# RESEARCH ARTICLE

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# Retrospective Evaluation in Child and Adolescent Victims of Sexual Abuse: Analysis of Gender and Age Differences

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# **Abstract**

**BACKGROUND/AIMS:** This study aimed to investigate the socio-demographic characteristics of children and adolescents who were victims of sexual abuse (SA) admitted to the child psychiatry clinic by the judicial authorities, to examine the characteristics of the abuse and the perpetrator, and to compare these characteristics in terms of age and gender.

**MATERIALS AND METHODS:** Our study included 388 cases of SA referred for a forensic report. Data were obtained retrospectively from the forensic files and outpatient clinic registration files of the cases.

**RESULTS:** Of 388 sexually abused cases, 357 (92%) were girls. The mean age of the cases was 13.41±2.99 years, and the mean age of the boys was lower than that of the girls. It was found that the rate of abuse was higher among adolescent girls. It was found that 99.2% of the perpetrators were male. One person was responsible for 93.5% of all instances of abuse. 50.4% of the victims experienced abuse more than once, and the victim's statement was responsible for revealed 44.8% of the abuse cases. It was found that in 44.4% of cases, the perpetrator was the victim's boyfriend, 14.9% of cases were married at an early age, 20.6% had a pregnancy after abuse, and 65.4% of cases had no psychiatric diagnosis.

**CONCLUSION:** Our findings showed that the majority of SA victims were girls, the frequency of abuse increased with age, the majority of perpetrators were the victims' boyfriends, and the reporting rate of abuse incidents by victims was low. Starting education about sexual health and SA at a very young age will be beneficial in protecting individuals from becoming victims of abuse, reporting abuse, and seeking help.

**Keywords:** Adolescent, child, psychopathology, sexual abuse

# INTRODUCTION

Child abuse and neglect, known to be as old as human history and one of humanity's most significant social wounds, is a health problem whose extent is not well known in societies, tends to be hidden, and has victims who are afraid to speak out.<sup>1,2</sup> Sexual abuse (SA), which is a subset of child maltreatment, is defined in two ways: (1) any act that occurs as a result of coercion, threat, deception, or fraud without the consent of the child or adolescent; (2) the involvement of a child under the age of consent in an act that results in the sexual gratification of a sexually mature adult or the condoning of such a situation.<sup>3,4</sup> Sexual behavior can take the form of sexual intercourse, attempted sexual

intercourse, oral-genital contact, and fondling of the genitals directly or through clothing. Non-contact behaviors, such as sexually explicit language, exhibitionism, and voyeurism, are also included in the concept of SA.<sup>5</sup> In recent years, the view has prevailed that all behavior with sexual content should be considered within the scope of sexual activity in a broad sense.<sup>6</sup> Many factors, such as the variable nature of SA, the time lag between abuse and examination, the experience of the examiner, and the lack of standardization of examinations, make detecting physical signs of abuse difficult. While it has been reported that in most cases of SA, there are no physical findings<sup>7</sup>, Green found that SA had more psychiatric effects.<sup>8</sup>

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In many societies, SA is concealed by the victim of abuse, and therefore, a large proportion of SA cases are not reported to the judicial authorities. It is difficult to obtain accurate statistical data about the prevalence of SA because only 15% of SA victims report. In thas been reported that the prevalence of SA is between 10-40% in children, 3-17% in boys and 8-31% in girls. Females are at two to three times the risk of experiencing SA during childhood compared to males. In a meta-analysis by Pereda et al. In which 38 articles from 21 countries were evaluated, it was reported that girls were sexually abused 1.5-5.5 times more than boys in all age groups except 2 studies. It is known that the abuser may be a stranger to the child or an acquaintance, relative, or family member. In 1911.

It has been reported, that 47% of people who have been sexually abused in childhood have psychiatric disorders that begin in childhood. In comparison, 26-32% have psychiatric disorders that begin in adulthood. In a retrospective study conducted among adults in Türkiye, the rate of childhood SA was found to be 2.5%. It has been highlighted suicide attempts following childhood SA are more common in girls. In a retrospective study conducted among adults in Türkiye, the rate of childhood SA was found to be 2.5%. It has been highlighted suicide attempts following childhood SA are more common in girls. In a second conducted among adults in Türkiye, the rate of childhood SA was found to be 2.5%. It has been highlighted suicide attempts following childhood SA are more common in girls.

Although the number of studies on childhood SA is gradually increasing in Türkiye<sup>4,6,9,13-15,20-30</sup>, data from different years and different regions are important to increase knowledge about the incidence, pattern, and impact of SA. This study aimed to determine the socio-demographic characteristics, psychiatric diagnoses, and characteristics related to abuse and perpetrator of SA victims referred to Trakya University Faculty of Medicine, Child Psychiatry Outpatient Clinic for forensic evaluation.

## **MATERIALS AND METHODS**

The sample of our study consisted of victims of SA abuse who were referred for forensic evaluation to Trakya University Faculty of Medicine, Child and Adolescent Mental Health Outpatient Clinic between June 2008 and June 2013. In this retrospective descriptive study, the principles of confidentiality were respected, and no details could reveal the children, their families, or the judicial process.

