

Students Perception On Pbl In The Hybrid Medical Curriculum

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ABSTRACT

Background : PBL can encourage useful discussion among highly motivated students, who have already understood the factual background. Although many of the western schools have totally shifted to PBL curriculum for undergraduates but most of the Asian Medical schools have hybrid curriculum. PBL is exercised as one of the teaching learning avenues fitted into traditional approach.

Objective :

- (1) To assess the level of satisfaction of medical students in learning through PBL approach after analyzing the student feedback taken after each Ophthalmology PBL tutorials.

Methodology : A cross sectional study was conducted from 1st June 2010 till 30th Nov 2010. The student feedbacks of all the recruited 100 undergraduate medical students during Ophthalmology PBL tutorial were analysed. The students were from 7th and 8th semester of Melaka Manipal Medical College, Malaysia. The tutors also did the formative assessment at the end of PBL session on responsibility, information processing, communication, critical analysis and self awareness. Students gave their feedbacks after each session. The 5 scale Likert approach was made by noting strongly disagree, disagree, no response, agree and strongly agree responses. The statistical calculation was done by using statistical package for Social Sciences (SPSS) version 12.

Result : In this study 90% students were found to be comfortable with PBL tutorial. Around 92% believed that PBL approach is more advantageous than traditional. The assessment procedure during PBL was also liked by most of the students.

Conclusion : There was high degree satisfaction among the students exercising PBL. This positive response from students might be a factor for incorporating more and more

PBL based modules to our current hybrid curriculum.

Key Words : PBL, Trigger, Ocular, Trauma , acute, vision loss

STUDENTS PERCEPTION ON PBL IN THE HYBRID MEDICAL CURRICULUM

INTRODUCTION :

The concept of PBL is nearly more than three decades old. PBL can undoubtedly encourage useful discussion among highly motivated students who have already understood the factual background (1). PBL is supposed to operate through a combination of group discussions and individual research, in which the students decide their own learning objectives, strategy, and pace. (2) A facilitator who is not intended to teach (3,4,5) is relatively passive; merely guiding the sessions. Still we need to work out more for justifying the purpose and outcome of PBL in many schools especially in Asian Medical schools, where PBL is exercised as a part of teaching Learning avenue incorporated into hybrid curriculum .The PBL tutorials during the clinical training phase is aimed at developing active learning attitude among undergraduate students and at the same time stimulating students for life-long learning. The seven step approach that was originally pioneered at Mc Master University still serves as a gold standard in PBL process. One of the important aspects of PBL tutorial is to have some form of assessment, which drives the students for better learning during PBL sessions. An effective PBL group always offers a safe, supportive environment for not only discussing and sharing the existing knowledge but also hypothesizing new ideas during the process. Out of many advantages the most important idea of an effective PBL is to prepare the students for professional practice by encouraging critical thinking, communicating and evaluating ideas. At the same time it also gives them scope of stimulating reflection on learning

and evaluating their own contributions. Assessment drives learning and should be a part of all PBL sessions. As reported by Nendez MR and Tekian A(6) the assessment during PBL session in an informal way should be taken and as a match between assessment procedures used and the curricular tenets of PBL. In their book on Basics in Medical Education Zubair Amin and Khoo Hoon Eng(7) have provided a sample assessment form for assessment of individual student during PBL sessions. Dodds et al(8) in their study on tutor assessment in PBL sessions indicated tutor assessment to be useful and distinctive direction for the assessment. In this study we basically focus on the students perception on PBL tutorial. Taking feedback has become an integral part of various teaching learning approaches. A proper feedback induce the tactical changes, correct adaptation and enhancing validity of approach in medical education system.(8,9)

MATERIALS & METHODS :

A cross sectional study was conducted between 1st June to 30th November 2010 to determine students perception on PBL process. 100 undergraduate medical students of 7th & 8th semester of Melaka Manipal Medical College, Malaysia were recruited in this study. They were in 10 different groups consisting of 9-11 students in each group for respective PBL sessions. The PBL triggers were derived from acute loss of vision and from the aspect of Ocular trauma for all the groups. Each PBL was completed in two sessions. During the first session students exercised on deriving key issues from the trigger and later generated hypothesis through a brain storming session. Thereafter they assigned the portfolio to every participant for information acquisition. During the second session which used to be conducted after 4-5 days, they elaborated on further information collected as well as solving the problem and (10) each PBL ended with derivation of learning outcomes from the projected scenario. Three tutors had done the formative assessment at the end of PBL session on the aspects of responsibility, information processing, communication, critical analysis and self awareness. The sub components of each heading were tested by Likert five scale of approach by using strongly disagrees, Disagree, can't say, agree and strongly agree. Based on

