Pattern of Injuries in Homicidal Deaths

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Abstract

The aggressive nature, creative ability and insatiable desire of human to conquer the environment exposes him to severe trauma and violent deaths. One of the components of violent death world-wide is homicidal death. Killing of an individual is the highest level of aggression found in all the cultures. Various means used by the assailants are Asphyxiation, Poisoning and Injuries. Injuries in homicidal death cannot be determined on the basis of any general rules; every case has to be considered on its own merit in relation to the particular circumstances obtained at the time of injury. Hence the present prospective study of 2 years duration from October 2005 to September 2007 was taken up to analyze age distribution of victims, the pattern of injuries, and period of survival in these cases. Homicidal deaths constituted 3.8 % of autopsies conducted. 58 % of homicides occurred in the age group 20-29 years. Sharp weapon injuries were more common (51 %). Defence injuries were common in deaths due to sharp weapon injuries (62 %).

Key words: Pattern, Injuries, Homicidal deaths.

Introduction

The world's first murderer CAIN sought to evade an admission that he had just killed his own brother ABEL. Since then, man has been more fascinated by crime than by any other subject. Offences against human body are very many, of which Homicide is the most heinous crime. The global rate of homicide is about 7.6 per 1 lakh population1. About 80 – 100 cases of homicides take place everyday in India2. The WHO defines homicide as any death resulting from injury purposefully inflicted by another person, is dealt under codes E960 – E9693 The Forensic Pathologist plays a crucial role, apart from aiding in the establishment of identity of the victim, time since death and ascertaining the mode of death, vital clues as to the type of weapon used, probability of multiple assailants based on the type, nature and number of injuries, presence or absence of defence wounds would unravel the mystery behind these murders. Injuries in homicidal death cannot be determined on the basis of any general rules; every case has to be considered on its own merit in relation to the particular circumstances obtained at the time of injury. Hence the forensic expert by applying his knowledge and expertise to the findings at autopsy and circumstances of death is able to draw an opinion, there by providing the Investigating Officer with inputs of evidentiary value towards the establishment of "CORPUS

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DELICTI". Hence the present study was undertaken to find out most vulnerable age group, pattern of injuries, commonest sites involved, defence injuries and period of survival

Materials and Methods

The present study was conducted in the Department of Forensic Medicine, MS Ramaiah Medical College, Bangalore during the period from October 2005 to September 2007 for a period 2 years. All the cases brought to the dept for medico legal autopsy with alleged history of homicide and also the cases which were later registered as homicide were included. Ethical clearance was obtained. Homicides by means of asphyxiation and thermal injuries were excluded. Information / history were obtained from police / relatives of victim regarding the circumstances of crime.

Results

During the study period 1580 cases were autopsied, which included 60 cases of homicidal deaths accounting for 3.8% of the cases. Out of 60 cases of homicidal deaths 45 were due to Injuries constituting 75% of the total homicidal deaths

Table 1: Age and Sex distribution of Victims

Sl No	Age in years	Number of cases			Percentage
		Male	Female	Total	
1	0-9	2	0	2	4.4
2	10-19	0	1	1	2.2
3	20-29	21	5	26	57.9
4	30-39	5	1	6	13.3
5	40-49	4	0	4	8.9
6	50-59	3	1	4	8.9
7	60 and above	2	0	2	4.4
	Total	37	8	45	

Chart 1: Distribution of cases according to Pattern of injuries

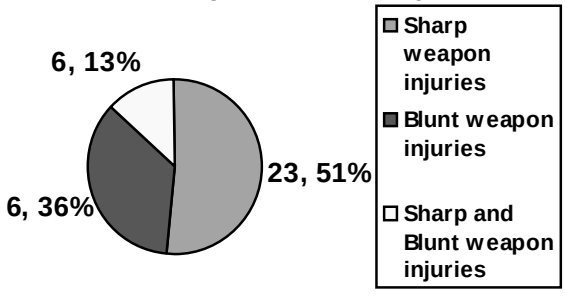

Table 3: Distribution of cases of single fatal injury based on the region involved

Sl No	Region	No of cases			Percentage
		Sharp weapon	Blunt weapon	Total	
1	Head	1	8	9	36
2	Neck	4	0	4	16
3	Chest	8	1	9	36
4	Abdomen	3	0	3	12
	Total	16	9	25	

Table 4: Distribution of cases of multiple fatal injuries based on the region involved

Sl No	Region	No of cases				Percentage
		Sharp weapon	Blunt weapon	Both Sharp and Blunt weapon	Total	
1	Head	0	1	3	4	20
2	Head & Neck	1	1	2	4	20
3	Head & Chest	1	0	1	2	10
4	Chest & Abdomen	4	0	0	4	20
5	Abdomen	0	0	0	0	0
6	Multiple sites	6	0	0	6	30
	Total	12	2	6	20	

