

Received: 2014.01.14
Accepted: 2014.01.31
Published: 2014.04.26

Evaluation of social and demographic characteristics of incest cases in a university hospital in Turkey

Authors' Contribution:
Study Design A
Data Collection B
Statistical Analysis C
Data Interpretation D
Manuscript Preparation E
Literature Search F
Funds Collection G

ACEF 1 **Ali Yildirim**
ABE 1 **Erdal Ozer**
E 2 **Hasan Bozkurt**
F 3 **Sait Ozsoy**
DF 4 **Ozgur Enginyurt**
F 5 **Durmus Evcuman**
D 6 **Riza Yilmaz**
C 7 **Yunus Emre Kuyucu**

1 Department of Forensic Medicine, Gaziosmanpasa University Faculty of Medicine, Tokat, Turkey
2 Department of Child Psychiatry, Gaziosmanpasa University Faculty of Medicine, Tokat, Turkey
3 Department of Forensic Medicine, Gulhane Military Medical Academy, Ankara, Turkey
4 Department of Family Medicine, Ordu University Faculty of Medicine, Ordu, Turkey
5 Department of Forensic Medicine, Council of Forensic Medicine, Istanbul, Turkey
6 Department of Forensic Medicine, Bulent Ecevit University Faculty of Medicine, Zonguldak, Turkey
7 Department of Biostatistics, Gaziosmanpasa University Faculty of Medicine, Tokat, Turkey

Corresponding Author: Ali Yildirim, e-mail: aliyildirim64@yahoo.com
Source of support: Departmental sources

Background: Incest is defined as any sexual activity between close blood relatives including step relatives and family members who are forbidden by law to marry. It is a problem that can be seen in all the social classes in developed and undeveloped societies. The World Health Organization classifies this problem as a silent health emergency. Father-daughter incest is reported to be the most common incest type followed by the other types like brother-sister, sister-sister and mother-son incest.





Material/Methods: Subjects for this study were recruited from a sample of incest cases referred to Forensic Medicine Department of Gaziosmanpasa University Medical Faculty Hospital between 2008 and 2012. Data involved social and demographic characteristics and clinical features of victims, perpetrators and the families. The ethical committee of the faculty of medicine approved the study.

Results: The study sample consisted of 43 incest cases (36 females and 7 males) with an age range 4–40 years. Two third of the victims were under 18 years old. All perpetrators were males. Father – daughter incest (34.9%) was found to be most common incest type followed by brother – sister incest (14%). 75% of the perpetrators were family members and relatives with consanguinity while 25% of them were not consanguineous but faithful and intimate relatives to victims.

Conclusions: Increasing awareness about incest and its damaging effects is so important and clinicians should keep in mind sexual abuse or incest when examining the risky population. Multidisciplinary approach is necessary for determining short term or long term results and preventing the negative consequences of incest.

MeSH Keywords: **Crime Victims • Incest • Child Abuse, Sexual**

Full-text PDF: <http://www.medscimonit.com/download/index/idArt/890361>

 1931  5  —  27

Background

Incest is defined as any sexual activity between close blood relatives, including step relatives and family members, who are forbidden by law to marry [1]. It covers a wide range from sexual abuse in which a person's body is violated through sexual behavior with penetration [2,3]. It is a problem that can be seen in all social classes in developed and undeveloped societies. Although incest is a worldwide problem, it remains a neglected social issue. In this context the World Health Organization classifies this problem as a silent health emergency [4].

Father-daughter incest is reported to be the most common incest type, followed by the other types like brother-sister, sister-sister, and mother-son incest [5]. Mother-son type is known to be the least common one. In a sample of 296 incest cases, Seto et al. found that 70 of the perpetrators were biological fathers, 87 were biological relatives (grandfathers, brothers, sisters, cousins), and 73 were step fathers [6]. The prevalence of incest cases is reported to vary between 5% and 62% according to culture, the source of the report, and geographic location [7,8]. Furthermore a study examining sexual abuse among 1955 female high school students in Turkey demonstrated that 1.8% of the sexual abuse was incest [9]. Another retrospective study from Turkey found a rate of 4.6% for incest [10].

