

Frequency of phobia among sexual assault victims referred to legal medicine organization in Isfahan province

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ABSTRACT

Introduction: Phobia is a mental disorder that can occur following rape and pose a serious threat to women's health. The aim of this study was to determine the frequency of paranoia in female victims of rape referred to Isfahan Forensic Medicine Center in 2014. **Methods:** This descriptive study included 93 women rape victims referred to Isfahan Forensic Medicine Center who were randomly selected. The study tool was the demographic information and mental health questionnaire scl-90. Descriptive statistics and Spearman correlation, independent *t* test, one-way analysis of variance in SPSS version 17 were used to analyze the data. **Results:** This study showed that there was a significant positive correlation between rape and phobia ($P < 0.001$) so that the prevalence of phobia in people who were raped was moderate to high. Also 9.1% (8 people) of mild phobias (scores 1-0), 79.5% (70 people) moderate phobias (scores 1-1) and 11.4% (10 people) phobias in the range Severe (scores 4-3) reported. Of the seven sub-indices in the phobia section, 52.3% (46 people) had very unreasonable fears. Approximately 52.3% (46 people) were afraid of traveling, 46.6% (41 people) were afraid of being alone. Going, 38.6% (34 people) fear of the market, 51.1% (45 people) anxiety, 12.5% (11 people) feeling of alienation, 1.1% (1 person) fear of fainting in total. **Conclusion:** Due to the increasing number of rapes in women and the recognition of rape as a factor disrupting mental health, strategies and resources should be provided to prevent rape against women and its adverse consequences, including phobia and early diagnosis and treatment of this complication and other complications Be allocated.

Keywords: Phobia, sexual assault, women

Introduction

Sexual crimes are one of the most violent crimes that can be committed against individuals. The effects of such crimes on the

victims remain for a long time and sometimes are never erased.^[1] Rape a sexual intercourse is defined as a child or adult (vaginal, oral, or anal) performed with a penis, finger, or other objects. Rape occurs when the victim consents to fear of death or injury, or when the drug is administered by force^[2] and through coercion, intimidation, or deception.^[1] Sexual crime is one of the forensic topics and one of the problems of today's civilized societies,^[3] which is a common and important issue in the field of public health in developed and developing countries. This

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phenomenon also has serious consequences for women physically and mentally.^[4] Rape is a complex problem that has disturbing aspects such as medical, psychological and legal aspects. The prevalence of this problem in the world varies from 13 to 39% in women and this rate is 3% in men.^[5] Statistics from the National Center for Women’s Studies indicate that between 680,000 and 1.5 million women are raped in the United States each year.^[6] The highest number of rapes has been announced in the Congo and in Iran the provinces of Tehran (one thousand six hundred and fifty sexual crimes per year) and Qom annually (1556 sex crimes) with the highest rate of reported rapes is.^[7] The psychological effects after rape are many and include aggression, depression, phobias, memory disorders and suicide.^[8,9] A report by the World Health Organization shows that one woman is raped every 5 min, and that these women are more likely than women who have not been raped to suffer from depression, suicide attempts, chronic anxiety, aggression, and problems. They are related to substance abuse, phobias, low self-esteem, guilt, self-blame and pessimism. A set of symptoms including fear, helplessness, shock, guilt, phobia, embarrassment, aggression and self-blame are seen in these people.^[10] Existence of various emotional pressures will increase the risk of mental breakdown and will damage mental health, as a result, the person is not able to behave in harmony and harmony with society and maintain his mental health.^[11]