Clinical interviews were conducted with all cases of SA, and an anamnesis form containing socio-demographic data was completed by the research assistants who conducted the interviews. The information form used for each case admitted to the outpatient clinic asked about the socio-demographic characteristics of the child and parents, including the age and educational status of the cases and parents, psychiatric diagnoses of the cases and drug treatments, if any, and family structure, as well as the characteristics of the abuse and the perpetrator. A psychometric test (Stanford Binet, Cattell 2A) was administered to the cases whose language development was complete and whose cooperation could be established. The data related to the abuse incident in the cases were obtained by analysing the diagnoses received in the outpatient clinic follow-up and in the forensic committee according to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR) diagnostic criteria, the number of outpatient clinics related to the follow-up, the data associated with the use of drug treatment, the outpatient clinic files and the forensic committee reports. As the DSM-IV-TR was the version in effect during the years the study data were collected, this version was used. This study was approved by the Non-Interventional Clinical Research Ethics Committee of Trakya University Faculty of Medicine (approval number: 17/14, date: 31.07.2013).

## **Statistical Analysis**

Statistical data analysis was performed using SPSS 15.0 for Windows, at a 95% confidence level. Mean, standard deviation, median, minimum, maximum, frequencies, and ratios were used in the descriptive statistics of the data. A one-sample Kolmogorov-Smirnov test was used to measure the conformity of variables to the normal distribution. Pearson chi-square was used to compare categorical data between groups, and Mann-Whitney U statistical analyses were used to compare continuous data that did not have a normal distribution between groups. p<0.05 was considered statistically significant.

#### **RESULTS**

The cases evaluated in the study consisted of girls and boys aged 3-18 years, of whom 357 (92.0%) were girls. Most cases (43.6%) were aged between 15 and 18 years, and the mean age was  $13.41\pm2.99$  years. The sociodemographic data of the cases are shown in Table 1. The majority of female subjects (45.7%) were aged 15-18 years, while the majority of male subjects (41.9%) were aged 7-11 years. It was found that the rate of abuse increased with increasing age in girls and in the total group, whereas it decreased with increasing age in boys. The mean age of the cases by sex was compared and showed that the male cases had a lower female cases (p=0.001). Similarly, the mean maternal age of the male cases was lower than that of the female cases (p=0.012) (Table 2).

The average age of the parents of the victims of SA was 37.42 and 42.22 years for mothers and fathers, respectively; the ratio of working mothers and fathers was 27.7% and 88.3%, respectively; 60.6% of the mothers and 67.4% of the fathers had completed primary school, and 66.8% of the cases lived in a nuclear family.

The characteristics of the abuse and the perpetrators were analyzed. In terms of the type of abuse, only 44.8% of the victims reported the incident; vaginal penetration was the most common type of abuse; 53.9% of the abuse involved coercion; and 50.4% of the victims were victimized more than once (Table 3).

The analyzed cases included those that were "married" by their definition. These cases were young people younger than 18 who were married with the consent of their families but they were not officially married. When the cases were analyzed in terms of early marriage, pregnancy after abuse, and suicide, it was found that 14.9% had an early marriage, 20.6% had a pregnancy after abuse, and 6.7% had attempted suicide following abuse.

The analysis of age groups among children (3-11 years) and adolescents (12-18 years) revealed that in both groups, the perpetrator was someone outside the family (p<0.001).

Gender and age were compared regarding the number and type of abuse, perpetrator information, penetration during abuse, and psychiatric diagnosis. These comparisons are presented in Tables 2, 4.

iable i. Delliogra	aphic characteristics of cases		0.4
		n	%
Gender	Girls	357	92.0
	Boys	31	8.0
	3-6 years old	15	3.9
Age of abuse	7-11 years old	70	18.0
	12-14 years old	134	34.5
	15-18 years old	169	43.6
	Mean ± SD 13.41±2.99	ı	
	Not of school age	10	2.7
	Illiterate	25	6.8
	Dropped out of primary education	49	13.3
Education	Currently attending primary education	141	38.2
Luucation	Primary school graduate	46	12.5
	High school dropout	26	7.0
	Currently attending high school	71	19.2
	High school graduated	25 6 49 1 1 141 3 46 1 26 7 71 1 1 0 308 8 34 9 18 4 5 1 2 0 12 3 169 6 34 1 38 1 5 2 7 2 253 6 60 1 7 1 2 0 47 1	0.3
	Normal	308	81.3
	Borderline intellectual functioning	34	9.0
10	Mild intellectual disability	18	4.7
IQ	Moderate intellectual disability	5	1.3
	Severe intellectual disability	2	0.5
	High intelligence	12	3.2
	Nuclear family	169	66.8
	Extended family	34	13.4
Family characteristics	Parents divorced	38	15.0
Characteristics	Mother/father deceased	5	2.0
	Under protection of social services	7	2.8
	No diagnosis	253	65.4
	PTSD	60	15.5
	Depression	7	1.8
	Anxiety disorder	2	0.5
	ASD	47	12.1
Psychiatric	Adjustment disorder	7	1.8
diagnosis	Selective mutism	1	0.3
	PTSD + depression	6	1.6
	Depression + ASD	2	0.5
	Depression + adjustment disorder	1	0.3
	Diagnosis unknown	1	0.3
Medical	Used	72	18.6
treatment	Not used	315	81.4
	Yes	68	17.5
Clinical follow-up	No	278	71.7
cimical follow-up	Didn't attend appointments	42	10.8
DTCD. D	c stress disorder, ASD: Acute stress disorder, S		

