## **ORIGINAL ARTICLE**

# Impact of Facilitator as Simulated patient on Students in Problem Based Learning

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## ABSTRACT

Aim: To explore the impact on students (in terms of engagement, improvement in achieving the learning outcomes, motivation and metacognition of prior knowledge) if facilitator behaves as simulated patient in PBL.

Methods: The research was carried out at the University College of Medicine and Dentistry in Lahore, Pakistan. The method employed was purposeful heterogeneous sampling. Through an online session of focus group discussion using Zoom software, qualitative data was collected from 30 students and 6 facilitators. The data was transcribed, and the codes were manually coded by highlighting them. Themes were then created

Result: Over all, the attitude of students towards simulated PBL was positive and respondents were satisfied. Five emerging themes that supports the efficacy of simulated PBL and active role of facilitators were as follows: PBL is efficacious pedagogy, professional development, life-long learner, impact of role modelling and role of simulation in PBL.

Conclusion: The study concludes that PBL is an effective pedagogy, the role of facilitators' impacts positively on students by enhancing their professional development like communication skills, empathy and confidence. Simulation and role modelling by the facilitator inculcate the confidence and competence and make them lifelong learner. Key words: Engagement, Facilitator, Problem based learning, Qualitative, Simulation

INTRODUCTION

Problem-based learning (PBL) is a well-established teaching strategy in medical education and continues to be developed and explored. It has been observed that PBL session conduction and facilitation sometimes become difficult due to disengagement of students in return session, information overload and undirected learning. Students often lack the energy and waste more time passively in rejoining the session as they feel burden to solve the learning objectives. The students learn about the subject through conceptual problem-solving mechanism. Problem Based Learning is currently considered as a powerful tool to produce high level competences, expertise and transferable skills in the students. PBL has become a prominent pedagogical identity in the current modern research era. The level of abstraction further increases due to the silent role of facilitator. Literature search provides the evidence that passive role of facilitator is a pertinent factor leading to disengagement of students. Facilitator can enhance the interest and motivation level of students effectively, Success, depends on the willingness and ability of teachers to modify the way they control the class. Obviously, this is not an easy transition to make; in order to be successful, teachers have to change both "how," as well as "what," they teach. Hence indicating the need of this era to explore the impact on students by changing the role of facilitator as simulated patient in Problem-based learning to improve the learning outcomes.

The aim of my study is to explore the impact on students (in terms of engagement, improvement in achieving the learning outcomes, motivation and metacognition of prior knowledge) if facilitator behaves as simulated patient in PBL. Either role modelling in the form of live simulation of facilitator has any longlasting effects on the memory and understanding

## METHODS

The research was carried out at the University College of Medicine and Dentistry in Lahore between February 2020 and July 2020. Thes study design was gualitative. The method employed was purposeful heterogeneous sampling. Through an online session of focus group discussion using Zoom software, qualitative data was

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collected from 30 students and 6 facilitators. The data was transcribed, and the codes were manually coded by highlighting them. Themes were then created.

Inclusion Criteria: MBBS students of 2nd year who had gone through traditional PBL system in first year as a part of integrated system. They had experience of traditional PBL and were fully aware of whole process of PBL. Those facilitators were selected who had a rich experience of traditional PBL and they gave the consent.

Exclusion Criteria: New student slots, who were not gone through process of PBL. Those facilitators who were invited but didn't participate in focus group discussion to share their experiences of this intervention.

## RESULT

Students were ecstatic because they had the opportunity to apply their basic science knowledge to practical circumstances. They were pleased with themselves for acting like doctors earlier in second year. Because of the clinical touch, students described their simulated PBL experience as fruitful. It benefits us in that our previous PBL just provided us with basic knowledge, whereas the new one, when the facilitator guides us, provides us with a wealth of additional information. It also aids in the correlation of clinical and non-clinical data. As a facilitator, I began by presenting the case scenario using verbal expressions and emotions. It allowed the students to create a mental paradigm. They took it one step at a time.

This feeling was frankly shared by the participants (students and facilitators) that it was relatively easy to understand the basic knowledge of scenario with clinical relevance.

Simulated PBL were showing less cognitive load because of addition of activity. Participants did not take it as a burden as in written scenario. Actually, participants enjoyed that PBL

Teacher's active role play make the students' comfortable and anxious environment of traditional class room was not there. One of the Student comments that simulation of facilitator helps in easy understanding of problem. It was a good experience of having facilitator as a stimulated patient and I enjoyed it. Previously how the PBL supposed to be conducted was quite boring but this way I gasped more things.

Active role not only improved understanding but also long term retention because it involved all the senses like sight, listening ,communication so it helped in better interpretation of problem .Better explanation made it easy to correlate with clinical picture rather than just read and recall the theory.

Secondly due to teacher's active role, all the students are involved. They ask one by one many questions from the facilitators who is behaving like patient at that time so team work is seen and many clues we get from each other which remained memorable. One of the students X shared his experience that he did not find this activity very effective in getting extra learning benefits. I did not think so, it was not very effective. But we could say to some extent that it was effective but not very much as being a second year student. Little bit better than traditional PBL.

Overall, students had a positive attitude about simulated PBL and responders were satisfied. PBL is an effective pedagogy, professional development, life-long learners, the impact of role modelling, and the importance of simulation in PBL are five developing themes that support the usefulness of simulated PBL and the active participation of facilitators.

#### DISCUSSION

Problem-based learning (PBL) is a well-established teaching strategy in medical education. Nobody can deny the beneficial effects of PBL, but there are certain grey areas which are under consideration for the researchers. One of the most important aspect is to connect the abstract nature of traditional PBL with clinical based scenarios to get the best learning outcomes. In my study, I will observe the impact of facilitator as simulated patient on students in problem-based learning sessions. As PBL is a wellknown pedagogy and strategy, want to address the impact of facilitator as simulated patient on students. In other words, want to find a solution of limitations of disengagement of students during conduction. It will give a new direction to get the best understanding and learning outcomes from these sessions by having an active facilitator as simulated patient. These simulated PBLs can rather easily connect the difficult and abstract nature of class-based PBL with clinical practice.

Many supporters of PBL argued that successful implementation of PBL depends on tutors framing of active learning. He can motivate the students by addition of environmental stimuli, teaching in dental education.

One of the major challenges which was observed in PBL process was loss of engagement due to undirected learning and information overload. Assessment pattern of PBL appears to be questionable if it depends on factual recall. Assessment should follow the fundamental rules according to learning objectives.

#### CONCLUSION

The study concludes that PBL is an effective pedagogy, the role of facilitators' impacts positively on students by enhancing their professional development like communication skills, empathy and confidence. Simulation and role modelling by the facilitator inculcate the confidence and competence and make them lifelong learner. The outcome of the study can be used in other disciplines of medical education to get the desired results. Conflict of interest: Nil

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