One of the psychological effects of rape is phobia. Severe or morbid fear, known in psychology as fear or phobia. Aggression has many physical, psychological and social effects. It is a morbid and persistent type of fear in a person that disrupts daily life. It causes symptoms such as feelings of helplessness, loneliness, social incompatibility, disregard for the rights and wishes of others. Short-term problems caused by phobias include headache, stomach pain, back and shoulder pain, palpitations, sweating, tremors, nausea, vomiting, dizziness, fainting, deep fatigue, long-term problems include: stress, anxiety, disability Social, educational, occupational and marital, but in any case, each of these affects the ability to be happy and healthy. What has made researchers pay attention to phobias, the consequences of such behaviors such as: creating the negative image among others is rejection by others, academic failure, drug use and social deviance in general. Being raped has significant emotional effects on victims, such as feelings of helplessness, feelings of anger, feelings of fear and especially loss of attractiveness in rape victims, inability to trust others, constant preoccupation with crime, and feelings of powerlessness Justice in the world.^[12] Gitighoreishi^[13] in 2007 showed that the victims did not feel healthy and were afraid, anxious and aggressive. Hebert *et al.*^[14] Found that adolescent girls had higher clinical levels of post-rape stress symptoms than boys. The results of other researches also confirmed that Chen *et al.*^[15] Also found a statistically significant association between sexual abuse and phobia, depression, and suicide attempt.^[16,17] Due to the fact that not enough studies have been done in this field so far and due to the serious effects of rape, we decided to conduct a study to determine the frequency of phobias and its sub-indicators

and the correlation between rape and phobia in female victims of rape. Refer to Isfahan Forensic Medicine Center in 2014.

Materials and Methods

This descriptive study was conducted in 2014. The study population included all female rape victims referred to forensic medicine in Isfahan province, from which 93 people were selected using available random sampling method. The researcher first referred to the forensic medicine center of Isfahan province and randomly selected those who met the inclusion criteria. The minimum sample size in this study was 93 samples which was calculated according to the following formula:

$$n = \frac{p(1-p)z_{1-\alpha/2}^2}{d^2}$$

After obtaining the necessary permits, sampling was first performed from Isfahan Forensic Medicine Center. Inclusion criteria included no previous experience of rape, no mental illness, no experience of a tragic accident of loved ones during the past 3 months. Data collection tool was Demographic Characteristics [Table 1] Questionnaire including questions on age, education, occupation, income, parents’ occupation, parents’ education, number of family members, marital status and 90 SCL Mental Health Questionnaire prepared by Dragotis *et al.* in 1973 and 9 indicators. Measures depression, paranoia, phobia, psychosis, anxiety, self-morbidity, obsession and aggression. The questions of this questionnaire examine the mental state of the individual. The 5-point Likert scale (none-little-somewhat-high-very high) was used for scoring. A score of (1-0) indicates a mild phobia, a score of (1-3) indicates a moderate phobia, and a score of (3-4) indicates a severe phobia.

Table 1: Demographic information of the rape victim

Percentage	Frequency	Scale Variable	
2.2	2	Sub-diploma	victim education
37.6	35	Diploma	
47.3	44	Cardinal	
12.9	12	Bachelor and higher	
100	93	Total	
6.5	6	House keeper	The job of a housewife victim
11.8	11	Worker	
12.9	12	Employee	
68.8	64	Other cases	
100	93	Total	
88.2	82	single	Marital status of victim
3.4	4	Married	
7.5	7	Divorcee	
100	93	Total	
77.4	72	<500 thousand	Victim income (Rial)
22.6	21	500000-1000000	
100	93	Total	
43	40	18-22	Age of victim (year)
49.5	46	23-27	
4.3	4	28-32	
3.2	3	33-38	
100	93	Total	

