# PATTERN OF CAUSES OF DEATH IN HOMICIDAL CASES ON AUTOPSY IN PAKISTAN

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# ABSTRACT

**Background:** Homicide is defined as killing of one human being by another. The present study was conducted to find out the pattern of causes of death in homicidal cases on autopsy in Pakistan.

**Material & Methods:** This descriptive cross-sections study was conducted from January, 2010 to March, 2014. Autopsies of 2025 dead bodies were conducted in homicidal cases. The data was collected on a proforma from the records of Forensic Medicine Department, BMC Bannu, Alama Iqbal Memorial Hospital Sialkot, Banzeer District Hospital Rawalpindi and Banzeer District Hospital Abbottabad, with permission of authorities. The causes of death were determined either by external and internal examination or by histological examination/chemical analysis of viscera. Partially decomposed, advancedly decomposed or skeletonized bodies, with no internal or external injuries sufficient to cause death and histological and toxicological reports failing to reveal any abnormal findings, were also included.

**Results:** Autopsies of 2025 dead bodies in homicidal cases were performed. Out of these 1375(67.24%) were males and 670(32.76%) females. It was observed in this study that fire-arm injury was the commonest causes of death in 1230(60.14%) cases, followed by blunt weapon injury in 367(17.94%) cases.

**Conclusion:** Homicidal deaths are mostly due to fire-arms in our set-up. Strict measures should be taken to monitor and control the possession of illegal fire-arms.

Key Words: Autopsy; Death; Homicide; Firearms; Violence.

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## INTRODUCTION

Homicide is defined as the killing of one human being by another. According to Section 300 of Pakistan Penal Code (PPC) unlawful killing of human being is murder.<sup>1</sup> The various patterns of homicidal deaths include assault by sharp weapon, blunt weapon, fire-arm, strangulation, homicidal hanging, smothering, drowning, burns, poisoning, etc.<sup>2</sup> Killing of an individual is the highest level of aggression found in all the cultures.<sup>3</sup>

Cases of homicidal death are increasing due to rapidly increasing population, urbanization, poverty, unemployment, frustration, illiteracy, prevalent economic, social and political environment, insurgency, terrorism, drug addiction, easy availability of weapon,

**Corresponding Author:** Dr. Asad Ullah Associate Professor Department of Forensic Medicine Bannu Medical College, Bannu, Pakistan E-mail: drasad.bmc@gmil.com and the widening gap between the rich and the poor. If we look at the crimes in our society, it is clear that most of the crimes are the result of economic crisis.<sup>4,5</sup> Young offenders are becoming increasingly violent and this is a cause for concern, as they are future generation.<sup>6</sup>

The aim of the present study was to know the pattern of causes of death in homicidal cases on autopsy in Pakistan.

## **MATERIAL AND METHODS**

This descriptive cross-sections study was conducted from January, 2010 to March, 2014. Autopsies of 2025 dead bodies were conducted in homicidal cases and included in this study. The data was collected on written proforma from the records of Forensic medicine Department BMC Bannu, Alama Iqbal Memorial Hospital Sialkot, Banzeer District Hospital Rawalpindi and Banzeer District Hospital Abbottabad with permission of the authorities. Cases of deceased where cause of death was determined either by external and internal examination or by histological examination / chemical analysis of viscera were included in this study. Partially decomposed, advanced decomposed or skeletonized bodies, with no internal or external injuries sufficient to cause death and histological and toxicological reports failing to reveal any abnormal findings, were included in the study. Different variables of bodies e.g., sex and age were analyzed using statistical package for social sciences (SPSS) version 13.

## RESULTS

Autopsies of 2025 dead bodies in homicidal cases were performed. Out of these 1375 (67.24%) were males and 670 (32.76%) females. The age distribution is given in Table 1. The data was collected from four districts given below in Table 2.

