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## Original Research

### Analysis of autopsies in 2 years- A retrospective study

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#### ABSTRACT

**Background:** An autopsy is a specialized procedure that consists of examination of dead body to find out cause of death, manner of death, time since death and identification. The present study was conducted to determine autopsies in a 2 year. **Materials & Methods:** The present study was conducted on 147 autopsies performed in 2 year. The purpose of the study was explained to the institutional ethical committee and permission to carry out work was obtained. The reason of death, gender and age group was recorded. **Results:** Age group 0-10 years had 4 male and 2 female, 11-20 years had 10 males and 5 females, 21-30 years had 7 males and 10 females, 31-40 years had 12 males and 13 females, 41-50 years had 9 males and 14 females, 51-60 years had 15 males and 12 females and >60 years had 14 males and 20 females. The reason for deaths was RTA (24), poisoning (20), hanging (13), assault (14), natural (30), drowning (8), burn (10) and fall (18). **Conclusion:** Autopsy is the fundamental procedure to that should be performed in every suspected death. It should be performed routinely.

**Key words:** Autopsy, burn, Drowning

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#### INTRODUCTION

An autopsy (post-mortem examination, necropsy) is a specialized procedure that consists of examination of dead body to find out cause of death, manner of death, time since death and identification. It is conducted by forensic expert. Autopsy is derived from a Greece word autopsia meaning see for yourself. However, in 1945, medico-legal autopsy was extended to everybody in the country including the indigenous Nigerian population as reported in the coroner's Law of Northern Nigeria published in 1963.<sup>1</sup>

Medico-legal autopsies or forensic or coroner's autopsies seek to find the cause and manner of death and to identify the descendant. They are generally performed as prescribed by applicable law, in cases of violent, suspicious or sudden deaths without medical assistance or during the surgical procedures.<sup>2</sup> Clinical and pathological autopsies are performed to diagnose a particular disease or for research purpose. They aim to determine, clarify or confirm medical diagnosis that remained unknown or unclear prior to the patient's death. Anatomical or academic autopsies are performed by students of anatomic for study purpose only. Virtual or medical imaging autopsies are performed utilizing imaging

technology only primarily magnetic resonance imaging (MRI) and computed tomography (CT).<sup>3</sup>

Forensic medicine is the branch of medicine, which deals with the application of medical knowledge in the administration of justice. Toxicology tests will be done in forensic science laboratory to reveal the presence of one or more chemical "poisons".<sup>4</sup> The present study was conducted to determine autopsies in a 2 year.

#### MATERIALS & METHODS

The present study was conducted in the department of forensic medicine. It comprised of 147 autopsies performed in 2 year. The purpose of the study was explained to the institutional ethical committee and permission to carry out work was obtained.

The reason of death, gender and age group was recorded. Results thus obtained were subjected to statistical analysis. P value less than 0.05 was considered significant.

