

PATTERN OF FEMALE MEDICOLEGAL CASES ATTENDING THE CASUALTY DEPARTMENT OF A TEACHING HOSPITAL

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ABSTRACT

BACKGROUND:

The most important duty of a doctor is to save the life of patient; however, after providing first aid & resuscitative measures, the Casualty Medical Officer has to carry out exhaustive documentation of medico legal cases especially while examining the female victims of physical trauma, domestic violence, attempts of suicide & sexual assault.

OBJECTIVES:

To study the pattern of medico legal cases in females with regard to age, marital status, and residential backgrounds; those reported for medico legal examination, during one year study period. To find out the incidence and trends of sexual assault in relation the socio demographic characteristics of the female victims of sexual violence.

STUDY DESIGN:

Retrospective Study:

SETTING & DURATION:

This study was conducted from 1st January 2012 to 31st December 2012, in Causality Department of tertiary care Hospital attached with Punjab Medical College, Faisalabad.

RESULTS:

Out of the total 837 cases, Physical violence was observed in 717 (85.66%) victims, sexual assault in 54 (6.45%) cases, 28 (3.34%) victims received Firearm injuries, and 21 (2.50%) cases were injured due to Road Traffic Accidents. The Injuries due to flame burn contributed for 15 (1.80%) cases and 02 (0.23 %) cases were reported to have miscarriage resulting from violence. Among total 54 cases of sexual assault, 30 (55.55%) belonged to urban settings and 24 (44.45%) were inhabitants of rural areas. Majority 37 (68.51%) of sexual assault victims were unmarried girls as compared to 17 (31.49%) married. The highest number of sexual assault 26 (48.15%) was reported among the victims of age group 10-19 years followed by age group 20-29 years involving 19 (35.19%) cases. The semen was detected in 13 (24.07%) cases, negative reports in 09 (16.67%) cases; whereas the reports of Chemical Examiner were not available in the record / medico legal registers in 32 (59.26%) cases of alleged sexual assault.

CONCLUSION:

The cases of physical violence were high in number followed by injuries due to firearms & road traffic accidents. Sexual assault was more commonly observed in the young girls in age group of 10-19 years majority of being unmarried belonging to urban areas. Public awareness, proper legislation & strict law enforcement are required to reduce such incidences against females.

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Key Words: Medico legal, Casualty, Physical Violence, Sexual assault.

INTRODUCTION:

The Case of injury or ailment, in which investigations by the law enforcing agencies are required to fix the responsibility regarding its causation, is known as Medico Legal Case. These cases are an integral part of medical practice that is frequently encountered by Medical Officers working in Casualty Department and dealing with Police/Court cases. All medico legal cases have some legal implications because the attending doctors, after taking history and careful examination of the victim think that some investigation are required to be done by law enforcing agencies in order to establish facts of the case against accused, under law of the state ¹.

The Casualty Department is the backbone of every hospital because almost all emergency cases report initially to this department. In addition to the medical emergencies, the cases of medico legal nature are also examined by the doctors known as Medico Legal Officers (MLOs) & Casualty Medical Officers (CMOs); both for examining the male & female victims ². Such cases constitute substantial proportion of the workload in Casualty Department of Government Hospitals. Studying the pattern & magnitude of the medico legal cases is an important aspect to be used for reducing the preventable casualties. It will also be helpful to study the crime rate in those areas ³.

Along with other medico legal cases of physical trauma, firearm injuries & road traffic accidents; the increasing number of sexual assault also put an extra burden over the doctors & paramedics because of the fact that incidence of sexual violence against women is increasing worldwide shocking the global statistics. All over the World, about 20% of women have been sexually abused in their childhood ⁴. Higher rate of sexual assault has been reported in other Asian countries as well. Sexual violence among 60% of the women was reported in Japan ⁵ while 25% of women in India⁶, while 53-62% women suffered from sexual violence in Bangladesh and 19% of the women in North Carolina, United States ⁷ are reported to be the victims of sexual assault during their life. The efforts have been done in this study to identify the magnitude & trends of different

