

## Original Research Paper

# Perceptions of Relatives' towards Medico-Legal Investigation and Forensic Autopsy: A Survey from Rural Haryana

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### Abstract

Currently a greater emphasis is being placed on the active participation of patients and their families; it is time that the attitude and feelings of the families with regard to autopsies are investigated. Therefore present study was planned with an objective to analyze deceased family member's attitudes towards medico-legal investigation and Forensic autopsy. An additional objective was to determine factors influencing autopsy refusal by relatives of the deceased. 200 family members or relatives were selected randomly from the list of address and contact number prepared from the autopsy cases from 2010 to 2012. Data of 165 was processed and analyzed. 30.9% of the respondents had a primary level of education while 35.2% of them were illiterates. A high proportion of study subjects considered that autopsy would result in visible disfigurement of the body. Involvement of police/ court (92.1%), no use in knowing the cause of death/ nature of death (88.6%) and autopsy delays funeral (83.4%) were three top most causes responsible for autopsy refusal by family members or relatives of the deceased. The experience and opinions of relatives and family members can be utilized in more effective management of medico-legal cases.

**Key Words:** Autopsy, Family members, Perceptions, Medico-legal

### Introduction:

Autopsy is an indispensable research tool which has been used for centuries. It is of two types: Forensic or medico-legal and clinical or academic autopsies. Forensic autopsy is medico-legal investigation of cases of unnatural and unexplained deaths. This procedure is still under the umbrella of misconceptions, myths, and emotions by the lay people as well as by the physicians. [1] In India, by law, Forensic or medico-legal autopsy is carried out without the consent of the relatives.

In such a scenario response of relatives can vary greatly. Investigation into the experiences of next of kin will help both family and Forensic expert to deal with the borderline situations which are so often encountered. [2, 3]

A recently expressed opinion states that autopsy is not something which should be done as a favour to the family, but more something to which the family has a right, of which they should be informed. [4] Currently a greater emphasis is being placed on the active participation of patients and their families; it is time that the attitude and feelings of the families with regard to autopsies are investigated. [5]

The experiences of deceased family members will teach Forensic fraternity how to handle an autopsy. Therefore present study was planned to conduct with an objective to analyze and ascertain deceased family member's attitudes towards medico-legal investigation and Forensic autopsy. An additional objective was to determine factors influencing autopsy refusal by relatives of the deceased.

### Materials and Methods:

The present cross sectional survey was conducted in the Department of Forensic Medicine, MM Institute of Medical sciences during May 2011 to April 2012. The study population consisted of relatives or family members of deceased whose autopsy had been

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performed at the MM Institute of Medical sciences, and that the relatives or family members of the deceased were available.

List of address and contact number was prepared for all the cases on which autopsy was performed from 2010 to 2012. A sample of 200 study subjects was chosen from the list randomly and their family members or relatives were approached. The author visited the household of the deceased to conduct a verbal interview after 3-4 month of autopsy

If a telephone number was available, an advance appointment was made with an appropriate respondent. 18 families could not be traced and contacted hence excluded from the study. Out of 182 families with whom contact, was made, 17 of them did not consent for the participation in the study, were again excluded from study. Finally 165 study subjects participated in the study.

115 family members or relatives accepted that they were not willing for autopsy (Group A) and it was forcibly conducted against their wish and remaining 50 family members or relatives were in the view that autopsy was conducted with their wish (Group B).

Written informed consent was obtained in the local language from every study subject before conducting each interview. They were explained about the nature and purpose of study and requested to participate. To obtain consent, contents of the consent information sheet were read out loud to each respondent, who was given the opportunity to ask the questions.

### **Results:**

Out of 200 study subjects approached, data of 165 was processed and analyzed.

Majority (79.4%) of the respondents were in the age group of 30-50 years. 88.4% of the study subjects were males. Most (80.6%) of them were Hindus. 30.9% of the respondents had a primary level of education while 35.2% of them were illiterates. Out of total 165 autopsied cases, 27 were homicidal, 8 were natural death cases, 98 were accidental cases and remaining 32 were suicidal cases.

Almost 63% and 86% respondents from Group A and Group B respectively correctly said that autopsy will tell us the exact cause of death and the difference was found to be statistically highly significant ( $p < 0.001$ ). A high proportion of study subjects appeared to have a fair understanding of the technical aspects of autopsy, but many considered that autopsy would result in visible disfigurement of the body. Very few i.e. 7% from Group A and 22% from

Group B correctly said that autopsy does not involve court in all the cases.

The difference was found to be statistically significant ( $p < 0.05$ ). (Table 1) Involvement of police/ court (92.1%), no use in knowing the cause of death/ nature of death (88.6%) and autopsy delays funeral (83.4%) were three top most causes responsible for autopsy refusal by family members or relatives of the deceased. 80.0% relatives denied out of fear of disfigurement of body. Refusal on religious ground was least common reason cited by them. (Table 2)

### **Discussion:**

A good number of relatives were interested in knowing the exact cause of death. They were in the view that, knowing the exact cause of death would help them in coping with the catastrophic, unfortunate bereavement of their beloved. The majority of these relatives were literate, and in their view incomplete information about the circumstances of death of their loved one caused them greater apprehension and agony.

