Frequency and Characteristics of Types of Trauma in Sexual Assault Victims Aged 15 Years and Less Referred to Legal Medicine Centers of Fars Province, Iran

Fatemeh Ghodrati 1, Farideh Vaziri 2, Narjes Saadatmand 3, Mohammad Zarenezhad 4 and Marzieh Akbarzadeh 5, 5

1Department of Theology, Faculty of Humanities Science College, Yasouj University, Yasouj, Iran
2Department of Midwifery, Community Based Psychiatric Care Research Center, School of Nursing and Midwifery, Shiraz University of Medical Sciences, Shiraz, Iran
3Department of Midwifery, Gachsaran Branch, Islamic Azad University, Gachsaran, Iran
4Legal Medicine Research Center, Legal Medicine Organization, Tehran, Iran
5Department of Midwifery, Maternal-Fetal Medicine Research Center, School of Nursing and Midwifery, Shiraz University of Medical Sciences, Shiraz, Iran

*Corresponding author: Maternal-Fetal Medicine Research Center, Department of Midwifery, School of Nursing and Midwifery, Shiraz University of Medical Sciences, Shiraz, Iran. Tel: +98-36474254, Email: akbarzadm@sums.ac.ir

Received 2017 October 16; Revised 2018 August 27; Accepted 2018 August 28.

Abstract

Background: This study aimed to investigate the prevalence and characteristics of trauma in sexual assault victims aged 15 years and less referred to legal medicine centers of Fars Province, Iran.

Methods: This descriptive cross-sectional was carried out on all female victims of sexual assault aged 15 years old and less referred to legal medicine centers of Fars, Iran, during 2006 - 2012. The study population consisted of 3140 victims that was reduced to 2113 due to incomplete records of some cases. To analyze the data, descriptive statistics and Chi-square test were used in SPSS, version 16.

Results: The prevalence of teenage victims was 32.01%. The highest frequency was reported in 2006 and the next highest rate was reported in 2011. The ordinal place of the victims in family was between 4 and 6 in 79% of the cases. All the crimes happened in cities. In 6.4% of the cases, victims had experienced sexual assault. In 90.1% of the cases, criminals were aged 16 - 25 years old, and in 40.3% of the cases, they were familiar and had familial relationship with the victim. Sexual traumas in 57.1% of the cases were hymen tear and in 11.8% cases anal tear.

Conclusions: Most adolescent sexual assaults remain hidden from the law because of fear of exclusion from the family and society. Therefore, community awareness regarding the prevalence of rape should be raised, and the necessary steps should be taken by the authorities and families to control this crime. Enforcing severe punishments for offenders can be considered as a preventive measure.

Keywords: Sexual Assault, Adolescent, Perpetrator

1. Background

Every social system consists of conventional behavioral norms and patterns accepted by the society and drifting away from them results in deviation. Human nature is inherently opposed to any kind of force and violence; therefore, any use of violence is regarded as deviation (1). Historical studies show that assault has a very long history as human life, and it has been claimed that as societies digress from divine teachings, the rate, variety, multiplicity and plurality of deviations and distortions increase. In religious and divine teachings, all types of violence and harassment are prohibited and deprecated even towards plants and animals (1).

In terminology, adolescent sexual assault refers to any sexual contact with an adolescent through physical and emotional coercion. The term “sexual assault” refers to a situation in which someone who has committed sexual assault is out of family. “Sexual abuse” is used when the offender is one of the family members. Sexual assault is not always accompanied with intercourse, but any assault and contact with private parts of the body (such as breasts, genitals and buttocks) with no consent and by force is considered as sexual assault (2). According to a report by Canada Statistics Center in 2008, the rate of sexual assault in adolescent girls is more than twice higher than in adult young women (3). Hence, in new clinical guidelines and care of adolescent sexual assault victims, it was emphasized that certain treatment and management measures should be taken to care for special needs and injuries of these adolescents (4).
In a cross-sectional study conducted on 2200 students from three universities in China in 2010, some information was obtained regarding the prevalence of sexual assault experience and/or sexual victimization during the past 12 months; the results indicated that more than a quarter of students (25.4%) experienced at least one form of sexual assault during the past 12 months, either as a perpetrator or as a victim, and nearly 10% of the students experienced it as both perpetrator and victim. The victims were almost three times less than perpetrators (87 versus 246 persons). Getting involved in high-risk behaviors, previous abuse by teacher or bullying by others increased the chance of becoming a sexual assault perpetrator or victim or both (5).