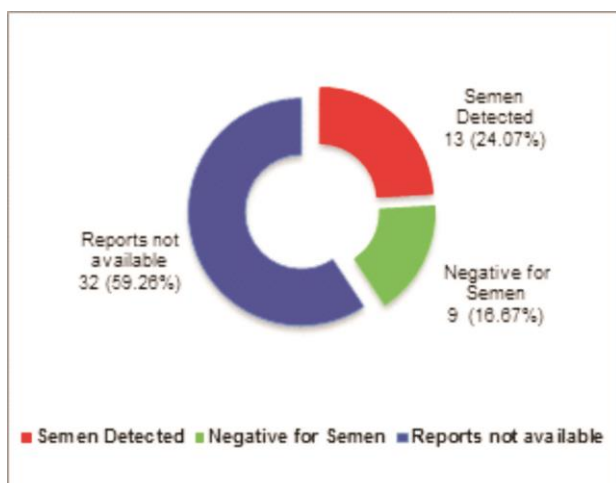
medico legal cases in Faisalabad; the 3rd largest city of Pakistan & 2nd in Punjab, with population of 2,912,269 (Economic survey of 2009-10) ⁸. The finding of this study will also provide a snapshot about burden of medico legal cases in this populous city which could be used by the Law enforcing agencies for further strategies to improve the Law & order situation and to reduce the potentiality of those crimes.

MATERIAL AND METHODS:

This study was carried out during the period from 1st January 2012 to 31st December 2012, in the Casualty Department of Allied Hospital (Tertiary Care Health Institution) attached with Punjab Medical College, Faisalabad. Total 837 females presented to Casualty Department for the issuances of Medico Legal Certificates; which were included in the study. Information regarding various parameters was obtained by careful study of the medico legal register and hospital record pertaining to those cases. The cases of sexual assault were examined in detail according to the age groups, marital status, habitats, seasonal variation and time interval between sexual act & medico legal examination. The data was analyzed, observations of the study were shown in tables & charts which were discussed and compared with other studies of different locations.

OBSERVATIONS & RESULTS:

Out of the total of 837 cases, presented to casualty department for medico legal examination, Physical violence was observed in 717 (85.66%) victims, sexual assault in 54 (6.45%) cases, 28 (02.43%) victims sustained firearm injuries and 21(2.50%) cases were injured due to Road Traffic Accidents. The injuries due to flame burn contributed for 15 (1.80%) cases whereas, 02 (0.23 %) females reported to have termination of pregnancy as a result of physical violence. Among 54 cases of sexual assault, the semen was detected in 13 (24.07%) cases, negative reports in 09 (16.67%) cases; whereas in 32 (59.26%) cases of alleged sexual assault, the reports of Chemical Examiner were not available in the record of medico legal registers. Detail is shown in Fig.1 below:

Fig: (1) Showing status of Lab: reports in sexual assault cases

Age wise distribution of sexual assault victims showed that the maximum victims 26 (48.15%) belong to the age group of 10-19 years, followed by 19 (35.19%) cases in age group of 20-29 years, 6 (11.11%) cases belonged to 30-39 years and 01(1.85%) case of the 40-49 years respectively whereas; sexual assault was reported in young girls less than 10 years of age in 2 (3.70%) cases. Detail of the age distribution among victims of sexual assault is shown in Table 1 below:

Table: (1) Showing age distribution among sexual assault victims

Age group in Years	No. of cases	% age
Less than 10 Years	02	3.70%
10-19 Years	26	48.15%
20-29 Years	19	35.19%
30-39 Years	06	11.11%
40-49 Years	01	1.85%
Total	54	100%

Out of the total 54 cases of sexual assault, Majority 37 (68.51%) were unmarried girls as compared to 17 (31.49%) married which is represented in Table 2.

As regards residential backgrounds of the sexual assault victims are concerned 30 (55.55%) cases belonged to urban areas and 24 (44.45%) were inhabitants of suburb & rural areas. It is shown in Table 3.

Our study showed that only one assailant was involved in 36 (66.67%) cases and two were responsible in 7 (12.96%) cases while three

or more assailants committed sexual assault in 14 (20.37%) victims. It is shown in Table 4.

The time duration between the sexual act & medico legal examination is very important in order to establish the case of sexual assault. This study shows that only 12 (22.22%) victims reported for examination in less than 24 hours and 10 (18.52%) females attended the hospital for examination during 24-48 hours of the incidence. Whereas 4 (7.41%) victims came during 48-72 hours while another 4 (7.41%) cases presented in 72-96 hours. Only 6 (11.11%) cases took 5-7 days, 8 (14.81%) cases reached in 8-15 days and 10 (18.52%) cases reported for medico legal examination after the lapse of 15 days or more after the incidence of sexual assault. Detail of this finding is shown in Table 5.

