Pattern of Unnatural Deaths - An Audit of Autopsies
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Abstract
Background: To study the unnatural deaths on autopsies.
Methods: In this descriptive study autopsies for age analysis, gender distribution, weaponry pattern, distribution of injuries and cause of death, rural and urban residential status were determined.
Results: Total 318 autopsies were conducted during this period. Majority (239) dead bodies were of males. Most common cause of death remained mechanical injuries and among mechanical injuries firearms remained on the top. The 2nd most common cause of death was use of poison.
Conclusion: Strict laws, their implementation and speedy justice are required to control violence in the society.
Key words: Autopsy, Unnatural death, Crimes

Introduction
Death is defined as the cessation of all vital functions of the body including the heartbeat, brain activity and breathing. Every soul shall have a taste of death. Death is guaranteed for every living creature but the death caused by violence leaves permanent scars on souls of the society. Justice embodies the fair and proper administration of laws i.e. administration of just, along with punishments if needed. Very well said by British Prime Minister William E. Gladstone in 1868 speech "Justice delayed is justice denied" - is a legal maxim meaning that if legal redress is available for a party that has suffered some injury, but is not forthcoming in a timely fashion, it is effectively the same as having no redress at all.
It is a common observation that delays in dispensation of justice increases the illegal activities in a community. Unfortunately our country has become the hub of delayed justice. This delayed justice in our country is playing havoc, with rampant lawlessness in our society. Use of violence is on increase in our country due to easy availability of arms, weak laws and their implementation, lawlessness in tribal areas, frequent smuggling of arms across the border, increasing population, illiteracy, unemployment, no fear of law enforcement agencies etc. Homicide is prevalent widely almost all over the world and also punishable offence in all the countries of the world. Even in the presence of capital punishment for this heinous crime in our country, this crime has not been brought under control. It is the youth which is mostly involved in criminal activities. This is the age of activity, sentiments and rage. With ageing process the human beings are less likely to be violent. Increasing trauma by road traffic accidents (RTAs) is also a source of great concern in our country. According to a report, in Pakistan, the pedestrians and the riders of motorized 2 or 3 wheelers are at greater risk and the leading cause of RTAs fatalities 41% and 39% respectively. Actually no proper system of investigations of RTAs is present in the country. We just shift the injured and dead to the hospitals and wait for another accident to occur. Killing of 8 persons in Police custody by torture shows the callous behavior of the law enforcement agencies violating the basic human rights. The suspected persons are arrested and put under violent torture for confession of a crime which may or may not have been committed by the accused persons. To control the crime rate there is dire need to equip the Forensic Science Laboratories with ultramodern gadgets, system of investigations also needs total overhauling. DNA, fingerprinting, Iris scanning and RFID should be included in Criminal Procedure Code (CrPC).

Patients and Methods
In this descriptive study autopsies conducted during the calendar year of 2015, at District Headquarters Hospital, Rawalpindi were included. The postmortem reports, police papers and notes of the hospitals were studied. Total 318 autopsies were performed during this period. The data was analyzed regarding age, sex, kind of weapons used, nature and sites of injuries, cause/mode of death and residential status of urban/rural victims. All the autopsies were included in the study.
Results
Total 318 autopsies were performed at DHQ Hospital Rawalpindi from 01-01-2015 to 31-12-2015. Most dead bodies were of males (239) as compared to females (79). Most common age of victims was 21-30 years (33.96%)(Table-1). Urban were more as compared to rural (Table 2). Firearm was the most commonly used weapon causing 132 (41.51%) deaths (Table 3). Twenty four (7.55%) deaths occurred due to use of sharp edged weapons. Only 9 persons died with the help of blunt edged weapons. 8 persons (2.52%) (7 males and 1 female) were killed by police torture. The second most common cause of death was poisoning with 59 victims (18.55%). Acute poisoning is more common in females (64%) as compared with males (36%). Four persons were killed by road traffic accidents. Head remained the most common site of fatal injury (53.5%) during traffic accidents. Two persons (0.63%) died due to electrocution. Hanging, strangulation and suffocation claimed 37 (11.64%) lives, 19 males and 18 females.

Table:1 Total Cases According to Age
<p>|</p>
<table>
<thead>
<tr>
<th>Age</th>
<th>cases</th>
<th>%</th>
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<tbody>
<tr>
<td>&lt; 20 years</td>
<td>61</td>
<td>19.18</td>
</tr>
<tr>
<td>21-30 Years</td>
<td>108</td>
<td>33.96</td>
</tr>
<tr>
<td>31-40 Years</td>
<td>74</td>
<td>23.28</td>
</tr>
<tr>
<td>&gt;40</td>
<td>75</td>
<td>23.58</td>
</tr>
</tbody>
</table>

Poisons may be used for homicidal, suicidal purposes or accidental poisoning may also occur. Use of poisons as homicidal agent is gaining popularity in our society as evident from this study as second most common cause of death after mechanical injuries. It is also considered somewhat safe method of killing a person to avoid suspicion, as signs and symptoms caused by poisons are quite confusing with different diseases. Liver detoxifies foreign organic compounds such as drugs, food additives, preservatives and other possibly harmful agents with no food value. According to WHO acute poisoning is the 9th leading cause of death in young adults. More than 90% of fatal poisoning cases are seen in middle and low income countries i.e. the developing countries in general and agricultural countries in particular. In Pakistan urban population is mostly exposed to house hold chemicals. Social or domestic stresses are main reasons for increasing suicidal tendencies. According to a study conducted at Faisalabad among acute poisoning cases 49.17% of suicide, 33.47% accidental, and 17.36% of homicides were recorded.

