

## Cause Towards Body Donation: A Survey In Eastern India

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**Abstract: Background:** In the 21<sup>st</sup> century it has been found there is various factor which hinder body donation to the various medical college. Body donation is necessary for improving medical science.

**Objective:** To know the trend of body donation and to know the cause of body donation in the 21<sup>st</sup> century.

**Material and method:** A study was performed in Nil Ratan Sircar medical college for the period of four year from January 2014 to December 2018. Data collected from department of anatomy. Exclusion and inclusion criteria are selected. Data compilation and statistical analysis are made.

**Result:** A total 320 body was donated during the above mentioned year. From the party, we have taken the data of pre-structured and preformed questionnaires. It has been found that there is increase tendency towards body donation. The main cause is motivation of people followed by family problem.

**Conclusion:** In the 21<sup>st</sup> century, motivation is the major cause of body donation.

**Keyword:** Anatomy, cause of donation

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### I. Introduction

Anatomy, the study of structure of human body is the first and most basic and yet one of the important subject studied by the students<sup>1</sup>. It helps topographic localization of the organ of body. The history of body donation can be traced long back to puranas, the Hindu religious literature. The first medical student Andreas Vesalius dissected the cadaver<sup>2</sup>. However, by early 19<sup>th</sup> century, with rise of medical science and with reduction of number execution, there was increased demand of cadaver throughout the India. India is multireligious and multi cultural country, prevailed with illiteracy what hinders body donation. So there was prejudice in our mind. People was hesitate to donate their body. Specially, it has been found there are some religion those avoid body donation. Here, our aim is to find out the cause of body donation in eastern india.

Present procedure of body donation in west Bengal is either pledged form from deceased person, death certificate and consent letter from legal heirs.

#### Procedure and difficulty in body donation :

In our state a pledged form is given and to be filled up by the donor and duly filled application of pledged form is submitted in respective office. Following documents are essential to donate a body:

1. Death certificate by registered medical practitioner
2. Filled up pledged form
3. Application by the nearest relative

There are various factors hinders body donation such as age, sex, education, attitude about religion, marital status. Armstrong<sup>3</sup> noted that there is a higher willingness to donate in younger age group than older one. In present scenario, it has been found that age is associated with willingness to donate body. Similarly, male are more inclined towards body donation than female<sup>4</sup>. Education is the most important factor. Educated people are more prone towards body donation. Because less educated person do not know the utility of body donation. Religious belief and spirituality is responsible for low cadaveric donation. Most important reason is lack of awareness. Only 22% general population is aware that body can be donated<sup>5</sup>. The fear within donor is also one of the reason.

#### Aims and objective:

Our aim is to know the trends of body donation and to find out the cause of body donation and public awareness status toward body donation.

## II. Material and method:

To know the cause of body donation, we have conducted a study in Nil Ratan Sircar Medical college and Hospital for a period of four year regarding body donation motivation and awareness. Unclaimed and autopsied bodies are excluded from this study. The study is conducted for a period four year. A preformed and prestructured questionnaires are meant for legal relative of deceased person.

Study tool:

1.Preformed and prestructured questionnaire.

2. Data collected from Department of Anatomy.

Study period : Over four years.

Sample size : 320.

Study design : Prospective study.

Exclusion criteria : Non legal relative and bias person.

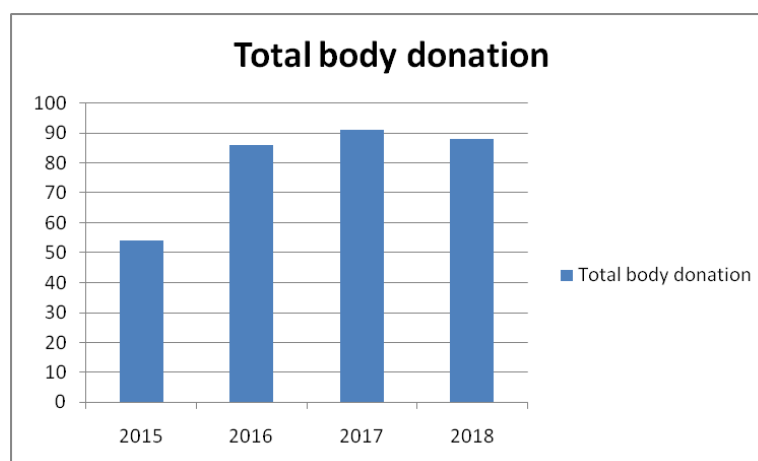
Inclusion criteria: Patient legal relative who is freely interested to give the answer of preformed and prestructured question.

