynamics. The term "social dynamics" is used to describe the cultural, societal, and familial expectations that may influence behavior. For example, in many societies, girls may be subject to more stringent social controls and gender-based expectations, which could contribute to psychological distress and, in turn, to a higher frequency of suicide attempts. Although the female participants constituted the majority in our study, the female-to-male ratio was comparatively low. It is postulated that the role of the center where the research was conducted may be a factor in this situation. As the study was conducted in a single-center emergency department, the specific demographic and patient characteristics of the population served may have influenced the findings. A review of the literature reveals that suicide attempts are most frequent during the spring and summer seasons.<sup>16</sup> However, in our study, the highest frequency of suicide attempts was observed during the winter season, with the lowest frequency occurring during the summer and autumn seasons. This discrepancy may be attributed to the specific climatic conditions of the region. For example, in colder climates, harsh winter conditions may contribute to increased isolation, a worsening of psychiatric symptoms, or other social stressors, which could result in higher rates of suicide attempts. Further research is required to elucidate the climatic and regional factors that may contribute to such seasonal variations.

The most prevalent method of suicide attempt observed in this study was the use of toxic substances and drugs. Prior research has yielded comparable results. For instance, one study indicated that 83.6% of children utilized toxic substances and drugs in their suicide attempts.<sup>17</sup> A further local study revealed that all children and adolescents in the sample had attempted suicide using drugs or toxic substances.<sup>15</sup> In contrast, research from New Zealand indicated that children who had completed suicide frequently employed hanging, with firearms being more common among those in rural areas.<sup>18</sup> These findings underscore the impact of environmental factors and accessibility on the methods selected. In the context of our study, in which the majority of the population resides in an urban area, the ready availability of drugs may have contributed to the prominence of this method.

Social relationship issues represent a significant contributing factor to both completed suicides and suicide attempts.<sup>19</sup> Negative events, whether experienced within or outside the family, frequently precipitate such critical situations in children, a finding that aligns with existing literature. The extant literature indicates that patients with a current psychiatric diagnosis are at an elevated risk of suicide.<sup>9</sup> Our findings substantiate this assertion. In the present study, children with a pronounced death wish were observed to be more likely to attempt suicide by jumping from heights. Furthermore, it was noted that such actions were frequently precipitated by adverse life events, including sexual abuse, feelings of loneliness,

or chronic psychiatric and physical illnesses. Additionally, some children and adolescents may engage in suicidal behavior as a means of seeking help or attracting attention.<sup>15</sup> Nevertheless, for those with a pronounced death wish, it seems plausible to suggest that they may feel disillusioned with the prospect of seeking help from those they turn to for assistance. Alternatively, they may perceive suicide as a means of resolving intractable health or life challenges. It is recommended that children in this particularly vulnerable group receive enhanced professional support compared to others at risk.<sup>20</sup> While both groups are confronted with significant challenges, the primary distinction lies in the intensity and duration of these experiences.

Vulnerable children frequently experience severe traumatic situations, including domestic violence, neglect, abuse, chronic health issues, or social exclusion, which can exacerbate their mental and emotional fragility. Conversely, other at-risk children may also experience adversity, but it is typically less intense and more transient in nature.

In terms of the limitations of the study, the most fundamental issue arises from the fact that the research was conducted retrospectively. As our research was conducted at a single center, some of the results may deviate from those reported in the literature due to the influence of regional factors. It is recommended that these factors be taken into account when interpreting the results. Furthermore, the exclusion of completed suicide cases constitutes another limitation, as it prevents a comprehensive evaluation of all suicide-related cases. Despite these limitations, it is anticipated that the study will make a significant contribution to the existing literature, as it is the first study conducted on children who attempted suicide in the region. In conclusion, this study provides valuable insights into suicide attempts among 70 children and adolescents over a 1-year period, revealing key patterns and risk factors. The findings revealed that girls attempted suicide more frequently than boys, with the use of toxic substances and drugs being the predominant method. In contrast, boys were more likely to use sharp objects and firearms. Children with a strong death wish were more likely to engage in high-lethality behaviors, such as jumping from heights, and were often exposed to severe psychosocial stressors, including psychiatric or physical disorders, sexual abuse, and other traumatic events. A family history of psychiatric illness was identified as a significant risk factor for the development of psychiatric disorders in children. These findings emphasize the necessity for the implementation of bespoke prevention strategies that address gender differences, method choices, and psychosocial factors, with a particular focus on regional data and demographic characteristics. It is imperative that educational programs and psychosocial support services are made a priority in order to reduce the risk of suicide attempts in this vulnerable population. It is recommended that future research involve larger and more diverse samples in order to further explore the complex factors contributing to suicide attempts and inform more effective prevention and intervention efforts.

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**Availability of Data and Materials:** The data that support the findings of this study are available on request from the corresponding author.

**Ethics Committee Approval:** Ethics committee approval was received for this study from Ağrı Provincial Health Directorate and Ağrı Training Research Hospital Scientific Research Commissions (Approval no: 2020/22; Date: November 11, 2020).

