

# Profile of Medicolegal Cases at Jinnah Hospital Lahore

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**Aims of study:** 1) To physically equip accident / emergency department of Jinnah Hospital for the management of medico legal cases on scientific grounds. 2) To Study the age group and the type of weapon involved 3) To create awareness amongst the social workers, law enforcement agencies and medical personnel about the management of such cases. 4) To suggest appropriate measures to reduce the incidence of these emergencies. **Subjects and Methods:** Two hundred and fifteen cases of medicolegal nature were collected. These cases visited the Accident /Emergency Department of Jinnah Hospital Lahore during the first six months of the year 2000 (January to June). A specialized proforma was designed to record the age, sex, and type of weapon inflicting injuries. **Results:** Out of these 213 cases 182 (85.44%) were male and 31 (14.56%) were female. Majority of the patients were within the age groups of 11-30 year of age (62.91%). 92 (43.19%) patients were injured because of the blunt weapon, 57 (26.76%) because of the firearms, 38 (17.85%) suffered injuries in road traffic accidents, 23 (10.80%) because of sharp edged weapons and 3 (1.40%) patients because of the burns.

**Key words:** Medicolegal cases, profile, Jinnah Hospital

Medico legal cases form a major component of emergencies brought to Accident and Emergency department of all teaching hospitals. Although providing legal and medical services to such cases, results in increased work load of the hospitals, yet the physical demonstration of these cases to the Medical students helps them in having the true perspective of mechanical injuries. The magnitude of the problem is to be assessed and multifaceted approach can be developed for the concerned sections of society. The law enforcement agencies, philanthropists, social workers and medical professionals can gear up the efforts for better, peaceful society and high class medical services for the ailing humanity. The study is conducted to have a classified data of the cases brought over a period of six months.

## Subjects and methods:

213 consecutive cases belonging to Medico legal category were documented from January to June 2000. These cases presented at the Accident and Emergency department of Jinnah Hospital, Lahore.

Specialized proforma was designed to systematically document, age, sex, weapon inflicting the injury, i.e., blunt (Fight), firearm injuries, road traffic accident and burns.

According to inclusion criteria all patients presenting to Accident and Emergency department with medico legal perspective were included regardless of the age, sex, and mode of injury i.e. accidental, homicidal & suicidal. The patient who had no medico-legal perspective was excluded from the study.

## Results:

Male half of the Society was mostly involved in the medico legal cases. Out of 213 patients included in the study 182 (85.44%) patients were male, and 31 (14.56%) were females. (Fig 1). Majority of the patients belonged to the active age groups i.e. 50 patients (23.47%) between 11 to 20 years, and 84 (39.44%) between 21 to 30 years.

Combined together 62.91% belonged to 11 to 30 years age. (Fig 2)

The type of weapon was also analyzed. Out of 213 case, 92 (43.19%) were due to blunt weapon, (Fight) 57 (26.76%) were due to firearms, 38 (17.85%) due to road traffic accidents, 23 (10.80) were by sharp edged weapons, and 3 (1.40 %) cases sustained burns. (Fig 3)

