



ORIGINAL RESEARCH PAPER

Pharmacology

Instant Recall Ability Assessment And Testing In 2nd MBBS UG Student-Pharmacology And Therapeutics

KEY WORDS: Recall Tutorial, Quiz, Viva, Question card

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ABSTRACT

Background:- Lack of weightage of immediate recall exercises (except viva) in the internal assessment can defeat purpose of making complete clinician.

Methods:Therapeutics:- being the part of health system, we have designed methods by combining set of exercises (viz. question cards, quiz, scores and tutorials , viva) to evaluate and develop immediate recall abilities. The questions were asked and scores recorded based on correctness and completeness of answer, by a knowledgeable person.

Result:- 9 out of 10 willing participants have scored above 50% in examination paper writings, whereas none could reach 50%score in immediate recall ability exercises.

Conclusions:- Separate weightage in internal assessment on these exercises may be given for making a student, a complete clinician of future because bedside teaching, learning, diagnosis and treatment are important in health services related to medicine faculty.

INTRODUCTION:MUHS has defined curriculum for second year undergraduate medical students in which pharmacology is taught in their 3rd,4th and 5th semester. 1

The students knew their weakness and wanted an improvement of teaching technique, so asked for more sessions in pharmacology.2

In medical education technology many important aspect teaching, learning and evaluation are dealt with sufficient emphasis and details. Problem based learning method alone or along with traditional learning has been adopted in about 60 medical schools worldwide.3 Immediate recall ability plays important role in problem based learning.

Tutorials is another bilateral communication method of teaching and learning, which prepares the student to face viva voce during practical examination. There is growing concern of dislike developed against tutorial in second MBBS student in pharmacology. This is because the students probably don't want their incomplete knowledge and/or inability to explain in front of other classmates.This is also associated probably with their disinterest in reading and learning the topic much in advance of final exam preparation. Most students prepare themselves during preparation leave, gain least deep learning and most learning by superficial way. Another reason that their carrier is based on multiple choice question based entrance examination.Hence they are least bothered about deep learning. There are other important aspects like immediate recall ability development and its testing-need to be considered. Lack of prescribing skill is one of the factor responsible for irrational use of medicine which is a major problem worldwide.4

In medical field bed side teaching, learning, diagnosis and treatment are integral parts. After passing the base line and specialised knowledge and training examinations, doctor has to examine, diagnose and treat the patients of different diseases. At this stage deep learning along with superficially learnt fact need to be recalled and linked to benefit of the patients.We have designed a method /technique which encourages the student to gain the required knowledge and tested their ability to recall it.

MATERIALS AND METHODS: Willing participant of 2013 batch undergoing training of pharmacology & therapeutics were included. Different aspect on which their ability was tested or as follows:

- 1) Answering the the question card : .card containing 4 to 8 questions answerable orally were asked to each of participant and score was recorded based on correctness and completeness of answers by knowledgeable person. this carried maximum 8 marks.
- 2) Scores in tutorials: The participants while undergoing learning by tutorial method were evaluated by scoring out of 10 marks on similar criteria of correct and completeness of answers.
- 3) Quiz: At the completion of 1st term syllabus topics, the participants were exposed to different rounds in the group of 2 students per team. This carried 48 marks .
- 4) Viva-voce: .At the end of each term , internal assessment examination as per syllabus is conducted .the viva voce carried 10 marks each after 1st and 2nd internal assessment while 14 marks in the prelim exam. Evaluation carried out in three phase manner –out of 34 marks. During undergraduate medical practical examination viva voce is integral part of assessment system in India.5,6,7.
- 5) Drug selection: of anti-hypertensive in patients with different clinical co morbidities was asked and score recorded for each of the correct reply. This carried 15 marks.

MCQ is single best response based exercise in undergraduate examination and therefore there are chances of being fraudulent, hence may not reflect students own knowledge.MCQ mostly will reflect the superficial knowledge by way of ticking correct guesses in single best response type. MCQs although immediate recall has not been included along with these set of exercises because it is the part of theory and is weighed in internal assessment.