**Informed Consent:** The authors declared that it was not considered necessary to obtain consent from the patients because the study was a retrospective data analysis.

**Peer-review:** Externally peer-reviewed.

**Author Contributions:** Concept – M.Ç., N.İ.İ.; Design – M.Ç., N.İ.İ.; Data Collection and/or Processing – M.Ç.; Analysis and/or Interpretation – N.İ.İ.; Literature Search – M.Ç., N.İ.İ.; Writing – M.Ç., N.İ.İ.

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## REFERENCES

- Naghavi M. Global, regional, and national burden of suicide mortality 1990 to 2016: systematic analysis for the Global Burden of Disease Study 2016. *BMJ*. 2019;364:194.
- Saxena S, Setoya Y. World Health Organization's comprehensive mental health action plan 2013-2020. *Psychiatry Clin Neurosci*. 2014;68(8):585-586. [\[CrossRef\]](#)
- Pelkonen M, Marttunen M. Child and adolescent suicide: epidemiology, risk factors, and approaches to prevention. *Paediatr Drugs*. 2003;5(4):243-265. [\[CrossRef\]](#)
- Tonyalı A, Karaçetin G, Atik Tosunlar HA, Kayan Ocakoğlu B. Evaluation of victim and abuse characteristics in child sexual abuse: a child advocacy center experience. *J Med*. 2023;37(3):143-149.
- Büber Ö, Oksal H, Alnak A. Investigation of case application to a child advocacy center: 5 years experience in a center. *J Med*. 2023;37(1):12-18.
- Eshun S. Sociocultural determinants of suicide ideation: a comparison between American and Ghanaian college samples. *Suicide Life Threat Behav*. 2003;33(2):165-171. [\[CrossRef\]](#)
- Türkiye İstatistik kurumu. İntihar İstatistikleri, 2018. Ankara, Türkiye: TÜİK:2019. Available at: <https://data.tuik.gov.tr/Bulten/Index?p=Olum-Istatistikleri-2018-30701#:~:text=%C3%96l%C3%BCmle%20sonu%C3%A7lan%20intihar%20say%C4%B1s%C4%B1%202017,3%20bin%20161%20ki%C5%9Fi%20oldu>. Accessed July 29, 2024.
- Dolan MA, Fein JA, Committee on Pediatric Emergency Medicine. Pediatric and adolescent mental health emergencies in the emergency medical services system. *Pediatrics*. 2011;127(5):e1356-e1366. [\[CrossRef\]](#)
- Yurtseven A, Turan C, Ort DM, et al. Suicide attempt management among Turkish and American adolescents: a comparison of two pediatric emergency departments. *Turk J Med Sci*. 2023;53(6):1870-1876. [\[CrossRef\]](#)
- Boeninger DK, Masyn KE, Feldman BJ, Conger RD. Sex differences in developmental trends of suicide ideation, plans, and attempts among European American adolescents. *Suicide Life Threat Behav*. 2010;40(5):451-464. [\[CrossRef\]](#)
- Yalaki Z, Taşar MA, Yalçın N, Dallar Y. Evaluation of suicide attempts in childhood and adolescence. *Ege J Med*. 2011;50(2):125-128.
- Demirdöken ED, Karbuz A. Retrospective evaluation of forensic cases at pediatric emergency admissions. *J Med*. 2023;37(1):33-38.
- Karaman D, Durukan I. Suicide in children and adolescents. *Curr Approaches Psychiatry*. 2013;5(1):30-47. [\[CrossRef\]](#)
- Liu RT, Walsh RFL, Sheehan AE, Cheek SM, Sanzari CM. Prevalence and correlates of suicide and nonsuicidal self-injury in children: a systematic review and meta-analysis. *JAMA Psychiatry*. 2022;79(7):718-726. [\[CrossRef\]](#)
- Gökçen C, Köylü R. Evaluation of cases under 18 years admitted for attempted suicide to the emergency service and transferred to the psychosocial support unit. *Eurasian J Emerg Med*. 2011;10(1):18.
- Coimbra DG, Pereira E Silva AC, de Sousa-Rodrigues CF, et al. Do suicide attempts occur more frequently in the spring too? A systematic review and rhythmic analysis. *J Affect Disord*. 2016;196:125-137. [\[CrossRef\]](#)
- Ünlü G, Aksoy Z, Ersan EE. Evaluation of child and adolescents with attempted suicide. *Pau Med J*. 2014;7(3):176-183. [\[CrossRef\]](#)
- Beautrais AL. Methods of youth suicide in New Zealand: trends and implications for prevention. *Aust N Z J Psychiatry*. 2000;34(3):413-419. [\[CrossRef\]](#)
- Kokkevi A, Rotsika V, Arapaki A, Richardson C. Adolescents' self-reported suicide attempts, self-harm thoughts and their correlates across 17 European countries. *J Child Psychol Psychiatry*. 2012;53(4):381-389. [\[CrossRef\]](#)
- Janiri D, Doucet GE, Pompili M, et al. Risk and protective factors for childhood suicidality: a US population-based study. *Lancet Psychiatry*. 2020;7(4):317-326. [\[CrossRef\]](#)