Victims of incest usually cannot report the event because of guilt, shame, fear, and many other reasons. They often blame themselves and feel guilty for allowing incest to happen. Even if the family is aware of the abuse, families in most cases prefer to keep the situation secret [11,12]. It is common for a victim of incest to experience multiple and devastating emotional, behavioral, and other psychiatric problems [13]. Dadds et al. demonstrated that daughters who had been sexually abused by their fathers reported lower levels of self-esteem about their intellectual and school status. In that study, mothers of the incest cases reported that their daughters had more conduct problems, and incestuous families had more conflicts and organizational problems [14].

Because of the nature of the incest events, determining the prevalence and other variables of incest is difficult. Despite the increasing data about the sexual abuse and incest in the world, the number of related studies in our country is inadequate. The aim of our study was to investigate basic descriptive characteristics of victims and perpetrators of incest in a forensic medicine department of a university hospital.

Material and Methods

Subjects

Subjects for this study were recruited from a sample of incest cases referred to the Forensic Medicine Department of Gaziosmanpasa University Medical Faculty Hospital between 2008 and 2012. Victims of sexual abuse or incest in the central Black Sea region of our country usually refer to our university hospital for forensic evaluation as it is one of the biggest tertiary healthcare centers. The study enrolled 43 cases ranging in age from 4 to 40 years.

Procedure

Incest victims who underwent routine forensic evaluation were assessed in terms of socio-demographic features, patterns of sexual abuse, and psychiatric examination. Socio-demographic data involved basic descriptive information like age, sex, educational levels, and occupational status of victims and perpetrators. Incest relationship in the present study included sexual activities performed by not only by the family members and step relatives, but also the people to whom the victims felt allegiance. Subjects were interviewed for psychiatric assessment after getting case information was collected.

Statistics

Chi-square test was used to compare the categorical variables. Categorical variables are presented as counts and percentages. A p-value <0.05 was considered significant.

Statistical analysis of the results was performed with SPSS 18.0. Our faculty ethics committee approved the study.

Results

The study sample consisted of 43 incest cases (36 females and 7 males) with an age range from 4 to 40 years. Two-third of the victims were under 18 years old. All perpetrators were males. Father-daughter incest (34.9%) was found to be most common incest type, followed by brother-sister incest (14%). We found that 75% of the perpetrators were family members and relatives with consanguinity, while 25% of them were not consanguineous but were people that the victim felt allegiance to.

When the educational status of the victims was examined, 58.1% and 30.2% were determined to be primary school and high school graduates, respectively, and 11.6% of them were found to be illiterate. The percentages of primary school and high school graduation for perpetrators were 72% and 14%, respectively. Of the perpetrators living together with victims in the same family, 55% were unemployed. There were 3 or more children in 79.1% of the families of victims.

Table 1. Socio-demographic and clinical data for the victims.

Victims		N (%)
Age	<18 years	30 (69.8%)
	>18 years	13 (30.2%)
Sex	Male	7 (16.3%)
	Female	36 (83.7%)
Education	Illiterate	5 (11.6%)
	Primary school	25 (58.1%)
	High school	13 (30.2%)
Psychiatric problem	Yes	31 (72.1%)
	No	12 (27.9%)

Table 2. Socio-demographic and clinical data for the perpetrators.

Perpetrators		N (%)
Age	Illiterate	6 (14.0%)
	Primary school	31 (72.0%)
	High school	6 (14.0%)
Occupation	Employed	23 (53.5%)
	Unemployed	20 (46.5%)
Medical problem	Yes	7 (16.3%)
	No	36 (83.7%)

Psychiatric problems were present in 72.1% of the victims. The most common psychiatric disorder was posttraumatic stress disorder (PTSD). PTSD was detected in the 66.7% of the father-daughter incest victims. Tables 1 and 2 show the socio-demographic characteristics and clinical features of victims, perpetrators, and their families.

