This Is How We Did It—Conceiving and Continuing a Body Donation and Honor Program at All India Institute of Medical Sciences, Raipur, India

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Abstract

Background and Aim Medical institutes around the world are facing scarcity of cadavers for anatomy dissection and teaching purpose. The academic value of "hands-on experience" on human bodies remains the mainstay of medical education, especially in the foster years of the young student. Efforts are needed to improve the availability of human bodies for dissection. This can be achieved by encouraging the masses to donate their bodies for the same.

Material and Methods The authors conceived a full-fledged body donation awareness campaign starting from 2013, which is successfully continuing till date. The program included memorial services and honor ceremonies for the family members of the pledgers/donors. Considerate support was provided by many nongovernmental organizations as well as the administration of the institute in discussion.

Observations The efforts made by the department emerged as an extremely improved scenario in terms of availability of cadavers for anatomy teaching and interdepartmental activities. Till date, 1,106 people have pledged for donating their bodies to the institute and 85 actual donations occurred till 31 July 2019. The continuous efforts of all the stakeholders have significantly improved the cadaver availability in the department where the ratio of one human body to 10 students is being practiced.

Conclusions Further work is still needed to encourage more people toward this altruistic act. Further deliberations with religious and political leaders are underway to enhance the penetration of this message amongst the masses. Extensive publicity is being planned for the same, and the authors are hopeful of further promising results toward this cause.

Introduction

Anatomy dissection and prosection have always sustained as a time-tested and an extremely useful methodology in imparting knowledge in basic medical sciences and other streams of medical education. It has always been an integral component of the anatomy curriculum. But a major problem faced by most of the teaching institutes is the scarcity of human bodies for teaching and research activities.

In a recent study of 71 countries around the world, authors analyzed the sources of human bodies used in anatomy departments for teaching purposes. The findings of the study have indicated that many nations still rely upon unclaimed bodies (mostly/exclusively). Certain nations were reported to have full-fledged body donation programs. A pertinent question raised was "why anatomists in many countries have not yet been able to establish functioning body donation programmes
but, rather continue to rely upon unclaimed bodies”4. Institutes from some countries have implemented body donation programs in their respective domains, with encouraging results.5,6 A study from Nigeria called for the establishment of bequest program in the country to solve the issue of cadaver shortages. In a study, the authors mentioned about the rise in body donation owing to the changes in religious beliefs and practices. They also pointed out that many medical schools have reinstated dissection as a teaching modality, rather than fully relying upon newer initiatives such as plastination, holographic display, and virtual-reality computer modules. Some institutes organize memorial services to pay tribute and respect to the donors and their families for the altruistic act done by their family member/friend.8

In spite of various programs being undertaken, there is still a paucity of awareness regarding the gracious act of donating one’s body for medical research and education. Talking about the Indian scenario, since lately, there has been an increase in the number of tertiary care medical teaching institutes across India. The increase in establishment of new medical institutes is a necessity to cater to the doctor:population ratio in the Indian context. New All India Institutes of Medical Sciences (AIIMS) were established under the Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) scheme of the Ministry of Health and Family Welfare (MOHFW), government of India.9

The uphill task of establishing the dissection program for the Department of Anatomy at the present institute (AIIMS Raipur) was bestowed upon the faculty members of the department. We started with one cadaver which, was received under a memorandum of understanding (MOU) between the already established state-run Government Medical College and the newly established AIIMS Raipur (the present institute in discussion). But as the requirements enhanced, there was a strong need for increase in the number of cadavers to be utilized for teaching as well as research purpose. This was a great challenge for us and we all strived hard to conceive the program and hoped for its success, which we ultimately received with flying colors.

Materials and Methods

How We Did It

Conceiving the Program
Taking into consideration an urgent requirement of bodies for anatomical dissection, we conceptualized a campaign to promote body donation. We took the help of our institute’s social media cell and website management team as well as many local nongovernmental organizations (NGOs), who supported us in the campaign wholeheartedly. A subtle body donation awareness symposium was organized in July 2013 and we received 5 donated bodies (2 male and 3 female).

Carrying On Year by Year
Looking into the fruitful results on our first program in 2013, we formulated a full-fledged mechanism that involved pledging by potential donors and filling up of the will form in the presence of witnesses. We undertook a campaign via these program to counsel the general public regarding the usefulness and necessity of human bodies for medical education. The details of the various programs, year-wise, are shown in Table 1.

Since 2015 we also started the honor program by the students, where the first-year medical students paid their tributes to the donated bodies and also expressed gratitude to the family members of the donors as well as the pledgers. Since 2017, another dimension was added to this—it was the oath-taking ceremony by the students in front of the relatives of the donors as well as the pledgers (Figs. 1 and 2).

In all of these program an open question–answer session was undertaken to clarify the doubts of the people attending the ceremony. They were also informed regarding the provision of transport vehicles and embalming procedures of the donated souls. The basic prerequisites for donating a body to the Department of Anatomy were discussed and explained to the invitees. The family members of the pledgers and donors were counseled for timely intimation of the death to the Department of Anatomy so that the necessary transportation and storage/embalming procedure can be arranged. The kith and kin as well as the general public who were invited for the program were informed regarding the will form for body donation and the certificate of body donation which is provided by the department as a mark of respect for their munificent act in allegiance to medical science. The details of the body donation program and will form are available at the institute’s website.