Fig 1: Age profile of all MLC cases

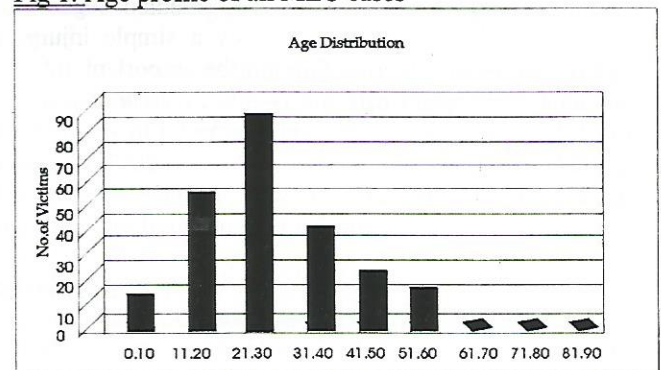


Fig 2: Sex profile of all MLC cases

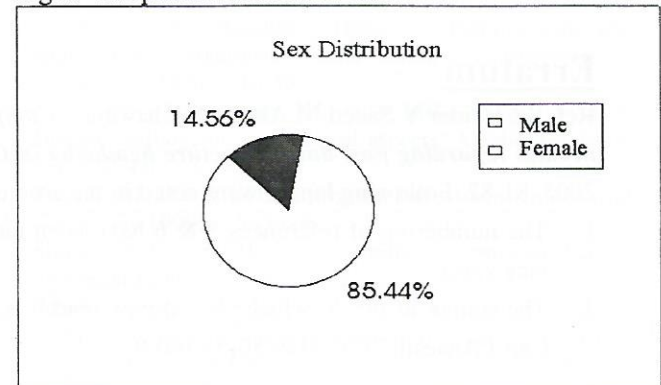
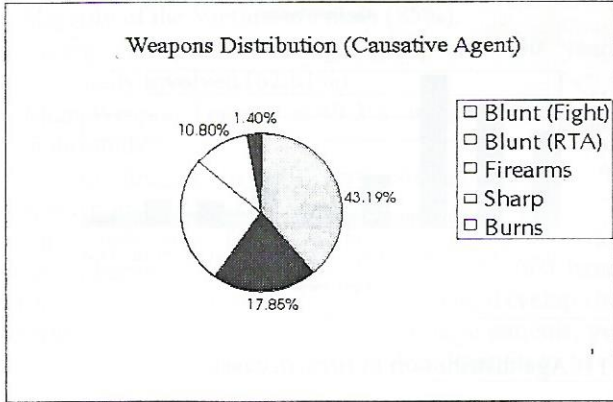


Fig 3: Causative agent of all MLC cases



**Discussion:**

Medico legal cases constitute one of the major groups of all emergencies presenting in Accident and Emergency Department. Because of its peculiarities, its management increases the workload of Accident and Emergency Staff, to many folds.

Criminal act, which may be homicidal or suicidal has become rampant in the modern societies and its existence has always challenged the law enforcing agencies in our society<sup>1</sup>.

An apparently looking trivial trauma may have severe damage to underlying organs and a high index of suspicion is required to make clinically and medico legally an accurate diagnosis. Bruise is usually a simple injury. It may prove fatal when it involves the important internal organs such as the heart and lungs, even without a visible injury to the chest wall. Multiple bruises though individually trivial and slight may result in death due to shock and internal hemorrhage<sup>2</sup>. It is a well known fact that deep bruises may never appear on the surface of the body<sup>3</sup>. Considering all these facts it is pertinent to emphasize that the physical examination of the injuries is to be meticulous, with proper exposure under hand held magnifying lens and in good light.

Use of blunt, sharp edged weapons and firearms to injure & kill a person exists in all parts of the world with variable percentage, but more important is the fact that its use and magnitude is increasing to alarming levels<sup>4</sup>.

Male half of the society is predominantly affected (85.44%) as compared to females which is because of more exposure to environmental hazards, including road traffic accidents. These observations are consistent with other studies<sup>1,6,9,10</sup>. The Sex distribution pattern in different categories of weapon injuries has been shown in figures no. 4 – 8.

Young and productive age group has been observed to be affected and the majority of the patients belonged to 11 – 30 years age group (62.91%) this has a great socio-economic impact as any kind of trauma leading to temporary or permanent, physical or psychological disability will not only affect the individual & his family in general but society as a whole<sup>5,6</sup>.

This age group is vulnerable to homicidal, accidental injuries because of their exposure to the outside world and events can happen at workplace, on the roads and other places of exposure<sup>7</sup>. The age distribution pattern in different categories of weapon injuries has been shown in figures no. 9 - 13

Use of blunt weapons as a cause of injury has been found to be the most frequent in this study where 92 (43.19%) were injured by the use of blunt weapon, which is consistent with other published studies<sup>6,1</sup>

57 patients (26.76%) suffered injuries because of the firearms and these findings have been found to be in contrast to other studies where firearms have been found to be the major contributor in morbidity & mortality<sup>1,4,8</sup>. Use of firearms was found to be less in this study in comparison to blunt weapons because of less availability of firearms to a common man. This is in contrast to the western world, where firearms constitute the cause of two third of homicidal injuries and deaths<sup>11,12,13,14</sup>.

Injury through sharp edged weapons was observed in 23 (10.80%) patients and most of the patients belonged to middle to low socio economic groups these findings are again consistent with the findings of other researchers who have conducted studies in other parts of the world<sup>8</sup>.

