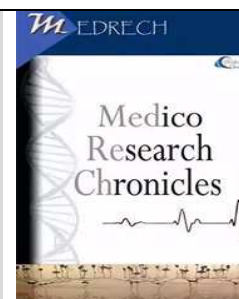




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DISSECTION HALL EXPERIENCE OF FIRST YEAR MEDICAL STUDENTS

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ABSTRACT

Background: Dissection is a special curiosity for First MBBS Students. It is remembered lifelong by medical students. The experience of dissection cannot be forgotten for life time. The first day of entering dissection hall remains the best memory for medical students. First Year Students are at cross roads. From a non-professional career they enter into a professional career. This sudden change and transformation has many implications. They take time to adjust to new form of education, responsibility and changes. Besides First Professional Studies are demanding as well. There are many modalities of teaching in the Subject of Anatomy like Theory, Practical's of Histology. Dissection is an entity special to Anatomy and very different from other skills. There is a special and unique response to dissection by first year medical student. It happens to be their first interaction with human body in real time. There is a range of feelings like excitement, fear, unpleasant feeling, fatigue associated with dissection. Dissection is the central pillar of anatomy. First year medical students on their encounter with the cadaver for the first time experience a variety of reactions and mixed feelings. The present study was carried to assess the experience of first year medical students towards the human cadaveric dissection and its physical and emotional aspects. **Materials & methods:** The present study was conducted on 125 first year medical students at SKIMS medical college Bemina Srinagar India. The students were provided with two sets of questionnaire and were asked to choose the appropriate option. **Results:** A total of 125 first year medical students (63male & 62 female) participated in the study. Majority (92.8%) of students were seeing the cadaver for the first time and were excited (72.4%). Almost all the students agreed that dissection is an important part of medical degree and is useful in the feature medical practice. **Conclusion:** In conclusion the present study has shown that if the students are properly educated and prepared about the cadaveric dissection they will respond in a more positive way and it will help to overcome the anxiety and fear related to it.

ORIGINAL RESEARCH ARTICLE

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INTRODUCTION:

Human anatomy is a science that deals with the structure of a human body. The word anatomy is derived from a Greek word "anatomē" which means cutting up. Dissection of cadaver has been the chief pillar for the understanding of anatomy. Dissection is a technique while as anatomy is a wide field of study. Anatomy knowledge forms the foundation of medicine and related professions.¹ Anatomy teaching in medical schools is based upon the use of cadaveric specimens either whole body specimens for complete dissection or as prosected specimens. The fact that a good medical or surgical practice could only be based on an adequate knowledge of human anatomy is derived from learning and teaching human dissection.² Dissection has also been called as the royal road and cadaver as the first patient.³ First year medical students on their encounter with the cadaver for the first time experience a variety of reactions and mixed feelings. The

RESULTS:

The results of this study are formulated in the tables shown below.

Table 1: Gender distribution of subjects

Total no. of students	Male	Female
125	63(50.4%)	62(49.6%)

Table 2: Response to questionnaire 1

S.no		Yes	No	Can't say
1	Are you seeing cadaver for the first time	116 (92.8%)	9 (7.2%)	
2	Did you feel excited after seeing the cadaver for the first time	88 (70.4%)	25 (20%)	12 (9.6%)
3	Have you ever had any fear, anxiety or stress with regard to the cadaver	7 (5.6%)	118 (94.4%)	
4	Did you have a pleasant feeling before entering the dissection room	85 (68%)	35 (28%)	5 (4%)
5	Did you have recurrent thoughts about the cadaver even when away from college	96 (76.8%)	29 (23.2%)	
6	Do you have recurrent smell of formalin	89 (71.2%)	36 (28.8%)	
7	Did you ever feel nausea, dizziness or fainting	38 (30.4%)	87 (69.6%)	

exposure to cadavers in the first year of medical school has both positive and negative reactions in the students. This study was conducted to assess the experience of first year medical students towards human cadaveric dissection in anatomy teaching.

AIMS AND OBJECTIVES:

This study was carried out to assess the experience of first year medical students towards human cadaveric dissection in anatomy learning and its physical and emotional aspects.

MATERIALS AND METHODS:

125 first year medical students (63 males and 62 female) of SKIMS Medical College Bemina Srinagar participated in this questionnaire based study. Supplementary students and readmitted were excluded from the study. Two sets of questionnaire were given to the students. One was given fifteen days after entering the dissection hall and another set was given four months after the exposure of dissection hall.

8	Were you explained about the composition of dissection before entering the hall	93 (74.4%)	30 (24%)	2 (1.6%)
9	Did you see human bone for the first time	105 (84%)	20 (16%)	

Table 3: Response to questionnaire 2.

