

AN ANALYSIS OF WEAPONS USED IN HOMICIDES IN JAIPUR REGION- A THREE YEARS STUDY

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ABSTRACT

BACKGROUND

The various patterns of homicidal deaths include assault by sharp weapon, blunt weapon, firearms, strangulation, homicidal hanging, smothering, drowning, burns, poisoning etc. The role of forensic expert is to help in the administration of justice. Detailed examination of wounds helps in prediction of the weapon used in the killing. The nature of the weapon used, and the gravity of the injury inflicted together play a decisive role in identifying the charges to be held against the said accused which further determine the punishment in each case. The present study was thus undertaken to find out the weapons used commonly in homicidal deaths in the study region.

MATERIALS AND METHODS

The present study was conducted at the Department of Forensic Medicine of a tertiary care center of the state over a period of three years. Informed consent from the relatives of the deceased was also kept as an inclusion criterion. Suspected deaths later disproved to be homicidal in manner as per police inquest and negative consent for participation in the study were the exclusion criteria. The weapon used in these killings were identified and other data collected to observe the pattern of use of different weapons in homicidal deaths in the study region.

RESULTS

In the present study, blunt weapons were the most common offenders used for homicidal killing especially employed in Land and property disputes. Sharp weapons and Firearms followed next in order. Burns were used least, and this study also reported homicidal killings by poisonings which is a rare finding and not reported earlier. Strangulation and burns were more common in female victims. Burning to death was used as a means for killing more commonly in fatalities of females associated with the demand of dowry.

CONCLUSION

Stricter enforcement of laws must be ensued on possession of dangerous weapons like sharp heavy cutting weapons/firearms and also to solve disputes related to land and properties to prevent these unwanted deaths hampering the active sections of the society.

KEYWORDS

Homicide, Blunt Weapons, Sharp Weapons, Firearm Weapons.

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BACKGROUND

Homicide is prevalent widely almost all over the world. Investigations of homicide have hefty impact in court trials of any judicial system of the country. Homicide can be described as the killing of one human being by the act, of commission or omission of another human being and the term applies to all such killings, whether criminal or not excluding the deaths due to rash & negligent act. The

various patterns of homicidal deaths include assault by sharp weapon, blunt weapon, firearms, strangulation, homicidal hanging, smothering, drowning, burns, poisoning etc. The role of forensic expert is to help in the administration of justice.

Medico legal autopsies not only give the cause and manner of death but also give important statistical data related to legal incidents in the cities and regions where the autopsies are conducted. Investigation of a homicidal death can never be complete without a detailed post-mortem examination. The detailed analysis and scientific interpretation of autopsy finding is imperative to reconstruct the crime scene. Autopsy surgeons not only help to draw a conclusion for the cause of death of the victim by studying the dead body and co-relating with the circumstantial evidence, but also help to draw a conclusion about the methods and means employed in these acts along with

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requisite detailing of the injuries inflicted which plays a determinant role in framing charges in cases. Forensic pathologists not only help to draw a conclusion for the cause of death of the victim by studying the dead body and correlating with the circumstantial evidence, but also help to draw a conclusion about the methods and means employed in these acts. Thus, helping law to punish the person involved in committing the crime.

Detailed examination of wounds helps in prediction of the weapon used in the killing. Nature of the weapon used and the gravity of the injury inflicted together play a decisive role in identifying the charges to be held against the said accused which further determine the punishment in each case. The study of wounds to assess the weapon used in crime can provide valuable baseline information and also guides in collection of evidences in favour of the prosecution. In response to the changing face of society in recent times, there also has occurred a tremendous change in the pattern of crime and its execution along with the weapons used for it. The present study was thus undertaken to analyse the weapons used commonly in homicidal deaths in the study region.

MATERIALS AND METHODS

The present study was conducted at the Department of Forensic Medicine of a tertiary care center of the state of Rajasthan over a period of three years. The Institution caters to the population of zonal region covered as well as to cases referred from other higher centers from all over the state and also from the adjoining regions of neighbouring states. This observational study was conducted from January 2012 to December 2014 after obtaining ethical clearance from the Institutional ethical Committee and due permissions from the Research review board of the Institute.

Inclusion Criteria

Deaths resulting from homicidal attack and informed consent from the relatives of the deceased for participating in the study were kept as inclusion criteria.