Table 5: Distribution of cases based on presence or absence of defence injuries

Sl No	Defence Injury		No of cases				Percentage
			Rt side (UL & LL)	Lt side (UL & LL)	Both sides	Total No of cases	
1		Sharp	7	3	3	13	62
	Present-	Blunt	2	1	0	3	14.2
		Both	3	1	1	5	23.8
2	Absent					24	
	Total					45	

(Note- UL—Upper limb, LL—Lower limb)

Table 6: Distribution of defence injuries based on site involved

Sl No	Site of defence injury	No of cases	Percentage
1	Palm	6	28.6
2	Palm & Forearm	5	23.9
3	Palm and Sole	2	9.5
4	Forearm	4	19
5	Arm	2	9.5
6	Other site	2	9.5
	Total	21	

Note: - Other sites in the study include the site like back of chest, leg, knee, etc.

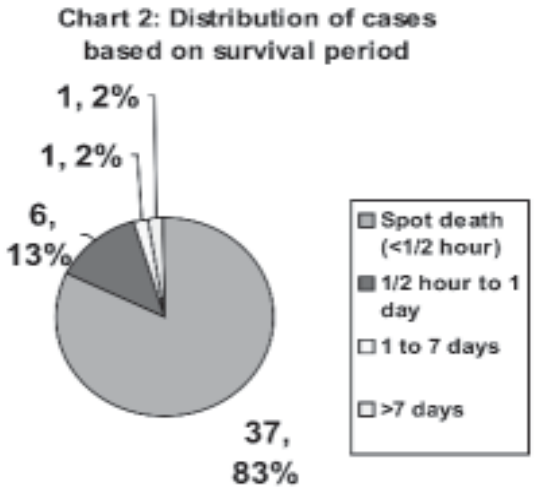

Figure No. 1 Multiple chop wounds over the back of head and neck and stab injuries over the back of chest caused by the curved end of a heavy cutting weapon (long).

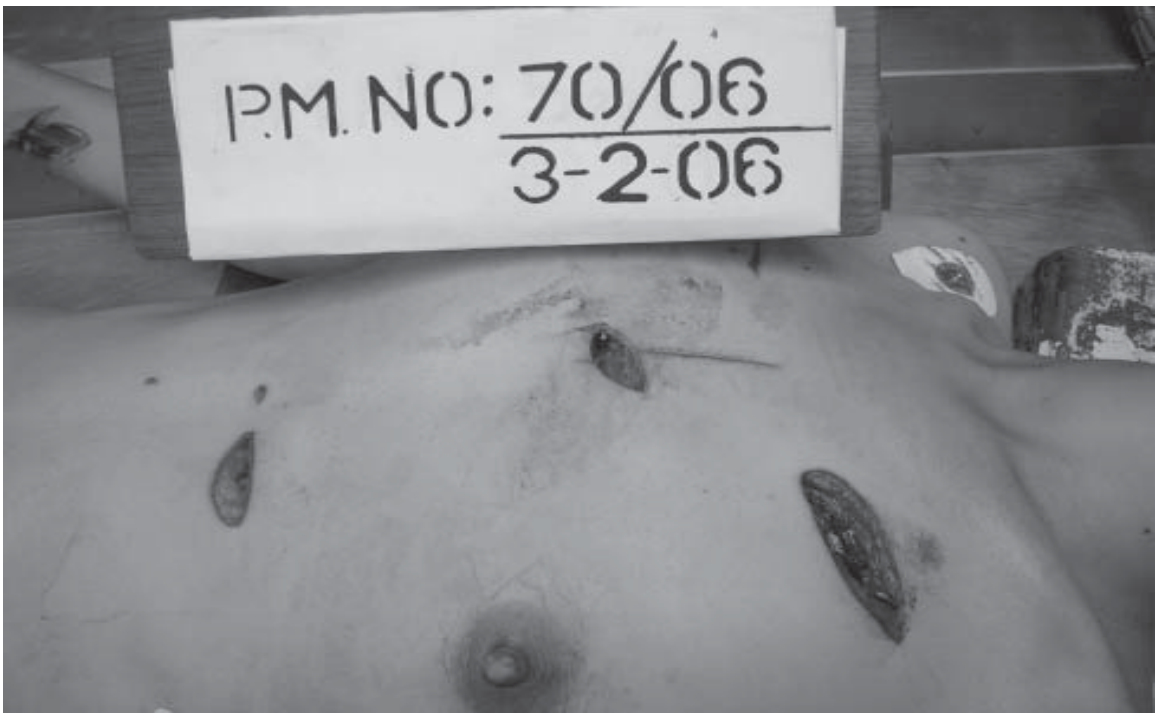

Fig No. 2- Multiple stab wounds caused by a single edged light cutting weapon.

