



ATTITUDE AND RESPONSE OF MEDICAL STUDENTS TOWARDS CADAVERIC ANATOMY

Anatomy

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ABSTRACT

Background: The 1st year medical students are underneath enormous anxiety as they are facing a skilled medical course that wants entirety commitment and attentiveness.

Objective: Therefore present study was designed to explore the attitude and response of medical students towards cadaveric Anatomy on first entry and after exposure to dissection.

MATERIAL & METHOD: This observational study was performed on newly admitted 100 1st year medical student, at the Department of Anatomy, C U Shah Medical College, Gujarat. All students were enrolled and their behaviour were observed at two time, one prior to dissection session, and second survey eight weeks after the first one. Standardized closed ended questionnaires prepared in suitable language, were used to collect relevant information from the students.

RESULT: The encouraging feelings included an inquisitiveness and attention to learn about the organization of human body. Out of 100 students 85% students was mental awareness to study cadaver at the commencement of the course whereas 15 % not prepared. Various students were observed that impact of cadaveric dissection sway on routine activity, like horrifying thoughts (12%), anorexia (12% loss of appetite), anxiety and sleep disorder (8%), Nausea (25%), Vomiting (10%), Fainting (14%), Dizziness (12%), palpitation (5%), Sweating (14%), Sleep Disturbance(8%), Eye Irritation(40%) and Smell (32%) 10% medical students were no experience any symptoms during 1st exposure of re-cadaveric dissection

CONCLUSION: our study shows most of students reported their 1st exposure thrilling to dissection hall. There is long period since dissection is a part of medical anatomy, and still it is the most excellent road map of appreciate anatomy subject, it's not substituted by any other tool and technique.

KEYWORDS

Medical Students, Behaviour, Response, dissection Hall

INTRODUCTION

Anatomy is the discipline which deals with the organization of the human whole body from gross to the microscopic stage. Person anatomy has for extensive been studied via dissection of cadavers which provided as the foundation for appreciative the organization and functions of human being body⁽¹⁾. As 1st years medical student begin their medical profession the study of the structure of the human body is one of the initial, most fundamental and so far one of the largely significant themes studied by medical students. More than 600 years the use human body cadavers as an education tool has been in rehearsal and customarily remains the support for the training and learning of human anatomy. In truth, Andreas was the initial medical scholar to dissect the cadaver and also sustained with it still as a professor⁽²⁾. Medical undergraduate students come across the certainty of life, morbidity and mortality during dissecting a cadaver the, overwhelming accountability of the physician considerate for the patient dissection puts under graduates medical students at the point end of medical education training. They may sense nervousness and strain not as aloofness but as a protective mechanism, frequently imminent for the first time, linking with authenticity and detached apprehension⁽³⁾. The 1st year medical student's wants total dedication and attention as they are underneath significant stress as they are face a medical professional course. Cadaver dissection is a psychologically exciting problem, though the morality of dissection for progression of medical science is extensively established, the emotional effect on 1st year medical students is frequently ignored. Cadaver Dissection has been entitled the "sharp-end" of medical teaching. Dissection has also been considered as the "imperial path" and cadaver as the "first patient"^(4,5). The first experience to human cadaver dissection has the latent to be a real stressor which can cause emotional shock. 1st year medical students problems about assault of privacy, cadaver resources, failing and death through dissection of a human body⁽⁶⁾. Several studies in different part of globe performed to assess the behaviour and response of medical students to human cadaveric dissection by different technique, there was not any comparable type of research done in Saurashtra region, Gujarat in best of my knowledge. Therefore present study was undertaken to attitude and response of medical students toward cadaveric dissection during anatomy teaching.

MATERIAL AND METHOD

This observational study was performed on newly admitted 100 1st year medical student, at the Department of Anatomy, C U Shah Medical College and associated hospital, Surendranagar, Gujarat. A total 100 Medical students of academic years (2015-2016), either sex, aged between 17-18 years were enrolled. Repeaters and re-admitted Medical students are excluded from the present study. This study was conducted in two different sessions (1st immediately after first experience to dissection hall and Cadavers and 2nd after 2 months of first session). Detailed closed ended structured questionnaires was formed in written proforma to collect various data from Medical student which include socio-demographic information, their experience during first exposure, encounter with various symptoms, various cope-up mechanism used by students to relieve the strain and different symptom. Essential instruction and direction given to the students prior fill up the questionnaires; the students had explained the aim of present study. Informed written consent was obtained from all the students prior to start the study. The study protocol was approved by institutional ethics committee. Anatomy dissection leftovers centre area for learning anatomy for undergraduate medical students in C U Shah College as like in every Medical college. The Medical College has an open, very well ventilated dissection hall with necessary facilities. Each year there is an intake of 100 medical students in college. According to teaching schedule students have to be present at Anatomy dissection minimum 12-15hrs per week average.

