

MEDICOLEGAL ASSESSMENT IN PUNJAB

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ABSTRACT... Introduction: Globally, rape of women is a serious health, social and religious concern and is considered as a violation of women basic human right. Objective: The aim was to ascertain incidence of natural sexual offence (rape) in Puniab and to analyze the data with respect to sociodemographic characteristics, findings of medicolegal examination and results of evidence collected from victims of sexual assault. Material and Method: This retrospective study was conducted on 148 female victims of rape brought to Forensic Medicine Department of King Edward Medical University Lahore, Fatima Jinnah Medical College Lahore and Nishtar Medical College, Multan from January 2012 to December 2013 for medicolegal examination. Details pertaining to socio-demographic profile of the victim, incident, findings of medical examination and results of evidence collected were noted. Data was analyzed using SPSS version 20. Result: The most affected age group was 11-20 years (60.8 %). Majority of victims were unmarried (70.9%), non- working (79.72%) and of lower socioeconomic class (71.6%) All were Muslims (100%). The highest number of victims was examined on the second day (24.3%). 31% cases were of gang rape. Majority knew the assailant (45.9%). The commonest place of offence was an isolated place (66.2%) Extragenital injuries were seen in 10.8% cases. Hymen was intact in 3.3% victims. The tears of hymen were old in 77.6% and fresh in 22.3% cases. Semen was detected in 18.2% cases. 1.3% victims were pregnant and 4% were intoxicated. Conclusions: The study highlights the importance of addressing rape as an important health issue.

Key words: Rape, Female Victim, Medicolegal examination, Punjab.

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INTRODUCTION

Sexuality, an intrinsic and compulsive requirement of human beings, is considered as a basic human right^{1,2}. All the religious codes accept the principles of normal sexual behavior of humans. With the progress of civilization over ages, all societies have developed some norms to regulate the sexual behavior of its members and have legalized them under the specific conditions of marriage and family laws. Sexual intercourse or sex related acts performed in a way which is against the provision of the law of the land is considered as sexual offence³. Rape is defined as the unlawful sexual intercourse by a man with a woman without her consent, against her will or with her consent obtained by force, fear, or fraud or with any woman with or without her consent below the age of 14 years^{3,4}. Sexual violence has a profound negative impact on physical and mental health of the victim with both short and long-term consequences^{5,6}. An old saying that "to die of

hunger is a small matter, but to lose your chastity is a huge matter," still resonates in contemporary culture in many countries around the world. Therefore, rape is a particularly complex crime to analyze, partly because many sexual assaults are never reported due to extreme social stigmata^{2,7}.

Sexual violence affects millions of women worldwide cutting across cultural and religious barriers². Although under reported, it is a frequent and significant public health issue in countries of both the developed and developing world. It is estimated that, worldwide, one in five women will become victim of rape or attempted rape in her lifetime⁸. 85,000 women are raped annually in USA⁹, 300 per 100,000 women in South Africa¹⁰ and four out of every ten women in Nigeria¹¹. A high rate of sexual assault is found in Asian countries as well. According to the studies, the percentage of female victims reporting sexual assault is 60% in Japan¹², 25% in India¹³ and 53-

62% in Bangladesh14.

Rape in Pakistan has been notable, and continues to be a barbarous tool for suppressing women in the country. The 2013 National Crime Data report for Pakistan documented rape rate of 8.4 women per 100,000 population (16.8 per 100,000 women), with 10% being gang rapes¹⁵. The NCMC reports that during 2008- 2013, 10,703 cases of rape have been registered across the country. Statistically, Punjab left all the other provinces behind registering 8,806 of the total 10,703 rape cases. 722 cases each were registered in Khyber-Pakhtunkhwa (K-P) and Sindh followed by 295 in Islamabad, 86 in Balochistan and 22 in Gilgit-Baltistan respectively¹⁶.

Securing evidence of sexual assault is one of the most difficult tasks in forensic medicine⁷. The forensic expert is mainly concerned with medicolegal examination, collection of evidence and analysis of biological specimens to identify the perpetrator of the crime¹⁷. Poor medical evidence is often responsible for low conviction rate¹¹.

