
Student Perspectives Regarding the Process of Problem Based Learning at the Faculty of Medicine and Health Sciences, University Malaysia Sarawak

Rasidah Abd Wahab

Abstract

The objective of this study was to determine the year 1 and year 2 medical students' perceptions on problem based learning (PBL) in the preclinical year curriculum. The data was drawn from a survey conducted among 134 medical students. The results indicate that the students perceived PBL to stimulate their learning environment and enable them to practice teamwork and problem solving skills. More in depth research through qualitative methods should be conducted to provide further evidence on the effectiveness of PBL and suggest areas for improvement.

Introduction

Problem based learning (PBL) first started in the Faculty of Health Sciences at the McMaster University in 1969. Since then PBL has been introduced and practiced at various medical schools as well as by other courses such as dental and engineering (Barman *et al.*, 2006; Awang and Ramly, 2008). A number of Malaysian universities including the University Malaysia Sarawak has undertaken the challenge of adopting this approach into the present medical curriculum. PBL integrates some fundamental educational principles, and has been found to be an effective and active learning method (Malik and Malik, 2001). This method has allowed students to correlate the knowledge gained in basic sciences with clinical scenarios (University Malaysia Sarawak, 2001).

The Faculty of Medicine and Health Sciences, University Malaysia Sarawak was one of the public higher education institutions in Malaysia that offers a medical programme with integrated PBL, community-oriented learning, early clinical exposure, and a student-centered teaching/learning approach. PBLs are introduced during the first two years of the medical programme (Medical Handbook 2009/2010 session).

Need for the study

The Faculty of Medicine and Health Sciences has implemented the PBL method into the preclinical year curriculum. Therefore a study was conducted among preclinical year students to explore students' perception on PBL in the preclinical year curriculum. Student views are vital in determining whether PBL has enhanced students' problem solving skills and teamwork skills, and whether PBLs have stimulated a conducive learning environment.

Objectives

The present study aims to determine year 1 and year 2 medical students' perceptions regarding problem based learning in the preclinical year curriculum.

Methodology

The present study was conducted among year 1 and year 2 students and questionnaires were completed by 134 randomly selected

¹ Medical Education Unit, Faculty of Medicine and Health Sciences, University Malaysia Sarawak

Corresponding Author:
Rasidah Abd Wahab, Coordinator,
Medical Education Unit,
Faculty of Medicine and Health Sciences, University
Malaysia Sarawak,
Lot. 77, Section 22,
K.T.L.D. Jalan Tun Ahmad Zaidi Aduce,
93150 Kuching, Sarawak, Malaysia

Email: awrasida@fmhs.unimas.my

students. The students recruited for this study have been exposed to and attended more than four PBL sessions. The questionnaire was designed to gather student's response on three aspects of PBL exercises namely; stimulated learning environment (6 items), teamwork skills (3 items) and problem solving skills (2 items). The students rated the items based on a five point Likert scale (namely strongly agree (SA), agree (A), neutral (N), disagree (DA) and strongly disagree (SDA). Data was analyzed using SPSS version 17.

Results

From the 134 medical students' who participated in the study, 37.3% were male and 62.7% were female. The distribution by race shows that about 44% students are Malays; 63% are Chinese and the remaining 8.7% are either Indian or other ethnicity. The

students' response to the questionnaire is summarized in Table 1. The students have indicated positive reactions towards PBL. More than 60% of the students perceived that PBL stimulated their learning environment, while many perceived that PBLs enabled them to practice teamwork and problem solving skills.

Conclusion

These results suggest that PBL help students enhance their self development skills besides stimulating the student learning environment. More in depth study should be done qualitatively so that more evidence on the effectiveness of PBL as a teaching/learning method can be gathered and further used to improve PBLs.

Table 1: Student's Response to the Questionnaire (n=134)

Items	Percentage of student's response		
	SA/A	N	DA/SDA
Stimulate Learning Environment			
1. PBL sessions are effective in achieving learning objectives.	64.9	28.4	6.7
2. PBL allows in depth understanding of the topics.	73.9	23.1	3.0
3. PBL motivate me to study since the problems reflects real scenario.	76.1	20.9	3.0
4. PBL enables me to identify relevant resources with the subjects to be studied.	67.9	26.1	6.0
5. PBL allows better student participation in the learning process.	78.4	17.9	3.7
6. PBL allows an opportunity to listen and learn to understand the problem from different perspectives.	91.0	-	9.0
Team Work Skill			
7. PBL allows group members to actively participate in the discussion.	76.9	17.2	6.0
8. PBL allows an opportunity for each group member to contribute ideas.	84.3	14.9	0.7
9. PBL allows member to assist each other to understand the problem.	80.6	18.7	0.7
Problem Solving Skill			
10. PBL allows me to integrate my prior knowledge to understand the problem.	72.4	24.6	3.0
11. PBL allows me to integrate different disciplines to understand the problem.	60.4	35.8	3.7

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References

- Awang, H., & Ramly, I. (2008) Creative thinking skill approach through problem-based learning: pedagogy and practice in the engineering classroom. *International Journal of Human and Social Sciences*, 3, 1, pp. 18-23.
- Barman, A., Jaafar, R., & Ismail, N.M. (2006) Problem-based learning as perceived by dental students in University Sains Malaysia. *Malaysian Journal of Medical Sciences*, 13, 1, pp. 63-67.
- Handbook on Introduction to PBL Curriculum and its Implementation in Faculty of Medicine and Health Sciences, Universiti Malaysia Sarawak, 3rd Edition, January 2001.
- Malik, A.S & Malik, R.H. (2001) Introduction to Problem Based Learning (PBL) curriculum and its implementation in Faculty of Medicine and Health Sciences, University Malaysia Sarawak. *Malaysian Journal of Paediatric and Child Health*, 13, pp. 54-70.
- Medical Handbook 2009/2010 session, Faculty of Medicine and Health Sciences, University Malaysia Sarawak.