Fig 4: Sex distribution in blunt weapon cases

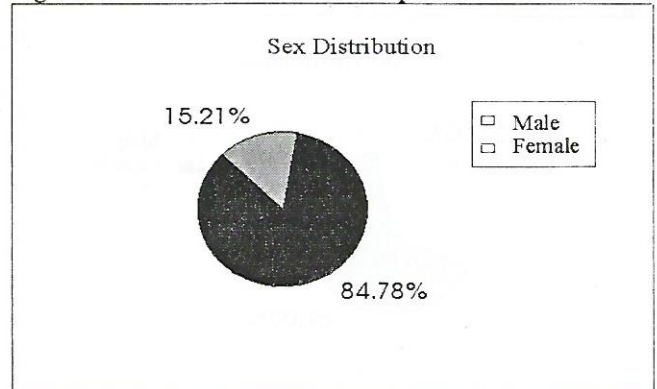


Fig 5: Sex distribution in road traffic accidents

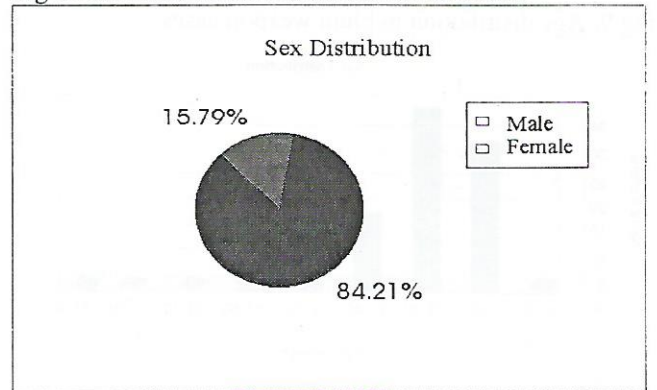


Fig 6 : Sex distribution in firearm cases

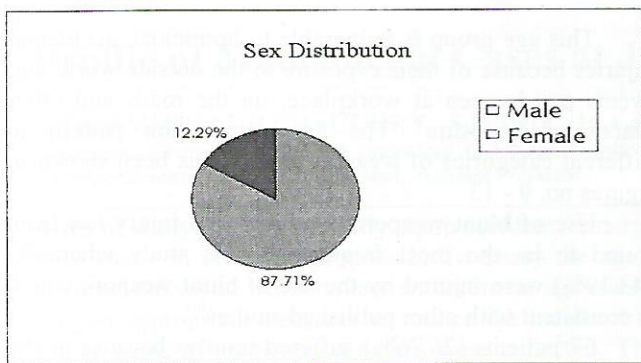


Fig 7: Sex distribution in sharp weapon cases

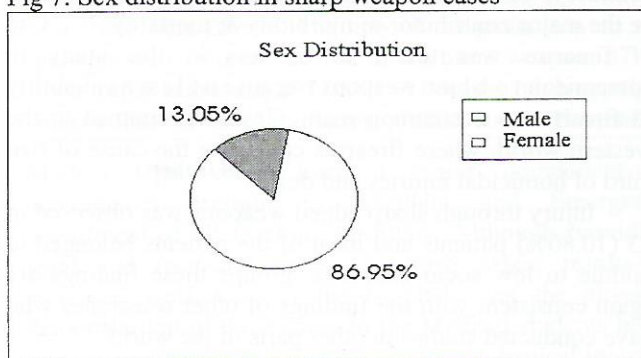


Fig 8: Sex distribution in burns

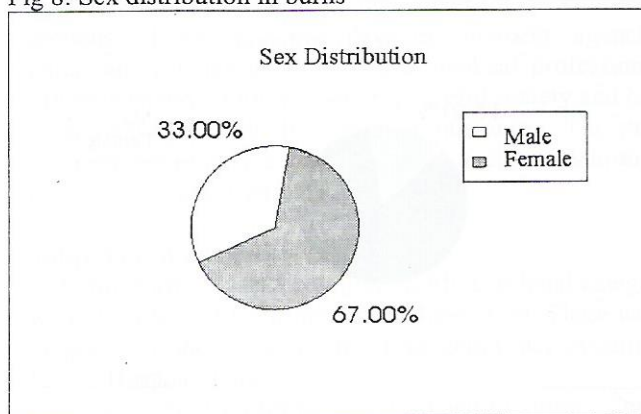


Fig 9: Age distribution in blunt weapon cases

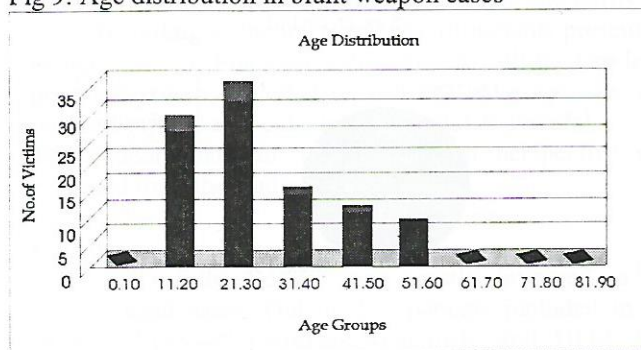


Fig 10: Age distribution in road traffic accidents

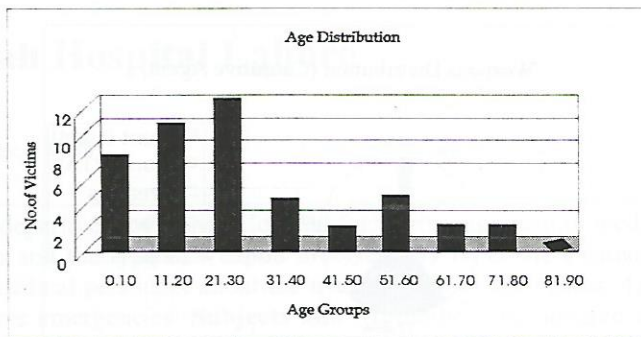


Fig 11: Age distribution in firearm cases

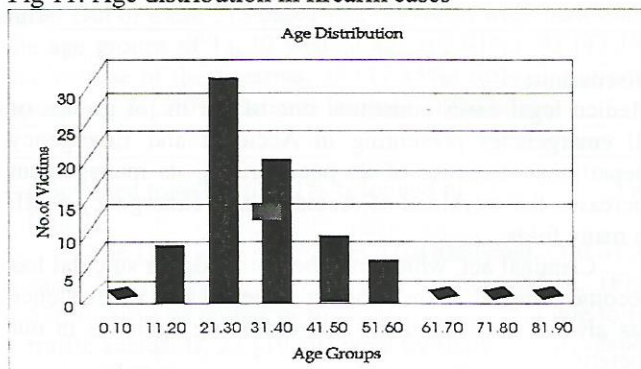


Fig 12: Age distribution in sharp weapon cases

