

# Integrated teaching - Students Perspective

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[Received: 25/05/2013, Revised: 10/07/2013, Accepted: 12/07/2013]

## Abstract

**Introduction** The innovative new MBBS curriculum that has been structured to facilitate horizontal and vertical integration between various disciplines bridges the gaps between theory and practical, between Hospital based Medicine and Community medicine.<sup>1</sup> Material and methods-This was a vertical module of integrated teaching. Topic chosen was hepatitis B, students answered a pre tested questionnaire with 5 questions. Result -The topic chosen was Hepatitis B infection after a meeting with the concerned teaching faculty from Department of Pathology, Biochemistry, Microbiology, Pharmacology, Community medicine, and Medicine. The feedback was evaluated. Factors that helped learning- Response rate was 79 %, (n=83). 78 (93.97%) students gave reasons of factors that helped them learn, 05 students ( 6.02%) said no factors helped them learn. Knowledge provided was 45 that is 54.2%, power point was 3.6%, were the main factors that helped many students learn. Discussion-Teaching learning methods are changing, in order to make the learners learn the concepts of medicine more clearly, integrated teaching method can be incorporated on a routine facilitating better understanding. Conclusion This type of teaching would involve clinical faculty as well as basic sciences and vice versa, helps in linking the topic with what is taught earlier.

**Key words:** Integrated teaching, curriculum.

## INTRODUCTION

The innovative new MBBS curriculum that has been structured to facilitate horizontal and vertical integration between various disciplines bridges the gaps between theory and practical, between Hospital based Medicine and Community medicine.<sup>1</sup>

Integrated Teaching is an important strategy to promote meaningful learning and make it last for a longer time; integration helps to efficiently recall knowledge when required<sup>2</sup>.

Integration is the most needed for basic sciences, integration for all subjects ensures continuity of learning and avoids duplication and redundancy<sup>2</sup>.

The dictionary meaning of word integrate is to form a more complete or coordinate entity often by addition or rearrangements of elements or organization of teaching matter to inter relate or unify subjects usually taught in separate departments<sup>2</sup>.

Medical council of India desires the incorporation of integration in medical curriculum in order to provide students with holistic rather than compartmentalized learning.<sup>3</sup> Rajiv Gandhi University of health sciences curriculum proposes 30 hours of integrated teaching in the Department of Medicine<sup>3</sup>. 148 hours for II

MBBS, that is 36 hours for Pathology, 36 hours for Microbiology, 10 hours for Forensic medicine, 36 hours for Pharmacology and 20 hours for community medicine.

Unless we train our students the way to learn through integrated teaching right from the beginning, it is difficult to accept it later on. The changing medical practice over years also demands that physicians are prepared to the multi disciplinary expertise for patient care thus the need for integrated teaching to be inculcated<sup>4</sup>.

## METHODS

As per MCI guidelines integrated teaching has become a part of regular teaching in the curriculum for MBBS students in our institute. To improvise the methodology and to know the benefits and pitfalls of the same; a study on feedback evaluation of the programme was undertaken. 105 MBBS Students belonging to II phase, who attended the 5th integrated teaching, were included for the study. This was a vertical module of integrated teaching. Topic chosen was hepatitis B, students answered a pre tested questionnaire with 5 questions, concerned with areas of strength of integrated teaching, which aspects helped them learn, time management and also included open and closed ended questions.

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The data from the questionnaire was compiled and analyzed based on their answers to the feedback questions in order to improvise the teaching technique.

**RESULTS:**

The topic chosen was Hepatitis B infection after a meeting with the concerned teaching faculty from Department of Pathology, Biochemistry, Microbiology, Pharmacology, Community medicine, and Medicine. The feedback was evaluated.

Table 1: The following were the factors concluded to be the Strengths and Weakness of the teaching methodology

2.strengths	No of students	3. weakness	No of students
Faculty who taught	29	Faculty	11
Information provided + knowledge	05 16	Exhaustive information	03
Topic chosen for this teaching	18	Topic/Concept	03
Interest created	04	Monotonous	03
Interactive method	02	Less interest	03
Powerpoint prepared	08	Power point prepared	03
n	80	n	75

Q.1 Whether integrated teaching module was helpful.

Response rate for the question was 85.7 % (n=90), 80.95%felt helpful, 3.15 % felt it to be not helpful and 16.66 % said can't say.

Q.2and Q.3 was an open ended questions to know the Strengths and Weakness of the teaching methodology.

Response rate was 78% (n=82) for Question.2 and 71.4 %(n=75) for Question 3

Q.4. Factors that helped learning

Response rate was 79 %, (n=83), 78 (93.97%) students gave reasons of factors that helped them learn, 05 students ( 6.02%) said no factors helped them learn. Knowledge provided was 45 that is 54.2%, power point was3.6%, were the main factors that helped many students learn. Other factors they found to be helpful were, topic chosen10 (12%), teacher who taught 3(3.6%), interaction (3.6%), one student felt it was easy understandability when topic was integrated.

Q.5. Attitudes of students to clarify their doubts by asking questions  
44 students (53.1%) were encouraged to ask questions, 39 students (46.9%) felt they were discouraged to ask questions.

**DISCUSSION**

As is your pathology so is your medicine as said by William Osler Pathology forms the basis of medicine and prepares students for clinical practice. The conventional practical examination is beset with several problems. The final score indicating overall performance gives no significant feedback to the candidate and are not based on demonstration of individual competencies.<sup>4, 5, 6</sup>

Objective structured practical examination is one of the new exam system designed to make assessment objective, valid and reliable. Over the years, experience has led to the use of OSPE not merely as an evaluation tool and also method of assessment in the international medical school. This has largely been attributable to the feedback that OSPE gives both to students and teachers.<sup>1</sup>

OSPE model in pathology was introduced for eighty one undergraduate medical students of second MBBS after briefing about the new system of examination. Feedback given by students was constructive which are presented in Table 1. OSPE was seen as a positive and a useful practical experience by most students (82%). We find this congruent with other study in which students perceived OSPE as a favorable experience that should be repeated regularly.<sup>1</sup> Feedback from students (74%) suggests that OSPE is an objective tool in evaluating practical skills. Students perceived OSPE scores as a true measure for essential practical skills being evaluated, standardized and not affected by student personality. Standard to check the competencies are made earlier and agreed check lists are used for marking and evaluation <sup>4,7</sup>.

Students provided positive feedback about the quality of OSPE performance in terms of the instructions of the exam (62%) and individual competencies being assessed (72%). Examiner variability can be reduced by adopting structured practical examination. In addition to the above points, OSPE ensures integration of teaching and evaluation. <sup>7</sup>

The evaluation of OSPE by students highlighted some areas that need to be enhanced in future, such as inadequate time at procedure stations. OSPE was perceived as a stressful experience by 31% of students. This perception could be due to the fact that this was the first time that OSPE has been implemented in Pathology. Hence, it was a new experience

for all medical students which made them anxious about it.

From the students' point of view, OSPE was acceptable and generated wide appreciation. Feedback from the students indicated that students were in favor of OSPE. The feedback provided scope for improvement and refining the method. It serves as a tool for testing multiple dimensions of student performance because it tests both skills as in performance exercises and knowledge. Present study was helpful in sensitizing the student towards OSPE.

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