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A Questionnaire Based Prospective Study to Acknowledgement of Anatomical Sectional Skills and Implement Session in Workout for First Year MBBS Student For Cadaveric Dissection in Medical College: A Qualitative Research

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Abstract

Background: Anatomy, the study of the structures of the human body is one of the first, most fundamental and essential subjects studied by medical students in their medical education career. Hence; the present study was conducted in the department of human anatomy for acknowledging Anatomical Sectional Skills and Implement Session in Workout for First Year MBBS Student for Cadaveric Dissection in Medical College. Materials & Methods: A total of 100 first years medical students participated in answering the questionnaire. An interventional session was done after 1 month of entry of I MBBS Learners with General lecture followed by small group teaching with demonstration by trained faculty. The learners were allowed to practice. Later post-test analysis was done with same validated questionnaire. All the questionnaires were made to be filled by all the participants. All the results were recorded and analyzed using SPSS software. Results: Consistency of structures are better appreciated in dissection was the strongly agreed though process of 39 subjects. 56 students strongly agreed that Dissecting helps students to learn to respect the dead. 39 students strongly agreed that everyone is able to participate during dissection. 37 students strongly agreed that Entering dissection hall gives unpleasant feeling. 23 students strongly agreed that First encounter with dead body ever resulted in recurrent thoughts about it. 32 students strongly agreed that Instructor stimulates the interest in the subject. 29 students strongly agreed that Dissection enhances the thinking in logical manner. Conclusion: From the above results, the authors concluded that interventional sessions at the initial phase of learning would improve, stimulate, and increase the learners' participation in dissections.

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Keywords: Human Anatomy, Cadaveric, Dissection.

Introduction

Anatomy, the study of the structures of the human body is one of the first, most fundamental and essential subjects studied by medical students in their medical education career. Anatomy teaching in medical schools has been conventionally based around the use of human cadaveric specimens, either taking the whole-body specimens for complete dissection or individual specimens. The practice of cadaveric dissection allows students grasp the three-dimensional anatomy and concept of biological inconsistency and skill development[1-3].Cadaveric dissection is considered a tool for studying structural details of the human body. Major part of practical working in gross anatomy consists of cadaver dissection by students. This method of learning human gross anatomy is time-honoured and highly effective recent years. Time and again the relevance and value of dissection as a tool for teaching anatomy to medical students have been under discussion at different occasions[4-6]. The first-year medical students are exposed to the human cadavers during the dissection classes of anatomy subject for the first time ever. This contributes to a huge psychological and emotional shift to many of the students. The experience of the very first confrontation of the human cadaver and its effects on the physic, psyche and emotions of the students have been studied by multiple workers previously[6-8]. Hence; the present study was conducted in the

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department of human anatomy for acknowledging Anatomical Sectional Skills and Implement Session in Workout for First Year MBBS Student for Cadaveric Dissection in Medical College.

Materials & Methods

The present study was conducted in the department of human anatomy for acknowledging Anatomical Sectional Skills and Implement Session in Workout for First Year MBBS Student for Cadaveric Dissection in Medical College. A total of 100 first year medical students participated in answering the questionnaire. An interventional session was done after 1 month of entry of I MBBS Learners with General lecture followed by small group teaching with demonstration by trained faculty using projection of videos of how to use instruments, how to wear and remove gloves, how to wear mask, how to wash hands and techniques of doing dissection. The learners were allowed to practice. Later post-test analysis was done with same validated questionnaire. All the questionnaires were made to be filled by all the participants. All the results were recorded and analyzed using SPSS software.

Results

In the present study, a total of 100 medical students were enrolled. Questionnaire was filled by all the subjects. 35 students strongly agreed that Orientation of structures is better leant while dissecting. Consistency of structures are better appreciated in dissection was the strongly agreed though process of 39 subjects. 56 students strongly agreed that Dissecting helps students to learn to respect the dead. 39 students strongly agreed that everyone is able to participate during dissection. 37 students strongly agreed that Entering dissection hall gives unpleasant feeling. 23 students strongly agreed that First encounter with dead body ever resulted in recurrent thoughts about it. 32 students strongly agreed that Instructor stimulates the interest in

the subject. 29 students strongly agreed that Dissection enhances the

thinking in logical manner.

Table 1: Results of questionnaire

S No	Questions	Strongly agree	Agree	Disagree	Strongly disagree
1	Orientation of structures is better leant while dissecting	35	45	12	8
2	Consistency of structures are better appreciated in dissection	39	42	18	1
3	Dissecting helps students to learn to respect the dead	56	39	4	1
4	Everyone is able to participate during dissection	39	44	10	7
5	Entering dissection hall gives unpleasant feeling	37	44	17	2
6	First encounter with dead body ever resulted in recurrent thoughts about it	23	39	25	13
7	Instructor stimulates the interest in the subject	32	49	15	4
8	Dissection enhances the thinking in logical manner	29	51	8	12

