

## Questionnaire: Research paper

# Students' Perception regarding Peer Assisted Teaching and Learning in Family Medicine Rotation at Oman Medical College.

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### ABSTRACT

**Background:** Peer assisted learning (PAL) provides a safe and controlled environment, offering students useful ancillary educational method for motivation preparing doctors for their future role as educators. Modern medical education is giving more emphasis on student centered teaching and learning. PAL offers the chance to develop self-directed learning skills and to help fellow students with their learning. The purpose of the study was to identify medical students' perception regarding peer assisted teaching and learning in family medicine rotation.

**Methodology:** This was a cross sectional study conducted in 6<sup>th</sup> year clinical students. The study comprised of a questionnaire survey of 68 students at Oman Medical College. Participants were invited for self-filled survey questionnaire comprised of questions regarding knowledge and perception of PAL. Data was analyzed in SPSS, expressed in frequencies and percentages.

**Result:** Over all response is 100%, 77.9% female students.

Most of the students strongly agrees that teaching is focused on must know things (51%), friendly environment is good for learning (65%). Good presentation skills and self-confidence (52%) is essential. Nearly half agreed clinical scenario based and clear concept, appropriate organization of content and interactive session is effective for learning during PAL.

**Conclusion:** Students have positive perceptions toward PAL and more sessions can be considered in future. Medical students recognize the unique and important role of peer teaching in under graduate medical education and its importance for their professional development. Medical students' informal teaching activities accompany, facilitate, and complement many important aspects of their medical education. Formally developing medical students' knowledge, skills, and attitudes in education may further stimulate these aspects.

**Keywords:** Peer Assisted Learning, Under Graduate Medical Student, Clinical Years, Small Group

### Background

The term Peer-Assisted Learning (PAL) as an educational concept in the medical education where students tutor or teach their peers. The big challenges of teaching and learning are how students can effectively interpreted knowledge in real practice to improve patient care. Medical education is changed from didactic teacher centered teaching to the use of interactive, problem based, student centered learning [1]. Modern medical education is giving more emphasis on student centered teaching and learning. Students become self- directed learner identify educational resources available to help, self-motivated and assessing their own strength and weaknesses to create a flexible and relevant curriculum [2]. The General Medical Council recognizes that teaching is vital to medical practice, and graduates are asked to demonstrate competent teaching abilities [3-4].

PAL is one the method in medical school which can improve teaching and learning, provides a safe learning environment to promote learning and retention of knowledge. Students feel

more comfortable asking questions to another student who will also better prepared for continuing education after graduation because they are allowed to be more actively involved in their own learning and so take more responsibility for it[5]. The PAL environment may allow students to ask questions with less fear of being judged. This also provides opportunities for networking within the class [6].

Discussions in peer groups are a valuable teaching and learning opportunity to retain the information prepared, and provide a safe environment in which they can experiment and develop their teaching skills [7]. PAL offers the chance to develop these skills and to help fellow students with their learning. Student learn in a relaxed environment with PAL and learn skills including leadership, presentation, and communication, all of which are essential to practice medicine [8].

This is true that Peer-tutors cannot provide the same clinical experience as a faculty, sometime groups led by students find analyzing clinical problems more difficult. Medical students

are future residents and faculty members and will have teaching roles; medical students may become more effective communicators as a result of such training, as teaching is an essential aspect of physician–patient interaction [9]. Better understanding of teaching and learning principles during PAL session may make them better learners. PAL is an exciting teaching-learning method in Family Medicine and has the benefits of increasing teaching skills of students. Peer teachers are closer to the students than faculty and can better understand the problems and challenges students face [10]. Also being at a closer level in education and training they can explain difficult concepts at an appropriate level. The purpose of this study was to identify medical students' perception regarding peer assisted teaching and learning in family medicine rotation.

Family medicine rotation has main objective of handling common problems in primary care. Year 6 is the first clinical year at Oman Medical College (OMC). In 8 weeks of family medicine rotation students placed in primary health care set up for clinical learning. Small group discussion conducted daily in the afternoon and facilitated by the family medicine faculty. Some of the sessions are presented by students as facilitator. All students receive a list of website and name of standardized books for learning at the time of Family medicine rotation orientation and they are supposed to make their presentation according to the guidelines given to them. Faculty in charge distributes the topic to the students from the identified topic list (from modules) for small group presentation. PAL is conducted at least twice a week and each student has a chance to present minimum once, followed by peer feedback and faculty feedback as well.