**Table 1:** Proforma of preformed questionnaire. **N.B.** – 1= Motivation, 2= Family problem, 3= Poor economic status

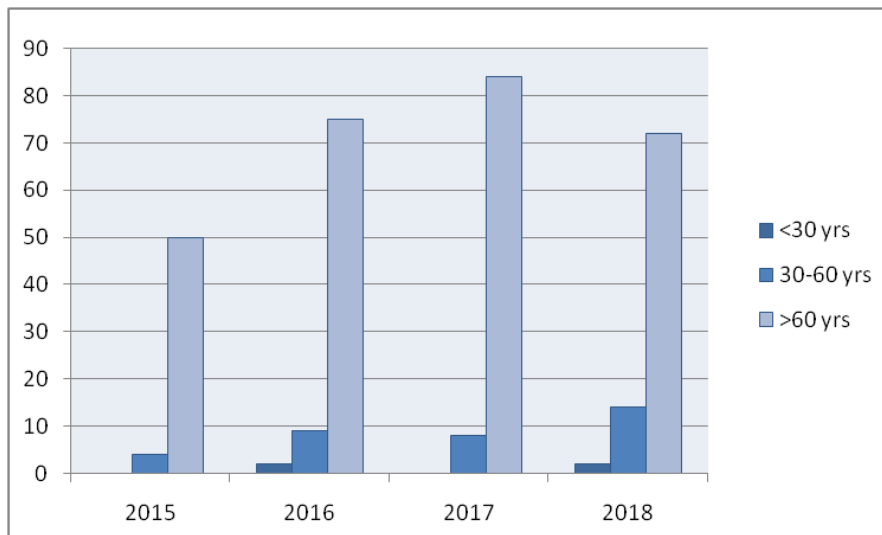
Sl no	Relationship with deceased person	Occupation of party	Education of party	Cause of donation			Religion	Age	Sex
				1	2	3			
Signature with address									

## III. Result and Analysis

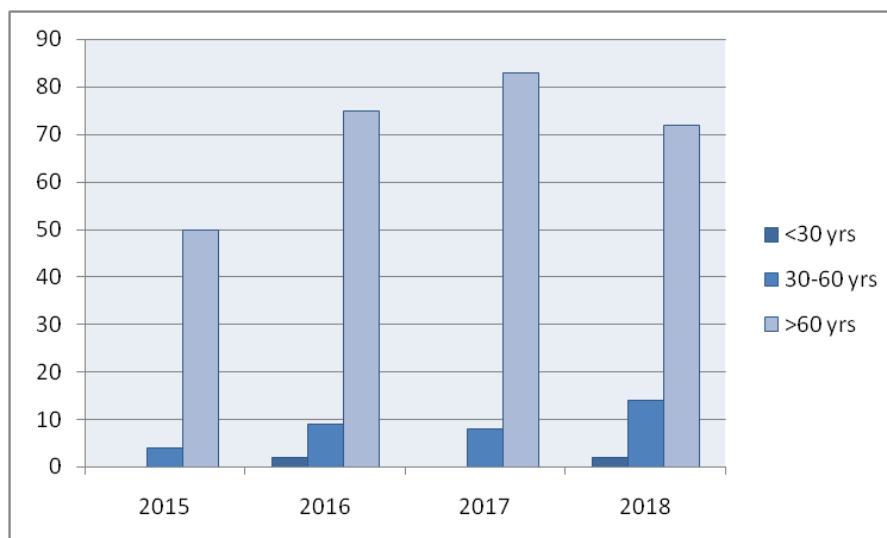
We have performed this study for a number of 320 subject over a period of four year. We have tried to find out whether there is any change in number of body donation, the age related to body donation. Number of donated body for the year 2015 to 2018 are 54, 86, 92 and 88 respectively (Figure 1). For that purpose, we have selected three age group- < 30years, 30 to 60 years and above 60 years. For the year 2015 number of body below 30 years was nil, 30 to 60 years were 4 and 50 bodies were aged above 60 years. Similarly for 2016 the numbers were 2, 9 and 75; for 2017 the numbers were 0, 8 and 84; and for 2018 it is 2, 14 and 72 respectively (Figure 2). Also we tried to find out the cause of body donation. Three causes have been taken to come out in conclusion. They are motivation, poor economic status and family problem. It has been found old aged people are more inclined towards body donation. Regarding sex, male are more interested towards body donation. Number of male and female bodies for the year 2015 were 39 and 15, for 2016 it is 58 and 28, for 2017 – 60 and 32 and for 2018 it is 64 and 24 respectively (Figure 3). Most of the people are Hindu .It has been found the main cause of body donation is lack of motivation. The second most cause is family problem. Poor economic status is the third cause of body donation among aforesaid three parameters.