## DISCUSSION

This study investigated the sociodemographic and clinical characteristics of SA cases referred to the Child and Adolescent Psychiatry Clinic of a University Hospital in Edirne province as forensic cases with a report request within 5 years. Comparisons were made according to gender and age factors. In our study, the mean age of the 388 cases evaluated for SA was 13.41±2.99 years. The mean age of female patients was higher than that of male patients. Our findings were similar to the results of studies in the literature.<sup>4, 20-24</sup> In previous studies, girls were found to undergo SA more frequently than boys.<sup>6,12,25-27</sup>

Studies on gender differences in the reporting of SA have found that girls report more cases of abuse, while boys tend to under-report. Factors contributing to this under-reporting include the fear of being perceived as homosexual in the presence of a male perpetrator. In the presence of a female perpetrator, boys perceive the experience as a sexual relationship, do not feel victimized, and do not report the abuse. It is also emphasized that male victims are usually threatened with more violence and power and are, therefore, reluctant to report. The effect of these factors leads to the conclusion that boys are more hesitant to report abuse than girls.<sup>31</sup>

When we analyzed the number of cases by age group, we found that most of our cases (43.6%) were in the 15-18 age group. When analyzed by gender, the majority of male cases (41.9%) were in the 7-11 age group, and the majority of female cases (45.7%) were in the 15-18 age group. In our study, the 3-6 age group accounted for only 3.9% of cases. It was found that the rate of abuse was higher in boys in the 3-6 and 7-11 age groups, whereas the rate of abuse was higher in girls in the 12-14 and 15-18 age groups (p<0.001). Similar to the results of our study, Cengel-Kültür et al.<sup>23</sup> found that boys were most often sexually abused during the school years (7-11 years) and girls during adolescence (12 years and older). The literature suggests that the risk of SA increases with age. 4,32 In another study, the frequency of abuse was found to have a bimodal age distribution, with abuse concentrated in children aged 5 and 14 years, and rates of abuse increasing with age beyond 14 years.<sup>33</sup> A study by Bassani et al.34 in a community-based sample reported that prevalence decreased with age in boys and increased in girls. Abuse is often observed in prepubertal boys because male cases may become more suitable for self-protection with increasing age. In contrast, adolescent girls are seen as more vulnerable sexual objects due to the development of secondary sexual characteristics.35

Our results showed that the number of cases was low in the age group of 3-6 years. This finding is consistent with studies in the literature. It is thought that the low number of cases in the 3-6 year age group may be due to the inability of this age group to understand or express the occurrence of SA.<sup>35</sup> Another reason may be that families are skeptical about the narratives of cases at this age, or want to protect the child from possible trauma that may develop in the forensic process. It may not, therefore, be responsive to the forensic process or the physician.

Studies investigating the prevalence of intellectual disability in victims of SA have reported rates ranging from 13.2% to 35.4% in different sources. <sup>20,21,24,25,28</sup> It has been reported that children with intellectual disabilities are vulnerable to deception, and this is considered a risk factor for abuse. <sup>20</sup> It has been reported that the risk of abuse is higher in children with intellectual disability and borderline intelligence because their perception and reasoning skills are limited, and children with

		Gender							
		Girls	Girls		Boys		Total		
		n	%	n	%	n	%		
	3-6 years old	12	3.4	3	9.7	15	3.9		
	7-11 years old	57	16.0	13	41.9	70	18.0	0.001	
	12-14 years old	125	35.0	9	29.0	134	34.5	0.001	
	15-18 years old	163	45.7	6	19.4	169	43.6		
	Total	357	92.0	31	8.0	388	Total		
Working	mother	67	28.2	5	22.7	72	27.7	0.586	
Working	father	215	87.8	19	95.0	234	88.3	0.332	
Perpetra	ator's proximity	'		'					
Within th	he family	54	15.2	8	25.8	62	16.0	0.420	
Outside	the family	302	84.8	23	74.2	325	84.0	0.128	
Total		356	92.0	31	8.0	387	100.0		
Frequen	cy of abuse	· ·	,		,		1	,	
Once		172	48.5	19	63.3	191	49.6		
Several		183	51.5	11	36.7	194	50.4	0.117	
Total		355	92.2	30	7.8	385	100.0		
Number	of perpetrators	<u> </u>			<u> </u>	'		'	
One		334	94.1	27	87.1	361	93.5		
>1		21	5.9	4	12.9	25	6.5	0.130	
Total		355	92.0	31	8.0	386	100.0		
Psychiat	ric diagnosis	<u>'</u>							
Yes		117	33.0	16	51.6	133	34.5	0.036	
No		238	67.0	15	48.4	253	65.5	0.036	
Total		355	92.0	31	8.0	386	100.0		
The pres	sence of penetration in abuse	<u>'</u>							
Yes		202	56.6	10	33.3	212	54.8	2.214	
No		155	43.4	20	66.7	175	45.2	0.014	
Total		357	92.2	30	7.8	387	100.0		
Type of	penetration								
Anal per	netration	13	6.4	9	81.8	22	10.3	0.001	
Vaginal <sub>I</sub>	penetration	175	86.6	-	-	175	82.2	N/A	
Oral pen	etration	3	1.5	2	18.2	5	2.3	0.053	
Anal-vag	inal penetration	11	5.4	-	-	11	5.2	N/A	
Total		202	94.8	11	5.2	213	100.0		
Mean Age		,			р				
Child's a			11.32±3.71		0.001				
Mother's	age	37.73±6.4	4	34.09±5.04		0.012			
Father's	306	42.34±7.5		40.8±6.18		0.424			

