Original Article

Frequency, Pattern of Injuries and Weapon used in Medico Legal Cases

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ABSTRACT

Objective: To study the frequency, Pattern of Injuries and weapon used in Medico legal cases.

Design of Study: Retrospective observational study.

Place and Duration of Study: This study was conducted at the Sardar Begum Teaching Hospital Sialkot, and forensic department Khyber Medical College, Peshawar from January 2015 to December 2016.

Materials and Methods: Two thousand and fifteen cases were included in the study. The Performa was designed to record age, sex, socio economic status, area of the victim, type of injury, number of injuries and weapon used. The fully informed consent of every patient was recorded before examination. The permission of ethical committee of the institute was also taken. The data was analyzed by SPSS version 10.

Results: There were maximum (64.2%) n=1413 medico legal cases at age 21-30 years, (59.8%) n=1317 male and (4.4%) n=96 female. Minimum medico legal cases (0.7%) n= 17 at the age of 61-70 years, (0.6%) n= 14 male and (0.1%) n=3 female as shown in table no. 1. It was seen that maximum (77.3%) n= 1704 from urban area (72.9%) n= 1607 male and (4.4%) n= 97 female medico legal and medico legal cases rural area were (22.6%) n= 498, (19.6%) n=432 male and (3.0%) n=163 female as shown in table no.2. Medico legal cases of firearm were at the top (68.8%) n= 1517, (65.84%) n= 1450 male and (3.04%) n= 67 female in the society but punctured wound medico legal cases were minimum (0.3%) n= 07, (0.22%) n= 05 male and (0.09%) n=2 female in the society as shown in table no. 3. The weapon used in medico legal cases was firearm at the top (68.8%) n=1517 and pointed end weapon was used minimally (0.3%) n=07 as shown in table no .4. There were (75%) n=1651 cases of homicide, (0.6%) n= 15 cases of suicide and (24.4%) n= 536 cases of accident in the study as shown in table no.5.

Conclusion: The study showed that (75%) cases were of homicidal in nature, (0.6%) cases of suicidal nature and (24.4%) cases of accidental in nature.

Key Words: Injuries, Medico legal, weapon.

INTRODUCTION

The standard definition of an injury as utilized by World Health Organization is injuries area unit caused by acute exposure to physical agents like energy, heat, electricity, chemical or ionizing radiation interacting with the body in amounts or at rates that exceed the brink of human tolerance. In some cases (e.g., frost bite and drowning), injuries result from unexpected lack of essential agents like oxygen or heat.[1] Injuries account for 16% of the planet burden of malady.

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In 1990, five million folks died thanks to trauma and injuries. The quantity is anticipated to rise to eight.4 million by year 2020.[2] Low and middle financial gain countries account for ninetieth of the overall burden of injuries with geographical area and western pacific regions having the best variety of injury deaths worldwide. Road traffic accidents are the second commonest reason for incapacity within the developing world.[3,4] The people most venerable to receive injuries ranges from 17–25 years with male preponderance.[5] The top and face is that the most typically concerned region in trauma because it is that the most accessible and exposed region within the social violence.[6] The frequency varies from place to put reckoning on high gun possession.[7] Only a few studies on the extent and pattern of injuries are conducted in Asian nation.[8,9] Therefore the aim of our study to research the categories of Injuries, weapon used and frequency of medico legal cases reportable at Sardar Baigum Teaching Hospital Sialkot and rhetorical department of Khyber Medical faculty, Peshawar.

A medico-legal case (MLC) may be a case of injury or unwellness wherever the attending doctor, once eliciting history and examining the patient, thinks that some investigation by enforcement agencies is important to ascertain and fix responsibility for the case

in accordance with the law of the land.[10] Common medico-legal cases embody alleged cases of assault, road traffic accidents, burns, poisoning, snake bite, bite, industrial accidents, alcoholic intoxications etc. Medico legal cases area unit an integral a part of practice in emergency departments of major hospitals. identification of medico legal cases is an integral facet for the hindrance of preventable causalities in future and to check the rate in space.[11]

MATERIALS AND METHODS

Two thousand two hundred and two cases were included in the study during the January 2015 – August 2016. The study was conducted at Sardar Begum Teaching Hospital Sialkot and forensic department of forensic medicine department Khyber Medical College Peshawar.

The charts were reviewed, and age, sex, area of the victim, type of injury, and weapon used were recorded on designed Performa. The fully informed consent of every patient was recorded before medico legal examination. The permission of authority of the institute was also taken. The data was analyzed by SPSS version 10.

RESULTS

There were maximum (64.2%) n=1413 medico legal cases at age 21-30 years, (59.8%) n=1317 male and (4.4%) n=96 female.

