ORIGINAL ARTICLE J. Med. Sci. (Peshawar, Print) October 2014, Vol. 22, No. 4: 155-158

AN AUDIT OF HOMICIDAL DEATHS CAUSED BY FIRE-ARMS AN AUTOPSY STUDY

Anjum Zia Munawar[1], Faqir-Ullah[1], Asad Ullah[2], Anwar-Ul-Haq[1], Adil Jan[3], Jahanzeb[4], Rizwan-Ul-Haq[5]

[1]Department of Forensic Medicine, Khyber Girls Medical College, Peshawar - Pakistan

[2]Department of Forensic Medicine, Khyber Medical College, Peshawar - Pakistan

[3]Department of Forensic Medicine, Pak International Medical College, Peshawar - Pakistan

[4]Department of Forensic Medicine, Gomal Medical College D.I. Khan - Pakistan

[5]Department of Forensic Medicine, Peshawar Medical College Peshawar

ABSTRACT

Objective: To study the Autopsis of Homocidal deaths by fire-arm injuries.

Material and Methods: The present study was conducted in the department of Forensic Medicine and toxicology, Khyber Medical College, Peshawar from Janury 2011 to December 2011. Data collected included all reported homicidal deaths by fire-arm in District Peshawar on which autopsy was carried out.

Results: During the year 2011, total number of autopsies conducted was 1043. Homicidal deaths due to fire-arm were 747(71.62%). The weapon of assault in majority of cases was rifled firearm (Kalashnikov, pistol, revolver). The most vulnerable group belonged to third decade of life (35.08%) while the least affected were the extreme of ages (3.36%). Males were the main target as compared to females in the ratio of 6.39:1. The ratio of urban and rural arias was 1:1.72

Conclusions: Firearm has come out to be the most commonly used weapon for homicide in Peshawar which highlights the issue of its easy access and unchecked use as a matter of tradition to settle the disputes by Pakhtun population.

Key Words: firearm, Homicide, Autopsy.

INTRODUCTION

Homicide is one of the oldest crimes in human civilization. Recent upsurge of the wave of terrorism in the region, porous borders with the neighboring countries and the easy availability of sophisticated weapons have resulted in shooting up of the rate of homicidal deaths by fire-arm. Firearm has become the most dreaded killing tool used by human being to kill themselves[1]. Globally the deaths due to firearm weapon have increased trmendously[2]. In the United States and Europe the condition is no better as for as the homicidal firearm deaths are concerned. In the US the most frequent method of killing in cases of homicide and suicide is by firearm[3]. More than 25000 people die every year in the US by injuries caused by firearm[4]. In England and Wales, the most frequent firearm used are shotguns both in case of homicide and suicide, but firearm as a whole is a less frequent method of killing than in many other countries[5]. The situation in Pakistan is bleak due to regional unstable political situation, easy availability of weapons and their irrational use in Pakhtun culture.

There are an estimated 18 million firearms in public ownership among the country's population of 180 million of which 7 million are registred[6]. Pakistan is also known for its indigenous gunsmithing tradition; Dara Adam Khel in the neighborhood of Peshawar is notable centre of gun manufacture where apart fro conventional firearms deadly weapons like AK-47 mini Kalashnikov and heavy weapons are being manufactured.

Other enduring customs and a strong culture of honor also promote the prevalence and importance of gun. In Khyber Pakhtunkhwa where the Pakhtun residents laud performances of strength and toughness, carrying Kalashnikov and other guns is a sign of honor and respect.

MATERIAL AND METHODS

The study was conducted in the Department of Forensic Medicine and Toxicology, Khyber Medical College, Peshawar for a period of one year from January 2011 to December 2011. The mortuary of the department caters to the need of all medico legal autopsies

Address for Correspondence:
Dr. Anjum Zia Munawar
Professor
Departments of Forensic Medicine
Khyber Girls Medical College, Peshawar - Pakistan
Cell: +92-334-9248214
Email: prof.anjumziamunawar@gmail.com

from urban and rural police stations of Peshawar. The study was based on information collected from police inquest reports accompanying relatives, and autopsy findings. A total number of 1043 autopsies were conducted. Deaths due to firearm were 747 in number.