In a study of 35 hospitals of Ontario, among 1082 rape victims, 665 (61.5%) were female, of whom 347 (32.1%) were adolescents and 318 (29.4%) were young adults. The rates of stimulating vagina and clitoris by tongue and mouth were 13.1% versus 8.2%, the rates of fellatio were 20.8% versus 14.3% and the rates of vaginal penetration with a penis were 64.0% versus 51.4% in adolescents and young adults, respectively (6).

Studies showed that adolescent girls are less likely to seek healthcare services; therefore, these girls may be at risk for re-experiencing sexual assault and suffer from long-term and chronic complications of assault (such as posttraumatic stress disorder). Thus, due to adolescents’ resistance to referring to counseling and treatment centers, promoting nursing care (7) and trying to minimize the risk of re-victimization are necessary (8, 9). Unfortunately, sexual assault is common among adolescents. Studies have revealed that one out of every four adolescent girls experiences verbal or physical sexual assault (10). In a qualitative study conducted on 20 adolescent victims of sexual assault aged 14 - 17 years, post-assault medical forensic examinations investigating the quality of personal / emotional care of adolescent victims indicated that nurses who are sensitive and sympathetic to adolescent patients’ physical and psychological needs should be used in medical centers, these nurses must have the necessary knowledge about the sensitive situation and characteristics of adolescence period (7).

Due to high social sensitivities in Iran, there are no official statistics about sexual assault. Of course, all crimes committed in the field of rape are not certainly included in statistics provided by the police because some people may be abused but because of social and family conditions are not willing to complain and make a judiciary case. Police officials have announced that 900 cases of sexual assault have been reported in 2011. Cases of sexual assault increased in 2012, including sexual assault and rape cases which have been increased by 1.2%, of course, it may be due to opening Sexual Assault Investigative Section. Also, the rate of sexual crimes decreased by 7% in 2013 compared to 2012, and now (in 2014), the rate of these crimes in Iran is 1.7%. About 40% of the statistics are related to women’s sexual assault and 60% to buggery, which is usually committed by deception in individuals under 15 years of age. Of course, the mentioned statistics only include cases reported to the police and courts and actual figures are certainly different from reports provided, because a large number of rape victims do not register their complaint in order to maintain their reputation and honor and many of those who declare their complaint to the police are deterred from pursuing their complaint in the court proceedings (11).

Regarding the statistics provided, it should be also noted that they relate generally to sexual crimes that include different types such as adultery, buggery, and femoral sex and official statistics have not separated these crimes and they are dealt under umbrella terms such as sexual offenses or acts incompatible with chastity. Despite the prevalence of this crime, there are no studies conducted on the epidemiology of sexual assault in Iran or Fars province. Due to the importance of the subject and the fact that the factors contributing to a crime are different in various societies, we made an attempt to study gender, demographic characteristics and clinical examinations of sexual assault victims referred to legal medicine centers. The present study investigated the frequency and characteristics of sexual assault victims aged 15 years and less referred to legal medicine centers of Fars (Southern Part of Iran).

2. Methods

This descriptive cross-sectional study was carried out on all cases of sexual assault in adolescents aged 15 years and less referred to legal medicine centers of Fars (including three west, east and central legal medicine centers) during 2006 - 2012. The inclusion criteria comprised all the cases with complete records. We excluded the cases from whom obtaining additional information about victims or plaintiffs by telephone was not possible. To analyze the data, Pearson’s correlation coefficient and Chi-square test were run in SPSS, version 16.

