

An Audit of Medicolegal Autopsies at A Tertiary Care Hospital of Sindh, Pakistan

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ABSTRACT

Objective: To evaluate and audit the frequency of medicolegal autopsies to learn the current trends of unnatural and natural deaths in the society.

Methods: It was a cross sectional study conducted at department of Forensic Medicine and Toxicology LUMHS Jamhoro, and Medico-legal section of Liaquat University Hospital from March 2016 to February 2017. Total 91 cases were sorted out for the present audit report during the study period. Records of the post mortem reports, police papers and hospital emergency notes were noted in a pre-structured proforma. Cause and mode of death of victims was noted for the natural or unnatural deaths from the autopsy findings. The data was typed on Excel sheet for analysis. Descriptive statistics was used for the data analysis. Frequency and % were computed for the specified variables such as age, and cause of deaths for data at 95% CI ($P \leq 0.05$)

Results: Male and female comprised 57 (62.6%) and 34 (37.4%) respectively. Male to female ratio was 1.67:1 for total sample. Most common age category in male was 30- 39.9 years and 40- 49.9 in female. Suicidal, homicidal and accidental cases comprised 30 (32.9%), 29 (31.8%) and 16 (17.5%) respectively of both male and female subjects. The present study shows most common cause of death was suicidal in both male and female subjects.

Conclusion: Suicidal deaths were more than accidental and homicidal deaths followed by undetermined deaths and natural deaths. Death among male exceeded than the female.

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INTRODUCTION:

Death by definition is the cessation of vital functions of life. Vital functions are the beating of heart, electrical activity of brain, and air breathing. When a person loses all of his or her vital functions, it is termed as death¹. Medical declaration of death needs evidence of loss of

heart beating, brain electrical activity and respiratory functions. Death is a divine order that is guaranteed for the living ones. Death is a natural command and beauty of life. Holy verses say every soul has to taste the death! Death is inevitable and an undeniable fact². Natural death is normal; however, if it occurs due to unnatural maneuvers, this is called murder. Death due violence puts negative effects on the family, community and society³. Unnatural deaths are a painful act for the society that reflects the degree of prevalent violence within the society. Violent behavior has emerged due to lack of justice, and improper law and order situation. Lack of justice begets intolerance and violence with increased illegal activities. Violent people increase the use of weapons and terrorism. This results in social evils of kidnapping, murdering, and smuggling.

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Murdering increases the unnatural deaths in the society. Unnatural deaths may be suicidal, accidental and or homicidal. Road traffic accidents are an emerging cause of accidental unnatural deaths. Over speeding and one wheeling now accounts for many cases of unnatural accidental deaths. Disobedience of traffic rules is on rise in the country. Minor children are driving vehicles without training and licensures⁴. Illegal police raids and killing by the law enforcement agencies also take places. Many innocent citizens are killed in police custody. Merciless attitude of force agencies is disappointing^{4,6}. Homicidal attitude is a punishable offence. Intolerance and injustice agitates the youngsters for committing homicidal killings^{7,8}. Homicidal deaths are unnatural deaths caused by fire arm injuries, sharp edged weapons, blunt force trauma, asphyxia, and poisoning, etc. Sharp and blunt force traumas are very common in cases of suicide and homicide deaths^{9,10}. Hanging, drowning, fire injury and poisoning are common methods of committing suicide. Suicidal deaths are caused by depression, mental agitation and instability and sentiments^{9,12}. The present study was conducted to audit the medicolegal autopsies to learn the current trends of unnatural and natural deaths in the society. The present study will invite the attention of authoritative bodies towards critical issues of natural and unnatural deaths.

METHODS:

The present is a descriptive and cross sectional study conducted at department of Forensic Medicine and Toxicology LUMHS Jamhoro, and Medico-legal section of Liaquat University Hospital from March 2016 to February 2017. All case reported deaths autopsied at Liaquat University Hospital were included over the study duration. Cases of unnatural deaths of accidental, homicidal, suicidal attitude and some natural deaths due to hanging, violence or criminality were included. Cause of death in those not- autopsied were excluded. Total 91 cases were sorted out for the present audit report during the study period. Records for analysis were the post mortem

reports, police papers and hospital emergency notes. All autopsies performed during study periods were noted in a pre- structured proforma. File data was used for the age and gender of victims and pattern of death. Cause and mode of death of victims was noted for the natural or unnatural deaths and autopsy findings. The data was typed on Excel data sheet for analysis. Descriptive statistics was used for the data analysis. Frequency and % were computed for the specified variables such as age, and cause of deaths.

