

# Assessment of Student's Knowledge, Attitude and Perceptions about Autopsy

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## ABSTRACT

**Background:** The clinical autopsy is a common term used to help in the identification of person's clinical conditions and causes of deaths, however, the autopsy plays a vital role in the justice and jurisprudence.

**Objective:** To determine the knowledge, beliefs and understanding of medical students regarding the autopsy

**Study Design:** Descriptive, cross-sectional study

**Place and Duration of Study:** Peoples University of Medical & Health Sciences for Women (PUMHSW) Nawabshah (SBA) Sindh Pakistan from 1<sup>st</sup> March 2021 to 31<sup>st</sup> August 2021.

**Methodology:** Four hundred and twenty eight female students of 3<sup>rd</sup> year and 4<sup>th</sup> year were enrolled. The students were recruited based on random sampling method.

**Results:** There were 221 students between 23 to 24 years followed by 207 students between 20 to 22 years. One hundred and sixty five were attended 3 autopsies. Autopsy is necessary for all unnatural death and the responses were 327 yes and 101 were no. Education of autopsy is mandatory for the career and the responses were 146 yes and 282 were no understanding, videos are helpful for autopsies and the responses were 178 yes and 250 were no.

**Conclusion:** The autopsies and experiences regarding the autopsies was integral part of medical curriculum. The studies of autopsies are helpful to understand the human anatomy and reasons of deaths. The students' perceptions supported the medical autopsies as important part of curriculum and teaching particular anatomy of human subjects.

**Key words:** Knowledge, Attitude, Perceptions, Autopsy

## INTRODUCTION

The autopsy came from a Greek work used in ancient time "AUTOS: oneself" and "Opsis" meaning sight which means "to see for oneself" the autopsy is formally divided into forensic and medico logical clinical and autopsies for academia.<sup>1</sup> The clinical autopsy is a common term used to help in the identification of person's clinical conditions and causes of deaths however the autopsy plays a vital role in the justice and jurisprudence.<sup>2</sup> The autopsy has been recognized gold standard in forensic medicines and pathology and as a valuable tool as education and experience.<sup>3</sup>

The pathology encourages the undergraduate medical students in the medical institutes to experience the post-mortem examination.<sup>4</sup> Earlier in the years the autopsy was the only tool to recognize the patients' illness. The importance of autopsy is in education, forensic department, justice proceedings, in statistical uncertainties and medical understandings.<sup>5</sup> The autopsy is considered as one of the peripheral uses in clinical investigations, and defining the estimations in the death's cases.<sup>6</sup> The significance of the autopsy findings in the clinical investigations is well accepted and recognized since the clinical autopsy provides the relatives with the accurate findings, reasons of deaths and provide with the accurate information related to deaths with feedbacks, diagnosis and the treatment, thus

making the clinical autopsy a tool of quality control, in providing the satisfaction regarding the patients profile and reasons behind health complications in a health care system.<sup>7</sup>

The autopsy with the evidence based diagnostic technologies in the modern medicines is well recognized yet, there are some divergences in the clinical diagnosis and post-mortem finding. The autopsy's is well accepted by the medical undergraduate in medical institutes, and all medical students are advised to seek the expertise of autopsy for forensic examinations.<sup>8</sup> The forensic is a medicine in accordance to law. The undergraduate's personal knowledge and perception plays a role in the teaching and understanding of autopsy examination. The knowledge and understanding of autopsy among students is prime objective of forensic medicines.<sup>9,10</sup>

This study aims to determine the knowledge, beliefs, and understanding of medical students regarding the autopsy as part of forensic medicines and toxicology, the education and improvement of humanity for clinical approaches in case of determination of death cases.

## MATERIALS AND METHODS

This descriptive, cross-sectional study was conducted among the 3<sup>rd</sup> and 4<sup>th</sup> year undergraduate students of Peoples University of Medical and health sciences for

Women (PUMHSW), Nawabshah (SBA), Sindh Pakistan over a period of 6 months from 1<sup>st</sup> March 2021 to 31<sup>st</sup> August 2021. A total of 428 students were enrolled in the study after the written informed consent. The study was non-interventional and observational. The students were recruited based on random sampling method. Only those students were enrolled who participated in forensic medicine and taken round to assess the autopsies. A structured questionnaire was designed to assess knowledge, attitude and perceptions of autopsies. The questions were included by the consultation of the senior faculties. The data were analyzed descriptively.