3. Results

The rate of adolescent sexual assault victims was estimated at 17% during seven years. Regarding the age of the victims, 24% (128 cases) were 4 years old or less and 76% (406 cases) were 5 - 10 years old. The highest rate of this crime was 114 (21.3%) in 2006, and the next highest rate was

The rate of sexual assault recorded in India has increased slightly from 2006 to 2011. In terms of victim's educational level, 19.5% were below school age, 14.1% were illiterate and 11.7% had elementary school education. Additionally, 76% of the victims belonged to families with 4-9 children; the ordinal place of the victim in family was between 4 and 6 in 79% of the cases. All the crimes happened in the city often at noon (72.3%, n = 238). In 6.4% of the cases, victims had experienced sexual assault.

Victims' fathers were aged between 46 and 50 years in most cases (47%) and the majority of them (n = 191; 35.8%) were self-employed, and fathers had elementary school education in 47.2% of the cases (n = 252). Victims’ mothers were aged between 36 and 40 years in most cases (31.6%, n = 169), and they were housekeepers in 47% (n = 251) of the cases. Perpetrators were aged between 16 and 25 years (90.1%, n = 481), 22.7% (n = 19) of the perpetrators had junior high school education and diploma, and 36.1% (n = 193) had elementary school education. Further, 84.5% of the perpetrators were single (n = 451). In 50.7% of the cases (n = 271), there was no familial relationship between the perpetrator and victim, and in 40.3% of the cases (n = 215), there was a familial relationship between them.

There was a significant relationship between offender's age and the kind of physical trauma (P ≤ 0.001) and location of trauma (P ≤ 0.001; Table 3). The locations of crime were out of the city in 61.8% of the cases (n = 330), and in 22.1%, it happened in the victims’ homes, and in other cases, it was not clear. Physical injuries included redness and soreness in 35.8% of the cases (n = 191) and bruise in 9.6% of the cases (n = 51). The site of injury in the majority of the cases was reported to be limbs (57.1%; n = 305; Table 4). Sexual traumas in 57.1% (n = 305) of the cases were hymen tear and in 11.8% (n = 63) cases anal tear (Table 5).

4. Discussion

Rape and sexual abuse are of those social traumas resulted from many social problems and disorders, and at the same time, they can cause many mental and social problems and disorders in victims.

The present study showed that the frequency of sexual assault has increased slightly from 2006 to 2011. In a research entitled as “Has sexual crime been affected by pornography in India” and conducted by Math over a period of four decades from 1971 to 2008, the results showed the overall percentage of crimes committed has increased in the past decade within the range of 3% - 4.9%. Also, the number of internet users has clearly increased since 1998 (13). In a study entitled as “sexual assault against women” conducted by Kalra and Bhugra in 2013, the results indicated that 67% - 84% of cases of sexual assault may not be reported. The rate of sexual assault recorded in India has increased from 2487 in 1971 to 24206 in 2011. Cases of sexual assault among children in India have plummeted from 213 in 1971 to 712 in 2001 (14).

There are no official statistics about indecent behaviors in Iran; however, according to report of Iran’s judicial system, about 1313 cases of sexual assault have been reported in 2014; although these figures show 30% reduction compared to reports provided in 2013, sexual assault has sharply increased from 200 to 300 cases since 2010 and the figure is almost constant. Also, the rate of women and girls’ harassment was about 72 thousand cases in 2010. According to statistics reported by the police force, cases of women and girls’ harassment have been 142,933 in 2014 showing a 98% increase. These figures include cases from all ages and are not limited to adolescents.

The results obtained from the mentioned studies conducted inside and outside Iran are similar to the findings of the present research performed on adolescents in terms of increase in the prevalence of sexual assault.

Official statistics of all countries reported in the past four decades indicate a significant increase in sexual crimes. Approximately, a quarter of United States’ population has been sexually abused. Also, the number of sexual crimes has been annually estimated about 10,000 cases in England, which is approximately less than 1% of all crimes recorded. Increment in the rate of sexual crimes committed in the world and financial and moral costs caused by them has led to extensive efforts to identify the factors affecting people’s tendency to commit sexual crimes in recent decades.

