Original Article

Unnatural Deaths

Array of Unnatural Deaths: A Study of Medico Legal Autopsies at District Head Quarter Hospital Lakki Marwat

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ABSTRACT

Objective: To determine the modalities and manners of unnatural deaths among all cases brought to the district headquarter hospital Lakki Marwat for autopsy.
Study Design: Observational / descriptive study
Place and Duration of Study: This study was conducted at the District Headquarter Hospital, Lakki Marwat, Khyber Pakhtunkhwa from January 2013 to December 2014.
Materials and Methods: A total of 126 dead bodies received during two years for potmortem examination through autopsy This study was a based on a data of unnatural deaths. The data were collected on structured checklist whereas, data analysis was done using SPSS version 20 and presented in terms of frequencies and percentages.
Results: Out of 126 dead bodies, 116 (92.1%) were males and 10(7.9%) females. Out of total, 3(2.4%) were also found decomposed. The dead bodies received for autopsy were in the age range from 3 to 72 years. Regarding manner of death 95(75.4%) were homicidal, 22(17.5%) accidental, 7(5.5%) suicidal and 2(1.6%) cases remained undetermined. Furthermore the types of modalities included; death due to fire arm injuries are 93(73.8%), road traffic accidents 19(15.1%), blunt weapon and hanging each 4(3.2%), bomb blast 3(2.4%) strangulation 1(0.8%) and the cause of death in 2 (1.6%) cases remained undetermined which were labeled as negative autopsy.
Conclusion: A high proportion male were referred for forensic examination as compare to female where, most of them were from young age. Homicide was noted as the major type of manner of death followed by accident. Fire arm injury was reported as the major modality of death followed by road traffic accident.
Key Words: Autopsy; Homicide; Suicide; Accidents; Wounds, Gunshot; Cause of Death

Citation of article: Rehman K, Wazir AH, Hamza A, Shah MM, Bahadur S. Array of Unnatural Deaths: A Study of Medico Legal Autopsies at District Head Quarter Hospital Lakki Marwat. Med Forum 2017; 28(3):30-32.

INTRODUCTION

To ascertain the cause and manner of death is always the demand of judicial system in order to provide justice to community[1]. Such medicolegal investigations are carried out through an autopsy study which has no substitute. The information provided trough medicolegal autopsy carries immense value in cases of any foul play by any person[2]. The information gathered from crime scene investigation, circumstantial evidence or externals examination cannot answer the question for cause of death which necessitates the performance of proper autopsy[3].

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Received: January 12, 2017; Accepted: February 17, 2017

Medicolegal autopsy is the detailed systemic external and internal scrutiny of dead body supported by laboratory examination carried out by authorized medical officer in the pursuance of law to ascertain the underlying and possible contributing cause and manner of death[1]. A competent legal authority can ask for investigation through autopsy in case a person reportedly committed suicide or a case of homicidal death or death caused by an accident or death under any suspicious circumstances[4]. Law also has provision to investigate the deaths occurring in prison, police custody or any other similar conditions[5].

It is required to determine the cause of death as natural or unnatural which is caused either by an accident or by hostile action of a member of community[1]. Manner of death can be natural and unnatural. The natural deaths are caused by a disease which may include environmental insult or chronic over usage of drug while, unnatural deaths include; suicide (self murder where the lethal action of some one's is intentionally inflicted), homicide (death caused by the act of other person), accidental (death occurred without intention to cause harm). Hence, undetermined is used when reasonable classification cannot be made[6].

Despite of its undoubted value for improving the death certificate in term of determination the cause of death, it is considered fallible in revealing the true cause of death[7]. It contributes to conclusion in many cases but in sometimes it has less finding for the reason that ante mortem trauma being obscured or destroyed by decomposition or even cause of death is equally difficult to prove[8]. This, results in negative autopsy despite of adopting all standard procedure by medico legal doctor, the rate of negative autopsy can be minimized by improving in skill and other facilities[9].

The global estimate of homicides indicates that there were 475,000 cases reported in 2012, where majority victims (82%) were male[10]. Literatures from Bangalore and Dhaka reveal accident was the main manner of death followed by suicide and homicide[11,12]. In Pakistan homicides were the most common manner of death followed by accidents and suicides.[13,14] Gunshot wounds were reported as the leading cause of death in homicides in Pakistan[15,16,17]. This study aims to determine the modalities and manners of unnatural deaths in district headquarter hospital (DHQ) Lakki Marwat.