## Methodology

This cross sectional study was conducted at Rustaq campus OMC. All students in 6<sup>th</sup> year (first clinical year) were invited to participate in this study. All Year 6 students were invited to act as tutors. Tutors were provided with a 1 hour information session detailing the objectives and organization of the program, and the format of the teaching. Teaching sessions were approximately 1 hour long, covering clinically relevant content. The topic of the tutorial was identified by tutees, who notified the tutors of this topic several days in advance of the tutorial, allowing them adequate time to prepare. Data was collected through self-filled questionnaire by the participant, included demographic characteristics (age, gender) and questions regarding knowledge and perception of PAL. At the end of the last session of family medicine rotation student feedback about the PAL sessions was obtained using a questionnaire. Principal investigator ensured uniformity, explained the questionnaire, objectives to the participant and obtain a written informed consent before collecting the data. Survey instrument was made after literature search reviewed by and agreed on via several brain storming sessions. Validation of questionnaire on small group was also completed. Student agreement with a set of 18 statements was measured using a Likert-type scale.

## Results

A total of 68 students participated in the study. The survey achieved a 100% response rate. Students were asked multiple

questions regarding their perception about peer assisted teaching and learning in family medicine rotation. Their answers were coded into strongly agree, agree, neutral, disagree and strongly disagree. Over all 53 female (77.9%) and 15 male (22.1%) were participated. More than half (51.4%) of the participants agreed that teaching was focused on must know things and number of slides were adequate. About two third of the students agreed that teaching material was taken from books. Nearly sixty six per cent of students agreed that PAL session had friendly environment. Response about teaching competency and adequate knowledge and skills was positive from 50% students. 44.3% agreed that sessions had appropriate organization of contents for lecture. Nearly 38.5% per cent of students said that teaching contents comprised of updated evidence based materials (Figure 1).

Less than half (42.6%) of the students agreed that the sessions were interactive with appropriate answers. More than fifty per cent commended that student teachers showed good presentation skills and self-confidence. Less than half (47.1%) agreed that the teaching was scenario based learning. The rate of agreement with a statement regarding problem solving and integrated presentation was 34.4%. Twenty six percent of students agreed, the option that lecture presentation is problem solving and integrated. About two third of students have given positive response about need of similar sessions in the future (Figure 2).

## Discussion

Peer assisted learning is known as an effective educational strategy in medical teaching and is an effective tool to promote learning and retention of knowledge. This strategy develops professionalism in student tutors and contributes to a sense of teaching responsibilities [11].

Our medical students generally show positive perception. By preparing to teach, students are encouraged to construct their own learning program, so that they can explain effectively to fellow learners. Studies have shown positive outcome with strategy [12].

Half of the participants agreed that teaching focused on must know thing with appropriate teaching competency and number of slides were adequate. Similar finding was seen in one of the study done in Nepal [13]. (Fig I)

Nearly one third participants mentioned that most of the material taken from book and 38.5% agreed organization of the content was appropriate with evidence based information. Half of the participants agreed that student teachers had good presentation skills with self-confidence. PAL is an exciting teaching-learning method which increases the in depth learning. In a study conducted in Netherlands and Uniformed Services University in the United States, majority of students agreed that peer teachers performed well in their teaching roles and can serve as effective teachers. Peer teachers are closer to the students than faculty and can better understand the problems and challenges students face [14].

Peer instructors may be used in practice to reinforce and review the assessment. More than half participants of our study agreed that teaching was focused on must know things and the environment was very friendly for learning. Students are more open with peers and more likely to share their difficulties and concerns [15]. PAL has the benefits of increasing teaching skills