Exclusion Criteria

Suspected deaths later disproved to be homicidal in manner as per police inquest and negative consent for participation in the study were the exclusion criteria.

All medico-legal autopsies of homicidal deaths satisfying the inclusion and exclusion criteria conducted at mortuary of the Department of Forensic Medicine during the study period were included in this study.

Detailed information regarding circumstances of crime was sought out from inquest papers, treatment records and history stated by the victim's relatives at the time of commencement of post-mortem examination. These were then supplemented by the autopsy findings.

The detailed examination of wounds was carried out and the characteristics of all wounds found in the dead bodies were observed and noted in detail and opinion was framed as regards to the weapons used in correlation with the circumstantial evidences elicited from the history and available records. The findings were further subjected to confirmation with the proceedings and conclusions of the police investigation. All collected data was then processed in Microsoft Excel software and tabulated to deduce results of the study.

RESULTS

A total of 272 cases of alleged culpable homicidal deaths excluding road accident cases satisfying inclusion and exclusion criteria were included in the study as per inclusion and exclusion criteria. Considering the distribution of the homicidal deaths over these years there were 82, 96 and 94 cases each year respectively in three consecutive years. [Fig. 1]

A variety of weapons/ means were found to be used in commissions of homicides in the present study on basis of the fatal wounds inflicted in these cases. [Fig. 2]. These included Blunt weapons, Sharp weapons, Firearm weapons, pressure over the neck, poisoning and thermal injuries. The present study revealed that majority of cases were caused by blunt weapons (56.62%) followed by an almost equal proportion of sharp weapons and firearms (14.3% & 14.7%); and also, that of strangulation and poisoning (6.62% each). the least commonly employed means for committing homicide was subjecting to fire (01.1%). [Table 1]

Amongst the victims, there were 77.2% males and 22.8% females. The nature of weapons used to commit killings in both sex mostly followed the proportion of distribution of these cases except with Firearms (uncommon in Females); and, Strangulation & Burns (more commonly used on Females) [Fig. 3]. Age of victims did not show any predilection for the weapon employed in homicidal killings. However, the weapons used in homicides showed varying patterns for different motives behind the homicidal killings [Fig. 4] Blunt force trauma was most commonly found to be inflicted on head region of body in 89.75% cases followed by upper and lower limbs in 6.25% cases and trunk region in 4% cases. Fatal Sharp force trauma was most common in neck and chest region in 43% cases followed by peripheries (25%) and head and abdomen (16% cases each).

Nature of Weapon Used	2012	2013	2014	Total
Blunt Weapons	48	54	52	154
Sharp Weapons	10	14	15	39
Firearms	10	13	17	40
Strangulation	7	6	5	18
Poisoning	6	7	5	18
Burns	1	2	0	3
Total	82	96	94	272

Table 1. Nature of Weapons Used in Homicide over 3 Years

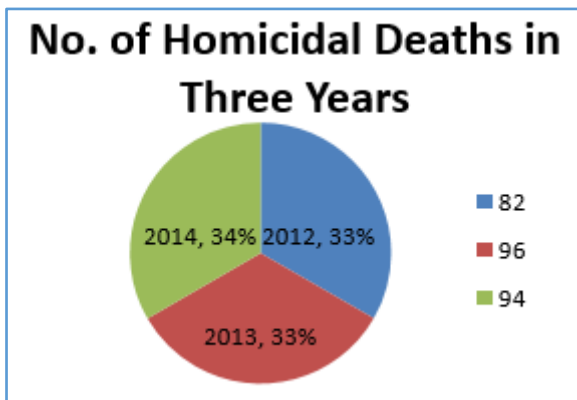


Figure 1. Year Wise Distribution of Homicidal Deaths in Three Consecutive Years (2012-2014)



Figure 2. Different Types of Fatal Wounds Observed in Cases of Homicidal Deaths on Basis of which Weapons were Predicted