S. no		Yes	No	Can't say
1	Do you feel that anatomy dissection is an important part of medical degree	125 (100%)		
2	Is dissection must to understand the gross anatomy	120 (96%)		5 (4%)
3	Should dissection be continued in the syllabus	112 (89.6%)		13 (10.4%)
4	Should cadaveric dissection be replaced by plastic models/ computer assisted training in future	5 (4%)	114 (91.2%)	6 (4.8%)
5	Will cadaveric dissection help you in future medical practice	123 (98.4%)		2 (1.6%)
6	Do you feel that interaction with anatomy staff before entering the dissection hall would lessen the emotional impact	88 (70.4%)	28 (22.4%)	9 (7.2%)
8	Is cadaveric dissection better than demonstration with prosected specimens	115 (92%)	10 (8%)	
9	Do you respect the cadaver	125 (100%)		

DISCUSSION:

Cadaveric dissection remains the most important means of teaching and learning anatomy. Previous literature reveals that there are varying responses regarding the attitude, emotions and views of medical students towards cadaveric dissection.⁴ The present study reveals a better/ positive outcome of students to dissection and its value in the learning and understanding of anatomy.

In the present study 50.4% students were males and 49.6% were females. Majority (92.8%) of the students were seeing the cadaver for the first time and they were excited (70.4%) after seeing it while as some (20%) showed a negative response. A study conducted by Nirmalya Saha⁵ showed that 96% students were seeing the cadaver for the first time and it was in contrast to a study conducted by Izunya AM et al⁶ in which 49%

students were seeing the cadaver for the first time. Initially about 5.6% of the students experienced fear and anxiety with regard to the cadaver and in a study conducted by Nirmalya Saha⁵ 3% students experienced fear and anxiety which is less as compared to (86.66%) shown by Agnihotri G et al.⁷ In this study 68% students had a pleasant feeling before entering the dissection hall and same (60.33%) was found by Agnihotri G et al.⁷ This study showed 76.8% students experienced recurrent thoughts about cadaver even when away from the college and Agnihotri G et al⁷ experienced such thing in 90% of the students and Nirmalya Saha⁵ found it in only 24.2%. In the present study 71.2% students experienced the recurrent odor of formalin which caused eye irritation and nasal congestion in the subjects. Dubhashi S et al⁸ found formalin odor in 71% of students and Agnihotri G et al⁷ experienced

the same in 66.67% of the students. About 30.4% students felt nausea and fainting during the dissection and was mostly found in female students due to weakness and a study conducted by Ruchi Ratnesh⁹ 53.33% experienced the same. In the present study 74.4% students agreed that they were explained about the composition of dissection before entering the hall. The study shows that the students should be properly explained and prepared emotionally for the dissection so that they get accustomed within few days to the dissection and the environment of dissection hall.

The present study showed 100% students agreed that dissection is an integral part of medical degree and 96% agreed that dissection is must to understand the human anatomy and its variability. It is supported by Izunya AM et al⁶ which showed 90% respondents considered cadaveric dissection plays an important role in the study of human anatomy. Patel and Moxham showed that 98% professional anatomist consider dissection important for learning gross anatomy.¹⁰ 89.6% students accept that dissection should be continued as a part of anatomy learning. The response shown to the replacement of dissection by plastic models and other methods was negative by majority of students (98.2%) which was in accordance with a study done by Mulu A et al¹¹ showing response in 83%. Parker LM.¹² reports that cadaveric dissection confers a better 3D appreciation of human anatomy as compared to plastic models .The manual skills learnt in the dissection has been considered as essential in almost every branch of medical profession¹³ and is evidenced in the current study by 98.4%.This study revealed that 70.4%students considered that a better interaction with anatomy staff would lessen the emotional impact, similar was found by Agnihotri G et al.⁷ This study revealed that majority (92%)students preferred dissection over prosected specimen, this finding is in line with the study of Izunya AM

et al⁶ that 71% students agreed that actual hands on practical sessions of cadaveric dissection give better results than demonstration of prosected specimens for good understanding. Similar finding 96.25% was shown by Rajkumari et al.¹⁴ The present study reveals that students (100%) treat the cadaver with due regard and respect as it is their first patient in their preclinical learning of anatomy and is supported by the findings of Nirmalya Saha.⁵

CONCLUSION:

Dissection is a fundamental anatomical need. It gives a distinct touch to Anatomy.

In conclusion the present study has shown that if the students are properly educated and prepared about the cadaveric dissection they will respond in a more positive way and it will help to overcome the anxiety and fear related to it. It also shows that majority of students prefer cadaveric dissection than prosection and do not prefer any other replacement like plastic models. A better interaction with the anatomy staff helps the students to deal with the emotional impact. Cadaveric dissection is undoubtedly an important part for knowing anatomy.

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