Table: (2) Showing the marital status of sexual assault victims

Marital Status	Cases	% age
Unmarried	37	68.51%
Married	17	31.49%
Total	54	100%

Table: (3) Showing the residential areas of sexual assault victims

Residential background	Cases	% age
Urban	30	55.55%
Rural	24	44.45%
Total	54	100%

Table: (4) Showing the No. of assailants involved in sexual assault cases

No. of Assailants	Cases	% age
Only one	36	66.67%
Two	07	12.96%
Three or more	11	20.37%
Total	54	100%

Table: (5) Showing the time between sexual assault & medico legal examination

Time Duration	Cases	% age
within 24 Hours	12	22.22%
24-48 Hours	10	18.52%
48-72 Hours	04	7.41%
72-96 Hours	04	7.41%
5 - 7 days	6	11.11%
8 - 15 days	8	14.81%
More than 15 days	10	18.52%
Total	54	100%

Associated injuries and marks of resistance on the body of victims other than local area were found in 8 (14.81%) cases in the form of abrasions, teeth bites & bruises while injuries on the genitals involving vulva / vagina were noted in 6 (11.11%) of the victims. Only 1 (1.85%) case was found Virgo intacta.

DISCUSSION:

In the present study, 837 female medico legal cases reported to Casualty Department of a tertiary care health facility i.e. Allied Hospital attached with Punjab Medical College Faisalabad Pakistan; during the study period from 1st January 2012 to 31st December, 2012.

Along with other medico legal cases of physical trauma, firearm injuries and road traffic accidents; the cases related to sex crimes are increasing day by day in our country, reflecting the western influence in our society. Sexual violence is considered as one of the most common crimes against women and its data is usually obtained from police, medico legal clinics of the hospitals, NGOs and surveys. The relationship between these sources and global magnitude of the problem corresponds to the tip of an iceberg. The magnitude of the reported cases of sexual violence could be much higher than the presented picture because many victims do not report because they are ashamed, embarrassed and got fear of being blamed in the community where they live⁹. "Blaming the victim" has historically been a strategy in countering rape charges. Women are told they "invited" the rape or harassment by their dress or demeanor. Because women see this happen to others they have good reason to believe it will also happen to them.

In present study the majority (48.15%) victims were from age group between 10-19 years followed by (35.19%) cases belonged to the ages 20-29 years. These results are in agreement with Hasan et al¹⁰, Sarkar et al¹¹, Bhardwaj et al¹² Roy Choudhury et al¹³, Chaudhary TH et al¹⁴ and a study conducted by Islam¹⁵ and other workers. This may be due to fact that individuals of these age groups are more vulnerable to the sexual violence at streets, work place, home, & even at the educational institutions. However, the illiteracy, lack of awareness about sexual act

and its complications also play important role for involvement of youth in such activities. The situation is further aggravated by the negative impacts of various exciting programs shown on multiple Channels of electronic media.

This study revealed that maximum number of medico legal cases had the injuries due to Physical assault 717 (85.66%) followed by sexual assault in 54 (6.45%) cases. It is observed that maximum number of the victims 30 (55.55%) belonged to urban setting as compared 24 (44.45%) inhabitants of the rural areas. These findings of our study are consistent with Chaudhary TH et al¹⁴ in their study conducted at Lahore, indicated that majority (66.0%) of the sexual assault victims belong to the urban areas. Our findings are contrary to those of study conducted by Islam MM et al¹⁷ in Bangladesh which showed that majority of sexual assault victims belonged to rural areas. The higher incidence of sexual assault in urban areas might be due to more exhibitions of exciting movies shown on the multiple channels of television. Moreover, the people residing in overcrowded and populous urban areas are more prone to sexual assault.

