

# ROLE OF TUTORS' TRAINING IN DELIVERING EFFECTIVE MEDICAL EDUCATION

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**Objective:** To determine the effectiveness of training of the tutors to conduct small group tutorial sessions.

**Study Design** A descriptive study

**Methodology:** One hundred and thirty nine students of first till fourth year of MBBS course, were introduced to the subject/topic and the learning objectives. In the following week, they attended small group sessions arranged for their respective subjects. Trained tutors were identified on the basis of having taken the tutor training course/workshops arranged by College of Physician and Surgeons, Pakistan. The tutors conducted the small group tutorial sessions as per their assignment. At the end of tutorial sessions the students were asked to complete a questionnaire encompassing the learning outcomes of the students and behaviors of the tutor during the tutorial classes. Learning outcomes were compared using Pearson test.

**Results:** The motivation of the students and their clarification of concepts increased significantly by attending the tutorial sessions with trained tutors (trained 77.7% vs. un-trained 21.58%  $p < 0.005$  and trained 80.58% vs. un-trained 19.42%  $p < 0.005$  respectively).

**Conclusion:** Trained tutors facilitated the sessions in such a way that students discussed themselves and found their own queries help in the clarification of the concepts more efficiently. Effective faculty development program should be designed and implemented to enhance the learning process of the students by trained facilitators.

**Key words:** Small group tutorials, Tutor Training, Learning, Facilitators.

## INTRODUCTION

The curriculum in most of the medical colleges in Pakistan is discipline based using lectures as main instructional method. Lecture is the best strategy to transfer a new concept or information to a large number of students at a time. A lecture is usually thought of as mechanism for imparting factual information and provides an opportunity to "paint the big picture" of the topic to the whole class. Unfortunately in public sector medical colleges of Pakistan the student population is large enough to limit the interactive nature of the lecture. According to O'Donnell, lecture is a process by which the notes of teacher become the notes of a student without passing through the minds of either.<sup>1</sup> With undergraduate medical education currently

carrying a health warning because of the stress and anxiety exhibited by students and young graduates, any educational process that promotes enjoyment of learning without loss of basic knowledge is likely to be a better idea.<sup>2</sup>

Undergraduate students are assumed to be capable of creative and critical thinking, and problem-solving skills. With large classes of over a few hundred and over-crowded syllabi, explicit teaching of thinking skills during lectures is not considered a practical choice. Small group work is characterized by student participation and interaction.<sup>3</sup> Small group tutorials sessions are an innovative technique of information transfer which allows the tutor to develop the student more effectively as good listener, speaker, manager, life long learner and researcher.<sup>4</sup> When adults teach and learn in one another's company, they find themselves engaging in a challenging, passionate and creative activity.<sup>5</sup>

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On the other hand, one of the problems, which is commonly seen, is unavailability of experienced facilitators to conduct sessions in the appropriate way.<sup>6</sup> There are several schools of thoughts regarding the benefits of problem based learning and small group tutorial for the knowledge provision to the students. Some private medical institutions are following a problem based learning system (PBL),<sup>7</sup> whereas many public medical institutions follow a conventional lecture based curriculum. Pakistan Medical and Dental Council has policies regarding the standard of teaching in medical schools, however there is no such policy to force any institution for opting small group session strategy.<sup>8</sup> Therefore different institutes implement tutorials and lectures based system in different ways. The role of tutorial support by the tutor/facilitator is to assist students and encourage a learning environment that empowers students. A trained tutor is capable of facilitating the tutorial sessions in a coherent way, so that the students clarify their concepts without the involvement of the tutor. While the untrained tutor may not be able to facilitate the discussion rather he/she starts leading the discussion and give all the answers him/herself turning small group tutorial session into a mini lecture again a didactic one. The leading role of tutor also suppresses the inquisitive nature of the students limiting them to become a life long learner.

The objective of this study was to determine the effectiveness of training programs for the tutors to conduct small group tutorial sessions.

## METHODOLOGY

It was a descriptive study conducted at Jinnah Medical and Dental College Karachi, during the academic year 2006-7. The College observes the conventional type of MBBS curriculum with two years of basic and three years of clinical sciences education. One hundred and thirty nine students from MBBS first year till MBBS fourth year were identified by a randomly stratified method for the study. The students were introduced to the topic and its key concepts in didactic lectures. The learning objectives regarding the topic were given at the end of the week. In the following week, they attended small group sessions arranged for their respective subjects. Tutors of the respective department facilitated the tutorial sessions. The trained tutors were identified as the one who had taken the teacher-training courses regarding conduction of small group tutorials arranged by the College of Physician and Surgeons of Pakistan (CPSP). Trained and un-trained tutors conducted the small group

tutorial sessions according to their assignments. At the end of tutorial sessions the students were asked to complete a questionnaire addressing the learning outcomes (motivation towards study and clarification of concepts) of the students and behaviors of the tutor (lecture based, minimal interference, keeping discussion on track, bouncing the question back to the students) during the tutorial classes. Statistical analysis was done through SPSS version 15.0 and Pearson chi-square test was applied to calculate the association among various responses with significance at  $p < 0.05$ .