Discussion
Autopsy plays a pivotal role in assessing cause of death, time since death, mode, manner and mechanism of death, thus helps in dispensation of justice particularly in homicidal cases. It provides help to the Government for framing policies to control violence in the community. The autopsy should be complete and meticulous, poorly performed autopsy is worse than no autopsy at all, as it is more likely to lead to miscarriage of justice. According to a study conducted at Bangalore (India), enmity is the chief motive for homicidal killings, followed by financial matters, sex, property disputes and robbery. The most commonly used weapon remained the firearms. The rampant presence of legal and mostly illegal firearm weapons in our society is quite evident from this study and other studies also. Among the deaths caused by firearms, use of rifled firearm remained on the top (91.98%) as compared to smooth bore firearm weapons (8.02%). Rate of homicides has been controlled in Brazil through firearms control by legislation and social education.

Table 3: Weapons/cause of death
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<table>
<thead>
<tr>
<th>Weapon / cause of death</th>
<th>Cases %</th>
<th>No of cases</th>
</tr>
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<tbody>
<tr>
<td>Total cases</td>
<td></td>
<td>Male %</td>
</tr>
<tr>
<td>Firearm injuries (132)</td>
<td>41.51%</td>
<td>113</td>
</tr>
<tr>
<td>Sharp edged/ stab (24)</td>
<td>07.55%</td>
<td>08</td>
</tr>
<tr>
<td>Blunt weapon (09)</td>
<td>02.83%</td>
<td>08</td>
</tr>
<tr>
<td>Bomb blast (11)</td>
<td>03.46%</td>
<td>09</td>
</tr>
<tr>
<td>Police torture (08)</td>
<td>02.52%</td>
<td>07</td>
</tr>
<tr>
<td>Hanging / strangulation (34)</td>
<td>10.69%</td>
<td>19</td>
</tr>
<tr>
<td>RTA (04)</td>
<td>01.26%</td>
<td>04</td>
</tr>
<tr>
<td>Poison (59)</td>
<td>18.55%</td>
<td>38</td>
</tr>
<tr>
<td>Burns (13)</td>
<td>04.09%</td>
<td>08</td>
</tr>
<tr>
<td>Drowning (06)</td>
<td>01.89%</td>
<td>06</td>
</tr>
<tr>
<td>Suffocation (03)</td>
<td>0.94%</td>
<td>00</td>
</tr>
<tr>
<td>Electro- tion (02)</td>
<td>0.63%</td>
<td>02</td>
</tr>
<tr>
<td>Exhumation (05)</td>
<td>01.57%</td>
<td>01</td>
</tr>
<tr>
<td>Nil (08)</td>
<td>02.51%</td>
<td>08</td>
</tr>
<tr>
<td>Total (318)</td>
<td>100%</td>
<td>239</td>
</tr>
</tbody>
</table>

Poisons may be used for homicidal, suicidal purposes or accidental poisoning may also occur. Use of poisons as homicidal agent is gaining popularity in our society as evident from this study as second most common cause of death after mechanical injuries. It is also considered somewhat safe method of killing a person to avoid suspicion, as signs and symptoms caused by poisons are quite confusing with different diseases. Liver detoxifies foreign organic compounds such as drugs, food additives, preservatives and other possibly harmful agents with no food value. According to WHO acute poisoning is the 9th leading cause of death in young adults. More than 90% of fatal poisoning cases are seen in middle and low income countries i.e. the developing countries in general and agricultural countries in particular. In Pakistan urban population is mostly exposed to house hold chemicals. Social or domestic stresses are main reasons for increasing suicidal tendencies. According to a study conducted at Faisalabad among acute poisoning cases 49.17% of suicide, 33.47% accidental, and 17.36% of homicides were recorded.
Death of 11.64% persons with asphyxia (hanging, strangulation and suffocation) is quite high. According to study conducted at KEMU Lahore majority of hanging cases (90.24%) were suicidal in nature. Cause of death in 8 cases (2.51%), all male dead bodies, couldn't be detected, is quite low as compare to a 5 year study conducted at Faisalabad, where 09.22% cases of negative autopsy were found. Most common reasons of negative autopsy are commencement of autopsy without studying police papers, untrained autopsy surgeons, lapses during external and internal postmortem examination. Other causes may be efficiencies in Forensic Science Laboratory as using ineffective expired reagents, causes may be efficiencies in Forensic Science external and internal postmortem examination. Other cases remained on the top. The 2nd most common cause of death was use of poison. Provision of speedy justice, inclusion of most modern techniques during investigations, free education, reduction in unemployment, strict implementation of laws without any regards to rich/poor, big/small, decreasing the gap between rich and poor may offer great help in reduction of crimes.

Conclusion
1. Most common cause of death was mechanical injuries and among mechanical injuries firearms remained on the top. The 2nd most common cause of death was use of poison.

2. Provision of speedy justice, inclusion of most modern techniques during investigations, free education, reduction in unemployment, strict implementation of laws without any regards to rich/poor, big/small, decreasing the gap between rich and poor may offer great help in reduction of crimes.

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