MATERIALS AND METHODS

This was a cross sectional study based on post mortem reports (PMR) at district headquarters hospital (DHQ) Lakki Marwat. The data pertains to two years, started from January 2013 to December 2014. After taking permission from in-charge, a total of 126 post mortem reports were reviewed during the study period. All the cases regardless of gender and age were selected in the study, only those cases with incomplete data or the final decision about autopsy awaited were excluded. The data were scrutinized on the bases of gender, age, type of weapons used, nature of assault and outcome of autopsy examination in terms of modalities and manner of death. Data were analyzed using SPSS version 20 and results were presented in terms of frequencies and percentages.

RESULTS

A total of 126 Post Mortem Reports (PMRs) were evaluated, 73(57.9%) cases were reported in 2013 and 53(42.1%) in 2014. Out of total 116 (92.1%) were being males and 10 (7.9%) were females. The mean age of the victims was 31.7±13.6 (ranged from 3 -72 years). Most of the cases 71 (56.3%) were between 20-39 years (Table 1).

Frequency of various types of modalities were: deaths due to fire arm injuries were 93(73.8%), road traffic accidents 19(15.1%), blunt weapon and hanging each 4(3.2%), bomb blast 3(2.4%), strangulation 1(0.8%) and 2(1.6%) of unknown causes were examined (Table 2). 2(1.6%) cases were labeled as negative autopsy and 3(2.4%) cases received as decomposed bodies (Table 2).

Table No.1: Age and Gender wise distribution of unnatural deaths

Age categories	Sex		Total
	Female	Male	
	F (%)	F (%)	F (%)
< 20 years	1(5.6%)	17(94.4%)	18(14.3%)
20 – 39 years	6(8.5%)	65(91.5%)	71(56.3%)
40 – 59 years	3(10.0%)	27(90.0%)	30(23.8%)
>59years	0(.0%)	07(100.0%)	07(5.6%)
Total	10(7.9%)	116(92.1%)	126

Table No.2: Modalities of unnatural deaths- Gender wise

Type of Modalities	Male	Female	Total	Percent
Fire Arm Injuries	85	8	93	73.8
Road Traffic Accidents	18	1	19	15.1
Blunt Weapon	4	0	4	3.2
Hanging	3	1	4	3.2
Bomb Blast	3	0	3	2.4
Strangulation	1	0	1	0.8
Unknown	2	0	2	1.6
Total	116	10	126	100

The frequency of manner of death was as follow: homicides 95(75.4%), accidental 22 (17.5%), suicides 7(5.5%) and 2(1.6%) cases remained undetermined (Fig 1). The homidal deaths were further grouped as 90 (94.7%) cases of fire arm injuries, 4 (4.2%) as blunt weapon and one case (1.1%) of strangulation.

DISCUSSION

Autopsy is a vital tool for forensic investigation of death which is caused either by natural or unnatural causes. Legal aspects of human deaths have always been part of the human experience, which can be evaluated from different medico-legal approaches, the intimal screening for manner and cause of unnatural remain the core component of this investigations. To attain the objective of present study, secondary data of autopsies were used. The result reveals that male were the common victim especially in the young age (20 to 39 years). This finding is in consistence with studies conducted in India[18]. Homicidal assault was noted as major type of manner of death in our study followed by accident and suicide, this is relevant to a study reported from Karachi and Faisalabad that homicide was the most common manner of death followed by accident and suicide [13, 14].

Out of the reported homicidal cases 90 (94.7%) were due to fire arm injuries which correlates with a study stating that fire-arm injury was the commonest causes of homicidal death in Dera Ismail Khan[16]. The same finding is also reported from a study in district Faisalabad and Peshawar that fire arm injuries are the leading cause of homicidal deaths[14, 15]. A study from India about fatal fire injuries reported that homicide was the most common manner of death in fatal fire arm

injuries[19]. Similar studies performed in Bangalore and Dhaka with a dislike reports from our result that accident is a major manner of death followed by suicide and homicide[11, 12].

According to the frequency of various modalities of death in this study, the higher no of deaths were found due to gunshot wounds followed by road traffic accidents, which matches with the results of a study conducted at Karachi[13].

Negative autopsies in present study accounted 1.6%, which is approximately similar 1.5% to a study conducted in Peshawar[20], however results of studies from Peshawar 4% and Faisalabad 9.2% shown an increases in proportion[21, 9], While the rate in Dhaka, Bangladesh is reported 5.9%[22].

CONCLUSION

Male were the common victim mostly from young age. The common manner of death was homicide followed accident, while the fire arm injury was the main modality of death in the present sample. A thorough multi-sectorial study is needed to investigate overall aspects of medicolegal autopsies, incorporating all factors.

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

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