



Original Research Article

A study among the first year MBBS students regarding the first exposure to the cadaver and impression about cadaveric oath in post Covid period in an Eastern India medical college

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ABSTRACT

Introduction: Cadaveric dissection is an integral part of teaching students of first professional MBBS. Oath taking is mandatory for teaching learning process according to National Medical Commission. The term "respect" is equality recognition.

Aim and Objective: The aim and objective is to perception and reaction of students, also its effect on teaching learning process.

Materials and Methods: A study is carried at Malda Medical College for a period of two years after covid 19. The study is carried just after admission of first year students regarding cadaveric oath ceremony. Responses are recorded in pre structured proforma and statistical analysis is made. Using Microsoft Excel 2019, the data is collected, tabulated, and interpreted.

Results: Various responses are recorded according to questionnaire.

Conclusion: It has been concluded that cadaveric oath ceremony has humanistic value to build up doctor-patient relationship in students. Students strongly agree that they will always remember the noble gesture of donors for medical education and research which cannot be compared to any of the modern-day virtual dissection tool for anatomy teaching-learning process.

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1. Introduction

The transformation of a medical student to a practitioner with professional principle and conduct should begin from the first day of a medical college. First year MBBS curriculum includes the basic subject of anatomy, physiology and biochemistry. Anatomy is a basic subject studied during medical learning dealing with the knowledge of study of the body structures, organ, and tissue. A descriptive knowledge of the anatomy is very vital for medical students to begin their medical career and later

become effective and competitive medical professionals. Brain death provides many of us with a one act of giving own body after death for medical education and research purpose and honoured beyond measure. Voluntary body donation is regulated by many acts. In India, the Anatomy Act enacted in 1948 to provide for the purpose of examination and dissection. Later on, the act is modified many times and ultimately following criteria has been defined for body donation. Bodies not suitable for donations are post-mortem body, death due to contagious disease, organ removed body except eye, bodies for medico-legal case, decomposed body. Though it is the lack of awareness of concern which is the main reason for less body donation.

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Now a days, body donation as well as organ donation is preferred side by side all over India. For this purpose, central government has opened an organization also. Cadaveric dissection is traditional method of teaching structural details of human body to medical students.¹ There is lecture class as well as demonstration classes take place in anatomy. Cadaveric dissection enables the students to appreciate the feel of human tissue and also awareness regarding the shape, position and consistency. The four basic principle of the doctor-patient relationship are trust, knowledge, regard, and loyalty.² Now-a-days, there is currently a loss of realiability between patients' families and doctors. To improve the doctor-patient relationship, the National Medical Council of India has newly introduced in the medical curriculum to train medical undergraduates from the first day of their entry into medical college.³ Studies have reported that student's reaction to dissection in anatomy may vary from gladness to anxiety and repugnance that may lead to some students even faints in the dissection hall.⁴ Medical students undergo various types of emotions like stress, anxiety, fear, and lack of concentration before seeing and handling the human body during dissection time. Even some students due to their religious stigmata does not touches the cadaveric parts such as vessel, nerve, muscles etc. But, during covid-19 pandemic, thanks giving ceremony to cadaver was different. At this time, student feels difficulty during orientation of organs and tissue within the body. While computer aided simulation of human body shows many benefit many studies have shown practical experience with cadaver and its oath remains superior to all other forms of instruction. Even after passing of first professional MBBS, they came to anatomy department especially for cadaveric dissection with new batches. Only by exploring a real human body a detailed knowledge of the normal orientation and organization of human body can be obtained. Clinical departments also require cadavers for live workshops to improve surgical skills and knowledge. Despite the importance of body donation for medical education and the advancement of medical science, cadaveric donation remains sub optimal because of lack of availability of cadavers. Under Anatomy Act of India, the unclaimed bodies have limitations and mostly they are not useful. Many responses have been noted during oath taking as well as performing dissection. In spite of various mixed emotions towards desecration, dehumanization, medical students should have right-minded respect for the bodies while handling cadaver during teaching-learning process.⁵⁻⁷ Then respect may develop towards patients in the future. Cadavers are the mainstay of learning and studying tool anatomy by dissection. The dissection will help the medical students gain knowledge through observation, identification, and palpation of various structures in the body. The spatial and tactile nature of the body may help students differentiate the normal and

anatomical variations that occur in the human body.⁸ The three-dimensional view of the different structures observed in the human body can be well appreciated in the anatomy research laboratory and can be used for educational as well as scientific research purposes. But ethical and emotional aspects of it is often missed. The student - cadaver relationship stabilized on humanities which can serve as a simulation for future doctor-patient relationship. Medical and paramedical students are the direct beneficiaries of the donated body. The obligations of the person who undertakes the dissection of a donated body are threefold: to oneself, to the donor, and to the community. Donating one's own body to medical science can be one of the best possible ways medical professionals can return the kindness to the community.

2. Aims and Objective

1. Perception and reaction to first year MBBS student on cadaveric oath ceremony.
2. To find out the effect of cadaveric oath during teaching, learning process.

3. Materials and Methods

For the last few year, cadaveric oath ceremony take place from the beginning of new curriculum of foundation course as per National Medical Commission. The study was conducted in the department of Malda Medical College for the batch of 2022-23, 2023-24. Preformed questionnaire in the English about the perception of cadaveric oath event is given to students. All the questions are supported by their new curriculum content and authenticated by a departmental faculty. The aim of the study is too made clear to the participants and consent is taken. The total time allotted to the participants to submit their responses is 20 minutes. Response is recorded. A cadaveric oath is a way to draw attention the truth that the cadaver in front of them is once alive. Statistical analysis is done. A preformed questionnaire is set and provided to the students just few days after the oath ceremony. The questionnaire are as follows and response is recorded in Likert scale.

