

ORIGINAL PAPER

# Public Attitudes toward Organ Donation, Autopsy and Anatomic Dissection- A Prospective Study

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## ABSTRACT

*This study was aimed to know the people's reactions to techniques involving the dead body by comparing their feelings toward organ donation, autopsy and anatomic dissection. 92% reported acceptance of an autopsy for themselves and 85% for a close relative. 60% were willing to donate their own organs and 40% to donate the organs of a family member; 15% accepted donation of their whole body for dissection. Nearly all who accepted dissection willing to donate their organs and to be autopsied; almost all who were willing to donate their organs also accepted autopsy. About 70% felt some discomfort at the thought of autopsy and organ donation. Woman seemed more sensitive towards operation on the dead body than men. This study was conducted on the beliefs, attitudes of people towards organ donation, anatomic dissection and autopsy in the region of Assam.*

**Keywords:** *Public attitudes, organ donation, autopsy, anatomic dissection*

## INTRODUCTION

The number of transplant done annually makes India, one of Asia's leading countries in the field.<sup>1</sup> As per statistics about cadaver transplant 1300 transplantation has been done in India upto 2009, since the legislation was passed in 1994. An NGO 'MOHAN' has been responsible for facilitating over 33% of such cadaveric donations in TN and AP, mainly in Chennai.

The donations itself have been sporadic and confined to a few states and the numbers have not been able to cater to the demand for organs.<sup>2</sup> Several health care areas are dependent on people's willingness to dispose off their body or parts thereof after death, and the issue of procedures involving corpses entails important and, to some extent, growing problems: the autopsy rate has declined considerably during the last decades all over the Western World.<sup>3-5</sup> There is an evident discrepancy between the need for transplantable organs and the supply<sup>6, 7</sup>, and there are also difficulties in providing corpses for anatomy education. The reasons behind these problems are probably manifold; some would be connected with the attitudes of people in general.

At that time of Tertullian and Augustine, there were strong religious and social objections to the autopsy. Although in the early years of Christianity, there was no formal church prohibition, the general attitude of church leaders was still unfavorable.<sup>8</sup> Jarcho has called attention to the problems of performing autopsies in Germany in 1670. In a medical periodical of that year, there is an autopsy report with a comment, "the other structures could not be examined because a female relative changed her mind.

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Our people have a great horror of autopsies and very rarely allow them unless special persuasion has been used.” The editor of the journal added a discussion of the difficulties of obtaining permission and some possible answers to the objections of relatives.<sup>9</sup> This ruling was apparently maintained by orthodox Jews until the twentieth century when Knesset, the Israeli parliament, passed a law permitting autopsies under strictly limited conditions.<sup>10</sup>

India’s total population is 1.22 billions. The number of daily deaths is 62389, daily births is 86853 and total blind people are 682497 respectively. If daily dead people donate their eyes, within 11 days all blinds will be able to see. Then in India there will be NO blinds! However, death is a highly sensitive issue, and people’s opinions on what might be done with the cadaver are very much influenced by their thinking about death.

**OBJECTIVE OF THE STUDY**

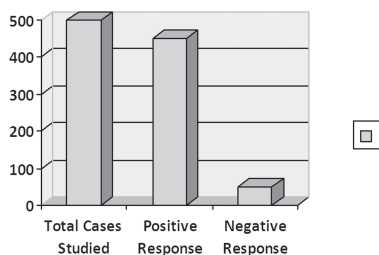
This study was conducted to estimate people’s reactions to dealings involving the dead body by comparing their attitudes toward autopsy, organ donation and anatomic dissection of people of Assam.

**MATERIAL AND METHOD**

This investigation was carried out, using a questionnaire with 25 objects that speak reactions towards autopsy, organ donation and anatomic donation of the body after death, including religious and socio-demographic issues. An age stratified, random sample of 500 people of Assam of 18 to 75 years old was taken for this study.

**OBSERVATION AND RESULT**

**Response Rate of Participants:** The response rate of age-stratified, random sample of 500 Indians living in Assam was 90%, however 10% people reacted their negative response as shown in **Figure 1**.



**Figure 1** Response Rate of Participants

**Attitudes Towards Autopsy:** A total of 92% reported acceptance of an autopsy for themselves in a case of unnatural death and 85% for their close relative. However, 8% of total cases flatly rejected autopsy with their own body and 15% for their relative as well as stated in **Table 1**.

**Table 1** Response rate of participant in percentage (%)

Response of Participants Towards	Autopsy				Towards Organ Donation				Anatomic Dissection			
	Own		Relative		Own		Relative		Own		Relative	
	M	F	M	F	M	F	M	F	M	F	M	F
Positive	60	32	62	23	40	20	30	10	10	5	10	2
Negative	6	2	10	5	30	10	45	15	40	45	28	60
<b>Total</b>	<b>66</b>	<b>34</b>	<b>72</b>	<b>28</b>	<b>70</b>	<b>30</b>	<b>75</b>	<b>25</b>	<b>50</b>	<b>50</b>	<b>38</b>	<b>62</b>

**Attitudes Toward Organ Donation:** A total of 60% were willing to donate their own organs to save the life of others while 40% reject the same procedures. In this study 40% cases agreed to donate the organs of their family members and 60% stated that they would not encourage their family members to donate their organ for any reason.

