

## Demographic Distribution of Firearm Injuries in District Quetta

ZULFIQAR ALI BUZDAR, FAKHAR UZ ZAMAN, MUHAMMAD HAMMAD, MUDASER HUSSAIN  
ABBASI, FARHAN UL AMIN MENGAL

### ABSTRACT

**Aim:** To determine the frequency, pattern, age, gender and location of firearm injuries in Firearm victims brought to the medicolegal department of Sandeman Hospital Quetta.

**Design:** Observational descriptive study

**Duration of study:** One year

**Methods:** The study was conducted in Avicenna Medical College, Lahore based on the data of firearm cases of the year 2003 collected from the Medicolegal Department Sandeman Hospital Quetta.

**Results:** Out of 230 cases of firearm 190(82.6%) males and 40(17.4%) females. Ages of victims ranged from 0 to more than 60 years and the most frequent cases of firearm found at the age 21-30yrs, 60(26.1%) and most common region found in fire arm victims was Chest 100(43.5%).

**Conclusion:** It must be targeted for made aware of lifestyle adjustments such as training to refrain from anger or disputes. Young aged males between 20-40 years are most commonly involved in firearm cases and most common region involved was thorax. Majority of the peoples are unemployed.

**Keywords:** Firearm injury, medicolegal,

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### INTRODUCTION

Man has been fascinated with the thought of launching a projectile at animals, developed additional economical ways in which of doing this. The invention of explosive junction rectifier to the event of firearms<sup>1,2,3</sup> fashionable field takes advantage of the squaring of speed therate to develop weapons that have a missile of tiny mass however extremely high velocity to supply the utmost K.E. for tissue harm. The mode of injury depends on the rate of the missile<sup>4</sup>. Firearms square measure barreled weapons of any sort or description from that an attempt, bullet or different missile may be discharged with some speed and momentum, and that within the acceptable circumstances will cause injury and death<sup>5</sup>. True within the developing world, together with Pakistan, is even worse wherever impoverishment, social difference, state and access to the illicit weapons square measure obvious<sup>6</sup>. In Pakistan, the war on coercion may be a recent addition that has caused more deterioration within the already law and order scenario. The main reasons of civilian small-arm injuries square measure murderous, suicidal, sectarian, accidental and theft

trends and result that were on account, therefore this study was planned to figure out the pattern, age, gender, selection and website of gun injuries in gun victims born at the profession department of Sandeman Hospital Quetta throughout the year.

### MATERIALS AND METHODS

The study was supervised in Avicenna Medical College, Lahore and data of all firearm casualties were assembled from the medicolegal unit of Sandeman Quetta, and data were collected from the period from January 2003 to December 2003. Our study was attempted to define the context, rationale, area and gravity of firearm-related injuries in their fatalities. All firearm injuries records were minutely reviewed the knowledge like, demographic data of the casualty and time interval between occurrence, and medico legal examination & examination of the attributes of firearm injuries like range and number of entry/exit wound, type of weapon used. A detailed antiquity was taken from caretakers or the persons accompanying the injured person. Police papers like, inquiry report was thoroughly studied and relevant findings were noted at same time. This is an observational descriptive study and data of 230 cases of firearm casualties case histories were, assembled and analyzed.

### RESULTS

A total of 230 cases of firearm injuries were recorded during the study period. Data were analyzed on using SPSS version 20. Figure showed the Firearm victims

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<sup>1</sup>Assistant Professor Forensic Medicine & Toxicology, Avicenna Medical College, Lahore

<sup>2</sup>Assistant Professor Forensic Medicine & Toxicology, Allama Iqbal Medical College, Lahore,

<sup>3</sup>Assistant Professor Forensic Medicine & Toxicology, HBS Medical & Dental College, Islamabad

<sup>4</sup>Associate Professor, Forensic Medicine & Toxicology Poonch Medical College, Rawlakot, AJ&K

<sup>5</sup>PG trainee in Gastroenterology, S.Z. Hospital, Lahore.

Correspondence to Dr. Zulfiqar Ali Buzdar Email: forensicatitsbest@gmail.com

were composed of 190(82.6%) males and 40(17.4%) females.

Fig. Cases weighted by frequency

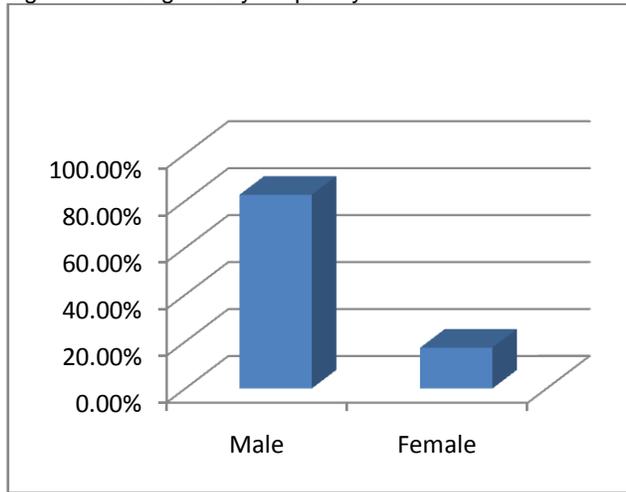


Table 1: Age variation in firearm victims

Valid	Frequency	%	Valid %	Cumulative%
11-20yrs	35	15.2	15.2	15.2
21-30yrs	60	26.1	26.1	41.3
31-40yrs	55	23.9	23.9	65.2
41-50yrs	40	17.4	17.4	82.6
51-60yrs	30	13.0	13.0	95.7
More than 60 yrs	10	4.3	4.3	100.0
Total	230	100.0	100.0	

Table1 showed the age of victims ranged from 0 to more than 60 years and most frequent cases of firearm found at the age of 21-30yrs, 60(26.1%) and 2<sup>nd</sup> most common age group of 31-40yrs, 55(23.9%). In 3<sup>rd</sup> common age group was 41-50yrs, 40(17.4%). A least number of cases were found in 11-20 years age group, 35(15.2%) followed by the age group of 51-60yrs, 30(13.0%) and a very least age group was more than 60yrs, 10(4.3%), were found .