The victims were thoroughly examined both externally and internally. The external examination was focused on examination of the clothes, physical scrutiny of the dead body and the presence of firearm injuries. A comprehensive examination of firearm injuries included the number site size shape edges margins and findings on the surrounding skin. Firearm injuries were diagnosed on the basis of their characteristics seen on naked eye and magnifying lens examination. Internal examination of the body included opening of the three body cavities and evisceration. The extent of internal injuries to the viscera was noted. Data were incorporated on a performa and results summarized.

RESULTS

A total number of 1043 autopsies were carried out during the study period. Homicidal deaths due to firearm numbered 747(71.62%) of all autopsies male victims were 630 (84.34%) while the females were 117(15.67%) in number as shown in Table 1. Vast majority of victims fell a prey to high velocity rifled weapons (Kalashnikov, rifles, pistols), followed by low velocity rifled weapons i.e Smooth bored weapons. Demographic data is reflected in Table 2. Victims belonging to the urban area constituted 275 cases (36.82%) as compared to rural area inhabitants 472 (63.19%). The most vulnerable age group was between 21-30 years. A total of 262 (33.08%) were reported from the same group. The most commonly single injured region of the body was reported to be head, 243 cases (32.53%) followed by chest 190(25.44%) cases and abdomen 83 (11.12%) extremities, buttock and genitalia together comprised of 24(3.22%) cases shown in Table 3. Different types of entry wounds are shown in Figure 1, 2, 3.

DISCUSSION

In a recent study by the UN it was found that firearm cause an average of 60% of all homicides7 Gun related death rates in the United States are eight times higher than they are in countries that are economically and politically similar to it. Higher rates are found in developing countries and those with political instability[8,9,10]. This is in contrast to the deaths by firearm in India which accounts for 25% and Australia 20% as compared to US 65%[11]. In Pakistan the current study shows homicidal deaths due to firearm as 71.62%. A local study conducted in Rawalpindi coincides with our study in highlighting firearms as the major cause of homicidal deaths[12].

