FREQUENCY AND PRESENTATION OF FIREARM DEATHS IN ISLAMABAD DURING 2014 BASED ON AUTOPSY REPORTS

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OBJECTIVES: To determine the frequency and presentations of firearm mortalities in Islamabad during 2014 and to find out the prevailing age, gender. To correlate frequency of gun shot injuries in relation to body region targeted.

STUDY DESIGN: A Retrospective Descriptive

PLACE AND DURATION: The study was conducted in the Federal Government Polyclinic Islamabad and Pakistan Institute of Medical Science Islamabad From 1st January 2014 to 31st December 2014.

METHODOLOGY: All cases of firearm mortality were recorded irrespective of age, sex, location of injuries, number of firearm injuries & type of firearm weapons used were amongst the inclusion criteria. All cases of putrefied dead bodies with firearm injuries and dead bodies with surgically altered wounds were amongst the exclusion criteria

RESULTS: A total of 117 Cases of firearm related deaths were recorded from autopsy reports composing of 96 (82%) Male and 21(18%) Female. The victim ages ranged from 13 years to 63 years. Location of injuries on the body were highest on Head 29.9% ,Head & Chest 19.70%, Chest + Abdomen 14.53% , Abdomen 17.95% and 4.3%.There were 71 dead bodies having two or more than two wounds of firearm entries and 46dead bodies having single firearm entry wound.

CONCLUSION: Most of the firearm victims were male particularly male youth. Rifled firearms injuries on the head and chest were cause of death in rural community.

KEY WORDS: Firearms, Death, Male Youth, Gun Violence.

INTRODUCTION

Violent injuries have become more prevalent in the recent years. More than 1.6 million people die as result of violent injuries Worldwide 1. Violent traumatic injuries are the eighth leading cause of death 2. Globally more than 5.8 millions people are killed every year as result of violent injuries and road traffic crashes 3. The violence and particularly the gun violence have spread at terrific speed by the use of small arms – mostly hand guns (pistols, revolvers, rifles). More than 31000 people die as result of firearm injuries in United States of America yearly 4,5. More than 313045 Americans were killed due to gunshot injuries during 2003 to 2012 and Gunshot homicide rate was 67% 6 during 2013. Much higher than rest of the developed world like France, United Kingdom, Germany and Canada. Thailand has a record firearm homicide (20032) during 20022. A study indicate the grave situation in India gun shot killing about 32000 – 38000 people each year 9. Pakistan has no national data on gunshot injuries morbidity and mortality, some regional studies has seen carried out like in Peshawar 10, Karachi 11,12, Multan 13, Dera Ismail Khan 14, Lahore 15 and Larkana indicating high rate of gun mortality. As firearm homicide rate is 91.4 % in Peshawar 10, 98.2 % in Karachi 11,12, 77 %in Multan 13, 77.7 % in Dera Ismail Khan 14 and 60% in Mirpur Khas in AJK. Data collected from Department of Forensic Medicine & Toxicology, Khyber Medical College Peshawar show about 3227 people died as result firearm injuries during 2000 to 2006 (Deaths reported for autopsy).

The gun violence varies from country to country & even varies from city to city within a country 16. This all depend upon the availability of firearm in the region 17,18, as there is strong relationship between the availability of firearms leading to shooting on minor disputes. Japan has the world's lowest gun shot mortality 19 because there is strict control over firearms. Violent firearm injuries are common in the low and middle income countries twice of high-income countries in 2000 20. Male youths are much more vulnerable to gunshot homicides and suicides than extreme age groups 21,22. The studies conducted in Pakistan indicate the second and third decade's age groups are frequent victims of firearm injuries and deaths (Multan 21-30 years (31.42%), 21-30 and 31-40 years (51.3%) age group in Lahore, Dera Ismail khan, Peshawar and Turkey. Youth involvement in interpersonal conflicts is common and due to anger, intolerance, poverty, unemployment, family and neighborhood environment, access to weapon and substance abuse 23. Most common body part targeted are head, chest followed by abdomen and pelvis 24.Vast numbers of local and modern sophisticated weapons are freely available in the Pakistan. The largest influx is from Peshawar, as the country largest illegal firearm production and sale market (Darra Adam Khel). There is public as well as media outcry on this issue. It is important to curb the high rate of Gun crime. There are number of weapons which are used to commit homicide or suicides are blunt and sharp edge weapons. The current study was carried to observe the law and order situation in our country.

REFERENCE

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METHODOLOGY

The study was conducted in the Federal Government Polyclinic Islamabad and Pakistan Institute of Medical Science Islamabad From 1st January 2014 to 31st December 2014 maintaining the inclusion criteria based on autopsy reports. The study design Descriptive cross sectional and convenient sampling was followed. All cases of firearm mortality were recorded irrespective of age, sex, location of injuries, number of firearm injuries and type of firearm weapons used were amongst the inclusion criteria. All cases of putrefied dead bodies with firearm injuries and dead bodies with surgically altered wounds were amongst the exclusion criteria. which data recorded on the proforma. The data was analyzed using SPSS version 17. A descriptive analysis of variables was calculated in terms of percentages and ratio.

