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#### of students and **Perception** faculty regarding implementation of Case Based Learning in Pre and Para clinical **MBBS** students

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#### Introduction

Curricula at business, law, and many medical schools now have analysis of real world case studies. Professors in a variety of disciplines to teach content involve students with real life data and provide opportunities for students to put themselves in the decision maker's shoes. They "bridge the gap between theory and practice and between the academy and work place" (Barkley, Cross and Major 2005, p.182) There is growing emphasis in many Indian medical schools to decrease the quantum of rote memorization and to adopt learning strategies that enhance critical thinking among students (Ghosh, 2007).

Case based learning (CBL) can be used as an effective learner centred teaching tool in medical colleges to promote self directed learning. Actively involve students, Promotes empathy with patients, help to practice problem solving, to blend cognitive and affective dimensions.

Working effectively within teams has been recognized by medical educator as an important competency for learners. Teams are increasingly being used in medical education to enhance active learning and foster better interpersonal communication skills. (Roa & Shenoy, 2013). Case scenarios typically focus on the

intersection between organizational or situational dynamics and individual perception, judgement, and action (Boehrer and Linsky, p.45).

The study was planned to assess feasibility of Case based learning (CBL) in Pre and Para clinical students of M.B.B.S, to collect perspectives of CBL from faculty and the students.

## **Objectives:**

- To use case based learning as a TL tool to reinforce the knowledge acquired by the traditional class room lecture.
- To analyse perceptions of the faculty and students regarding introducing Case based learning as teaching learning tool.

#### **Materials & Methods:**

This cross-sectional study was planned to assess perceptions students and faculty regarding implementing CBL in I & II MBBS (Pre & Para clinical) teaching at Apollo Institute of Medical sciences & Research, Hyderabad for a batch of 100 students each.

**Source of Data:** Pre and Para clinical medical students and faculty, Apollo Institute Medical Sciences and Research, Hyderabad.

**Inclusion criteria**: students given consent to participate

**Exclusion criteria**: disinterested students

Sample size: 100 students from preclinical and 100 students from Para clinical phases, 36 faculty members.

This prospective study is done to assess perceptions of faculty and students regarding CBL as TL tool to reinforce the acquired knowledge from lecture classes.

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Before starting this study Institutional ethical committee approval was taken.

Students and faculty were oriented to CBL sessions. Case scenarios were prepared for few clinically significant topics after consulting respective clinicians & faculty of pre and Para clinical departments. CBL sessions were conducted; pre-validated feedback

forms in the form questionnaires were given to faculty as well as students to collect their perceptions. Perceptions on CBL were recorded using a separate questionnaires in which responses were graded on Likert scale from strongly agrees to strongly disagree.

## **Methodology**:

The students were given complete information which included history, signs and symptoms and investigations with results of the given case.

Facilitator was allotted

Students were divided into groups, various learning issues were specified

Intersession period

Students used all the resources such as library, internet and other sources of gathering information

Case was analysed by different groups

Students discussed in the group and also with the facilitators

Each group presented their analysis

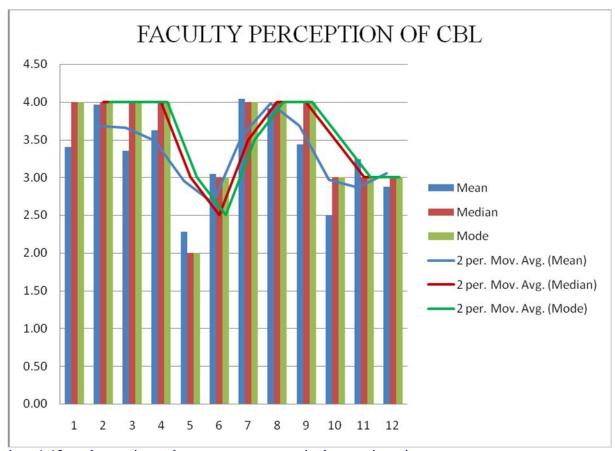
The Facilitator refined the various analyses and gave the final report

