

# Small Group Discussion versus Traditional Lecture in Anatomy Teaching: A Cross-sectional Study

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## ABSTRACT

**Introduction:** All educational institutions follow different types of teaching and learning methods to deliver knowledge to the students. The conventional teaching methodology is commonly used in many educational institutions. Small group discussion (SGD) aids in improving the basic skills required for every task i.e., communication skills. Enthusiastic participation help in creating a dynamic and lively environment for the progress of participants.

**Aim:** To evaluate the effectiveness of Small group discussion (SGD) over traditional lectures and to assess the perception of students regarding SGD versus traditional lectures.

**Materials and Methods:** A cross-sectional study was conducted with MBBS Phase-I medical students from November 2019 to April 2020 in Chirayu Medical College and Hospital, Bhopal, Madhya Pradesh. About 150 MBBS Phase-I medical students were divided into two groups, A and B, 75 students per group. Group A (Roll Number 1 to 75) was taken for traditional lecture, and Group B (Roll Number 76 to 150) were taken for SGD. Pre and post multiple choice assessment was performed. Perception

of both Groups A and B about traditional Lecture and SGD was taken by pre-validated questionnaire based on Likert's scale. Crossover of the groups was done with second topic. Student's t-test was used to compare pre-test and post-test results and the  $p < 0.05$  was considered as statistically significant.

**Results:** The mean in post-test scores of Group B i.e., in SGD was  $55.8 \pm 4.51$  ( $p$ -value=0.022). As per 55 (88.7%) students, small group teaching session was less stressful. A total of 59 (95.15%) students agreed that SGD was interactive and 58 (93.54%) said they had their active participation and 61 (98.38%) students developed interest. A total of 58 (93.54%) students agreed that, it helped in retaining knowledge. As per 62 (99.9%) students, SGD was useful for improvement of communication skill among students, were of the opinion that they had a good level of discussion in SGD session.

**Conclusion:** SGD involves active participation with good communication skills and develops good retention of knowledge. It has been introduced in the new curriculum to increase the efficiency of students.

**Keywords:** Conventional teaching, Feedback, Learning method

## INTRODUCTION

Educational institutions all over the globe follow different teaching and learning methods for enhancing the knowledge of medical students. Conventional traditional learning is one of the teaching tools which is considered the best among many institutions. Teacher-dominated interaction with the students and teachers are the source of the knowledge, students being passive learners are common in this method [1,2]. Traditional lecture encourages one-way communication [3].

Since the advent of the Competency Based Medical Education (CBME) new curriculum, SGD has become one of the best tools of learning methods for undergraduate medical students to achieve the desired competency and knowledge [4]. SGD not only generate curiosity among students but also help them to develop a sense of responsibility, greater learning with better retention, and become independent. It helps them to enhance their communication skills and learn enthusiastically to become productive [5]. SGDs are students centered methodology which allow the active participation of learners, generate interest, and develops self-motivation with better learning outcome and assessment [4,6].

One major fact that this study concludes is that humans have the habit to be attracted to any new technology or method introduced and tend to follow its' path. Same way, today SGD are in the air and preferred by most. But it's not true for every case. Any newer method developed cannot replace the previous ones by just the name of something "new", rather the choice of the students (who are actually affected by any newer method) is the principal thing on which further judgements are to be made. Today CBME prefers

SGD, which is thought a better alternative. But, the students of the institute does not completely agree with this method, rather they expect a mixture of both the methods for helping them understanding the concept and being successful. Hence, present study was conducted with an aim to:

- To evaluate the effectiveness of SGD over traditional lectures.
- To assess the students perception regarding SGD versus traditional lectures.

## MATERIALS AND METHODS

A cross-sectional study was conducted in the Department of Anatomy in Chirayu Medical College and Hospital, Bhopal, Madhya Pradesh with MBBS Phase-I students for six months (November 2019 to April 2020). The study was conducted after the approval from Research Committee and Institutional Ethics Committee (CMCH/EC/2019/75 Dated 17<sup>th</sup> December, 2019).

**Sample size calculation:** Only those students were enrolled who were present on day of session. 123 students participated in session one and 113 students in session two.

