

**Analysis of body donation in the saurashtra region: A Retrospective Study**

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**Abstract:**

**Introduction:** Body donation is defined as the act of giving one's own body after death for medical research and education. As the gradual advancement in medical field and increasing research requirement of cadavers is increasing and so is the need for voluntary body donation.

**Material method:** This was a retrospective study, done by collection of data through the proforma which was obtained, at the time of body donation from the relatives and known of deceased from anatomy department of our institute, for the year 2010-2014.

**Result:** Average number of bodies donated per year was 19-20. The pattern of donation is variable from year to year. Most of donors were male and belonged to age group > 50 years, were literate and belonged to urban settings.

**Conclusion:** The saurashtra region population is very well aware of the idea of body donation and has set an example for rest of mankind through this noble act.

## **Introduction:**

Body donation is defined as an informed and free act of giving one's own whole body for medical and education research.<sup>(vi)</sup>

Delmas (2001) stated that donation is a clear "will" made by the persons free and informed. Donation is most often by self-sacrifices, conferring life on another and it is a gift for better tomorrow.<sup>(v)</sup>

A sound knowledge of anatomy is essential from the beginning of a medical education and, knowledge obtained through dissection of human body is indispensable.<sup>(i)</sup>

Anatomy act -

In India Anatomy Act was enacted in 1949. It has been uniformly adopted in all states of India. This act, rectified by various states in India provides for supply of unclaimed bodies to medical and teaching institutes for the purpose of anatomical dissection and research.<sup>(v)</sup>

Anatomy act is a state act propagated by the legislature and published in State Government Gazette. This act regulates the use of dead bodies for medical purposes.<sup>(iii)</sup>

Dissection of human cadavers provides the students with an emotional and intellectual approach towards human body. Most of the students today also think that dissection is indispensable and gives the best method for study of anatomy and disagree with the idea of replacing cadaver dissection with the computer-based program.<sup>(iv)(v)</sup>

Now- a- days with the upcoming advancements in the medical field, cadavers play an important tool for the clinicians to practice the various new techniques on them, so that they can apply the same with confidence over their patients.

Most of medical and dental students are in favor of organ donation; however less than half consider donating their own body for educational purposes at this point in their life.

Despite of the importance of body donation for medical education and the advancement of medical science, cadaver donation remains sub-optimal worldwide.

**Aims:** the aim of the present study was to analyze the pattern of body donation in saurashtra region.

**Material and method:** it was a retrospective study, done by the collection of data through the proforma, that were filled during the year 2010-14 (five year data).

The voluntary donors and the relatives of the deceased who came to the institute for whole body donation were required to fill a 'dehdan form' and they provided with a 'sankalp patra'

After the donation of body, 'abhar patra' was issued to the relatives to express the gratitude from the institute and students for their noble act.

The ID proof of the deceased, death certificate issued by a registered medical practitioner are collected from the relatives who bring the dead body.

The proforma used in the study were filled at the time of body donation with the help of information provided by the nearest relative or known person of the deceased.

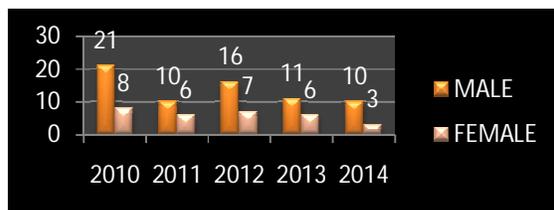
Information was obtained regarding the date and time of death, personal information of deceased and the nearest relative bringing body.

**Results:**

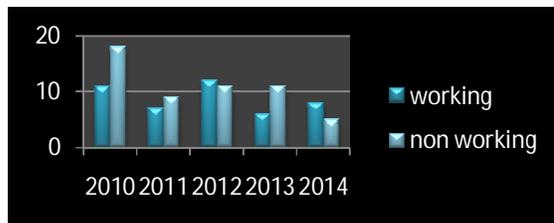
**1. Number of donors**



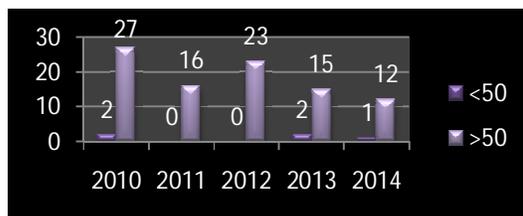
**2. number of males and females**



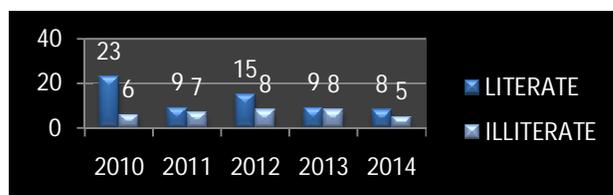
**3. number of working and non-working population at the time of death**



**4. Age group of donors:**



**5. Literacy trend among the donors:**



## 6. Statistical analysis of the above data:

**Discussion:** From the results of the present study, it was concluded that, out of 19-20 average bodies per year donated to our institute, most of them were male and belonged to age group of greater than 50 years. It was proved by the data that literate population favors body donation than illiterate one.

x	TOTAL	P value
TOTAL NO.	98	
LITERATE	64	Statistically significant P<0.05
ILLITERATE	34	
MALE	68	Statistically highly significant P<0.005
FEMALE	30	
<50	5	Statistically very highly significant P<0.0001
>50	93	
WORKING	44	Statistically not significant P>0.05
NON WORKING	54	

- Our results were found in accordance of studies done by Amanrao BP et al (2012)<sup>(ii)</sup> who found the similar results in North Maharashtra population.
- Ranjan et al (2014)<sup>(vi)</sup> did a study of awareness regarding voluntary body donation in population of Ujjain region of MP and derived the similar conclusion.

The reasons for the above observation could be, the better exposure of urban and literate population of country to body donation awareness programmes through mass media communication.

The higher age group in the donated bodies is because, most commonly deaths in these age group are from natural causes (especially above 70 years) , and they have a higher mortality rate.

Males out-number females in body donation because the life expectancy in males is lower as compared to females and females in our country are less aware (due to illiteracy) and feel cultural bondage.

**Conclusion:**It was concluded from the present analysis that the number dead bodies obtained by our institute through voluntary body donation is sufficient to meet the requirements for medical education. The population of saurashtra region in Gujarat state is very well aware of the idea of body donation, which is a very appreciable act. They had set as an example for the people of other parts of our country and world, where due lack of voluntary body donation, medical institutes are running short of cadavers needed for medical education.

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