INTRODUCTION
Anatomy is the science which deals with the structure of the body from macroscopic to the microscopic level. Human anatomy has for long been studied through dissection of cadavers (Preserved Dead Bodies), which served as the basis for understanding the structure and functions of human body. When student begin their medical career the study of the structure of the human body is one of the first, most basic and yet one of the most important subjects studied by medical students. Over 500 years the use human cadavers as a learning tool has been in practice and traditionally remains the pillar for the teaching and study of human anatomy. In fact, Andreas was the first medical student to dissect the cadaver and also continued with it even as a professor. Student encounters the reality of life, morbidity and mortality during dissecting a cadaver the, the awesome responsibility of the physician caring for the patient Dissection puts undergraduates at the point end of medical education. They may experience anxiety and stress not as a detachment or indifference but as a defence mechanism, often coming for the first time, connecting with reality and detached concern. The medical students needs total dedication and concentration as they are under considerable stress as he is facing a professional course. Cadaver dissection is an emotionally charged issue, although the morality of dissection for advancement of medical science is widely accepted, the

ORIGINAL ARTICLE

Attitude & Reaction of 1st Year Medical Students Toward Cadaveric Dissection

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ABSTRACT
BACKGROUND: The medical student is under huge stress as he is facing a professional course that needs total dedication and concentration. This investigation is therefore designed to interpret student’s attitudes & reaction towards human cadaveric dissection on first entry and after exposure to dissection. MATERIAL & METHOD: A longitudinal survey was conducted among 150,1st year medical students in 2014 at the GMERS Medical College, Dharpur Patan, of Hemchandracharya North Gujarat University, Patan, Gujarat, India. All first year medical students (n=150) were included in the study where their attitudes were surveyed at two time points (one prior to dissection session, and second survey eight weeks after the first one).Standardized and pretested questionnaires prepared in English were used to collect relevant data from the subjects. RESULT: The positive feelings included a curiosity and interest to learn about the structure of human body. Out of 150 students 83% students was mental preparedness to study cadaver at the beginning of the course while 7 % not prepared. We find out main cause of this various symptom was due to 73% by sight,38% by smell, 25% by Touch, 23% by fear of infection. CONCLUSION: Before the formal dissection pre-education session should be conducted so, teaching begins which produce a sense of respect into the minds of the students and eliminate the feeling of anxiety. This will offer a stable mental status for the fresh medical students to handle higher levels of stress in their clinical careers, thereby reducing the drop-out rates.

Key Words: 1st year Medical students, Dissection, Reaction,
emotional impact on medical student is often ignored. Cadaver Dissection has been called the “sharp-end” of medical education. Dissection has also been labelled as the “royal road” and cadaver as the “first patient”. The first exposure to human cadaver dissection has the potential to be an actual stressor which can cause psychological trauma. First year medical student questions about invasion of privacy, cadaver sources, dying and death during Dissection of a human body during an anatomy course. Many studies in different part of world conducted to evaluate the attitude & reaction of medical students to human cadaveric dissection by various methods, there was not any similar type of study done at north Gujarat area, that’s why this study designed to record reaction of 1st year medical students toward dissection & how they cope up with various difficulties.

MATERIAL AND METHOD

Anatomy dissection remains core area for learning anatomy for undergraduate medical students in our college as like in every Medical college. The college has a spacious, very well ventilated dissection hall with necessary facilities, standard chemical level. Each year there is an intake of 150 students in college. According to teaching schedule students have to attend Anatomy dissection 9hrs per week average. The study was conducted on newly admitted 150 first year medical students of 2014-15 batch, of GMERS Medical College & hospital, Dharpur, Paten of Hemchandracharya North Gujarat University, Patan. Repeaters & re admitted students are excluded from the survey. Survey was conducted in two different sessions (1st – just after first exposure to dissection hall & Cadavers and 2nd – after 8 week of first session). For Study detailed Questionnaires are formed to collect different data from student which include socio-demographic data, their experience during first exposure, encounter with various symptoms, various cope-up mechanism used by students to relieve the stress & various symptom. Necessary instruction & guidance given to the students prior filled out the questionnaires, the students had explained the objective of study and verbal consent taken as well subject name was not written to keep anonymity. Data recorded from questionnaires and analyzed by using SPSS version 16.

RESULT

In our study we had taken 150, 1st year medical students average age was 17.out of 150 students Male – 56%, Female – 44%, had food habit was Vegetarian – 82.7% Non vegetarian- 17.33%. students was coming from different family like Farmer, businessmen, Government service, Private sector, and 12% from Medical family whose parents are doctors. All students had taken Medical field as by own choice, none of them had forcefully admitted. Out of 150 students 83% students was mental preparedness to study cadaver at the beginning of the course while 7 % not prepared.

