

TWO-WAY FEEDBACK BETWEEN THE STUDENTS AND FACULTY TO IMPROVE THE METHODS AND STYLE OF TEACHING ANATOMY TO UNDERGRADUATE MEDICAL STUDENTS

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ABSTRACT

Introduction: Anatomy is one of the oldest basic medical sciences, it is considered core to medicine as well as some associated and complementary health disciplines. Anatomy teachers continually look for implementing effective teaching and learning techniques that give the students a more interesting and advantageous experience in the course. The aim of the study is to improve the way of teaching anatomy with the help of suggestions from the medical and paramedical students itself through a set of questionnaires created by the department of anatomy in Autonomous State Medical College, Shahjahanpur, Uttar Pradesh. Effective feedback provides comprehensive data on student performance and could be linked to student self-esteem and motivation.

Methods and materials: This study was done at Autonomous State Medical College, Shahjahanpur, Uttar Pradesh which involved 100 MBBS 1st year students. The study involved both qualitative and quantitative methods. Quantitative data was received with the help of some sets of questionnaires. Qualitative evaluation was conducted through a group discussion with the students as well as the faculty members of department of anatomy.

Result and conclusion: 100% of the students agreed that it was a good step taken by the department to improve the teaching session. 94.3% of the students were of the view that the session helped them to identify their weakness and wanted this type of session to be conducted more.

KEY WORDS: Feedback, Anatomy Sessions, Questionnaires.

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Access this Article online	Journal Information
Quick Response code 	International Journal of Anatomy and Research ISSN (E) 2321-4287 ISSN (P) 2321-8967 https://www.ijmhr.org/ijar.htm DOI-Prefix: https://dx.doi.org/10.16965/ijar
	Article Information
	Received: 23 Apr 2020 Peer Review: 25 Apr 2020 Revised: None
	Accepted: 15 May 2020 Published (O): 10 Nov 2020 Published (P): 10 Nov 2020
DOI: 10.16965/ijar.2020.157	

INTRODUCTION

Anatomy is the scientific study of the structure of organisms including their systems, organs and tissues. It includes the appearance and position of the various parts, the materials from which they are composed, their locations and their relationships with other parts [1]. Anatomy is one of the oldest basic

medical sciences, it is considered core to medicine as well as some associated and complementary health disciplines [2].

Anatomy teachers continually look for implementing effective teaching and learning techniques that give the students a more interesting and advantageous experience in the course. The aim of the study is to improve

the way of teaching anatomy with the help of suggestions from the medical and paramedical students itself through a set of questionnaires created by the department of anatomy in Autonomous State Medical College, Shahjahanpur, Uttar Pradesh. Effective feedback provides comprehensive data on student performance and could be linked to student self-esteem and motivation [3].

Many strategies are used in medical education to improve student's learning and hence the achievement of learning outcomes with the aim to produce a health workforce that is capable to promote the society health status. The process of formative assessment is among those strategies and specially if it is associated with feedback to students [4, 5]. The ability of teachers to provide positive and constructive feedback to students relies on teachers themselves acknowledging factors that can facilitate the execution of their duties in a better way [6]. Recognition of the importance of the wider sociocultural context in which formative assessment takes place is essential to support student learning. Active participation is needed for the development of new identities within the practice environment [7].

MATERIALS AND METHODS

This study was done at Autonomous State Medical College, Shahjahanpur, Uttar Pradesh which involved 100 MBBS 1st year students. The study involved both qualitative and quantitative methods.

Quantitative data was received with the help of some sets of questionnaires.

Qualitative evaluation was conducted through a group discussion with the students as well as the faculty members of department of anatomy.

The objective of the discussion is to understand and take the views of the students. A two-way feedback delivery (TWFD) session was taken immediately after a part completion test (PCT) of the unit after it has been completed. The entire session was divided into two parts. The first part was providing feedback to the students about their performance in the recently conducted Part Completion Test (PCT). In this session the

teacher explained all the answer in which the questions considered tough were given concern with the help of powerpoint presentation as well as verbally. In this way a discussion between the students and the teacher was initiated.

The second part was an open discussion in the presence of the faculties wherein the students came forward with their issues and concerns related to the subject. Also, they were allowed to put forward any suggestion related to the method of teaching in the lecture theatre and the way the PCT was being conducted.

All the concerns and suggestions of the students were gathered through a set of questionnaires which were developed according to the Likert-type rating scale. This scale included the level of agreement and disagreement in the form of ratings from 1-5 wherein 1 was for strongly disagree and 5 was for strongly agree.