intellectual disability may have difficulty assessing the incident and reporting it to authorized persons.<sup>36</sup> It is noted that the rate of cases with intellectual disability was low in our study. The rates in our study may have been low because individuals with borderline intelligence or mental retardation had difficulty reporting their victimization and were exposed to abuse that did not cause physical findings. When they shared this situation with their families, the families viewed the incident with suspicion and did not report it. On the other hand, the proportion of cases with mental retardation may have been lower, as 14.9% of the cases were due to early marriage.

The maternal and paternal ages of the subjects maternal and paternal ages were analyzed according to gender. The mean maternal age of male subjects was lower than that of female subjects, and this difference was statistically significant. No comparison can be made because there aren't enough studies evaluating parental age. However, our results should be interpreted with caution. The mean age of male subjects may

		n	%
	Victim's statement	172	44.8
Disclosure type	Witnessed by someone else	43	11.2
	Discovered due to pregnancy	72	18.7
	Other	98	25.3
	Anal penetration	32	8.2
	Vaginal penetration	188	48.5
	Touching-fondling	97	25.0
Type of abuse	Kissing	27	7.0
	Interfemoral intercourse	26	6.7
	Oral penetration	5	1.3
	Exposing-touching genitalia	6	1.5
	Verbal and other	35	9.0
	Attempted rape	72 18.7 98 25.3 32 8.2 188 48.5 97 25.0 27 7.0 26 6.7 5 1.3 a 6 1.5 35 9.0 9 2.3 191 49.6 194 50.4 207 53.9 24 6.3 137 35.7 16 4.1 361 93.5 25 6.5 384 99.2 3 0.8	2.3
Frequency of abuse	Once	191	49.6
	More than once	194	50.4
	Physical force	207	53.9
Method of abuse	Deception	24	6.3
viction of abuse	Voluntarily	137	35.7
	Through coercion and deception	16	4.1
Number of perpetrators	1	172 43 72 98 32 188 97 27 26 5 6 35 9 191 194 207 24 137 16 361 25 384 3 172 19	93.5
tumber of perpetrators	>1	25	6.5
Gender of perpetrator	Man	384	99.2
	Woman	3	0.8
	Boyfriend	172	44.4
	Family member	19	4.9
The perpetrator's relationship/	Relative	25	6.5
proximity	Neighbor-acquaintance	97	25.1
	Stranger	56	14.5
	Stepfather/stepmother	4	1.0
	Other	14	3.6
Perpetrator's age	Mean ± SD 28.5±14.65		

be younger because our sample was predominantly female and mainly in the 15-18 age range, whereas the male cases were mostly in the 7-11 age range.

Another issue analyzed in studies of SA is the relationship between age and the number of incidents of abuse. When we examined the relationship between age and repeated abuse, we found that abuse was mainly repeated once in the 3-11 age group, whereas it was mostly repeated in the 12-18 age group (p<0.001). It has been reported in the literature that the risk of being a victim of repeat abuse is higher in adolescence than in childhood.<sup>37,38</sup> It was observed that the rates of SA reoccurrence, reported in the studies, varied from 25% to 89.6%. Consistent with our findings, the rates of abuse reoccurrence increased with advancing age.<sup>13,22,23,25,29,39,43</sup>

In studies where the forms of abuse were assessed, the most common were vaginal penetration, anal penetration, fondling, and interfemoral intercourse. 35,41,44 When analyzed by gender, vaginal penetration and fondling were reported to be the most common forms of abuse in girls. Anal penetration and frictional abuse were the most common forms of abuse in boys. 4,21,35 In studies of non-clinical samples, touching and rubbing were found to be the most common forms of abuse. 45,46 Two studies from Sweden and Australia reported that non-contact abuse was more common than contact abuse. 47,48 It has been noted in the literature that the penetration rate found in the non-clinical sample is lower than that in the clinical sample. It is thought that non-contact forms of abuse, such as touching, are more common in some studies in the literature, whereas genital penetration is more common in studies in Türkiye, because the low level of reporting of touching forms of abuse may explain this discrepancy.<sup>35</sup> Similar to the literature, the results of our study found that abuse involving penetration was most prevalent in the adolescent age group and among girls, and the rate of vaginal penetration was 49.0%. In addition, the fact that 14.9% of our sample were assessed for "early marriage" impacted the higher rate of these findings.