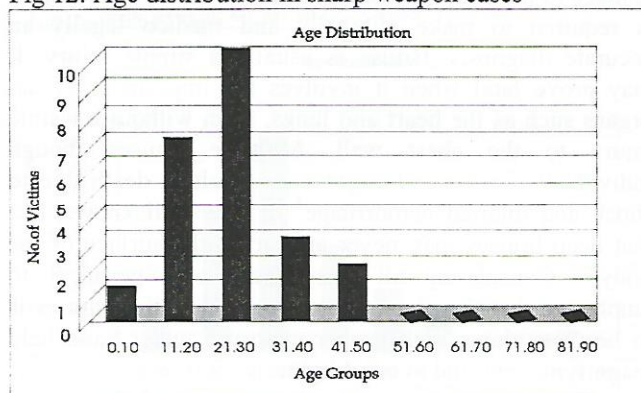
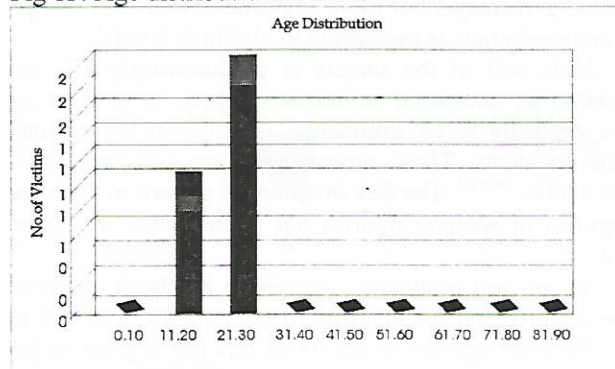


Fig 13: Age distribution in burns



**Conclusion:**

- Majority of the Victims are male (85%).
- Young and productive age group 11– 30 years maximally involved (62.91%)
- Blunt Weapon Trauma is 49.3% which is maximum in the study.
- Use of firearms is still very common despite all restrictions and laws.

This study was found to be very useful for the institution because we were able to obtain the first hand information about the medicolegal cases and develop the guidelines for the better management of these patients, yet this study needs expansion and extended duration to have better statistical analysis.

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