**Inclusion criteria:** Students who were present on the day of session and gave informed consent to participate were enrolled in the study.

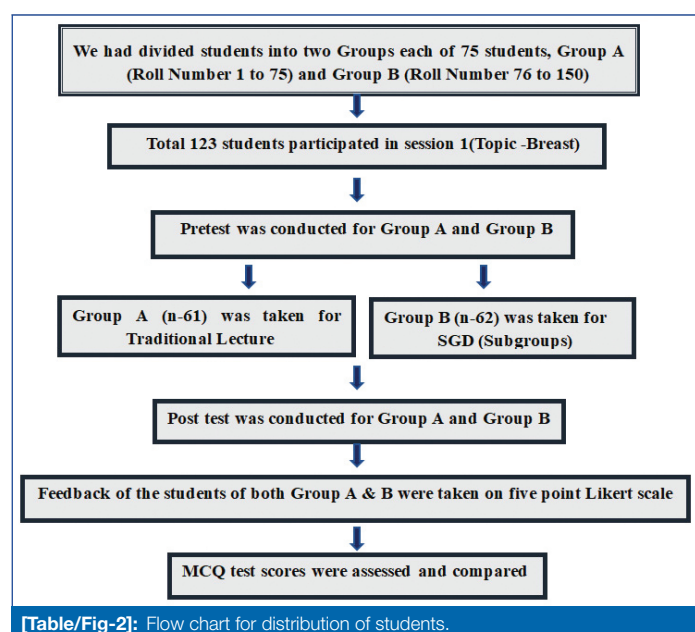
**Exclusion criteria:** Students who were absent on the day of session were excluded from the study.

Total 123 students actively participated in the Session-1 on Topic-Breast and Session-2 was successfully conducted with 113 students on the topic-scapular region. After the informed consent was taken

from each participant, we divided 150 MBBS Phase-I students into two Groups (A and B), wherein 75 students were involved in each group. Group A (Roll Number- 1 to 75) were taken for traditional lecture and Group B (Roll Number- 76 to 150) for SGD. Only 61 students were present in Group A and 62 students in Group B on the day of session. The contents of the lecture for both the session is provided in [Table/Fig-1,2].

Session-1	
Breast (Traditional Lecture) for Group A	Breast (SGD) for Group B
1. Introduction	Group-1- Introduction, Location, Shape and Extent
2. Location	
3. Shape and Extent	
4. Relations	Group-2- Relations, Structure
5. Structure	
6. Arterial Supply	Group-3- Arterial Supply, Venous drainage, Nerve supply
7. Venous drainage	
8. Nerve supply	
9. Lymphatic drainage	Group-4- Lymphatic drainage, Clinical aspect
10. Clinical aspect	
Session-2	
Scapular Region (Traditional Lecture) for Group B	Scapular Region (SGD) for Group A
1. Introduction of Scapular region	Group-1- Introduction of Scapular region
2. Deltoid	Group-2- Deltoid, Supraspinatus, Infraspinatus
3. Supraspinatus	
4. Infraspinatus	
5. Teres minor	Group-3- Teres minor, Teres major
6. Teres major	
7. Rotator cuff	Group-4- Rotator cuff

**[Table/Fig-1]:** Topics covered during traditional teaching and Small Group Discussion (SGD).



## Study Procedure

The students were intimated about the topic three days before the conduction of lecture. Multiple choices based pre-test was taken before the traditional lecture on breast. It was taken by a subject expert for Group A lasting for an hour. Multiple choice based post-test was taken for Group A after completion of lecture.

The questionnaire was designed on the basis of the teaching methods (traditional and SGD). The questions asked were based on the contents covered during the session. Validation was done by the community medicine faculty. Feedback from the students

was taken from pre-validated questionnaire (designed by the author) based on five point Likert's scale (ranging from strongly disagree, disagree, neutral, agree to strongly agree). The combined agreement (agree+strongly agreed) and combined disagreement (disagree+strongly disagreed) were noted. The questionnaire was a paper-based test conducted by the author. Perception (feedback) of traditional lecture from the students of Group A was taken through feedback Questionnaire. The author had distributed questions on paper, they solved the questions on paper and returned back and the answers were evaluated. The scores of pre and post-test were assessed and compared.

