

Role of Small Group Interaction Sessions (SGIS) among Medical students

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ABSTRACT

Introduction: The effectiveness of the teaching tools can be evaluated through the student feedback on the active learning strategies implemented by educationists.

Objectives: To evaluate the student perceptions of the usefulness of small group interaction session in medical college using conventional or problem based Learning (PBL) teaching methodology.

Materials and method: The study was carried out among 120 students of second year MBBS students. Student's perception of the usefulness of small interactive session was evaluated through feedback, in the form of a questionnaire. They were divided as two batches with two different strategies (Group I PBL, and Group II conventional). Data was entered and compared using SPSS version 15. The significance noted with the chi square test application, the p value <0.5 was noted.

Results: The feedback of 120 students of both groups (I & 2), revealed importance of small group interactive sessions in the understanding of content and skills, facilitation in the active learning. Significant difference in perception was found with respect to better interaction, confidence, clinical application and preparation for the final examinations.

Conclusion: The small group interactive session like Problem based learning (PBL) in combination of conventional teaching learning method is helps to student for better learning and understands the subject matter.

Key words: Small group interaction sessions, problem based learning, conventional group

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INTRODUCTION

In the subject of pathology the concepts, terms and structures are not readily visualized. The mechanism to be taught by

using conventional teaching. The subject of Pathology deals with the clinically oriented and problem based curriculum. Hence the teaching strategy of both PBL and

conventional learning were implied. These two strategies based to improve concepts and comprehension among the students. The teaching might not be effective if taught only by lectures¹⁻³.

The Researchers have found many advantages of teaching students in small tutorial groups. This enables an approach toward a responsible way of learning.

Small group discussion is important for learning as they facilitate discussion of previous

Knowledge, sharpen perception of information from books and lectures⁴ and clarify misunderstanding of the subject. Many studies have documented that it facilitates the students performance⁵ and comprehensive knowledge on a particular topic or issue. The small group interactive session facilitates individual attention of tutors to encourage equal participation by all the students⁸. The encouragement and motivation by the tutors further help in boosting of the self-confidence and social skills.

In the present studies the usefulness of small group interactive sessions was evaluated by comparison of student's perception, of conventional learning and problem based learning among

the students. The objective of the studies was to promote the use of small group interaction sessions (SGIS) among the medical student

MATERIALS AND METHODS

A cross sectional descriptive study was carried out from January to December 2013 by a self reported questionnaire distributed to 120 students of second year MBBS (Appendix 1). Students were divided into two groups (60 students in each group) i.e. Problem based learning (group I) and the conventional learning (group II). Some of the incomplete performers were rejected

Out of 120 students; fifty eight from group I and fifty two among group II completed the questionnaire and were included in the study. Two from group I and eight from group II did not complete the performance and were excluded from the study. A comparison was made between both the groups on the usefulness of SGIS in the subject of pathology. Group I and II sessions comprised of 12 students and looked after by one tutor for each group. Prior information about the objectives were displayed on the notice board. The facilitators involved in the sessions of group I had a pre-tutorial meeting with the head of the department and discussed the tutorial

objectives, format and plan to generate discussion with the students, while no pre-tutorial meeting in group II. In both groups facilitators instead of being didactic discussed the objectives by critical thinking question from students and discussed unresolved inners and confusions among the students.

The data was analyzed using SPSS version 15. Grading was given to the responses as poor, good or excellent especially in term of the content, relationship with other sciences, confidence to interact and present, working group, learnt to criticize and become active learners in both groups. Chi- square test was applied

to evaluate significance of result in both groups.

RESULTS

Group I (PBL) had 58 students while in group II (CL) 52 student responses were selected. Group II students demonstrated a greater ability to work in a group with better interaction (p value < 000) when compared to group I (Table – 1). Table 1 shows that the critical questions asked in SGIS helped students of group II to gain confidence and correlate the topics with clinical medicine. The clinical knowledge gained thus helped them in attempting clinical evaluation and enabled them to perform better in final university examination with improved good results.

Table -1: Student's responses on usefulness of Small group interactive sessions

Objective	Group I			Group II			P- Value
	Problem based learning			Conventional teaching			
	Poor	Good	Excellent	Poor	Good	Excellent	
Understanding of content	4	22	32	2	16	34	0.05
Relation with other subject	12	18	28	8	24	20	0.05
Active Learning	4	14	40	7	10	35	0.05
Self directed learning	4	16	38	6	11	35	0.05
Working in a group	8	20	30	2	2	48	0.05
Critical Reasoning	4	22	32	5	22	25	0.05
Presentation skills	3	25	30	1	21	30	0.05
Interaction	4	26	28	2	18	32	0.05
Confidence	28	30	0	1	2	49	0.05
Better performance in university exams	30	28	0	4	18	30	0.05
Application in clinical practice	16	32	0	10	14	28	0.05

