

## PATTERN OF HOMICIDAL DEATHS IN FAISALABAD

Muhammad Zahid Bashir, Ahmad Saeed, Dilawar Khan\*, Muhammad Aslam\*\*, Javed Iqbal, Mumtaz Ahmed  
Departments of Forensic Medicine, Khyber Medical College, Peshawar, \*Ayub Medical College, Abbottabad and \*\*Punjab Medical College, Faisalabad

**Background:** Homicide is a reflection of extreme aggression. Many factors influence such a behavior. Family environment, urbanization and the presence of weapons. We conducted this study on autopsies conducted at the department of forensic medicine, Punjab Medical College Faisalabad to know the dimensions of homicide in terms of age, sex, weapons involved and seasonal variation if any. **Methods:** The study encompasses all 188 cases of homicide reporting for autopsy at the department of forensic medicine, Punjab Medical College Faisalabad from July 2001 to June 2002. The cases were categorized on the basis of police inquest and autopsy findings. **Results:** The homicide rate in Faisalabad was 8.3/100,000 population/year. The age of predilection was the third decade of life and males outnumbered females by a ratio of 3.47:1. A firearm was used in almost 50% of the cases. A surge in the summer months was noticed. **Conclusion:** Homicide rate is high in Faisalabad. Firearms are the major weapon used for committing homicide.

**Key Words:** Homicide, Firearms, Autopsy.

## INTRODUCTION

Homicide is the death of one human being as the result of the conduct of another<sup>1</sup>. Homicide is an expression of aggression in its most extreme form. Amongst the strongest factors that predict aggression and violence is a poor family atmosphere as reflected in rejection, punitiveness, hostility, permissiveness and aggression. Factors weakly related to aggression are a male gender, neuropsychological deficits, having a muscular physique, high plasma testosterone levels and being raised in an urban environment<sup>2</sup>. In addition to factors that trigger or provoke aggression; there are other elements of a potentially aggressive situation that facilitate the expression of the behaviour. These facilitators include the presence of weapons and seeing other people acting violently; which may either simply increase arousal or they may suggest to the observer that violence is an acceptable option<sup>2</sup>.

There is a great variation in the frequency of homicide in the world ranging from less than 1 per 100,000 population in Egypt, Greece and England to more than 15 per 100,000 in Mexico and Columbia<sup>2</sup>. In USA homicide rates have varied from 1.1/100,000 in 1903 to a peak of 10.7/100,000 in 1980, declining to 6.1/100,000 in 2000.<sup>3</sup>

Homicide is reported to be commoner in the younger age group.<sup>4-10</sup> Males are the predominant victims in cases of homicide.<sup>4-11</sup> The weapon used to commit homicide varies in different parts of the world but is mostly a firearm<sup>4-13</sup> but may be a sharp weapon<sup>14-18</sup> or some other means. Victims of homicide are usually injured in the head and chest regions.<sup>7,15,19</sup> Homicides are more common in the summers.<sup>4,19</sup>

The study was carried out to know the frequency of homicidal deaths in Faisalabad, which gender and age groups were inflicted, the weapons being used to inflict such deaths, parts of the body involved and seasonal trends if any occurring in such cases. Knowing the magnitude and dimensions of a problem is the first step in trying to solve or eradicate a problem. It is this first step that we have endeavored to take.

## MATERIALS AND METHODS

The cases labeled as homicide on the basis of police inquest and autopsy findings were selected from all the autopsies conducted at the department of forensic medicine, Punjab Medical College Faisalabad between 1<sup>st</sup> July 2001 and 30<sup>th</sup> June 2002.

The cases were grouped on the basis of age, sex, causative agent, part of the body having mortal injuries and the season in which the incident took place. The data was recorded in a proforma and the results were then summarized.

## RESULTS

During the period under study a total of 188 homicidal deaths were reported out of a total of 236 autopsies conducted in the department, thus being 79.66% of all deaths reporting for autopsy.

Faisalabad was having a population of 2.272 million during the study period, the rate of homicide comes out to 8.3 per 100,000 population per year.

The victims were mainly between 20-39 years of age with 53 cases (28.2%) in the third decade of life and 48 (25.5%) in the fourth decade. Males outnumbered females by a ratio of 3.47:1. Age and sex distribution is shown in table 1.

The primary method for committing homicide was by a firearm weapon (49.4%) followed by sharp force in 25.5% of the cases. In three cases both a sharp weapon and blunt force collectively were responsible for the death of the person.