One of the important issues in the assessment of sexual activity is voluntary sexual intercourse before the age of 18. This issue has been analyzed in different countries, and a study conducted in Australia reported that about 50% of Australian adolescents had voluntary sexual intercourse before the age of 17 or 18. A study conducted in a nonclinical sample in Sweden found that most cases involved voluntary sexual intercourse.<sup>39,49</sup> In our study, 35.7% of the cases were found to have had sexual intercourse voluntarily. In a study conducted in Mersin, this rate was found to be 24.8%.<sup>35</sup> In another study, the rate of SA without the use of coercion and physical violence was reported to be 45.7%. 50. As sexual intercourse before the age of 18, even before marriage, is generally not approved in our country, it is not surprising that the majority of the group who said they did not consent actually did not consent. According to the Convention on the Rights of the Child, everyone under the age of 18 is considered a child, so it seems problematic to talk about the consent of a child. It is assumed that all kinds of interactions in which the child is used to satisfy the sexual desires of the adult should be accepted as SA, whether they involve consent or not.35

Another significant finding of our study was that the perpetrator in the "child" and "adolescent" age groups was someone outside the family (p<0.001). the study by Alikasifoglu et al.<sup>46</sup> reported that when analyzing the relationship between age and whether the perpetrator was inside or

	Years						
	Child (3-11	Child (3-11 years)		Adolescent (12-18 years)		Total	
	n	%	n	%	n	%	
Perpetrator's proximity	·	·	·	·	·		·
Within the family	27	32.1	35	11.6	62	16.0	< 0.001
Outside the family	57	67.9	268	88.4	325	84.0	<0.001
Total	84	21.7	30,3	78.3	387	100.0	
Frequency of abuse							
Once	65	78.3	126	41.7	191	49.6	<0.004
Several	18	21.7	176	58.3	194	50.4	<0.001
Total	83	21.6	302	78.4	385	100.0	
The presence of penetration	n in abuse						
Yes	6	7.1	206	68.0	212	54.8	< 0.001
No	78	92.9	97	32.0	175	45.2	<0.001
Total	84	21.7	303	78.3	387	100.0	
Number of perpetrators							
1	232	92.1	129	96.3	361	93.5	0.110
>1	20	7.9	5	3.7	25	6.5	0.110
Total	252	65.3	134	34.7	386	100.0	
Psychiatric diagnosis							
Yes	35	42.2	98	32.3	133	34.5	0.095
No	48	57.8	205	67.7	253	65.5	
Total	83	21.5	303	78.5	386	100.0	

outside the family, cases of abuse under the age of 12 were mostly by someone outside the family. One study suggested that reasons for the high incidence of out-of-family abuse include cultural factors that allow abuse to remain a secret within the family.<sup>35</sup> Although the results of our study are similar to those of previous studies, there is not sufficient research in the literature.

In our study, penetration was assessed according to four age groups. In most of the cases in the 3-6 age/7-11 age group, a form of abuse without penetration was found. In contrast, forms of abuse with penetration were found in the 12-14 age/15-18 age group. This difference between the rates was statistically significant. A study conducted by Metin et al.<sup>35</sup> in Mersin reported findings consistent with those of our study. A survey by Akbaş et al.<sup>22</sup> in Samsun found that older children were often exposed to multiple forms of abuse, and the rate of abuse involving vaginal penetration increased with age in girls. It has been reported in the literature, that cases exposed to penetrative SA were in the older age group compared to those exposed to non-penetrative SA.<sup>51</sup>

Our study found that the pregnancy rate after confidence interval was 20.6%. In a study conducted in Mersin, the rate of pregnancy history after SA was found to be 8.6%, while in a study conducted in Samsun, this rate was 4.2%.<sup>22,35</sup> In their meta-analyses, Noll et al.<sup>52</sup> found that the presence of SA increased the risk of adolescent pregnancy by a factor of 2.21 and that approximately 5 out of 10 pregnant adolescents may have a history of SA. In our study, the rates of pregnancies were higher than those reported in the literature. We believe that the high rate (14.9%), of

cases, referred to our outpatient clinic by forensic units as victims of SA due to unofficial marriages performed with the consent of the families, influenced the results of our study.

Our study found no psychopathology in 65.4% of cases assessed according to the DSM-IV-TR diagnostic and classification system. In 4 studies that evaluated the status of receiving a psychiatric diagnosis in victims of sexual assault in our country, the rates ranged from 76.4% to 91.7%, and it was reported that most cases were diagnosed with post-traumatic stress disorder (PTSD), acute stress disorder, and depression. 4,21,25,30,35 In studies of children and adolescents exposed to SA, PTSD has been reported in 44-71%. Although some children do not meet all the diagnostic criteria for PTSD, they may show symptoms of re-experiencing, fear, anxiety, and difficulty concentrating.<sup>53</sup> There are studies in the literature, reporting that 21-36% of child victims of SA have no symptoms in the short term and 64-79% have a variable spectrum of symptoms. Additionally, there are studies reporting that approximately 40% of children exposed to SA have very few or no symptoms.<sup>5,53</sup> It has been reported that 10-20% of asymptomatic cases may show symptoms within 12-18 months. It is thought that the reason why undiagnosed cases do not show symptoms may be that they have been exposed to milder abuse, are more resilient children, or have a coping style that masks their distress.<sup>5</sup> A review of the literature related to the outcomes of SA suggests that SA does not have a single and universal effect. Therefore, not every child who has been exposed to SA may show a post-traumatic response to abuse.35 For these reasons, we believe the diagnosis rate was lower in our study.