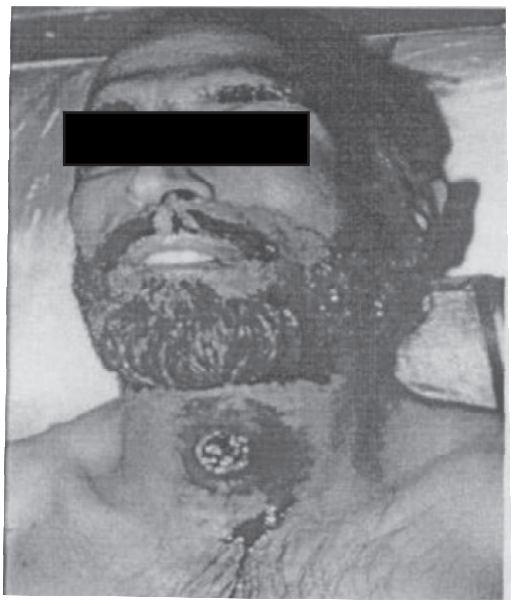

Figure 1: An entry wound with muzzle imprint

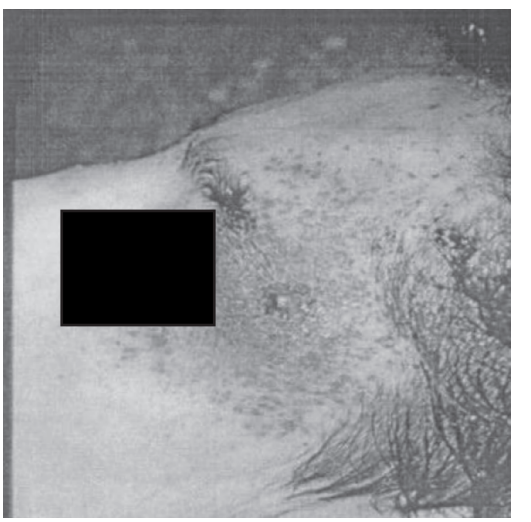

Figure 2: An entry wound inflicted from short range

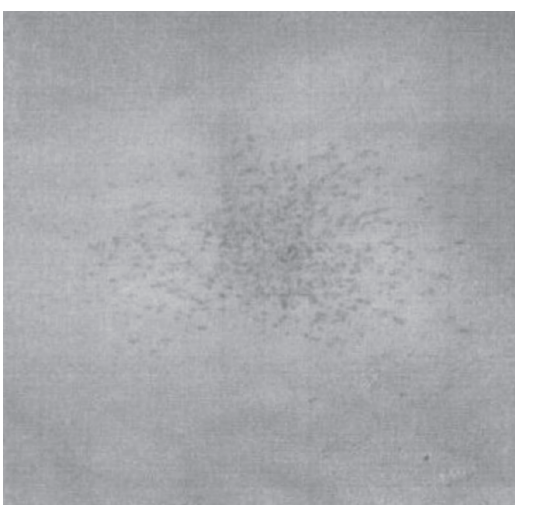

Figure 3: An entry wound showing powder tattooing

Table 1: Distribution of causes of death in autopsies (n=1043)

Cause of death	No of patients & percentage
Firearm weapon	747(71.62%)
Blunt Weapon	110(10.55%)
Explosives	43(4.13%)
Mechanical asphyxia	45(4.32%)
Sharp weapon	29(2.78%)
Poisoning	9(0.87%)
Drowning	7(0.68%)
Burns	2(0.20%)
Electrocution	2(0.20%)
Natural deaths	8(0.77%)
Undetermined	41(3.93%)

Table 2: demographic data of autopsies of firearm victims (n=747)

Variables	No of patients & percentage
Locality	
Rural	472(63.19%)
Urban	275(36.42%)
Gender	
Males	630(84.34%)
Females	117(15.7%)
Ages (years)	
0–10	10(2.15%)
11–20	89(11.92%)
21–30	262(35.08%)
31–40	175(23.43%)
41–50	111(14.86%)
51–60	62(8.30%)
61–70	23(3.08%)
70 & above	9(1.21%)

Table 3: Regional distribution of firearm injuries sustained by victims (n=747)

Anatomical regions involved		No. of patients & percentage
Involvement of single anatomical region		540(72.29%)
	Individual region	
	Head	243(32.53%)
	Chest	190(25.44%)
	Abdomen	83(11.12%)
	Extremities	24(3.22%)
Involvement of two anatomical regions		186(24.90%)
Involvement of three anatomical regions		15(2.01%)
Involvement of four anatomical regions		6(0.81%)

The age most prone to deaths by homicidal firearms weapon was 21-30 years 262 cases (35.08%) followed by 31-40 years 175 cases (23.43%). A similar study carried out in India shows identical pattern[13]. However studies in USA[14] Africa[15] and Brazil[16] show a comparatively younger age group prone to such deaths. The reason behind this dissimilarity is due to difference of cultural fabric of society where family bond is quite weak and children become independent at an early age predisposing them to violence. While in our society the vulnerable younger group is more active with unstable emotions and lack of rational thinking leads to such tragic incidents.

Our study showed 63.19% of firearm homicidal deaths were reported from rural area as compared to 36.42% from urban dwellers. This can be compared to local study with the rural urban ratio conducted in 2006[17]. The reason could be lower level of education, poverty resulting in intolerance and hostility. The high male to female ratio of 5.39.1in our study compares well with early local studies carried out in Lahore[18] and larkana[19]. The reason being the male dominated society and extrovert nature of the males predisposes them to violence while females are mostly confined to their homes.

Our study revealed the most commonly targeted area of the body was head followed by chest abdomen and extremities. This is in contrast to a similar study conducted in India[1] where chest was the most commonly targeted area while it is consistent with other local study in faisalabad[20]. The reason could be the determination of offender to ensure death by targeting vital organs.

