ORIGINAL ARTICLE

An Observational Study on Autopsies

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ABSTRACT

Objective: To find out and evaluate to the number of cases, natural of cases (known, unknown) and unique reference to mode, manner and cause of death of medicolegal autopsies

Study Design: Cross-sectional study.

Place and Duration of Study: Department of Forensic Medicine, Lahore General Hospital, Lahore from 1st January 2021 to 31st December 2022.

Methodology: Two hundred and forty six medicolegal autopsies were gathered. The perceptions kept in proforma with an accentuation on the gender of subjects, cause of death (natural, un-natural), manner of death, mode of death of known and unknown cases and month-wise variation of post-mortems.

Results: One hundred and eight were natural deaths and 138 were un-natural. Gunshots represented 36% of the deaths through 18% were physical assault related deaths.158 cases were known while the 88 were obscure cases.

Conclusion: In larger part of the medicolegal post-mortems male populace was involved and brought about by gunshot wounds (homicidal). August and October were the months where greater part of the cases came.

Keywords: Medicolegal autopsy. Mode, Manner, Known and un-known

INTRODUCTION

Autopsy it's a Latin world, but autopsy was first started in Italy in 1302. Autopsy means "complete examination of dead body, both external surface and internal contents after opening its cavities and materials are collected for histopathological, biochemical and toxicological examination". Two other synonymous word are also used Necropsy and post-mortem examination. In USA and some other countries autopsy and post-mortem are two different procedures.¹⁻⁴

Autopsy rate is the total number of autopsies conducted on all deaths occurring in a community while the autopsy index is total number of medicolegal autopsies conducted in all deaths occurring in a community. According to international surveys, the number of autopsies has declined. Overall autopsy rates in the United States declined from 19.1-8.5% between 1972 and 2007, according to data from the National Center for Health Statistics (NCHS).2 Similarly, in the United Kingdom, autopsy rates fell from 25.8% in 1979 to 0.69% in 2013.3 However, there is a shortage of data on autopsy rates in Pakistan due to the lack of a well-established mechanism for collecting such information. The increasing number of homicides is also a source of concern. According to research conducted in Peshawar in 2006, homicidal deaths accounted for 77.7% of all deaths, with 91.2% of those killed being men were homicidal firearms, and the male-to-female ratio 5.5:1 was the ratio.4 In the last decades number of physical assault (fight) cases were also incredibly high.5,6

Apart from determining the cause of death, the forensic pathologist must also establish medical cause of death, manner of death (natural and unnatural, such as accidental, suicidal, or homicidal), the identification of the deceased (if unknown), and the time since death, time of death. If appropriately documented and addressed, the risk factors linked with such unnatural deaths can be managed and prevented. This has the ability to lower the rates of autopsy and, as a result, the financial burden and the quality of human resources.

MATERIALS AND METHODS

This was a cross sectional study carried out over a period of two years from January 2021 to December 2022 in Lahore General Hospital, Lahore. All medico-legal autopsies carried out during the study period were included all known and unknown cases. Cases other than medico-legal deaths did not come for autopsied were

excluded. Also, the dead bodies submitted by police with a requisition for partial/external post-mortem examination were excluded from this study. Particularized Performa was designed to systematically document the no of cases, no of natural deaths and no of unnatural deaths, how much was the known and unknown cases, male to female ratio of the deaths, and monthly distribution of autopsy cases during these years. The data was entered and analyzed through SPSS-25.

RESULTS

There were 138 (56%) were un-natural deaths i.e. firearm injuries 50 (36%), physical assault 26 (18%), road traffic accidents 24 (17%) and poisoning 8 (5%). One hundred and eight (44%) deaths were natural. Number of putrefied bodies was 12.

Table 1: Frequency of manner of death (n=246)

Manner of Death	No.	%
Natural	108	44.0
Un-natural	138	56.0

Table 2: Frequency of genders (n=246)

Gender	No.	%
Male	198	80.4
Female	48	19.6

Table 3: Total number of cases by category (n=246)

Category of death	No.	%	
Natural Deaths	108	44.0	
Un-natural Deaths (n=138)			
Firearm injuries	50	36.2	
Physical assaults	26	18.8	
Road traffic accidents	24	17.4	
Putrefied body	12	8.8	
Poisoning	8	5.7	
Hanging and asphyxia	8	5.7	
Suicide	6	4.4	
Burn	2	1.5	
Electrocution	2	1.5	
Blast cases	-	-	

Male cases were overwhelmingly higher out of absolute cases, 198 (80.4%) cases were male and 48 (19.6%) were female. Male power was additionally displayed in cases death because of qunshot wounds, out of 246, 198 cases have a place with male

populace comparably in passing's because of gunshot, physical assault and accidents were high. Month to month conveyance of post-mortem cases was as per the following; July was the pinnacle months 38 (15%), 34 (13%) cases came in month of August and October separately. Out of absolute just 8 cases related to poisoning (Tables 1-5).

Table 4: Monthly distribution of autopsy cases (n=246)

Month	No.	%
January	22	8.9
February	6	2.4
March	24	9.7
April	22	8.9
May	14	5.7
June	16	6.6
July	38	15.4
August	34	13.9
September	12	4.8
October	34	13.9
November	8	3.2
December	16	6.6

Table 5: Frequency of manner of deaths (n=246)

Manner of Deaths	No.	%
Unknown	62	25.3
Known	106	43.0
Homicidal	54	21.9
Suicidal	6	2.4
Accidental	18	7.4

DISCUSSION

Our current study revealed that, out of total autopsy conducted male predominant cases because of reason of male prevailing society, for the most part male of these age bunch will generally move out from their home and frequently go to different urban areas to acquire their business. The vast majority of the guys are underneath the neediness line and road occupants. Same realities saw in past examinations moreover. ¹⁸

The current review uncovered that there were 88 cases which product unknown (a large portion of these were vagrants live out and about or drug addict) and 158 were known cases. While different examinations showed different measurement like in Milan and USA level of unidentified bodies is very high. Additionally in Denmark and France yearly mean of unidentified bodied is 88% and 89% separately.

As per our review unnatural cases are more than natural cases while different studies showed that natural deaths because of sickness and obsessive condition were the replenishing cause, that distinction is expected due to lacking of hospital or statistic Autopsy in our setup. Other explanation is missing of food, shelter, and appropriate restorative consideration, casualty of different contaminations and illnesses prompting casualty without coming to emergency clinic. Death in any way is painful in our review 96 cases were homicidal in nature. In Hamburg, poisoning is very normal among unnatural cases, while in USA driving reason for death is RTA and wounds (mishaps). Though suicidal death could not be confirmed before proper investigation, yet most of the cases have pending reports so statistic showed few cases. But Homicidal manner is common in our setup due to property dispute, enemies, frustration to hide or cover up the criminal act. In our urban are like Karachi homicide is usually due to political reasons, violence, and street crime based.20

Being in the Forensic specialty one should differentiate the terms of mode, cause and mechanism of death. Mode clearly

indicates the stoppage or failure of vital system, there are three modes Asphyxia, Syncope and coma. Death can occur by involving single mode or may be combination of 2 or more modes. Our study showed that most of the cases involve the combination of coma and syncope.

CONCLUSION

Death for any reason is undesirable and agonizing. A seriously huge number of the passing's were expected to be infectious condition and were avoidable. Consequently, the outcomes may not be practically identical with those of the developed countries. Brief and better identification proof strategies alongside co ordinate endeavours of the law authorizing organizations would assist with laying out the burden of such people. It wouldn't just be significant for measurable purposes, yet may likewise give essential data connected with different lawbreaker acts including destructive

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