

## Demographic Study of Female Victims of Sexual Violence Referred to Forensic Medicine in Fars Province

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### ABSTRACT

**Aims:** To determine the clients' profile of referred in female victims of sexual violence.

**Methods:** In a period of 7 years (2006-2012), 2113 cases of plaintiffs complaining about women sexual violence were investigated by a questionnaire after receiving permission from Shiraz University of Medical Sciences and Forensic Medicine Organization. Data were analyzed after entering SPSS software, version 16, using descriptive statistics and chi-square.

**Results:** The prevalence of rape has decreased in different ages. In 1668 cases, the plaintiffs were female (78.93 %) and most of the victims (36.5%) aged between 16 and 25 years old. According to Fisher test, there was a significant relationship between the age of the victims and different years of examination ( $p \leq 0.001$ ). The highest frequency of 30% is reported at elementary education level. The highest frequency of sexual violence against women (18.3%) was reported in 2006 followed by 18.2% in 2011. In terms of occupation, the highest frequency of victims was related to students estimated as 40.52%.

**Conclusions:** Because of the unpleasant nature of sexual violence, there is a serious need for urgent and necessary consideration of its harmful effects and root out this social dilemma by policy makers. Sexual abuse must be prevented especially using religious achievements or by developing effective control strategies detected and by experience female health care users treated.

**Key words:** female, forensic medicine, sexual violence, victims.

### INTRODUCTION

Undoubtedly, sexual violence and harassment, as one of a variety of social deviations, is considered among the most important disorder factors which disrupts the cultural and social affairs as well as order and discipline of the communities. Meanwhile, the Islamic legal system and the resulting criminal policy strongly react to sexual deviations generally and violence and harassment, in particular.<sup>1,2</sup> Because there is a reasonable relationship between the family and community health and safety and security for

individuals, especially women, is based on the foundation of the family, and on the other hand, it adds to the ability of the community and prevents harm to the vast and influential sectors of society, then violence must be discussed as a major social problem. In this way, it helps to ensure the health, safety and stability of the family and, consequently, the health and safety of the community.<sup>3,4</sup> Annually, millions of women and children around the world are victims of attacks, rape and sexual abuse. In recent years, official statistics in all countries have confirmed a significant increase in this category of crimes.<sup>5</sup> Sexual violence

### CORRESPONDENCE

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refers to any form of violent sexual behavior of one person to another despite her /his opposition. This violent sexual behavior can be motivated by threats, abuse, injury and sexual harm.<sup>1,6</sup> A WHO study on women health and violence against women, its data gathered from a study of more than 24 thousand women in 15 regions from 10 countries, indicated that the frequency of physical or sexual violence, or both of them, by sexual partner was 15-71% during the lifetime and 29- 62% in most areas.<sup>7</sup> It is estimated that out of every five women one person faces a form of violence in their lifetime. In some cases, it can lead to serious injury or death. Today, most governments paid attention to violence against women in general and violence by a husband or other sexual partner in relative terms as a social problem of society.<sup>8</sup>

Violence against women is a major threat to economic and social development. General Assembly of United Nations presented some plans to confront all forms of violence against women and to implement the Convention on the Elimination of All Forms of Discrimination against Women.<sup>9</sup> According to the WHO report, in the first international study on types of violence, 150 million girls and 73 million boys under the age of 18 were sexually abused in the world just in 2002.<sup>10</sup> Study conducted in Iran (2010) showed that 22.8% of the (1,495 high school students) reporting violence between their parents.<sup>11</sup> Based on the conducted studies, other research refers to a variety of domestic violence and less violence and sexual abuse have been reported in Iran.<sup>12-14</sup>

In a study in Iran, for screening and determining the extent of intimate partner violence, the prevalence

of physical, psychological and sexual abuse against women was 43.7%, 82.6% and 30.9% respectively.<sup>15</sup> It was indicated that sexual violence was 28.6% and the most common type of sexual violence, sexual relationship by force, in this study was 13.1%.<sup>16</sup> The aim of this study was to investigate the demographic characteristics of female victims of sexual violence (rape) who referred to Fars Forensic Medicine between 2006 -2012.

## METHODS

This retrospective study was conducted to investigate plaintiffs in cases of women sexual violence over a period of 7 years (2006-2012). Out of 3240 cases 2113 had required information. In this study, the demographic data of female plaintiffs of sexual violence were studied. The data were analyzed after entering the SPSS software, version 16. Descriptive statistics (frequency and percentage) were used for data analysis. Approval was taken from Shiraz University of Medical Sciences and Forensic Medicine Organization.

## RESULTS

A total of 2113 victims of were reported at the Fars Forensic Medicine Centre over a seven-year period (2006-2012); there were 1668 female plaintiffs (78.93%). Of these, it was reported that most of the victims (609; 36.5%) aged 16-25 years old followed by those who aged 6-15 years old (32%). The lowest incidence of violence was over the age of 35 (6.7%). According to Fisher test, significant correlation was found between the age of the victims and different years of examination ( $p \leq 0.001$ ) [Table-1].