Factors such as changing social taboos about sexual assault, having various sexual partners and having previous experience of victimization can contribute to sexual assault and harassment. Also, adolescents aged 16 - 24 years are more likely to become exposed to sexual assault than other age groups.

In the present study, 90.1% of perpetrators were aged between 16 and 25 years, and most of them were students and about 40.3% of the cases were familiar with each other. In a study conducted by Basile et al. with the title: “committing sexual assault by adolescents” in the United States in 2004, the results indicated that the rate of sexual violence has been 3.2% during the last 12 months, and 1 out of 5 women (18.3%) and 1 out of 71 men (1.4%) have committed sexual assault. Most women (79.6%) were victims of complete sexual assault and had experienced it for the first time before 25 years of age, and almost half of the female victims (42.2%) experienced sexual assault for the first time before 18 years of age. In both genders, most victims considered assault agents as perpetrators. In 80% of the cases, perpetrators were familiar with their victims. In a study conducted on 74 high school students, the rates of male-
female, female-female and male-male sexual assaults were 27%, 5% and 1.3%, respectively (20).

A research conducted by Martin et al. on 756 cases of sexual assault in France indicated that in 57% of cases, the perpetrator was one of the family members and in 262 cases the perpetrator was familiar with the victim (21). In a study, 69% of victims knew the perpetrator (162/111). The rate of perpetrators who were accidently known by the victim was 20% (n = 32) and the rates of perpetrators who were known, sexual partner and unknown were respectively reported 42% (n = 68), 7% (n = 11) and 18%. Type and severity of sexual assault significantly differed based on the relationship between victim and perpetrator. Use of weapon was reported as the most life-threatening case of assault, which was committed by a known perpetrator (22); the results were to some extent consistent with the findings of the present research.

In this study, sexual traumas in most cases (57.1%) were hymen tear and in 11.8% cases were anal tear. In a study conducted on sexual assault with the title of “physical damages caused by sexual partner” in 2007, Baker et al. concluded that the prevalence rates of damage to the reproductive organs, hymen tear, fossa navicularis, and rectal damage or anal penetration were 44.5%, 29%, 25%, and 56%, respectively (16). In a retrospective study, hymen tear was reported in 93.8% of the cases (23).

There are no official and unofficial statistics about sexual and non-sexual injuries in Iran. Statistics related to indecent behaviors in Iran during 1999 - 2001 indicated that the rate of acts incompatible with chastity resulted in Hadd (some penalties have been determined for many sins in Islamic law; such punishments specified and determined are called Hadd.) punishment was 0.09% (n = 3577) in 1999, 0.07% (n = 3131) in 2000, and 0.09% (n = 4489) in 2001, and the rate of acts resulted in Tazir punishment was 60.1% (n = 63090) in 1999, 45.1% (n = 63761) in 2000, and 49.1% (n = 12175) in 2001; these are general statistics and have not been separated based on age (1).

It is noteworthy that regarding concerns about recurrence of these crimes and deviations by perpetrators of sexual crimes and preventing them due to the growing crisis caused by the increase of these crimes and due to the lack of efficiency or at least insufficient criminal means to control and restrain sexual offenders, using the following techniques by judiciary, police, education and health planners should be considered (24) in order to reduce to some extent the prevalence of this ominous phenomenon among adolescents who are national capitals of a community.

Different classes should be educated based on morality and religion in order to reduce the ignorance rate related to human and ethical values resulted from various factors. For example, in societies such as Islamic communities where there are some limits in people’s way of dressing, violation of this limit can be considered as something abnormal and a stimulating factor for a person prone to assault. Many perpetrators participated in sexual assault have pointed out that they have been stimulated by seeing inappropriate dressing in female victims and it was the reason of assault. In contrast, many women believe that they always feel insecure with every type of dressing; however, dangers threaten unveiled women more (25). National planners should strive to promote community awareness regarding the prevalence of this crime, and the necessary steps should be taken by planners and families to control and reduce it. Further, severe punishments should be in effect for these offenders, which could deter individuals from such deeds. Other factors that can lower the rate of this crime are lack of freedom of sexual offenders after a while for reasons such as withdrawal of the plaintiff due to his/her fear of losing reputation and honor, losing

