

Patterns of homicidal deaths in District Swat

Muhammad Iqbal, Shahida Naveed, Rubina Salma Yasmeen, Naveed Alam, Muhammad Tariq Azeem, Farzand Iqbal

ABSTRACT

Introduction: The forensic aspects of homicidal deaths demand an inquiry into the various types of such occurrences, as well as the manifest reasons associated with them. In our country, many social and cultural aspects underlie the occurrence of homicidal deaths that need to be properly investigated in terms of patterns and weaponry involved.

Objective: To determine the weaponry pattern of homicidal deaths in cases presented for autopsies at Swat.

Materials & Methods: This cross-sectional study was conducted in Saidu Group of Teaching Hospital, Swat from January 2019 to December 2019. The study opted a sample enrollment based on census based sampling using non-probability consecutive sampling. About 220 subjects of homicidal deaths were taken and studied in detail. A pre-designed questionnaire with demographic details was used as the data collection tool. SPSS v 25.0 was used for descriptive data analysis; frequency and percentages were calculated for categorical variables while mean \pm S.D. were applied for numerical variables.

Results: Out of total 220 autopsies, in 80% cases cause of death was due to firearm injury, followed by sharp weapons in 10%, bomb blast and ligature related deaths in 6%, and blunt trauma in 4% cases. The male to female ratio of homicidal cases showed a male predominance, with 86% male and 14% female cases. The cause of death of these cases showed that 27.72% died from injury to brain, followed by Heart & Lung injuries at 18.64%, and the remaining due to injuries of other organs.

Conclusion: Firearm was the common weapon of homicidal deaths with male predominance in district Swat; injury to the brain was the leading cause of death.

Keywords: Homicide; Firearms; Weapons; Wounds and Injuries; Wounds, Penetrating; Brain Injuries.

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INTRODUCTION

The history of trauma goes alongside the history of the evolution of mankind, with their aggressive instincts, creative abilities, and endless ambitions to conquer the environment without regard to the price paid to achieve the goals.¹ Any physical substance with the ability to induce body harm is called a weapon. Some of these weapons are manufactured specially for harming the body. Weapons of the old era were simple; at first stones were used, then the concept of knives, swords, and arrows developed. Nowadays the firearm weapons and bombs are used for assault as well as for murdering of people.² In the modern world including America the most fatal type of violence is firearm weapon violence.³

The way by which a death occurred is called manner of death. On the basis of manner, deaths are classified into natural and unnatural deaths. Unnatural deaths are further classified into homicidal, suicidal and accidental. Statistics shows that suicides are more prevalent in US in comparison with homicide with a ratio of 3:1.⁴

Firearm injuries are penetrating injuries caused by a weapon that uses a powder charge to fire a projectile. Gunshot injuries or wounds result from handguns, rifles and shotguns, and do not include those resulting from air-powered, gas-powered, or pellet guns, as well as non-penetrating injuries associated with firearms. Non-penetrating firearm injuries include whipping by pistol. Firearm injuries are mainly two types depending on the severity of injuries; these may be fatal and non-fatal. In 2019, a total of 10258 people suffered from firearm injuries.⁵

In our country specially in Khyber Pakhtunkhwa province due to near border with Afghanistan as well as local production of firearm weapons, these weapons are easily available and have low cost. However our cultural setup also allows such weapons as a source of pride and for protection. There are plenty of causes of homicidal or unnatural deaths in our society; among them the most important are poverty, family or tribal conflicts and social behaviors.⁵ Homicide is derived from Latin language which means killing of human beings by other human being.⁶

Homicidal deaths are conveyed multiple times to our hospital from district Swat and vary from year to year. On the basis of manner of death, homicide

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Author Information

Dr. Muhammad Iqbal
Department of Forensic
Medicine, Saidu Medical
College, Swat, Khyber
Pakhtunkhwa, Pakistan

Dr. Shahida Naveed
Department of Forensic
Medicine, Rehman Medical
Institute, Peshawar, Khyber
Pakhtunkhwa, Pakistan

Dr. Rubina Salma Yasmeen
Department of Forensic
Medicine, Peshawar Medical
College, Peshawar, Khyber
Pakhtunkhwa, Pakistan

Dr. Naveed Alam
Department of Forensic
Medicine, Northwest School
of Medicine, Peshawar,
Khyber Pakhtunkhwa,
Pakistan

Dr. Muhammad Tariq Azeem
Department of Forensic
Medicine, Peshawar Medical
College, Peshawar, Khyber
Pakhtunkhwa, Pakistan

Dr. Farzand Iqbal
Department of Forensic
Medicine, Khyber Medical
College, Peshawar, Khyber
Pakhtunkhwa, Pakistan
(Corresponding Author)
Email:
drfarzandiqbal@yahoo.com

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is the most common manner of death in Swat. Percentage wise distribution of homicidal deaths in district Peshawar in the year 2000 documented at Forensic Medicine Department Khyber Medical College, Peshawar, Khyber Pakhtunkhwa was 83%, of which 90% cases were due to firearms as the main cause.⁷ In the past or 1990 era there was easy accessibility to weapons in our setup but due to terrorist attacks in Pakistan the firearm weapons producing factories were banned due to which these weapons have nowadays become scanty and costly; therefore the pattern of firearm injuries has changed significantly. In autopsy procedure first step is crime scene investigation where circumstantial evidence is collected to achieve goal of justice and to prevent further criminal behaviors.⁸ So the study of homicidal deaths pattern due to firearm and other weapons at Swat has been conducted to compare the results with those of the previous three years.⁷

This study includes external and internal examinations of all deaths of homicidal manner with main objective to determine the homicidal deaths pattern due to firearm. The study will help forensic experts to know the most common pattern which could further be used to suggest ways and means for control of easy weaponry access.

