

## ORIGINAL ARTICLE

## FREQUENCY AND TYPES OF BODILY MEDICO-LEGAL INJURIES IN AN URBAN AREA

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**Background:** The primary objective of the study was to know the types and frequency of the bodily medico legal injuries in an urban setup of Abbottabad and compare it with that of rural study. **Methods:** Data was retrospectively collected by selecting 55 cases consecutively. Data of injury types was analysed. **Results:** The number of injured males in this study was 44 (80.0%), while the females were 11 (20.0%). The most common types of injuries were others (50.9% among males and 14.5% among females). **Conclusions:** Our study shows relatively true picture of frequency and types of injuries. It was observed that male population is more prone to violence than females owing to the conservative life style of women in our societies both rural and urban.

**Keywords:** bodily medico-legal injuries, *Shajja*

## INTRODUCTION

Hurts, wounds or injuries are of different varieties, they mostly are result of assaults, by definition one can understand the meaning of assault, which means the offer of threat, or the application of force to the body of an other in angry or hostile manner, while when the assaults are brought to completion then the term is called battery, that means that some one has actually applied force to the body of another one, and have caused hurt.<sup>1-3</sup> Hurt is defined as whoever causes illegally to a person any harm, pain, disease, infirmity, injure or disable or dismember any organ or part of the body of some one is said to have caused hurt to that person.<sup>2</sup> On the other hand, in the current situation any criminal act of anyone against the other individual is now investigated first by the society to establish the fact of injury which is defined as any harm illegally caused to a person in body, mind, reputation, and property. Wound is said to the solution or disruption of anatomical continuity of tissue of the body externally or internally.<sup>1</sup>

In all theologies, e.g., Muslims and Christians, human beings are regarded as creation of God, no one can have any right to deprive a human of his freedom, capabilities or his life and this principle is respected by all laws made by different societies.<sup>3</sup>

In the early stages of humanity, the human beings use to retaliate individually when ever they were interfered functionally or physically in life or their life was threaten and they use to retaliate in groups against groups, but the modern man due to improved intellect and development of civilisation, and understanding of things does not retaliate at personal level, rather retaliation is shifted at the level of society.

In the present time the law presumes after investigation that the aggressor is responsible for his act and, on the proof, he is punished for his wrong doing. But if it is proved that his wrong act was due to the defect in intellect or due to disease of mind or administration of an intoxicant involuntarily then he is

not held responsible due to such facts. Anybody who administers criminal force or intoxication to another one and restrain him/her from his freedom and assault him/her to injure or kill, is made punishable proportionately to the harm brought to the victim.<sup>3</sup>

The development of criminal law to its present stage passed through various stages. First in the primitive stage the rule was might is right, and the victim used to revenge the aggressor himself. Then the stage of standing of society was adopted, but the revenge was not in proportion to the harm done to the victim. Life used to be taken in case of death, eye in case of eye. But now the things have changed and the factors responsible to force the aggressor to assault or the factors in determining the responsibility have been recognized and punishments are scaled in accordance with degree of responsibility.<sup>3</sup>

The law to deal with the criminal offences such as physical assault resulting in wounding or killing was an English law in our country which was repealed by the *Qisas and Diyat* Ordinance 1991 amended in 1997, and this brought it in conformity with injunction of Islam as laid down by Quran and Sunnah.<sup>2</sup>

The law prefers the word Hurt to use in spite of wound. So *Qisas and Diyat* has introduced a new classification of hurt and beside this the law has provided compensation for the suffering of victims in Pakistan for the first time, the provision for compensation is *Arsh, Daman, Diyat*, and *Qisas*. These terms are defined as under:<sup>2</sup>

**Arsh:** compensation specified in law, to be paid by the offender to the victim or his heirs.

**Daman:** compensation specified by the court, paid by the offender to the victim or his heirs.

**Diyat:** compensation for causing death which is specified by law, payable to the heirs of victim by the offender.

**Qisas:** *Qisas* means punishment by causing similar hurt at the same part of the body of the convict as he has caused to the victim or by causing his death if he has

committed *qatl-i-amd*, in exercise of the right of the victim or a *wali*.<sup>2</sup>

*Qisas* has to be executed in the presence of a medical practitioner, who can assess the extent of hurt, so that the *Qisas* should be equal to the assault. The assaults causing wound and injuries are legally hurts by the

offenders, and all the bodily hurts are medically injuries. They have local and general effect on the body, the local effect is wound while the general effects are the sign and symptoms.<sup>4,5</sup> The hurts according to the *Qisas* and *Diyat* ordinance are classified into various types which are tabulated in Table-1.