Table No. 1: Age and Sex distribution in Medico Legal Cases

Sr No	Age (Years)	No Of Patients (%)	Male (%)	Female (%)
1	10-20	157 (7.1%)	123 (5.6%)	34 (1.5%)
2	21-30	1413 (64.2%)	1317 (59.8%)	96 (4.4%)
3	31-40	557 (25.2%)	537 (24.3%)	20 (0.9%)
4	41-50	37 (1.6%)	31 (1.4%)	6 (0.3%)
5	51-60	21 (1.0%)	17 (0.7%)	4 (0.1%)
6	61-70	17 (0.7%)	14 (0.6%)	3 (0.1%)
	Total	**2202 (100%)**	**2039 (92.4%)**	**163 (7.6%)**

Table No. 2: Area Distributions in Medico Legal Cases

Sr No	Area	No of Patients	Male %	Female %
1	Urban	1704 (77.3%)	1607 (72.9%)	97 (4.4%)
2	Rural	498 (22.6%)	432 (19.6%)	66 (3.0%)
	Total	**2202 (100%)**	**2039 (92.6%)**	**163 (7.4%)**

Table No. 3: Pattern of Injuries/ Means in Medico legal cases

Sr No	Pattern of Injury	Cases (Percentage %)	Male (%)	Female (%)
01	Firearm	1517 (68.8%)	1450 (65.84%)	67 (3.04%)
02	Incise(cuts)	13 (0.5%)	6 (0.27%)	7 (0.31%)
03	Stab	27 (1.2%)	21 (0.95%)	6 (0.27%)
04	Punctured	07 (0.3%)	5 (0.22%)	2 (0.09%)
05	Blunt	63 (2.8%)	48 (2.17%)	15 (0.68%)
06	Chemical Burn	11 (0.4%)	8 (0.36%)	3 (0.13%)
07	Dry Flame Burn	13 (0.5%)	8 (0.36%)	5 (0.22%)
08	Poising	15 (0.6%)	8 (0.36%)	7 (0.31%)
09	Road Traffic	536 (24.3%)	485 (22.02%)	51 (2.31%)
	Total	**2202 (100%)**	**2039 (92.6%)**	**163 (7.4%)**

Table No.4: Weapon/Mean used in Medico legal cases

Sr.	Weapon/Mean	Cases	Percentage %
01	Firearm	1517	(68.8%)
02	Sharp Edge	40	(1.81%)
03	Pointed End	07	(0.3%)
04	Blunt	63	(2.8%)
05	Acid /Alkali	11	(0.4%)
06	Dry Flame	13	(0.5%)
07	Poison	15	(0.6%)
08	RTA	536	(24.3%)
	Total	**2202**	**100%**

Table No. 5: Medico Legal Type of Cases

Sr No	Medico Legal Types	No of Patients	Percentage %
1	Homicidal	1651	75.0%
2	Suicidal	15	0.6%
3	Accidental	536	24.4%
	Total	**2202**	**100%**

Minimum medico legal cases (0.7%) n= 17 at the age of 61-70 years, (0.6%) n= 14 male and (0.1%) n=3 female as shown in table no. 1. It was seen that maximum (77.3%) n= 1704 from urban area (72.9%) n= 1607

male and (4.4%) n= 97 female medico legal and medico legal cases rural area were (22.6%) n= 498, (19.6%) n=432 male and (3.0%) n=163 female as shown in table no.2. Medico legal cases of firearm were at the top (68.8%) n= 1517, (65.84%) n= 1450 male and (3.04%) n= 67 female in the society but punctured wound medico legal cases were minimum (0.3%) n= 07, (0.22%) n= 05 male and (0.09%) n=2 female in the society as shown in table no. 3. The weapon used in medico legal cases was firearm at the top (68.8%) n=1517 and pointed end weapon was used minimally (0.3%) n=07 as shown in table no .4. There were (75%) n=1651 cases of homicide, (0.6%) n= 15 cases of suicide and (24.4%) n= 536 cases of accident in the study as shown in table no.5.

DISCUSSION

Present study showed that maximum medico legal cases came to casualty were firearm. This finding was consistent with other studies.[1,2,6-8,10,11] Malik Y [3].But it was stated Hussain SN[5] study also showed maximum number of case reported to casualty were of burn which was differ to our study.

In our study maximum numbers of cases reported to casualty were from age group 21-30 years (64.02%) followed by 31-40 years (25.02%) and minimum at the age 61-70years (0.7%), similar to other authors studies.[2-5,9-11] This may be due to fact that individual of adult age group lead more active life and take risk but in old age the people are spent sedentary.

In our study we observed that male (92.04%) and female (7.6%) as seen in others.[2-5,9-11] This is because males are more vulnerable to accident or injuries.

Present study showed that maximum number of medico-legal cases reported to casualty between 12 p.m. to 6 p.m. because in this time of day most of people are maximally involved into their activities[13].

We observed in our study that firearm weapon was used maximally (68.8%) in medico legal cases in the society which was similar to other studies conducted in Pakistan and even in develop countries.[14]

CONCLUSION

The study showed that (75%) cases were of homicidal in nature, (0.6%) cases of suicidal nature and (24.4%) cases of accidental in nature.

Author's Contribution:

Concept & Design of Study:	Abid Karim
Drafting:	Hakeem
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