TABLE: I: LOCATION OF FIREARM INJURIES (n=117)

<table>
<thead>
<tr>
<th></th>
<th>Head</th>
<th>Chest</th>
<th>Abdomen</th>
<th>Limbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>16</td>
<td>23</td>
<td>17</td>
<td>21</td>
</tr>
</tbody>
</table>

TABLE: II: AGE OF VICTIMS (n=117)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>13 - 20 years</th>
<th>21 - 40 years</th>
<th>41 - onward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>5</td>
<td>76</td>
<td>36</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TABLE: III: GENDER OF VICTIMS (n=117)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>96</td>
<td>21</td>
</tr>
</tbody>
</table>

DISCUSSION

In this study 117 cases of firearm mortality were recorded and this figure show high rate of firearm mortality. The total Islamabad population is 1.9 million much lesser than Lahore, Peshawar and Rawalpindi. Most of the cases were from the rural area of Islamabad which is 40%of Islamabad population. Here interpersonal conflicts are mostly due to land disputes leading to the chain of enmity. This chain of enmity goes on generation to generation. Additionally the familial /domestic violence (Marriage, in-laws dispute, unfaithfulness, poverty and illiteracy) are one of the contributing issues. This study is not consistent with studies conducted in the West1, 3, 7 where gun violence is more common in urban cities. Some of Firearm injuries cases did happen in urban area of Islamabad and few of them resulted in deaths. Gunshot deaths in Islamabad is more than what is on record as some cases of suicidal deaths are not reported, even homicidal deaths are not reported because deceased relatives have lack of trust in the country judicial system. The victims of firearm mortality were grouped into 13–20 years, 21 years – 40 years and 41 years onward. Victim’s mean age was ranged from 13 years - 63 years and these findings are consistent with number of studies10, 11. Majority of the victims were between 16-40 years (78.90%), these findings are consistent with number of international & national studies, coding the 2nd & 3rd decade of life is most vulnerable10, 11. The study showed that male youth is more vulnerable to firearm injuries as they are aggressive, intolerant ready to fight, violent, poverty drug addiction & access to firearm weapon. The number of gun shoot victim were 102 male & female 13.

RESULTS

A total of 117 Cases of firearm related deaths were recorded in this study from autopsy reports composing of 96 (82%) Male and 21(18%) Female giving female male ration is 1: 4.58. The victim ages ranged from 13 years to 63 years with the mean ages most of the victims were 21 – 40 Years – 64.95% and 41 – Onward 31.30%. The location of injuries on the body regions were Head 35 (29.9%), Head & Chest 16(36.68%), Chest & Abdomen 17(14.53%), Abdomen 21(17.95%) and Limbs 5(4.3%). There were 71 dead bodies having two or more than two wounds of firearm entries and 46dead bodies having single firearm entry wound. Rifled firearms were used in all cases i.e. 117(100%).

TABLE: IV: NUMBER OF FIREARM ENTRY WOUNDS (n=117)

<table>
<thead>
<tr>
<th>Type of Wounds</th>
<th>Single Entry Wound</th>
<th>Multiple Entry Wounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>46</td>
<td>71</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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female are less exposed to violence because of cultural & religious reason unless domestic violence male female ratio 1: 78.8.consistent with studies conducted in national and international studies.17, 21, 28 The most common body targeted regions are head & chest21, 27. These regions are mostly involved as these regions have the vital organs of body, these finding are consistent to number of studies conducted in Pakistan & abroad. There were 71 dead bodies having two or more than two wounds of firearm entries and 46 dead bodies having single firearm entry wound. There were dead bodies with 10-15 gunshot entries. These findings demonstrate the aggressiveness, hostility, abhorrence, and wrath in our culture.

There is a strong relationship between firearm availability and gun violence as minor disputes lead to shooting. Greater risk of violent deaths when unlocked loaded firearms are kept at home, increasing three folds risk of homicide and 20times more risk of suicide when previously domestic violence existed20,22,23. Not only is the registered firearm available in Islamabad but there considerable number of illegal firearms. The state of affairs became worse as Pakistan being the developing country where poverty, inequality, injustice and unemployment exists29. It has been reported that about 20 million firearms are in civilian possession (both legal and illegal) in Pakistan.30

CONCLUSION

High incidence of firearm mortality in the Pakistan capital and increased Male youths vulnerability to gun shot deaths. Chest and head are the most targeted regions of the body. Rifled firearms were weapon of choice for homicides and suicides.
RECOMMENDATIONS

1. Establishment of more trauma centers and pre-hospital emergency services
2. Sensitize and create awareness about dangers of firearm in civilian hands
3. Sensitize the law enforcement agencies to control spread of firearm weapons

REFERENCES