

## Pattern and Characteristic of Injuries of Medicolegal Cases

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### ABSTRACT

**Objectives:** To study the pattern and characteristics of medicolegal cases at the rural health care facilities.

**Study Design:** Cross-Sectional.

**Place & Duration of Study:** Tehsil Headquarter Hospitals (THQs) & Rural Health Centre (RHC) District Kasur from 1<sup>st</sup> July 2018 to 1<sup>st</sup> July 2019.

**Methodology:** One hundred forty nine medicolegal cases were collected, after perusal of injury statement, police docket and brief history reflected in medicolegal certificates. The observations recorded in predesigned Performa with an emphasis on age of subjects, region of body, number of injuries, weapon involved, type of injury and injury declared or not declared according to Q&D.

**Results:** The highly frequent age group was 21-30 (32% male and females). The most frequent weapon of offence was the blunt (79%). Majority of the cases (38%) were observed having only one injury. The most common regions of the body having injuries in males were the fingers and hands, while head majorly involved in females' cases. According to Q&D mostly injuries were declared while some of them remained KUO.

**Conclusion:** Most of the medicolegal cases involved the male population and caused by blunt weapon, while females appeared to be less inclined to the bodily injuries in medicolegal cases. The cases of unnatural sexual acts with males were having a serious prevalence in rural areas. The basic need is to timely investigate and to prevent linger on cases and collaboration with law enforcing agencies are urgently required to reduce the potentiality of the crimes, especially in rural areas.

**Key Words:** Medicolegal Cases, Qisas and Diyat

### INTRODUCTION

Most doctors come across medico-legal cases (MLC) in their clinical profession. An MLC is a case of injury wherein an investigation by the law implementation agency is necessary to get to the bottom of the cause of the injury.<sup>1</sup> In other words, it is a medical case with legal implications for the doctor, where he, after the examination of the patient, thinks that some investigation by law implementation agencies is necessary. It also includes a legal case requiring medical expertise when brought by the police for examination since a doctor's knowledge may be necessary for the administration of law. It is an examination of the living person carried out under the law of the state for the protection of society and help the administration of justice.<sup>2</sup>

The medicolegal examination is generally required in the case of trauma, sexual assault, and poisoning. Cases that are considered as medicolegal are, all cases of injuries (caused by trauma), other unnatural accidents, cases of sexual assault (rape, sodomy) criminal abortion, all cases of poisoning or intoxication, cases for age estimation, cases of self-inflicting injuries, fabrication. Moreover, there is an ascent in the instances of violence against ladies and youngsters over a recent couple of years. Specialist doctors and all healthcare experts assume a double job in giving medicolegal help, just as in helping survivors in the medicolegal procedures by gathering proof and documentation of the findings.<sup>3-7</sup>

### MATERIALS AND METHODS

This cross-sectional study was conducted at Tehsil Headquarter Hospitals (THQs) & Rural Health Centre (RHC) District Kasur from 1<sup>st</sup> July 2018 to 1<sup>st</sup> July 2019 and

comprised 149 MLC cases. The data was recorded the age, sex, no of injuries, the region of the body, causative weapon, type & nature of injury according to Q&D, investigation advised, whether injury declared or remain KUO. According to including criteria all cases which were presented in these peripheral hospitals regardless of age, gender, and mode of injury were included and the patients who had no medicolegal perspective were excluded from the study.

### RESULTS

The male half of the society was mostly involved in medicolegal cases. Out of 149 patients included in study 119 (79.87%) cases were male and only 30 (20.13%) patients were female (Fig. 1). Majority belong to the age group 21-30 years. In the male gender, most cases belonged to the age 23-25 years while the 2<sup>nd</sup> age group was the 34-40 years. In females, most cases belonged to the 26-35 years age group, while the 2<sup>nd</sup> age group was 35-55 years. As regard age distribution is concerned, 42 (28%) cases (both male and female) were 10-20 years of age, while 48 (32%) belonged to 21-30 years, 27 (18%) were of 31-40 years, 18 (12%) of 41-50 years, whereas the age group of more than 60 years involved 1-2 (1%) cases (Fig. 2).

The most common type of weapon was observed blunt 119 (79%). The second common type of weapon was the combination of blunt and sharp 8 (5.4%), then only sharp 5 (3.4%), rape and sodomy related to sexual assault 5 (3.4%). The use of blunt and friction (abrasion) was found in 3 (2%) cases, while 1 (0.7%) case was observed fabricated (Fig. 3).

More than half of the cases causative weapon was blunt, so most common injuries in males and female was abrasion and bruises. While some other injuries like an incised wound, laceration, bleeding, fracture, amputation, a tooth missing, swelling, tenderness, and pain (body aches) were also reported (Fig. 4). Several injuries are directly related to the fatalities. As a greater number of injuries and vital organs are involved, thus there are fewer chances of survival. According to our data 54(38%) cases having a signal injury, 39(26%) having two number injuries, 24(16%) having three injuries, 13(8.7%) having four injuries 3(2%) cases having 5-7 number of injuries. In males, 44 cases out of 112 no of injury were just single, similarly, in females, 10 cases out of 25 have a single injury (Fig. 5).

