

# Evaluation of Sexual Violence Victims: Cross-Sectional Research

## Cinsel Şiddet Mağdurlarının Değerlendirilmesi: Kesitsel Çalışma

<sup>ORCID</sup> Turgay BÖRK<sup>a</sup>, <sup>ORCID</sup> Ömer TOKGÖZLÜ<sup>a</sup>, <sup>ORCID</sup> Vahap GÖÇÜK<sup>a</sup>, <sup>ORCID</sup> Abdurrahim TÜRKOĞLU<sup>a</sup>

<sup>a</sup>Department of Forensic Medicine, Fırat University Faculty of Medicine, Elazığ, Türkiye

This study was presented as an oral presentation at 2<sup>nd</sup> International 18<sup>th</sup> National Forensic Sciences Congress, 14-17 October 2021, Online.

**ABSTRACT Objective:** The present study was aimed to evaluate the cases presented with sexual abuse claims referred by judicial authorities for forensic examination. **Material and Methods:** The reports on cases presented to the Fırat University Faculty of Medicine Forensic Medicine Department Polyclinic with sexual abuse claims between 2016 and 2020 were reviewed retrospectively. The cases were evaluated in terms of sociodemographic features and examination results. **Results:** Of the cases, 128 (82.6%) were female. 64.8% of the women presented with vaginal penetration, and that the suspect was most frequently a friend or partner of the victim (38.2%), where 64 (41.3%) victims applied within the first 3 days following the incident. Upon genital examinations, the hymens in question were mostly in annular form (89.1%), 52.8% of the female cases were hymen injury, the natural notches were most frequently at the 3 and 9 o'clock locations (15.9%) in the lithotomy position, and that the tears were the most common at the 6 o'clock location (29.4%). 5.2% of all the cases had anal penetration, and that 75% of the acute hymen tears and all the acute anal penetration were examination was found within first three days. **Conclusion:** It is known that the detecting criminal manifestations becomes more challenging as the application is delayed following the sexual abuse incident. For this reason, we believe that it is important to determine the reasons for the delay in reporting the crime of the victims and to take the necessary precautions, in order to collect the findings of the crime properly and to get the punishment they deserve.

**Keywords:** Sexual assault; abuse; forensic medicine

**ÖZET Amaç:** Bu çalışmada cinsel istismar iddiası nedeniyle adli makamlar tarafından adli muayene istemi ile başvuran olguların değerlendirilmesi amaçlandı. **Gereç ve Yöntemler:** Fırat Üniversitesi Tıp Fakültesi Adli Tıp AD Polikliniğine, 2016-2020 yılları arasında cinsel istismar iddiası nedeniyle başvuran olguların raporları retrospektif olarak incelendi. Olgular, sosyodemografik özellikler ve muayene bulguları açısından değerlendirildi. **Bulgular:** Başvuran olguların 128'i (%82,6) kadındı. Kadınların %64,8'inin vajinal yolla penetrasyon iddiası ile geldiği, şüphelinin en sık mağdurun arkadaşı veya partneri (%38,2) olduğu, mağdurların 64'ünün (%41,3) olay sonrası ilk 3 gün içerisinde başvurduğu saptandı. Yapılan genital muayenelerde değerlendirilen himenlerin sıklıkla (%89,1) halkavi (anüler) yapıda olduğu, kadın olguların %52,8'inin himende yaralanma olduğu, doğal çentiklerin litotomi pozisyonunda saat kadranı hesabıyla en sık 3 ve 9 hizalarında (%15,9), yırtıkların ise en sık 6 hizasında (%29,4) olduğu görüldü. Tüm olguların %5,2'sinde anal penetrasyon bulgularının mevcut olduğu, akut himen yırtıklarının %75'inin, anal yolla penetrasyon akut bulgularının ise tamamının ilk 3 gün içerisinde muayeneye geldiği tespit edildi. **Sonuç:** Cinsel istismar olayı sonrası başvuru süresi uzadıkça suç bulgularının tespitinin güçleştiği bilinmektedir. Bu nedenle mağdurların suç bildiriminde gecikme nedenlerinin belirlenerek gereken önlemlerin alınmasının, suçta ait bulguların uygun şekilde toplanabilmesi ve suçluların hak ettiği cezayı alabilmesi açısından önemli olduğu kanaatindeyiz.