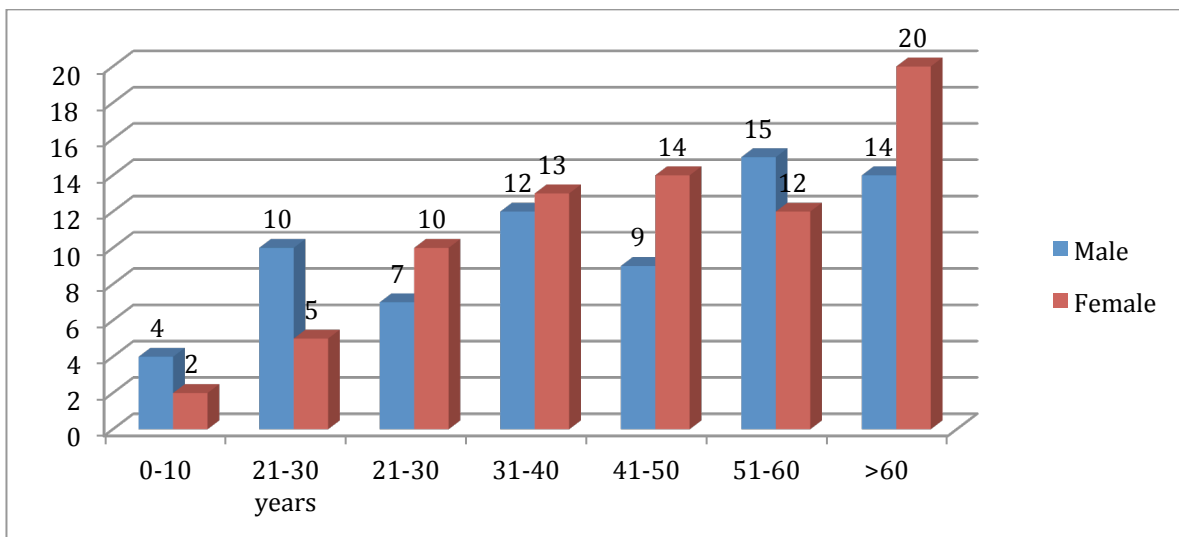
#### RESULTS

Table I, Graph I shows that age group 0-10 years had 4 male and 2 female, 11-20 years had 10 males and 5 females, 21-30 years had 7

males and 10 females, 31-40 years had 12 males and 13 females, and 12 females and >60 years had 14 males and 20 females. 41-50 years had 9 males and 14 females, 51-60 years had 15 males Gro

**Table I Age & gender wise distribution**

Age group (years)	Male	Female
0-10	4	2
11-20	10	5
21-30	7	10
31-40	12	13
41-50	9	14
51-60	15	12
>60	14	20
<b>Total</b>	<b>71</b>	<b>76</b>



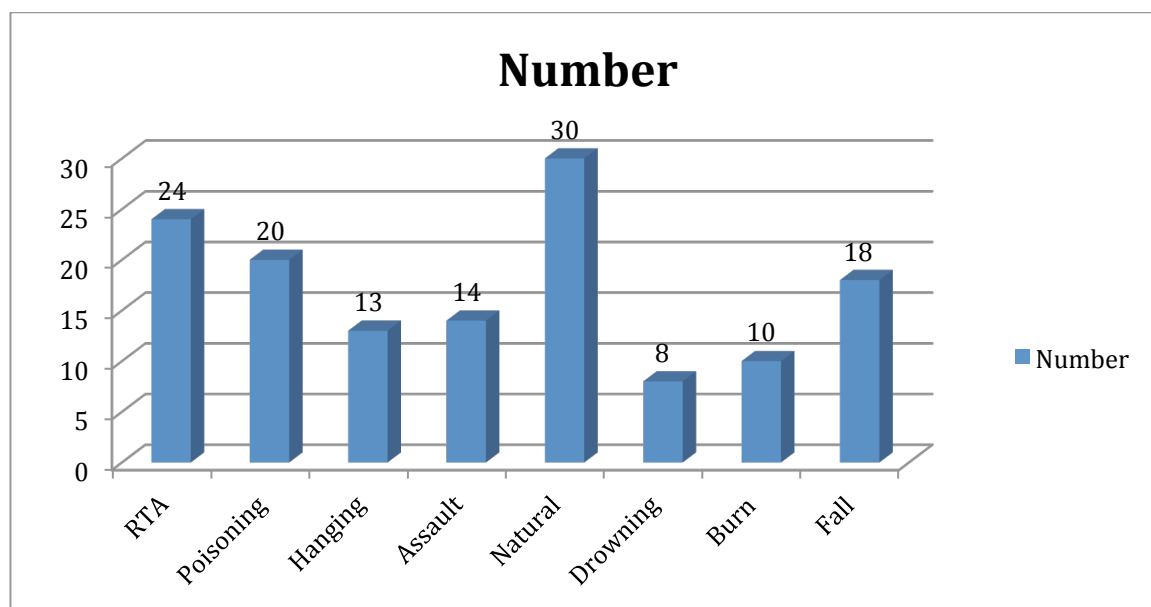
Graph II:??

