

STUDENTS PERCEPTION ON INTERNAL ASSESSMENT IN ANATOMY

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ABSTRACT

Background: Assessment is one of the most important aspect of teaching and learning process. Various assessment methods are available to assess the knowledge & skills of students. The objective of the study was to know views of the students regarding the best assessment method in anatomy.

Materials and methods: Inputs from 200 MBBS students were collected who completed first year MBBS. A questionnaire which included questions relating to various assessment techniques for theory & practical internal exams in anatomy was used to get the feedback from the students.

Results: Majority students felt that internal assessment should be conducted thrice in a year. The assessment methods preferred by them was written test for theory in the form of SAQ & SEQ and MCQ also should be included in it. Many students felt that internal assessment should be the criteria for allowing students to appear in university examinations but disagreed to include the internal assessment marks in university examination.

Conclusion: It is important to obtain more frequent feedback from the students which will help teachers to modify the assessment methods and improve the standards of medical education.

KEY WORDS: Internal Assessment, Student, Method, Feedback, Anatomy.

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Access this Article online	Journal Information
Quick Response code  DOI: 10.16965/ijar.2019.264	International Journal of Anatomy and Research ICV for 2016 90.30 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: 26 Jun 2019 Peer Review: 27 Jun 2019 Revised: None
	Accepted: 05 Aug 2019 Published (O): 05 Sep 2019 Published (P): 05 Sep 2019

INTRODUCTION

A systemic process of collecting, analysing and interpreting data in order to validate or judge students is assessment. It is one of the most important aspect of teaching and learning process [1]. Traditionally assessment was done at the end of the term or the academic year. Later internal assessment was introduced in medical curriculum [2]. The impact of assessment on student learning is profound. Recent research suggests that examinations are more powerful drives of student learning [3-4]. It also measures

knowledge and competence and provides feedback to teachers and learners [5].

A wide range of assessment methods currently available include essay questions, modified essay questions (MEQs), multiple choice questions (MCQs), objective structured clinical examination (OSCE), student projects, short case assessment and long case assessment, logbook, video assessment, simulators, peer assessment and standardized patients [6]. Medical anatomy is an important subject of first year of MBBS course. Progress of students in anatomy is

assessed by using written, practical & viva voce examination. Practical assessment is done with the help of spotters & discussions on already dissected specimens and viva voce on bones and models. In a written examination the questions can be asked in different ways eg. Long essay questions (LAQ), short essay questions (SEQ), short answer questions (SAQ) and (MCQs) [7].

LAQ assesses critical thinking skills and writing abilities of student but limited content of subject is assessed [8]. SAQ is an open ended semi structured question format and larger portion of the subject can be evaluated [6].

Structured essay question (SEQ) is an open ended question containing structured components and expects specific answers to those components. These questions are used to test the knowledge as well as the capacities of analysing, reasoning, application and integrating. SEQ helps in evaluation of interpretative skills [9].

MCQs are reliable, valid and assess the large amount of knowledge but less powerful to assess problem solving skills of students [10].

It is necessary to review the assessment methods at regular intervals. Various evaluation tools

such as students feedback help the faculty to identify the strong & weak points of their assessment methods and allows to modify and improve the assessment method [11]. With this background this study was undertaken to assess the student perception about frequency, interval & format of internal assessment in anatomy.

MATERIALS AND METHODS

200 MBBS students in Vydehi Institute of Medical Sciences & Research Centre, Bangalore were exposed to regular teaching pattern in anatomy. We conducted three internal examinations for theory & practical as well as part ending tests were also carried throughout the year. This study was conducted once the students had completed their first year MBBS examination. A specially designed questionnaire was developed which included close ended questions relating to various assessment techniques for theory & practical internal exams in anatomy. Students were also asked to suggest improvements in assessment techniques. The questionnaire was explained to students. They were asked not to reveal their identity while answering the questionnaire. Data thus obtained was analysed considering each question of the questionnaire.

Table 1: Perception of students regarding internal assessment in anatomy.

Number	Questions	Options	Number of students	%
1	How frequently the internal assessment should be conducted	a. weekly	7	3.50%
		b. Once in a month	30	15%
		c. Part completion	53	26.50%
		d. Thrice in a year	110	55%
2	Internal assessment examination should be conducted for	a. Theory	9	4.50%
		b. Practical	5	2.50%
		c. Both theory & practical	186	93%
3	How many marks a theory paper should have?	a. 50 marks	36	18%
		b. 100 marks	164	82%
4	Which type of question is the best form of assessment?	a. Long question	14	7%
		b. Short essay	105	52.50%
		c. Short answers	81	40.50%
5	Which type of question is easier to answer?	a. Long essay	23	11.50%
		b. Short essay	61	30.50%
		c. Short answers	116	58%
6	Which type of questions will fetch more marks?	a. Long essay	11	5.50%
		b. Short essay	53	26.50%
		c. Short answers	136	68%
7	Which type of question is time saving?	a. Long essay	3	1.50%
		b. short essay	12	6%
		c. short answers	185	92.50%
8	Which type of question test knowledge of the topic?	a. Long essay	52	26%
		b. Short essay	67	33.50%
		c. Short answers	81	40.50%

Table 2: Perception of students regarding internal assessment in anatomy.