OBJECTIVES

The aim of the study was to evaluate the data with respect to:

- Socio- demographic characteristics of the victims.
- History of assault: Place of incident, number of assailants, type and site of injures, relationship with the assailant, time lapse between incident and forensic examination.
- Examinations: Physical and genital examination including evidence of general and local violence.
- Results: tests done for detection of semen, pregnancy, intoxication.

MATERIAL AND METHOD

This retrospective study included 148 female victims of rape brought for medicolegal examination to the Forensic Medicine Department of King Edward Medical University Lahore, Fatima Jinnah Medical College Lahore and Nishtar Medical College, Multan, in metropolitan cities of

Punjab, Lahore and Multan from January 2012 to December 2013. Details pertaining to age, sex, religion, socioeconomic status, place of incident, time interval between incident and examination, number of assailants, relationship with assailants, findings of physical and genital examination and results of evidence collected during examination were noted. Data was collected on a predesigned proforma and then analyzed using SPSS version 20. Prior to medical examination, informed written consent was taken from all the victims or their parents.

RESULTS

The age of the victims ranged from a three year old child to a thirty nine years old woman. The most vulnerable age group was 11-20 years (60.8%) followed by 21-30 years (26.3%), 31-40 years (8.1%) and 0-10 years (4.7%) in decreasing order of frequency. Most of the victims were of 16-20 years age. (Table I)

Age group (in years)	Number (n-148)	%age
0-10	7	4.7
11-20	90	60.8
21-30	39	26.3
31-40	12	8.1
Table-I. Distribution of the victims according to age		

Majority of victims were unmarried 105 (70.9%), non-working 118 (79.7%) and of lower socioeconomic group 106 (71.6%). All were Muslims 148 (100%) as shown in table II.

The victim was assaulted by a person known to the victim in 68 (45.9%) cases; in 51 (34.4%) cases by a stranger while in 25 cases (16.8%) the assailant was a neighbor. The commonest place of offence was an isolated place 98 (66.2%) followed by the house of the accused 26 (17.5%) and victims house 16 (10.8%) respectively. There were 46 (31.01%) cases of gang rape with maximum of four assailants involved in one case. (Table III)

Maximum number of victims was examined on the second day of incident 36 (24.3%) while 26 (17.5%) cases were examined after 1 month. (Table IV)

Socio-economic Variables	Number (n=148)	%age	
Marital Status			
Unmarried	105	70.9	
Married	43	29	
Religion			
Islam	148	100	
Other	-	-	
Occupation			
Student	20	13.5	
Working	10	6.7	
Not Working	118	79.7	
Socioeconomic status			
Lower class	106	71.6	
Middle class	42	28.3	
Upper class	-	-	
Table-II. Distribution of the victims according to			

Only 16 (10.8%) of the victims revealed physical findings of violence on the body in the form of abrasions and bruises. Hymen was ruptured in 143 (96.6%) cases of which 32 (22.3%) cases had recent tears.5 (3.3%) victims were virgo intacta as shown in Table V.

socioeconomic variables

Most of the victims 122 (82.4%) had changed clothes. Of the 26 cases presenting with the clothes worn at the time of the assault, 14 (53.8%) had positive findings for stains. Swabs were taken for the presence of semen in 110 cases. In 38 cases, they were not taken as more than three weeks had elapsed since the incident The laboratory analysis detected semen in 27 (18.2%) cases. 2 (1.3%) victims were pregnant while 6 (4%) victims were intoxicated at the time of assault (Table-VI).

DISCUSSION

Rape of females is a heinous crime that appears to be enshrined in culture and religion. In some parts of the world, the assailant is punished by being stoned to death whereas in the old Jewish law, such people were ostracized from the society¹⁸. In Pakistan, any sexual relation outside bond of marriage is illegal as it is forbidden by Islam and law. Sexual Violence against women is a violation of our cultural and religious values.