## RESULTS

The sessions facilitated by untrained tutors were mostly teacher centered and were unable to clarify concepts of students and they were not motivated towards their studies (Table -I). The sessions conducted by the trained tutors were mostly student centered and the discussion was kept on a track that resulted in significantly higher motivation towards studies and clarification of concepts compared to the sessions led by untrained teachers (77.7% vs. 21.58%  $p < 0.05$  and 80.58% vs. 19.42%  $p < 0.05$  respectively). Figure 1 depicts the students response towards the method of facilitation by a trained tutor. Keeping the discussion on track, making the students discuss among themselves and bouncing the question back to the students, significantly increased the motivation of the students towards their studies and helped them clarify their concepts ( $p < 0.05$ ). Figure-2 is the graphical representation of the responses of the students towards the tutorial sessions conducted by the un-trained tutors. It shows that delivering the lecture in tutorials was not helpful in motivating the students towards their studies. Moreover the qualities of the tutor that is keeping the discussion on track ( $p < 0.05$ ), making it more student centered ( $p < 0.05$ ), and bouncing the question back ( $p < 0.005$ ) to the student group highly correlated with the motivation and understanding of the students regarding their subject clarifying their concepts (Table-I).

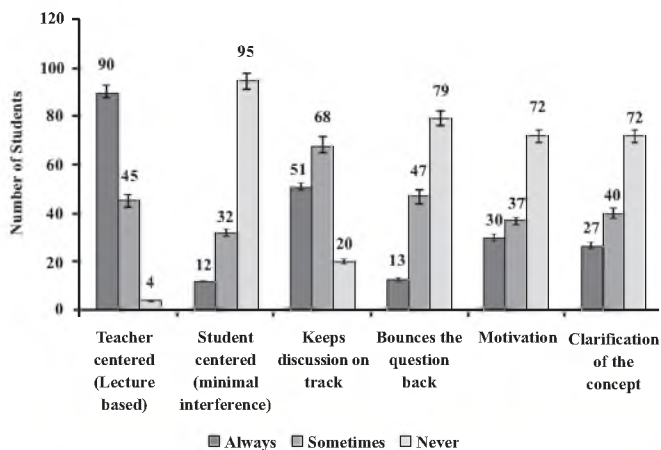
## DISCUSSION

In this paper outcome-based approaches are described in which competence in teaching was defined in terms of learning outcomes. There have been many calls to decrease the use of didactic lectures methods in medical education and to increase student centered learning.<sup>9</sup> Small group works is a powerful educational tool and group learning is the variety of

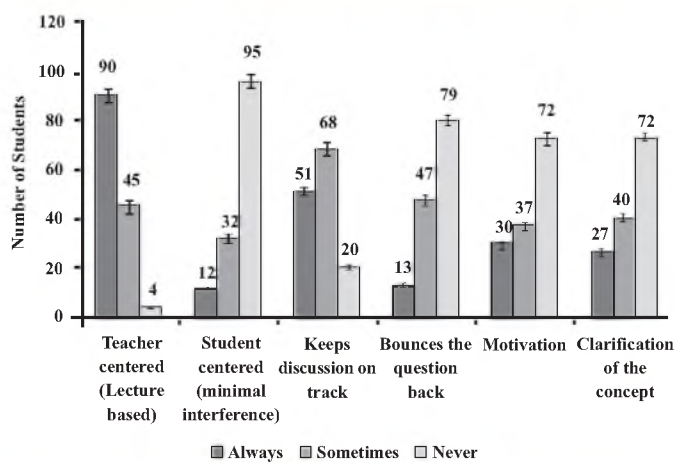
**Table I:** Responses of the students on the items in the questionnaire (N=139)