**Table-1: Types of injuries and definition**<sup>2,6,7</sup>

Types of injuries	Subtypes of Bodily Injuries	
<b>A. Shajjah</b>		Hurt on head or face which does not amount to itlaf-i-udw or itlaf-i-salahiyat udw
	<i>Khafifah</i>	Hurt without exposing the bone
	<i>Mudihah</i>	Exposing the bone without fracture
	<i>Hashimah</i>	Fracturing the bone without dislocation
	<i>Munaqqilah</i>	Fracturing bone with dislocation
	<i>Ammah</i>	Fracturing skull and wound touch the membrane
	<i>Damighah</i>	Fracturing skull and membranes ruptured
<b>B. Jurh</b>		Hurt on part of body other than head and face which leave mark permanently or temporarily
<b>2. Jaiffah</b> (Wound entering the body cavity of trunk. Chest or abdomen.)		
<b>3. Ghayr-i-Jaiffah</b> (Jurh not amounting to jaifa)	1. Damiyah	Rupturing of skin with bleeding
	2. Badiyah	Cutting of flesh without exposing the bone
	3. Mutalahimah	Lacerating the flesh
	4. Mudihah	Exposing of bone
	5. Hashimah	Fracture without dislocation of bone
	6. Munaqqilah	Fracture with dislocation of bone
<b>4. Others/miscellaneous</b>		
	1. Itlaf-i-udw	Causing of dismemberment, amputation, or severement of any organ or limb of body
	2. Itlafa-i-slahiyat-e-udw	Disfiguring or destruction of function or capacity of organ permanently
	3. Dislocation of any joint	
	4. Injury threatening life	
	5. Injury without skin damage (bruise)/others	

The physical assault causes wound or injury on the body, and the nature of injury depend upon the weapon of offence, nature of tissue involved and the execution of force, the injuries are classified as under:

- Mechanical injuries
- Transportation injuries
- Thermal injuries including chemical and radiation injuries

The mechanical injuries are further divided into.<sup>8-10</sup>

- Abrasions
- Bruises
- Lacerations
- Incised wounds
- Stab wounds
- Fractures
- Firearm injuries

These injuries are further divided in to subgroups, and the duration of these injuries can be approximately assessed by the necked eye appearance, microscopic examination, and enzyme histo-chemical and chemical methods but, the assessment by necked eye is usually adopted in most of the medico legal centres, due to short duration of injuries.<sup>11-13</sup>

## MATERIAL AND METHODS

A medico-legal Centre of Ayub Teaching Hospital in District Abbottabad in northern Pakistan was selected. Fifty-five consecutive cases of injuries were included in

the study. The data for this case series was retrospectively collected. A performa was developed on which data was entered from such registers which were available as records for court matters. Data were analysed using SPSS-16.

## RESULTS

From the records of the said Medico-legal centre, 55 recorded cases were selected, 44 (80.0%) were males and 11 (20.0%) females. The mean age of victims was 29.64±12.48. The frequency of males getting injured was at higher rate. Out of total 55 injuries, 18 had no *Shajjah* type of injury. Total victims of *Shajjah* were 32 (58.2%) out of which 26 (47.3) were males having *Shajjah* and 6 (10.9%) were females. *Jurh Jaiffah* had the lowest frequency among the types and only one victim was recorded. *Jurh ghyre Jaifah* was having frequency of 30.9% in males, and 10.9% in females. The other types of injuries were 28 (50.9%) in males and 8 (14.5%) in females. These injuries were common in types and frequency. Among the subtypes (further types) of *Shajjah* the most common in our study was *shajjah-e-mudihah* which was 19 (34.5%) and the second most common was *shajjah-e-khafifa* 3(5.5%) and Hashima which was also 3 (5.5%) and one female victim was of sub type *munaqila* (Table-1). *Jurjaiifa* has no further subtypes and only one victim of this type was found. *Ghayr-i-Jaifah* had the subtype *Badiyah* as the most frequent type in subtypes and the *Mutalahema* as

second common *Damiyah* the least frequent one. *Damiyah* was 2 (3.6%) in males and (0%) in females, while the total number of *Jur ghyr-e- Jifa* was 41.8% of the total, (Table-2). Among the victims of *other* type of injuries the most frequent type was Bruises 38 (69.1%), out of which 30 (54.5%) were in males and 8 (14.5%) were in females. There was one case of *Iltaf-e-udw* and one case of injury *threatening life* (Table-3).

**Table-1: Gender-wise types of injury Shajja**

Types of Shajja	Male n (%)	Female n (%)	Total
<i>Khajifa</i>	3 (5.5)	2 (3.6)	5 (9.1)
<i>Mudihah</i>	19 (34.5)	1 (1.8)	20 (36.4)
<i>Hashima</i>	3 (5.5)	0 (0)	3 (5.5)
<i>Munaqila</i>	0 (0)	1 (1.8)	1 (1.8)
<i>Damigha</i>	1 (1.8)	0 (0)	1 (1.8)

**Table-2: Gender-wise types of *Jurh-ghyr-e-jaiffa***

Types of <i>Ghyr-e-Jaiffa</i>	Male n (%)	Female n (%)	Total
<i>Damiyah</i>	2 (3.6)	0 (0)	2 (3.6)
<i>Badyiah</i>	6 (10.9)	0 (0)	6 (10.9)
<i>Mutalahima</i>	4 (7.3)	3 (5.5)	7 (12.7)