**Table-1: The relationship between age and sexual violence victims in different years**

Year		<5	6-15	16-25	26-35	35>	Total
2006	N	38	114	98	35	21	306
	%	12.4%	37.3%	32.0%	11.4%	6.9%	100.0%
2007	N	14	64	86	40	6	210
	%	6.7%	30.5%	41.0%	19.0%	2.9%	100.0%
2008	N	23	71	96	38	20	248
	%	9.3%	28.6%	38.7%	15.3%	8.1%	100.0%
2009	N	21	56	62	37	14	190
	%	11.1%	29.5%	32.6%	19.5%	7.4%	100.0%
2010	N	14	61	69	32	10	186
	%	7.5%	32.8%	37.1%	17.2%	5.4%	100.0%
2011	N	35	96	115	36	22	304
	%	11.5%	31.6%	37.8%	11.8%	7.2%	100.0%
2012	N	20	72	83	31	18	224
	%	8.9%	32.1%	37.1%	13.8%	8.0%	100.0%
total	N	165	534	609	249	111	1668
	%	9.9%	32.0%	36.5%	14.9%	6.7%	100.0%

\* Fisher's Exact Test                   .; PV:≤0.001

The average rate of rape among 16-25 women was 0.46/10,000 adult women in 2006. It was decreased from 0.46/10,000 to 0.30/10,000 in 2010. The average rate of rape among over 35 years women was 0.098/10,000 adult women in 2006 that decreased to 0.044/10,000 women in 2010 [Table-2].

**Table-2: The Ratio violence victims in 10,000 women of different ages in 2006 and 2010**

Year		<5	6-15	16-25	26-35	35>	Total
2006	N	38	114	98	35	21	306
	The ratio of 10,000 women*	0.178	0.53	0.46	0.16	0.098	1.44
2011	N	35	96	115	36	22	304
	The ratio of 10,000 women**	0.06	0.26	0.30	0.14	0.044	0.82

The highest frequency of sexual abuse by victims' educational level was of same proportion of around 30% each year [Table-3].

**Table-3: The relationship between educations and sexual violence victims in different years**

	undermined	Under the age of literacy	illiterate	Primary school	Secondary school	Associate Degree	BSC	total	
2006	N	9	38	40	112	82	16	9	306
	%	2.9%	12.4%	13.1%	36.6%	26.8%	5.2%	2.9%	100%
2007	N	7	14	27	53	74	25	10	210
	%	3.3%	6.7%	12.9%	25.2%	35.2%	11.9%	4.8%	100.0%
2008	N	5	23	41	68	78	26	7	248
	%	2.0%	9.3%	16.5%	27.4%	31.5%	10.5%	2.8%	100.0%
2009	N	4	21	29	53	49	30	4	190
	%	2.1%	11.1%	15.3%	27.9%	25.8%	15.8%	2.1%	100.0%
2010	N	2	14	33	56	52	26	3	186
	%	1.1%	7.5%	17.7%	30.1%	28.0%	14.0%	1.6%	100.0%
2011	N	6	35	55	84	94	28	2	304
	%	2.0%	11.5%	18.1%	27.6%	30.9%	9.2%	0.7%	100.0%
2012	N	8	20	37	74	63	21	1	224
	%	3.6%	8.9%	16.5%	33.0%	28.1%	9.4%	0.4%	100.0%
total	N	41	165	262	500	492	172	36	1668
	%	2.5%	9.9%	15.7%	30.0%	29.5%	10.3%	2.2%	100.0%

Pearson Chi-Square; value: 59.040 , df:36, pv:0.009

The highest number of sexual violence against women (over 300) was reported in 2006 and 2011 [Table-4].

**Table-4: Frequency of victims of sexual violence in different years**

Year		Frequency
2006	N	306
	%	18.3%
2007	N	210
	%	12.6%
2008	N	248
	%	14.9%
2009	N	190
	%	11.4%
2010	N	186
	%	11.2%
2011	N	304
	%	18.2%
2012	N	224
	%	13.4%
total	N	1668
	%	100.0%

In terms of occupation, the highest frequency of victims were students (40.52%) followed by unemployed people. The lowest frequency was in below working age and workers reported as 2.15% and 3.65% respectively [Table-5].

