Original Article

Real Medical Cause of Death

Suspected Medico legal Cases Turned out to Be Real Medical Cause of Death

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ABSTRACT

Objective: The purpose behind this study was to determine the real medical cases among all autopsies performed on the basis of suspected medico legal cases at Peoples Medical College Hospital, Nawabshah, and Sindh, Pakistan.
Study Design: Prospective observational study.
Place and Duration of Study: This study was conducted at the Department of Forensic Medicine, tertiary care Peoples Medical College Hospital Nawabshah Sindh Pakistan. From January 2014 to December 2018.
Materials and Methods: The prospective observational study has been conducted through a convenience sampling technique on autopsied 134 males and females between the periods of four years from 2014 to 2018 to observe the real medical cause of death such as cardiovascular or cereberovascular to fill the statistical gap present at our area of a tertiary care Peoples Medical College Hospital, Nawabshah, Sindh, Pakistan. 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 (77.61%, N = 104 / 134) with more autopsied were performed in rural areas (85.52, N = 115 / 134). The mean age of the autopsied performed was 41.31 ± 13.51 years and the age ranges between 20 to 60 years. The prevalence of medical cause of death was 60.44% (N = 81 / 132). The most common cause of death was due to cardiovascular disease (69.13%, N = 56 / 81) and cereberovascular disease (20.98%, N = 17 / 81).
Conclusion: Besides medico legal causes of deaths ascertained during autopsy, the burden of actual medical causes of deaths which were suspected as medico legal cases impose a huge burden. Hence, suspected medico legal cases most often turned out to be actual medical cause of death that our study findings have shown.
Key Words: Autopsy findings, Medical Cause of Death, Pakistan

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INTRODUCTION

Medico legal 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]

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Sometimes, these suspected medico legal cases are turned out to be true medical diagnosis due to false allegations or selfish desire of interest to take money from the people. In a nation, where crime ratio is higher due to illiteracy and poor socioeconomic background people most often blame other persons to gain some money from them but such cases are exposed during autopsy[3-5].

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

Deaths from poison, snake bite, scorpion bite, sudden cardiac deaths, and deaths from cereberovascular accidents causes suspicion in a family that person is killed rather died from other cause. These types of statistical observations are limited and no study has been conducted in Pakistan which shows true burden of medico legal causes and medical cause of deaths during autopsies performed. That is why this study has been conducted to fill the scientific gap and ascertain how

much of the suspected medico legal has been turned out to be medical causes of natural deaths.

MATERIALS AND METHODS

This study is a prospective observational study which was conducted through a convenience sampling technique on autopsied 134 males and females between the periods of four years from January2014 to 2018 December in a tertiary care hospital of Nawabshah, Peoples Medical College Hospital in a Department of Forensic Medicine.

RESULTS

The mean age of the autopsied performed was 41.31 ± 13.51 years and the age ranges between 20 to 60 years. Among all the 134 autopsies performed mostly the autopsied persons were belongs to rural areas (85.52, N = 115 / 134) and among them most of them were males (77.61%, N = 104 / 134), shown in Chart number 1 &2.

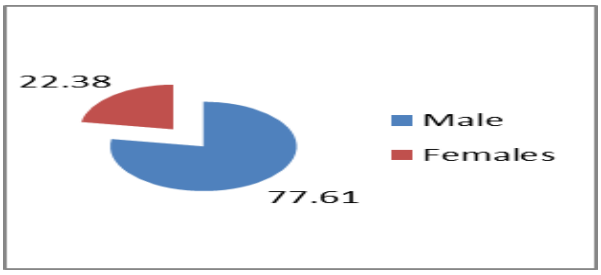

Figure No.1: Gender Wise Distribution of Study Subjects (N = 134)

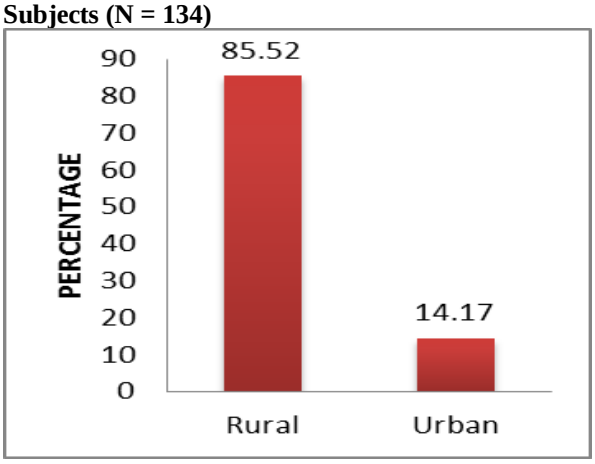

Figure No.2:Area of Residence of Study Participants (N = 134)

