

## Effectiveness of Early Clinical Exposure in First M.B.B.S Students

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### Abstract

**Back ground:** Early clinical exposure ensures more knowledge about basic sciences, clinical sciences and patient – doctor interactions. Present study was planned to study the impact of early clinical exposure in the knowledge towards anatomy and also interest in studying anatomy.

**Materials and methods:** The study was conducted in first year M.B.B.S 150 students studied in PSG Institute of Medical Science & Research Centre, Coimbatore during the academic year 2013 -14 in Department of Anatomy. Informed consent was taken from the first year M.B.B.S class of 150 students. Pre-test and post-test before and after early clinical exposure sessions were conducted. Feedback also obtained by means of questionnaire.

**Results:** 150 students were attended both pre-test & post-test through multiple choice questions. Comparison between both tests were done. In that, 81.69% students showed increase in knowledge, 15.27% showed same level in knowledge of anatomy. In feedback 98.6% of students mentioned that early clinical exposure was extremely useful.

**Conclusion:** Based on questionnaire and MCQ analysis, the results showed that the knowledge on anatomy and interest in studying anatomy were increased. Combination of experiences may help the students to gain best clinical knowledge, basic science knowledge, clinical skills and helps them to succeed in their medical practice.

**Keywords:** Medical student, Early Clinical Exposure, Pre-test and Post-test

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### I. Introduction

It is now being agreed that early clinical exposure in the first M.B.B.S students help to increase their motivation to learn and applying the basic science and retaining the knowledge better (1). Early clinical exposure helps them to know how to handle the emergency situations and understand the patient's perspectives. From early clinical exposure they can experience the relevance between the basic science and its clinical application (2). Early clinical exposure gives the students the confidence level to excel in their duties during the forth coming years and helps them to succeed in their medical practice.

### II. Aim & Objectives

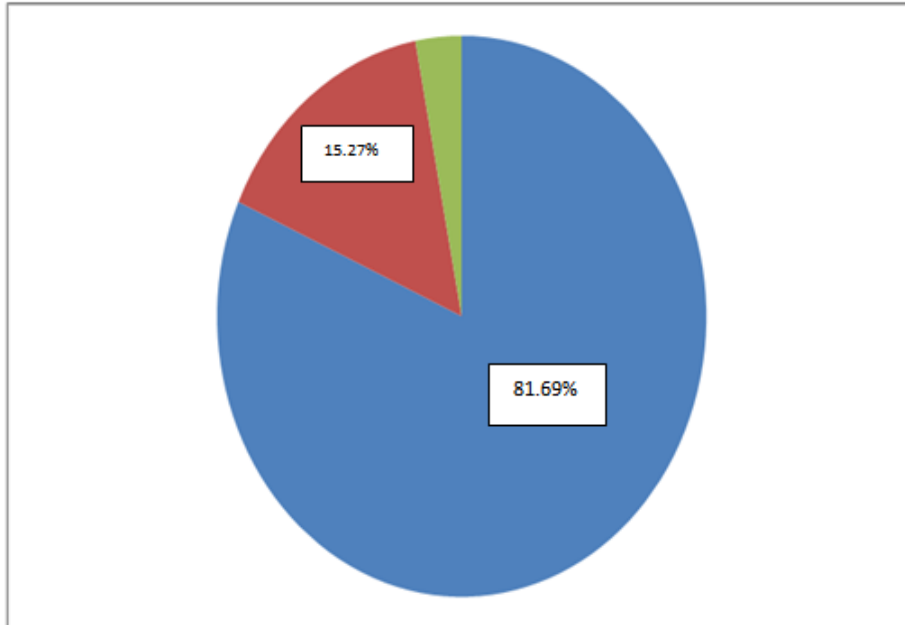
1. Effectiveness of early clinical exposure in first M.B.B.S students.
2. To ensure that the knowledge in anatomy is increased with clinical exposure.
3. To ensure that the interest among the students in anatomy is increased with early clinical exposure.

### III. Materials And Methods

The study was conducted with 150 voluntary students from first M.B.B.S for academic year 2013-2014 and it was carried out in PSG Institute of Medical Science and Research Centre, Coimbatore. Ethical clearance was obtained from institutional ethical committee. Informed consent also obtained from students. Before clinical exposure the students were written pre-test and then they visited the clinical departments of Cardiology, Nephrology, Clinical Pathology and Simulation lab in rotation for a period of 3 weeks. The post- test was conducted soon after the programme. A feedback was obtained through a questionnaire.