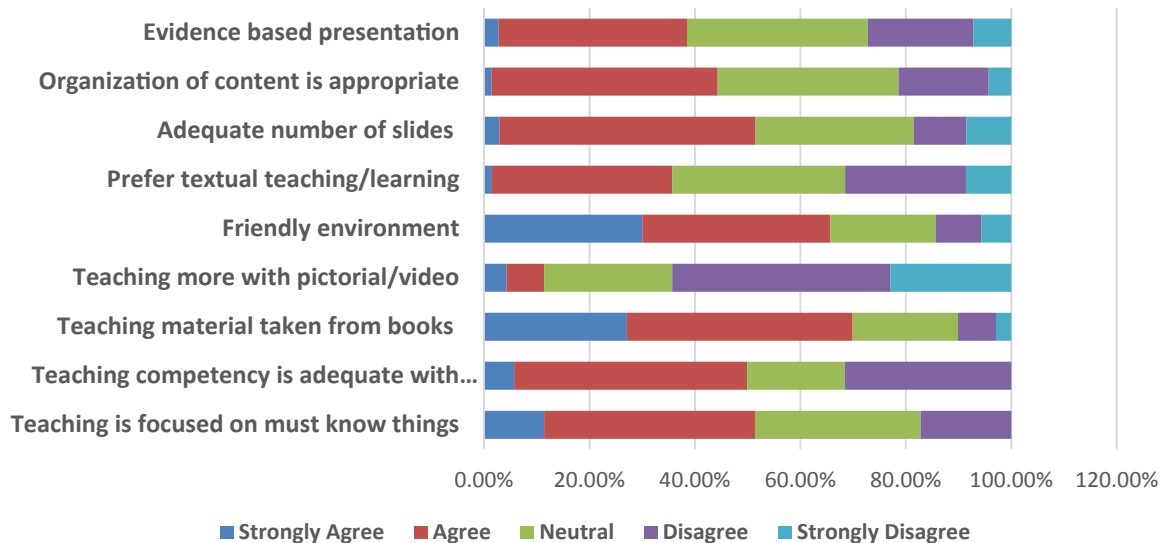


Figure 1

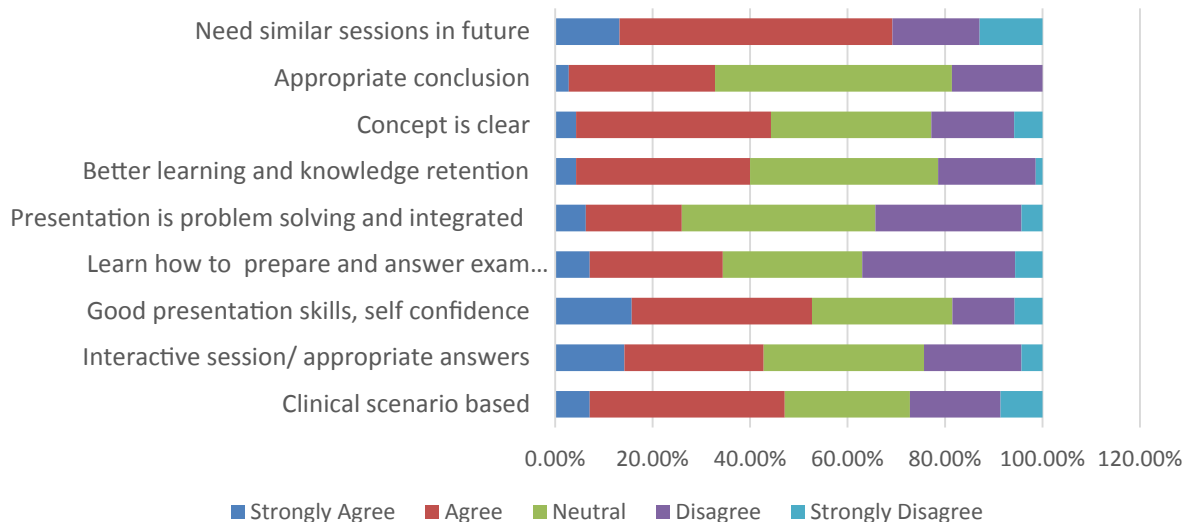


Figure 2

of students, their knowledge of educational theories and their application in teaching.

Nearly half of them mentioned that presentations were interactive clinical scenario based with appropriate answers and clear concepts. Teaching skills increases knowledge also being at a closer level in education and training they can explain difficult concepts at an appropriate level [16-17].

PAL is very useful motivating our students and refining their competency in teaching. More than one third students in our study agreed that the sessions should be done in future also. Similar findings have shown in one study published recently that actively involving students in leadership practices can contribute to the promotion of a culture of excellence in teaching [18].(Fig2)

Medical students play an important role as communicators and educators in health care system to educate patients as a physician in near future. They must have adequate time and opportunity to practice and develop this skill during medical school in a comfortable and safe educational environment [19-21].

### Limitation

We recognize some limitations in this study such as small number of participants and this study is done only in one campus. Moreover, respondents are selected based on their ability to inform a topic of interest rather than for their generalizability to a larger population.

### Conclusion

PAL could play a useful role in an undergraduate medical education and teaching can stimulate further learning. Students have positive perceptions toward PAL and more sessions can be considered in future. Peer-assisted learning can be tried and encouraged in other medical schools. Medical students' informal teaching activities accompany, facilitate, and complement many important aspects of their medical education. Formally developing medical students' knowledge, skills, and attitudes in education may further stimulate these aspects. Further studies are required.

**Questionnaire: Students Perception regarding Peer assisted Learning (PAL)**

Age: -----

Gender: ----M -----F

S No	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
	Evidence based presentation					
	Organization of content is appropriate					
	Number of slides adequate					
	Prefer textual teaching/learning					
	Friendly environment					
	Teaching more with pictorial/video					
	Teaching material taken from books					
	Teaching competency is adequate with knowledge and skills					
	Teaching is focused on must know things					
	Need similar sessions in future					
	Appropriate conclusion					
	Concept is clear					
	Better learning and knowledge retention					
	Presentation is problem solving and integrated					
	Learn how to prepare and answer exam questions					
	Good presentation skills, self confidence					
	Interactive session/ appropriate answers					
	Clinical scenario based					

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