SGD were conducted in Group B (15 students per group), on the same topic, breast for an hour. The students were sensitised by assigning the desired topic to all the participants three days prior to the session. The session was facilitated by the teacher instructions, and explained details of the steps of the session. Sub-topics of each group were prepared by the faculty and it was assigned to the respective group leaders. The group leaders distributed the topics among the group members to cover the complete topic and thus promote active participation of each student. The facilitators guided the students and solved their problem.

Pre-test MCQs and post-tests MCQs of breast were taken of Group B. Perception (feedback) of students of Group B towards SGD of breast was taken through pre-validated feedback questionnaire.

The next topic scapular region was again given to students, three days prior to Session-2. In Session-2, a cross-over of the groups was done. Group B (Roll no. 76-150) went for the traditional lecture of scapular region, which was attended by 53 students from Group B while Group A (Roll no 1-75) went for a SGD on scapular region and there were 60 participants who attended this session.

Pre-tests and post-tests were taken on the topic of scapular region of traditional teaching method (Group B) and SGD (Group A) in Session-2. Perception (feedback) of students (Group B towards traditional lecture and Group A towards SGD of scapular region) was taken through a feedback Questionnaire.

The time taken in the Traditional lecture for pre-test was 15 minutes, for the lecture was one hour, and post-test and feedback each of 15 minutes duration. In SGD, the duration of pre-test was 15 minutes; SGD was conducted for 30 minutes and presentation for 45 minutes. At the end, post-test and feedback each of 15 minutes. The project was completed with two topics, with two sessions including traditional teaching method and SGD teaching method and cross-over of the groups with a new topic. This was done so to ensure proper exposure of every participant towards SGD and traditional lectures. All lectures and SGD was taken by faculty of the department of anatomy of this institute.

## STATISTICAL ANALYSIS

Epi info 7.1 was used for analysis. Data was entered in excel sheet and expressed as mean±SD. After comparison of data, student's perception was expressed as on five points Likert scale, % agreement (strongly agree+agree). The p-value was determined by t-test. When p-value is less than 0.05, it was considered as statistically significant. Student's response to question expressed as overall median, mean and mode.

## RESULTS

According to [Table/Fig-3], the mean and SD in post-test scores of Group A in traditional lecture (54.9±4.121), p-value was 0.02. In SGD (Group B), the mean and SD in post-test scores were higher (55.8±4.516), p-value was 0.025.

After cross over, as shown in [Table/Fig-4], the mean and SD scores of Group B, post SGD (37.4±16.222), p-value was 0.807, which was statically not significant. In Group A, post Traditional lecture (35.2±15.977), p-value was 0.636, which was statically not significant.

Group	Methods	Mean±SD	Range	p-value
Group A	Pre-test traditional lecture breast (n=61)	50.5±3.778	45-56	0.022*
	Post-test traditional lecture breast (n=61)	54.9±4.121	48-60	
Group B	Pre-test SGD breast (n=62)	49.8±6.356	48-62	0.025*
	Post-test SGD breast (n=62)	55.8±4.516	37-61	

**[Table/Fig-3]:** Mean scores of different learning methods (traditional lecture and SGD) (Session-1).

Note: \*indicate significant, p-value <0.05

Group	Methods	Mean±SD	Range	p-value
Group B	Pre-test Traditional Lecture Scapular Region (n=53)	32±3.711	5-48	0.636**
	Post-test Traditional Lecture Scapular Region (n=53)	35.2±15.977	6-51	
Group A	Pre-test SGD Scapular Region (n=60)	35.6±16.297	11-53	0.807**
	Post-test SGD Scapular Region (n=60)	37.4±16.222	13-55	

**[Table/Fig-4]:** Mean scores for different learning methods (traditional lecture and SGD) (Session-2).

Note: \*\* indicate not significant

So, to conclude in Session-2, there was no statistical significance between pre-test and post-test scores in both methods, especially in SGD. Initially the students were not experienced and hence excited about the new project. Improvement was seen in SGD in the first session, they became confident and performed and scored better with new teaching learning methods. They took part with enthusiasm as it was conducted for the first time. But when the second session was conducted, neither they participated in full strength, nor came prepared. That's the reason they scored less.