RESULTS:

Male and female comprised 57 (62.6%) and 34 (37.4%) respectively. The male predominated in the medicolegal autopsies. Male to female ratio was 1.67:1 for total sample. Age categories of male and female autopsied bodies are depicted in table I. The most common age category in male was 30- 39.9 years and 40- 49.9 in female. Mean± SD age in male and female was 40.5±9.54 years and 39.9±7.5 years respectively. Age (mean± SD) of total subjects was 38.1±5.54 years. Second most common age category in male was 50- 59.9 years and same for 10- 19.9 years for the female as shown in table 1. Medicolegal patterns of death of subjects are summarized in table II. Suicidal, homicidal and accidental cases comprised 30 (32.9%), 29 (31.8%) and 16 (17.5%) respectively of both male and female subjects. Natural and undetermined deaths cause were noted in 9 (9.8%) and 7 (7.6%) respectively of both male and female subjects. The present study shows most common cause of death was suicidal in both male and female subjects.

DISCUSSION:

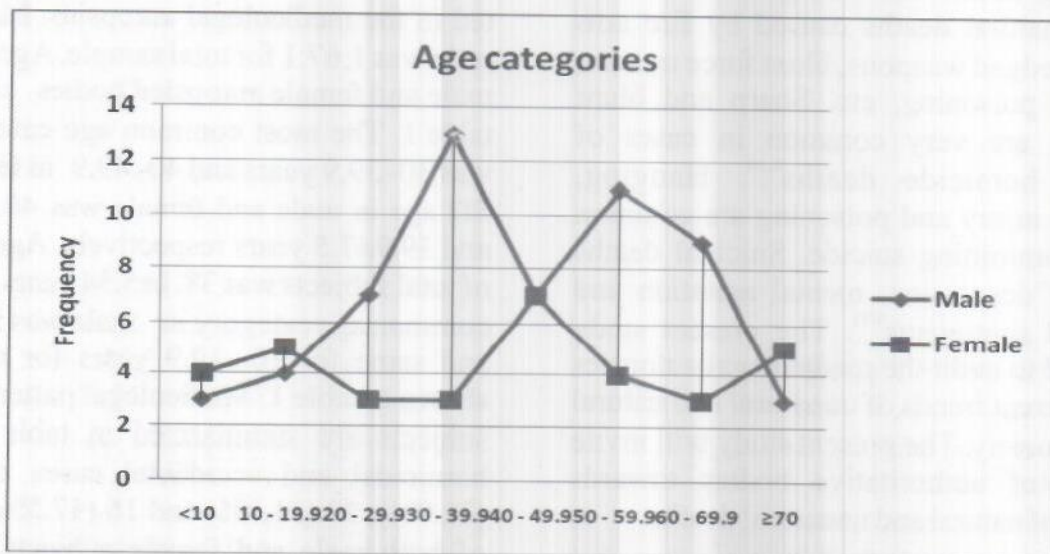
The present is a small descriptive and cross sectional study that audited the medicolegal autopsies to find the natural and unnatural causes of death autopsied at our tertiary care hospital. The present study reports results of 91 autopsies deaths conducted from March 2016 to February 2017 that were autopsied at Postmortem Unit. Out of 91 autopsy cases, male and female comprised 57(62.6%) and 34(37.7%) respectively.

Table I. Age and Gender of Autopsied Bodies (n=91)

