Body Donation - Attitude and Knowledge of Medical Professionals

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Abstract

There is huge deficiency in number of cadavers in anatomy for dissection. Mainly this is because of increase in number of medical colleges and also increase in number of students in each college. Also there is decreased number of unclaimed bodies and very few cadaver donations. The solution for these remains to increase in number of donations towards medical education. Although anatomists encourage people to donate bodies, the attitudes of anatomists toward donating their own bodies for dissection is not well known³. The questionnaire was distributed to the doctors in the medical college in Bangalore irrespective of department. Results showed that more than 50% of the doctors are ready to donate organs but not whole body. The main reason for not donating was unacceptability of donation by family. Few doctors were not even aware of the legal procedures towards body donation. We did not find any statistical significant difference in opinion based on age or gender.

Keywords: Voluntary body donor, body donation, medical professionals.

Introduction

Despite many technological developments and audio-visual aids, dissection of cadaver still remains an essential component of medical study, especially in 1st year of MBBS. Unclaimed and donated bodies have been a major source of study material in many of the institutes. In India, Anatomy Act was enacted in 1948. Accordingly it provides for collection of dead bodies for teaching purpose. If death occurs in a state hospital or in a public place within the prescribed zone of the medical institution provided the police have declared a lapse of 48 hours with no claimants for the body and could be used for medical purpose¹¹. With the increase in number of medical colleges and the number of students in each college, there has been a significant shortage of cadavers for dissection purpose. To encourage the public towards body donation we must first develop a positive attitude in medical professionals towards the same. In this study we are evaluating the knowledge & attitude of medical faculty with regard to body donation.

Aim

To create awareness about body donation among medical professionals.
Objectives

• To evaluate the attitude of medical professionals towards voluntary body donation.
• To evaluate the difference in attitude based on gender & experience in medical field.

Materials and Methods

Study Design- Cross sectional study

Study Area- Sathagiri Institute of Medical Science and Research Centre, Bangalore.

Study Population- Teaching staff of Sathagiri Institute of Medical Science and Research Centre.

Inclusion Criteria: All post MBBS doctors, MD, MS

Exclusion Criteria: Not willing to participate.

• The questionnaire was given to 135 doctors including pre, para and clinical departments.
• 102 were returned back. Participation in the study was voluntary and anonymity was maintained.
• A maximum of two attempts were made to collect the completed questionnaire.
• Analyzed through descriptive statistics using SPSS statistical software and results expressed as percentage of the total study population.

Review of Literature

• A study done by prachisaffar in Gurgaon among 100 doctors: It was observed that. The number of female doctors (29%) consenting to donation is significantly less than the number of male doctors (52%)4.
• In a similar study conducted to evaluate the attitudes of Turkish anatomists, majority of the respondents objected to donating their bodies due to psychological reasons. However many agreed that it is easier to donate an organ for transplant and other purposes3.
• In a study conducted on anatomists in UK by Luis A showed that 74% were in favour of donation, 23% would not donate and 3% did not know or did not answer the question. Of the 74% that favoured donation, 41% respondents would only donate organs, 9% would only donate their body, and 25% would donate both organs and body. Males were more in favour of whole body donation than females. The willingness to donate organs and body increased significantly with the years of teaching experience.
• A cross sectional study conducted at Kasturba Hospital, Manipal, India, among medical doctors. A large proportion of the respondents did not know about the authority that oversaw body donation, or its criteria for accepting donated bodies. Only 22% of polled physicians were willing to donate their bodies for medical education, but 68% expected the public to do the same1.
• A study conducted on dutch anatomy professionals by Bolt et al showed that only a quarter of them would consider the possibility of body donation. The two main constraints preventing Dutch anatomical professionals from donating their own body are their professional and their social environments. In contrast to the absence of registered body donors, half of the anatomical professionals are registered as an organ donor2.

Results and Discussion

• Results were deduced taking 102 completed proforma. Out of which 46 were male and 56 were female.
• Mean age – 37 y
• Mean experience – 9.7 years

Table 1 showing attitude towards donation

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole body</td>
<td>12</td>
<td>12</td>
<td>23.5%</td>
</tr>
<tr>
<td>Only organs</td>
<td>25</td>
<td>33</td>
<td>56.9%</td>
</tr>
<tr>
<td>I will not donate</td>
<td>9</td>
<td>10</td>
<td>18.6%</td>
</tr>
</tbody>
</table>