## **Study Limitations**

The limitations of our study include the inability to use a scale because it was conducted using the retrospective file review method, the lack of a control group, and the fact that the psychological evaluation was conducted during the forensic process. However, as it represents a single region and a high number of cases, our results make an essential contribution to the literature.

## CONCLUSION

Our study found that the majority of victims of SA were girls, males were abused in childhood and girls in adolescence, the frequency of abuse generally increased with age, the victim was exposed to more than one abuse with increasing age, the number of abuses involving penetration also increased with increasing age, the number of "early marriages" was 14.9% and the rate of pregnancy was 20.6%. On the other hand, the fact that incidents were reported where the victim consented at a rate of 35.7% and that 44.4% of perpetrators were the victim's boyfriend suggests that it is important to assess the need for increased sexual health education in adolescence. Starting education about SA which is an important public health problem at a very young age may encourage victims to report abuse. Although the number of studies addressing SA and evaluating victims of SA is increasing, there is still a need for studies on prevention, treatment, and aftercare in this area.

#### **MAIN POINTS**

- Our study contributes to the literature on sexual abuse in children and adolescents, and a significant majority of the abuse victims (92%) are girls in the adolescent age group.
- Girls are more often subjected to penetration-related abuse, while anal penetration is more commonly seen among male children.
- · Less than half of the victims report the abuse themselves.
- In reported cases, more than half involved multiple instances of abuse, with repeated abuse being more prevalent among adolescents.
- Most perpetrators (99.2%) are male, and often individuals outside the family.

#### **ETHICS**

**Ethics Committee Approval:** This study was approved by the Non-Interventional Clinical Research Ethics Committee of Trakya University Faculty of Medicine (approval number: 17/14, date: 31.07.2013).

Informed Consent: Retrospective study.

#### **Footnotes**

# **Authorship Contributions**

Concept: L.B., I.G., Design: L.B., I.G., Data Collection and/or Processing: L.B., Analysis and/or Interpretation: L.B., Literature Search: L.B., I.G., Writing L.B., I.G.

#### **DISCLOSURES**

Conflict of Interest: No conflict of interest was declared by the authors.

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#### REFERENCES

- Teeuw AH, Derkx BH, Koster WA, van Rijn RR. Educational paper: detection of child abuse and neglect at the emergency room. Eur J Pediatr. 2012; 171: 877-85.
- Fallon B, Trocmé N, Fluke J, MacLaurin B, Tonmyr L, Yuan YY. Methodological challenges in measuring child maltreatment. Child Abuse Negl. 2010; 34: 70-9.
- 3. Çeçen AR. Çocuk cinsel istismarı: Sıklığı, etkileri ve okul temelli önleme yolları. Uluslararası İnsan Bilimleri Dergisi. 2007; 1: 1-17.
- Bilginer Ç, Hesapçioğlu ST, Kandil S. Sexual abuse in childhood: a multidimentional look from the view point of victims and perpetrators. Dusunen Adam J Psychiatry Neurol Sci. 2013; 26: 55-64.
- Putnam FW. Ten-year research update review: child sexual abuse. J Am Acad Child Adolesc Psychiatry. 2003; 42: 269-78.
- Öztop DB, Özcan ÖÖ, editors. Cinsel istismar vak'alarının sosyodemografik ve klinik özelliklerinin değerlendirilmesi. Yeni Symposium. 2010; 48(4): 270-6.
- Giardino AP, Finkel MA. Evaluating child sexual abuse. Pediatr Ann. 2005; 34: 382-94.
- 8. Green A. Child sexual abuse and incest. In: Lewis M, ed. Child and adolescent psychiatry. A comprehensive textbook. 2nd ed. Baltimore, MA: Williams & Wilkins. 1996; 1041-48.
- 9. Taner Y, Gökler B. Child abuse and neglect: Psychiatric aspects. Hacettepe Tip Dergisi. 2004; 35: 82-6.
- İşeri E. Cinsel istismar. Çocuk ve Ergen Psikiyatrisi Temel Kitabı. 2008;1:470 6.
- Barth J, Bermetz L, Heim E, Trelle S, Tonia T. The current prevalence of child sexual abuse worldwide: a systematic review and meta-analysis. Int J Public Health. 2013; 58: 469-83.
- Pereda N, Guilera G, Forns M, Gómez-Benito J. The international epidemiology of child sexual abuse: a continuation of Finkelhor (1994). Child Abuse Negl. 2009; 33: 331-42.
- 13. Metin Ö, Toros F, Karcı CK. Cinsel istismara uğramış çocuk ve ergenlerde cinsiyet ve yaşa ilişkin farklılıklar: Psikopatoloji öngörücüleri. Klinik Psikiyatri Dergisi. 2021; 24: 86-98.
- Gencer Ö, Özbek A, Özyurt G, Kavurma C. Çocuk ve ergenlerde aile dışı ve aile içi cinsel istismar olgularının karşılaştırılması. Anatolian Journal Of Psychiatry/Anadolu Psikiyatri Dergisi. 2016; 17: 56-64.
- Ayraler Taner H, Çetin FH, Işık Y, İşeri E. Cinsel istismara uğrayan çocuk ve ergenlerde psikopatoloji ve ilişkili risk etkenleri. Anatolian Journal of Psychiatry/Anadolu Psikiyatri Dergisi. 2015; 16: 294-300.
- Wilsnack SC, Vogeltanz ND, Klassen AD, Harris TR. Childhood sexual abuse and women's substance abuse: national survey findings. J Stud Alcohol. 1997; 58: 264-71.
- 17. Green JG, McLaughlin KA, Berglund PA, Gruber MJ, Sampson NA, Zaslavsky AM, et al. Childhood adversities and adult psychiatric disorders in the national comorbidity survey replication I: associations with first onset of DSM-IV disorders. Arch Gen Psychiatry. 2010; 67: 113-23.