Anal, vaginal, or both anal and vaginal intercourse was detected in 24 cases (55.8%). Physical abuse was concomitant with sexual abuse in 6.9% of the cases. We found that 51.3% (n=20) of the incest events occurred in places where the victims and perpetrators lived together. The duration of the incest was less than 1 year in 67.4% of cases and more than 1 year in 32.6% of the cases. Pregnancy resulting from incest was reported by 7% of the victims. Table 3 summarizes data about the incest events and Table 4 Provides detailed data on incest cases. There was no significant difference between victim-perpetrator living together and incest type in Table 5.

Table 3. Socio-demographic data for the families.

Families		N (%)
Number of children per family	<3	9 (20.9%)
	3–5	29 (67.4%)
	>5	5 (11.7%)
Maternal education	Illiterate	16 (37.2%)
	Primary school	27 (67.8%)
Paternal education	Illiterate	4 (9.3%)
	Primary school	36 (83.7%)
	High school	3 (7.0%)
Maternal occupation	Yes	7 (16.3%)
	No	36 (83.7%)
Paternal occupation	Yes	35 (81.4%)
	No	8 (18.6%)

Table 4. Data about the incest events.

Events		N (%)
Offender	Father	15 (34.9%)
	Brother	6 (14.0%)
	Relative (with consanguinity)	11 (25.6%)
Incest type	Relative (without consanguinity)	11 (25.6%)
	Non-penetrative	19 (44.2%)
Penetration type	Penetrative	24 (55.8%)
	Anal	8 (33.3%)
	Vaginal	10 (41.7%)
Physical abuse	Both	6 (25.0%)
	Yes	3 (6.9%)
Duration	No	40 (93.1%)
	<1 year	26 (67.4%)
Victim-perpetrator living together	>1 year	14 (32.6%)
	Yes	20 (51.3%)
	No	19 (48.7%)

Discussion

Sexual abuse includes the abuse by adults of children who are not completely developed in psycho-social aspects for sexual stimulation. Incest is the severest form of child sexual abuse. Because it usually remains a secret, chronic process within

Table 5. Relation between Victim-perpetrator living together and Incest type.

		Victim-perpetrator living together		p
		Yes	No	
Incest type	Non-penetrative	8 (42.1%)	11 (57.9%)	0.306
	Penetrative	15 (62.5%)	9 (37.5%)	
Total		23 (53.5%)	20 (46.5%)	

Data were shown as n (%).

the family, it is important to recognize and prevent incest. We evaluated the basic descriptive characteristics of incest cases referred to the forensic medicine department of a university hospital in Turkey.

Fathers constituted the majority of abusers of incest events in our study. This finding is also compatible with the literature, as father-daughter incest is known to be the most common type of incest in related studies [5,6]. Limited research on father-daughter incest suggests that it has deep and long-term effects on victims. In this respect, Stroebel et al. reported that victims of father-daughter incest had problematic scores on sexual satisfaction, sexual partner intimacy, and depression scales [15]. Therefore, most of the victims in our study are more likely to have long-term problematic life events. Moreover, duration of the abuse has been reported to be a risk factor influencing the harmful effects of sexual abuse. In the present study, one-third of the incest was found to have occurred over a period of more than 1 year. It is not surprising that this finding contributes to negative consequences of incest (i.e., the longer the duration of the incest, the worse its adverse effects.

Brother-sister incest was the second-most common individual incest type in the present study. Cyr et al. demonstrated that brother-sister incest does not differ from father-daughter and stepfather-stepdaughter incest [16]. Their findings suggest that sibling incest should not necessarily be construed as less severe or harmful than father-daughter incest. Thus, the frequency of brother-sister incest here should be considered as being as important as father-daughter incest in this context.