Type of relationship	Number (n=148)	%age
Acquaintance	68	45.9
Stranger	51	34.4
Neighbour	25	16.8
Close Friend	2	1.3
Student of the same school	1	0.6
Master and servant	1	0.6
Place of incident		
Victim's house	16	10.8
Accused house	26	17.5
Isolated place	98	66.2
Field	03	2
Guest house / hotel	05	3.3
No of Assailants		
Single	102	68.9
Multiple	46	31.01

Table-III. Relationship of victims with assailant, place of offence and no of assailants

Time interval	Number	%age
<24 hrs	18	12.1
24-48 hrs	36	24.3
48-72 hrs	13	8.7
4-7 days	19	12.8
1-2 weeks	14	9.4
2-4 weeks	22	14.8
>1 month	26	17.5
Total	148	100

Table-IV. Distribution of the victims according to time of examination of victims

Injuries	Number	%age`
Physical injuries on body	16	10.8
Intact hymen	5	3.3
Recent hymen tears	32	22.3
Old hymen tears	111	77.6

Table-V. Distribution of injuries in sexual assault victims

Result	Number	%age`
Sperm present	27	18.2
Pregnancy test positive	2	1.3
Toxicological analysis positive	6	4

Table-VI. Results of laboratory tests of biological specimen of victims

With ever increasing population, with degradation of socio-cultural and moral values, such incidences are increasing day by day in our country. The study was conducted on 148 alleged victims of rape in Punjab during 2012-13. In the past, 123 cases were studied by Hassan et al in Lahore in 2002¹⁷, 93 cases by Parveen et al in Faisalabad in 2008¹⁹ and 180 cases by Khan et al in Karachi in 2013²⁰. The true prevalence of the different forms of sexual violence against females is not well known in South East Asia and especially Pakistan. Only few studies all over Pakistan had been reported and they had been very diverse because of various definitions of sexual violence, different years of study, cultural and regional variations and different inclusion/exclusion criteria. Therefore, it is difficult to compare all the variables of existing research data with other studies conducted from time to time in Pakistan

In this study, victims' age ranged from 3 to 39 years. Majority of the victims (60.8%) was between 11-20 years of age. These results are in agreement with the study by Manzoor et al (62.2%)²¹, Parveen et al (51.6%)¹⁹, Al-Azad et al (69.57%)⁴ and Sarkar et al (68.9%)⁷ respectively. Most of the victims belonged to 16 -20 years age group (37.1%) also reported by Sarkar et al (34.4%)7. Islam et al²² found 33.5% cases in 12-15 years age group. In a study done by Sharma²³, the alleged rape victims were mostly girls of 15-18 years. El-Elemi² observed that the incidence of natural sexual offences was most in age group 18-28 years. Adolescent victims were the most common victims (76.9%) in study of Malhotra²⁴. Thus, it can be said that all ages are vulnerable to sexual assault.

According to our study, majority of the victims were unmarried (70.9%) which is in line with study of Al-Azad et al (78.69%)⁴, Parveen et al (63.45%)¹⁹, Islam et al (77.7%)⁶ and Das et al (76%)¹. There is no documentation of the marital status of victims of sexual assault in developed countries because it is acceptable in their society for sexual contact to take place even without lawful wedlock. All the victims were Muslims. Islam et al⁶ also reported similar Muslim predominance (95.5%). This is

in line with the population majority of both the countries. Most of the cases belonged to lower socioeconomic class (71.6%) thus supporting previous researches, linking low socioeconomic status and sexual assault^{4.6}.

Nearly half (45.9%) of the assailants were known to the victims. This is in accordance with Sarkar et al (44.4%)⁷, Parveen et al (59.1%)¹⁹ and Hassan et al (57%)¹⁷. Studies in India, Portugal, Malaysia, South Africa and Uganda7,25-29 showed that approximately 2 out of every 3 sexually violent acts are committed by someone acquainted to the victim. 34.8% of the rapists were strangers in our study. Strangers have also been reported as common perpetrators in studies by Okonkwo et al (34.8%)11, Riggs et al (39%)30, DuMont (49.2%)³¹ respectively. Malhotra²⁴ reported that rape by assailant known to the victim is common among girls less than 10 years of age. Incidence of rape by strangers increases significantly with age. The commonest place of offence was an isolated place followed by house of the accused. This is in contrast to results of Sarkar et al7 and Grossin et al32 who reported victims house as the commonest place. This may be because many of the victims were abducted and then raped in our study.