MATERIALS & METHODS

The cross-sectional study was conducted in Saidu Group of Teaching Hospitals, Swat, Khyber Pakhtunkhwa, from January 2019 to December 2019. A census based sample of 220 was enrolled in the study using non-probability consecutive sampling. The cases selected were those having had a proper history taken, complete medico-legal related documents such as police records, operation notes of the hospital, as well as admission record of the hospital. First step in autopsy is proper external examination including clothes and internal examination. All putrefied bodies that were thoroughly seen for any sign of violence were included and if there were no signs of violence then they were excluded. A pre-designed questionnaire with demographic details was used as research tool. For statistical analysis SPSS 25.0 was used to obtain descriptive statistics; frequencies and percentages were used for categorical variables, while mean and SD were used for numerical variables.

RESULTS

Out of 220 autopsies, firearm homicidal mortality were noted in 176 cases (80%), so firearms were the most common weapons used for homicidal deaths in the present study. The second most commonly used weapons for homicidal deaths were sharp weapons in 22(10%) cases, followed by bomb blasts and ligature having 13(6%) cases; blunt weapons were the least common weapons with 09(4%) cases.

The male to female ratio was approximately 6:1, with 189(86%) males and 31(14%) females depicting the greater exposure of males to the external environment in the present cultural setup of the study.

The causes of deaths of these cases (Table 1) show that most died due to Brain Injuries, 61(27.72%), followed by Heart / Lung injuries in 41(18.64%) cases; Asphyxia / Strangulation and Multi-Organ Damage were the causes of death in 28(12.72%)

cases each; damage to abdominal organs caused death in 24(10.92%) cases, and damage to vital neck structures in 19(8.64%); other causes were 19(8.64%).

Table 1: Causes of deaths in homicidal cases (n=220).

Cause of Death	Frequency (%)
Brain Injuries	61 (27.72)
Heart / Lungs Injuries	41 (18.64)
Asphyxia / Strangulation	28 (12.72)
Multi-Organ Injuries	28 (12.72)
Abdominal Organs Injuries	24 (10.92)
Vital Neck Structures Injuries	19 (8.64)
Others	19 (8.64)
Total	220 (100)

DISCUSSION

Manner of death shows that how death occurred, which is classified into natural and unnatural; unnatural is further classified into suicide and homicide. Homicide is the leading cause of unnatural death worldwide. Data published in South Africa in 2021 showed that Homicide was the most common at 33.7%, followed by Accidents at 28.6%.⁹ Data from the USA also revealed that homicide is more common in USA than other means; data showed that out of total murders reported, 73% were due to firearms in which majority were homicide.⁵

In homicidal deaths, the ratio of males was far more than females all over the world. Data reported from South Africa covering the overall epidemiology of firearms revealed that in all cases reported during the year 2017, male predominance was recorded; taking homicides in particular the ratio was 6:1.⁹ This study conducted in district Swat also showed male dominance, which is increased to 86% of males and remaining 14% females. This study show similarity with another study at Pakistan i.e. Bahawalpur¹⁰ in which male involvement was 88% and female only 12%. Almost same results were seen by another in Peshawar on gunshot deaths, where out of 200 victims 86% were male and rest were females with a ratio of 6:1.¹¹

Our study also revealed that most common weapons involved were firearms (160 in number) which were involved in 80% of all homicidal deaths, followed by sharp weapons for homicidal purposes at 10% in this area. The study at Newfoundland¹² (1990-95) showed that sharp weapons were most commonly used for homicidal deaths. In Newfoundland, firearm weapons are not freely available while sharp weapons are easily available in homes. Our study parallels with the previous studies at Bahawalpur and Peshawar^{10,11} in which firearms weapons were generally used for the killing of other human beings.

Another data reported internationally revealed that 79% of murders in the USA are due to firearms; the same is different from data reported from Europe.¹³ The data records that 19,384 people out of 24,576 were murdered in 2020 due to firearms including suicide and homicide. In a study reported from Saudi Arabia, the incidence of firearm deaths was reported to be as 3.13/100,000, wherein maximum of the victims were of young

age; among vital organs, abdominal injuries were more common than any other organ with a percentage of 19.6%.¹⁴

Unnatural homicidal deaths due to firearms are continuously increasing with passage of time due to many factors. Some of the most important factors are state failure to control the production/manufacturing, sales, and smuggling of such kinds of weapons. Currently our state is in a weak position per law perspective; as a result the anti-state forces pursue their own agenda to make a state within a state. The most important factors are lack of education, awareness, and tolerance in our society which leads to brutalization especially in religious matters.¹⁵

CONCLUSION

In keeping with global trends, homicide by firearms was the leading cause of unnatural deaths in Swat with a distinct male preponderance.

RECOMMENDATIONS

The study recommends that the government make new legislation for firearm weapons and order the law and enforcement departments to take strict measures for control of easy access to firearm weapons.

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