A STUDY ON STUDENTS PERCEPTION TOWARDS SMALL GROUP DISCUSSION –SGD

Biochemistry

Dr. Uma Unnikrishnan*

Associate Professor ,Department of Biochemistry ,Apollo Medical College ,Hyderabad.
*Corresponding Author

Dr.C.Rekha

Professor &HOD, Department of Biochemistry ,Apollo Medical College, Hyderabad.

ABSTRACT

Introduction: The Medical Council of India curriculum which now implements Competency Based Medical Education CBME has made Small Group Discussion SGD mandatory as a teaching learning method. CBME promotes active and lifelong learning. Students need to get actively involved in the learning process and small group discussion is optimal for this. **Background:** For decades the traditional method of teaching has been lectures in medical school. More interesting and innovative methods are needed to improve learning. Pre clinical subjects like Anatomy, Biochemistry and Physiology have concepts that are better understood in a Small group discussion. **Materials And Methods:** The 100 first year M.B.B.S. students are given a paper questionnaire individually. A total of 25 questions based on 5 topics namely Learning Experiences, Team work, Confidence, Communication skills and Role of Teacher are answered on the 5 point Likert scale. **Results:** The statistics was analysed using SPSS software. The mean percentage score of students was 66.1 with minimum score of 46.4 and maximum score of 89.6 with SD of 9.09. **Conclusion :** The students have a positive perception towards Small Group Discussion. The confidence and communication skills of students need improvement. The Role of teacher is also very important in conducting SGD.

KEYWORDS

Competency based medical education CBME, Confidence , Small group discussion SGD, Team work

INTRODUCTION :

The present medical curriculum is inclined towards competency based education that strongly promotes active and lifelong learning. Nowadays students need to get keenly involved in the learning process and small group discussion SGD is hence an ideal method of teaching. When students work in small groups they are more active, independent and share their ideas with both the teacher and peers¹. However teaching as a SGD requires more infrastructure, more faculty and more time for both preparation and conduction. For decades medical education has followed the traditional method of lecture teaching. Some innovative methods like flipped classroom, fish bowl strategy, problem based learning are conducted by some medical colleges both in India and abroad. However majority of them still follow the lecture method with power point presentation. Important concepts in pre clinical subjects like Anatomy, Physiology and Biochemistry can be better understood in small groups. Therefore the Medical Council of India has made SGD as a compulsory method of teaching for the new curriculum introduced in 2019. From this academic year in our medical college the first year students were exposed to SGD in numerous topics. Anatomy, Physiology and Biochemistry faculty conducted SGD in a systematic manner by giving the objectives one week earlier, clarifying their doubts during the week and encouraging active participation from students during the discussion. Peer peer interaction and student teacher bonding were given prime importance.

Many studies have shown that SGD encourages team work, communication skills, critical thinking and reasoning among medical students who are the future health care professionals². Since our first year students have participated in many SGD for the past six months, this study was done to know whether the students have a positive perception towards SGD.

MATERIALS AND METHODS

Assuming 95% confidence interval, with 82% of students agreeing that SGD has improved their learning and 10% of relative precision the required sample size was found to be 84.

$$N = \frac{Z^2 \cdot q}{pe^2}$$

N=84

Considering the non response of 10% the sample size was calculated as 84+8=92 students from first MBBS Apollo medical college. A validated paper questionnaire was given to 90 students individually. A set of 25 questions based on 5 topics namely A. Learning Experiences, B. Team Work C. Confidence D. Communication skills E. Role of teacher was answered anonymously by the students. The questions

were answered using the 5 point Likert scale Strongly disagree -1, Disagree -2, Neutral -3, Agree -4, Strongly agree -5

ETHICS

The study was presented to the Research Committee of college, approved by the members and allotted RefNo AIMSIR/IRB/RC/2020/02/083

STATISTICS

The Likert scale questions were analysed using SPSS software windows 24. Descriptive statistics like mean, standard deviation and percentages were calculated for the different dimensions namely Learning Experiences, Team work, Confidence, Communication skills and Role of Teacher. To study the relationships of different dimensions correlation coefficients were assessed. Level of significance was considered as 0.05.