- Akyuz G, Sar V, Kugu N, Doğan O. Reported childhood trauma, attempted suicide and self-mutilative behavior among women in the general population. Eur Psychiatry. 2005; 20: 268-73.
- 19. Bebbington PE, Cooper C, Minot S, Brugha TS, Jenkins R, Meltzer H, et al. Suicide attempts, gender, and sexual abuse: data from the 2000 British Psychiatric Morbidity Survey. Am J Psychiatry. 2009; 166: 1135-40.
- Köse S, Aslan Z, Başgül ŞS, Şahin S, Yılmaz Ş, Çıtak S, et al. Öztop DB, Özcan ÖÖ. Cinsel istismar vakalarının sosyodemografik ve klinik özelliklerinin değerlendirilmesi. New Symposium 2010; 48: 270-6.
- 21. Gökçe İmren S, Ayaz A, Yusufoğlu C, Rodopman Arman A. Cinsel istismara uğrayan çocuk ve ergenlerde klinik özellikler ve intihar girişimi ile ilişkili risk etmenleri. Marmara Med J. 2015; 26: 11-6.
- Akbaş S, Turla A, Karabekiroğlu K, Şenses A, Karakurt MN, Taşdemir GN, et al. Adli makamlarca çocuk psikiyatrisi polikliniğine gönderilen cinsel istismara uğramış çocukların, istismar şekilleri, ruhsal ve fiziksel muayene özellikleri. Sex Disabil. 2009: 27: 205-13.
- Cengel-Kültür E, Cuhadaroğlu-Cetin F, Gökler B. Demographic and clinical features of child abuse and neglect cases. Turk J Pediatr. 2007; 4: 256-62.
- 24. Yektaş Ç, Tufan AE, Büken B, Çetin NY, Yazici M. Cinsel istismar mağduru çocuk ve ergenlerde istismar ve istismarcıya ilişkin özelliklerin ve psikopataloji ile ilişkili risk etkenlerinin değerlendirilmesi. Anadolu Psikiyatri Dergisi. 2018; 19: 501-8.
- Uğur Ç, Şireli Ö, Esenkaya Z, Yaylalı H, Duman Saday N, Gül B, et al. Cinsel istismar mağdurlarının psikiyatrik değerlendirmesi ve izlemi: son dört yıllık deneyim. Çocuk ve Gençlik Ruh Sağlığı Dergisi. 2012; 19: 81-6.
- Sahin F, Çepik-Kuruoglu A, Demirel B, Akar T, Duyan-Çamurdan A, Iseri E, et al. Six-year experience of a hospital-based child protection team in Turkey. The Turkish Journal of Pediatrics. 2009; 51: 336-43.
- Koç F, Aksit S, Tomba A, Aydın C, Koturoğlu G, Aslan A, et al. Çocuk istismarı ve ihmali olgularımızın demografik ve klinik özellikleri: Ege Üniversitesi Çocuk Koruma Birimi'nin bir yıllık deneyimi. Türk Pediatri Arşivi. 2012; 47: 119-24
- 28. Demirkaya SK, Küçükköse M. Ruhsal durum muayenesi için çocuk ve ergen psikiyatrisine yönlendirilen cinsel istismara uğramış çocuk ve ergenlerin demografik ve klinik özellikleri. Adli Tıp Bülteni. 2017; 29: 14-20.
- Çöpür M, Üneri ÖS, Aydin E, Bahali MK, Tanidir C, Günes H, et al. İstanbul ili örnekleminde çocuk ve ergen cinsel istismarlarının karakteristik özellikleri/ Characteristic features of sexually abused children and adolescents in İstanbul sample. Anadolu Psikiyatri Dergisi. 2012; 13: 46.
- Bahali K, Akçan R, Tahiroglu AY, Avci A. Child sexual abuse: seven years in practice. Journal of Forensic Sciences. 2010; 55: 633-6.
- Maikovich-Fong AK, Jaffee SR. Sex differences in childhood sexual abuse characteristics and victims' emotional and behavioral problems: findings from a national sample of youth. Child Abuse & Neglect. 2010; 34: 429-37.
- De Bellis MD, Keshavan MS, Clark DB, Casey B, Giedd JN, Boring AM, et al. Developmental traumatology part II: brain development. Biological Psychiatry. 1999; 45: 1271-84.
- Hall RC, Hall RC, editors. A profile of pedophilia: definition, characteristics
  of offenders, recidivism, treatment outcomes, and forensic issues. Mayo
  Clinic Proceedings; 2007: Elsevier.
- Bassani DG, Palazzo LS, Béria JU, Gigante LP, Figueiredo AC, Aerts DR, et al. Child sexual abuse in southern Brazil and associated factors: a population-based study. BMC Public Health. 2009; 9: 1-11.
- Metin Ö. Çocuk psikiyatri polikliniğinde değerlendirilen cinsel istismar olgularının biyopsikososyal özellikleri (Tıpta Uzmanlık Tezi) Mersin

