ISSN: E: 2319-6475

Available Online at http://journalijcar.org

International Journal of Current Advanced Research
Vol 5, Issue 2, pp 615-617, February 2016

International Journal of Current Advanced Research

ISSN: P: 2319 - 6505

RESEARCH ARTICLE

EVALUATION OF KNOWLEDGE AND ATTITUDE AMONG FIRST YEAR STUDENTS TOWARDS MCQ LEARNING

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A R T I C L E I N F O

Article History:

Received 06th November, 2015
Received in revised form 14th December, 2015
Accepted 23rd January, 2016
Published online 28th February, 2016

Key Words: Teaching Method, Evaluation, Active learning, MCQ'S

A B S T R A C T

The study was done to bring out the perception of the First Year MBBS students of regarding the prevailing system of teaching methods, to evaluate the extent to that they're benefited by these & to get the views and suggestions of scholars concerning numerous aspects of the present medical education. 135 students were selected from first year for this study. A set of questionnaires were place and directed to decide on the suitable possibility as per the likert scale. The response were collected and analyzed. 65% of students very much liked solving mcq's,54% of students expressed interest to solve mcq's before going to exams. 38% of students expressed that they were terrified solving mcq's. 67% of students felt confident solving mcq's, 57% students opined that future theory evaluation should be based on mcq's. 71% of students felt solving mcq helped them in remembering , analysing , evaluating and understanding difficult medical concepts.

INTRODUCTION

In the last twenty years, the importance of teaching analysis has been stressed in educational activity. Several Medical faculties have researched for ways that of effectively and constructively measures the performances of their students[1-3]. The teaching analysis system depends totally on student evaluation of teachers and courses,, and peer faculty reviews. Indian medical education system has seen rapid growth within last two two years. From a very small range, the number of Private medical colleges have grown up to account of more than half of all the medical colleges of India in 2011 and consequently, India has the highest number of medical educators in the world.

To enhance eminent communication, medical academicians are more and more using teaching-learning media.It is accepted that the students learn once they are concerned actively in learning than once theyare passive recipients of instruction[4]. Active learning methodsare often designed to target visual learners through models and demonstrations, active learners through discussion, debates, games and proprioception and passivelearners through models and role playing There is little or no documentation of the effectiveness of varied active learningmethods, and infrequentlycollegeare reluctant to include such new ways into the teaching syllabus[5]. There has been a growing concern among medical educators regardingthe standard of medical graduates trained in medical schools in our country. Several committees have suggested restructuring of the under graduate curriculum there fore on address the health desires of the community and also the country[6]. unfortunately, important changes don't seem to be happening for varied reasons. hence in our study we tend tohavevaluate the effectiveness of mcq resolution in creasing the active learning among medical students.

MATERIALS AND METHODS

A set of closed ended questions was displayed in class , to assess their MCQ'S skills and their involvement in MCQ'S Solving activities. First year MBBS students of 2015-16 batch participated by voluntarily in the study by responding to the questions provided to them during class. A batch of 150 students participated on 3 different days teaching class and responded to the questions.

Assessment plan: (Statistical Analysis)

Data will be entered in Microsoft excel and analysed using SPSS software version 18. The demographic data will be analyzed as frequencies, measures of central tendency and dispersion. Chi- square test and Fishers' exact test will be used to compare the data in proportions. Non-parameter tests like Mann-Whitney U test will be used. Response to questions was assessed by item analysis.

Selection criteria

- Inclusion criteria:- medical students.(Ist, IInd and IIIrd phase students)
- Exclusion criteria:- non medical students, Interns , PG medical students.

Table no 1 Feedback questionnaire: Fill respective alphabets- A,B,C,D& E for each 1-10 questions.

Sl.no	Questions	Likert scale
1.	Do you like solving multiple choice questions??	a. Strongly agree b. Agree c. Neither agree or disagree d. Disagree e. Strongly disagree
2.	Do you like to solve multiple choice questions before for exams??	
3.	Do Multiple choice questions activity terrified you ???	
4.	Do you feel confident while solving MCQS??	
5.	Do you feel classes with mcq for teaching /learning activity should be more in the future??	
6.	MCQ'S help you in remembering difficult concept in biochemistry ??	
7.	MCQ'S help in understanding concepts in biochemistry	
8.	MCQ'S help in applying biochemistry concepts in real life	
9.	MCQ'S Help in analyzing biochemistry concepts in clinical cases?	
10.	MCQ'S shall Help in Evaluating , creating and innovating new concepts in biochemistry	

RESULTS

Table no. 2 "MCQ'S KAP Study Responses"

