

Firearm Injuries A Study of 150 Cases

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ABSTRACT

Objective: To know the epidemiology of firearm injures, to update the Demonstrators Medicolegal examination about the magnitude of the problem, requesting for appropriate recognition, interpretation and investigation of firearm injures., to have some idea about the cost / expenditure regarding the management of such cases, to make suggestions for pu8bnlic health action / remedial measures and to high light the issue for those (social workers, media, authorities) Who keep on striving for better and peaceful society.

Material and method: Total Cases presented at services Hospital Lahore during 2008 were 2693 (2412 Male and 281 Female). Out of 150 firearm injured cases 142(95%) male and 8(5%) were female.

Results: The age ranged from 0 to above 60 years. The maximum numbers 62(41%) were found between 20-29 years. For distance fire was 120(80%), near distance fire 18(12%) and loose contact fire was 4(3%). Regarding manner 148(98.5%) were homicidal and 2(1.5%) were by friendly hand. Body parts involved were analysed i.e., head and face 4(2.6%), chest and abdomen 57(38%), upper limb 15(10%) and lower limb 74(49.4%). Urban cases were 142(95%) and rural were 8(5%).

Conclusion: The gravity of situation reemphasized and suggestions were made to the relevant authorities for better, healthy and peaceful society.

Keywords: Medicolegal, firearm injuries, healthy and peaceful society.

INTRODUCTION

A firearm is a device to propel a projectile (shot/ bullet / missile) by the expansive force of gases generated as a result of combustion of the propellant (powder) in a closed space¹. A firearm related injury was defined as a penetrating injury of gunshot wound from a weapon that uses a powder charge to fire a projectile (e.g., hand guns, riffles and shotguns)². There has been an increase in the medicolegal cases due to firearm weapons in the last few decades, while blunt and sharp edged weapons injuries have decreased to considerable extant. One major cause for this increase is the easy availability of firearm weapons in our country. Television imparts images to society as Kalashnikov, rifles, and other weapons designed for use^{3,4}. This has been argued to contribute to social violence more generally^{5,6}. Impulse and ready access to firearm are thought to play an important part in firearm injures^{7,8}. Easy handling causing grave damage by keeping oneself away from the enemy / target has made the firearm weapons most favorable choice to the people involved in enmity. Most intentional injuries arose during family disputes and disputes over land⁹. The presence of a gun in a household is associated with

approximately five fold increase the risk of suicide and three fold increased in the risk of homicide for household residents^{10,11}. There are 2.6 nonfatal injuries caused by firearm.12 firearms were found to be the most commonly used weapon killing 114 persons out of 250¹³. Abuse of firearms and resulting injuries result in major cost of life, health and resources spent for medical care and law enforcement, and must be considered a major public health and safety concern¹⁴.

MATERIAL AND METHODS

The study was conducted at accident and Emergency department services Hospital Lahore. The study of firearm cases during 2008 was conducted on of all ages, sex, distance including minor and severe injuries. The data was collected form medicolegal certificates. The variables were age, sex distance, manner, area and part of the body hit by firearm.

RESULTS

Sex of the victims

Sex	=n	% age
Male	142	95
Female	8	5

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Age of the victims

Age Group (years)	Male		Female	
	No.	% age	No.	%age
01-09	01	0.7	-	-
10-19	12	8	01	0.7
20-29	59	39.3	03	2
30-39	38	25.3	03	25
40-49	21	14	01	0.7
50-59	08	5.3	-	-
60 and above	03	2	-	-
Total	142	95	08	5

Distance of fire

Distance	Male		Female	
	No.	% age	No.	%age
Far Distance	120	80	8	5
Near Distance	18	12	-	-
Loose Contact	4	3	-	-
Total	142	95	8	5

Manner of Infliction of injury

Manner	Male		Female	
	No.	% age	No.	% age
Homicidal	140	93.5	8	5
Friendly	02	1.5	-	-
Suicidal	-	-	-	-
Total	142	95	8	5

Urban / rural area distribution

Area	Male		Female	
	No.	% age	No.	% age
Urban	101	67.5	7	4.3
Rural	41	27.5	1	0.7
Total	142	95	8	5

Parts of the body involved

Region	Male		Female	
	No.	%age	No.	%age
Head and face	3	2	1	0.7
Chest and abdomen	56	37.5	1	0.7
Upper limbs	12	8.2	3	1.8
Lower limbs	71	47.3	3	1.8
Total	142	95	8	5

DISCUSSION

Firearm weapons (especially unlicensed) became available in this county. In this study only 5% victims were females, 95 were males. This numbering of female victims by the male victims has been established in other studies^{15,16,17}. This study depicts that maximum number of victims belonged to 3rd decade of life (20-29 years) followed by 4th decade (30 -39 years). This age group individuals are physically strong, full of energy and challenge on provocation. The number of victims of firearm injuries were less in first and second decades of life, also in

fifth and sixth decades. This is consistent another study made in Lahore^{15,17}.

Firearm injuries inflicted within arm's length in this study were 22 (near distance and contact), while far distance (beyond arm's length firearm cases were 128. Presence of burning effect, blackening and tattooing was the basis to decide that injury was inflicted within arm's length. Absence of these findings was the criteria to decide that injury was inflicted beyond arm's length.

Firearm injuries beyond arm's length almost rule out the possibility of its being suicidal, self-inflicted. Head and face were involved in 2.7%, chest and Abdomen 38%, upper limb 10% and lower limb was involved maximally in 49.3% of all cases of firearm injuries.

This study shows that most of the cases 72% belong to urban area while 28% cases belong to rural area. This emergency treatment in all the teaching (tertiary care) hospitals is being provided by the Government. The emergency surgery has to be provided in many of such cases.

The present study was conducted on a limited number of firearm cases in this center. There is need collect statistics form all medicolegal centers for complete evaluation of the problem. This will enable us to suggest measures to minimize the victim of firearm injuries in our society.

Conclusion:

Firearm injures cases are real problem presenting in the accident and emergency department. Their recognition and management is highly skilled job. The preponderance of males as victims in such a high percentage in active, energetic age group has added to the problem. It should be matter of serious concern for law makers, law enforcement agencies, social workers, psychiatrists and media.

The cost assessment in managing such cases has to be evaluated at the nation level so that preventive measures are taken.

A state basis national reporting system needed to track the incidence, detailed circumstances, characteristics of the shooter and injured person and long term consequences of fatal and nonfatal firearm injuries. These data would be useful for the design, implementation and evaluation of prevention programs aimed at reducing the burden of firearm related injuries.

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