It was observed in this study that fire-arm injury was the commonest causes of death in 1230 (60.14%) cases, followed by blunt weapon injury in 367 (17.94%) cases. All other causes are depicted in Table 3.

# DISCUSSION

In this study of more than four years duration, 31.76% cases of homicide on autopsies belonged to district Rawalpindi, 30.33% to district Abbottabad, 22.02% to district Sialkot and 15.89% to district Bannu.

The age range of victims of homicide in this study was maximum at 21-30 and 31-40 years 30.84% cases and 31% cases as this age group persons are more mobile and are putting themselves more to violence. The number of victims of homicide

## Table 1: Age distribution of patients with homicidal death (2045)

S. No.	Age (years)	Number of cases	Percentage
1.	Up to 20	140	6.84%
2.	21 – 30	635	30.84%
3.	31 – 40	750	31.00%
4.	41 – 50	255	11.45%
5.	51 – 60	135	5.60%
6.	Above 60	130	5.15%

## Table 2: District location of patients with homicidal death (n=2045)

S. No.	District	Cases	Percentage
1	Rawalpindi	670	31.76%
2	Abbottabad	600	30.33%
3	Sialkot	450	22.02%
4	Bannu	325	15.89%

#### Table 3: Causes of homicidal deaths (n=2045)

S. No.	Cause	Number of cases	Percentage
1	Fire Arm	1230	60.14%
2	Blunt weapon	367	17.94%
3	Burning	74	3.61%
4	Target killing	60	2.94%
5	Bomb Blast	53	2.55%
6	Sharp weapon	40	1.96%
7	Asphyxia	35	1.72%
8	Drowning	35	1.72%
9	Poisoning	28	1.37%
10	Electrocution	26	1.28%
11	Undetermined	97	4.74%

in males were 67.24% as compared to female victims 32.76% which was 2/3 as compared to female victims, as females are less exposed to violence in our country due to cultural and religious reasons.

The victims of homicide due to fire-arm were maximum 60.14% which correlates with the study by Khalil et al<sup>7</sup> conducted at Peshawar in 2012. Similarly high rates were found in Faisalabad and Lahore.<sup>8,9</sup> In New Mexico USA, a study suggested that homicide prevention efforts should be directed against non-firearm methods as the firearm use was very low.<sup>10</sup> In a study conducted in Georgia USA<sup>11</sup>, the homicide rate was 48% and fire arm was used in 88% of the cases over a 20 years period.<sup>12</sup> Although a high rate of firearm use was found in this study but the rate of homicide is still very low compared to our situation.<sup>13</sup>

There were 2.55% cases of bomb blast in our study. As the casualties in bomb blast are very high so every victim is not subjected to autopsy.<sup>14</sup>

There were 2.94% (60 cases) of target killing. It was seen that the victims of blunt trauma were 17.94% (367 cases).

Use of sharp weapons, blunt trauma and asphyxia deaths were very low and this trend was seen in many other studies in Pakistan.<sup>15</sup> However the incidence of blunt trauma injuries and deaths due to sharp weapons is higher in UK.<sup>16,17</sup> There were 1.72% cases of asphyxia, 1.96% by sharp weapon, and 1.72% cases of drowning.

In our country there is also trend of homicidal electrocution as reported in this study there were 1.28% cases of electrocution.<sup>18,19</sup>

Some homicidal poisoning tendency is also seen which was reflected by 1.37% cases in this study. There were also homicidal burning deaths seen on autopsy as we recorded 3.61% cases on autopsy.

In this study in 4.74% cases the cause of death could not be undetermined due to advanced putre-faction which correlates with other similar studies conducted in Pakistan.<sup>20</sup>

# CONCLUSION

Homicidal deaths, due to firearms have increased substantially. Strict measures should be taken to monitor and control the possession of illegal fire arms. Law and order situation needs to be improved in the country.

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CONFLICT OF INTEREST Authors declare no conflict of interest. GRANT SUPPORT AND FINANCIAL DISCLOSURE None declared.