More than one assailant was observed in 31.01% cases consistent with studies by Parveen et al (31.18%)19 and Hassan et al (30%)17. Also Grossin et al32 in his study found that rape was done by more than one assailant in 15% of cases examined within 72 hours and in 10% cases examined after 72 hours. One third of the victims (36.4%) were brought for medicolegal examination within 48 hours. Similarly one third of the cases were examined within 72 hours in study by Sarkar et al7. Du Mont31 reported that 40.1% of victims were examined within 2-6 hours of the incident. In study by Khan et al, 36.7%20 cases were examined within 6-24 hours. The early reporting may be due to awareness among urban population of the metropolitan cities.

Extragenital injuries on the body were found in 10.8% of victims. This is in accordance with

studies by Parveen et al19 and Daru18 who found 13.98% and 13.1% cases with non genital injuries. Physical evidence of violence on the body was present in only 15% of the victims in study by Hassan et al¹⁷ also supporting our findings. Hymen was ruptured in 143 (96.6%) cases of which 22.3% cases had fresh tears while 3.3% were virgo intacta. Sarkar et al⁷ reported rupture of hymen in 85% of the victims. Al Azad et al4 found fresh tears in the hymen at 6 o' clock position in 34% of the cases while Daru¹⁸ observed 17.1% victims with recent tears in hymen thus in agreement with our results. 4.8% cases had intact hymen in studies by Hassan et al¹⁷ and Islam et al⁶ which is consistent with our findings. There are various explanations for presence/absence of injuries. Majority of victims in our study are young and middle aged females while genital injuries are more common in children and postmenopausal women. The absence of physical injuries may not contradict the allegation as it may be attributed to the vulnerability of the victims and to the fact that minimum resistance was offered by the victim due to complete control by the assailant. Minor physical injuries healing rapidly may be missed in cases with delayed examination or there may be false allegation⁷. Moreover, in case of early examinations, subcutaneous bruises are likely to be missed as they appear after 48 hours of assault.

According to our study, swabs collected for semen detection were positive in 18.2% of cases. This is in agreement with study by Daru¹⁸ in which spermatozoa were detected in 22% cases and Islam et al²⁶ who reported evidence of semen and spermatozoa in 17.6% cases. This can be explained by the fact that the probability of detecting semen decreases as the interval between the assault and medical examination increases. The chances of yielding positive results become even lower if the victim has washed private parts, urinated, taken bath or changed clothes (82.4% in our study).

1.3% victims were pregnant in our study. Boonma³³ also reported that 3.2% cases were pregnant at the time of examination while Islam quoted 2% victims reported with pregnancy. 4% victims were

under the influence of drug or alcohol in our study. This is in contrast to studies by DuMont et al³¹ and Okonkwo et al¹¹ who observed that 41.7% and 21% victims were under the influence of alcohol or drugs at the time of assault respectively. The reason may be that young females are the victims in our study who can be easily pacified and offer less resistance. Therefore, the assailant does not need to resort to other methods including intoxication to overcome the resistance of the victim.

CONCLUSIONS

Rape victims usually belong to young age group between 11-20 years; majority being unmarried, non working and belonging to lower socioeconomic group. In most of cases, one acquainted assailant raped victim at an isolated place. Most common genital finding is old healed ruptured hymen.

NGOs, researchers, health sector and the policymakers need to acknowledge the existence of this heinous crime in the society and develop and implement strategies with regular monitoring to make the society a safe place for females.

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Insanity is doing the same thing, over and over again, but expecting different results Everyone thinks of changing the world, but no one thinks of changing himself.

Leo Tolstoy