Number	Questions	Options	Number of students	%
9	Do you think the questions asked are relevant?	a) Agree	178	73.50%
		b) disagree	7	3.50%
		c) neither agree or disagree	15	7.50%
10	Adequate time was allotted for writing the theory paper?	a) Agree	159	70.50%
		b) Disagree	23	11.50%
		c) Neither agree or disagree	18	9%
11	Should MCQ be included in theory paper?	a) Agree	126	63%
		b) Disagree	25	12.50%
		c) Neither agree or disagree	49	24.50%
12	Was internal examination leading to absentees in the class?	a) Agree	149	74.50%
		b) Disagree	27	13.50%
		c) Neither agree or disagree	24	12%
13	Was internal examination stressful?	a) Agree	147	73.50%
		b) Disagree	22	11%
		c) Neither agree or disagree	31	15.50%
14	Should internal assessment be the criteria for allotting students to sit in university exams?	a) Agree	92	46%
		b) Disagree	66	33%
		c) Neither agree or disagree	42	21%
15	Should internal assessment marks be included in university exams?	a) Agree	58	29%
		b) Disagree	92	46%
		c) Neither agree or disagree	50	25%
16	Best assessment technique for practical examination	a) Viva on soft parts	85	42.50%
		b) Viva on hard parts	13	6.50%
		c) Viva on models	22	11%

Table 1&2 shows the perception of undergraduate students towards the internal examination. As evident from the table many students opined that the internal examination should be conducted thrice in a year for both theory & practical examination. In the present study many of the students felt that a theory paper should carry maximum 100 marks. Short essay question (SEQ) was considered as the best form of assessment in theory by 52.5 % of students. Majority of the students favoured short answer questions (SAQ) over other two formats as it was easier to answer, time saving & fetch more marks. With regard to a method to test the knowledge of the topic SAQ was preferred by 40.5% of students followed by short essay question (33.5%). Further analysis of data revealed that 63% of students agreed to include MCQ in theory paper. In terms of questions asked were relevant 89% of students answered in the affirmative. Majority of the students (79.5%) felt that time allotted for writing the theory paper was adequate. Best assessment technique to measure

skills in practical exam should be viva voce on dissected parts (42.5%) followed by spotter examination (40%). Most of students agreed that internal examination is stressful & cause of absentees in the class. In the present study 92(46%) students felt that internal assessment should be the criteria for allowing students to appear in university examinations and 66(33%) students were disagree for it. There was disparity in students about including internal assessment marks in university exams. 46% of students disagreed whereas 29% of students agreed to add the internal assessment marks in university exams.

DISCUSSION

Assessment is central to the educational process. It shows how well students have learnt the subject [5]. Interim assessment stimulates student to learn better and to increase their score of the final examination [12].

In our study majority of students preferred internal assessment should be conducted for

both theory & practical examination. Considering the interval of internal assessment about 55% students preferred test three times in a year. In study by S K Nagar et al. [13]. 70.80% students preferred weekly test whereas in study conducted by Rashmi Jaiswal et al. [14]. 47% students were in favour of part completion test and in study by Chakrabarti S et al. [15]. 55% students preferred monthly assessment.

In our study many students felt that a theory paper should carry maximum 100 marks. In terms of best form of assessment in theory short essay question (SEQ) was preferred by 52.5% of students in the present study which is similar to the study conducted by Rafique et al. (38.8%) [11]. In the study by Jaiswal et al. [14] 55.03% students favoured combination of descriptive and short essay questions with multiple choice questions whereas in study conducted by Chakrabarti et al. [15] students preferred short answer questions (SAQ) as the best method of assessment. Majority of students in the present study favoured SAQ over other two formats as it was easier to answer, time saving & fetch more marks as well as test the knowledge. A study done among second year students of Subbaiah medical college [16] revealed that SEQ helps to fetch more marks whereas in study by Sharma et al [9] found that MCQ scores are higher than SEQ scores.

In present study 63% of students recommended to include MCQ in theory. In RGUHS (Rajiv Gandhi University of Health Sciences) a combination of long essay questions, short essay questions & short answer questions are presently used for assessment of theory. Many undergraduate students were satisfied with the questions asked in the written examination (89%) and allotment of sufficient time for writing theory paper (79.5%). In the present study best assessment technique for conducting practical examination was viva voce on dissected parts (42.5%) followed by spotter examination (40%) which is similar to study done by Jaiswal R et al. [14] in the study by Chakrabarti et al. [15] students preferred combination of spotter, discussion on gross specimen & discussion on histology.

Most of the students agreed that internal examination is stressful and cause absentees

in the class. 46% of students felt that internal assessment should be criteria for allowing students to appear in university examinations whereas in study done by Jaiswal et al. [14] only 29.4% students agreed for performance in internal assessment should be considered. In the study by Rafique et al. [11] 55.7% students felt that internal assessment & class attendance both should be taken into consideration for allowing students to appear in university examination. There was disparity in students about including internal assessment marks in university exams. 46% of students disagreed whereas 29% of students agreed to add the internal assessment marks in university exams.

CONCLUSION

Overall students were satisfied with the internal assessment. The assessment methods preferred by them was written test for theory in the form of SAQ & SEQ and MCQ also should be included in it. Majority of students opined that best assessment technique for practical examination should be viva voce on dissected parts and internal assessment should be conducted thrice in a year. Many students felt that internal assessment should be the criteria for allowing students to appear in university examinations but disagreed to include the internal assessment marks in university examination.

This study shows that there is a constant need for modification and improvement of assessment methods. It is important to obtain more frequent feedback from the students which will help teachers to modify the assessment methods and improve the standards of medical education.

ABBREVIATIONS

MEQ - Modified essay question

MCQ - Multiple choice question

OSCE - Objective structured clinical examination

LAQ - Long easy question

SEQ - Short essay question

SAQ - Short answer question

Conflicts of Interests: None

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How to cite this article:

Swapnali Shamkuwar, Varsha Mokhasi. STUDENTS PERCEPTION ON INTERNAL ASSESSMENT IN ANATOMY. *Int J Anat Res* 2019;7(3.3):6939-6943. DOI: 10.16965/ijar.2019.264