Cadaveric Oath – Perceptions of First Year Medical Students

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ABSTRACT

BACKGROUND
Cadaveric dissection is indispensable for anatomy learning. The student - cadaver relationship stabilized on humanities can serve as a simulation for future doctor-patient relationship. Hence bioethics is introduced in the medical curriculum. To achieve the goal of professionalism, cadaveric oath should be conducted on the first day of anatomy dissection, so that medical students can imbibe values like respect, gratitude, compassion, care and dignity towards their first teacher. 

METHODS
This is an observational study conducted in the Department of Anatomy of J.N.M.C., Sawangi (Meghe), Wardha. On the first day of anatomy dissection, first year medical students were sensitized about the ethical approach towards cadaver. Students were given cadaveric oath. 220 students who participated in the study marked their responses to the questionnaire about the perceptions of cadaveric oath according to the 5 point Likert scale. Data was analysed statistically.

RESULTS
172 (78.18 %) and 182 (82.73 %) students strongly agreed upon the importance of cadaveric oath in anatomy learning and that it is unique and essential aspect of the medical curriculum respectively. Students agreed that this event helped them to overcome their inhibitions and the event was heart touching and empathetic. 98.18 % students strongly agreed that they should be thankful to the family members for the noble gesture of body donation. 95 % students strongly agreed that they are enlightened about the importance of once lived bodies while 97.73 % strongly agreed that cadaver should be treated with respect, compassion, care and dignity. 97.27 % students agreed that cadavers are their silent mentors. Students strongly agreed that cadaveric oath event should be continued for future medical undergraduates and there should be awareness about bioethical education among medical students.

CONCLUSIONS
In the present study, cadaveric oath ceremonies helped learners to develop empathy towards their silent mentors. Students strongly agreed that they will always remember the noble gesture of donors for donating their body for medical education and research which cannot be compared to any of the modern-day virtual dissection tool for anatomy learning.

KEY WORDS
Cadaveric Oath, Perceptions, Ceremony, Silent Mentor, Bioethics
In today’s scenario, the doctor-patient relationship is getting worse due to lack of communication skills and empathy among medical students.\(^1\) The need of hour is to develop best doctor – patient relationship. The attainment of the best professional principles, attitudes, expertise, and conduct begin on the first day of medical college and continues throughout.\(^2\) Hence Bioethics is introduced in the medical curriculum.

Since centuries human cadaveric dissection is used as an essential teaching tool in anatomy.\(^3\) Through cadaveric dissection, students are able to get the feel of the tissues and structures which leads to direct perception and deep learning of structure of the human body. But ethical and emotional aspects of it is often missed.\(^4\) The student - cadaver relationship stabilized on humanities can serve as a simulation for future doctor-patient relationship.\(^5\) It is an important step in the medical profession. A cadaver has a fundamental moral and ethical value that necessitates a solemn attitude towards it.\(^6\) Every human cadaver should be held in high esteem which undergoes anatomical dissection and enriches medical sciences. A cadaveric oath becomes an essential part of the medical curriculum to express students respect and gratitude to the donors and their families.

A Cadaveric Oath is a pledge which the students recite on the opening day of Anatomy learning, to pay tributes to the soul, to respect the dignity and integrity of the human remains that they are about to work on. To promote humanistic values such as respect, altruism, and responsibility among students memorial ceremonies of gratitude towards cadaver donors are conducted worldwide in many medical schools. South Korea has a strong tradition of the memorial ceremonies. There are two ceremonies, one at the commencement of the course (dae - myun - sik) and the annual ceremony (gam - eun - je) with the donors’ family. Besides these major events, daily at both the beginning and the end of dissections brief silent tributes are offered by the students.\(^7\) In Thailand, donors attain the highly regarded status of ajarn yai, the great teacher which is formalized in a ceremony called ‘Waikhru’ (honour the teacher).\(^8\)

The practice of students taking an oath prior to dissecting cadavers is essential in anatomy learning and unique aspect of medical curriculum. This is an innovative idea to imbibe the importance of their first teacher and first patient in the form of a cadaver. This approach will allow students to implement and practice humanistic and ethical values indispensable for laying a foundation for their clinical training and adequate future professional practice of medicine. The present study was carried out with the aim to sensitize the first year medical students about ethical approach towards the cadaver and comprehend them that the main ethical concern of cadaver dissection lies in respect to human life. The perceptions of students about cadaveric oath event were studied after sensitization.