### Table 1. Correlation of Frequency of Age and Education of Victim Girls Aged 15 Years and Less in Different Years

<table>
<thead>
<tr>
<th>Year</th>
<th>Age Education</th>
<th>Education</th>
<th>Under School Age</th>
<th>Illiterate</th>
<th>Primary School</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>114 (21.3)</td>
<td>9 (7.9)</td>
<td>40 (35.1)</td>
<td>65 (57)</td>
<td>114 (100)</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>64 (12.0)</td>
<td>7 (10.9)</td>
<td>27 (42.2)</td>
<td>30 (46.9)</td>
<td>64 (100)</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>71 (13.3)</td>
<td>5 (7)</td>
<td>41 (57.8)</td>
<td>25 (35.2)</td>
<td>71 (100)</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>56 (10.5)</td>
<td>4 (7.1)</td>
<td>29 (51.8)</td>
<td>21 (41.1)</td>
<td>56 (100)</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>61 (11.4)</td>
<td>2 (3.3)</td>
<td>33 (54.1)</td>
<td>26 (42.6)</td>
<td>61 (100)</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>96 (18.0)</td>
<td>6 (6.3)</td>
<td>55 (57.2)</td>
<td>35 (36.5)</td>
<td>96 (100)</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>72 (13.5)</td>
<td>8 (11.1)</td>
<td>37 (51.4)</td>
<td>27 (37.5)</td>
<td>72 (100)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>534 (100)</td>
<td>41 (7.7)</td>
<td>262 (49.1)</td>
<td>231 (43.2)</td>
<td>534 (100)</td>
<td></td>
</tr>
</tbody>
</table>

\(^a\)Values are expressed as No. (%).  
\(^b\)Pearson Chi-square, value: 19.790, df: 12, P = 0.071.
Table 2. Frequency of Family Characteristic of Victim Girls Aged 15 Years and Less in Different Years

<table>
<thead>
<tr>
<th>Variables</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of children</td>
<td></td>
</tr>
<tr>
<td>&lt; 4</td>
<td>128 (24.0)</td>
</tr>
<tr>
<td>5 - 10</td>
<td>409 (79.0)</td>
</tr>
<tr>
<td>Ordinal place of the offspring</td>
<td></td>
</tr>
<tr>
<td>&lt; 3</td>
<td>24 (4.5)</td>
</tr>
<tr>
<td>4 - 6</td>
<td>422 (79.0)</td>
</tr>
<tr>
<td>7 - 9</td>
<td>38 (7.2)</td>
</tr>
<tr>
<td>Unknown</td>
<td>50 (9.4)</td>
</tr>
<tr>
<td>Time of the crime</td>
<td></td>
</tr>
<tr>
<td>Morning</td>
<td>18 (3.4)</td>
</tr>
<tr>
<td>Noon</td>
<td>386 (72.3)</td>
</tr>
<tr>
<td>Evening</td>
<td>85 (15.9)</td>
</tr>
<tr>
<td>Night</td>
<td>45 (8.4)</td>
</tr>
<tr>
<td>Relationship between the offender and the victim</td>
<td></td>
</tr>
<tr>
<td>Neighbors</td>
<td>30 (5.6)</td>
</tr>
<tr>
<td>Classmates</td>
<td>13 (2.4)</td>
</tr>
<tr>
<td>Relatives</td>
<td>215 (40.3)</td>
</tr>
<tr>
<td>Non-familiar</td>
<td>271 (50.7)</td>
</tr>
<tr>
<td>Roommate</td>
<td>2 (0.4)</td>
</tr>
<tr>
<td>Teacher</td>
<td>3 (0.6)</td>
</tr>
<tr>
<td>Mother’s occupation</td>
<td></td>
</tr>
<tr>
<td>Worker and retired</td>
<td>115 (21.5)</td>
</tr>
<tr>
<td>Housewife</td>
<td>252 (47.0)</td>
</tr>
<tr>
<td>Other</td>
<td>96 (18.0)</td>
</tr>
<tr>
<td>Unknown</td>
<td>72 (13.5)</td>
</tr>
<tr>
<td>Father’s age</td>
<td></td>
</tr>
<tr>
<td>31 - 35</td>
<td>114 (21.3)</td>
</tr>
<tr>
<td>36 - 40</td>
<td>64 (12.0)</td>
</tr>
<tr>
<td>41 - 45</td>
<td>71 (13.3)</td>
</tr>
<tr>
<td>46 - 50</td>
<td>251 (47.0)</td>
</tr>
<tr>
<td>&gt; 51</td>
<td>34 (6.4)</td>
</tr>
<tr>
<td>Father’s occupation</td>
<td></td>
</tr>
<tr>
<td>Retired</td>
<td>29 (5.4)</td>
</tr>
<tr>
<td>Working</td>
<td>85 (15.9)</td>
</tr>
<tr>
<td>Self-employed</td>
<td>191 (35.8)</td>
</tr>
<tr>
<td>Employee</td>
<td>357 (68.4)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>3 (0.6)</td>
</tr>
<tr>
<td>Other</td>
<td>69 (12.9)</td>
</tr>
<tr>
<td>Father’s education</td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>114 (21.3)</td>
</tr>
<tr>
<td>Primary school</td>
<td>252 (47.2)</td>
</tr>
<tr>
<td>Secondary school</td>
<td>96 (18.0)</td>
</tr>
<tr>
<td>Associate degree</td>
<td>72 (13.5)</td>
</tr>
</tbody>
</table>