In males the most common region of the body was the fingers and hands, then hand and foot then eyes (Fig. 6). While in females most common part of the body involves was the head then hand, eyes, fingers, and legs (Fig. 7).

The majority of the injuries are declared according to *Qisas* and *Diyat* Laws. While some injuries are partially declared, which means that >1 injury was declared, and the other injury was kept under observation and waiting for the investigation report (Fig. 8). Similarly females seemed less prone to bodily injuries in medicolegal cases. The law sections applied in the cases included the most common section *Shajjah* (337), and secondly, the subsections 337-F1 (*Ghayr Jafiah Damiyah*). The most common law section declared in males' injuries was the *Shajjah Khafifah* followed by *Jurh Ghair Jafiah Damighah*. However, the law section 337-L2 (injury causing bruise, contusion, and/or swelling) were reported in almost all the histories of MLCs.

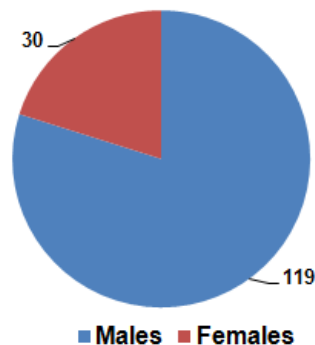


Fig. 1: Gender distribution

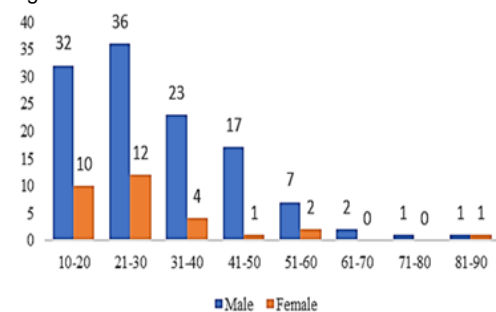


Fig. 2: Age distribution

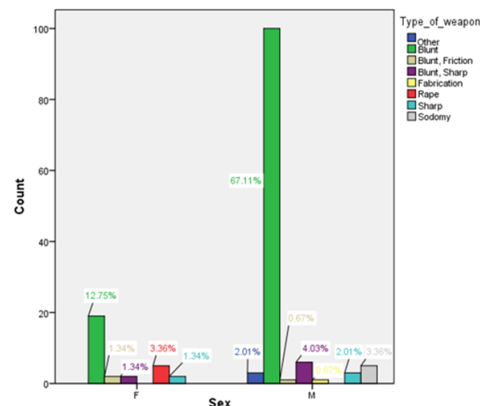


Fig. 3: Weapon distribution (causative agent)