## RESULTS

Two hundred and twenty one students having age from 23 to 24 years followed by 207 students having age from 20 to 22 years (Table 1). Fifty eight students were attended 1 autopsies, 96 were attended 2 autopsies, 165 were

attended 3 autopsies, 66 were attended 4 autopsies, 43 were attended 5 autopsies (Table 2).

Table 3 described the assessment of knowledge, attitude and perception of autopsies based on pre-validated questionnaire with close-ended responses i.e. yes or no.

Table 1: Descriptive statistics of age (n=428)

Age (years)	No.	%
20-22	207	48.36
23-24	221	51.64

Table 2: Number of autopsies attended

No. of autopsies	No.	%
1	58	13.55
2	96	22.43
3	165	38.55
4	66	15.42
5	43	10.05

Table 3: Assessment of KAP based on structured questionnaire (n=428)

Question	Response			
	Yes	%	No	%
Autopsy is necessary for all unnatural deaths?	327	76.40	101	23.6
Education of autopsy is mandatory for your career?	146	34.11	282	65.89
Observation of autopsies is necessary to enhance your skills?	267	62.38	161	37.62
Practical experience increases your interest in field of Forensic?	187	43.69	241	56.31
During autopsies, you feel uncomfortable.	357	83.41	71	16.59
Is the method of autopsies is helpful for diagnosing the cause?	299	69.86	129	30.14
Scope of Forensic medicine in Pakistan is good?	66	15.42	362	84.58
During autopsy, you feel sad to cut the human organs?	375	87.62	53	12.38
Are you uncomfortable from the smell coming from the human dead body?	312	72.90	116	27.1
Are you scared from autopsy methodology?	369	86.21	59	13.79
For better understanding, videos are helpful for autopsies?	178	41.59	250	58.41

## DISCUSSION

The study showed a clear demonstration of data and perceptions of students. The present study showed that 221 students having age from 23 to 24 years followed by 207 students having age from 20 to 22 years, which is similar to the studies conducted in past.<sup>11,12</sup> Similarly, the data showed 58 students had autopsies lectures and attended the autopsies, 96 were attended 2 autopsies, 165 were attended 3 autopsies, 66 were attended 4 autopsies, 43 were attended 5 autopsies, which shows the clear learning experiences.<sup>13</sup>

The quantitative methodologies of the study helped to evaluate the medico-legal autopsies and different experiences of the students.<sup>14</sup> The autopsies and autopsies lectures provide the actual knowledge and experience to understand the autopsies.<sup>15</sup> The autopsy has been an important part of the medical curriculum which needs the gradual relegation and practice in a progressive approach and following the medical curriculum.<sup>16</sup> The pathology of autopsy is yet more important to adopt by the medical students. Whereas the comprehensive curriculum and understanding enables the students to focus and decide regarding decisions.<sup>17</sup> The education of autopsy is mandatory for your career was also the part of getting perceptions of students and was supported by 34.1% students which is nearly equal to the percentage to students supported somewhat same question.<sup>18</sup> The observation of autopsies is considered as an important step in the life of a medical student, the statement was asked if

it is necessary to enhance your skills to which majority of students supported it 62.38% of positive responses clearly showed the importance of observations.<sup>19</sup>

However, the reason behind the autopsy procedures and reluctant behaviour was tried to assess and more than the half of the students agree that they feel uncomfortable during autopsies, 84% responses are in agreement with the study conducted in the past.<sup>20</sup> The responses to the structured questions were compared to the study the response to practical experience increases your interest in field of Forensic was not supported by majority, which shows the slight deviation from the study.<sup>21</sup> The perception regarding the autopsy procedure was assessed by another statement "during autopsy, you feel sad to cut the human organs" which was supported by 83% positive responses which is in accordance with the response of another study.<sup>22</sup> 70% students respond to the uncomfortable feel due to smell coming from the human dead body, which is nearly according to the past study.<sup>23</sup> Alongwith the other perception and knowledge regarding the autopsy studies was found important for the medical students.

## CONCLUSION

The autopsies and experiences regarding the autopsies was integral part of medical curriculum. The studies of autopsies are helpful to understand the human anatomy and reasons of deaths. The study suggests the autopsy teaching and demonstration imparts in good learning for medical students. The students' perceptions supported the

medical autopsies as important part of curriculum and teaching particular anatomy of human subjects.

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