Fig No. 3 Scene photograph of the deceased, lying in pool of blood, the body is naked & note the grinder stone used by the husband (accused) to crush her head.

Fig No. 4(a) - Unusual Defence Injury- Forearm. Fig No. 4 (b) - Foot

Fig No. 5- Multiple sharp heavy and light cutting weapons (sword, long, dagger, knife) used by the assailants in the concerned case

Fig No. 6- Various blunt weapons (cement block – blood stained, helmet, jack rod) used in the respective cases

Discussion

The highest incidence in the 20-29 years age group is because this age group is exposed to violent trauma by the nature of its life style and are commonly involved in gang rivalry, family disputes, unsuccessful romantic disputed, unemployment and financial instability forcing them to involve in violent activities exposing them to the greater risk. Similar observation was made in studies conducted by K.W.M Scott 4, Avneesh Gupta 5. But is in contrast to the observation made by P. Whalsten 6 where the highest incidence was in the age group of 31 to 40 years.

Males constituted 82.2 % of the victims which could be because in India males are generally working outside the house and are of aggressive in nature as compared to the females who remain indoors and are of soft natured. Those who are more likely to be aggressive are also likely to be on the receiving end of aggression; hence males are at greater risk of being victimized due to stress, frustrations, arguments, family disputes and violence in day to day life. Similar observation was made by C.M. Milroy7 and Manoj Kumar Mohanty 3

Sharp weapon injuries clearly out numbered the blunt weapon injuries. Most of the sharp weapon injuries were due to gang rivalry, real estate enemity where in the assailants used the sharp weapon due to easy availability and lethality of such weapons. The common sharp weapons used were longs, knives, swords etc. Blunt weapons were used more so in domestic homicides due to pretty arguments hence using immediate available weapons at that moment like stones, rod, pipe, wooden plank, helmet etc. Similar observation was made by Avneesh Gupta 5, P Wahlsten 6 and is in contrast to the study conducted by C.M. Milroy 7 where in the commonest method of killing was by shooting due to easy availability fire arms in the western countries.

25 cases were due to single fatal injury which included 17 sharp weapons injuries in the form of stab injuries, cut throat injuries, and chop injuries. Other 8 cases were due to single blunt injuries all involving the head.

In cases of stab wounds, chest was the most targeted site because of its multiplicity of vital organs and its nearness at hand to an attacker, neck was the another favored site of chop injuries next to the head. Similar observation was made by Knight8 and Mason9.

When the sharp heavy cutting weapons were used by the assailants multiple sites were involved due to involvement of multiple offenders where as in multiple blunt weapons injuries head remained the target of choice. In cases where both the types of the weapons were used they targeted commonly the head and neck.

Defence injuries in the form of incised wounds and chop wounds were common among deaths due to sharp weapon injuries, and in the form abrasions, contusion, laceration and fractures among deaths due to blunt weapons injuries and more so on right side of the body as most of the deceased were right handed. Similar observation made by James Alen Fox10 where in the defence injuries were seen in 45.2% of the fatalities due to injuries and is in contrast to Avneesh Gupta 5 where in defence injuries were present only in 18.9 % of the cases.

The highest defence wound on the hand /fore arm could be attributed human tendency of warding of the attack by raising the hands to cover the most vital parts like head and chest. Presence of the defence injury in the soul and knees indicates that the victim was laying on the ground and hence tried to ward of the attack by raising the legs /kick of the assailant.

Most of the victims died on the spot which could be attributed to the lethality of the weapons used and determination on the part of the assailants to kill the victims. Similar observation was made by Avneesh Gupta 5 where in the highest number of victims died on the spot (44.8%) and Sacchidananda Mohanty 11 where in the majority of the victims died instantly (45%) or within 24 hours (30%)

Conclusion

Homicidal deaths constituted 3.8 % of autopsies conducted. Maximum number of homicides (58 %) occurred in the age group 20-29 years in both sexes. Sharp weapon injuries (51 %) were the commonest pattern followed by blunt weapon. Chest was the target of choice for stab injuries, head and neck for the chop injuries and head in the blunt injuries. Defence injuries were common in deaths due to sharp weapon injuries (62 %), commonest site being right palm and forearm.

Limitations

1. Study was confined to a particular area (Bangalore North).
2. Number of cases studied was less (as the duration of 2 years was taken as the criteria).

Recommendations

1. As most of the victims were in 20-29 years age group the problems of this age group like unemployment, marital disputes and family problems should be addressed by referring the parties to an appropriate agency or counselor and the police should be trained to recognize social problems likely to lead to violence at home.
2. Strict enforcement of law on possession of dangerous weapons like sharp heavy cutting weapons/firearms.

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