**Anahtar Kelimeler:** Cinsel saldırı; istismar; adli tıp

Sexual violence is any sexually-oriented non-consensual act (such as exhibitionism, caressing, genital imaging, pornography production, oral-genital contact, object insertion, or vaginal/anal penetration) taking advantage of the victim's age, or poor mental or physical capacity.<sup>1</sup> Sexual violence is a global problem. The lifetime risk of attempted or

completed rape is about 20% in women.<sup>2</sup> It was reported in a United States of America study that 43.6% of women (approximately 52.2 million) experienced any form of sexual contact violence throughout their lifetime, and 1 out of 5 women and 14 men suffered rape or attempted rape at some point in their life.<sup>3</sup>

**Correspondence:** Turgay BÖRK

Department of Forensic Medicine, Fırat University Faculty of Medicine, Elazığ, Türkiye

**E-mail:** tbork7@hotmail.com



Peer review under responsibility of Türkiye Klinikleri Journal of Forensic Medicine and Forensic Sciences.

**Received:** 16 Nov 2021

**Received in revised form:** 11 Jan 2022

**Accepted:** 12 Jan 2022

**Available online:** 14 Jan 2022

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Sexual violence is associated with a number of physical and psychological effects in the short and long term that can affect the entire course of life of the victim. Physical effects are various physical manifestations, ranging from very mild symptoms to fatal injuries in the genital and non-genital areas. Genital injuries most prevalently occur in the posterior fourchette, labium minor, hymen and/or fossa navicularis in women. These generally occur in the form of ecchymosis, abrasions, swelling, and lacerations of varying depth. Non-genital physical injuries include abrasions, ecchymosis and contusions, lacerations; Injuries such as handprints, fingerprints, ligament scars on wrists and neck areas, sucking and bite marks intended for the satisfaction of sexual desire. Psychological effects have significant interpersonal variations, including post-traumatic stress disorder, depression, social phobias, anxiety disorder, increased alcohol-substance abuse, suicidal behavior, sleep and eating disorders, and sexual dysfunctions.<sup>4</sup> At the same time, victims of rape are at risk of unintended pregnancies, abortions in high-risk pregnancies, sexually transmitted infections such as human immunodeficiency virus/acquired immunodeficiency syndrome, pelvic pain and pelvic inflammatory disease, urinary tract infections.<sup>2,5</sup>

In many countries, sexual assault and abuse were incorporated into the legal system and are still being amended.<sup>6</sup> In Turkish Republic, sexual crimes were covered in sexual assault (Article 102), sexual abuse of children (Article 103), sexual intercourse with a minor (Article 104), and sexual harassment (Article 105) articles under the title of “Crimes Against Sexual Immunity” in the Turkish Penal Code No. 5237, which entered into force on 1 June 2005. Article 102 of the Turkish Penal Code covers crimes against sexual immunity of adults. Pursuant to aforementioned law, the victim’s bodily immunity must have been violated for the act can be considered sexual assault offense.

The present study aimed to discuss the sociodemographic and clinical examination features of the suspected sexual abuse cases submitted to our polyclinic.

## MATERIAL AND METHODS

This study was designed as a retrospective file review. For the purposes of the study, the reports on 155 cases presented to the Forensic Medicine Department Polyclinic, Faculty of Medicine, Fırat University with the claim of sexual assault between 2016 and 2020 were reviewed retrospectively. Demographic data of the cases, including age and gender, as well as the psychiatric history of the victim, the degree of affinity to the suspect, the incident scene, how the incident occurred, the time between the date of the incident and the examination (1-3 days, 4-7 days, 8-30 days, above 30 days), and macroscopic examination results were taken into evaluation. IBM Statistical Package for Social Sciences (SPSS) version 22 (IBM Corp., Armonk, New York, USA) software package was used for statistical analysis.

