

# A Comparative Study on Effect of Small Group Discussion versus Didactic Lectures among Medical Students

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Received: 18.03.25, Revised: 20.04.25, Accepted: 03.05.25

## Abstract

**Background:** Small group discussion stimulates collaboration and in-depth discussion for application and transfer of knowledge, known as collaborative learning. This study aimed to compare the effect of small group discussion and conventional didactic lecture teaching learning methods.

**Methods:** A comparative study was conducted among final MBBS part 1 students for a period of one month. A total of 128 students were included in the study. All the students were divided into 2 groups. Didactic lecture was given to one group and small group discussion was conducted to another group. Post test was conducted to assess and scores were compared pre and post in both groups.

**Results:** Of 128 students, 35% (45) were males and 65% (83) were females. In the post test, for a maximum score of 20 marks, the mean score of students subjected to didactic lecture was  $13.1 \pm 2.02$  (66%) and that of small group discussion was  $12.34 \pm 2.08$  (62%) and association between the two variables was found to be statistically significant. There is also significant difference in the performance of students of didactic lectures and that of small group discussion in the recall test with a mean score of  $11.23 \pm 2.65$  (56%) and  $12.28 \pm 2.56$  (61%) respectively

**Conclusion:** The knowledge from small group discussion is more long lasting and has better recall. So small group discussion can be adopted as another alternative teaching modality which can bring better output among the medical students.

**Keywords:** Didactic lectures, Small group discussion, MBBS students

## INTRODUCTION

Over the decades, as a routine, medical under graduates were being taught in conventional didactic lecture format. In this format there is unidirectional delivery of large amount of information in short period of time. Here the students are passive listeners <sup>(1)</sup>, where they tend to focus on memorizing the information acquired from the lecture rather than critical thinking and application of knowledge in clinical practice. Even the lectures delivered by great professionals can't assure student's performance. In recent years, due to several challenges in didactic lectures, many newer teaching methods were adopted among which small group discussion is on the rise in medical under graduate teaching.<sup>(2, 3)</sup> Research shows greater retention of knowledge with small group teaching method enhancing the ability to work as a team, improving peer communication and develop an attitude to take responsibility of their own progress. <sup>(1, 4-6)</sup> In small group

discussion, the key feature is student's active involvement throughout learning cycle. <sup>(7)</sup> Small group discussion stimulates collaboration and in-depth discussion for application and transfer of knowledge, known as collaborative learning. There are 3 types of small group learning, they are problem-based learning (PBL), case-based learning (CBL) and team-based learning (TBL). <sup>(7)</sup> The case based learning is more common in medical education as the students learning is based on patient cases.<sup>(8)</sup> In small group discussion, the teacher being a facilitator who motivate students to discuss and share their ideas with the group members. The facilitator corrects the students of their misperception.<sup>(9)</sup> The better communication of students with peers and facilitator makes small group discussion a better interactive teaching modality.

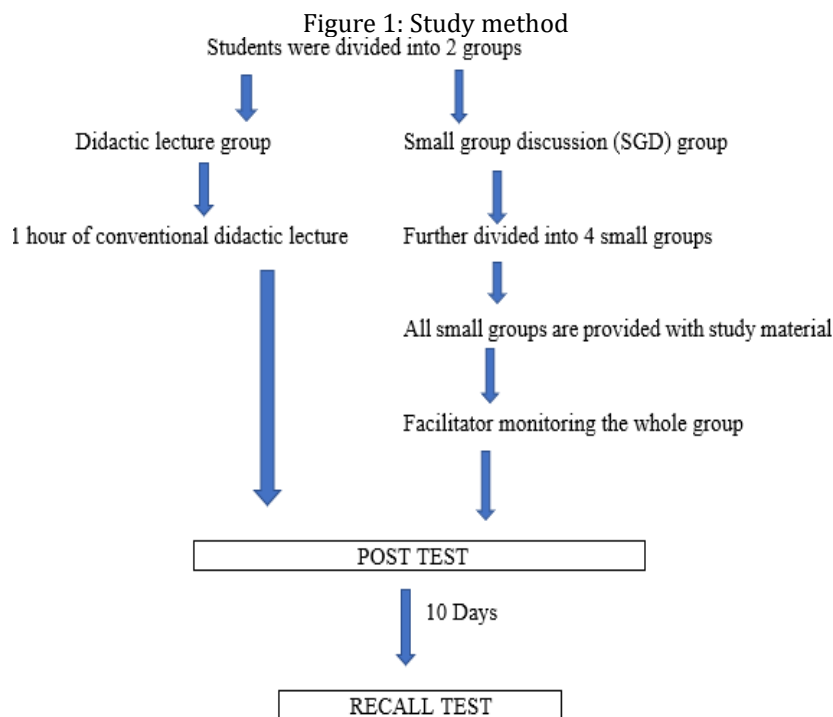
Incorporation of other modalities of teaching techniques in medical college may help

