

Cases in Physical Injury at Peoples Medical College Hospital, Nawabshah, Shaheed Benazirabad, Sindh, Pakistan

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ABSTRACT

Objective: The purpose behind this study was to determine the spectrum of medicolegal cases in physical injury at Peoples Medical College Hospital, Nawabshah, Shaheed Benazirabad, Sindh, Pakistan.

Study Design: Prospective / observational study

Place and Duration of Study: This study was conducted at the at a tertiary care Peoples Medical College Hospital, Nawabshah, Shaheed Benazirabad, Sindh, Pakistan from 2014 to 2018.

Materials and Methods: The study has been conducted through a convenience sampling technique on autopsied 259 males and females between the periods of six years to observe the frequency and location of physical injury leads to death among different age groups. Ethical consent was taken from family member and hospital before doing autopsy and use of its findings for study purpose. A structured questionnaire was used to collect the objective specific data and we used SPSS version 21 for data entry and analysis.

Results: Our study has male predominance (95.75%, N = 248) with more autopsied were performed in rural areas (66.02, N = 171). More than 77% (N = 202) autopsied persons did not had traumatic bony lesion during examination. The most commonly used weapon was hard blunt type 76.47% (N = 39/51) while comparatively less people were killed due to firearm injury (17.64%).

Conclusion: The spectrum of medicolegal cases is quite variable in people presenting at Peoples Medical College Hospital, Nawabshah, Shaheed Benazirabad, Sindh, Pakistan in which most of them were killed due to blunt weapon.

Key Words: Autopsy findings, Clinical spectrum, Pakistan

Citation of articles: Awan EA, Kumar P, Rajpar S. Spectrum of Medicolegal Cases in Physical Injury at Peoples Medical College Hospital, Nawabshah, Shaheed Benazirabad, Sindh, Pakistan. Med Forum 2019;30(8):69-72.

INTRODUCTION

Medicolegal cases are the most important and least documented form in the field of medical sciences that is why the actual burden and consequences from these cases are limited worldwide and very few studies are available in developing countries including Pakistan.^{1,2} The pattern of injury and causative weapon are well studied in developed countries but data is limited in Pakistan due to ethical constraints. The importance of type of weapon is defined the type of injury occurred in

patient is suffered from and died. Firearm injuries cause more harm than blunt traumas.

There could be multiple reasons from which a person can be investigated for medico legal cases and these differ in developing countries from developed countries and from region to region³⁻⁵.

The documented causes of medicolegal cases in Pakistan is still unknown but in a study published in Pakistan has shown that more than 40% of the medicolegal cases are caused by road traffic accident while blunt trauma and physical assault were less common 32% and 19%, respectively^{6,7}.

Available data from Pakistan is mostly from the bigger cities and comprises of urban population but there is no such study has been conducted in peripheral areas of Sindh Pakistan through which we can highlight the spectrum of medicolegal cases that is why this study has been conducted to evaluate the actual burden of medicolegal cases in Nawabshah and its surrounding so the data can be scientifically available to highlight the importance of such cases in peripheral areas of Sindh.

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Received: March, 2019

Accepted: June, 2019

Printed: August, 2019

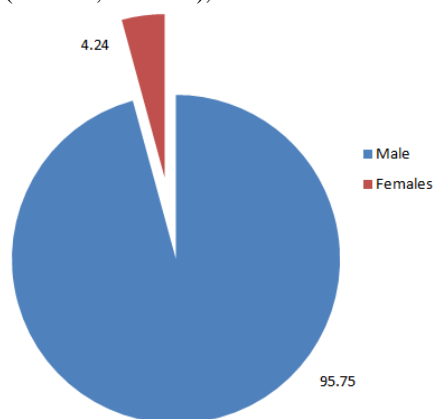
MATERIALS AND METHODS

We have conducted a longitudinal prospective study through a cross sectional sampling technique on autopsied 259 males and females between the periods of four years from 2014 to 2018 in a Tertiary Care Hospital of Nawabshah, Peoples Medical College Hospital, Nawabshah, Shaheed Benazirabad, Sindh, Pakistan.

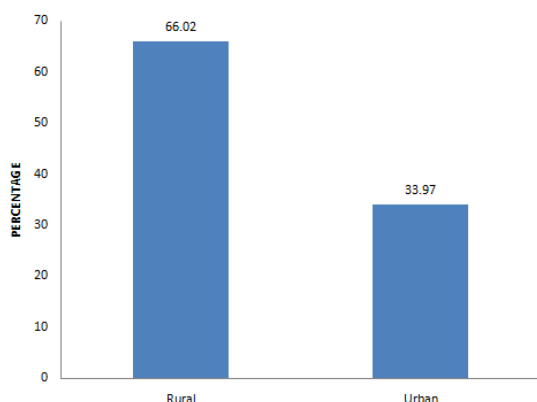
Data Collection And Analysis: Data collection for this study was started after the consent taken from ethical review committee of hospital and also the verbal consent was taken from the family member of deceased. Data was collected for baseline variables such as deceased age & area of residence and cause and pattern of death was observed as an outcome variable. For both data entry and analyses we have used SPSS version 20 and presented in the form of tables and bar charts.