Related studies mostly emphasize intrafamilial incest types like father-daughter and brother-sister incest [5,16]. However, in our study 25.6% of the incest events were found to be performed by relatives without consanguinity. These relatives were mainly stepfathers, stepbrothers, father-in-laws, and brother-in-laws. This finding is probably due to the feudal structure of families in Turkey, because families are prone to be extended rather than nuclear, especially in rural areas. Likewise, the families of victims were commonly large families living in rural areas, which probably increases the risk of incest events in our target population.

More than half of the incest events in our study were penetrative – anal, vaginal, or both anal and vaginal intercourse. Similarly, Gunduz et al. found that 54 out of 65 cases were exposed to penetration in their study evaluating adjudicated incest cases in Turkey [17]. Because vaginal or anal penetration has been reported to increase the harmful effects of sexual abuse, the high rate of cases exposed to penetration also shows the severity of incest in our study. On the other hand, child sexual abuse also includes different types of sexual behavior that are not as traumatic as penetrative incest [18,19] and in which physical findings are encountered less frequently [19]. Similar to these findings, physical signs were examined in only 3 of the cases in our study.

As in other studies [5,20,21], the victims of incest were mainly females. The literature mentions that boys are less prone to intrafamilial abuse and, if involved in such cases, are more likely to be abused by female offenders [22]. However, father-son incest is thought to be even more underdiagnosed than the other types of sexual abuse. Furthermore, difficulties in determining the physical and other signs due to late forensic evaluation (at least 72 hours after sexual abuse) also prevent the reporting of incest cases [23]. These factors may explain the lower rate of male victims in this study.

Larger families, alcohol or substance abuse, increased physical intimacy, and divorce are some of the factors affecting the frequency of incest [1,19,24]. Similarly, victims of parents were more likely to have more children and lower educational levels in our study. Additionally, more than half of the victims were found to live together with the perpetrators and 55% of these offenders were unemployed. Likewise, Ozturk et al. found that 94% of perpetrators were illiterate or primary school graduates and 50% of them were unemployed [25]. It is also suggested that incest events might be easily covered-up in families with higher socioeconomic levels. However, there have been different reports about the socioeconomic levels of incestuous families [1].

Emotional, behavioral, and medical problems have been reported in sexually abused children [9,26]. The main psychiatric disorders diagnosed in the present study were PTSD, anxiety, and

depressive disorders. In addition, victims were mainly under 18 years old and were illiterate or primary school graduates. These findings might also have contributed to being sexually abused and having more psychological problems. Middleton found that cases of long-term incest frequently resulted in pregnancies [27]. We found unwanted pregnancies in 7% of the cases and pregnancy was the most serious medical problem in our study. Incest cases usually show up through unwanted pregnancies long after the beginning of abuse. This finding also leads to impairment in physical and mental health of incest victims.

Conclusions

Incest studies usually consist of case reports or anonymous surveys [13,27]. In contrast, our data is based on information

given by the victims themselves and their family members. On the other hand, our study has some limitations that should be addressed. One limitation is the low case numbers. Our study also lacks the longitudinal outcomes of psychosocial factors investigated. Longitudinal studies with higher numbers of cases are needed.

Incest is a taboo and a neglected social problem in all cultures. We aimed to focus attention on this important form of sexual abuse. Our results highlight some particular characteristics that contribute to the psychosocial severity of incest cases. Increasing awareness about incest and its damaging effects is very important and clinicians should keep in mind sexual abuse or incest when examining patients at risk. However, a multidisciplinary approach is necessary for determining short- and long-term results and preventing the negative consequences of incest.

References:

1. Kellogg N: The evaluation of sexual abuse in children. *Pediatrics*, 2005; 116: 506-12
2. Nurcombe B: Child sexual abuse I: Psychopathology. *J Psychiatry*, 2000; 34: 85-91
3. Johnson CF: Abuse and neglect of children. *Nelson textbook of pediatrics*, 18th ed., 2008; 178-82
4. WHO – World Health Organization. Child sexual abuse: a silent health emergency. Regional Office for Africa, 2004; <http://www.who.int/iris/handle/123456789/1878>
5. Sariola H, Uutela A: The prevalence and context of incest abuse in Finland. *Child Abuse Negl*, 1996; 20: 843-50
6. Seto MC, Lalumière ML, Kuban M: The sexual preferences on incest offenders. *J Abnormal Psychology*, 1999; 108: 267-72
7. Committee on Sexual Offences against Children and Youths. Sexual offences against children in Canada: Report of the Committee on Sexual Offences against Children and Youth [the Badgley Report]. Ottawa: Minister of Supply and Services Canada, 1984
8. Jackson JL, Calhoun KS, Amick AE et al: Young adult women who report childhood intrafamilial sexual abuse: subsequent adjustment. *Arch Sex Behav*, 1990; 19: 211-21
9. Alikasifoglu M, Erginoz E, Ercan O et al: Sexual abuse among female high school students in Istanbul, Turkey. *Child Abuse Negl*, 2006; 30: 247-55
10. Gokten ES: Forensic Cases Referred to Child and Adolescent Psychiatry in a State Hospital between 2009 and 2011. *Turk J Child Adolesc Ment Health*, 2011; 18: 105-16
11. Stem AE, Lynch DL, Oates RK et al: Self-esteem, depression, behavior and family functioning in sexually abused children. *J Child Psychol Psychiatry*, 1995; 36: 1077-89
12. Erdinc IB, Sengul CB, Dilbaz N, Bozkurt S: A case of incest with dissociative amnesia and post-traumatic stress disorder. *Turk Psikiyatri Derg*, 2004; 15: 161-65
13. Gabel M: Incest today. *Bull Acad Natl Med*, 2002; 186: 981-88
14. Dadds M, Smith M, Webber Y, Robinson A: An exploration of family and individual profiles following father-daughter incest. *Child Abuse Negl*, 1991; 15: 575-86
15. Stroebel SS, O'Keefe SL, Beard KW et al: Father-daughter incest: data from an anonymous computerized survey. *J Child Sex Abus*, 2012; 21: 176-99
16. Cyr M, Wright J, McDuff P, Perron A: Intrafamilial sexual abuse: brother-sister incest does not differ from father-daughter and stepfather-stepdaughter incest. *Child Abuse Negl*, 2002; 26: 957-73
17. Gunduz T, Karbeyaz K, Ayranci U: Evaluation of the Adjudicated Incest Cases in Turkey: Difficulties in Notification of Incestuous Relationships. *J Forensic Sci*, 2011; 56: 438-43
18. Tyler AH: Abuse in the investigation and treatment of familial child sexual abuse. *Child Abuse Negl*, 1984; 8: 47-53
19. Schatzow E, Herman JL: Breaking secrecy. Adult survivors' disclosure to their families. *Psychiatr Clin North Am*, 1989; 12: 337-49
20. Finkelhor D: Current information on the scope and nature of child sexual abuse. *Future Child*, 1994; 4: 31-53
21. Brand BL, Alexander PC: Coping with incest: the relationship between recollections of childhood coping and adult functioning in female survivors of incest. *J Trauma Stress*, 2003; 16: 285-93
22. Finkelhor D, Hotaling GT: Sexual abuse in the National Incidence Study of Child Abuse and Neglect: an appraisal. *Child Abuse Negl*, 1984; 8: 23-32
23. Adams JA, Harper K, Knudson S, Revilla J: Examination findings in legally confirmed child sexual abuse: it's normal to be normal. *Pediatrics*, 1994; 94: 310-17
24. Topcu S: Incest in Sexual Abuse. Ankara: Phoenix Publisher, 2009
25. Ozturk M, Guzelhan Y, Ortakoylu L: Encest oykusu olan adli olgularin incelemesi. *Yeni Sempozyum*, 2000; 38(1): 15-18 [Ain Turkish]
26. Finkel KC: Sexual abuse and incest. What can you do? *Can Fam Physician*, 1994; 40: 935-44
27. Middleton W: Parent-child incest that extends into adulthood: a survey of international press reports, 2007-2011. *J Trauma Dissociation*, 2013; 14: 184-97