Firearms were primarily targeted at the chest (34.1%) and head (31.7%). Sharp weapons injured the chest (33.3%) and neck (27.5%) whereas death in case of blunt trauma was predominantly due to head injury (64.2%).

The greatest number of homicides was committed during the hot summer months of June and July whereas the lowest number was in February.

**Table- 1: Age and Sex distribution of victims of homicide at Faisalabad in the year 2001-2002**

Age (Yrs)	Males	Females	Total %
0-9	9	09	18 (9.57%)
10-19	17	04	21 (11.17%)
20-29	40	13	53 (28.19%)
30-39	40	08	48 (25.53%)
40-49	19	07	26 (13.82%)
50-59	14	0	14 (7.44%)
60-69	04	0	04 (2.12%)
>70	03	01	04 (2.12%)
<b>Total</b>	<b>146</b>	<b>42</b>	<b>188(100%)</b>

**Table-2: Causative Agent/ Modalities in Homicidal deaths in relation to age groups**

Age Group (Yrs)	Causative Agent/Modalities					
	Firearm	Sharp	Blunt	Asphyxiation	Poison	Flame
0-9	0	06	04	09	0	0
10-19	14	03	01	02	01	0
20-29	29	18	04	01	01	01
30-39	26	12	05	05	0	01
40-49	11	07	04	04	0	0
50-59	10	01	03	0	0	0
60-69	01	01	02	0	0	0
70-79	02	0	02	0	0	0

Total	93	48	25	21	02	02
(%age)	(48.69%)	(25.13%)	(13.08%)	(10.99%)	(1.04%)	(1.04%)

**Table-3: Target Areas in different methods of Homicide**

Region involved	No. of injuries with different causative Agents		
	Firearm	Sharp weapons	Blunt Means
<b>Head</b>	41 (31.78%)	11 (15.94%)	18 (64.28%)
<b>Neck</b>	05 (3.87%)	19 (27.53%)	03 (10.71%)
<b>Chest</b>	44 (34.10%)	23 (33.33%)	04 (14.28%)
<b>Abdomen</b>	30 (23.25%)	14 (20.28%)	03 (10.71%)
<b>Upper Limb</b>	03 (2.32%)	01 (1.44%)	0
<b>Lower Limb</b>	06 (4.65%)	01 (1.44%)	0

**Figure-1: Month-wise distribution of homicidal deaths**

## DISCUSSION

During the period under study, 188 deaths were labeled as homicide out of a total of 236 autopsies conducted at the department. This comes out to be 79.66% of the total. This is a higher percentage than reported in other cities of Pakistan like Lahore<sup>4</sup> and Bahawalpur<sup>5</sup> but is less than the percentage in Peshawar where 82.67% of the total autopsies were homicides.<sup>19</sup>

The rate of homicide (8.3/100,000 population per year) is rather high when compared to countries like Egypt, England and Greece but is lower than Mexico and Columbia.<sup>2</sup> The reason for this high rate of homicide in Faisalabad could be the industrial character of the city with its inherent socio economic implications like societal disorganization,<sup>20,21</sup> the high population density<sup>22</sup> and the free availability of weapons, three factors described as increasing the vulnerability to homicide coming together in the city of Faisalabad. However rates of 31 to 124/100,000 population have been reported in other metropolitan cities.<sup>8, 10, 15</sup>

The male to female ratio was 3.47:1, which is consistent with other studies in Pakistan<sup>4-7</sup> and other countries.<sup>9</sup> This is because of the extrovert nature of males and a male dominant society where they handle most of the disputes and are more exposed to the extraneous world.

The age of predilection in our study is consistent with other studies in our country<sup>4-7</sup> and the increasing trend of violence in the younger age groups world wide.<sup>8-10,20,23</sup>

The preference for using a firearm for committing a homicide in our study (49.4%) is consistent with other studies in Pakistan<sup>4-7</sup> and other countries with a high level of firearm possession<sup>8-13,24</sup> and contrasts to countries with low level of firearm possession where means other than firearm are the primary mode of committing a homicide.<sup>14,15,17,25</sup>

The head and chest as primary target areas for homicide is also reported by other authors<sup>7,19</sup> and is consistent with the knowledge that vital organs (brain, heart and lungs) are situated here.

We also noted a peak incidence during the summer months. This has also been reported previously<sup>4,19</sup> and is due to the fact that the contact time between people increases due to the longer day times, increasing with it the risk of exchanging the heat of tempers.