CONCLUSION

It is the need of the hour to check and control the unlicensed arms and create awareness among the public through media, jurga system, seminars and walks about the hazards and miseries following the use of arms as a matter to settle disputes, a cultural tradition.

Recommendations

Social stability and re-enforcement of capabilities of law enforcement will be a step in the right direction.

REFERENCES

1. Potwary A.J Study of pattern of injuries in Homicidal firearm injury cases. JIAFM, 2005: 27(2) ISSN 971-913.
2. Hussain Z, Shah MM, Khan H, Arif M, Homicidal deaths by firearm in Peshawar. An Autopsy study: I Ayub Medical College Abbottabad 2006: 18(1).
3. Wintemate CJ, Teret SP, Craus JF, Wright MW. The choice of firearm suicides. A in J Public Health 1989; 79: 824-26.

4. Fateh A. Gunshot-wound in Forensic Pathology, 11th edition, Philadelphia: J.B Lippincott. Co, 1973 P79.

5. Chapmans J, Milroy CM. Firearm deaths in Yorkshiren and Humberside. Forensic Science International Dec 1992; 57(2): 181-91.

6. Palian, Michael. 2005. Himalaya. Weidenfeld Nicolson illustrated. 288 Pages. ISBNO-297-84371-0.

7. United Nations office of Drugs and Crime "Global Burden of Armed violence".

8. Committee on law and justice (2004). Chapter .3. Firearm and violence-A Critical Review National Academy of Science ISBN 0-309-09124-1.

9. Krug, EG, KE Powell, LL Dahlberg. Firearm related deaths in the united state and 35 other high and upper middle income countries international journal of Epidemiology. 1998; 27 (2): 214-221. DOI:10.1093/ije/27.2.214.PMID9602401.

10. "The seventh United Nations survey on Crime Trends and the operation of Criminal Justice systems|(1998-2000)" data United Nation, Office on Drugs and Crime. Archived from the original on 2007-11-12 Retrieved 2006-11-08.

11. "The Seventh United Nation Survey on Crime Trends and Operation of Criminal Justice system (1998-2000) data (PDP)" United Nations Officer on Drugs and Crime (UNODC). Retrieved 2006-11-08.

12. Main AR, Majid A, Malik MM, Zaheer M, Goraya SU. Analysis of unnatural deaths in Rawalpindi in 1997. Pakistan Armed Forces Med J 1999: 49: 68-70.

13. Ambade VN, Godbole HV, Kukde HG Suicidal and homicidal deaths: a comparative and circumstantial approach. J Forensic Leg Med 2007: 14: 253-60.

14. Reza A, Mercy JA, Krug E. Epidemiology of violence deaths in the world injury, Prev 2001; 7. 104-11.

15. Nejem GR Aslam, Davidow Al Elliot N. Youth homicidal racial disparities: gender year and cause J Nati Med Assoc 2004: 96: 558-66.

16. Sant Anna AR, Lopes MJM. Homicide among teenagers in the city of porto Alegre, Rio Grands do sul State Brazil; Vulnerability, Susceptibililty and gender cultures Cad Sande Public 2002; 18; 1509-17.

17. Marri MZ, Bashir MZ, Munawar AZ; Khalil ZH, Khalil Ir: Analysis of homicidal deaths in Peshawar, Pakistan J Ayub Medical College (Abbottabad) 2006; 18: 30-33.

18. Bashir Z, Rana PA, Malik SA, Shaheen A. Pattern of Death due to firearm in Lahore. A twelve years study Pakistan Postgraduate Medical J 2000; 11(3) 190-14.

19. Qadir G, Aziz K. The study of homicides in larkana Pakistan Postgraduate Medical J 2000: 11. (2); 79-80.

20. Saeed A Parveen H, Zafar T, Fatal Homicidal Violence against Women and Girls in Faisalabad APMC 2010; 4 (2); 150-54.