7 Phobia Indices Unreasonable fear, fear of going out, fear of fainting in public, fear of the market, fear of traveling, anxiety, feeling of alienation, are examined in this questionnaire. The validity of this questionnaire was 72%^[18] and its reliability in 2007 by Fooladvand was 91% using the halving method.^[19] In this study, the retest method was used to evaluate the reliability of the scl-90 questionnaire questions. For this purpose, the questionnaire was completed by ten qualified samples and then ten days later, the questionnaire was completed again by the same people and the correlation between the answers was measured. The results were consistent with 94% of the scientific validity of the data collection tool. Also, Cronbach's alpha coefficient in this study was estimated to be 0.92. Questionnaires were filled out for people who have not been raped for more than 3 months. Ethical considerations in this research were as follows: (1) obtaining permission from the Vice Chancellor for Education of Shahid Beheshti University of Medical Sciences and the code of ethics from the Ethics Committee of Shahid Beheshti University of Medical Sciences to introduce to research centers. (2) Submitting a written letter of introduction by the researcher to research centers. (3) Explain the nature, purpose, benefits and duration of research to all research units and obtain informed and written consent from them. (4) Answering the questions of research units during, before and after research. (5) Observance of fidelity and honesty during the research and in the report 6. Ensure research units keep information obtained. (7) Explain to research units about freedom to participate or not participate in research and withdraw from research whenever they wish. (8) Refer victims of rape to relevant centers in If needed (in case of depression, stress, etc.). Data were analyzed using SPSS-17 and descriptive and inferential statistics were used to determine the frequency of aggression and Spearman correlation tests, independent *t* test and one-way analysis of variance.

Findings

As can be seen in the table below, the mean and standard deviation of the age of the victims was 23.38. 3.40. Most of the victims were in the age range of 23 to 27 years, which was 46 or 49.5%. In terms of education level, 44 (47.3%) of the victims had associate degrees. 82 (88.2%) of the victims were single. The income level of 72 people (77.4%) of the victims was less than 500 thousand and 21 people (22.6%) had an income between 500 thousand to 1 million.

As can be seen in Table 2, 37 (39.8%) percent of the fathers of the victims had a diploma and 60 (64.5%) of the mothers of the victims had a diploma. 41 (44.1) of the fathers of the victims were neither workers nor employees and were divided according to the job classification scale among other cases. Most of the mothers of the victims were 60 (64.5%) housewives and 85 (51.6%) lived in families with a medium population

9.1% (8 people) of mild phobia (scores 1–0), 79.5% (70 people) moderate phobia (score 3-1) and 11.4% (10 people) severe phobia they had. This index has 7 subindices, among which fear of travel and unreasonable fear are seen as very high in more than 50% of cases.

Table 2: Demographic information of the family of the rape victim

Percentage	Frequency	Variable Scale	
4.3	4	داوسیب	Education of the victim father
43	40	Sub-diploma	
39.8	37	Diploma	
9.7	9	Cardinal	Education of the victim's mother
3.2	3	Bachelor and higher	
100	93	Total	
11.8	11	illiterate	Education of the victim's mother
64.5	60	Sub-diploma	
20.4	19	Diploma	
2.2	2	Cardinal	The victim's father's job
1.1	1	Bachelor and higher	
100	93	Total	
37.6	35	Worker	The victim's father's job
18.3	17	Employee	
44.1	41	Other cases	
100	93	Total	The job of the victim's mother
64.5	60	House keeper	
4.3	4	Employee	
31.2	29	Other cases	Victim family population
100	93	Total	
12.9	12	Low population	
51.6	48	Crowded	Victim family population
35.5	33	Average population	
100	93	Total	

According to Table 3 of 7 sub-index related to phobia, 38.6% (34 people) of the studied units had a very high level of fear of the market. 52.3% (46 people) had a very high level of unreasonable fear. 52.3% (46 people) fear of traveling, 51.1% (45 people) anxious, 46.6% (41 people) fear of going out alone, 12.5% (11 people) and feeling alienated and 1.1% (1 person) fear of fainting They were together.

To evaluate the relationship between rape and phobia in victims, Spearman correlation coefficient was used, which showed a positive and significant correlation between paranoia and rape ($P < 0.001$), so that the prevalence of phobia in those who were raped was moderate to high.