Table 3. Frequency of Age and Marital Status of the Offender in Victim Girls Aged 15 Years and Less

<table>
<thead>
<tr>
<th>Variables</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of offender</td>
<td></td>
</tr>
<tr>
<td>&lt; 15</td>
<td>16 (3)</td>
</tr>
<tr>
<td>16 - 25</td>
<td>481 (90.1)</td>
</tr>
<tr>
<td>26 - 35</td>
<td>37 (6.9)</td>
</tr>
<tr>
<td>Total</td>
<td>534 (100)</td>
</tr>
<tr>
<td>Marital status of the offender</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>431 (84.5)</td>
</tr>
<tr>
<td>Married</td>
<td>45 (8.4)</td>
</tr>
<tr>
<td>Unknown</td>
<td>38 (7.1)</td>
</tr>
<tr>
<td>Total</td>
<td>534 (100)</td>
</tr>
</tbody>
</table>

*Values are expressed as No. (%).

social and family position and fear of offender’s revenge and threats, increasing social security, identifying perpetrators, and quick determination of offenders’ crime by judicial authorities. Court’s decision regarding these cases should not remain unknown to the public because it may make offenders assertively commit such brutal crimes and leave the victim in a deserted place and move towards the next victim.

4.1. Conclusion

The prevalence of adolescent victims is rising. In our cases, all the crimes happened in cities and most perpetrators were aged between 16 and 25 years. Perpetrator was unknown to the victim in half of the cases and the crimes were committed out of the city. Victims had experienced hymen and anal tears. Children and adolescents are of vulnerable groups who are at risk for sexual crimes. Multiple sexual assaults are committed in the context of dysfunctional families. Wherever these crimes happen, because of fear of rejection by the family, they remain hidden. Providing a framework to refer to judicial centers for solving problems while honor and dignity of victims are maintained and offenders are dealt with legally can reduce problems.

Acknowledgments

This article was extracted from a Master’s thesis by Mrs. Narjes Saadatmand approved by Shiraz University of Medical Sciences. The authors would like to thank Shiraz University of Medical Sciences, Shiraz, Iran and the Center for Development of Clinical Research of Nemazee Hospital for Women Health Bull. In Press(In Press):e62905.
their cooperation. We also thank Dr. Nasrin Shokrpour for editorial assistance.

Footnotes

Conflict of Interests: The authors declare that they have no conflicts of interest.

Ethical Considerations: Approved by Shiraz University of Medical Sciences.

References