4. Result

The study was conducted in the department of Malda Medical College for the batch of 2022-23, 2023-24 from the very beginning of their entry in the department. The head of the institution, Dean of the student affair and many more faculty from other department has been invited in the cadaveric oath taking ceremony. The session is conducted in the dissection hall during the period of foundation course. The students participated eagerly in cadaveric oath taking ceremony. They expressed gratitude to the silent mentor in the form of a Thank you card (six students), diagrammatic creation (ten students). The perception of

Table 1:

S.No	Questionnaire	1	2	3	4	5
1	Is there importance of cadaveric oath ceremony during learning?					
2	Do you feel any help at the end of the session?					
3.	Do you think they are your first teacher?					
4.	Do you think privacy kept in secret of cadaver?					
5.	Do you think cadaveric oath help you to overcome your phobia towards dead body?					
6.	Do you think dissection on cadaver help in future towards surgical aspect?					
7.	Do you think it should be continued in each session of MBBS curriculum?					

1 = Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly agree

students is obtained. 51% students shows importance of oath ceremony during learning. 44% students agree that it will help at the end of session and the remaining answers is shown in the graph below.

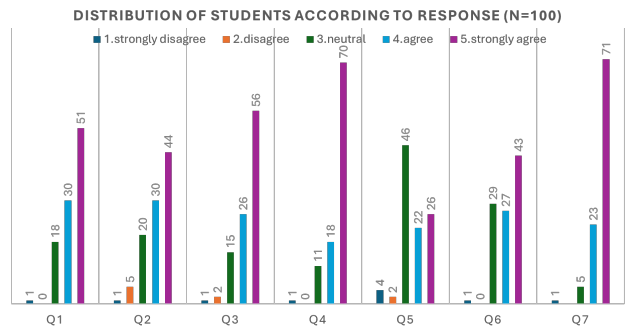


Figure 1: Distribution of student’s response according to the pre-structured questionnaire

5. Discussion

Anatomy is a versatile subject in medical curriculum. 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. Cadaveric dissection remains the best teaching modality in anatomy as it is expected to increase the visual as well as psychological aspects of medical students. The health-care professionals have done a great job in the past while advertising the fact that blood donation and organ donation is a noble act and have succeeded in increasing the



Figure 2: Oath taking ceremony at dissection hall in Malda Medical College

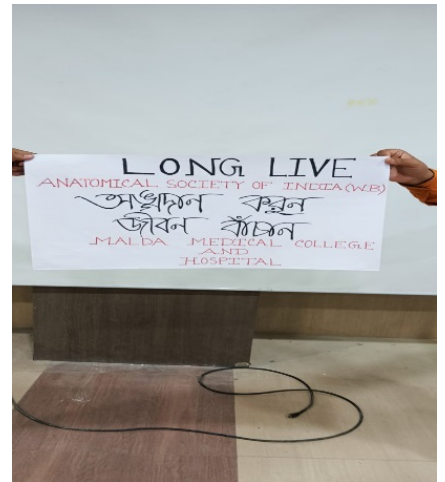


Figure 3: Placard display during Oath taking ceremony

rate of blood donors and organ donors. However, voluntary whole-body donation is still at its formative stage in our society. Any negative outcome is thought to be the result of inattention.

In the present study, 51% students strongly agreed that cadaveric oath is important in anatomy learning. Kache et al shows 77.50% students shows that oath is important in anatomy learning.⁹ So, attitude, ethics and communication is strongly implemented in our district. Lalit M et al also found that cadaver-based education must be a prereuisit.¹⁰ It is also corroborating with our study. According to Zehra et al., medical undergraduates who took part in dissection performed well in both theory and practical exams.¹¹ The result of our study is correlated with the observations of Alhassan and Majeed and Izunya et al.^{12,13}

About 56% students strongly agreed that they are first teacher in medical profession. This cadaver helps us to accruing knowledge in this medical field because they

are silent mentor which is not possible anywhere even in OPD and in patient department. Anne D Souza revealed that the module nurtured the value of professionalism and empathy.¹⁴ Kumar DV, Jayagandhi S et al shows students had empathy and compassion for the cadaver in their phenomenological study.¹⁵

70% student strongly agreed that the privacy should be maintained of the cadaver. In the study of Kache et al shows students strongly agreed that cadaver should be treated with respect.⁹ For their sacrifice in medical field, students are able to gather knowledges of medical field.

43% students strongly agreed that this oath taking ceremony overcome the phobia towards dead body. In Maharashtra, Kache et al found that 72.7% students strongly agreed that this incidence will overcome phobia.⁹ 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 psychological factors contributing to a patient's illness.¹⁶

Regarding dissection on cadaver help towards surgery skill in future, we found a mixed observation. 43% strongly agreed, 27% agreed and 29% becomes neutral on this point. Because incision over living skin and formalin embedded skin is different in texture.

71% students strongly agreed that it should be continued in every year. Kache et al found that 85.9% students is strongly agreed with that question.⁹ It should start at the beginning of the learning of Anatomy. They may serve as a powerful tool to define the atmosphere and provide an ethical framework around dissection. Kumar D, Murugan m et al also found that it can be conducted for future medicos to help them cherish the privilege of dissection which is not found in any other profession.¹⁷

6. Conclusion

It has been found that cadaveric oath ceremony helps learners to develop empathy towards their silent mentor in their novel profession. As per National Medical Council of India, attitude, ethics and communication module helps students in medical profession to build relationship in future budding doctor. It has potential to imbibe humanistic value among medical students. And this will help in simulation of best doctor-patient relationship which is very much essential now a days. This noble gesture of donors will always be remembered which cannot be compared to any of the modern too; virtual dissection table for any anatomy teaching learning process.

7. Conflict of Interest

None.

8. Source of Funding

None.

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