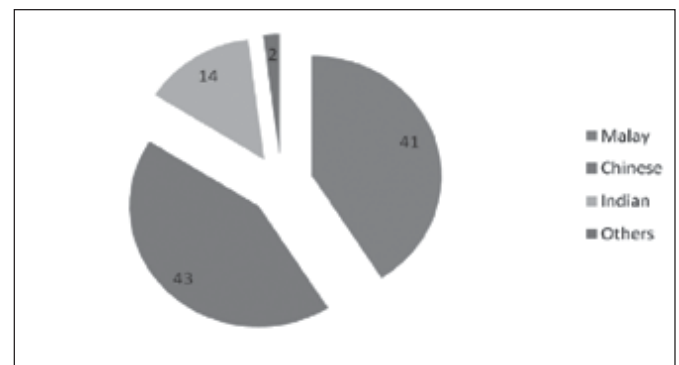
the scale readings the student's performance during PBL was regarded as below average (score less than 50%), average (score between 51%-70%), good (score between 71%-90%) or outstanding (score more than 90%). All students provided their feedback after each PBL session. The statistical calculation was done by using the Statistical Package for Social Sciences (SPSS) version 12.0.

RESULTS :

Total of 100 students were recruited for this study. The ethnic distribution of the recruited students were like Malay (41%), Chinese(43%), Indian(14%) and others(2%). Fig.1.

Figure 1. Ethnic distribution of students

There were 45% male students and 55% female students in this study group.Fig.2.



The analysis of feedback found that 90% students were comfortable with PBL where as 10% felt otherwise. 20% students agreed that it was difficult for them but 80% did not support this statement.92% agreed to the fact that



Figure 2. Sex ratio

PBL was more advantageous than traditional style of teaching. Although 15% felt that PBL scenario was very much structured but majority(85%) did not agree to this statement. Majority (91%) of students liked the

assessments done after each PBL session. 93% felt that the instructors were helpful facilitators during each session. And more than 90% had over all enjoyed the PBL sessions (Fig.3.).

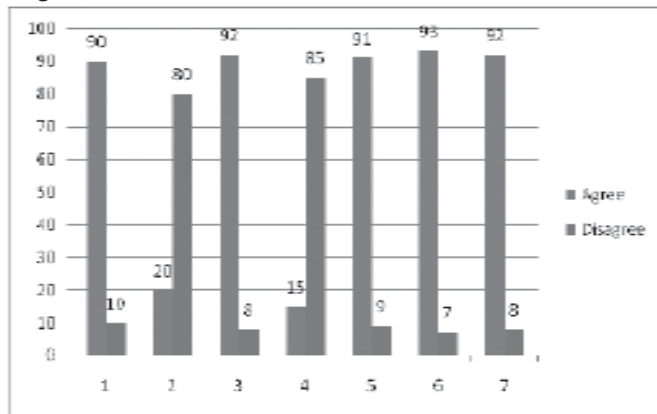


Figure 3. Student feedback after PBL session

1. I felt comfortable with PBL. 2. PBL was too difficult. 3. PBL more advantages than traditional teaching. 4. PBL was too structured. 5. I liked the assessment during PBL. 6. Instructor was helpful. 7. I overall enjoyed the PBL session

DISCUSSION

In this era of evidence-based medicine, it is strange that such fundamental changes crucial to the future of this profession which are being pushed through in the absence of any proof that they will improve medical training. In our study more than 90% enjoyed the programme that matches with other reports elsewhere (11,12). And 92% students accepted the fact that PBL was more advantages to traditional learning process. Although 57% students denied the fact that PBL scenarios were too structured but 43% students accepted the fact. This indicates that the scenarios may be kept more open for students to apply their problem solving skill in more broad way. Assessments drives learning is the common proverb which was vindicated by the students response on assessment during PBL. Even in this hybrid system of incorporating PBL to the traditional curriculum, most of the students believed that the PBL approach was more advantageous than traditional way of teaching. It is a common fact that active involvement among the students and scope for critical thinking always lie in PBL approach.

CONCLUSION :

PBL was found to be more attractive and encouraging among students and resulted in active participation during

PBL session. The formative assessment should be exercised during each PBL session, which stimulates students for further improvement. We recommend PBL approach to be a part of learning module during Ophthalmology clinical posting of undergraduate medical students.

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