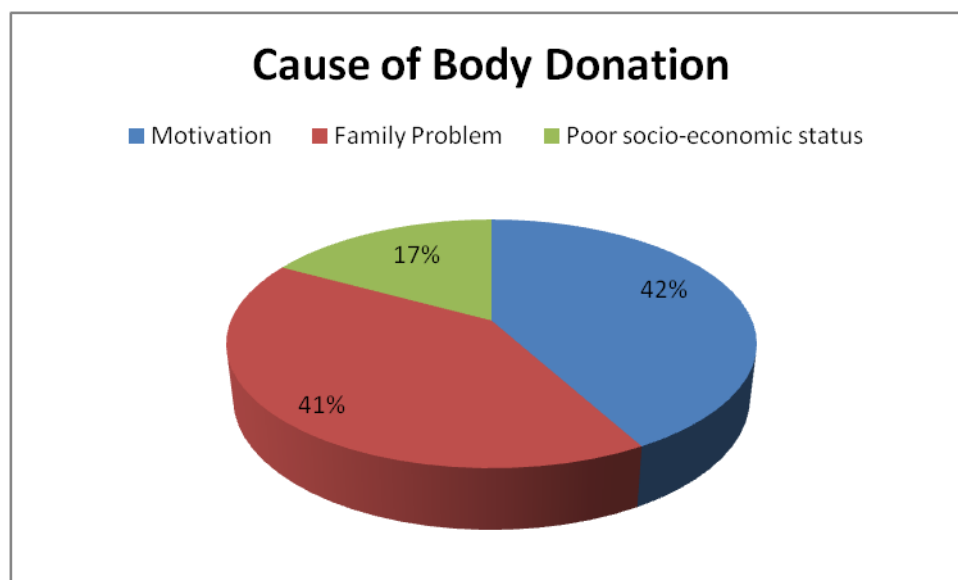
**Figure 1:** Bar diagram showing time wise body donation graph



**Figure 2:** Bar diagram showing age related to body donation



**Figure 3:** Bar diagram showing sex related to body donation



**Figure4:** Pie diagram showing Cause of body donation

#### **IV. Discussion**

We have conducted a study on 320 subjects over a period of four year in Nil Ratan Sircar Medical College and Hospital .In the present study, it has been found that there is an increased tendency of body donation as the time progresses. The people aged between 30 to 60 years are more prone to body donation. Almost all deceased person are Hindu. The most common cause of body donation is motivation followed by family problem. Poor economic status is the third cause of body donation. From the above data, it is obvious that people aged between 30 to 60 years are more prone towards body donation, mainly due to either motivation or family problem. The main cause behind body donation is motivation of people. The second most common cause is family problem, followed by poor economic status. Now a day, there is various newspaper, media, non government organization which motivate the people toward body donation. Family problem is the second most common cause is family problem. It is due to that now a days nuclear family exist in society mainly. So, the daughter and son of their family did not want to take part in the funeral procedure of their parents. Because some of them lives outside West Bengal even outside India. And the third cause can be explained in this way that family member did not want to take any responsibility toward the expenses of funeral ceremony.

#### **V. Conclusion**

Anatomy is one of the basic subject in medical sciences. We have studied in anatomy regarding position of different organs, blood supply, function and utility of the organ. Study of anatomy thrives on available dissectable cadaver. In our study we found that motivation is the major cause of body donation. Awareness generation is needed through various programs throughout the India to motivate the people. Although motivation is the leading cause but it still has not reached its mark where it should be.

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