



SMALL GROUP DISCUSSION AS A TEACHING – LEARNING MODALITY IN SLOW LEARNERS.

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ABSTRACT

INTRODUCTION : Research has demonstrated that small group discussion(SGD) promotes greater synthesis and retention of materials.

Aim: Evaluation of small group discussion among slow learners of undergraduate MBBS students to improve their performance and to adopt a new teaching-learning modality.

SUBJECTS AND METHODS: The study was conducted in 1st year MBBS students of 2015–2016 batch (n = 150). After determining the slow learners, their assessment was done using pretest and posttest and correlated statistically. Feedback forms were also provided.

RESULTS: Result of the study shows that 77% of the slow learners agreed that small group discussion were interactive, innovative and built interaction between teacher and student. Also small group discussions help them to remove their hesitancy, increased their thought process and built self confidence in them.

CONCLUSIONS: The small group discussion was interactive, friendly, and bridged the gap between the teacher and student. The slow learner's communication skills are drastically improved.

KEYWORDS : Small group discussion, slow learners.

RATIONALE

After a conventional biochemistry theory class of one hour, very less time is left for any discussions. Also if there is any confusion regarding the topic among the students, there is no time left to clear them. This problem is exponentially increased in case of slow learners.

So, this study is proposed where the effectiveness of small group discussion (SGD) will be evaluated among the slow learners of undergraduate medical students in the Department of Biochemistry, IQ City medical College, Durgapur. Proper healthy discussion allows students to express themselves, presenting their ideas, to work like a team, in monitoring their own learning process and to have a more closer contact with the faculty member, which is not possible in formal lecture classes.

Aim

Evaluation of small group discussion to improve the performance among the undergraduate medical students(slow learners).

OBJECTIVE

1. To find the cut off for finding the slow learners and group them in small groups.
2. To assess the effective learning gain with small group discussion methodology.
3. To evaluate the perception of the students regarding the new teaching methodology.

INTRODUCTION

Small group is formed when few (usually 5-10 learners) work together with the task of attaining common educational objectives and the learning in small group is bolstered by group interaction. Small group discussion is a major innovation in medical education. It is optimal for promoting active and collaborative learning. Small group discussion brings variety in teaching – learning and can be customized for teaching needs so that learner - centered learning or self - directed learning can be promoted. Small group is consisting of many learners with common learning goals. Interaction among the learners is unrestrained and helps in breaking the monotony of the class^{1,2,3,4}.

Common leaning goals is the major driving force for the functioning of small group, also brings structure and cohesiveness into the group and develops collective responsibility among the group

members⁵. Higher order cognitive processes such as analysis and problem solving can be promoted by such active learning. Medical Council of India, in the recent Vision 2015 document, recommended foundation courses to orient students to national health scenarios, learning skills and communication, vertical and horizontal integration to bridge the gap between theory and practical and emphasis on early clinical exposure⁶. Also working together in a group eases the distinctions between fast and slow learners. A wide range of learning activities, which requires group collaboration, can be handled via group activity.

A convention theory class of one hour is not enough to interact with the students in one to one manner. And the real sufferers are the slow learners. This study is proposed as an effort to evaluate the role of small group discussion(SGD) in the improvement of slow learners in first year undergraduate students of MBBS of IQ City Medical College, Durgapur, West Bengal. This study is conducted in the department of Biochemistry which also evaluates the perception of slow learner about this newer interactive teaching- learning methodology.

METHOD

This study was conducted in department of Biochemistry, IQ City Medical College, Durgapur, West Bengal. After obtaining the permission from the head of the Institution and Institutional Ethics Committee, the project was started on the first year MBBS students 2015-2016 batch . Two internal assessment were conducted for the whole batch of 150 students. average of the two internal assessments were taken to find out the slow learners(those who got less than 70%). 5-7 students were absent in one or two assessment, they were separately questioned or assessed. 24 number of slow leraners were found out for the study. Out of 24, 2 remained absent for all the sessions of small group discussion. So, the total number was taken to be 22 for slow learners. For SGD sessions verbal consent was taken from the students. 22 slow learners were divided into 3 groups , each group containing 7-8 students. Groups were made randomly.

For the SGD sessions, two to three topics of must know areas of academic curricular of biochemistry were selected, to be taught either by CBL or PBL or group discussion. Three small group discussion sessions were conducted.

While taking these sessions it was ensured that those topics were

already taught in the form of traditional teaching technique i.e. didactic lecture. Hence, the students were well aware of the contents of the topic. Also the topics for SGD sessions are well informed beforehand to the students so that they can prepare it properly for the SGD sessions.

During the SGD sessions some clinical problems were given to discuss among the group and to come to a solution from each group. Then that case discussed among the group, related theory discussed, all group members were asked to present one by one so that dominating and quiet members could be controlled. Role of facilitator was to guide and control the discussion and finally summarize the session.

Each SGD session consisted of 5 min pretest, 40 min discussion, 5 min posttest and 5 min feedback from students. Pretest consisted of 10 closed loop questions of 1 mark each, same question paper as posttest was given. Feedback consisted of 10-12 closed loop questions, and to answer them in likert scale. Feedback form was a pre validated questionnaire consisting of questions related to the teaching technique used in the session, the content of session, role of facilitator, interaction of teacher- student and student-student and overall perspective of students about the session.

Students were asked to tick whichever option they felt best. At the end of the questionnaire, students were also asked for any other comment as well as suggestions to improve the given teaching technique. Students were not forced to reveal their identity. Finally the scores of pretest and posttest are also compared to see for the actual benefit of the slow learners from the sessions.

