

Suicide in Prepubescent Children in the United States: A Descriptive Analysis of Major Characteristics and Risk Factors

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INTRODUCTION

Suicide is the third leading cause of death in youth between the ages of 10-24 in the United States. Approximately 4600 youth die by suicide annually. Detailed information about prepubescent children (children under 12 years of age) who die by suicide is lacking. Risk factors for suicidal children younger than 12 years of age may be different from adolescents and adults. This study describes the characteristics of prepubescent children who died by suicide. Risk factors of prepubescent children were compared with early-adolescent (ages 12-14) and late-adolescent (ages 15-18) youth.

METHODS

Analysis of 2004 to 2012 child death review data (see below for description of child death review) from the National Child Death Review Case Reporting System (CDR-CRS) from 29 states was conducted. Frequencies and proportions for child, caregiver, and incident characteristics were generated for prepubescent children who died by suicide (n=97). The risk factors for prepubescent suicides were compared with early-adolescent suicides (n=572) and late-adolescent suicides (n=2092). Chi square analyses were conducted to assess whether age cohorts differed significantly for covariates (risk factors) ($\alpha=.05$).

WHAT IS CHILD DEATH REVIEW?

Child Death Review (CDR) is a process in which multidisciplinary teams share information on child death events and identify risk factors in these deaths. The goal is to understand how and why children die in order to take action to prevent other deaths. CDR teams collect extensive information on the circumstances surrounding the death, child and parent characteristics, death scene investigations, and prevention initiatives undertaken as a result of the death. There is a CDR team in every state in the United States. 43 states currently submit CDR data into the CDR-CRS, a free, web-based reporting tool that is available to states upon signing a data use agreement.

RESULTS

Demographics

- Of the 97 prepubescent suicide completers, the majority were boys (70%) (Table 1).
- 43% of prepubescent were identified as non-Hispanic White, 27% as non-Hispanic Black, and 17% were Hispanic (Table 1).
- The mean age for young suicide completers was 10.1 years.
- The primary caregiver was the child's biological parent in 85% of these deaths.
- 91% of the prepubescent died by suicide at home.

Method of Death

- The predominant means of suicide for the prepubescent was asphyxia (hanging) followed by firearms (Table 2).

IN A NUTSHELL

- ✓ *Although relatively rare, prepubescent youth do plan, attempt, and die by suicide.*
- ✓ *Some situational crises such as arguments with parents or bullying may be more acute stressors for this age group.*
- ✓ *Prepubescent suicide completers predominantly die by asphyxia (hanging).*
- ✓ *Increased understanding of risk factors for this age may lead to better screening tools or prevention initiatives.*
- ✓ *The CDR-CRS is a valuable data tool to help us understand this population.*

Table 1
Sex and Race/Ethnicity of Suicide Completers

	Ages 5-11 (n=97)		Ages 12-14 (n=572)		Ages 15-18 (n=2092)	
	No.	%	No.	%	No.	%
Sex						
Male	68	70.1	387	67.7	1559	72.9
Race/Ethnicity						
Hispanic	16	16.5	82	14.3	331	15.8
Non-Hispanic White	42	43.3	372	65	1372	65.6
Non-Hispanic Black	26	26.8	66	11.5	186	8.9
Other Race	7	7.2	34	5.9	137	6.5
Unknown	6	6.2	18	3.1	66	3.2

Table 2
Method of Death by Suicide Completers

	Ages 5-11 (n=97)		Ages 12-14 (n=572)		Ages 15-18 (n=2092)	
	No.	%	No.	%	No.	%
Asphyxia	78	80.4	332	58.0	983	47.0
Firearms	10	10.3	168	29.4	783	37.4
Poisoning	<6	<5	25	4.4	120	5.7
Other	8	8.2	47	8.2	206	9.8

Table 3
Risk Factors in Suicide Completers

	Ages 5-11 (n=97)		Ages 12-14 (n=572)		Ages 15-18 (n=2092)		p
	No.	%	No.	%	No.	%	
Disability or chronic illness	23	23.7	124	21.7	451	21.6	0.55
Substance abuse history	<6	<5%	64	11.2	568	27.2	<.001
Break up girlfriend/boyfriend*	<6	<5%	26	6.8	275	20.1	<.001
Argument parent*	22	35.5	113	29.7	235	17.2	<.001
Problems in school	23	23.7	178	31.1	571	27.3	0.10
Bullying*	6	9.7	41	10.8	57	4.2	<.001
Sexual orientation*	<6	<5%	<6	<5%	35	2.6	0.17
Family history of suicide*	6	9.7	30	7.9	80	5.9	0.34
Talked about suicide*	15	24.2	122	32.1	494	36.2	0.01
Prior suicide threat*	12	19.4	94	24.7	406	29.7	0.01
Prior suicide attempts*	6	9.7	55	14.5	291	21.3	0.001
Left suicide note*	8	12.9	110	28.9	425	31.1	0.019

*These questions were not asked for all decedents (training issue for case reporters using the CDR-CRS).
Cell size decreases to 62 for ages 5-11, 380 for ages 12-14, and 1365 for ages 15-18.

RESULTS

Risk Factors

- Of the 97 prepubescent suicide completers, argument with parent(s) was indicated in more than one third of the cases (Table 3).
- Nearly one quarter of the prepubescent youth had problems in school, and one quarter also indicated a prior disability (including mental health disorders) or chronic illness (Table 3).
- Bullying was reported in nearly 10% of the prepubescent youth (Table 3).
- 24% of the youth aged 5-11 talked about suicide, and 10% attempted suicide on previous occasion(s) (Table 3).

CONCLUSION

This study demonstrated that some situational crises appear to be more acute in the prepubescent suicide completers. Stressors such as arguments with parents or bullying were reported at higher percentages in the prepubescent when compared to the early and late-adolescents. The percentage of prepubescent who left suicide notes or talked about suicide was lower in comparison to the other cohorts. Analyses of family stressors and family psychopathology may also be critical risk factors in this population; however, high rates of missing data were reported in several of these variables. The risk factors of prepubescent children who die by suicide may be different from other age groups. Increased understanding of these risk factors may lead to better screening tools and prevention initiatives that more effectively target this population. The CDR-CRS is a valuable data source to help us better understand this population.

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