**Table-3: Gender-wise types of other injuries**

Others type of injuries	Male n (%)	Female n (%)	Total
<i>Iltaf-e-Udw</i>	1 (1.8)	0 (0)	1 (1.8)
Injury threatening life	1(1.8)	0 (0)	1 (1.8)
Bruises	30 (54.5)	8 (14.5)	38 (69.1)

## DISCUSSION

In the present study data was retrospectively collected from the available records in an urban health facility. Cases were consecutively selected spread over a period of three months. The results showed that males are more likely to be involved in such cases as compared to females like our all previous studies about injuries on the basis of *qisas* and *dyat* and use of weapons. Our results are comparable with other national level studies.<sup>14,15-17</sup> This is not unexpected in a male dominated society like ours. Males frequently confront each other in disputes leading to violent physical contacts and ultimately injuries. In a study conducted in an urban area of Lahore, 85.44% were male and 14.56% were female.<sup>12</sup> The mean age of males in our rural study was 36.92±14.0 while that of females was 43.29±10.1 year<sup>18</sup>, and in our urban study of Abbottabad 80% were male and 20% female victims, the mean age of victims is 29.64±55. In the study at Lahore, 62.91% of people were of age around 30 years. In our rural study with respect to type of injuries, 22 males and 5 females suffered from *Shajjah* while in urban study 26 are male and 6 female. In rural study victims of *Jurh ghyayre jaiifa*

included 17 (94.44%) males, and 1 (12.5%) female<sup>18</sup>, while in urban 17 (30.9%) are male, and 6 (10.9%) female. The most common injuries were of group classed as others having 36 victims and among these the victims of Bruises were 30 (54.5%) male and 8 (14.5%) female. The results are reflecting almost true situation of our society. These results are comparable with a study by Tajammal N *et al*<sup>14</sup> and Seema N *et al*<sup>18</sup>.

## CONCLUSION

The common type of injuries in our study were *others type* among which *bruises* has high frequency, *shajjah* was second common injury, and then *jur-ghyr-e-jaiffa*, followed by a variety of other injuries. Women were less prone than males to such injuries.

## REFERENCES

1. Simpson K, Knight B. Forensic Medicine. London: Edward Arnold Publisher Ltd; 1985.
2. *Qisas and Dyat* Ordinance 1991, amended 1997. Government of Islamic Republic of Pakistan.
3. Awan NR. Principles and practice of Forensic Medicine, 1<sup>st</sup> edition. Lahore: Sublime Arts; 2004.
4. Mason JK (Ed.) The Pathology of Violent Injury, 2<sup>nd</sup> edition. London: Edward Arnold; 1994.
5. Di Maio D, Di Maio V. Forensic Pathology. New York: Elsevier; 1985.
6. Sinnatam CS, (Ed). Last's Anatomy: Regional and applied. (12<sup>th</sup> ed) London: Churchill Livingstone; 2011.
7. Snell RS, (Ed). Clinical Anatomy by Regions. (9<sup>th</sup> ed) Philadelphia: Lippincott Williams Wilkinss; 2009.
8. Shepherd JP, Shapland M, Pearce NX, Scully C. Pattern, severity and aetiology of injuries in victims of assault. R Soc Med 1990b;83:75-8.
9. Knight B. The Post-Mortem Technician's Handbook: A Manual of Mortuary Practice. Oxford: Blackwell Scientific Publications; 1984.
10. Camps FE. Recent advances in forensic pathology. London: J & A Churchill Ltd; 1969.
11. Camps FE, (Ed.). Gradwohl's legal Medicine, (2<sup>nd</sup> ed). Bristol UK: John Wright & Sons Ltd; 1968.
12. Walls HJ. Forensic Science: An introduction to scientific crime detection. (2<sup>nd</sup> ed). London: Sweet & Maxwell; 1974.
13. Boorman KE, Dodd BE, Lincoln PJ. Blood Group Serology: Theory, Techniques, Practical Applications, (5<sup>th</sup> ed). Edinburgh: Churchill Livingstone; 1977.
14. Tajammal N, Chaudhry TH, Hanif S, Bhatti MA. Profile of medicolegal cases at Jinnah Hospital Lahore. Ann King Edward Med Coll 2005;11:332-5.
15. Seema N, Ahmad I. The incidence of weapon used in medicolegal cases of urban area of Abbottabad. Med Forum 2011;22(9):29-33.
16. Ahmad I, Seema N. Weapon of offence used in bodily medicolegal injuries of a rural area. Med Forum 2011;22(5):51-3.
17. Sleem M, Siddiqui BA, Seema N. Study of different pattern of finger prints prevalent in our population. Med Forum 2011;22(12):45-9.
18. Seema N, Ahmad I. Frequency and types of medico-legal injuries in rural area. J Ayub Med Coll Abbottabad 2010;22(2):93-5.

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