Present study shows that maximum number 8 (14.81%) of sexual assault cases reported in the month of September followed by 7(12.97%) in May, 6 (11.11%) in April and 5 (9.25%) in the month of October respectively. In 54 cases of sexual assault, 37 (68.51%) victims were unmarried girls as compared to 17 (31.49%) married. This finding is consistent with those of other studies conducted by Chaudhary TH et al¹⁴, Tamuli RP et al¹⁶, Islam MM et al¹⁷ and Parveen H et al¹⁸. This finding may be explained due the fact that younger / unmarried females are relatively immature, weaker & unsupported. They are vulnerable to the sexual violence at their homes, streets and work places.

The time of reporting for medico legal examination after the sexual assault is very important but majority of the victims are reluctant to report because of embarrassment, feeling of guilt whereas, some of the victims have very little knowledge about the proceedings to report about sexual assault. This study found that only 26 (48.14%) cases reported within three days (72 hours) of incidence for medico legal

examination while 18 (33.33%) victims presented after the lapse of 8-15 days or more after the incidence of sexual assault.

The Women often believe that no one will do anything about the problem. If women are harassed in an organization and the leadership of the organization does not speak out against that harassment or does not act quickly on reports of harassment, it will result in embarrassment among employees & most of the victims will be discouraged. In some cases, the consented act of sexual relationship over a period of time followed by refusal to marry by the sexual partner and failure in mutual settlement between both parties cause further delay in lodging of complaint, and so thus the medical examination. In studies conducted by Sukul B *et al*¹⁹ they found that 86.2% cases reported late for medical examination. In contrary to this, Santos *et al*²⁰ found that 61% cases of sexual assault reported for medical examination within 72 hours of the incident. Another study conducted by Kucuker H *et al*²¹ has highlighted the importance of medico legal examination & investigation of sexual assault cases within first 72 hours which not only helped in establishing the facts of cases but also ended with sentencing in 96.2% of the sexual assault cases. This study indicated the presence of associated injuries and marks of struggle on the body of victims other than local area in 8 (14.81%) cases only. These injuries are usually in the form of abrasions, scratches, teeth bites & bruises. The injuries on the genitals involving vulva and vagina were noted in 6 (11.11%) victims whereas; only 01 (1.85%) case was found Virgo intacta. This finding is similar to the results of Parveen H *et al*¹⁸ in which non genital injuries were reported in 13.98% cases. Similar findings are documented in a study conducted by Hassan Q *et al*¹⁰ indicating the presence of physical injuries on the different parts of the body in 15% victims while fresh injuries on the genital tract were noted in only 18% cases of alleged sexual assault. This may be due to voluntary sexual act by the victims hence offering least resistance.

The findings of study conducted in Turkey by Kucuker H *et al*²¹ indicated the evidence of general body trauma in 28.4% cases of sexual assault but the higher ratio of physical trauma associated with genital injuries has been reported by Riggs N *et al*²² in 64.4%

cases while McGregor MJ²³ and Sugar NF *et al*²⁴ documented the presence of associated marks of injuries on the different parts of the body of 52-65.2% sexual assault victims.

In all cases of alleged sexual assault, the vaginal swabs were collected for further examination to establish the presence of semen and blood. All the samples were sealed and handed over to police officials by adopting proper chain of custody. The semen was detected in 13 (24.07%) cases, negative reports in 09 (16.67%) cases; whereas in 32 (59.26%) cases of alleged sexual assault, the reports of Chemical Examiner were not available in the record of medico legal registers. This finding highlights the time of reporting for medico legal examination after the sexual assault which is very important but majority of the victims are reluctant to report because of embarrassment, feeling of guilt whereas, some of the victims have very little knowledge about the proceedings to report about sexual assault. Such cases report for medico legal examination very late most of the time after initial 72 hours and finally end up with negative findings on examination as well as negative reports for semen. The probability of the semen detection decreases as the time interval between sexual act and examination increases.

CONCLUSION:

Present study shows that majority of sexual assault victims were the younger unmarried girls belonging to age group of 10-19 years and inhabitants of the urban areas. Such incidences can be prevented by proper education, awareness and execution of the rule of law which are required to be implemented strictly. The doctors involved in handling medico legal cases need to be more trained. Due to increasing trends in physical violence, sexual assault and accidents; there is dire need for round the clock availability of medico legal experts in casualty departments especially the expert female doctors along with trained nurses & paramedical staff to deal with medico legal cases without any loss of time and of course to reduce the anxiety of the victims. The law enforcing agencies should also play their role to eliminate the violence from the society especially to curb the heinous crime like sexual violence.

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