**METHODS**

This study was conducted in the Department of Anatomy, J.N.M.C. Sawangi (Meghe), Wardha after obtaining IEC (Institutional Ethical Committee) clearance. Interactive lecture about the ethical approach towards cadaver was delivered on the first day of anatomy learning. First year medical students were first sensitized how to respect the cadaver after that they were given cadaveric oath by the faculties. Written consent was obtained from 220 students who participated in the study. Questionnaire about the perceptions of cadaveric oath event was given to students. Students marked their responses according to the 5 point Likert scale. With the help of questionnaire required information was collected.

**Statistical Analysis**

Statistical analysis was done by using descriptive statistics. 95 % confidence interval for the mean was calculated. The percentage of the students who were strongly agreed to the questionnaire was calculated as shown in the Table 1. Software used in the analysis was SPSS 24.0 version.

**RESULTS**

220 students of first year MBBS participated in the present study. After cadaveric oath perceptions of students were obtained. A cadaveric oath is important in anatomy learning was strongly agreed by 172 (78.18 %) students and its mean was 4.65 ± 0.76. Mean of ‘Cadaveric oath is unique and essential aspect of the medical curriculum’ was 4.73 ± 0.67 and was strongly agreed by 182 (82.73 %) students. 160 (72.73 %) students strongly agreed that this event helped them to overcome their inhibitions and its mean was 4.45 ± 1.01.

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Mean (± SD)</th>
<th>95 % CI for the Mean</th>
<th>Strongly Agreed Students (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 - There is importance of cadaveric oath in anatomy learning.</td>
<td>4.65 ± 0.76</td>
<td>4.55 - 4.75</td>
<td>172 (78.18 %)</td>
</tr>
<tr>
<td>Q2 - It is a unique and essential aspect of the medical curriculum.</td>
<td>4.73 ± 0.67</td>
<td>4.64 - 4.82</td>
<td>182 (82.73 %)</td>
</tr>
<tr>
<td>Q3 - Cadaveric oath event helps you to overcome your inhibitions.</td>
<td>4.45 ± 1.01</td>
<td>4.32 - 4.59</td>
<td>160 (72.73 %)</td>
</tr>
<tr>
<td>Q4 - Cadaveric oath event is heart touching &amp; empathetic.</td>
<td>4.35 ± 1.06</td>
<td>4.21 - 4.50</td>
<td>141 (64.09 %)</td>
</tr>
<tr>
<td>Q5 - You should be thankful to the family members for their noble gesture of donating body for medical teaching &amp; research.</td>
<td>4.98 ± 0.13</td>
<td>4.66 - 4.99</td>
<td>216 (98.18 %)</td>
</tr>
<tr>
<td>Q6 - After Cadaveric oath you are enlightened about the importance of once lived bodies.</td>
<td>4.95 ± 0.21</td>
<td>4.92 - 4.97</td>
<td>209 (95 %)</td>
</tr>
<tr>
<td>Q7 - Cadaver should be treated with respect, compassion, care &amp; dignity.</td>
<td>4.97 ± 0.18</td>
<td>4.94 - 4.99</td>
<td>215 (97.73 %)</td>
</tr>
<tr>
<td>Q8 - You accept the fact that cadavers are your silent mentors.</td>
<td>4.97 ± 0.16</td>
<td>4.95 - 4.99</td>
<td>214 (97.27 %)</td>
</tr>
<tr>
<td>Q9 - Cadaveric oath event should be continued for future undergraduate medical students.</td>
<td>4.81 ± 0.49</td>
<td>4.74 - 4.87</td>
<td>189 (85.91 %)</td>
</tr>
<tr>
<td>Q10 - There should be awareness about bioethical education (ethics of medical and biological research) among medical students.</td>
<td>4.89 ± 0.40</td>
<td>4.83 - 4.94</td>
<td>203 (92.27 %)</td>
</tr>
</tbody>
</table>

Table 1: Perceptions of 1st Year Medical Students Regarding the Influence of Cadaveric Oath Event