The Student "t" test was employed to compare the mean marks of study group during the pre-test and the post-test. The data was analysed by using online statistical tools. P values which were <0.05 were considered to be statistically significant.

RESULTS AND OBSERVATION

Table 1 and Figure 1 shows the students perspective about the SGD sessions. It is observed that about 77% of the slow learners agreed that the newer teaching-learning modality was interesting and was effective for them. About 77% of the slow learners agreed that it helped them in opening up and to ask questions. About 55-65% agreed that proper clinical correlation was done and it helped them to think at a higher level. Overall positive response was observed from the slow learners.

Table 1. Student response (in numbers and percentage) to different questions on Likert scale

Question no.	Question type	Strongly agree	Agree	No Response	Disagree	Strongly disagree
1	Started and ended session on time	13(59.09)	09 (40.91)	-	00	00
2	Ensured that group knew the objectives	13(59.09)	08 (36.36)	-	01(4.55)	00
3	Appropriate use of humour	08(36.36)	11 (50.00)	-	03 (13.64)	00
4	Effectively managed students who talked too much or too little	14(63.64)	08 (36.36)	-	00	00
5	Encouraged students to ask questions	17(77.27)	05 (22.73)	-	00	00

6	Proper questions asked for higher level of thinking	12(54.55)	07(31.82)	-	03(13.64)	00
7	Proper positive and negative constructive feedback provided	07(31.82)	13(59.09)	-	02(9.09)	00
8	Confusing and complicated topics clarified	14(63.64)	08(36.36)	-	00	00
9	Reviewed important learning points at the end of the session	14(63.64)	07(31.82)	-	00	01(4.55)
10	Overall was an effective facilitator/teacher	17(77.27)	05(22.73)	-	00	00
11	Overall the group discussion was interesting and educational	17(77.27)	05(22.73)	-	00	00
12	Proper clinical correlation done	14(63.64)	08(36.36)	-	00	00

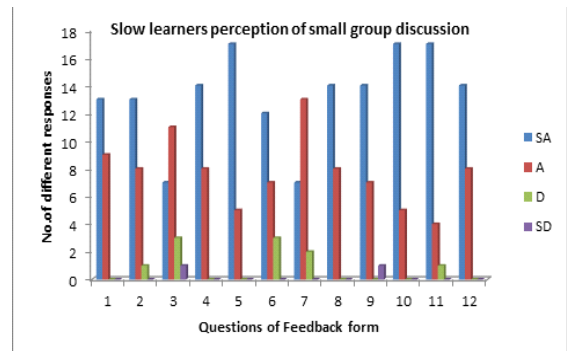


Figure 1. showing students(slow learners) responses to the questions of Feedback questionnaire.

In Table 2 and figure 2 Comparison of the pretest and posttest scores, before and after the small group discussion sessions, are depicted. It is evident that the post test scores are significantly higher than the pre test scores. It shows if all the topics can be covered by this interactive teaching- learning modality then definitely academics of slow learners can be improved.

Table 2: Comparison of Measured parameters among the study group (n = 22)

Day 1	Pre test	04.11±0.92	P value(0.002) < 0.05
	Post test	8.02±1.18	
Day 2	Pre test	4.18±0.91	P value(0.001) < 0.05
	Post test	8.30±0.92	
Day 3	Pre test	4.27±1.03	P value(0.002) < 0.05
	Post test	8.25±1.14	

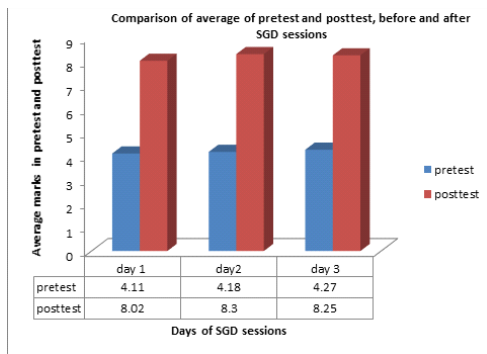


Figure 2. showing average of pretest(series 1) and posttest(series 2) on three SGD sessions

DISCUSSION

This study proved to be a very innovative of its type as this is done on slow learners. It could be very well appreciated while doing this study that slow learners could speak in front of others with confidence. Their phobias and hesitancy are much reduced. They also perceived that it helped them to understand the topic and the concepts clearly and is a better method compared to lectures for reinforcing the topic, revision, for long term memory and building up confidence to face viva voce in the examination.

Sharmila SR et al reported that small groups can be an effective learning situation in which students learn from their teachers and interaction with each other⁷. Our findings were concordant with the previous study report. Group discussion increased active participation of students as it was observed in our study; it makes more student friendly than traditional teaching methods. It also helps self-directed learning and to exchange ideas. Similar findings were reported in the various literature^{8,9,10,11}.

CONCLUSION

From this study, Small group discussion proved to be a better teaching-learning modality among slow learners. It bridges the gap between teacher and student. Communication skills of slow learners are drastically improved. It was an attempt toward the introduction of learner centered or self-directed learning. If all the must know areas of medical curriculum can be covered by this teaching-learning modality then definitely slow learners can be improved. I therefore conclude that Small group teaching is a boon not only for the slow learners but for all medical students and should be included in medical curriculum very soon.

LIMITATIONS OF THE STUDY

This type of instruction method requires proper planning and training of facilitators, manpower, time, space. Also all topics of must know areas cannot be covered by small group discussion. It is difficult to convince some senior faculty members in the implementation of new teaching learning method.

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