Discussion

In this study, the mean age of the victims was 23–27, which was almost consistent with the studies of Gitighoreishi^[13] and Kharamin *et al.*^[20] and Alklayat *et al.* He was under 24 years old, which was lower than our study.^[21,22] and in the study of Hutching and Dutton,^[23] it was 34 years, which is higher than our study. If we look, we see that the average age of people who have been raped is lower than in the past, perhaps because these people have more freedom from their parents than in the past. In this study, most of the raped women were single and divorced and married women were in the next ranks, which was consistent with the studies of Gitighoreishi^[13] and different from the study of Hutching and Dutton^[23] in 1997, in which Most of the women

Table 3: Frequency of phobia index in victims

Total		Very high level		High level		Partly		Slightly		Never		Sub Index
Percent	number	Percent	number	Percent	number	Percent	number	Percent	number	Percent	number	
100	88	38.6	34	27.3	24	13.6	12	1.9	8	11.4	10	Fear of the market
100	88	46.6	41	18.2	16	11.4	10	6.8	6	17	15	Fear of going out alone
100	88	52.3	46	14.8	13	8	7	13.6	12	11.4	10	Fear of traveling
100	88	52.3	46	9.1	8	6.8	6	4.5	4	27.3	24	unreasonable fear
100	88	12.5	11	8	7	20.5	18	18.2	16	40.9	36	Feeling weird
100	88	51.1	45	14.8	13	20.5	18	5.7	5	8	7	anxious
100	88	1.1	1	4.5	4	14.8	13	11.4	10	68.2	60	Fear of fainting in public

who were raped were married. This may be due to the fact that the freedom of single women has increased compared to the past, so these people are more at risk. In terms of education level in our study, most people had associate degrees, which did not match the results of studies, Kharamin *et al.*^[20] and Hutching and Dutton,^[23] when most people had undergraduate education. The number of educated people in the society has increased compared to the past. The results of this study showed that there was a statistically significant relationship between sexual abuse and phobia, which is consistent with the results of a study by Chen *et al.*^[15] The results of our study showed that phobias in women after rape are significantly which is similar to the results of Nickerson *et al.*^[16] The results of our study showed that rape in women is associated with short-term and long-term psychological and psychiatric effects such as phobia, which is consistent with the results of a study by Mirzai *et al.*^[17] The results of our study showed that those who were sexually abused had mood disorders and a high level of phobia in these people, which is consistent with the study of Hutching and Dutton^[23]. The results of the present study show that the rate of mental disorders in victims is higher than usual, which is consistent with the results of the study of Kharamin *et al.*^[20] and Alklayat *et al.*^[21] Among the limitations of this study were the lack of cooperation of the participants and the lack of correct answers to the questions due to creating a sense of shame and embarrassment and exposing them to rape.

Conclusion

The results of this study showed that 32.3% of the victims had mild mental disorders, 64.5% had moderate mental disorders and 1.1% had severe mental disorders. Also, most of the psychological symptoms seen in these people were phobia, depression, and aggression. Overall, the results of our study show that victims of sexual abuse had phobias and the majority of people (70 people) showed moderate phobias (scores 1–3) and early diagnosis and treatment of this disorder is a great help to victims. It will endanger the psyche of individuals in the community, and to prevent this phenomenon, educational and preventive interventions should be expanded at the community level and family and social networks should be strengthened. Therefore, it is recommended that due to the serious complications of rape, victims who have suffered psychological damage be identified and given psychotherapy and behavioral therapy to reduce the serious complications of this incident.