Result:

In present study, taken 100, 1st year medical students age ranging was 17-18. Out of 100 students' male were 59% and female had 41 % and dietary habit was vegetarian 85% Non vegetarian were 15%. Medical students were approaching from different Socio-demographic status like farmer, businessmen, Government service, private sector, and 18% from Medical family whose blood relation are doctors. All students had selected Medical education as by his choice, none of them had vehemently admitted. Out of 100 students 85% students were mental attentiveness to study cadaver at the commencement of the course whereas 15% not ready. Objective of present study to find out response of 1st year medical students toward cadaver, that we reported

as a variety of symptoms which are describe in table-1. In our study, main cause of this several symptoms were due to 40% by vision, 38% by smell, 32% by feel, 42% by fear of infection. Various students were observed that impact of cadaveric dissection sway on routine activity, like horrifying thoughts (12%), anorexia (12% loss of appetite), anxiety and sleep disorder (8%), Nausea (25%), Vomiting (10%), Fainting (14%), Dizziness (12%), palpitation (5%), Sweating (14%), Sleep Disturbance(8%), Eye Irritation(40%) and Smell (32%) 10% medical students were no experience any symptoms during 1st exposure of cadaveric dissection. Students were reported normal without any symptoms after few weeks that recorded in 2nd session when students tell about numerous defences mechanism used by them such as concentrate on job, praying, relaxation, staying in group. 18% students had earlier experience to cadavers through lifetime; only 6% Medical students were disturb at the commencement of dissection whereas all others were thrilled. on 2nd session we tried to find out behaviour of students toward dissection by different question associated to dissection and cadavers, we reported that 98 % believed dissection provides the most excellent technique for the knowledge of Anatomy, none of student was appreciate anatomy without attending dissection hall, only 2% in favouritism of cadaver dissection process can be substituted by plastic dummy models, interactive learning based education etc. in forthcoming time.

Table: 1. Symptoms in Medical Students During 1st experience of Dissection Hall

S No	Symptoms	Number of students in percentages
1	No Symptoms	10
2	Nausea	25
3	Vomiting	10
4	Fainting	14
5	Dizziness	12
6	Palpitation	05
7	Sweating	14
8	Anorexia	12
9	Sleep Disturbance	8
10	Eye Irritation	40
11	Smell	32
12	horrifying thoughts	12

DISCUSSION

Cadaver based anatomy education is a carry out mandatory for 1st year medical students for considerate a variety of anatomical vocabulary, standard look, preparation of body structure. Our study was performed in C U Shah medical college on a small sample size therefore our verdict may not be broadly universal stable, but it can crash on several issues. 98% medical students thought dissection provides the most excellent technique for the learning Anatomy, which also associate with other studies in which a few studies establish that improved groundwork of students was compulsory for dissection⁽⁷⁾.

In present study we found that behaviour of medical students toward dissection and percentage of students showing attention and enthusiasm for dissection augmented over the period of time, and unenthusiastic issue, anxiety, decreased as time passed. This type of response also observed in other studies⁽⁸⁾.

The findings of our study shows several symptoms for the duration of 1st exposure of dissection in which 40% eye irritation, 25% Nausea, 14% sweating, 19% loss of appetite, 8% sleep disturbance, 10% vomiting, fainting (14%) dizziness (12%) and palpitation (5%), which are reduce slowly. This study associate with observation study done at medical college in UK 5% of students relieves symptoms by repeated exposure to dissection⁽⁹⁾. Similar study performed by Mc Garvey et al⁽¹⁰⁾, in royal college of surgeons in Ireland and reported that on their first exposure and 2nd exposure after ten weeks to dissection hall showed a considerably diminish of several symptoms like nausea, eye irritation, loss of appetite. In this study we observed the enthusiasm and inquisitiveness of medical students toward cadaveric dissection was elevated, it modification well with another study done by Cahill and Ettarh⁽¹¹⁾ in Ireland, where 95% of Irish medical college students were interested with cadaveric dissection.

Another finding in our study was 80% students were emotionally ready for cadaveric dissection, 20% were prior exposure to cadavers which is important factor to reduce strain or anxiety toward cadaveric dissection, and they are healthy defence mechanism to relieve stress of

study, this finding associate with other study performed by Evans and Fitzgibbon⁽⁹⁾ who found most of 1st year medical students are mentally well prepared for cadaveric dissection in anatomy subject. Other finding by Chalton et al⁽¹²⁾ that 1st year medical students rapidly developed a coping mechanism and see the cadaver only as occupation. However Horne et al.⁽⁷⁾. We reported main reason of this various symptom was due to by sight, smell, touch and fear of infection, this type of out comes reported by other authors⁽¹³⁾. Another significant out comes was Gender difference, more females faces problem, symptoms, stress as compare to males medical students. Which was accordance with earlier study done by Snelling et al⁽¹⁴⁾.

In our study 2% medical students disagree with cadaver dissection method can be replaced by plastic dummy Models and interactive learning based technique. in close to future, this associate with a other study conducted by Mulu et al.⁽¹⁵⁾ at university of Gondar, which found that 81% of medical students opposed change of Dissection with various other methods. In contrast, two other studies done by Parker et al,⁽¹⁶⁾ & McLachian et al,⁽¹⁷⁾ and found that dissection provides enhanced thought of sensible observation of human anatomy, which is not possible with plastic dummy models or computerised technique⁽¹⁸⁾.

CONCLUSION

In conclusion, present study shows that most of medical students reported their 1st exposure thrilling to dissection hall. Students experience several symptoms such as Nausea, anorexia, vomiting while these symptoms reduce slowly. It also find out that visual irritation, sensation and formaldehyde smell is leading chief issue which can be reduced by local modification like well ventilated Dissection hall favoured centralised air conditioned and suitable attentiveness of fluid which used for safeguarding of cadavers. There is long period since dissection is a part of medical anatomy, and still it is the most excellent road map of appreciate anatomy subject, it's not substituted by any other tool and technique.

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