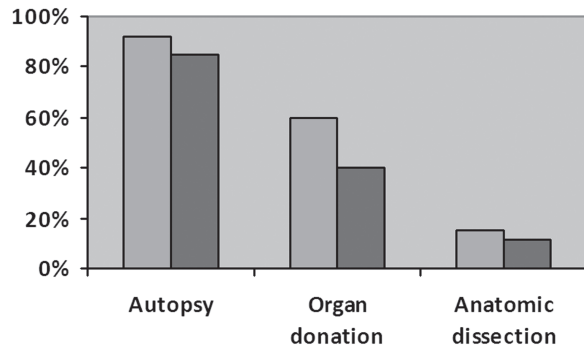
**Attitudes Towards Anatomic Dissection:** Only 15% cases accepted donation of their whole body for anatomic dissection in medical education to help medical researcher for future knowledge gathering, while 85% refused the procedure. Out of 15% cases 12% want to assist their relative for the same procedures.

Nearly all who accepted dissection also willing to donate their organs and to be autopsied; almost all who were willing to donate their organs also accepted autopsy. About 70% felt some discomfort at the thought of autopsy and organ donation. Woman seemed more sensitive toward operations on the dead body than men.

**Religious and Illiterates Sentiment:** A total of 75% of religious and illiterates section felt some discomfort at the thought of own autopsy and organ donation. However, 25% of total case agreed the procedure and thought that this act will be helpful for the society.

**RANK ORDER OF MEDICAL PROCEDURES**

The rank order of medical procedures during life and after death, based on the proportion of individuals positive towards the procedures can be used to form a scale with autopsy and dissection at each end point and organ donation in the middle.



**Figure 2** Rank order of Medical Procedures

## DISCUSSION

The rate of non response 8%, can be attributed not only to factors affecting all mail surveys, but also to the sensitive nature of the issue. The relatively high non response rate on certain questions is another indication of the sensitivity. This finding was well tallied with the study of Margareta Sanner.<sup>11</sup>

A large majority of the respondents indicated that they would accept an autopsy for themselves. 92% reported acceptance of an autopsy for themselves in a case of unnatural death and 85% for their close relative. However, 8% of total cases flatly rejected autopsy with their own body and 15% for their relative as well. Some Forensic Medicine and Toxicology experts argue that more autopsies are performed than necessary. However, recent studies show that autopsies can detect a person's condition that were not suspected when the person was alive, and the growing awareness of the influence of genetic factors in disease has also emphasised its importance. It is important to note that autopsies can also provide peace of mind for the bereaved family in certain cases. Therefore, an autopsy should be encouraged regardless of caste, community and religion upon all unnatural deaths. The key lies in a renewed understanding of Forensic pathologists, clinicians and hospital administrators about the role of autopsy in health care. The autopsy room should not be seen as the place where sorrow and the spectre of death come alive; rather it should be where death rejoices to aid the living.<sup>12</sup> This high response towards autopsy is because of details and explanations about the procedures. In this study women were more sensitive toward the procedures on the dead body than men that tallied with the findings of Sanner M.<sup>11</sup>

Response to organ donations after death were considerably less positive, especially when the donation of organs from a relative was concerned. 60% were willing to donate their own organs to save the life of others while 40% reject the same procedures. In this study 40% cases agreed to donate the organs of their family members and 60% stated that they would not encourage their family members to donate their organ for any reason. In two questions, different types of possible reactions of discomfort at the thought of autopsy and organ donation, experience of discomfort as mentioned which were well tallied with the findings of Sanner M, Den Doda Kroppen.<sup>11, 13</sup>

Dissection is the most extensive procedure of those mentioned herein. Only 15% cases accepted donation of their whole body for anatomic dissection in medical education to help medical researcher for future knowledge gathering, while 85% refused the procedure. Out of 15% cases 12% wants to assist their relative for the same procedures. The findings were tallied with the findings of Sanner M.<sup>11</sup> A total of 85% felt much more difficult to consider donating the whole body for scientific or educational purposes than to donate parts of the body or undergo autopsy. The reasons for this were not explored in this study.

## SOCIODEMOGRAPHIC FACTORS

In relation to attitudes in connection with dissection, there was no relationship either to age or to education, only to gender. Women were less often positive about donating their bodies than men in this study. The differences in reaction patterns between men and women suggest that women are more sensitive than men towards operation on their bodies, probably "cathecting" their bodies and including them into their "extended self," as has been suggested by Belk.<sup>14</sup>

A large number of religious and illiterate people felt some discomfort at the thought of own autopsy and organ donation. With regard to organ donation and autopsy, the younger generation were more often positive than the old as stated by Sanner M.<sup>11</sup> Religious beliefs have been found to be connected with attitudes toward organ donation in other studies.<sup>15, 16</sup>

The funeral is the last procedure that can be undertaken with the cadaver. In a recent research a connection was

noted between attitudes toward organ donation and funeral preferences.<sup>15</sup> This finding was confirmed in this present study: individuals selecting cremation were more often positive towards the donation of their own organs with relatives' organs and also towards autopsy and dissection. As the funeral is a very sensitive issue if care taken as per religious belief they are willing to accept the procedures as suggested.

A study by Parisi and Katz<sup>17</sup> indicates that only when the negative motives (discomfort reactions) concerning organ donation are weak has the intensity of the positive motives (such as altruism) any significance for the willingness to sign a donor card. This finding is supported by the above-mentioned interview study on people's reactions towards organ donation.

## CONCLUSION

India has an important role to play in Asia and has the capacity to lead the way in transplant surgery. It has the law for it, the expertise and the hospital infrastructure to support the programme. It needs to streamline the implementation of its law, and promote the deceased donation programme.

Organ donation and autopsies provide peace of mind for the bereaved family in certain situations. A good understanding is needed amongst forensic pathologists, clinicians, hospital administrators, etc.

The autopsy room should not be seen as the place where sorrow and the spectre of death come alive, but rather it should be where death rejoices to aid the living. Organ donation and autopsy can give a new twist to the tragedy "organs wasted are the wastage of lives." Organ donation, autopsy and anatomic dissection must be encouraged by all for well being of members of the society and not to cause any harm to any of its members.

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