

Effectiveness and Perceptions of Small Group Teaching among Second Year MBBS Students

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ABSTRACT

Background: Small Group Teaching (SGT) has grown in popularity in medical education as it offers a dynamic setting for learning and it is also learner-centered. **Materials and Methods:** Hundred final year MBBS students with informed consent were divided randomly into two groups. Group A was delivered a didactic lecture on the topic of Infant deaths, Group B was administered case-based learning and then subjected to small group interactive discussions. Pre-test and post-test were conducted using MCQ's. Perception of students based on Likert scale taken. The data analyzed in SPSS software. **Results:** Students who were given small group learning experience fared better than the didactic lecture group in the post-test. Small group tutorial teaching was agreed upon by the majority of the students to be more effective. **Conclusion:** Small group teaching was more effective as compared to didactic lectures and the perception of students was in favor of it.

Keywords: Tutorials, Small group teaching, Perceptions, Didactic lecture and Medical education.

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AIM AND OBJECTIVES

1. To assess the effectiveness of small group tutorials in comparison with didactic lectures.
2. To know the Students' perceptions regarding small group learning using case-based discussions.

INTRODUCTION

The global trend for rationalizing teaching-learning is gathering momentum toward a dynamic mindset instead of traditional didactic lectures. Innovative curriculum developments look afresh to work out solutions and ensure that tomorrow's medical students will receive need-based education.^{1,2} Effective small

group learning in medicine is a much more challenging task than is often realized; it is relatively easier to have a meandering discussion with a group of medical students. It is much more difficult to get them to discuss constructively, to question and, most important of all, to think. Small Group Teaching (SGT) has grown in popularity in medical education as it offers a dynamic and collaborative setting for learning and it is learner-centered.³ Problem-Based Learning (PBL) relies almost entirely on SGT methods and many schools with more traditional curricula have incorporated a significant number of SGT sessions into undergraduate programs for medical students.⁴ Many factors affect student performance, of which some are in the hands of the teacher. Among these, motivation is the most relevant, and other factors that foster cooperative learning are feedback and individual participatory activities.⁵ There has been a lot of emphasis on the small group teaching in the Competency-based medical education introduced by the National Medical Council, which can be known by the fact that in Forensic Medicine 40 hr have been allotted to didactic lecture however 75 hr have been allotted for small group teaching.⁶

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MATERIALS AND METHODS

The present questionnaire-based study was carried out at Mysore Medical College and Research Institute, Mysuru. Approval for the study was obtained from the Institutional Ethical Committee.

Study Population

Second-year MBBS students of MMCRI, Mysuru.

Study Duration

3 months.

Sampling Method

Convenient sampling.

Sample size and study design

100 student who had consented to participate in the study were divided into two groups randomly using excel.

Methodology

Out of 150 students, 100 second-year students consented to participate in the study they were randomly divided into two groups of 50 each using excel. For group A, a didactic lecture of one hour was conducted on the topic of infant deaths. Group B, they were administered case-based learning and then subjected to small-group interactive teaching in a two-hour session. Both theory and small group discussions were carried out by the same instructor.

20 MCQs was prepared by a teacher not involved in the study. They were validated by the other Forensic experts. The hard copy of the same was given as both the pretest and the post-test for both groups. The data were analyzed using SPSS 10 software. The Pre and Post Test scores of didactic lectures were compared with the application of the *t*-test, and the same was repeated for the small group sessions.

Subjective feedback from the students (100) was taken on their perception through questionnaires using a Likert scale (1-5) was taken (strongly agreed-1; agreed-2; neutral-3; disagree-4; strongly disagree-5). The questionnaire included 8 questions out of which 7 were closed and one was an open-ended question (Figure 1).

RESULTS

The mean for group A pre-test was 7 and the post-test was 14. The mean for the group B pretest was 7 and the post-test was 17. The gain in mean score for group A (didactic lecture) was 7 and Group B (small group teaching) was 10. The *p*-value for the pretest was > 0.999, the post-test *p*-value for both was <0.0001, the *p*-value for gain was <0.0001 (Table 1 and 2).

Table 1: Distribution of pre-test, post-test, and gain in the mean score among two groups.

	Pre-test score	Post-test score	Gain	Statistical t-test
Didactic lecture	7	14	7	Not significant
Interactive session	7	17	10	Significant >0.0001

Table 2: Distribution of students according to the gender.

Sex	Male	Female
	47	53

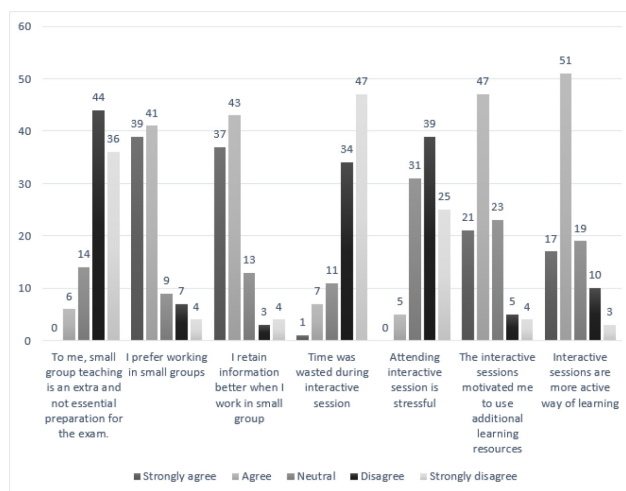


Figure 1: The descriptive statistics of perception of students about small group teaching on Likert scale.

The majority of the students agreed that in small-group teaching they learned and retained information better. The majority opined that it motivated them to read the topic from additional resources for better understanding and participation in discussion and it was a very effective type of active learning.

The majority of the students felt that small group teaching was not stressful and was not an extra burden for them.

Few comments by the students when they were asked to give their opinions on small group teaching. One of the students opined that small group involves them better than lecture which they can see on youtube also. One more student was of the opinion that he didn't want any lectures everything should be taught in small groups. Another student was of the opinion that he was forced to study as he was asked questions repeatedly.

DISCUSSION

In the present study, the small group discussions introduced among the students were assessed and compared with that of didactic lectures, and their perception was taken on the Likert's scale and it was observed that in this study the majority of the students accepted the fact that the small group sessions adopted for teaching were better compared to the large group teaching methods like large classroom didactic lectures. Similar findings were observed by a study conducted by Sarah.⁷ In another study Hegde concluded that the small group teaching sessions can be further improved by adding various relevant assessment tools.⁸

It was concluded in the present study that the majority of the students accepted the small group of sessions as a more active way of learning as compared with the didactic lectures of the large classrooms. This was in agreement with the study conducted by Hegde.⁸ However another study carried out by Harden and Laidlaw though agreed but they added that it is the most difficult and highly skilled teaching technique and they suggested that it should be planned carefully.⁹ Retention of knowledge and self-learning was agreed upon by maximum to be better in small group discussions. This is in agreement with the several studies conducted worldwide.¹⁰⁻¹²

There was a statistically significant gain in knowledge (p -value < 0.0001) when small group teaching was applied instead of the didactic lecture. Which is in agreement with the majority of the studies conducted.

CONCLUSION

Small group teaching was more effective as compared to didactic lectures and the perception of students was in favor of it.

Limitations

The study was conducted on a single topic with a limited number of students. This can be overcome by doing the study on different topics with a larger sample.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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