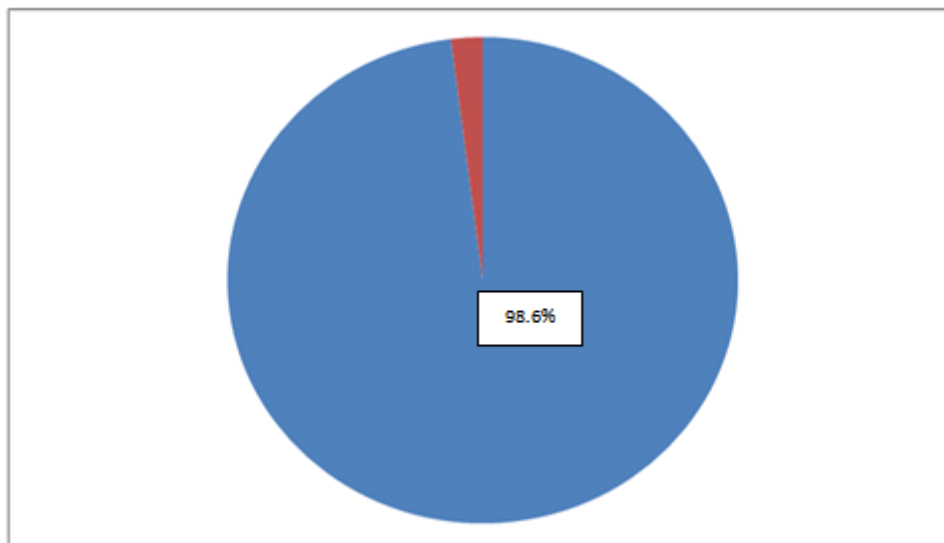
#### **IV. Observations**

The students were attended both pre-test and post-test in the form of multiple choice questions. Comparison between both tests were done. In that, 81.69% of students showed increase in knowledge of anatomy and 15.27% of students showed same level of knowledge and 3.05% of students showed (Fig-1) Students also attended the feedback questionnaire. The most important suggestions were to increase the period and extension of the timings of early clinical exposure. 98.6% students also suggested the early clinical exposure has to be continued for the forth coming batches also. 98.6% students also answered that the logistics in understanding the preclinical subjects by early clinical exposure was extremely useful (Fig-2, Fig-3).



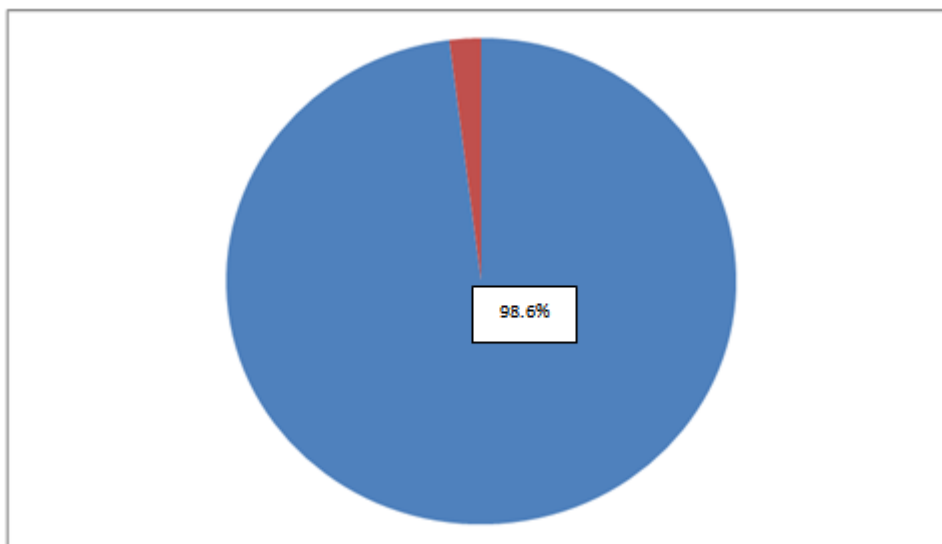
**Fig -1** shows the comparison of Pre-test and Post-test results.

1. 81.69% of the students showed increase in the level of the knowledge.
2. 15.27% of the students showed same level of the knowledge.
3. 3.04% of the students showed decrease in the level of the knowledge.



**Fig-2** shows the feedback from the students.

- 1.98.6% students mentioned that Early Clinical Exposure was Extremely Useful.
- 2.1.4 % students mentioned that Early Clinical Exposure was Not Useful



**Fig-3** shows the feedback from the students.

- 1.98.6% students suggested for continuity of Early Clinical Exposure for forthcoming years.
2. 1.4% students suggested not to continue Early Clinical Exposure for forthcoming years.

#### **V. Discussion**

Motilal et al stated that there was significant difference in knowledge, skill and attitude of students of two groups (ECE group and Non-ECE group) (3).

According to Chowdapurkar et al, the video demonstration adjuvant to didactic lectures made a positive impact in the form of increase comprehension and correlation (4).

According to Surekha et al, they divided the participants into two groups (group A & group B) and found that 98% of participants believed that early clinical exposure improved their interest on continuation of their field of study (5).

#### **VI. Conclusion**

Early clinical exposure can provide a framework for the beneficial and successful integration of the teaching and learning of basic sciences with clinical science. But it was found that early clinical exposure consumes more manpower, infrastructure, time and requires extra efforts on their part. Early clinical exposure is an alternative approach to reinforce didactic instruction in applied anatomy. Most of the students recommended the early clinical exposure has to be continued in teaching anatomy for future batch of students also.

#### **References**

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