Mean calculated using 5-point Likert scalea = 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree; 95 % CI\(^b\) - 95 % Confidence interval; Percentage that responded “strongly agree”c.
Mean of ‘Cadaveric event is heart touching and empathetic’ was 4.35 ± 1.06 and strongly agreed by 141 (64.09 %) students. About 216 (98.18 %) students strongly agreed that they should be thankful to the family members for the noble gesture of body donation and its mean was 4.98 ± 0.13. Mean of ‘Students enlightened about the importance of once lived bodies’ and ‘Cadaver should be treated with respect, compassion, care and dignity’ was 4.95 ± 0.2 and 4.97 ± 0.18 and was strongly agreed by 209 (95 %) and 215 (97.73 %) students respectively. 97.27 % students agreed that ‘Cadavers are their silent mentors’ and its mean was 4.97 ± 0.16. ‘Cadaveric oath event should be continued for future medical undergraduates’ and ‘There should be awareness about the bioethical education (ethics of medical and biological research) among medical students’ was strongly agreed by 189 (85.91 %) and 203 (92.27 %) students and their mean was 4.81 ± 0.49 and 4.89 ± 0.40 respectively.

**Graph 1. Perceptions of 1st Year Medical Students Regarding the Influence of Cadaveric Oath Event on 5-Point Likert Scale**

**DISCUSSION**

Anatomy is a rigorous course which requires great dedication and devotion. To study human anatomy, cadavers are required in all disciplines of medical science. Cadaver-based anatomical education is a prerequisite for optimal training and is necessary for apprehension of the multidimensional body, learning the basic language of medicine and for development of future doctor-patient relationship. So, it becomes an essential part that students should start their anatomy dissection classes with a cadaveric oath thanking the almighty for giving them a human body to learn from.

In the present study 172 (78.18 %) students strongly agreed that cadaveric oath is important in anatomy learning and that it is a unique and essential aspect of the medical curriculum was strongly agreed by 182 (82.73 %) students. The domains of attitude and communications with emphasis on ethics need to be taught directly and explicitly throughout the undergraduate curriculum for which MCI implemented ATECOM module. In Thailand, two ceremonies are held to define an ethical framework related to the dissection courses: the dedication ceremony - some days before the first course session and the cremation ceremony - at the end of the course. A dignified “silent mentor” initiation ceremony is conducted in medical schools of Taiwan to strengthen student’s medical humanity and to increase their learning attitudes. In South Korea, anatomy professors provide lectures regarding professional attitudes while dealing with human cadavers on the first day of ceremony (dae - myun - sik).

About 160 (72.73 %) students strongly agreed that this event helps them to overcome their inhibitions and 141 (64.09 %) students strongly agreed that event is heart touching and empathetic. Halpern J commented that students should be sensitized so that they can develop an emotional attachment with the cadaver which can help them to understand the psychosocial factors contributing to a patient’s illness. Andrea Oxley da Rocha et al in their study remarked that empathy is an essential attitude for future medical professionals enabling them to provide more humanistic medical care.

In the present study about 209 (95 %) students strongly agreed that they should be thankful to the family members for their noble gesture of donating body for medical teaching & research. In the study conducted by Monika Lalit about 136 (98.55 %) students, while in study of Saha et al 98 % students had a sense of gratitude to people who donated their dead bodies. The unique concept of "Donor Luncheon," is introduced in the University of Oklahoma College of Medicine where prior to anatomy dissection students meet the families of the donor which enables them to maintain humanistic attitudes at the beginning of their medical career.

In the ATECOM competencies for Indian Medical Graduate, competency number AN82.1: Demonstrate respect and follow the correct procedure when handling cadavers and other biological tissues is included under the topic of Ethics in Anatomy. In the present study 209 (95 %) students strongly agreed that they are enlightened about the importance of once lived bodies while 215 (97.73 %) students strongly agreed that cadaver should be treated with respect, compassion, care and dignity. In the study conducted by the Monika Lalit, cadavers were once living humans like them was agreed by 116 (80.06
will contribute in making the empathetic doctors of tomorrow which in turn will help in simulation of better doctor-patient relationship.

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REFERENCES