Original Article

An Epidemiologic Profile of Homicidal Deaths in Karachi

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ABSTRACT

Objective: The study was planned to review the epidemiologic profile of homicidal deaths in Karachi.
Design of Study: Observational study.
Duration and Place of Study: Since Jan. 2009 to June 2009 and place of study was the Department of Forensic Medicine and Toxicology of Jinnah Postgraduate Medical Centre (JPMC), Karachi.
Materials & Methods: Two hundred and ninety seven cases were included in the study. The data was collected by reviewing the police papers and autopsy reports. The parameters recorded were age, sex, manner of death, type of weapon used, part of the body involved, time of death and location of fatal wound.
Results: During the study period there were 297 cases of homicides, out of which 259 (87.2%) were firearms related homicides and majority of victims were males (75.4%) and most of them were between 21 to 30 years of age (39.5%). Most of the crimes occurred during night hours (59.5%) and head injuries were most common (49.8%).
Conclusions & recommendations: The firearms related homicides are highest in number, the reason being easy access to firearm weapons. Further studies and effective intervention strategies are needed to be employed to reduce the occurrence of homicides. The situation demands a strict control on firearms by government.
Key words: Homicidal, Fire arms, Blunt weapon, Sharp weapon, Hanging and Strangulation.

INTRODUCTION

Crime is something that impacts everyone whether directly or indirectly through societal and economic costs and the leading causes of crime are jealousy, love, revenge, poverty, hatred, desperation, juvenile thrills, lack of education, broken home and "gang" or peer pressure.

The major form of crime is murder or killing of another person (homicide) in which the main causes are target killings (very common in Karachi nowadays), deeply rooted psychological problems, too much stress, isolation, bad parenting etc. Look at the first murder known man which was when Kane killed Abel because he was jealous that God likes Abel's flowers more than his.

The World Health Organization (WHO) defines homicide as "any death resulting from injury purposefully inflicted by another person". This is crime is unacceptable to all types of society.[1] The world witnesses over 500,000 deaths due to homicide annually.[2]

It is the most heinous crime against society and like other parts of the world it is very common in our country. [3, 6] In spite of legal controls, homicidal deaths are on rise.[3,4]

There has been a tremendous increase in the number of fire-arm related homicide in childhood and adolescence (CDC 2004).[5] There is a positive co-relation between homicide rates and availability of guns in developed nations (Hemenway and Miller 2000). The number of firearms in the hands of private citizens continues to grow each year at a rate far exceeding that of the population as a whole.

MATERIALS AND METHODS

This study was undertaken in the department of Forensic Medicine and Toxicology of Jinnah Postgraduate Medical Centre (JPMC) Karachi from January 2009 to June 2009 on victims of homicidal deaths. This centre is an apex medical centre where 75% of all medico legal autopsies in Karachi are performed. The data was collected by reviewing the police papers and autopsy reports. The parameters recorded were age, sex, manner of death, type of weapon used, part of the body involved, time of death and location of fatal wound.

RESULTS

During the period of our study there were 297 cases of homicidal death. The cases where the manner of death was undetermined were not included in the study. Out of these 297 cases, 224 (75.42%) were males and 73(24.58%) were females. (Table No. 1)

Table No.1: Sex distribution in homicidal deaths (n=297)

Sr. No.	Sex	Number of cases	Percentage
1	Male	224	75.42
2	Female	73	24.58
	Total	297	100.00

There were 4(1.34%) cases below 10 years of age, 21(7.07%) cases in 11-20 years group, 117(39.39%) cases in 21-30 years age group, 89 (29.97%) cases in 31-40 years age group, 31 (10.44%) cases in 51-60 years age group, 22(7.41%) cases in 51-60 years age group, 13 (4.38%) cases in age group above 60 years. The majority of cases fall in 3rd decade. The next common age group was 4th decade. (Table No. 2)

Table No.2: Age distribution of the victims (n=297)

Age group	Number of cases	Percentage
0-10 years	4	1.34
11-20 years	21	7.07
21-30 years	117	39.39
31-40 years	89	29.97
41-50 years	31	10.44
51-60 years	22	7.41
61 onwards	13	4.38
TOTAL	297	100.00