The medical students actively participated in the programs and shared poems/songs and performed dramas and dances pertinent to the essence of body donation theme. One of the widely appreciated activity was the oath-taking ceremony by the students in front of the families of donors/pledgers. They undertook the oath for ethical and respectful handling of the departed soul and paid tributes to their first teacher—the cadaver. The copy of the oath is shown in the supplementary file. Our endeavors have tried to remove the misconceptions and doubts regarding the usefulness of this great altruistic act of body donation. We were able to convince hundreds of people through these programs and rekindle the public’s desire to aid in the advancement of medical sciences. Some of the photographs of the programs

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Program organized</th>
</tr>
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<tbody>
<tr>
<td>July 2013</td>
<td>Symposium on body donation awareness</td>
</tr>
<tr>
<td>September 2014</td>
<td>Body donation memorial, honor and awareness program cum exhibition</td>
</tr>
<tr>
<td>October 2015</td>
<td>Body donation honor by students</td>
</tr>
<tr>
<td>October 2016</td>
<td>Body donation honor by students</td>
</tr>
<tr>
<td>October 2017</td>
<td>Body donation honor and oath-taking by first-year students</td>
</tr>
<tr>
<td>October 2018</td>
<td>Body donation honor and oath-taking by first-year students</td>
</tr>
<tr>
<td>November 2019</td>
<td>Body donation honor and oath-taking by first-year students</td>
</tr>
</tbody>
</table>
organized are available in the supplementary digital contents (Supplementary Material, online only).

**Observations**

We continued with the awareness and honor programs for many years since 2013, and it proved to be a boon for the learning and teaching of anatomy as we started having several pledgers as well as actual donations. The awareness campaign to promote the message among the masses is being organized every year with the basic theme of body donation. Since 2013, 1,106 people (839 males and 267 females) have been the signatories to the will form for donating their bodies to the department after death. The number
of actual donations is 85 (50 males and 35 females) till the filing of this report. The yearly breakup of the number of pledges and the number of donations has been detailed in Table 2.

The support of the local media/press also elaborated our mission to the large populace. The donated bodies are being used not only for the teaching of medical students, but also for interdepartmental workshops/simulation programs and hands-on training in orthopaedics, anesthesia, neurosurgery, otorhinolaryngology, and so forth, to name a few. Due to the dedicated efforts of the faculty and staff members of the Department of Anatomy, AIIMS Raipur, and the NGOs, the present ratio that we are following in our department is one cadaver for 10 students (1:10). This ratio shall undoubtedly help the students to become better-trained professionals and possess enhanced skills.

Discussion and Conclusions

The body donation awareness programs undertaken by the Department of Anatomy has indeed proved to be a blessing for all. This has also been projected as an encouraging example toward public participation in the welfare of society and contribution in upliftment of medical education. Further work is still needed for motivating and encouraging the people regarding this noble act. It is a matter of discussion as to how some incentives can be provided to the next of kin of the donors/pledgers in terms of preferences in OPD (outpatient department) consultations, elective surgeries, and so forth. Photography/videography of the dissection/prosection procedures can be undertaken so as to establish a full-fledged resource library for the medical students. Further elucidations are needed with the religious leaders/political parties/NGOs/social workers to propagate the importance of body donation in medical education, keeping in mind the social and cultural psyche of the people.

Broad publicity and elaborate propagation of such programs should be planned to recognize and honor the donors and their families. This shall motivate and encourage more people for this magnificent act of donating one’s body. Institutions can advocate, build, and manage such programs with minimal documentary complications and administrative hiccups, since they are the beneficiaries—they can become the nodal centers for these programs. It is high time that institutes realize that cadaveric dissection is an indispensable means in imparting anatomy education and cannot be replaced by anything.

Conflicts of Interests
None declared.

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Manisha B. Sinha, MD, is Associate Professor of Anatomy at All India Institute of Medical Sciences (AIIMS), Raipur, Chhattisgarh, India. She teaches anatomy and histology to first-year medical and nursing students, and postgraduate students in anatomy. She has a strong interest in infertility research and has research interest in cytogenetics.

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Table 2  The number of pledges and the number of donations, year wise

<table>
<thead>
<tr>
<th>Year</th>
<th>Total pledges registered</th>
<th>Actual donations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>2013</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>2014</td>
<td>56</td>
<td>34</td>
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<tr>
<td>2015</td>
<td>78</td>
<td>52</td>
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<td>2016</td>
<td>174</td>
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<tr>
<td>2017</td>
<td>201</td>
<td>47</td>
</tr>
<tr>
<td>2018</td>
<td>281</td>
<td>46</td>
</tr>
<tr>
<td>2019 (till 31 July 2019)</td>
<td>49</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>839</td>
<td>267</td>
</tr>
</tbody>
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References