Overall evaluation out of 139 marks was recorded and considered in this study The above-said methods qualified on merit of no spoon feeding on question of above said technique i.e. no question and or its answer was disclosed to the participants prior to their participation. Other exercises like pharmacy viva, criticise correct and rewrite were not included, as the answers of these were disclosed to them earlier in revision practical.

DECLARATIONS

Funding: There is no funding in this study.

Conflict of interest: Nil

Ethical approval: Not require

OBSERVATION AND RESULTS:

In the table of observation it is clear that out of 115 none has

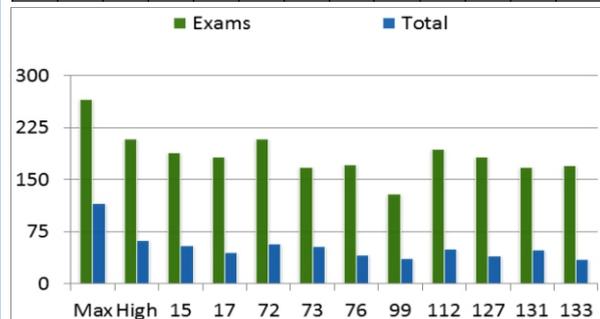
scored 57.5 i.e. 50% of the marks.

Heads	Max	High	15	17	72	73	76	99	112	127	131	133
Q.Car d	8	5	5	0	3	5	3	5	4.5	3	4.5	3
Tuts	10	8	4	4	8	6	8	4	6	4	8	4
Quiz	48	20.1	20.1	20.1	19.2	19.2	8.7	8.7	13.6	10	13.6	10
Viva 1	10	7	5.5	4.0	6.5	6	5	4	7	6.5	3	3.5
Viva 2	10	6.5	6	5	6	6.5	6.5	4	4.5	3	5	5
Viva 3	14	10	9.5	9.5	9	5	6	6	10	7.5	8	6.5
Anti-HTN	15	6	4	6	5	6	4	4.5	4	6	6	3
Total	115	62.6	54.1	44.6	56.7	53.7	41.2	36.2	49.6	40	48.1	35

Whereas Table 2 and graph indicate that 9 out of 10 participants has scored more than 50% and above in their terminal exams.

Table 2

Heads	Max	High	15	17	72	73	76	99	112	127	131	133
Exams	266	208.5	189	182.5	208.5	167	171	129	193	183	168	170.5
Total	115	62.6	54.1	44.6	56.7	53.7	41.2	36.2	49.6	40	48.1	35



DISCUSSION : To produce effective and competent Indian medical graduates, active, skill based learning and outcomes have been focused by medical council of India in Vision 2015⁸

The exercises included for the purpose of evaluation and of development of recall ability contained mostly the questions answerable orally and immediately, and were of no spoon feeding pattern. Results have clearly differentiated that the score in such type of exercises is less than the scores in terminal examination, in other words the training received by these students to become a good clinician on the basis of immediate recall by linking the knowledge is not good enough, we are only testing the combination of superficial and deep learning in the method of terminal exams and there is at present no inclusion in curriculum separately in such type of task/exercises. There is need of separate internal assessment pattern emphasis which should cover immediate recall by linking abilities. Such separate provision of internal assessment marks will create the interest compulsorily to be learned along with the existing examination pattern, to make them more complete clinicians of utility to mankind. Utilization of the academic expert knowledge in pharmacology for health care does not match its availability - has been concluded by WHO.⁹

Therapeutics can be thought in final MBBS along with clinical subjects separately. Exposure of students to various disease specific case scenarios through active learning techniques may develop good prescribing practice and critical clinical thinking¹⁰ Internal personal skills can be developed by working in groups on case studies¹¹

Separate weightage in internal assessment to these exercises including tutorial will create fresh interest in students to start attending and participating actively in tutorials for the scores.

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