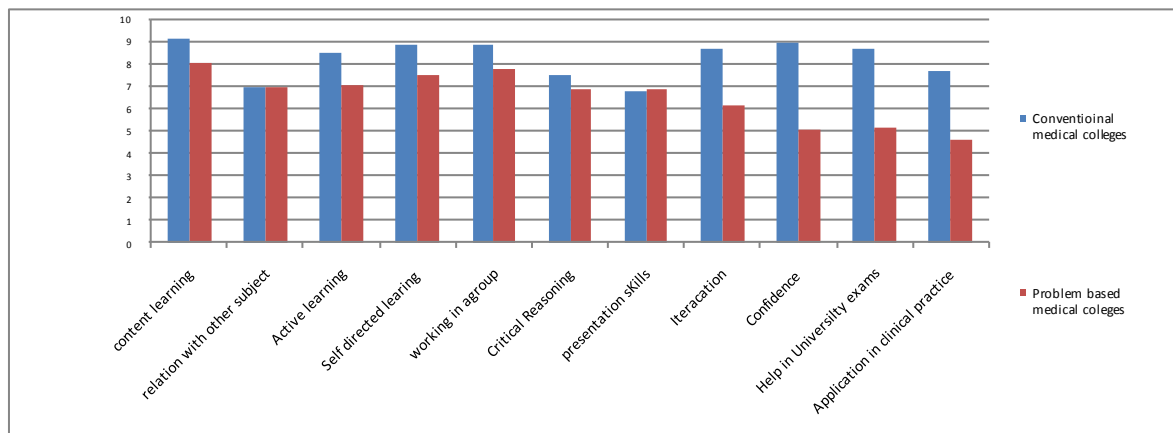


Figure 1: Comparison of effective role of small group Interactive sessions by both medical colleges

Students of both groups agreed that SGIS helps in understanding contents and facilitates active learning in Figure 1. Rate the usefulness of following teaching/learning methods employed: Scale 1=Poor, 2= Good, 3= Excellent

DISCUSSION

The current trend in pathology education is to implement new methods of teaching in a successful manner which could be incorporated into the medical curricula. This type of teaching will transform from a faculty centered, passive learning environment, to one that encourages more active student – centered learning.⁹ Bergetal 2003 recognized that the small group discussions (SGD) increase student engagement, and changes the attitudes and causes improvement in active learning¹⁰. This study assesses the utility of SGIS, a form of SGD, a strategy used for 120 batch students as PBL and conventional

type of learning. In this, the students in PBL placed were emphasized on understanding and made use of journals, on-line resources and library sources¹¹, for self study than on routine learning and memorization for reproduction which is practiced in conventional type¹¹.

The valued important outcome of SGD is a collaborative team work. The facilitator plays an important role in determining the SG tutorial learning environment. Students with more knowledge in the group, generate discussion with other students (peers) to propagate the subject knowledge⁴. Singaram etal, found that working in small groups was neither

frustrating nor stressful and also students of different social and cultural back grounds learned the subject with great interest¹². In the present study, 96% students of conventional learning group declared marked improvement in working as a group, where as 86% PBL group accepted to have improvement. This shows that SGIS had an impact on improvement of working and learning in a team irrespective of type of curriculum.

PBL is generally regarded as an effective learning strategy and an active process of personal cognitive constructions. This implies that the individual students are ultimately responsible for their own learning, while faculty learning facilitators^{13,18}. The understanding of pathology is more useful by SGIS and provides a basic to think, figure and workout and outcomes are good¹⁴. In the present studies the students of PBL gave more weightage to group discussions than SGIS for effective learning and are the active process of personal cognitive construction. The interpersonal interaction was better by the PBL group (54%) when compared to convention group (50%). In the conventional group the interpersonal interaction only in small of interactive

sessions. In the present study the students of conventional group gained a lot of confidence from small group interactive sessions, change in the attitudes towards learning. This was noticed by the facilitators through the feedback questionnaire of conventional group students. A study correlated with Rehana et al¹⁸.

Nandi et al¹¹ found that there one significant differences in the perception of learning in both groups curricular environments. PBL group students consider learning to be more stimulating, interesting engaging and useful while the conventional groups feel that the learning is not relevant and boring. In another study, the conventional learning students learning are lower than that is “modernized” medical school of Duude university.¹⁵ In the present study the active learning was 93% PBL and 86.5% in conventional learning.

This type of educational tool helped in the university exam preparation of (92%) and (55%) students of convention and PBL this is because, they learn in the clinical aspects from PBL’s because of presentation of clinical cases in the form of problems.

Learning of pathology through lectures can further be developed by

discussion and it is a knowledge – acquiring process during SGD.⁴ The opportunity for discussion was appreciated by both groups and that helped them to better understand the unclear subject concepts and also they felt that they remembered the subject well after discussion in small groups. This type of discussion allowed students to discuss about the previous knowledge and perception on the subject that they gained through books and lectures. In the present study in the small group interacting session integration of the topic with clinical orientation or problem oriented, topic was helpful for the conventional group (90%) as compared to the PBL group (93%). This is because problem based learning develops a different set of skill in the approach to clinical problems when compared to students of conventional learning method.¹⁶

When both group responses as SGIS Compared, it was found that both groups responded to interactive sessions on a useful teaching and benefited them in understanding the topics.

Educational leaders try their level best to take care of the educational climate and ensure the satisfaction of students with their learning atmosphere.¹⁷ It is understood that complete transition from conventional

to PBL learning provide effective training for undergraduate students has its own limitations. In the present study, the limitations was that Group II facilitators had no pre-tutorial meeting with faculty member, hence the results of the study emphasize the importance of SGIS in teaching and learning of pathology. This study suggests the usefulness of SGIS in two different types of learning.

CONCLUSION

This study suggests that The small group interactive session like Problem based learning (PBL) in combination of conventional teaching learning method is helps to student for better learning and understands the subject matter.

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Appendix 1

QUESTIONNAIRE	1	2	3
Helped to earn content of the subject			
Helped to relate physiology with other subject			
Helped you to become an active learner			
Motivated self directed learning			
Learned the skill of working in group			
Learned skill of critical reasoning			
Learned the skill of presentation			
Learned skill of interaction during the teaching tool			
Developed confidence			
The teaching tool will help you to perform better in University exams			
Help you to apply knowledge in clinical practice			