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Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

References

1. Knight B. Simpson's Forensic Medicine. 11th ed. New York: Oxford University Press; 1997.
2. Sarkar J. Mental health assessment of rape offenders. *Indian J Psychiatry* 2013;55:235-43.
3. Gheshlaghi F. The History, Ethics, Rules in Midwifery and Forensic Medicine. 1st ed. Isfahan: Honarhaye Ziba Press; 2005. [Persian].
4. Islam MN, See KL, Ting LC, Khan J. Pattern of sexual offences attended at Accident and Emergency Department of HUSM from Year 2000 to 2003. *Malays J Med Sci* 2006;13:6-30.
5. Blackburn AG, Mullings JL, Marquart JW. Sexual assault in prison and beyond: Toward and understanding of lifetime sexual assault among incarcerated women. *Prison J* 2008;88:351-77.
6. Karlsson ME, Zielinski MJ. Sexual victimization and mental illness prevalence rates among incarcerated women: A literature review. *Trauma Violence Abuse* 2020;21:326-49.
7. Kordi H, Nozari A. Experiment of kinds of rape. *J Soc Welfare* 2015;15:7-30. [Persian].

8. Sadock BJ, Kaplan HI, Sadock VA. Kaplan and Sadock's Synopsis of Psychiatry: Behavioral Sciences/Clinical Psychiatry. American: Lippincott Williams and Wilkins; 2007.
9. Ward T, Beech A. An integrated theory of sexual offending. *Aggress Violent Behav* 2006;11:44-63.
10. Hall GC, Hirschman NR. Toward a theory of sexual aggression: A quadripartite model. *J Consult Clin Psychol* 1991;59:662-9.
11. Giovagnoli AR, Meneses RF, da Silva AM. The contribution of spirituality to quality of life in focal epilepsy. *Epilepsy Behav* 2006;9:133-9.
12. Grella CE, Stein JA, Greenwell L. Associations among childhood trauma, adolescent problem behaviors, and adverse adult outcomes in substance-abusing women offenders. *Psychol Addict Behav* 2005;19:43-53.
13. Gitighoreishi A. Mental profile of girls experiencing sexual abuse. *Andishe Raftar Appl Psychol* 2007;1:25-31. [Persian].
14. Hebert M, Lavoie F, Blais M. Post-Traumatic Stress Disorder/PTSD in adolescent victims of sexual abuse. Resilience and social support as protection factors. *Cien Saude Colet* 2014;19:685-94.
15. Chen LP, Murad MH, Paras ML, Colbenson KM, Sattler AL, Goranson EN, *et al.* Sexual abuse and lifetime diagnosis of psychiatric disorders: Systematic review and meta-analysis. *Mayo Clin Proc* 2010;85:618-29.
16. Nickerson A, Steenkamp M, Aerka IM, Salters-Pedneault K, Carper TL, Barnes JB. Prospective investigation of mental health following sexual assault. *Depress Anxiety* 2013;30:444-50.
17. Mirzai J, Khodaei MR, Mohammad Khani P. Effect of sexual violence on the incidence PTSD. *J Rehabil* 2006;7:65-74.
18. Clark CB, Perkins A, McCullumsmith CB, Islam MA, Hanover EE, Cropsey KL. Characteristics of victims of sexual abuse by gender and race in a community corrections population. *J Interpers Violence* 2012;27:1844-61.
19. Foladvand KH. The relationship between organizational climate and mental health workers in public hospitals in Ilam. *J Ilam Univ Med Sci* 2007;1:44-50.
20. Kharamin SHA, Gorgi R, Golam Zade S, Amini K. The prevalence rate of post-traumatic stress disorder in the rape victims of Kohgiluyeh and Boyairahmad province during 1390-1391. *J Legal Med Islamic Repub Iran* 2013;18:99-105.
21. Elklit A, Christiansen DM. Risk factors for posttraumatic stress disorder in female help-seeking victims of sexual assault. *Violence Vict* 2013;28:552-68.
22. Machado CL, DE Azevedo R, Facuri CO, Vieira MJN, Fernandes AMS. Posttraumatic stress disorder, depression, and hopelessness in women who are victims of sexual violence. *Int J Gynecol Obstet* 2011;113:58-62.
23. Hutching PS, Dutton MA. Symptom severity and diagnoses related to sexual assault history. *J Anxiety Disord* 1997;11:607-18.