Before starting this research, Fırat University Non-interventional Researches Ethics Committee (date: November 18, 2021 no: 2021/12-01) and written permission from the chief physician of the relevant training and research hospital taken. The study was conducted in accordance with the Principles of the Declaration of Helsinki.

## RESULTS

Of the cases, 128 (82.6%) were female in a total of 155 cases, with a mean age of  $20.28 \pm 10.93$  years (minimum 3-maximum 80), where 54.8% of the cases aged 18 years and below. A review of the marital status of the cases indicated that the cases were mostly single ( $n=122$ , 78.7%), as regards the education level, the cases were mostly secondary school graduates ( $n=51$ , 32.9%), and the majority of the cases were unemployed (50.3%) or students (40%). Twelve victims had a psychiatric history of mental retardation diagnosis. As regards reasons for referral for examination, 102 (65.8%) of the cases had history of sexual assault (Table 1).

The cases were most frequently reported to law enforcement (54.2%) (Table 2).

It was reported that 58 (37.4%) cases had a previous history of sexual assault or abuse prior to their application. As regards the alleged sexual assault or sexual abuse cases, the suspect was most frequently the victim’s friend or partner (Table 3).

**TABLE 1: Characteristics of the cases.**

		n	%
Marital status	Single	122	78.7
	Married	16	10.3
	Widowed/divorced	17	11
Level of education	Illiterate	26	16.8
	Primary school	32	20.6
	Middle school	51	32.9
	High school	41	26.5
	University	5	3.2
Profession group	Unemployed	78	50.3
	Student	62	40
	Employee	9	5.8
	Self-employment	4	2.6
	Officer	2	1.3
Psychiatric history	Mental retardation	12	7.7
	Schizophrenia	4	2.6
	Bipolar disorder	1	0.6
	Borderline personality disorder	1	0.6
	Unknown psychiatric diagnosis	137	88.5
Reason for arrival	Suspected sexual abuse	144	92.9
	Falling story (family's request)	11	7.1
	Total	155	100

**TABLE 2: Reasons for reflection of cases to judicial authorities.**

	n	%
Request of their families	52	33.5
Applying for law enforcement assistance	84	54.2
Due to pregnancy	3	1.9
Health personnel notification	9	5.8
Counselor notification	7	4.5
Total	155	100

Oral and anal penetration claims were raised in respectively 27 (18.8%) and 83 (57.6%) of 144 cases of alleged sexual abuses, and vaginal penetration was claimed in 83 (64.8%) female cases.

The account of medical history of the cases indicated that the sexual assault or abuse occurred frequently in the suspect's home/workplace (41.3%) or in the victim's own home (24.5%) (Table 4).

The suspect met the victim most frequently through the social surroundings, the neighborhood,

followed by the convenience provided by the kinship and the use of social media (Table 5).

The number of suspects was 1 individual in 139 (96.5%) cases, 2 in 4 (2.8%) cases, and 3 in 1 (0.7%) case among 144 cases that presented with a history of abuse.

**TABLE 3: The degree of closeness of the suspect in the cases.**

	n*	%
Friend/partner	55	38.2
Unknown person	23	16
Distant relative	21	14.6
Neighbor	14	9.7
Husband	11	7.6
Brother	5	3.5
Father	2	1.4
Father in law	1	0.7
Other	12	8.3
Total	144	100

\*11 cases sent to us with a history of falling were not included.

In the present study, the victim’s resistance was most frequently overcome by physical violence (34.7%) and threats (31.9%) (Figure 1).

Twenty (12.9%) cases had a history of alcohol, substance or drug abuse before or during the incident.

In 89.1% of the female cases, the hymen was in annular form.

Twenty one (16.4%) of the female cases had 1, 15 (11.7%) cases had 2, and 7 (5.5%) cases had 3 or

more natural notches, which mostly occurred at 3+9 o’clock (15.9%) and 9 o’clock (13.6%) location in the lithotomy position.