RESULTS

Among all the 259 autopsies performed mostly the autopsied persons were belongs to rural areas (66.02, N = 171) and among them most of them were males (95.75%, N = 248), shown in table number 1 & 2.



Graph No. 1: Gender wise distribution of study subjects (N = 259)



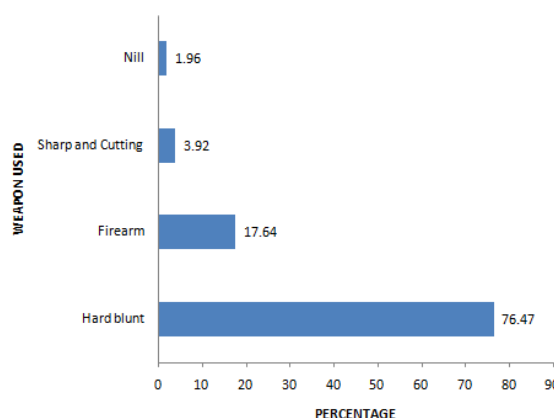
Graph No. 2: Area of Residence of Study Participants (N = 259)

The main objective behind conduction of this study was to evaluate the spectrum of medicolegal cases through which we can find the burden of causative agent and damaged caused to the body and leads them to death. Interestingly more than 77% (N = 202) autopsied persons did not had traumatic bony lesion during examination while only 69% (N = 51) had some traumatic bony lesion seen during examination, and only 2.31% (N = 6) of the autopsied body showed post-operative findings during examination.

Table number 5 shows weapon used to kill the person. The most commonly used weapon was hard blunt type 76.47% (N = 39/51) while 17.64% people were killed due to firearm.

Table No. 1: Clinical Spectrum Of Autopsied Bodies (N = 259)

Clinical Spectrum	Percentage	Number
No evidence of Traumatic Bony Lesion	77.99	202
Fracture seen in any site of a body	19.69	51
Post-operative findings	2.31	6



Graph No. 3: Type of Weapon Used (N = 51)

DISCUSSION

Any case of injury or ailment where some criminality is involved is called a Medico Legal Case (MLC). A medico legal case is where a person is injured or harmed in any way and needs medical attention for it. The injury cases suggestive of criminal offense (blunt injuries and sharp edged weapons), burn any case of injury or ailment where some criminality is involved is called a Medico Legal Case (MLC). A medico legal case is where a person is injured or harmed in any way and needs medical attention for it. The injury cases suggestive of criminal offense (blunt injuries and sharp edged weapons), burn. Such types of studies in Pakistan have not been conducted properly hence the true burden is still not known. In our study we have tried to observe and evaluate the scientific burden of such types of cases

in which the cause of injury leading to death is questionable^{8,9}.

In our study we have observed larger number of autopsied persons in which we have observed that most of them were males which could be due to people are more of them from rural areas and they least likely to proceed for autopsies when it comes to females. The findings of our study are similar to the findings shown in both international and national data published.^{10,11}

Focusing on the main objective of our study, it has been observe that most of the autopsied persons did not had any sign of physical injury and seems to be they died from natural cause of death but people had filed case for autopsy possibly due to high crime rate at their particular area and want to rule out the cause of death. The published international and national data has in favor of our findings¹²⁻¹⁴.

The second most common finding of our study was presence of bony lesion which lead them to death. Bony lesions are the sings of having some assault by weapon resulting in a death. The percentage of having bony lesion in our study population is rather less than the studies published internationally. This could be due to improper documentation of assaulted cases in Pakistan.¹⁵⁻¹⁷

The most common weapon used in assaulted autopsied peoples was hard blunt type which leads them to death while the prevalence of death due to firearm injury was less than 18%. This could be due to lack of availability of firearm weapons while on the other hands blunt materials are easily accessible at rural areas. International data has shown firearm injury their major cause of death in comparison to hard blunt material¹⁸⁻²⁰.

CONCLUSION

The spectrum of medicolegal cases is quite variable in people presenting at Peoples Medical College Hospital, Nawabshah, Shaheed Benazirabad, Sindh, Pakistan in which most of them were killed due to blunt weapon.

Author's Contribution:

Concept & Design of Study: Ejaz Ahmed Awan

Drafting: Pardeep Kumar

Data Analysis: Sultan Rajpar

Revisiting Critically: Ejaz Ahmed Awan

Final Approval of version: Ejaz Ahmed Awan

Conflict of Interest: The study has no conflict of interest to declare by any author.

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