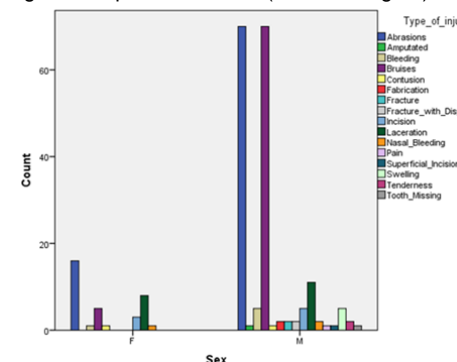


Fig. 4: Frequency of type-of injuries

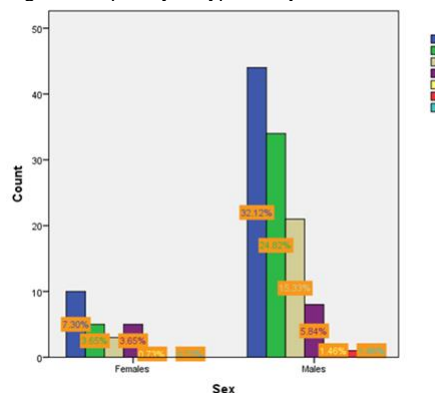


Fig. 5: Number of injuries

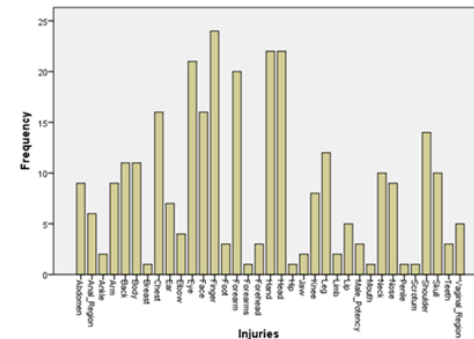


Fig. 6: Bar graph showing region-of-body involved

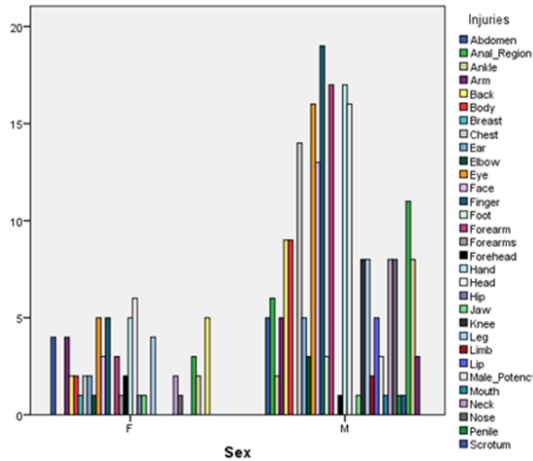


Fig. 7: Comparison of gender according region of body involved

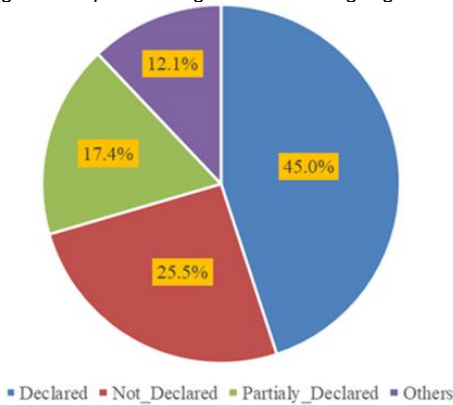


Fig. 8: Percentages of Injuries declared, not-declared and partially-declared

## DISCUSSION

The doctor should carefully examine and treat the patient, record the date, time, place, brought by whom, and examination findings. As per section 39 of the Criminal Procedure Code, the doctor must report the MLC to the police after the completion of primary lifesaving medical care. The aim is to initiate the legal proceeding at the earliest to gather maximum evidence by the police. Quick and effective action by the police also helps to avoid the destruction of evidence. Generally, all the big hospitals and teaching institutions have a detailed manual on how to deal with MLC's. However, even if these manuals are not available, MLC's pose no problem if the doctor uses proper care and caution in dealing with them.<sup>8-10</sup>

One of the major groups of presenting emergencies is medicolegal cases, especially at the periphery. A simple looking injury may cause severe damage to the internal organs. Like a simple bruise, abrasion if it involves the kidney and heart it can prove to be fatal. Similarly, injury on the head can also be fatal. Multiple bruises with internal organ involvement may result in death due to shock and internal haemorrhage.<sup>11</sup>

The male half of the population is most affected (79%) as compared to the female. Females are less helpless against relational interpersonal violence-based injury because of vengeance free behaviour and traditionalist way

of life. As males are more exposed to the outside world and events can happen at workplaces, on the roads, and other places of exposure.<sup>11,12</sup> The young age group has been affected more majority of the patient belong to the age group 21-30 this has a great socio-economic impact as any kind of trauma leading to temporary and permanent disability and that will affect the individual as well as its family and as a whole society. These observations are consistent with other studies.<sup>11,13,14</sup>

In the observed cases for this study, the blunt weapon was observed commonly used (79%). Such observation is consistent with previous studies, where cases of the fight were always high. A blunt weapon is easily available in the surrounding of the fight-place.<sup>11,15-17</sup> Chances of fabrication are quite rare now. Data analysis showed that law reporting in most of the MLC against history of fight with male dominance followed by domestic violence in females.<sup>15-21</sup>

Several injuries are directly related to the fatalities. It has a direct relation to the rate of survival. If there are more injuries and involve vital organs like the heart, brain, and liver-kidney, the fatality rate will be higher. Most of the cases in both males and females were having a single injury. The anatomical site or region of the body is an important factor, as injuries involving the head and neck suggest the lethal intention of the assailant. The injuries involving extremities exhibit the defensive tendency of the victim. In our study in males, the most common region of the body were fingers and hands, then hand and foot and followed by eyes. While in females the most common part of the body involved was the head, followed by hand, eyes, fingers, and legs. The injuries involving chest and abdomen often penetrating proves to be fatal as compared to head and neck because it directly causes pneumothorax, bleeding, and infection.<sup>16</sup>

Law reporting rate in MLCs seems to be improved a lot as it was deficient before. Most of the injuries were declared according to *Qisas & Diyat* Laws. The most common reported injury according to *Qisas & Diyat* Laws was section 337 (*Shajjah Khaffah*) and 337-F1 (*Jurh Ghayr Jaifah Damiyah*).<sup>17</sup>

Issues like the decision about originality (real/fabricated) of the injuries and KUO (kept under observation) injuries need proper attention for understandable significant entries. Reporting of the laws in more than 50% MLCs is a matter of seriousness especially concerning fighting cases.

True implementation of the existing laws as well as the collaboration of Health, Social welfare, and law enforcing agencies is urgently required to reduce the potentiality of the crimes, especially in rural areas.<sup>11</sup>

## CONCLUSION

Most of the cases are males. Age group 21-30 were maximally involved. The most used weapon was blunt. The most common injury was blunt. Maximum has no injury were one. The region of the body involves was variable in both gender in the male upper limb while in the female head region was involved. Majority of the MLC on the history of interpersonal violence. MLC was accounted for as indicated by *Qisas* and *Diyat* Laws. The most common reported injury according to *Qisas* and *Diyat* Laws was 337 *Shajjah Khaffah* and 337-F1 (*Jurh Ghayr Jaifah Damiyah*).

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