There was caruncula multiforme in 13 (10.2%) cases among women. As regards the remaining cases, 55.7% (n=64) of the hymens had no a traumatic injury, 29 (25.2%) had hymen tears in 1 location, 17 (14.8%) in 2 locations, and 4 (3.5%) in 3 locations, and that hymen tears most frequently occurred at 6 o’clock location (n=15, 29.4%). 9 (7%) cases were flexible hymen. Acute and chronic anal penetration manifestations were seen in 3 (1.9%) cases and 5 (3.2%) cases, respectively. All of the cases with acute sodomy symptoms were admitted within the first three days of the incident (Table 6).

Sixty four of the victims (41.3%) presented within the first three days of the incident, and 41 of those (26.5%) cases had signs of trauma in the non-genital areas, where these manifestations were mostly seen in the group that presented within the first 3 days of the incident (73.2%).

In 52.8% of the cases, there was a tear in the hymen as a result of sexual assault, 4 (3.1%) cases had an acute hymen lesion, and 75% of the cases with acute hymen tear presented within the first three days of the incident.

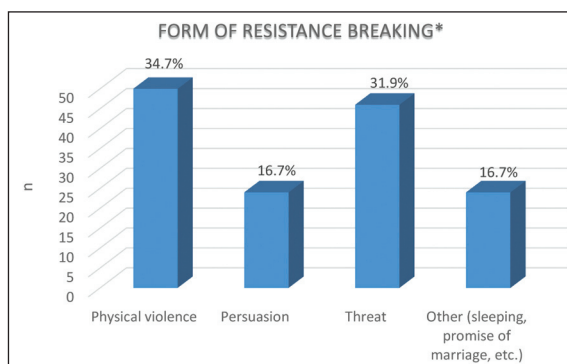
**TABLE 4: The place where the event took place.**

	n	%
Suspect's home/workplace	64	41.3
Victim's home	38	24.5
Empty land/abandoned building	26	16.8
Inside the vehicle	10	6.5
Nursing home/dormitory etc.	6	3.9
Prison	5	3.2
Hotel	4	2.6
Other	2	1.3
Total	155	100

**TABLE 5: How to meet the aggressor.**

	n*	%
Neighborhood	66	45.8
Kinship relationship	40	27.8
Social media	25	17.4
School	8	5.6
Business acquaintance	5	3.5
Total	144	100

\*11 cases sent to us with a history of falling were not included.



**FIGURE 1:** The aggressor’s way of breaking the victim’s resistance. \*11 cases sent to us with a history of falling were not included.

## DISCUSSION

Sexual violence is a globally recognized offense that has serious and lasting effects on victims and can affect individuals from all age groups. Relevant studies in the literature reported that the victims especially belonged to the 13-20 years age group.<sup>7-11</sup> Consistently, in the present study, the mean victim age (20.28 years) is in parallel with the mean victim age (15.9-26.5 years) found in similar studies conducted in other countries.<sup>7-9,12-17</sup> These data support the idea that mostly the young adults are chosen as targets in sexual offenses.

During childhood, the physical and mental defense skills are not fully developed. Therefore, the perpetrator, aiming to satisfy one’s sexual impulses, may consider the children as a target the resistance of whom can be easily broken. In certain studies, the rate of victims under the age of 18 years was 34% in

**TABLE 6:** The relationship of lesions in the body with the post-event presentation time.

Presence of non-genital trauma	Time between incident and inspection				Total
	0-3 days	4-7 days	8-30 days	Over 30 days	
No	34	13	34	33	114
There is	30	3	7	1	41
Total	64	16	41	34	155
Acute/old hymen tear					
No lesions	30	4	15	18	67
Acute tear	3	1	0	0	4
Old torn	20	7	17	12	56
Could not be evaluated	1	0	0	0	1
Total	54	12	32	30	128
Acute-chronic anal penetration findings					
No	58	16	40	33	147
Acute anal penetrations findings	3	0	0	0	3
Chronic anal penetration findings	3	0	1	1	5
Total	64	16	41	34	155

the Netherlands, 50% in the USA, and 84% in the Philippines.<sup>10,18,19</sup> Similar to the results reported in the relevant literature, the children constituted the majority of the victims (54.8%).