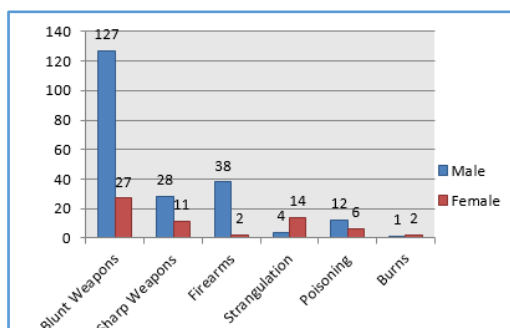


Figure 3. Weapons Used for Homicides in Males & Females

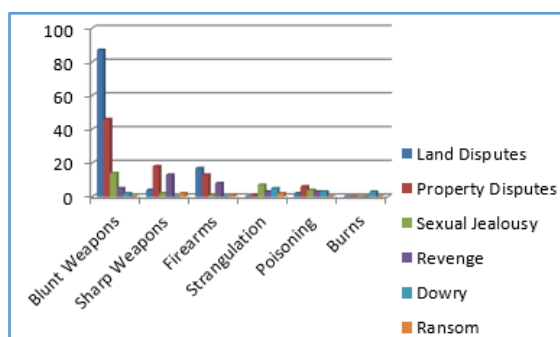


Figure 4. Weapons Used for Different Motives of Homicides

DISCUSSION

The present study reports the use of blunt weapons as a means of committing homicide in majority of cases (56.62%). The probable reason may be due to their easy availability and whenever available was resorted to for the commission of the crime. Similar findings have been reported by some other authors.¹⁻⁸ However, our results are contradictory to many other studies where sharp weapons were used as the most common weapon for commission of homicide.⁹⁻¹⁶ We report an almost equal use of sharp weapons and firearm weapons following the use of blunt weapons in victims of homicidal deaths (14.3% and 14.7% each). This study reports much lesser use of sharp force trauma for commission of the crime of culpable homicide as compared to most other studies as mentioned above.

Almost all the studies being considered here mention the use of blunt or sharp weapons as the most common weapon followed by another. However, in the present study there was use of sharp force and firearm weapons as a second choice by the assailants equally. The use of firearm weapons has been rarely reported in Indian studies being observed only in few studies.^{5,12,15} In the present study, Firearms were the second most commonly employed weapon of offense quite similar to another study who reported it to be the third most common weapon used for homicidal killing.⁶ Manual & ligature strangulation have been reported as means for commission of culpable homicide in 06.62 % cases in the present study which is quite less than that reported in few other studies.^{5,6,7,14,15} Most previous studies have reported homicidal burns as rare means for committing homicide seen in 1-5% cases which is similar to the present study (01.1%). There were eighteen cases of homicidal deaths due to administration of a poisonous substance which has not been reported in any of the studies being compared to. This is probably because poisoning is not an easy method for execution of homicide. It was observed in the present study that poisoning was employed as a means where the victims were murdered for sexual jealousy, financial and property disputes or dowry wherein the offender was a known person who could conduct the administration easily being a person of trust for the victim.

The means of homicidal killing varied in both genders in the present study. Burns and strangulation were more common in homicide of females as compared to males and only two victims were females amongst the forty cases of deaths resulting from use of firearm weapons. This difference was probably because the homicide of females was mostly as a result of impulsive behaviours in the heat of moment and thus committed with easily available means at hand at homes.

The most common site of infliction of blunt force trauma in our study was the head region followed by neck by means of strangulation, both accounting for 89.75% cases. This is in accordance to most other studies.^{2,3,6,7,15} The next commonly offended site in fatal blunt trauma were the peripheral parts of the body in 6.25% cases followed by chest and abdomen in 2% cases each. In cases where sharp weapons had been used chest and neck were the most

commonly targeted sites for causation of fatal injury seen in 43% cases followed by peripheral parts in 25% cases and head and abdomen in one case each (16% each); which is quite obvious except the rarity of infliction with sharp weapons on abdomen which is the most vulnerable site for sharp force trauma. This finding is not explainable and has probably resulted as a matter of chance in the present study. Similar findings have been reported by other authors with the variation of abdomen being the most common site of sharp injuries followed by chest.^{2,3,6,7}

CONCLUSION

1. Blunt weapons were the most commonly employed homicidal weapons in the present study.
2. Land disputes were found to be well correlating with homicides which is a matter of concern and needs intervention by legal agencies to develop ways to solve them peacefully and speedily to avoid such fatal confrontations amongst the disputed parties.
3. Moreover, Strict enforcement of law must be ensued on possession of dangerous weapons like sharp heavy cutting weapons/firearms to prevent these unwanted deaths hampering the active sections of the society.

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