Student-Based Clinical Training

Mojtaba Dayyani[1], Farzaneh Barzkar[2], Mozghan Afkhamizadeh[1]

Corresponding author: Dr Mojtaba Dayyani m.dayyani@gmail.com

Institution: 1. Faculty of Medicine, Mashhad University of Medical Sciences., 2. Faculty of Medicine, Zahedan University of Medical Sciences.

Categories: Curriculum Planning, Learning Outcomes/Competency, Students/Trainees, Teachers/Trainers (including Faculty Development), Teaching and Learning

Received: 12/08/2018
Published: 17/08/2018

Letter

Some studies have demonstrated the fundamental role of medical education and training systems in the development of physicians' performance and consequently the quality of health services in various societies. (Davis et al., 1999)

Problem-based learning (PBL) has been introduced as an interactive method of clinical training, but its efficacy and adoption in different countries with different levels of facilities, human resources, and economic states is still an administrative concern. (Koh et al., 2008)

In Mashhad University of medical sciences, Iran, a couple of volunteer medical students have founded a group called: Students’ Educational Advisory Committee (SEAC). The principal goal of SEAC is to improve the quality of medical training through running appropriate research projects and having consultation meetings among faculty members and students. Additionally, organizing pilot studies for educational projects, holding seminars about medical education and last but not the least acting as a mirror for reflecting gaps of the contemporary system to the faculty for optimization of the curriculum are further examples of SEAC assignments.

As a successful educational experience, we introduced a new training plan called: "Student-Based Clinical Training" (SBCT) which is based on PBL, with some differences.

A standard case problem is designed or selected by an educator to be presented to the 4th year medical students by a tutor who is also a volunteer student because we all know that todays’ students are tomorrows’ professors.

Students are asked to organize small groups for having a consultation, searching online, and making the differential diagnosis. The official language of the sessions is English so that the students are familiarized with the conditions of scientific gatherings. When the diagnosis is made through discussions in groups, a quick review of principal points is presented by the tutor. All of the processes are under the direct supervision of a professor who is a specialist in the field of discussion. Having a totally student-centered atmosphere for dynamic learning is one of the most remarkable points of this method.
In this pilot project after a three-month course at the Internal medicine ward of Imam Reza Teaching Hospital, Mashhad, Iran, both students, and educators were asked about the efficacy of the course. Interestingly, 97.5 percent of the students and all of the professors answered that SBCT is much more efficient than traditional methods, and all of them agreed to continue this plan. These results are firmly in the same line with some prior studies that assessed participants’ satisfaction regarding the problem-based learning method. (Berkson, 1993; Vernon and Blake, 1993; Newman, 2003)

Following the implementation of this pilot project, we think providing a constructive atmosphere between faculty and students builds the basis for making impossible changes, possible.

In this experience, with the assistance of medical students, we could diminish the limitation of time, budget and workforce concerning the implementation of a new method of clinical training. Furthermore, giving the opportunity of being a tutor may improve teaching and communication skills of the students who are thinking about their potential future roles in the field of medical education.

We believe that regardless of economic state, medical students have extraordinary potentials to improve the quality of the training systems; utilizing trusted pieces of evidence, creativity, teamwork, and hope for change.

**Keywords:** Medical education; Problem-based learning; curriculum; Medical students; Clinical training.

**Notes On Contributors**

Mojtaba Dayyani is a Neurosurgery Research Assistant at the Department of Neurosurgery, Ghaem Teaching Hospital, Medical faculty, Mashhad University of Medical Sciences, Mashhad, Iran.

Farzaneh Barzkar is a Medical Student at the Student Research Committee, Medical Faculty, Zahedan University of Medical Sciences, Zahedan, Iran.

Mozhgan Afkhamizadeh is an Assistant Professor of Endocrinology at the Department of Internal Medicine, Imam Reza Teaching Hospital, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran.

**Bibliography/References**

Berkson, L. (1993) 'Problem-based learning: have the expectations been met?', *Acad Med*, 68(10 Suppl), pp. S79-88. [https://doi.org/10.1097/00001888-199310000-00053](https://doi.org/10.1097/00001888-199310000-00053)


**Declarations**

The author has declared that there are no conflicts of interest.

This has been published under Creative Commons "CC BY 4.0" ([https://creativecommons.org/licenses/by-sa/4.0/](https://creativecommons.org/licenses/by-sa/4.0/))

**Ethics Statement**

This pilot project was not reviewed by our institutional review board, but we followed the Declaration of Helsinki (2013) and obtained informed consent from the participants.

**External Funding**

This paper has not had any External Funding

AMEE MedEdPublish: rapid, post-publication, peer-reviewed papers on healthcare professions’ education. For more information please visit [www.mededpublish.org](http://www.mededpublish.org) or contact [mededpublish@dundee.ac.uk](mailto:mededpublish@dundee.ac.uk).