## **ORIGINAL ARTICLE**

# Manners and Modalities of Unnatural Deaths in Multan

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## **ABSTRACT**

**Background:** Unnatural and violent deaths are the category of deaths, which comprises of Homicidal, Suicidal and Accidental manner so deaths. There is need of adequate analysis of these deaths to make the measures to minimize incidence of such deaths. This study comprises of 189 medico legal autopsies.

Aim: To analyze the unnatural and violent deaths which comprises of homicidal, suicidal and accidental manners of deaths.

**Methods:** This is a retrospective study examining 189 cases of medico legal autopsies in the mortuary of Forensic Medicine and Toxicology Department, Nishtar Medical College, Multan from January 2015 to December 2015.

**Result:** Total homicidal deaths were 63.49%mostly by the Firearms 42.49% being the commonest weapon used as cause of death, while the road side accidents was the next common cause of death 58.62%, among the accidental i.e., 30.68% of the total unnatural deaths. Suicidal manner of deaths were 5.82% out of which death due to poisoning on top 36.36%.

**Conclusion:** The alarming number of homicidal deaths can be minimized by a rapid development in literacy rate, socioeconomic conditions. The accidental deaths can be prevented by obeying the traffic rules & strict implementation of laws.

Keywords: Unnatural and violent deaths, Homicidal, Suicidal.

#### INTRODUCTION

Unnatural manner of death are homicide, accidental, suicide, and undetermined<sup>1</sup>. A 25 year autopsy study in Chandigarh, India<sup>2</sup>, in 2003 showed that accidental deaths (79.3%)constituted the majority of unnatural fatalities but followed by suicidal (13.9%) and homicidal (6%) in contrary to study in Dhaka. A 10 year study in Dhaka, Bangladesh³ in 2003 concluded that leading manner of death was road traffic accidents (37%), followed by homicide(21%) and suicide (18%). On the other side, in Pakistan different studies in Peshawar<sup>4</sup> in 2001 and in Bahawalpur<sup>5</sup> in 2000 revealed that homicidal deaths (82.67%, 80.3%) respectively outnumbered the unnatural deaths. Suicide being rare and accidents occupied the intermediate position. In a study carried out at Houstan school of Public health, Texas, USA in 2003<sup>6</sup>, it was found that accidents accounted for 74% of deaths from unintentional injuries while homicide accounts for 18% and suicide for 15% of deaths. Similarly different studies in port Harcourt<sup>7</sup>, Nigeria in 2003 and in South Africa8 in 2004 mentioned that deaths from motor vehicle collision outnumbered as compared to homicidal and suicidal deaths. Natural deaths are generally about 80% of all the deaths in a community, which is significant portion of the total

mortality. While unnatural deaths constitute a lesser proportion of the total no. deaths occurring in a community<sup>9</sup>.

Every human being is blessed with the gift of life for the purpose of being happy and to bring peace for all but the purpose is ignored when human pursuit o wealth and power, satisfaction of physical appetites and passions terrorize their fellow human beings. The crime and violence exist in the society long over the centuries but in this modern era there is an extreme aggravation of these problems<sup>10</sup>. The type and magnitude of violence leading to injuries, disabilities and death, has been pointed out by various authors in the studies. In Pakistan, attempts have been made by the researchers to find out the magnitude, cause and manner of deaths as well as the sociodemographic background of the victims of unnatural deaths, at different centers from province of Baluchistan<sup>4</sup>, Punjab<sup>5,6,7,8,9</sup>, Sindh<sup>11,12</sup>, KPK<sup>13,14,15,16,17</sup>, and AJK18.

The above mentioned literature reflects that manner and modalities of deaths differ from country to country as well as city to city in the same country. Socio economic, geo political, religious and cultural values also contribute to these differences. In addition to this legislation, political and economic crises and literacy rate in the area are also important determinants in this regard. So that keeping in view, we are able to collect and frame a data to assess the

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different manners and modalities of unnatural deaths at Multan during the year 2015. This data will facilitate the authorities to take measures for future planning of crime control, legislation and steps to change socio cultural values in the area.

### **MATERIAL & METHOD**

This retrospective study includes 189 cases of medico legal autopsies conducted in the mortuary of Forensic medicine department, Nishtar Medical College Multan during the year 2015. Cases were examined for the cause of death, manner of death. The aim of the study was to know the common manner& modalities of death both in the male & female dead bodies subjected to autopsy as unnatural deaths. Information were collected by police papers, relatives, eye witnesses regarding death circumstances in relation with postmortem findings, toxicological analysis, Histopathological examination being the tools to make the conclusion about manner and modalities of death.