The questionnaires were according to the situations and teaching methods of the faculties. Some extra space was also provided for the students to express their views and note down any suggestions they wanted to give regarding any issues related to anatomy classes.

Few students were called to attend a short discussion with the faculties wherein their concerns were noted down. Before proceeding ahead, the consent of the students was taken. This study was approved by the ethics committee here at ASMC, Shahjahanpur, UP, India.

RESULTS

A total of 88 students participated in the session. The views of the students were recorded with the help of a set of questionnaires.

Total no of students participated- 88

	Agree	Neutral	disagree
The session was interesting	80 (91%)	6 (6.8%)	2 (2.3%)
It is a good step taken by the department to improve the teaching session	88 (100%)	0	0
Feedback after the session helps us to let teachers know what more can be done to gain from the lectures	83 (94.3%)	5 (5.7%)	0
Regular advise from teachers helps me to point out my weakness	81(92.1%)	4 (4.5%)	3 (3.4%)
I would want this type of session to be conducted more.	83 (94.3%)	4 (4.5%)	1(1.1%)

It is clearly evident from the table above that the session was a success. 100% of the students agreed that it was a good step taken by the department to improve the teaching session. 94.3% of the students were of the view that the session helped them to identify their weakness and wanted this type of session to be conducted more.

Some of the comments recorded during the group discussion supported the above results:

- **Student 1:** This session helped me to identify my weakness and work hard on it.
- **Student 2:** This session made anatomy subject very fun to study.
- **Student 3:** It allowed us to put forward our views regarding the topic.

Student 4: The session was very helpful and we would like this type of sessions to be conducted on a regular basis.

DISCUSSION

Based on the data observed through the questionnaires and the number of students participating, it was found that the session was actually a good way to improve the method of teaching anatomy as the faculties received a good idea about what the students feel and how they want to study. This also gave opportunities to the faculties as to how more sophisticated and improved methods can be introduced in the classrooms during anatomy lecture sessions. Ramani and Krackov stated that formative assessment and feedback are crucial to the educational means and supporting students to approach their greatest potential. The procedures and circumstances for valuable feedback delivery are well reported and include a particular learning environment; a "two-way conversation"; and acknowledgement and reinforcement of good practice [8].

O'Farrell concluded that good quality, complete and timely feedback is a very influential factor in driving student learning. Assessment should afford feedback to students on their advance towards the accomplishment of learning outcomes. Feedback will allow students to understand where they have done properly and shown what they

could develop on, as well as explain the grade/mark of summative evaluations. The higher cognitive centers in adults are specialized in adopting the perception of learning and reasoning, and then interpreting them into intellect by accumulation of various experiences [9]. Panasuk and Lebaron identified that adult learners have strong abilities to link learned theoretical knowledge with experimental learning experiences [10] while Howley and Martindale illustrated that medical learners are self-motivated to learn and possess desire to be recognized in professional settings; in order to achieve these outcomes, they seek feedback and reinforcement about their performances and future goals [11].

Students are often not able to perform well even after good lectures because of inadequate good feedback as according to Bruner, there are four modes of learning: a) learning by seeing; b) learning by listening; c) learning through experimental or constructive methods; and d) learning by observing those with greater knowledge. Student dissatisfaction is often based on receiving insufficient guidance in feedback [12]. But above all that, the relationship between a student and teacher has to be good enough so that the feedback provided by the teacher to the student is been accepted properly. The dynamics of the roles that lie between these two entities vary from one faculty to another. Dialogue is a type of feedback that is communicative, cooperative, and conservative in origin. The real meaning of dialogue is the sharing of views, ideas, and insights of both parties to form an inference that is productive in nature [13]. These findings are in alignment with the literature; researchers stated that formative assessment followed by feedback help students to narrow their gaps, to self-regulate their learning, and to improve their self-efficacy [14,15].

CONCLUSION

From this research study, it can be said that the feedback method is a good approach to evaluate the method of implementing new ideas to make the study easy and interesting through the direct feedback of the students

concerned. The students took interest in participating in the feedback through the sets of questionnaires developed according to Likert rating scale but was modified looking at the present scenario. Based on all the feedbacks received it can be said that TWFD is a good method to work on areas for both the teachers and the students.

Conflicts of Interests: None

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How to cite this article: Sumit Debnath, Kewal Kishore Thakur, Kamaldeep Singh Balowria. TWO-WAY FEEDBACK BETWEEN THE STUDENTS AND FACULTY TO IMPROVE THE METHODS AND STYLE OF TEACHING ANATOMY TO UNDERGRADUATE MEDICAL STUDENTS. *Int J Anat Res* 2020;8(4.1):7749-7752. DOI: 10.16965/ijar.2020.157