As depicted in [Table/Fig-5], 59 (96.71%) students agreed that they were sensitised about the traditional lecture technique. Traditional lecture teaching session was found less stressful by 53 (86.88%) students.

Feedback session was conducted for SGD too. A total of 51 (82.25%) respondents agreed that they were sensitised about the small group

teaching technique. A total of 55 (88.70%) participants accepted it to be less stressful along with 59 (95.15%) agreeing that it was interactive [Table/Fig-6].

As shown in [Table/Fig-7], 51 (85%) students agreed that they were sensitised about the small group teaching session. Small group teaching session was considered as less stressful and interactive by 52 (86.66%) and 59 (97.32%) respondents, respectively.

Through [Table/Fig-8], information of traditional lecture of scapular region can be derived. A total of 41 (77.35%) students agreed that they were sensitised about the traditional lecture technique prior to the session. 40 (75.46%) students considered traditional lecture to be less stressful.

In Session-1 of SGD, 62 students participated (which was the maximum strength). Highest mean was observed in this SGD session, counted as 4.53 which reflected on the interest of students in SGD. Median and mode in the same was 4.7 and 4.72 respectively, followed by traditional lecture in Session-1 in which mean, median and mode were 4.4, 4.5 and 4.62, respectively [Table/Fig-9].

## DISCUSSION

In this modern era, the need of the hour is to opt for a method that improves the efficiency of students and helps them learn at a good pace. There are different types of teaching-learning methods introduced all over the globe. But the main task is to select the one which is the most advantageous for students and helps them to achieve their predefined goals.

In this study, the mean and SD in post-test scores of Group A (Session-1) in traditional lecture of Breast was (54.9±4.121), p-value found to be 0.025, which was statistically significant while in contrast to post-test scores of Group B (Session-1) in SGD of Breast, the mean and SD was higher (55.8±4.516), p-value was 0.022, was statistically significant. A study by Thotakura N et al., concluded that the mean score of multiple choice questions was higher for fishbowl (10.769±2.875) than traditional teaching (8.724±3.614), which was statistically significant with a p-value of 0.025 (p<0.05) [2]. Srilakshmi P et al., stated that the mean score of MCQ test of the lecture groups in pre and postanalysis were highly

Breast traditional lecture feedback (%), n-61 (Session-1, Group A)							
Questions	Strongly disagree n (%)	Disagree n (%)	Undecided/ Neutral n (%)	Agree n (%)	Strongly agree n (%)	Combined disagreement (Disagree+Strongly disagree)	Combined agreement (Agree+Strongly agree)
Q.1 I was sensitised sufficiently about the traditional lecture technique before	0 (0%)	0 (0%)	2 (3.27%)	28 (45.90%)	31 (50.81%)	0 (0%)	59 (96.71%)
Q.2 Traditional lecture teaching session was less stressful	2 (3.27%)	2 (3.27%)	4 (6.55%)	14 (22.95%)	39 (63.93%)	4 (6.55%)	53 (86.88%)
Q.3 Traditional lecture teaching session was interactive	0 (0%)	4 (6.55%)	9 (14.75%)	20 (32.78%)	28 (45.90%)	4 (6.55%)	48 (78.68%)
Q.4 Sufficient time was there for traditional lecture session	0 (0%)	0 (0%)	6 (9.83%)	24 (39.34%)	31 (50.81%)	0 (0%)	55 (90.15%)
Q.5 Traditional lecture teaching method was useful in increasing my active participation	3 (4.91%)	2 (3.27%)	4 (6.55%)	17 (27.86%)	35 (57.37%)	5 (8.18%)	52 (85.23%)
Q.6 Traditional lecture teaching method of teaching develops interest regarding the topic	2 (3.27%)	4 (6.55%)	1 (1.63%)	15 (24.59%)	39 (63.93%)	6 (9.82%)	54 (88.52%)
Q.7 Traditional lecture teaching session was useful for good retention of knowledge	1 (1.63%)	1 (1.63%)	2 (3.27%)	12 (19.67%)	45 (73.77%)	2 (3.26%)	57 (93.44%)
Q.8 Traditional lecture teaching improves communication skill among students	1 (1.63%)	3 (4.91%)	13 (21.31%)	18 (29.50%)	26 (42.62%)	4 (6.54%)	44 (72.13%)
Q.9 I would you like to attend traditional lecture teaching in future also	0 (0%)	2 (3.27%)	3 (4.91%)	14 (22.95%)	42 (68.85%)	2 (3.27%)	56 (91.8%)
Q.10 Traditional lecture teaching was conducted in a systematic manner	0 (0%)	0 (0%)	2 (3.27%)	16 (26.22%)	43 (70.49%)	0 (0%)	59 (96.71%)

