

ORIGINAL ARTICLE

Medical Students' Perception about the Effectiveness of Interactive Session in Small Groups

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ABSTRACT

Objective: To find out the perception of undergraduate medical students about the effectiveness of interactive sessions in small groups.

Study Design: A descriptive cross sectional study.

Place and Duration of Study: This study was conducted at Islamic International Medical College Rawalpindi from 10th April to 12th June 2014.

Materials and Methods: A total of 100 students from 3rd and 4th year MBBS were enlisted on first come first basis out of those who volunteered to participate in the study. They were provided with questionnaire (Table I) to give their opinion about the effectiveness of interactive sessions in small groups as learning tool during undergraduate medical studies.

Results: Out of the 100 participants 65% considered interactive small group discussions effective, 16.7% were indecisive, while 18.3% disagreed that interactive small group discussions were very effective at undergraduate level in medical education. In students' opinion sessions kept the students attentive (93%), promoted group interaction skills (95%) and promoted critical thinking (63%). A majority (76%) thought that there was good retention of the subject discussed in an interactive session. In students' opinion it gave them a good chance to evaluate them (71%).

Conclusion: It is concluded that interactive group discussions is an effective method of imparting education to medical students at undergraduate level.

Key words: *Interactive sessions, Group discussion, Undergraduate Studies.*

Introduction

Enhancement of students' learning skills is one of the primary goals of the educational institutions. Methods of imparting knowledge have remained static for ages. Class room lectures was a norm and its value was never questioned. In the recent past newer methods of imparting education have been considered and introduced in the institutions worldwide and medical education is no exception.¹ Lectures, which were the mainstay of teaching in the past, have been criticized for being a passive form of learning in which the teacher-student interaction is minimal.² Total passivity on the part of students may fail to keep them attentive and generate their interest in the subject. Failure of participation and lack of attention may also result in poor understanding and retention of the material taught. Lectures considered now a relatively ineffective way to deliver information are increasingly being replaced by more interactive learning formats.³ learning is an active process and interactive lectures

and interactive small group discussions are considered today as better educational practice compared to non-interactive methods of teaching.⁴ According to some research projects such as Tennessee's Star, reducing the size of the class as in small group sessions are likely to produce many benefits for teachers and students. Due the smaller numbers, students receive more individual attention, teachers are able to manage the students better, discipline problems are likely to be less and there is more interaction amongst students and between students and teachers since the students are not passive listeners any more.⁵ Suitable teaching methods which aim at involving the students and encourage their participation can motivate them and help them to better utilize their potentials. One of these methods is small group teaching. It is student-centered, students participate and interact actively while the teacher plays the role of facilitator.⁶ Interactive small group teaching has been the highlight of a revolution in medical education over the last 40 years.⁷ Evaluation of the effectiveness of newer methods like interactive sessions in small groups is a constant ongoing process by experts in medical education. We introduced interactive methods in our college a few years ago. The aim of this study was to assess IIMC students' perception about the usefulness and effectiveness of interactive

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sessions in under graduate medical education.

Materials and Methods

This is a descriptive cross sectional study conducted at Islamic International Medical College Rawalpindi from 10 April to 12 June 2014. One hundred students comprising of 86 female and 14 male students from 3rd and 4th year MBBS were included by convenient sampling technique. A questionnaire was developed by the authors in consultation with experts in medical education to cover various aspects required to find the opinion of students about the effectiveness of interactive sessions at under graduate level medical education. An introductory lecture was given to third and fourth year students about the aims and significance of study. Out of all the students who had volunteered 100 were enlisted on first come first basis to participate in the study. Participants were provided with a questionnaire (Table I) to know their opinion about effectiveness of interactive sessions in small groups at under graduate level. The questionnaire comprised of 10 statements. Opinion was to be made on Likert scales ranging from one (strongly agree) to five (strongly disagree). Each participant was required to mark one out of five statements. Results were compiled as the percentage of students choosing each category on the Linkert scale. The points which were considered in the study included potential of interest generation. Opinion was sought if small group discussion kept them attentive, and if there was good retention of the subject discussed in an interactive session. Questionnaire inquired if interactive session was considered good to enhance critical thinking, and provided understanding of the subject discussed. It considered if participation of a number of students in the form of a group could help gather information and knowledge on the subject, with a view that group work might encourage students to go out of the way to consult books and other sources. One important aspect considered was if the group work helped to enhance interactive skills, and did peer pressure evoke healthy competition amongst the participants. It is a general perception that in traditional method of education through lectures the students did not get an opportunity to evaluate them; opinion was invited if this method did not have that shortcoming.

