

Didactic lectures and small group discussions among undergraduate students in a medical college - A comparative study

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ABSTRACT

Objective: To study and compare didactic lecture and small group discussions among undergraduate medical students.

Study design: Quasi-experimental study

Method : Two groups of students were selected from the same batch for the study. One group was taken as the experimental group and the students were taught a topic by small group discussions. The other group was taken as the control group and taught the same topic by the traditional method of didactic lecture. At the end of both the methods of teaching a test was conducted and the scores obtained by the students in both the groups were analyzed.

Results: Students involved in the small group discussions were found to have performed better than those taught by didactic lecture.

Conclusion: Introduction of small group discussions into the present curriculum of medical education can improve the learning process in the students.

Keywords: Didactic lectures, small group discussions

Introduction

Teaching has got a very important role not only at school level but also in higher education as it can help in generating effective professionals. The effectiveness of teaching depends upon how much has been received by the students. There are different methods of teaching –lectures, tutorials, CMEs, seminars, videotapes, case-studies, small group discussions, etc.¹

Lectures are the traditional methods of teaching and are still applied as the main methods of teaching in many medical colleges in India. But it has been found that, these days the students find passing the examinations as their immediate goal which does not help them in respecting the importance of learning. The fast changes and advancements in other branches of science and technology make it necessary for the medical students also to become active, self-directed and life-long learners to be at par with these changes.²

The objective of this study was to study and compare two different methods of teaching, didactic lecture and small group discussions in a group of undergraduate medical students in KIMS Medical College.

Methodology:

This study was quasi-experimental. All the students in the 4th semester of year 2014 were included in the study. Out of the total 145 students in the class, the first 72 students according to roll were taken as the experimental group i.e they were included for small group discussions(SGDs) and the last 73 students were taken as the control group i.e for didactic lectures. The topic selected for teaching them was “biostatistics”. The control group was taught the topic by the traditional method of didactic lecture over 5 classes with each class of 45 minutes duration. The students in the experimental group were divided into groups of 10-12 members each. Then they were all asked to come prepared from some prescribed books and then discuss the subtopics in their respective groups. In all, 5 sessions of SGD each of 40 minutes duration were conducted. In the SGD the teachers acted as facilitators. At the end of both the didactic lectures and SGD, the students were assessed by being given a test of 10 questions. The questions included both statistical exercises and SAQs. At the end of SGD, the students in the experimental group were

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also given a set of questionnaire for their subjective perception of the SGD sessions. After the test, statistical analysis of the student's scores was done and t-test was done for determining the statistical significance.

Results and discussion:

From the control group of 73 students, 65 appeared for the test and from the experimental group of 72 students, 67 appeared for the test. The mean score obtained by the students in the experimental group was 32.13 whereas it was 26.67 in the control group. The S.D. of scores in the experimental group was 4.1 and in the control group S.D. was 4.9

Table 1. Comparison of assessment scores of both groups (study and control)

Teaching method	Mean	S.D.	p-value
SGD	32.13	4.1	0.00001
Lecture	26.67	4.9	

The difference between the means of scores of the students in the SGDs and those from the didactic lecture classes was found to be statistically significant ($p < 0.05$). The students involved in SGDs performed better than those who attended the lectures because getting involved in the discussions might have driven them to study on their own and analyze and understand the topic better. Our results from this study are similar to the ones obtained from the study by Saleh AM *et al.*¹ In a study conducted by Hameed S *et al.*³ where the undergraduate medical students of one batch were taught by SGDs, it was found that they performed better than their previous batch who were taught by the traditional lecture method. Similar results were also found in studies conducted by Tiwari A *et al.*⁴ and Costa ML *et al.*⁵ But in a study conducted by Khan I *et al.*⁶ it was found that the performance of the students taught by problem based learning method was similar to those taught by lecture method.

Table 2. Positive attitude of students towards SGDs

Statements	Strongly agree & agree N(%)	Undecided N(%)	Strongly disagree & disagree(%)
SGDs are more active way of learning	60(89.6)	7(10.4)	None
I am comfortable in the group	54(80.6)	4(5.9)	9(13.4)
SGDs motivate for self learning	52(77.6)	6(8.9)	9(13.4)
SGDs develop interaction skills	59(88.0)	3(4.5)	5(7.5)
Sufficient learning materials are available for SGD	59(88.0)	8(11.9)	None

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Table 3. Negative attitude of students towards SGDs

Statements	Strongly agree and agree N(%)	Undecided N(%)	Strongly disagree and disagree N(%)
SGDs are stressful	6(8.9)	3(4.5)	58(86.6)
SGDs are a waste of time	7(10.4)	5(7.5)	55(82.09)
Teaching is unfocussed	3(4.5)	4(5.9)	60(89.6)
Uncertainty about the accuracy of colleague's information	6(8.9)	5(7.5)	56(83.6)
SGDs increase workload	4(5.9)	5(7.5)	58(86.6)

In this study it was found that majority of the students(89.6%) in the experimental group found SGDs as an active way learning. In the same group 77.6% students found self-learning motivating and 88% students said that SGDs improved their interaction skills. Similar results were obtained in the studies conducted by Goshtasebi A *et al*⁷ and Nanda *et al.*⁸

Conclusion :

Inclusion of small group discussions into the present curriculum of medical education can help in retaining interest and knowledge among the medical students. It can also help the students in improving their interpersonal communication skills which will finally be helpful in their future as professionals.

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