**[Table/Fig-5]:** Students Response to feedback questionnaire about traditional lecture of breast (%), n-61, (Session-1, Group A).

Breast SGD feedback (%), n-62, (Session-1, Group B)							
Questions	Strongly disagree n (%)	Disagree n (%)	Undecided/ Neutral n (%)	Agree n (%)	Strongly agree n (%)	Combined disagreement (Disagree+Strongly disagree)	Combined agreement (Agree+Strongly agree)
Q.1 I was sensitised sufficiently about the small group teaching technique before	3 (4.83%)	3 (4.83%)	5 (8.06%)	33 (53.22%)	18 (29.03%)	6 (9.66%)	51 (82.25%)
Q.2 Small group teaching session was less stressful	1 (1.61%)	3 (4.83%)	3 (4.83%)	28 (45.16%)	27 (43.54%)	4 (6.44%)	55 (88.7%)
Q.3 Small group teaching session was interactive	1 (1.61%)	0 (0%)	2 (3.22%)	18 (29.03%)	41 (66.12%)	1 (1.61%)	59 (95.15%)
Q.4 Sufficient time was provided to me for small group session	0 (0%)	0 (0%)	2 (3.22%)	16 (25.80%)	44 (70.96%)	0 (0%)	60 (96.76%)
Q.5 Small group teaching method was useful in increasing my active participation	0 (0%)	0 (0%)	4 (6.45%)	19 (30.64%)	39 (62.90%)	0 (0%)	58 (93.54%)
Q.6 Small group teaching method of teaching develops interest regarding the topic	0 (0%)	0 (0%)	1 (1.61%)	11 (17.74%)	50 (80.64%)	0 (0%)	61 (98.38%)
Q.7 Small group teaching session was useful for good retention of knowledge	0 (0%)	1 (1.61%)	3 (4.83%)	16 (25.80%)	42 (67.74%)	1 (1.61%)	58 (93.54%)
Q.8 Small group teaching session help in improvement of communication skill among students	0 (0%)	0 (0%)	0 (0%)	16 (25.80%)	46 (74.19%)	0 (0%)	62 (99.99%)
Q.9 I would you like to participate in this type of teaching in future also	1 (1.61%)	1 (1.61%)	2 (3.22%)	22 (35.48%)	36 (58.06%)	2 (3.22%)	58 (93.54%)
Q.10 Small group teaching was conducted in a systematic manner	0 (0%)	0 (0%)	0 (0%)	18 (29.03%)	44 (70.96%)	0 (0%)	62 (99.99%)

[Table/Fig-6]: Students response to feedback questionnaire about SGD of breast (%), n-62 (Session-1, Group B).