The firearms were used in maximum number (87.21% cases). Blunt means were used in 5.05% cases, sharp weapon in 2.02% cases, hanging & strangulation in 3.70% cases & burns in 2.02% cases. (Table No. 3)

Table No. 3: Weapon used in homicidal deaths (n=297)

Types of weapon	Number of cases	Percentage
Firearms	259	87.21
Blunt weapon	15	5.05
Sharp weapon	06	2.02
Hanging & strangulation	11	3.70
Burns	06	2.02
Total	297	100.00

Head & neck are maximally hit area in all forms of violence, 49.81 % cases of firearms, 83.33% cases of sharp weapons and 80.00% cases of blunt weapons. The chest was involved in 31.26% cases of firearms, 16.67% cases of sharp weapon and 20.00% cases of blunt weapon. The abdomen, lower limb and upper limbs were hit in firearm cases respectively 6.94%, 6,20% & 5.79% cases. (Table No. 4)

Table No. 4: Part of body involved in fatal injuries.

Area involved	Firearms cases(%age)	Sharp cases (%age)	Blunt cases (%age)
Head and neck	129 (49.81%)	05(83.33%)	12(80.00%)
Chest	81 (31.26%)	01(16.67%)	3(20.00%)
Abdomen	18 (6.94%)	0	0
Upper Limb	15 (5.79%)	0	0
Lower Limb	16 (6.20%)	0	0
Total	259	6	15

In about 60 % cases the time of homicidal deaths was evening / night. (Table No. 5)

Table No. 5: Time of homicide.

Time	Number of cases	Percentage
6pm – 6am	177	59.60
6am – 6pm	120	40.40
Total	297	100.00

DISCUSSION

In our study majority of homicidal cases are males. Criminal behavior also breaks down along gender lines, males are more likely, both historically and sociologically to be responsible for a criminal behavior. In part this may be explained by hormonal differences, the testosterone being a hormone linked to more violent and risky behavior. Certain aspects of male social behavior may also encourage this, such as the need to appear "tougher" which helps legitimize violence.

Age is often a large determinant of criminal behavior; most initial offenders tend to be younger. Criminal activity then decreases as age increases; this may be a result of other social responsibilities precedence such as taking care of a family.

Most of the victims belonged to their third decade of life. These finding are consistent with that of other studies in Pakistan[8,9,10] which gives the highest incidence in the same age group and 28-40% of all homicides in the age bracket of 20-29 years.[5,11,12,13,14,15] but differ from the findings of Chu and Rachuba et al as they have reported 15-19 years and 10-25 years as the most vulnerable age group in their respective studies[16,7] The number was lower at the extremes of age as children below ten and adults above sixty were involved in only 1.34% and 4.3%. Wilkey and others have also reported this low incident at the extremes of age.[18]

Gun related violence is most common and in conjunction with target killings and gang violence often involving young adults. In our study the firearms were the major weapon of offence (87.21%) & it is consistent with other studies in Pakistan[11,15,25] and in consensus

with a high level of firearms possession.[16] It is followed by deaths due to application of blunt weapons (5.05%) and asphyxiation (3.70%). This is in contrast to the studies conducted in New Found land and Costa-Rica[19,20] where sharp weapons pre-dominate as the most common method of homicide. This is because firearms are not freely available and law is strict relating to the possession of firearm weapons.[21] In the United States, firearms are used in more than 60% of all homicides.[26]

Death due to head injury was the commonest finding followed by the chest which is consistent with the findings of others.[22, 23] The upper limbs and lower limbs sustained minimum number of fatal injuries. When firearms are used head and neck are most commonly involved, when blunt object is used in most of the cases face and head was the target but when sharp object was used, head, neck and abdominal regions were commonly involved.

In the present study, it has been observed that offence can occur at any time of the day. The highest incidence was observed during evening and night. Others had similar findings.[24]

CONCLUSIONS

The firearms related homicides are highest in number, the reason being easy access to firearm weapons. Further studies and effective intervention strategies are needed to be employed to reduce the occurrence of homicides. The situation demands a strict control on firearms by government.

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