The above table shows that doctors are more comfortable donating only organs rather than the whole body i.e 26.1% (males), 23.5% (females) are willing to donate body whereas 54.3%
(males), 58.9 (females) are willing to donate organs. A study done on Spanish anatomists by LUIS-A. ARRAZAYBAR et al, showed that majority of anatomists were ready to donate organs rather than whole body. According to Seven of the eight anatomical institutes in the Netherlands refuse to accept the bodies of people who have donated their organs. After organ donation, the body is no longer intact and it will not be suitable for preservation with the embalming technique. With this in mind, some anatomical institutes only register people above a certain age in order to stimulate younger people to register for organ donation. The anatomical institute in Groningen, however, does accept the so-called total donors, people who first donate those organs suitable for transplant and subsequently donate their body for dissection²

Table 2 showing probable reason for not donating

<table>
<thead>
<tr>
<th>Question</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Num</td>
<td>%</td>
<td>Num</td>
</tr>
<tr>
<td>Unacceptability of donation by family</td>
<td>13</td>
<td>28.3%</td>
<td>16</td>
</tr>
<tr>
<td>Psychological reasons</td>
<td>8</td>
<td>17.4%</td>
<td>6</td>
</tr>
<tr>
<td>Anxiety of disrespectful behaviour towards cadaver</td>
<td>5</td>
<td>10.9%</td>
<td>11</td>
</tr>
<tr>
<td>Religious beliefs</td>
<td>4</td>
<td>8.7%</td>
<td>6</td>
</tr>
<tr>
<td>Not answered</td>
<td>15</td>
<td>32.6%</td>
<td>17</td>
</tr>
</tbody>
</table>

The major reason for not donating body by doctors was unwillingness by relatives (28.4%). Whereas almost 30.4% of them dint answer the particular question. The study also shows that female doctors have more anxiety of disrespectful behaviour towards the cadaver. This anxiety of disrespectful behaviour towards donated cadavers may be avoided by educating the students and non teaching staff when they handle the cadavers to be more kind and respectful towards the same.

Table 3 showing awareness of doctor about body donation

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>Not aware</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Num</td>
<td>%</td>
</tr>
<tr>
<td>Aware of body donation association in the respective institute.</td>
<td>51</td>
<td>50%</td>
</tr>
<tr>
<td>Aware of procedure and legal aspects of Body donation.</td>
<td>53</td>
<td>52%</td>
</tr>
</tbody>
</table>

Above table shows that 50% of the doctors are not even aware of the body donation association in the institute and also about the procedure and legal aspects with respect to that. This means that there is requirement of awareness programmes in doctors fraternity before we preach the public for voluntary body donation.

Table 4 showing their attitude toward creating awareness

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Num</td>
<td>%</td>
</tr>
<tr>
<td>Would you advise your relatives/friends to donate</td>
<td>82</td>
<td>80.4%</td>
</tr>
<tr>
<td>Are you creating awareness about body donation.</td>
<td>40</td>
<td>39.2%</td>
</tr>
</tbody>
</table>

Above table denotes that even though right now doctors are not aware of donation process they are ready to create awareness in future among their relatives or friends.
There is also a Study done by Prachi S Aneja in gurgoan⁴ and by Luis et at on spanish anatomists showed there is age / experience related difference in the opinion and also males are more comfortable donating their body compared to females, In present study we did not find any statistical significant difference in opinion based on age or gender.

**Conclusion**

In our study we observed that majority of the doctors are in favour of donating organs (56.9%) but not willing to donate body for dissection purpose. Also there is no statistically significant difference of attitude on body donation based on gender, age. The major reason for not donating was unacceptability by family members & psychological reasons. We should work towards clearing doubts and fears from the minds of our doctors. The awareness programmes should first start from medical institutes which inturn will help the doctors in creating awareness among general public.

**Acknowledgement**

I would like to thank all the doctors who actively participated in the study and also the non teaching staff and the clerk who helped with all the other paper work.

**References**

Questionnaire

1. **Department**
2. **Sex**: male female
3. **Religion**: 
4. **How many years have you been practicing/teaching medicine?**
5. **Current role of human cadaver for you?**
   
   {0=disagree, 1=agree}
   
   • a. Source of medical research
   • b. Instrument to develop professional skills
   • c. As a tool in professional training
   • d. Only learn/teach anatomy
6. **Are you aware of body donation association in your institute?**
   
   Yes no
7. **Would you donate your body?**
   
   Only my organs
   Whole body
   No, I will not donate

8. **If not, then probable reason for not donating?**
   
   Not aware
   Unacceptability of donation by family
   Psychological reasons
   Anxiety of disrespectful behavior towards cadaver
   Religious beliefs
   Others –mention
9. **Are you comfortable with your family member donating their body?**
   
   Yes No
10. **Are you creating awareness regarding body donation across patients?**
    
    Yes No
11. **If no, are you willing to do it in future?**
    
    Yes No
12. **If not body donation, what other source of cadavers would you suggest?**