RESULTS

The mean percentage score of the students was 66.1 with a minimum score of 46.4 and a maximum score of 89.6 and SD of 9.09. The mean percentage score in the different dimensions are Learning experiences-64.4, Team work-67.9, Confidence-60.04, Communication skills-60.6, Role of Teacher-66.4.

The questions with highest positive score are Q5 in Learning experiences: The knowledge and skills acquired in a group will help me in clinical practice Q9 in Team work : Group members were respectful to all members Q14 in Confidence : I felt nervous when asked to present in a group. Q19 in Communication Skills : Few members of the group talk too much and some don't talk enough. Q24 in Role of Teacher : The teacher encouraged all students even the less talking students to talk.

Correlation coefficients among the different dimensions revealed that the Role of Teacher has important significance with all the other dimensions namely Learning experiences 0.379, Team Work 0.280, Confidence 0.408 and Communication Skills 0.364.

DISCUSSION

Small Group Discussion is a low cost, interactive, simple, repeatable, interactive and friendly method of teaching. Working together in small groups ranging from 12 to 20 students encourages keen participation and active learning. It also improves the communication skills, student teacher interaction and peer peer sharing of ideas³. SGD improves critical and analytical thinking among the students. Students also ask questions confidently, express their opinions fluently and develop self directed learning skills in a SGD which is very difficult in a lecture class⁴.

Many studies have also shown that SGD increases students interest in learning ,provides opportunity to clarify points of confusion,promotes higher level intellectual skills and fosters team work⁵.The study by Shivananda Nayak states that SGD plays a pivotal role in the all round education of medical students whether it s a seminar,a tutorial ,simulated learning or problem based learning³.

In this study the highest percentage score of 67.9 was for Team work and the lowest of 60.04 was for Confidence. The Role of Teacher with percentage score 66.4 was also important. After participating in several SGD the first year students gave the opinion that working as a member of a team enhanced their learning as their fellow students shared their ideas and thoughts.They also felt that students respected each other when working in small groups. Small group discussions were conducted on a weekly basis for the students The teacher was able to concentrate more on the students in a SGD

In this study we observed that with the lowest percentage score of 60.04 the Confidence of the students needs improvement .Surprisingly most of the them felt nervous to express their thoughts in a group. The faculty are very important in conducting a good SGD as indicated by a percentage score of 66.4 for Role of Teacher .Providing the objectives, encouraging a good discussion. clarifying the doubts and giving an immediate feedback are the key roles of the teacher. .SGD provided a student centred learning strategy as indicated by Burgess and Kalmann in their study⁴.Hence on analysing many studies including ours it is seen that SGD is a collection of about 12 to 20 students who as a team work collectively; interact and listen attentively to one another, and respect the views of others.

CONCLUSION

Hence from this study it can be concluded that the students have a positive perception towards SGD .Team work among the students and Role of Teacher are very important in conducting a good SGD while the faculty needs to improve the Confidence and Communication Skills of the students.

Table 1 Students Perspective – Percentage Score In Different Groups

Question Groups	N	Minimum	Maximum	Mean
A.Learning Experiences	90	36	100	64.4
B.Team Work	90	44	96	67.9
C.Confidence	90	28	96	60.04
D.Communication Skills	90	40	84	60.6
E.Role of Teacher	90	36	96	66.4

Team work has highest percentage score .Confidence has lowest percentage score

Table 2 Correlation Matrix Between Different Groups

Question Groups	Learning Experiences	Team Work	Confidence	Communication Skills	Role of Teacher
Learning Experiences	1	0.187	0.627**	0.304**	0.379**
Team Work	0.187	1	0.230*	0.375**	0.280**
Confidence	0.627**	0.230*	1	0.323**	0.408**
Communication Skills	0.304**	0.375**	0.323**	1	0.364**
Role of Teacher	0.379**	0.280**	0.408**	0.364**	1

** Correlation is significant at 0.01 level * Correlation is significant at 0.05 level

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