Throughout the world, women are more likely to be exposed to sexual violence. The World Health Organization underscored the severity of the issue by stating that one out of every 5 women in the world suffered rape or attempted rape at least once in her lifetime.<sup>4</sup> In the present study, the majority of the victims were women, which is consistent with other studies (with incidence rate varying between 86% and 97%).<sup>8,10,11,14,15,18</sup> Nevertheless, it should not be ignored the fact that due to the societal structures, the male sexual abuse victims might avoid reporting abuses associated with the likelihood of being of stigmatized as powerless, weak, and homosexual.

Similar to the other studies, the most frequented marital status of sexual assault victims in the present study (78.7%) were single.<sup>11,13</sup> The fact that single individuals maintain more frequent social contacts with the outside world may account for the abuse of this behavior against the victim and the fact that some of the sexual crimes are still perpetrated with the aim of getting married (abduction, etc.).

In certain studies, the students and unemployed individuals among the victims rated respectively 31%

and 37% in the Netherlands, 38.5% and 15.4% (or 54% and 14% in another study) in Denmark, 22.9% and 66.3% in Tunisia, 52.7% and 20.5% in France, where 87.93% were students in India.<sup>7,11-15,20</sup> Similar to the other studies, the fact that the predomination of unemployed (50.3%) and student (40%) victims may be associated with the high ratio of the adolescent and younger adult groups based on the mean age of victims.

The victim's inability to defend oneself physically or mentally is deemed as a factor that facilitates the act of abuse. In the present study, 3.8% of the cases had a history of mental illness and 7.7% had a history of mental retardation, where consecutive results on the same subject Zilkens et al. reported 39.7% with a known mental illness and 3.8% with mental retardation, Mulder et al. reported 18% with mental retardation and 29% with psychiatric morbidity, and Duchesne et al. reported mental retardation in 15% and psychiatric morbidity in 18% of the cases among male victims over the age of 15 years.<sup>16,18,21</sup> The fact that rate of reporting to the judicial units is low can be attributed to inability of victims to conceive the moral evil of the offense, inability to express themselves, and the negligence of their caregivers. These rates were lower in the present study compared to the relevant studies in the litera-



ture, likely due to the fact that the claims of victims might have been ignored, since in closed societies their attestations are ignored.

In the present study (54.2%), consistent with other studies, the majority of victims preferred to apply primarily to law enforcement following the incident (60.2%-99%).<sup>6,21,22</sup> This is suggestive of the fact that the police forces are generally the first step of application in sexual offenses, and that the victim can be exposed to the least trauma thanks to the training provided to the relevant public personnel in the process from complaint to police application to referral for the doctor's examination.

In sexual crimes, the perpetrator is not someone the victim is not familiar with, but is often known to the victim previously, contrary to popular belief. Relevant studies reported that the victims were abused by familiar individuals with such high rates as 65.5%-84.5%.<sup>7,11,13,15,16,18,20,23-25</sup> In the present study, consistent with the literature, the rate of cases in which the victim knew the aggressor was high (84%). Similar to other relevant studies, the abuser was often (38.2%) a friend or partner of the victim.<sup>8,16,18,23</sup> Evidence-based research, reveals that a large proportion of sexual assaults are committed by people known to the victims.<sup>26</sup> In the study of Jones et al., 28% of sexual assault perpetrators were foreigners.<sup>27</sup> 16% of cases were unknown people. People who did not enter any classification in the sociodemographic data form created with the victim's statement constitute 8.5% of the cases.

Incest is specific type of sexual abuse. The prevalence of incest cases is reported to vary between 5% and 62% according to culture, the source of the report, and geographic location.<sup>28</sup> In our study, there was incest in 8 (5.6%) cases. We think that the differences in the number of cases in the studies are mostly due to the difficulty in detecting incest.