This is an alarming situation in a society that is said to have faith in the Quranic injunctions, which clearly prohibit the killing of another Muslim.

## REFERENCES

1. Mant AK. Taylor's Principles and practice of medical jurisprudence. 13<sup>th</sup> ed. New Delhi: B.I. Churchill Livingstone; 1994: 215.
2. Mason JK, Purdue BN. The Pathology of Trauma. 3<sup>rd</sup> ed. London: Arnold; 2000:462-4.
3. Bureau of Justice Statistics Key Facts at a Glance Homicide Rate Trends.htm [cited on 12/11/02].
4. Aziz K, Rana P, Malik SA. Homicide in Lahore. Pakistan Postgraduate Medical Journal 1999; 10(1):10-13.
5. Ali SMA, Rizvi SIH, Ali MA, Chaudry TH. Weaponary Patterns in The Homicidal Deaths In Bahawalpur. The Professional 2000;7(4):514-6.
6. Qadir G, Aziz K. The Study of Homicidal Deaths in Larkana. Pakistan Postgraduate Medical Journal 2000;11(2):79-80.
7. Chughtai BR, Uraizy SMH, Rashid MA, Chaudry TH, Ahmed B, Qureshi GAA. The Professional 2002;9(4):316-9.
8. Whitman S, Benbow, Good G. The epidemiology of homicide in Chicago. J Natl Med Assoc 1996;88(12):781-7.
9. Nwoso SO, Odesanmi WO. Pattern of homicides in Nigeria—the Ile- Ife experience. West Afr J Med 1998;17 (4):236-8.
10. Concha-Eastman A, Espitia VE, Espinosa R, Guerrero R. Epidemiology of homicides in Cali, Columbia, 1993-1998: six years of a population-based model. Rev Panam Salud Publica 2002;12(4):230-9.
11. Batten PJ, Hicks LJ, Penn DW. A 28-year (1963-90) study of homicide in Marion County, Oregon. Am J Forensic Med Pathol 1991;12(3):227-34.
12. Lowry PW, Hassig SE, Gunn RA, Mathison JB. Homicide victims in New Orleans: recent trends. Am J Epidemiol 1988;128(5):1130-6.
13. Chu LD, Sorenson SB. Trends in California homicide, 1970 to 1993. West J Med. 1996;165(6):297-8.
14. Lo M, Vuletic JC, Koelmeyer TD. Homicides in Auckland, New Zealand. A 14-year study. Am J Forensic Med Pathol 1992;13(1):44-9.
15. Duflo JA, Lamont DL, Knobel GJ. Homicide in Cape Town, South Africa. Am J Forensic Med Pathol 1988;9(4):290-4.
16. Myers WC, Blasfield R. Psychopathology and personality in juvenile sexual homicide offenders. J Am Acad Psychiatry Law 1997;25(4):497-508.
17. Avis SP. "Homicide in Newfoundland: A Nine Year Review". Journal of Forensic Sciences 1996;41(1):101-5.
18. Lester D. Suicide and homicide in Costa Rica. Med Sci Law 1995;35(4):316-8.
19. Memon MU, Khalil ZH, Aziz K, Kaheri GQ, Khalil IR. Audit of cases autopsied in the mortuary of Khyber medical college Peshawar during the year 1999. Annals 2001;7(3):190-3.
20. Rosenberg ML. Violence in America: an integrated approach to understanding and prevention. J Health Care Poor Underserved 1995;6(2):102-12.
21. Pridemore WA. What we know about social structure and homicide: A review of the theoretical and empirical literature. Violence Vict 2002;17(2):127-56.

22. Kennedy HG, Iveson RC, Hill O. Violence, homicide and suicide: strong correlation and wide variation across districts. *Br J Psychiatry* 1999;175:462-6.
23. Dahlberg LL. Youth violence in the United States. Major trends, risk factors, and prevention approaches. *Am J Prev Med* 1998;14(4):259-72.
24. Blumstein A. Youth, guns, and violent crime. *Future Child* 2002;12 (2): 38-53.
25. Srch M. Medico-legal investigation of 66 homicides. *Soud Lek* 1979;24(1):7-14.

---

**Address for Correspondence:**

**Dr. Zahid Bashir**, Assistant Professor, Forensic Medicine, Women Medical College, Abbottabad. Phone: 0992-390221.