Discussion

The medical students are first exposed to the anatomy during their undergraduate studies in India. The same is true for the other paramedical courses. Learning anatomy is said to be the basic pillar of the learning of all the medical sciences. 1 A Greek word meaning "to cut up" is the derivation of the modern term anatomy. In ancient times, the word anatomize was commonly used than the word dissect. 2 The cadaveric dissection is said to be an essential component to the anatomy curriculum. It provides a hands - on view to understand the various parts and system of the human body and also makes the medical students familiar to it[8-10]. Hence; the present study was conducted in the department of human anatomy for acknowledging Anatomical Sectional Skills and Implement Session in Workout for First Year MBBS Student for Cadaveric Dissection in Medical College.In the present study, a total of 100 medical students were enrolled. Questionnaire was filled by all the subjects. 35 students strongly agreed that Orientation of structures is better leant while dissecting. Consistency of structures are better appreciated in dissection was the strongly agreed though process of 39 subjects. 56 students strongly agreed that Dissecting helps students to learn to respect the dead. 39 students strongly agreed that everyone is able to participate during dissection. Biswas R et al assess the attitude and emotional reactions of first year Medical students to the dissecting cadavers. The attitude and opinion of students on cadaver dissection was assessed by a modified structured pretested questionnaire after one week of dissection class among all first-year medical students by cross-sectional design. Males and females were in the ratio of 7:3.88.3% complied that active involvement is necessary but only 10.9% told that models or virtual program could replace dissection. Altogether 49.6%% had experienced the excitement, 15.3% had experienced headache and sweating. 87.6%% were curious about cadaver dissection and 84.7 %were interested; however, 8% had negative feelings towards dead body. Majority of students opined cadaver dissection was the best method for learning and understanding Human anatomy[11]. In the present study, 37 students strongly agreed that Entering dissection hall gives unpleasant feeling. 23 students strongly agreed that First encounter with dead body ever resulted in recurrent thoughts about it. 32 students strongly agreed that Instructor stimulates the interest in the subject. 29 students strongly agreed that Dissection enhances the thinking in logical manner. Chaudhari G et al evaluated the approach, understanding and views of the first-year medical students towards the cadaveric dissection as well as its impact. Their study was conducted on a cohort of the first-year medical student, where a total of 324 students of first year MBBS were recruited and circulated a preset proforma of questions in the form of two separate questionnaires. The responses of the students were recorded and analyzed. It was observed that 97% of the students considered the cadaveric dissection an integral part of the anatomy curriculum. Majority of them were of the view that newer technologies are not superior to the traditional dissection. Various symptoms were found to be less prevalent amongst the students which could be the result of prior counseling.

Cadaveric dissection remains an inseparable part of the first-year anatomy curriculum. Students are of view that it is the best method to learn anatomy[12]

Conclusion

From the above results, the authors concluded that interventional sessions at the initial phase of learning would improve, stimulate, and increase the learners' participation in dissections. However; further studies are recommended.

References

- Mulu A, Tegabu D. Medical students' attitudinal changes towards cadaver dissection: A longitudinal study. Ethiop J Health Sci. 2012; 22(1):51-8.
- Nnodim JO. Learning human anatomy: by dissection or from prosections? Med Educ. 1990; 24(4):389-95.
- P Finkelstein, LH Mathers. "Post-traumatic stress among medical students in the anatomy dissection laboratory," Clinical Anatomy. 1990; 3(3):219–226.
- Vikani S, Gujar S, Parmar J, Vaisnani H, Gadekar S. Attitude & Reaction of 1st Year Medical Students Toward Cadaveric Dissection. Int J Res Med. 2017; 5(4):88-91.
- Saha N, Chaudhuri S, Singh MM. Attitude of First Year Medical Students in Dissection Hall. IOSR. 2015; 14(5):74-8.
- Gangata H, Ntaba P, Akol P, Louw G. The reliance on unclaimed cadavers for anatomical teaching by medical schools in Africa. Anat Sci Educ. 2010; 3:174-83.
- Patel KM, Moxham BJ. The relationship between learning outcomes and method of teaching anatomy as perceived by professional anatomists. Clin Anat. 2008; 21(2):182-9.
- Agnihotri G, Sagoo MG. Reactions of first year Indian medical students to the dissection hall experience. NJIRM. 2010; 1(4):4-9.
- Kaundal AP, Kaundal PK. Perception of students towards cadaveric dissection in a tertiary care teaching institution. Int J Res Med Sci. 2017; 5:3684-7.
- Williams SR, Thompson KL, Notebaert AJ, Sinning AR. Anat Sci Educ. Prosection or Dissection: Which is Best for Teaching the Anatomy of the Hand and Foot? 2019; 12(2):173-180.
- Biswas R, Bandyopadhyay R. Attitude of first year medical students towards cadaveric dissection: a cross sectional study in a medical college of West Bengal, India. Int J Community Med Public Health. 2019; 6:2679-83.
- Chaudhari G, Sonawane M, Singel TC. Importance of the human cadaveric dissection for learning anatomy by the first year MBBS students – An observational study. Indian J Clin Anat Physiol. 2020; 7(2):177-181

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