Question	Options & Response (n =135)			
Do you like solving multiple choice questions??	Yes 60%	No 28%	Neither yes or no 15%	
Do you like to solve multiple choice questions before for exams??	Yes 66%	No 5%	Neither yes or no 27%	
Do Multiple choice questions activity terrified you ???	Strongly agree 25%	Agree 11%	No 58%	Neither yes or no 7%
Do you feel confident while solving MCQS??	Strongly agree 13%	Agree 53%	Not interested 15%	Neither yes or no 17%
Do you feel classes with mcq for teaching /learning activity should be more in the future??	Strongly agree 29%	Agree 48%	No 22%	Neither yes or no 7%
MCQ'S help you in remembering difficult concept in biochemistry ??	Strongly agree 58%	Agree 22%	No 10%	Neither yes or no 8%
MCQ'S help in understanding concepts in biochemistry	Strongly agree 31%	Agree 41%	No 18%	Neither yes or no 10%
MCQ'S help in applying biochemistry concepts in real life	Strongly agree 41%	Agree 33%	No 8%	Neither yes or no 16%
MCQ'S Help in analyzing biochemistry concepts in clinical cases?	Strongly agree 33%	Agree 54%	No 8%	Neither yes or no 3%
MCQ'S shall Help in Evaluating , creating and innovating new concepts in biochemistry	Strongly agree 40%	Agree 33%	No 10%	Neither yes or no 17%

Table no3 Pre test and Post Test MCQ'S Results -class average score

Class	Number students	MCQ'S	Pre test score	Post test score	Topic covered
Theory 1	130	1-	1.7	3.2	Thyroid function test
Theory 2	126	10	1.5	4	Liver function test
Theory 3	110	10	2.1	4.5	Renal function test

DISCUSSION

Responses for Top 10 questions out of total questions are shown in Table no.1, Among 150 students 135 students participated in the study and submitted their responses, out of which male participants were 43% & female participants were 55%.. Such access to such enormous information could bring about changes in the attitude of the medical student towards the goal of academic excellence and incorporating MCQ'S assisted learning which is monitored by teaching faculty could be novel step in achieving this goal.135 students were selected from first year for this study. A set of questionnaires were place and directed to decide on the suitable possibility as per the likert scale. The response were collected and analyzed. 65% of students very much liked solving mcq's,54% of students expressed interest to solve mcq's before going to exams. 38% of students expressed that they were terrified solving mcq's. 67% of students felt confident solving mcq's, 57% students opined that future theory evaluation should be based on mcq's. 71% of students felt solving mcq helped them in remembering, analysing, evaluating and understanding difficult medical concepts.

An evaluation given by students will offer the teacher with helpful feedback. Many psychological science studies have discovered the validity and accuracy of students' opinion furthermore as their near correlation with 'objective' measurements of the instructor's effectiveness [7].The many biases that were earlier ascribed to participants evaluators have largelyverified to be of negligible importance [8].

Hence the present study has been designed within thevariety of a type ofthe target to elicit the perception of the scholars concerning the utility of the prevailing system of teaching and to judge the extent to thatthe studentsare benefited by these methodologies.

Reason for absence of students from the classes, the participants pointed out that teaching method of faculties as a major factor. [9]

At the same time participants suggested that the teaching should be done by both black board and audio visual aids which correlates with the study done by Kaushik Bhowmick*et al*[7].

One reason for this could be ignorance regarding the advantages of evaluation by pretest and posttest. Many students expressed the benefits of mcq's which if properly introduced, mcq will go an extended means in teaching medical students in future. Regarding the distribution of teaching hours for theory and practical (clinical) classes most of the participants preferred for allotment of more hours for

practical / clinical teaching with more mcq's , as in the study conducted by Garg, A. *et al*.[10]

CONCLUSION

The wider use of MCQ'S pretest and post will result in enhanced student active learning [1,2]. About the evaluation of knowledge and attitude towards mcq's, most of the participants expressed multiple choice questions as preferred method of evaluation might be due to the trend amongst the students for the preparation of post graduate entrance examinations from 1st Year Professional MBBS onwards.

Thus, it should be concluded from the current study that the feedback from the students had facilitated a changein the preconceived notions regarding teaching learning principles on thea part of the college. This result are of tenutilized indesigning medical educaiton and planning medical education programs..

Planning for effective medical education programs that are to be tailored to lecturers desires regarding their ability to guide students' learning. We tend to hope that this paper can encourage different college to work with their students in establishing what the students' most well-liked and least preferred teaching methods.

This will give knowledge which will be discussed by teachers with the data that the knowledge is provided by the students they teach and may be the beginning of the involvement of studentsin the learning methodologies.

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