Our main aim to find out reaction of 1st year medical students toward cadaver, that we record as various symptoms that given in Fig. No. 1

Figure 1: Symptoms suffered on 1st entry of dissection room:

We find out main cause of this various symptom was due to 73% by sight,38% by smell, 25% by Touch, 23% by fear of infection. various students was found that effect of cadaveric dissection Influence on routine activity , like Horrifying dreams, Loss of Appetite, shivering of hands, Fright and Sleep disturbance. students were fond normal without any symptoms after few week, that recorded in 2nd session when students told about various coping mechanism used by them like focus on task, praying, Relaxation, staying in group.20% students had prior exposure to cadavers during lifetime, only 8% students were upset at the beginning of dissection
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while all others were excited. On 2nd session we tried to find out attitude of students toward dissection by various question related to dissection and cadavers, we found that 94% said dissection gives the best method for the learning Anatomy, no one understand anatomy without attending dissection, only 6% in favors of cadaver dissection technique can be replaced by plastic Models, computer assisted training programs etc. in near future.

DISCUSSION
Cadaver based anatomy teaching is a perform requisite for 1st year medical students for understanding various anatomical terminology, normal appearance, arrangement of body structure. This study was carried out in one medical college on a small group of subjects, so our finding may not be widely general sable, but it can impact on various issues. 94% said dissection gives the best method for the learning Anatomy, which also correlate with other studies in which some studies found that better groundwork of students was necessary for dissection. In this study we found attitude of students toward dissection and percentage of students showing interest and excitement for dissection increased over the period of time, and negative factor, anxiety, decreased as time passed. This type of response also found in other studies.

The result shows various symptoms during 1st entry of dissection in which 89% Eye irritation, 40% Nausea, 20% sweating, 19% loss of appetite, 5% sleep disturbance, 4.7% vomiting, which are decrease gradually. This study correlate with survey done at medical college in UK 5% of students relieves symptoms by repeated exposure to dissection. Similar study by Mc Garvey et al, on royal college of surgeons in Ireland on their initial visit and 2nd visit after 10 week to dissection hall showed a significantly decrease of various symptoms like nausea, eye irritation, loss of appetite. In this study we showed the excitement and curiosity of students toward cadaveric dissection was high, it tuning well with the other study done by cahill and Ettarh in Ireland, where 95% of Irish medical college students were interested with cadaveric dissection. Another finding in our study was 83% students were mentally prepared for cadaveric dissection, 20% were prior exposure to cadavers which is important factor to diminish stress toward cadaveric dissection, and they are well cope up to relieve stress of study, this finding correlate with other study done by Evans and Fitzgibbon who found most of 1st year medical students are mentally well prepared for cadaveric dissection in anatomy subject. Other finding by Chalton et al that 1st year medical students rapidly developed a coping mechanism and see the cadaver only as occupation. However Horne et al said students who had prior exposure to cadavers are more sensitive and they need more attention by counsellor or departmental staff. We find out main cause of this various symptom was due to 73% by sight, 38% by smell, 25% by Touch, 23% by fear of infection, this type of finding reported by other authors. Another important finding was Gender difference, more females faces problem, symptoms, stress compare to males, 75% Female feels various symptom compare to 60% males. Which is supported by Snelling et al that emotional and physical impact much higher in females? In present study 95% students disagree with cadaver dissection technique can be replaced by plastic Models, computer assisted training programs etc. in near future, this correlate with a other study done by Mulu and colleagues at university of Gondar, which said 81% of medical students opposed change of Dissection with various other methods. Another study done by Parker and McIachian et al, found that dissection gives better idea of realistic view of human anatomy, which is not possible with plastic models or computerised technique. Moreover Azis et al has noted that the removal of cadaveric dissection from anatomy is bound to impair the student’s ability to apply scientific knowledge during diagnosis in clinical practise.
CONCLUSION

In conclusion, this study shows that most of students found their 1st visit exciting. Students feel various symptom like Nausea, loss of appetite, vomiting. But these symptoms decrease gradually. It also point out that eye burning sensation and chemical odour is leading factor which can be diminished by local adjustment like well ventilated Dissection hall preferred centralised air conditioned and appropriate concentration of fluid which used for preservation of cadavers. There is long period since dissection is a part of human anatomy, and still it is the best way of understand anatomy subject, it’s not replaced by any other modalities.

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