Develop a concept map of protocol for the disease

## **Results**

## Faculty perception in implementation of CBL

S.No	Statement	Percentage
01.	In your opinion whether students had nicely prepared the topic and were clear	52%
	about what they wanted from you	
02.	CBL method has facilitated the teaching and learning	72%
03.	It is not possible to evaluate the students when they are exposed for a small	52%
	period for CBL and rest of the time on traditional method	
04.	CBL method has developed positive attitudes in students towards medical	60%
	education resulting in increased satisfaction with the course	
05.	By CBL method I feel that teaching time is reduced	16%
06.	I find students are discussing more with others, than after a lecture.	28%
07.	The model of education (CBL method) is worth trying in other semesters	68%
08.	This model has produced integration of thoughts to modify the curriculum	64%
09.	By CBL method student-teacher interaction has improved	56%
10.	CBL method is useless for our traditional examination pattern	8%
11.	The CBL method has stimulated the students to have more active involvement	32%
	in patient management	
12.	Students have reported that the CBL method is time consuming	28%

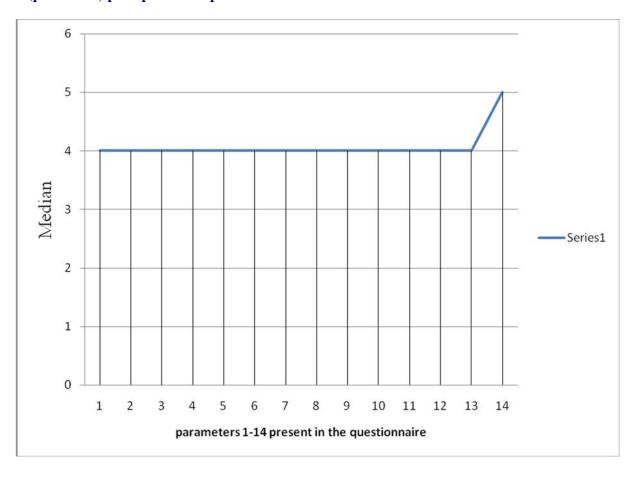


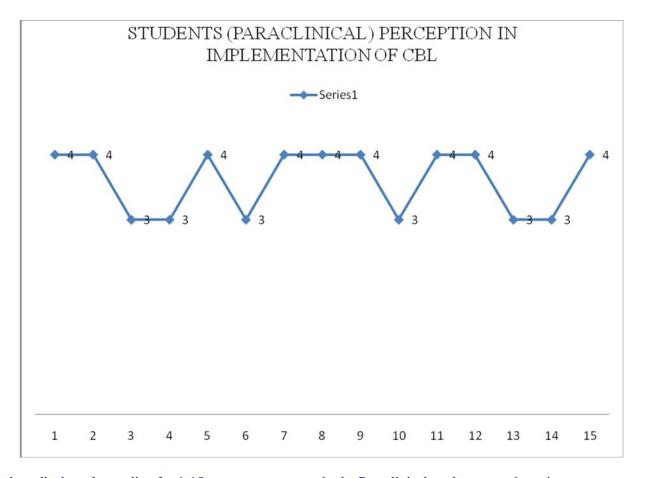
Numbers 1-12 on the x-axis are the parameters present in the questionnaire

## Students (pre/paraclinical) perception in implementation of CBL

Sl.No	Statement	Percentage
01.	Benefits of case based learning in medical education is significant	83.53%
02.	Helped in improving understanding further	80.48%
03.	Process encouraged student responsibility for the learning objectives	71.34%
04.	This method enabled me to develop good interaction with the faculty and co-	70.11%
	learners.	
05.	Can be used along with lectures	71.95%
06.	Conducted in a systemic manner	64.02%
07.	Facilitators were helpful	81.7%
08.	Presentations helped to learn better	75.6%
09.	Given opportunity to express	84.14%
10.	Do you like other topics to be dealt by this method	
11.	This method has improved problem solving ability	73.16%
12.	Can be continued for future batches	77.43%
13.	Will help to perform better in University exams	75.6%
14.	Will help to perform better in later days of clinical course	85.97%

## Students (preclinical) perception in implementation of CBL





This chart displays the median for 1-15 parameters present in the Paraclinical students questionnaire

The present study revealed that as a whole CBL was enjoyed by both students and tutors. This type of learning has been shown to enhance clinical knowledge, improve teamwork, improve clinical skills, improve practice behaviour, and improve patient outcomes in future. Learners or students in health care-related fields will one day need to interact with patients, and so education that relates to patient is particularly relevant. Relevance is an important concept in adult education. CBL was found to be used in all semesters of M.B.B.S.course.

CBL is certain to become part of every medical and health profession's curriculum.

#### **Limitation and Recommendations**

Successful implementations of CBL require cooperation of students and teachers along with administrative regulatory body.

There was resistance from few faculty members who do not favour CBL as it requires pre preparation even on the part of faculty and extra time to conduct.

There are recommendations also from faculty members to undergo Teachers Training Programme, to make them equipped with new teaching methodology.

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