students to enhance retention of knowledge and applied clinical skills. Hence the objective of this is to compare the effect of small group discussion and conventional didactic lecture teaching learning methods.

## MATERIAL AND METHODS

A Comparative study was conducted among Students of Final year MBBS part 1 for a period

of one month (October 2021). After obtaining ethical clearance the institute's ethics committee, A total of 128 students were included in the study by simple random sampling. Students who have given both post-test and recall test were included in the study and students who were absent were excluded from the study.



Data analysis- The results were analyzed by Independent and Paired t-test using SPSS version 20.

## RESULTS

Of 128 students, 35% (45) were males and 65% (83) were females as shown in figure 1. In the post test, for a maximum score of 20 marks, the mean score of students subjected to didactic lecture was  $13.1 \pm 2.02$  (66%) and that of small group discussion was  $12.34 \pm 2.08$  (62%) and association between the two

variables was found to be statistically significant ( $p=0.027$ ). There is also significant difference in the performance of students of didactic lectures and that of small group discussion in the recall test with a mean score of  $11.23 \pm 2.65$  (56%) and  $12.28 \pm 2.56$  (61%) respectively ( $p=0.025$ ) as shown in table 1.

Figure 2: Gender distribution of study population

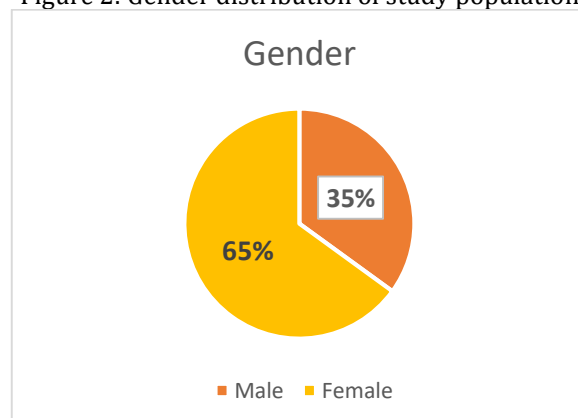


Table 1: Mean score of students of didactic lecture and small group discussion

	Post-Test	Recall Test	p value
<b>Didactic Lecture</b>	13.15 ± 2.02	11.23 ± 2.65	0.0001
<b>Small Group Discussion</b>	12.34 ± 2.08	12.28 ± 2.56	0.754
<b>p value</b>	0.027	0.025	

## DISCUSSION

Many studies shows that there is improved performance of students by small group discussion. The small group discussion guided by a facilitator who is a subject expert will enhance student's understanding. Group discussion form a effective basis for decision making <sup>(1)</sup>. A study by Suparna Bindu et al., has concluded that an effective small group teaching depends on skill of facilitator and student-facilitator communication <sup>(10)</sup>. The present study shows the students of small group discussion has better retention of knowledge than the students of didactic lectures. A study by Rathnakar U.P et al., also states that the small group teaching is effective and facilitates better recollection of topics than large group teaching <sup>(11)</sup>. Despite of carrying many benefits over didactic lectures the small group discussion has its own disadvantages like some students may depend far too much on other students in their group to solve their problems, weak participants may face discouragement by active students, hesitate to express themselves and slow academic progression. The facilitator needs to be skilled enough to address all these challenges for an effective small group teaching. A study by M. Qamar et al., highlighted on reason that may lead to unsuccessful small group teaching like involvement of junior faculty members in teaching, less than optimal preparation by teachers etc.<sup>(12)</sup>

## CONCLUSION

In the post test, the mean score of the group involved in didactic lecture was higher as compared to small group discussion while in the recall test mean score of small group discussion was higher than that of didactic lecture. It implies that the knowledge from small group discussion is more long lasting and has better recall. So small group discussion can be adopted as another alternative teaching modality which can bring better output among the medical students.

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