Table-2 showed the most common region found in fire arm victims was Chest100(43.5%) and the 2<sup>nd</sup> most common region in firearm victims was Head Neck &face,50(21.7%), and the 3<sup>rd</sup> common region was upper extremities,40(17.4%) found. Least region in firearm victims were Abdomen & pelvis, 30(13.0). and very least regions in firearm victims were lower extremities,10(4.3%).

In all above regions 70% from far distance injuries and 30% from near distance injuries were found. History of incidence, weapons used during the incidence and pattern of injuries mentioned 65%

were rifled firearm injuries and 35% from smooth bore weapons used for such injuries.

Table 2: Body region involved

Valid	Frequency	%	Valid%	Cumulative %
Head neck & face	50	21.7	21.7	21.7
Chest	100	43.5	43.5	65.2
Abdomen & Pelvis	30	13.0	13.0	78.3
Upper extremities	40	17.4	17.4	95.7
Lower Extremities	10	4.3	4.3	100.0
Total	230	100.0	100.0	

Table3:Manner of injuries

Valid	Frequency	%	Valid%	Cumulative%
Suicidal	20	8.7	8.7	8.7
Homicidal	190	82.6	82.6	91.3
Accidental	20	8.7	8.7	100.0
Total	230	100.0	100.0	

Table 3 showed that the most common manner was Homicidal 190(82.6%) of firearm cases, and second common manners were Suicidal and accidental 5 cases (8.7%) each found.

Table 4 showed The Occupational history of victims which showed the un employed victims were most commonly 70(30.4%) involved which was followed by Labourers victims, 60(26.1%) and third common victims belonged to the occupation of farmers, and house wives 40(17.4%) each. Least occupation was Drivers 15(6.5%) which was followed by the students, 5(2.2%) found.

Table 4: Occupational History

Valid	Frequency	%	Valid%	Cumulative%
Unemployed	70	30.4	30.4	30.4
Labourers	60	26.1	26.1	56.5
Farmers	40	17.4	17.4	73.9
House wives	40	17.4	17.4	91.3
Drivers	15	6.5	6.5	97.8
Students	5	2.2	2.2	100.0
Total	230	100.0	100.0	

A Highest share of admissions of firearm victims were seen in January month 37 (16.1%), ordinal highest share of firearm patients admissions were seen in September 26(11.3%), third highest share of admissions of firearm patients were seen in November and June 25(10.9%) each.

## DISCUSSION

Weapons are getting cheaper and easier to get as a result of the excessive and generally indiscriminate provision of arms and ammunition by governments and therefore the acts and actions of national and international terrorist teams<sup>8</sup>. There are 2 main sorts of gun – those with sleek barrels that fire teams of pellets or shot and people with grooved or rifled barrels, that hearth single projectiles or bullets. Each of those sorts of weapon depend upon the detonation of a solid propellant to provide the gases that propel the projectile(s)<sup>8</sup>. The character of gun wounds varies significantly with the sort of weapon used<sup>4</sup>. Low-velocity wounds are attributed to weapons having velocity of but 600 meter per second which is caused by handguns and are, therefore, additional common in civilian population. Military or searching weapons have a velocity of quite 600 meters per second and cause high-speed wounds<sup>7,9</sup>. In our study the bulk of the patients were males 190(82.6%) and 40(17.4%) females and therefore the commonest age of gun victims were 21-30yrs, 60(26.1%) accompanied by the age of 31-40yrs, 55(23.9%). Such results could also be thanks to the males are additional violent, aggressive doing searching jobs and cows rearing acts and doing additional daring as compared to females. It conjointly might be thanks to their role that obligates them to be additional exposed to the surface setting than females. Similar findings were conjointly seen numerous different studies in West Pakistan<sup>10,12</sup> and majority of cases were thanks to civilian assaults that was relatively like different studies<sup>11</sup>. The foremost common manner was murderous 190(82.6%) of gun cases, followed by dangerous and accidental five cases (8.7%) every found. The United Nations used victims were most ordinarily 70(30.4%) concerned that was followed by Labourers victims, 60(26.1%) and third common victims belonged to the occupation of farmers, and house wives 40(17.4%) each. Sixty percent (60%) of deaths in our study belonged to rural areas as compared to four-hundredth within the urban dwellers. This trend has conjointly been reported in USA<sup>13,14</sup>. This predisposition of rural society to violence will be explained by the commonly low levels of education during this cluster, whereby they have an inclination to breed enmity amongst themselves and their emotions tend to occurrence sooner. In most the cases, high rate weapons were used as firearms. There is a necessity to decrease the quantity of firearms weapons used and over-subscribed in West Pakistan. We would like to eradicate illicit local people gun producing units. It's

obvious that personal gun possession ought to be strictly restricted and therefore the illicit convenience ought to be prevented. Elimination of those illicit countries created hearth arms is of the utmost importance so as to curb the high murderous gun death rate during this region<sup>15</sup>. Prevention efforts ought to be initiated through strict regulating laws not to mention education and awareness. Snap checking for arms by enforcement agencies and a system of police investigation for management of violence and street crimes might facilitate in reducing the burden of deaths from firearms.

## CONCLUSION

Young aged males between 20-40 years are most commonly involved in firearm cases and most common region involved was Thorax. Majority of the peoples are unemployed.

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