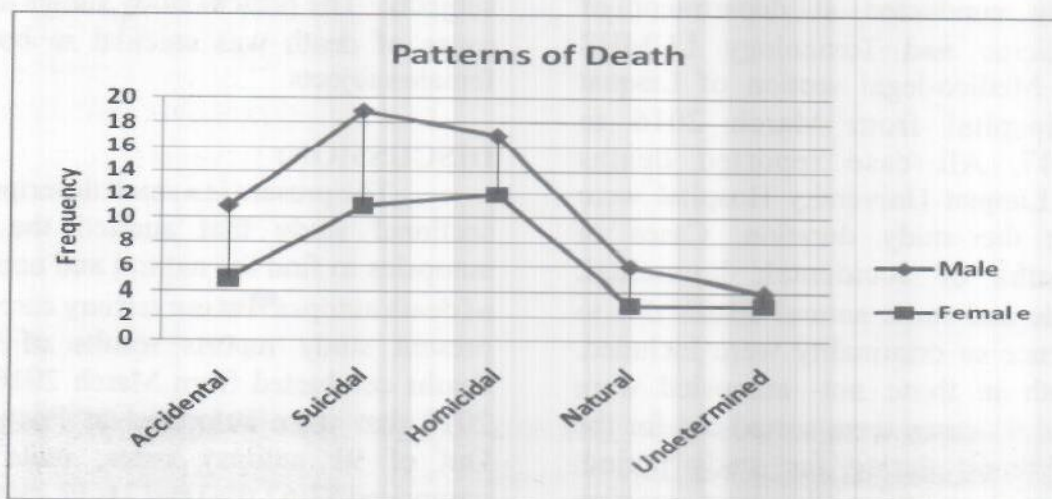
Age categories	Male	Female	Total
<10 years	3	4	7
10 - 19.9 years	4	5	9
20 - 29.9 years	7	3	10
30 - 39.9 years	13	3	16
40 - 49.9 years	7	7	14
50 - 59.9 years	11	4	15
60 - 69.9 years	9	3	12
≥70 years	3	5	8
Total	57	34	91

Table II. Age and Gender of Autopsied Bodies (n=91)

Death Patterns	Male	Female	Total
Accidental	11	5	16
Suicidal	19	11	30
Homicidal	17	12	29
Natural	6	3	9
Undetermined	4	3	7
Total	57	37	91



Graph I. Graphical presentation of age categories



Graph II. Graphical presentation of patterns of Death

The male predominated in the medicolegal autopsies. Male to female ratio was 1.67:1 for total sample. The findings are in agreement with previous studies^{13,14}. However a recent study from Ethiopia¹⁵ reported male to female ration of 3:1 that contradicts to the present study. Such conflicts might be due to the different study populations and geographical areas. In present study, the most common age category in male was 30- 39.9 years and 40- 49.9 in female. Mean± SD age in male and female was 40.5±9.54 years and 39.9±7.5 years respectively. Age (mean± SD) of total subjects was 38.1±5.54 years. Second most common age category in male was 50- 59.9 years and same for 10- 19.9 years for the female (table 1). The findings are in agreement with previous studies^{16,17}, but contrary to others^{18,19}. In present study, the most common age category in male was 30- 39.9 years and 40- 49.9 in female. That is in contradistinction to a previous study^{19,20} that reported most common age group of 21-30 years of the victims. A previous study¹⁸ from District Head Quarter (DHQ) Hospital Rawalpindi reported audit of 318 autopsies were performed; involving 239 male and 79 females. They reported most common age category was 20- 30 years of age. In present study, the suicidal, homicidal and accidental cases comprised 30 (32.9%), 29 (31.8%) and 16 (17.5%) respectively of both male and female subjects. Natural and undetermined deaths cause were noted in 9 (9.8%) and 7 (7.6%) respectively of both male and female subjects. These findings are in disagreement with present and previous studies¹⁷⁻²⁰. A previous study from Multan²¹ reported on the unnatural death patterns over 1 year duration (January 2015 to December 2015). They reported majority of cases were homicidal, 139 cases (63.5%) while accidental and suicidal deaths were noted in 30.7% and 5.8% respectively. These findings are in contradistinction to the present study as suicidal deaths were frequent. However, our findings are same like results reported previously^{2,6}. A previous study²² reported unnatural deaths in 236 (87%) out of 273 causalities. They reported frequency of deaths was common in males (64.4%) than female (35.6%). The male predominance of above study is

in agreement with present study that notes 62.6% male population. From the evidence based findings of present study, it is conclude that the suicidal tendencies are increasing in the society that may be due to economical frustration, poverty, joblessness and injustice. This needs urgent action to motivate the society through improving economic and social issues.

CONCLUSION:

The present study reports high frequency of suicidal deaths that may be due to economical frustration, poverty, joblessness and injustice. Male victims exceeded the female partners. This needs urgent action to motivate the society through improving economic and social issues, patience, guidance and provision of proper justice to avoid suicidal tendency.

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