Regarding the purpose of autopsy, almost 30% were not able to state any reason for it. Another study from Delhi reported a little lesser proportion of people i.e. 21% was not able to tell the purpose of autopsy. [6] It is very much evident that the awareness level among general public in this geographical area is not as good as national capital Delhi.

Lower literacy rate and awareness among the general public, might be responsible for above finding. The most suitable way to change public perception of autopsy is through education. Media can be used as an effective tool for such educational programme. Another study [1] is also in cohort with our observations.

More than 90% of the relatives of deceased patients refused to consent to autopsy because of fear of involvement of police and court. Majority of the relatives complained of the casual and indifferent attitude of police personnel. In general, somehow they were not comfortable with the police personnel.

Herein lays the importance of way of interaction with members of such families. Training police personnel, the significance of dissemination of adequate information to the affected family members will definitely help in betterment of existing situation.

It was observed in our study that concern about mutilation of the body was the reason cited by eighty percent relatives of deceased patients for refusal to consent to autopsy. It was similar to that found in a study

from Zambia [7], China [8] and Sweden. [9] A similar finding was recorded by McPhee et al in his study on clinical autopsy. [3]

Above finding showed that such concerns about autopsy cut across cultures and races. Furthermore, it is often a layman's perception of the autopsy. The autopsy, however, is a scientific procedure during which utmost consideration is given to prevent the disfigurement of the body. This observation also buttresses the need to step up the public education about the autopsy.

This study has several strengths. First, we have compared the knowledge and awareness among the family members or relatives who were not willing for autopsy and among those who were willing.

According to our knowledge comparison of this aspect has not been closely investigated by the experts in the field. No similar experience is available in the literature. Second, families were chosen randomly which provide protection against selection bias. Third, all the interviews were conducted by single person which creates a sense of uniformity.

The study has some limitations as well. First, some may argue that the results obtained may not be applicable to the general population as baseline data like income, literacy, gender distribution and other socio-demographic-cultural factors tend to vary in different geographical areas. Second, such a community-based study is always susceptible to recall bias.

**Conclusion:**

The findings of the study highlight the importance of delivery of the sufficient relevant explanations and information to the family members and relatives' in improving the acceptance and giving consent for autopsy.

The experience and opinions of relatives and family members can be utilized in more effective management of medico-legal cases.

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**Table 2: Factors Influencing Autopsy Refusal by Family Members or Relatives of the Deceased**

Reasons cited for refusal of autopsy	N+ (Percentage)
Fear of disfigurement of body	92 (80.0)
Delays funeral	96 (83.4)
Autopsy is certainly not going to bring them back	89 (77.3)
autopsy would disturb the peace of the deceased person/disturb peace of deceased	89 (77.3)
No use in knowing the cause of death/ nature of death	102 (88.6)
Involvement of police/ court	106 (92.1)
Lack of adequate information on reason for autopsy given by police/ doctors	88 (76.5)
Religious objections	26 (22.6)
Concerns about removal of organs or part of the body	75 (65.2)
Lack of feedback on results of autopsy	69 (60.0)

+Response from 115 family members or relatives (Group A) who were not willing for autopsy and it was forcibly conducted against their wish.

**Table 1 Knowledge and Perceptions of Family Members or Relatives of the Deceased about Autopsy**

Do autopsy involve any of the following?	Correct response from Group A+	Correct response from Group B++	P value
	N (%age)	N (%age)	
Will autopsy tell you the cause of death	72 (62.6)	45 (86.0)	0.0003**
Is autopsy is examining outside of the body	93 (80.8)	43 (86.0)	0.42
Is autopsy is examining inside of the body	108 (93.9)	48 (96.0)	0.58
Is autopsy is examining the brain, heart, lung etc	61 (53.1)	23 (46.0)	0.40
During autopsy Blood tests are done	32 (27.8)	22 (44.0)	0.04*
During autopsy x rays are taken	26 (22.6)	12 (24.0)	0.85
Post-mortem means visible disfigurement of the body	22 (19.1)	16 (32.0)	0.07
Post-mortem Involves police in all cases	110 (95.6)	41 (82.0)	0.003*
Post-mortem involves going to court in all cases	8 (6.9)	11 (22.0)	0.005*
Autopsy means removing organs from body	36 (31.4)	6 (12.0)	0.008*
Autopsy will emit foul smell	39 (33.9)	24 (48.0)	0.09
Post-mortem will delay in funeral	19 (16.5)	19 (38.0)	0.002*

+Group A- 115 family members or relatives who were not willing for autopsy and it were forcibly conducted against their wish.  
 ++Group B- 50 family members or relatives were in the view that autopsy was conducted with their wish. \*p<0.05 (Significant), \*\*p<0.001 (Highly Significant)