**Table II Reason of death**

Reason	Number	P value
RTA	24	0.12
Poisoning	20	
Hanging	13	
Assault	14	
Natural	30	
Drowning	8	
Burn	10	
Fall	18	

Table II, Graph II shows that reason for deaths was RTA (24), poisoning (20), hanging (13), assault (14), natural (30), drowning (8), burn (10) and fall (18). The difference was non- significant (P> 0.05).

Graph II:??



## DISCUSSION

Despite the declining rate of autopsies. The procedure still have is proponents, some have advocated that non-forensic should be left with relics of the past since there are more sophisticated ways at arriving diagnosis. The detractors question the risk and cost effectiveness of the autopsy. The proponent believes, that autopsy has a place in establishing public trust in medicine and remains a focal point for the integration of medical knowledge.<sup>5</sup> Autopsy is the golden standard for evaluating the accuracy of diagnosis and the outcome of therapy. Autopsy seeks to establish final diagnosis and determination, whenever possible of the cause of death. It provides a unique opportunity for physician to co-relate their physical and laboratory findings with pathologic changes of diseases. Through autopsy findings, pathologist alerts hospital infection committee of a possible contagion.<sup>6</sup> Thus it may provide medical quality assurance and ultimately quality improvement of health care. Autopsy may also reduce hospital and physician malpractices risk, Autopsy eliminated suspicions, provide assurance to families, Substitute fact from conjuncture, improve qualities of health care among others.<sup>7</sup> In present study, age group 0-10 years had 4 male and 2 female, 11-20 years had 10 males and 5 females, 21-30 years had 7 males and 10 females, 31-40 years had 12 males and 13 females, 41-50 years had 9 males and 14 females, 51-60 years had 15 males and 12 females and >60 years had 14 males and 20 female. In a study by Riboli E et al<sup>8</sup> in their study found that Road traffic accident cases constitute 47% of total cases since the medical college is next to national highway and national highway are the major source of road traffic accident in India. Poisoning cases constitutes 23% of total cases because the medical college located in rural area and due to severe drought from past 15 years, the farmers is forced commit to suicide because of lack of cultivation. Drowning constitutes 2.5% of total cases because medical college is surrounded by Kaveri and Hemavathi River. Snake bite constitutes 4.4% of total cases because of deforestation which is rampaged in this area.

In present study, reason for deaths was RTA (24), poisoning (20), hanging (13), assault (14), natural (30), drowning (8), burn (10)

and fall (18). In a study by Malami SA et al<sup>9</sup>, a total number of 360 autopsies were done during the study period and 155 were medico-legal autopsies representing 43%. 232 were male, 118 female with a male to female ratio 2:1. Homicide death 56(36.1%), RTA 36(23.2%), sudden death 32(20.6%), perioperative death 8(5.2%), anaesthetic death 7(4.5%), drowning 5(3.2%), institutional deaths 4(2.1%), death in police custody 3(1.9%), burns 3(1.9%) and electrocution 1(0.6%) were seen. Age distribution of medico-legal autopsy was between 10-100 years. The study concluded that homicidal death is the common indication of medico-legal autopsies in the study and is beneficial to law enforcement and jurisprudence, medical education and legal implication of patient management. Lawrence EO<sup>10</sup> found that there were 421 cases of medico-legal autopsies giving an annual ratio of 23 per annum. 313 (73%) were males and 108 (26%) female giving a male to female ratio of 3:1. Accidental death 210, sudden death 44, homicidal death 35, anaesthetic death 50, institutional death 44 and death in police custody 38 was common one.<sup>10</sup> The study concluded that medico-legal autopsy is beneficial to law enforcement and jurisprudence, medical education and even the family of the deceased. Exposure to medical students and resident doctors will help in the understanding of the legal implications of patients management.

## CONCLUSION

Autopsy is the fundamental procedure to that should be performed in every suspected death. It should be performed routinely.

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