Scapular region SGD feedback (%), n-60 (Session-2, Group A)							
Questions	Strongly disagree n (%)	Disagree n (%)	Undecided/ Neutral n (%)	Agree n (%)	Strongly agree n (%)	Combined disagreement (Disagree+Strongly disagree)	Combined agreement (Agree+Strongly agree)
Q.1 I was sensitised sufficiently about the small group teaching technique before	0 (0%)	4 (6.66%)	5 (8.33%)	33 (55%)	18 (30%)	4 (6.66%)	51 (85%)
Q.2 Small group teaching session was less stressful	0 (0%)	0 (0%)	8 (13.33%)	31 (51.66%)	21 (35%)	0 (0%)	52 (86.66%)
Q.3 Small group teaching session was interactive	0 (0%)	0 (0%)	1 (1.63%)	31 (51.66%)	28 (46.66%)	0 (0%)	59 (98.33%)
Q.4 Sufficient time was provided to me for small group session	0 (0%)	1 (1.66%)	6 (10%)	24 (40%)	29 (48.33%)	1 (1.66%)	53 (88.33%)
Q.5 Small group teaching method was useful in increasing my active participation	2 (3.33%)	0 (0%)	7 (11.66%)	26 (43.33%)	25 (41.66%)	2 (3.33%)	51 (84.99%)
Q.6 Small group teaching method of teaching develops interest regarding the topic	0 (0%)	5 (8.33%)	2 (3.33%)	20 (33.33%)	33 (55%)	5 (8.33%)	53 (88.33%)
Q.7 Small group teaching session was useful for good retention of knowledge	0 (0%)	3 (5%)	5 (8.33%)	26 (46.33%)	26 (43.33%)	3 (5%)	52 (86.66%)
Q.8 Small group teaching session helps in improvement of communication skill among students	0 (0%)	1 (1.66%)	5 (8.33%)	31 (51.66%)	23 (38.33%)	1 (1.66%)	54 (89.99%)
Q.9 I would you like to participate in this type of teaching in future also	1 (1.66%)	1 (1.66%)	10 (16.66%)	23 (38.33%)	25 (41.66%)	2 (3.33%)	48 (79.99%)
Q.10 Small group teaching was conducted in a systematic manner	1 (1.66%)	1 (1.66%)	3 (5%)	25 (41.66%)	30 (50%)	2 (3.33%)	55 (91.66%)

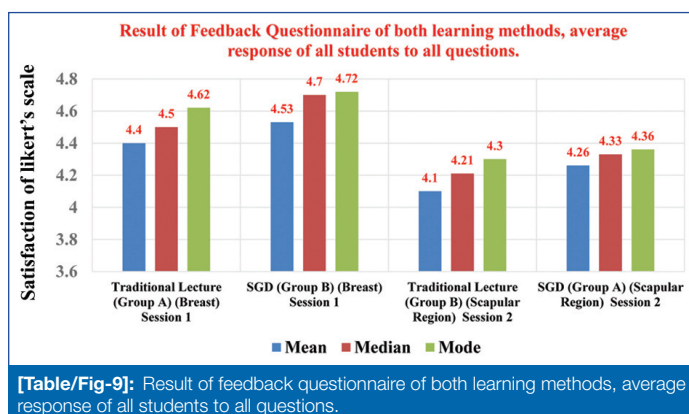
[Table/Fig-7]: Students response to feedback questionnaire about Small Group Discussion (SGD) of scapular region (%), n-60 (Session-2, Group A).

significant, while mean score of MCQ test for the SDL groups in pre and post analysis were significant [7]. The conclusion drawn in the study by Sabitha V et al., is consistent to this result as they stated, there was slightly better performance by the Group B with

mean score and SD (5.5±1.54) and p<0.001, which was significant [8]. Shifan K et al., students preferred a case based interactive learning followed by simultaneous assisted sketching as the best preferred (96%) [5]. Manisha C et al., reported that their students