- Üniversitesi Tıp Fakültesi, Çocuk ve Ergen Ruh Sağlığı ve Hastalıkları AD, Mersin, 2010.
- Spencer N, Devereux E, Wallace A, Sundrum R, Shenoy M, Bacchus C, et al. Disabling conditions and registration for child abuse and neglect: a population-based study. Pediatrics. 2005; 116: 609-13.
- Arata CM. Child sexual abuse and sexual revictimization. Clinical psychology: Science and Practice. 2002; 9: 135.
- Humphrey JA, White JW. Women's vulnerability to sexual assault from adolescence to young adulthood. Journal of Adolescent Health. 2000; 27: 419-24.
- 39. Edgardh K, Ormstad K. Prevalence and characteristics of sexual abuse in a national sample of Swedish seventeen-year-old boys and girls. Acta Paediatrica. 2000; 89: 310-9.
- Priebe G, Svedin CG. Child sexual abuse is largely hidden from the adult society: An epidemiological study of adolescents' disclosures. Child abuse & Neglect. 2008; 32: 1095-108.
- 41. Shaw JA, Lewis JE, Loeb A, Rosado J, Rodriguez RA. Child on child sexual abuse: Psychological perspectives. Child Abuse & Neglect. 2000; 24: 1591-600.
- 42. Edgardh K, von Krogh G, Ormstad K. Adolescent girls investigated for sexual abuse: history, physical findings and legal outcome. Forensic Science International. 1999; 104: 1-15.
- 43. Ruggiero KJ, McLeer SV, Dixon JF. Sexual abuse characteristics associated with survivor psychopathology. Child Abuse & Neglect. 2000; 24: 951-64.
- 44. Oral R, Can D, Kaplan S, Polat S, Ates N, Cetin G, et al. Child abuse in Turkey: an experience in overcoming denial and a description of 50 cases. Child Abuse Negl. 2001; 25: 279-90.
- 45. Dube SR, Anda RF, Whitfield CL, Brown DW, Felitti VJ, Dong M, et al. Long-term consequences of childhood sexual abuse by gender of victim. American Journal of Preventive Medicine. 2005; 28: 430-8.
- Alikasifoglu M, Erginoz E, Ercan O, Albayrak-Kaymak D, Uysal O, Ilter O. Sexual abuse among female high school students in İstanbul, Turkey. Child Abuse & Neglect. 2006; 30: 247-55.
- 47. Mazza D, Dennerstein L, Garamszegi CV, Dudley EC. The physical, sexual and emotional violence history of middle-aged women: A community-based prevalence study. Medical Journal of Australia. 2001; 175: 199-201.
- 48. Halpérin DS, Bouvier P, Jaffé PD, Mounoud RL, Pawlak CH, Laederach J, et al. Prevalence of child sexual abuse among adolescents in Geneva: results of a cross sectional survey. BMJ. 1996; 312: 1326-9.
- Boyle FM, Dunne MP, Purdie DM, Najman JM, Cook MD. Early patterns of sexual activity: age cohort differences in Australia. Int J STD AIDS. 2003; 14: 745-52
- 50. Soylu N, ģEntÜRk PĠLan B, Ayaz M, Sönmez S. Cinsel istismar mağduru çocuk ve ergenlerde ruh sağlığını etkileyen etkenlerin araştırılması. Anatolian Journal of Psychiatry/Anadolu Psikiyatri Dergisi. 2012;13: 292-8.
- 51. Aktepe E. Çocukluk çağı cinsel istismarı. Psikiyatride Güncel Yaklaşımlar. 2009; 1: 95-119.
- 52. Noll JG, Shenk CE, Putnam KT. Childhood sexual abuse and adolescent pregnancy: a meta-analytic update. J Pediatr Psychol. 2009; 34: 366-78.
- 53. Lewis ME. Child and adolescent psychiatry: A comprehensive textbook: Lippincott Williams & Wilkins Publishers; 2002.