The main objective behind conduction of this study was to evaluate the determine the real medical cases among all autopsies performed on the basis of suspected medico legal cases at Peoples Medical College Hospital, Nawabshah, Sindh, Pakistan. Interestingly 60.44% (N = 81 / 132) autopsied persons were died from real medical causes rather than medico legal cause Chart 3. Among them, the most common cause of death was due to cardiovascular disease (69.13%, N = 56 / 81) and cereberovascular disease (20.98%, N = 17 / 81). Descriptive statistics shown in Table No. 1.

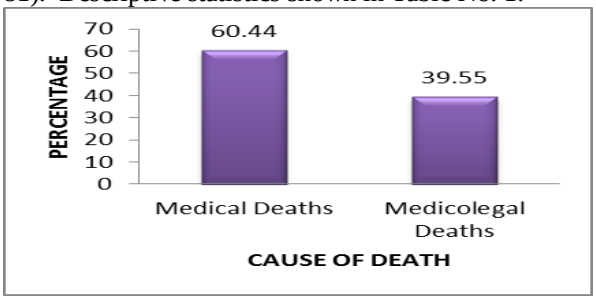

Figure No.3: Prevalence of Medical Cause of Deaths (N = 134)

Table No. 1: Clinical Spectrum of Autopsied Bodies (N = 81)

Medical Causes of Deaths	Percentage	Number
Cardiovascular Disease	69.13	56
Cereberovascular Disease	20.98	17
Respiratory Disease	6.17	5
Kidney disease	3.7	3
Miscellaneous	2.46	2

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. That is why; sometimes people use medical cases and file a case against someone to gain some ransom. The actual burden of medico legal cases in Pakistan is still unknown but some of the smaller local studies have shown scattered data from different areas of Pakistan [8, 9] In our study we have observed mean age of the autopsied performed were 41.31 ± 13.51 years and the age ranges between 20 to 60 years. Among all the 134 autopsies performed, mostly the autopsied persons were belongs to rural areas (85.52, N = 115 / 134). Our study's mean age showed that most of the persons belonged to middle aged population and higher number of autopsies performed from rural area represents people were not so illiterate and belongs to socioeconomic backgrounds. The findings of our study are similar to the findings shown in both international and national data published [10, 11]

The main objective behind conduction of this study was to evaluate the determine the real medical cases among all autopsies performed on the basis of suspected medico legal cases at Peoples Medical College Hospital, Nawabshah, Sindh, Pakistan. Interestingly 60.44% (N = 81 / 132) autopsied persons were died from real medical causes rather than medico legal cause. The reason behind false accusation could be due to they want some money from them. But there is no study has been conducted in Pakistan or even internationally to compare our findings with them.

Worldwide cardiovascular diseases are considered to be responsible for approximately 17 million deaths every

year and about 25% are sudden cardiac deaths (SCD) [12-14]. Any person who died without any noticeable cause should be evaluated for cardiovascular disease. The similar findings are observed in our study in which we have also observed that the most common cause among such persons were due to cardiovascular disease (69.13%, N = 56 / 81). Previous literature have suggest that in adolescents and young adults (<35 years), the approximate incidence of death is 0.01 per 1000 per year caused by cardiovascular related deaths such as cardiomyopathies, myocarditis, premature coronary artery disease, congenital coronary artery anomalies, and channelopathies. The incidence of SCD then increases, reaching about 1 per 1000 per year in the subjects 35–45 years, 2 per 1000 per year by 60 years, and 200 per 1000 per year in the elderly. This indicates a global burden of cardiovascular disease is a major concern that needed to be accounted on a larger scale particularly in our area based on autopsy findings[15-17].

CONCLUSION

Besides medicolegal causes of deaths ascertained during autopsy, the burden of actual medical causes of deaths which were suspected as medicolegal cases impose a huge burden. Hence, suspected medicolegal cases most often turned out to be actual medical cause of death that our study findings have shown.

Author's Contribution:

Concept & Design of Study:	Ejaz Ahmed Awan
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Revisiting Critically:	Ejaz Ahmed Awan Pardeep Kumar
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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