Scapular region traditional lecture feedback (%), n-53 (Session-2, Group B)							
Questions	Strongly disagree n (%)	Disagree n (%)	Undecided/ Neutral n (%)	Agree n (%)	Strongly agree n (%)	Combined disagreement (Disagree+Strongly disagree)	Combined agreement (Agree+Strongly agree)
Q.1 I was sensitised sufficiently about the traditional lecture technique before	0 (0%)	0 (0%)	12 (22.64%)	24 (45.28%)	17 (32.07%)	0 (0%)	41 (77.35%)
Q.2 Traditional lecture teaching session was less stressful	1 (1.88%)	1 (1.88%)	11 (20.75%)	24 (45.28%)	16 (30.18%)	2 (3.76%)	40 (75.46%)
Q.3 Traditional lecture teaching session was interactive	0 (0%)	3 (5.66%)	13 (24.52%)	22 (41.50%)	15 (28.30%)	3 (5.66%)	37 (69.8%)
Q.4 Sufficient time was there for traditional lecture session	0 (0%)	4 (7.54%)	4 (7.54%)	24 (45.28%)	21 (39.62%)	4 (7.54%)	45 (84.9%)
Q.5 Traditional lecture teaching method was useful in increasing my active participation	0 (0%)	5 (9.43%)	7 (13.20%)	24 (45.28%)	17 (32.07%)	5 (9.43%)	41 (77.35%)
Q.6 Traditional lecture teaching method of teaching develops interest regarding the topic	0 (0%)	5 (9.43%)	4 (7.54%)	27 (50.94%)	17 (32.07%)	5 (9.43%)	44 (83.01%)
Q.7 Traditional lecture teaching session was useful for good retention of knowledge	0 (0%)	1 (1.88%)	4 (7.54%)	29 (54.71%)	19 (35.84%)	1 (1.88%)	48 (90.55%)
Q.8 Traditional lecture teaching helps in improvement of communication skill among students	2 (3.77%)	4 (7.54%)	6 (11.32%)	24 (45.28%)	17 (32.07%)	6 (11.31%)	41 (77.35%)
Q.9 I would like to attend traditional lecture teaching in future also	0 (0%)	0 (0%)	9 (16.98%)	24 (45.28%)	20 (37.73%)	0 (0%)	43 (81.13%)
Q.10 Traditional lecture teaching was conducted in a systematic manner	0 (0%)	1 (1.88%)	0 (0%)	24 (45.28%)	28 (52.83%)	1 (1.88%)	52 (98.11%)

**[Table/Fig-8]:** Students response to feedback questionnaire about traditional teaching lecture of scapular region (%), (Session-2, Group B), n-53.



**[Table/Fig-9]:** Result of feedback questionnaire of both learning methods, average response of all students to all questions.

were satisfied and perceived that SGD improves their understanding (85%), solve their problem (80%) and resulted in better performance in practical examination (88%) and motivated for self-directed learning (78%) [9].

Rehman R et al., revealed that their students agreed their performance improved in a group with good interaction ( $p$ -value  $<0.001$ ) when compared to the other group [10]. Muhammad AB et al., showed out of 77 students, the majority preferred interactive lectures, followed by PBL and SGD [11]. The results obtained by the Chakrabarti S are similar as majority students (79%) felt that the concentration improved with small Group-Based discussion than the large group didactic lectures [12].

In present study, SGD improves communication skill and had a good level of discussion in SGD session and can be a motivational tool with better outcome. Same results were obtained by Lalit M et al., showed that the students preferred active learning methodology [13]. Suhasini P et al., stated that majority students (98%) agreed that SGD, they had good retention of knowledge, improved their performance with good score in examination [14].

In this study, students preferred small group teaching as a best teaching mode. But the study conducted by Sivakumar G et al.,

contradicts that their students preferred traditional teaching with didactic lectures followed by table teaching with audio-visual aids [15].

**Authors perspective:** A SGD was the new teaching learning method for the students. All students were well prepared for the session. They were also exposed for the first time to SGD, enjoyed the whole session. Preparing pre-test and post-test questionnaire and feedback question was a good task.

### Limitation(s)

Study time was less, only two topics were covered. All the students were not present on the day of sessions. Few participants were not interested in taking part in active discussions because they were not prepared with the topic despite repeated reminders. Earlier author has thought to do these pre-test and post-test and feedback through google forms but some students were having difficulty in it. Hence, it was cancelled.

### CONCLUSION(S)

The SGD involves active participation of each student, improves the academic performance of students. It involves enthusiastic participation with better learning and good communication skills, develops interest with good retention of knowledge. The sessions were interactive, when learning strategy improves and efficiency of students increases, they will definitely perform better in examination with good scores. To conclude, Small group discussion which has been introduced with new curriculum would be effective in improving student's academic performance.

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