**Table-5: The relationship between distribution of jobs and sexual violence victims in different years**

Variable	Under the age	housewife	Non-Governmental	Governmental	Unemployed	students	undetermined	total	
Year	Job								
2006	N	20	38	26	10	32	180	0	306
	%	32.8%	15.4%	17.3%	9.9%	14.3%	26.6%	0.0%	18.3%
2007	N	11	28	18	5	24	121	3	210
	%	18.0%	11.4%	12.0%	5.0%	10.8%	17.9%	1.4%	12.6%
2008	N	13	31	29	23	26	124	2	248
	%	21.3%	12.6%	19.3%	22.8%	11.7%	18.3%	0.9%	14.9%
2009	N	10	40	20	18	32	65	5	190
	%	16.4%	16.3%	13.3%	17.8%	14.3%	9.6%	2.4%	11.4%
2010	N	0	0	0	0	0	0	186	186
	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	88.2%	11.2%
2011	N	4	69	36	27	73	88	7	304
	%	6.6%	28.0%	24.0%	26.7%	32.7%	13.0%	3.3%	18.2%
2012	N	3	40	21	18	36	98	8	224
	%	4.9%	16.3%	14.0%	17.8%	16.1%	14.5%	3.8%	13.4%
total	N	61	246	150	101	223	676	211	1668
	%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square; value: 1586.591, df: 36, PV:≤0.001

From 2006 to 2009, it was reported that most victims of sexual violence were housewives and schoolchildren while the lowest incidence of violence was in women below working age and self-employed workers. In 2010 and 2011, most women were studying and the lowest number of women was workers. In 2012, only 47% were below working age [Table-6].

**Table-6: Frequency of family characteristic of victim in female sexual violence victims**

variables	N (%)	variables	N (%)
Number of child		Relationship between the offender and the victim	
<4	293(17.75)	friend	398(23.86)
5-10	957(57.37)	The house	7(0.41)
11>	154(9.23)	families	251(15.04)
undetermined	264(15.82)	Non-familials	825(49.46)
Rank child		classmate	22(1.31)
<3	213(12.76)	neighbor	133(7.97)
4-6	856(51.31)	Teacher	19(1.13)
7-9	336(20.14)	fellow	13(0.77)
Unknown	263(15.76)	Having parents	
Time of the crime		yes	1087(65.16)
Morning	137(8.21)	No	302(18.10)
Noon	439(26.31)	undetermined	279(16.72)
Evening	87(5.21)		
night	828(49.64)		
undetermined	177(10.61)		

## DISCUSSION

Sexual violence occurs all over the world, though in many countries there is little research conducted on this issue. Because of the private nature of sexual violence, it is difficult to estimate the extent of this problem.<sup>6</sup> In our study, 78.93% of sexual violence plaintiffs were female where as the proportion varies from one study to another like 93.9% (Ezechi OC et al<sup>17</sup>) and 40% (United States<sup>18</sup>).

In our study, the highest frequency of sexual assault belonged to female victims aged 16-25 and the lowest frequency was reported for women over 35 year old. This amount of frequency increased somewhat from 2006 to 2011. Results of a retrospective study of French Forensic reports during a seven-year period indicated that among a total of 756 cases during the study period, the mean age of the subjects was 16.5 years old and in 31.7% of cases, the victims were aged 15 years old or more. In official criminal charges, 46.2% of cases had no sufficient evidence and in 36.3% of cases the sex offenders were convicted.<sup>19</sup>

Ezechi et al<sup>12</sup> reported sexual assault as higher in single girls and women over the age of 20 and Isfahan<sup>20</sup> also showed a significant relationship between marital status and sexual abuse.

A review by Mirzaee et al<sup>21</sup> indicated 12-35% of women having sexual abuse before the age of 18. Another study<sup>22</sup> in Tehran reported it between 20 and 30. The above studies are consistent with the results of our studies. Studies show that women are eight times more prone to violence.<sup>6</sup> Adolescents victims aged 16-24 years are more exposed to rape than the other age groups.<sup>23-25</sup>

Young age, lack of social protection and being alone were the risk factors for women to be exposed to violence and rape.<sup>26</sup> In our study, in terms of

education, the highest frequency of sexual abuse victims was among low educated people (elementary) while in terms of occupation was among students and unemployed people with a higher frequency reported in 2011 and 2012.

In one study, 7603 students were investigated for sexual assault among which nearly 20 percent of the samples reported a widespread experience of SA. The prevalence of sexual assault was significantly higher in women compared to men. Victims were at greater risk before coming to college (at school time).<sup>27</sup> The findings from the first large study of Canadian women since the 1990s shows that a large proportion of women at university experienced a history of sexual assault in the pre-university period.<sup>28</sup> Mostly unemployed<sup>22</sup> and pre-University disable students (18%) had sexual assault with rape in 15%.<sup>29</sup>

Adolescents are more likely to experience disastrous situations of psychological stress and general health problems than others.<sup>30</sup> There was no significant relationship between work place (public and private) and sexual harassment.<sup>20</sup> About 80% of sexual assaults is not reported for various reasons.<sup>21,31</sup>

## CONCLUSIONS

The prevalence of rape has decreased in different ages and the most female victims were aged between 16 and 25, had primary education and were students. A high rate of rape frequency observed in the years of 2006 and 2011.

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