The incident most frequently occurred at the suspect's house, at the suspect's workplace (41.3%) or at the victim's house (24.5%). According to Ingemann-Hansen et al., 19% and 25% of the incidents took place at the home of the perpetrator or the victim, respectively, where in a study by Duchesne et al. 26% and 17% of the incidents took place in the perpe-

trator's home and in another private house, respectively; and according to Tyagi et al., 31% at perpetrator's and 29.3% at victim's home.<sup>11,15,21</sup> Consistent with a number of relevant studies on sexual crimes, sheltered areas such as houses are preferred as the crime scene, which is suggestive of the fact that perpetrators took advantage of the close relationship and sense of trust between the perpetrator and the victim.<sup>8,13,14,20</sup>

Studies on male victims in France and Denmark showed that there was more than one perpetrator with the rates of 29% and 25%, respectively.<sup>20,21</sup> This same rate was reported as 17.2% by Sugar et al., 13.6% by Kolopp et al., 8.1% by Zilkens et al., and 6.4% by Ohayi et al.<sup>7,16,24,29</sup> The diversity of sample populations may account for the difference between our study (3.5%) and other relevant studies.

In the present study, 18.8% of the cases presented with alleged sexual abuse had oral penetration, 57.6% had anal penetration, and 64.8% of the female cases had vaginal penetration complaints. A review of literature indicated that parallel to our study, vaginal penetration was the most common type of abuse.<sup>14-16,29</sup>

Sustained communication between the victim and the perpetrator following sexual abuse and lack of reporting to judicial authorities increase the likelihood recurrence. In the relevant studies, Kolopp et al. reported the rate of recurring assaults as 24.8%, and Grossin et al.<sup>7,14</sup> Reported that the same rate was 13% in the group presented within 72 hours following the last event, where in delayed reporting cases the rate increased to 36%. In the present study, 58 (37.4%) cases had a previous history of sexual assault/abuse prior to the application. The recurrent incidences especially in the closed societies, may be caused by the fact that families tend to cover up the abuse within the family or the cases are simply not reported due to feelings such as fear and embarrassment of the victim.

In sexual crimes, there is usually an act of aggression by a stronger individual against a weaker individual. In certain cases, however, the physical force is replaced by factors that affect the will of the victim, including cheating, threats, blackmail, and marriage promises. In the study, the victim's resistance was

frequently broken by battery (34.7%) and threats (31.9%). Ben Khelil et al. reported threats and weapons in 24.6% of the cases, where in a Nigerian study on 78 adolescents, threats and physical force were used at a rate of 14.1% and 32.1%, respectively.<sup>13,24</sup>

Alcohol and/or psychoactive substance abuse may trigger risky sexual behaviors.<sup>7</sup> The victim is unable to resist the aggressor, and the aggressor may become further courageous and determined in one's actions, due to the weakening of consciousness during the assault and amnesia associated with alcohol and/or substance abuse. A comparison of the results of the present study with relevant studies indicated that compared to the rate (12.9%) reported in the present study, 66% of the victims consumed alcohol in the UK, 67% of the victims consumed alcohol and 4.5% used stimulants in Australia, and 12.3% in Nigeria and 4.8% in India used sedatives-drugs before the incident.<sup>9,16,24,30</sup> Habitual traits of societies, accessibility and prevalence of substance use affect the proportional differences in sexual offenses facilitated by drugs.