### RESULTS

The most common manner of deaths in Multan was homicidal (63.5%) the second one is Accidental deaths (30.7%), while the Suicidal among the unnatural deaths was the lowest (5.8%) as shown in table-1. By considering the weapon used in homicidal deaths is firearm (42.5%). The second most occurrence of unnatural death was due to Sharp Edge weapon (23.3%), the asphyxial deaths strangulation and smothering contributed as (10% & 2.5%) respectively. Death due to poisoning has no contribution in it (Table-2). Among the suicidal deaths poisoning was on the top as a cause of death (36.4%), the second most was the hanging (27.3%), Firearm and cut throat injuries were at the bottom (18.2%) each (Table-3). Road side accidents and Railway track accidents were the leading cause among unnatural deaths (58.6% & 24.1%) respectively.

Table 1: Manner of Death (n=189)

Manner of unnatural death	n	%age
Homicidal	120	63.5
Accidental	58	30.7
Suicidal	11	05.8

Table-2: Modalities of Homicidal deaths (n=120)

Weapon	n	%age
Firearm	51	42.5
Sharp Edge	28	23.3
Blunt Edge	26	21.7
Strangulation	12	10.0
Smothering	03	02.5

Table-3: Modalities of Accidental Deaths (n=58)

Modality	n	%age
Road side Accidents	34	58.6
Railway Track Accidents	14	24.1
Firearm	05	08.6
Electrocution	04	06.9
Drowning	01	01.1
Total	58	100

Table 4: Modalities of Suicidal Deaths (n=11)

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Modality	n	%age
Poisoning	04	36.7
Hanging	03	27.3
Cut Throat	02	18.2
Firearm	02	18.2
Total	11	100

### DISCUSSION

The present study is analyzed and discussed with the objective to help the state institutions and local administration to take necessary measures for the reduction in the number of unnatural deaths in the area of Multan. The results of study showed that high ratio of homicidal deaths (64.5%) as compare to accidental deaths (30.7%) table-1.

If we compare it with the other studies like Bangladesh<sup>1</sup>, India<sup>2</sup>, Nigeria<sup>7,8</sup>, South Africa<sup>9,10,11</sup>, Turkey<sup>12</sup>, Australia, USA<sup>13,14</sup>, where the accidental deaths are more as compare to homicidal and suicidal deaths. This difference is because of implementation of law, effective role of law enforcing agencies, high literacy rate, good economic conditions and cultural values of the population. The other factor is that most of the accidental deaths (road side/railway track accident) are being reported specially the mass disasters accidents. However we can say that majority of other researches in Pakistan also reflects that there is increase in the number of homicidal deaths as compared to accidental deaths. This needs attention of the law enforcing authorities and need to improve the implementation of laws, literacy rate and socio economic status in the most affected areas.

Table-2 of the present study shows that Firearm injuries (42.5%) is the ruling cause among the homicidal deaths as compare to sharp edge weapons (23.3%) and blunt edge weapons (21.7%). This reflects the easy availability of lethal weapon, again which needs implementation of law and also a question for the law enforcing agencies regarding failure to control the use of lethal weapon.

Table-3 reflects the most common method used to commit the suicide is the use of poisonous material (36.4%), while hanging is (27.3%) and use of firearm and sharp edge weapon is (18.2%) & (18.2%) respectively. This shows that easy availability of

cheap lethal poisons in Multan as a good suicidal agent. However the low rate of suicide as compare to other countries indicates the dominance of religious and good social environment in the society.

Table 4 of the present study showed that among the accidental unnatural deaths, the main cause is the road side accidents (58.6%) while the second cause is the railway track accidents (24.1%). Accidental death by firearm is (8.6%) & by electrocution (6.9%) both being the rare cause, which again can be minimized by adopting safety measures. Accidental deaths (RSA) can be prevented by obeying the traffic rules, safety measures and fitness of the drivers & vehicles. However most of the road side accidents are being not subjected to post mortem examinations. Our results are similar with the studies in different centers of Pakistan<sup>8.9.12.15</sup> and other countries<sup>22,23,24,25,26</sup> reporting highest incidence of medico legal deaths in this age group. This is due to the fact that persons belonging to this age group are active, mobile and energetic. The young individuals are short tempered and easily become emotional which results in violence.

## CONCLUSION

The alarming number of homicidal deaths can be minimized by a rapid development in literacy rate, socioeconomic conditions. The accidental deaths can be prevented by obeying the traffic rules & strict implementation of laws.

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