	Descriptive output						P - Value			
	Trained Tutor			Untrained Tutor			Trained Tutor		Untrained Tutor	
	Frequency	Mode	%	Frequency	Mode	%	Motivation	Clarification of concepts	Motivation	Clarification of concepts
Teacher centered (Lecture based)	75	2	54.0	90	1	64.7	0.101	0.004	0.066	-0.037
Student Centered (minimal interference)	92	1	66.2	95	3	68.3	0.179*	0.125	0.055	0.074
Keeps the discussion on track	93	1	66.9	68	2	48.9	0.100	0.198*	0.031	0.013
Bounces the question back	78	1	56.1	79	3	56.8	0.230**	0.126	0.237**	0.009
Motivation toward studies	108	1	77.7*	72	3	51.8	-	0.369**	-	0.062
Clarification of concepts	112	1	80.6*	72	3	51.8	0.369**	-	0.062	-

\* p< 0.05, \*\*p<0.005. 1= always, 2= sometimes, 3= never



**Figure 1:** Responses of the Students to Tutorials Conducted by the Trained Tutors



**Figure 2:** Responses of the Students to Tutorials Conducted by the Un-Trained Tutors

educational sessions designed to enhance the learning capabilities of the student. Personal understanding of an educational issue can be attained in a number of ways but small group make it possible to turn such understanding into a coherent, rational and professionally defensible position that can be clearly articulated.<sup>10</sup> Group is defined as the set of people gathered together to discuss the topic of similar interest. The optimum size of the group in these sessions is 18 – 20 students.<sup>11</sup>

Trained tutors can actually play the role of true leaders, who direct the discussion onto the right tract in such a way that at the end of discussion the participants are convinced that they themselves have reached to the right decision. Leaders can model manual, intellectual and communication skills, and learners can safely rehearse and refine these capabilities.<sup>12</sup> Preston-Whyte et al. in their study declared that over two-thirds of academic and clinical staff had received no formal training in teaching skills.<sup>13</sup> It is quite possible that sessions are arranged with a small number of students and a tutor yet the discussion is one sided and the participation of the students is minimal. This is better called mini-lecture. The role of tutor during the session is more of the facilitator rather than a resource person. The trained facilitator keeps the discussion on the right track and directs it to the achievement of task with minimal his/her interference.

Optimally effective small group work is done when there is more interaction of students which makes

them more expressive, encouraging them into a good listener and speaker; that are the qualities of a good doctor. In case of traditional tutorial sessions, the tutor normally states the objectives, initiates the process, invites learning input, promotes discussion and brings the session to an appropriate close. Throughout the session the tutor "leads from the front" often literally.<sup>14</sup> During all this process the discussion revolves around the tutor him/herself and a few outspoken students among the group. This clearly does not elicit the motivation of all of the students and the aim of the small group session is not achieved. The success of these sessions depends upon the tutor's role.<sup>15</sup> This study confirmed that the training of teacher influences significantly ( $p < 0.05$ ) the motivation of the students towards their studies. The authors surveyed forty-eight distinguished teachers from clinical departments regarding the role of instructional successes in learning to teach. Using qualitative content analysis of comments, the authors identified nine common successes in clinical teaching associated with planning, teaching, and reflection. In anticipatory reflection used for planning, common successes occurred by involving learners, continuously innovating, creating a positive atmosphere for learning, considering the learners, engaging the learners, preparing adequately, and limiting content.<sup>16</sup>

In addition to the participation, small group sessions are also characterized by group work on task and reflection on the work completed. This is reflected by the achievement of the learning objectives with the clarification of the concepts. The training of the tutors as the facilitators of group discussion has a vital role in this aspect. The ability of the tutor to keep the discussion on the right track and bouncing the question back to the students is positively and significantly correlated with the clarification of the concepts by the students themselves ( $p < 0.05$  and  $p < 0.005$  respectively). A fundamental feature of effective facilitation is to make the participants feel that they are valued as separate, unique individuals deserving of respect.<sup>5</sup> If the tutors are new to small group learning, then they need to be trained and acquire some basic knowledge of adult learning. Appropriate faculty development programs should be developed to meet these requirements. These may take the form of specific

courses or "on the job" training and may include the opportunity to join experienced tutors at work.<sup>17</sup> Faculty development and evaluation program were found to have contributed significantly to the process of curricular change.<sup>18</sup> Successful small group sessions are based on development of trust, fostering of collaboration and achievement of task. As with all teaching instruments its benefits are maximized when it is used skillfully by a well trained tutor with structured with well defined objectives.

## CONCLUSION

Trained tutors were able to manage small group tutorials in a way that students could obtain maximum learning benefits. Students' satisfaction and motivation become high after attending tutorial session conducted by trained tutors. Therefore the authors strongly recommend that the teaching staff of medical college should be trained through short courses/series of workshops to be well acquainted with the teaching skills and learning methodologies so as to conduct tutorial session effectively.

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