In cases of sexual abuse, early examination of the victim is very important so that the evidence of the incident can be acquired. The first 72 hours are critical, especially for the collection of biological evidence.<sup>31</sup> In the present study, 64 (41.3%) victims complained within the first three days following the incident. The fact that the above rate was lower compared to the results of the studies conducted in Australia, Serbia, United Kingdom, and the Netherlands (81.9%, 84.5%, 84%, 85% and 83%, respectively) can be attributed to victims' feeling vulnerable for a number of reasons, fear of being stigmatized, shamed, or even blamed, the public awareness level, and the weakness of trust in the justice mechanism.<sup>9,12,16,18,32</sup>

In certain cases, the only evidence of sexual abuse or assault may be the traumatic lesions in the body consistent with the claim. A meta-analysis study compiling 26 studies published between 1972 and 2011 reported the mean prevalence of general bodily injuries as a result of a sexual assault as 48.6% (6.3%-82%).<sup>33</sup> In the present study the incidence of extra

genital traumatic manifestations (19.8%-63.4%) was consistent with the rates reported in the above and other similar studies.<sup>1,7,12-14,29,30</sup> In the present study, these manifestations were more prevalent in the group that presented within the first 3 days of the incident (19.3% vs. 7%). Similarly, Grossin et al. and Maguire et al. reported the said rate as 39% vs. 6.3% and 40% vs. 7%, respectively, indicative of the fact that trauma manifestations were significantly higher during the first 72 hours of the incident.<sup>9,14</sup> This is suggestive of the importance of presenting within the early period for the detection of physical trauma manifestations, which may be the only evidence of sexual assault in certain cases. Especially in those who are married or have a history of sexual intercourse, there may be no symptoms or extra genital traumatic findings may be the only finding.

Genital examination, including hymen examination, is of great importance in terms of detecting evidence of sexual offense, contributing to the trial process. White and McLean reported that all the hymen tears were located at lower parts of the dial, with a majority (69%) at 5 o'clock-7 o'clock location, where Tyagi et al.<sup>11,25</sup> Reported that hymen tears were most frequently located at 5 o'clock location (24.39%) followed by 7 o'clock location (19.51%), where Jaiswani et al. reported that they were most prevalent (35.7%) in the 6-9 o'clock locations. Again, Suttipasit et al. reported that hymen lesions were located at the lower quadrants and Astrup et al.<sup>17,30,34</sup> Suggested that most of the anterior genital area injuries (hymen, post fourchette, fossa navicularis) located at the 6 o'clock position. In the present study, hymen tears were most frequent at the 6 o'clock location (n=15, 29.4%).

Relevant literature reported the frequency of genital traumatic lesions between 2.4% and 47%.<sup>9,13,14,16,17,19,21,24,29-31</sup> In the present study, there were acute genital manifestations in 4.5% of the cases. Eg et al. found hymen tears in 22% of 226 cases involving girls under 15 years of age, where Maguire et al.<sup>9,31</sup> Reported that 22.8% of the cases had hymenal tears. All the cases with manifestations of acute sodomy and 75% of the cases with acute hymen tears reported to judicial authorities within the first three days of the incident.

## CONCLUSION

In conclusion, adolescents and young adult women should be provided with training on the right approach, defense, and problem-solving skills against sexual acts they may be exposed to, and that this should be included in the compulsory education curriculum, if necessary. Detecting criminal manifestations becomes more challenging as the application is delayed following the sexual abuse incident. Therefore, the reasons of delayed reporting of crime by the victims should be determined, necessary precautions should be taken, awareness of public and relevant public personnel should be raised, and the cases should be elevated through a multidisciplinary approach by experienced physicians. Victims should be able to defend their rights without having to experience the same hurtful events again and again, by giving importance to their privacy and feelings.

## Source of Finance

During this study, no financial or spiritual support was received neither from any pharmaceutical company that has a direct connection with the research subject, nor from a company that provides or produces medical instruments and materials which may negatively affect the evaluation process of this study.

## Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

## Authorship Contributions

**Idea/Concept:** Turgay Börk, Ömer Tokgözlü; **Design:** Abdurrahim Türkoğlu; **Control/Supervision:** Ömer Tokgözlü; **Data Collection and/or Processing:** Abdurrahim Türkoğlu, Vahap Göçük; **Analysis and/or Interpretation:** Turgay Börk; **Literature Review:** Ömer Tokgözlü; **Writing the Article:** Ömer Tokgözlü; **Critical Review:** Turgay Börk; **References and Findings:** Abdurrahim Türkoğlu; **Materials:** Vahap Göçük.

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