Table I: Students' response towards the effectiveness of interactive small group discussion sessions. (n=100)

	Statements	Strongly Agree	Agree	Indecisive	Disagree	Strongly disagree
1	Interactive sessions generate interest in the subject.	28	36	22	14	0
2	Interactive session keeps a student attentive	89	4	4	3	0
3	Interactive sessions promote critical thinking	41	22	19	13	5
4	There is good understanding of subject during interactive sessions	13	43	9	30	5
5	Retention of subject is good after an interactive session	18	58	10	12	2
6	Interactive sessions enhance group interaction skills	90	5	5	0	0
7	Interactive sessions encourage students to prepare the topic beforehand	34	19	31	9	7
8	Helps evaluate oneself by comparing with other participants	5	66	23	6	0
9	Provide extensive knowledge on the subject due to combined efforts of several participants in a group.	4	14	36	38	8
10	Generate healthy competition amongst the participants	18	43	8	31	0

Results

Out of 100 participants, 65 % students considered interactive small group discussions effective by agreeing or strongly agreeing with the statements in the questionnaire, 16.7% were indecisive, while 18.3 % disagreed or strongly disagreed that interactive small group discussions were effective in imparting knowledge at undergraduate level in medical education. The points which a predominant majority of participants considered most positive about the interactive sessions were that they kept the students attentive (93%), they attributed this to the active participation of students during a session which maintained their interest and prevented them from getting bored and distracted. It was because of the

potential of the discussion sessions to maintain attention that a good retention of the discussed material was achieved (76%). In students opinion discussion sessions promoted group interaction skills (95%). Participants thought that interactive sessions promoted critical thinking (63%). Predominantly (71%) considered interactive sessions gave students a fair chance to evaluate them, only 6% disagreed. Owing to active participation a majority of students (64%) considered that interactive sessions generated interest in the subject, 14% thought otherwise. Regarding encouragement to prepare the topic before-hand only 53% agreed that interactive sessions encouraged students in this regard, 31% were indecisive while 16% disagreed, thus not showing any significant advantage in this regard. Most of the respondents did not agree that interactive sessions helped to provide extensive knowledge (46%), only 18% gave positive response to the question, and 36% remained indecisive, indicating that interactive sessions do not significantly promote students to go out of the way to improve their knowledge. Fifty-six percent participants agreed that subject is well understood during interactive sessions, 30% disagreed with this which shows that a third of the participants fail to grasp well the subject discussed. A positive aspect of group discussions agreed upon by 61% students is that they generate healthy competition among the participants.

Discussion

The results of our study on perception of students regarding effectiveness of interactive group discussions show that interactive small group discussion is an effective method of learning with the point of view of understanding and retaining knowledge at undergraduate level. Active participation increases understanding and confidence, and encourage students to participate actively in discussion.^{8,9} Students agreed that there is good retention of topic after interactive small group discussion because of active participation, extrinsic and intrinsic motivation¹⁰ which is similar to our study in which 76% agree that interactive sessions result in retention of discussed material. Students receive more attention in small groups, they think

that it provides more group interaction skill because there is generation of new ideas through brain storming, they get opportunity to talk freely as there is minimum intervention of tutors and criticism from them.¹¹ In our study the students considered that interactive sessions kept them attentive because of their active participation, this is similar to the findings of a study from Iran.¹² The educational research has shown that students who are actively involved in the learning activity will learn more than students who are passive recipients of knowledge as in a lecture.^{13,14} Studies have demonstrated that increased attention and motivation enhances memory.¹⁵ In fact, some authors have said that increased arousal and motivation are the essential ingredients for learning and are often more important for retention than intelligence. Active involvement enhances the student's level of understanding and ability to integrate and synthesize material.¹⁶ Active participation also improves the student's conceptualization of systems and how they function and increases the student's level of retention.¹⁷ This is particularly important in medical education, where the application and use of information is as important as the retention and recall of facts. In a study done in Hong Kong, many aspects of small groups students centered activities were highly valued by students.¹⁸ In Malaysia In a study conducted in two medical colleges, 79.0% of respondents found problem oriented class sessions interesting. which indicates effective understanding of subject contents with the help of interactive lecture.¹⁹ Majority of students in our study (63%) agree that interactive small group teaching promotes critical thinking, it is in line with the finding in the study that questioning, reasoning, listening, responding and explaining, which is a part of interactive small group discussion stimulate students critical thinking and increases their interest in subject contents.²⁰ A study based on self reports from participants as well as from observational data shows that interactive lecturing techniques is successful and more effective than non-interactive lectures.²¹ This study was limited to students of only one medical college and with a limited sample size. Further studies on the subject must be conducted to incorporate and compare vast data to arrive to a conclusion.

Conclusion

It is concluded that undergraduate medical students consider interactive small group discussion effective as a tool of imparting knowledge because it keeps the participants attentive, promotes group interaction skills and critical thinking. They think that subject is well understood and discussed material is well retained after an interactive session. It also provides them a chance to evaluate them.

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