

Training of Tutors in Problem Based Learning: Feedback of Participants

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ABSTRACT

Background

The faculty members should have knowledge on PBL process and must be familiar with the changing role of teacher to facilitator to adopt PBL as a teaching/learning strategy. The transition from the role of teacher to tutor is critical for the success of PBL. The objective of this study was to describe the process of proceedings of training workshop at the outset of introduction of PBL in Gandaki Medical College Nepal and assess the feedback of the tutors towards PBL training workshop.

Methods

Two one-day training workshops were organized at GMC; first on November 28, 2021, and second on October 16, 2022. Feedback of the participants was taken on valid semi-structured self-administered questionnaire at the end of proceedings of training workshops. Data was analyzed for frequency and central tendency.

Results

The response rate was 100% (Total number of participants =37). The training workshops were rated for usefulness (7.89±0.90), content (7.83±0.76), relevance (7.83±0.98), facilitation (7.91±1.11) and overall process (8.13±0.82) using scale 1-10(1=Poor, 10= Excellent). Most of the participants found the sessions moderately important ("PBL Process" 70.3%, "Role of Tutor" 75.7%, "Designing PBL problem package" 48.6%, and "Conducting PBL" 70.3%). The majority of the participants recommended increasing the duration of workshop, allocate adequate time for the practice session and arrange other types of training workshops in medical education.

Conclusions

The significance of PBL trainings was recognized by the participants. Overall, their feedback on training workshops were positive.

Keywords: problem based learning; training; workshop; tutor.

INTRODUCTION

Problem based learning (PBL) is learner-centered teaching approach involving three features: presenting problem-cases, learning issues and facilitation. Principles of PBL are active learning, interdisciplinary learning, self-directed learning, practice and group-based learning.¹ Students identify learning cues, create learning needs and objectives and work in group to learn new knowledge. The group usually comprised of six to ten members with different roles: discussion leader, timekeeper, scribe, observer, and

presenter. Tutor is facilitator who guides students to remain on track, develop learning objectives, instruct for self-directed learning and motivate the learners.³ Teachers following traditional curriculum feel discomfort as they are not oriented on PBL method. It is essential for the academician to work together with faculty members to develop a mutual understanding for implementation of PBL. Hence, faculty development is critical for the implementation of PBL.⁴ The objective of the study was to give description of training and feedback of participated faculty members.

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METHODS

This descriptive cross-sectional study was conducted at Gandaki Medical College (GMC), Pokhara. Two one-day “Training Workshops on PBL for Tutors” were organized on November 28-2021 and October 16, 2022, respectively. The study population was heterogenous representing medical, nursing, dental, community medicine and basic sciences faculty members. The general objective of the training workshops was to train the faculty members for conducting PBL. The specific objectives were to: explain the PBL process to faculty members (tutors), differentiate the role of tutor in conducting PBL session and design and develop PBL package including scenario, triggers, tutor guide and orient about PBL process. The sessions conducted in workshops were: 1) PBL Process (Basics of PBL, Characteristics of PBL and Basics of PBL process), 2) Role of Tutor in designing problem package, conducting PBL tutorial and orienting the students about PBL. 3) Group Work: Develop Scenario and Triggers, and 4) Develop Tutor Guide. After the proceedings of training workshops, feedback of the participant faculty members was taken on the valid semi-structured questionnaire. There were four parts of questionnaire:

Part A, Demographic information: Information was taken regarding age in years, sex, year of graduation and post-graduation, participation in PBL or in any other medical education related training earlier.

Part B, Overall feedback on training: This part contained one close ended question on the rating workshop on scale 1-10(1=poor,10=excellent) for usefulness, content, relevance, facilitation and training as overall.

Part C, Feedback on specific sessions: This part covered four closed ended questions on specific sessions conducted in workshop: session on “Basics of PBL and PBL Process”, session on “Role of Tutor and PBL Package”, session on "Group work: Develop Scenario & Triggers" and session on "Group work: Develop Tutor Guide".

Part D, Feedback for improvement: This part had three open-ended questions; the first one was on good points/ and strengths of training, second was on areas

for improvement and third for additional comments. The informed consent was taken from the participants and ethical approval was obtained from Institutional Review Committee (IRC-GMC) (Ref No. 157/079/080). The collected data were entered in SPSS version 16 and analyzed for the frequency, percentage, and central tendency (mean and standard deviation).

RESULTS

Table 1 shows that out of 37 respondents, 11 respondents did not provide their age, and 7 did not provide their sex.

Table 1. Socio-demographic Characteristics of the participants of two training workshop on PBL for tutors.

Variables	Frequency (%)
Age (in years)	
≤35years	16 (64.0)
>35 years	10 (36.0)
Mean ±SD (36.65±7.75) Range 30-55yrs	
Sex	
Male	8 (26.7)
Female	22 (73.3)
Participated in PBL training	
Yes	2 (5.4)
No	35 (94.6)
Participated in any medical education related training	
Yes	22 (59.5)
No	15 (40.5)
If yes, mention the name of training	
Teacher training	7 (31.8)
Team based learning	9 (40.9)
Faculty development	6 (27.3)

Table 2. The rating of the Participant Tutors in two “Training Workshops on PBL for Tutors.”

Training Scale (1-10)	Maximum Possible Score	Obtained Range	Mean ±SD
Usefulness	10	6-10	7.89±0.90
Content	10	7-10	7.83±0.76
Relevance	10	6-10	7.83±0.98
Facilitation	10	5-10	7.91±1.11
Overall	10	7-10	8.13±0.82

Feedback for the Improvement

The Strengths/Good Points of Workshop Shared by the Participants

Effective Learning: One third of participants emphasized the effectiveness and benefits of the PBL method. Participants learned about the PBL

Statement	Frequency (%)			
	Not important(1)	Slightly important(2)	Moderately important(3)	Extremely important(4)
Basics of PBL and PBL process	-	2(5.4%)	26(70.3%)	9(24.3%)
Role of Tutor and PBL Package	-	1(2.7%)	28(75.7%)	8(21.6%)
Group Work: Develop Scenario and Triggers	-	4(10.8%)	18(48.6 %)	15(40.5%)
Group Work: Develop Tutor Guide: Activity and presentation	-	-	26(70.3%)	11(29.7%)

package and highlighted the importance of PBL in teaching and learning. They also found the workshop applicable to their day-to-day teaching patterns and believed it would be beneficial for their students.

Time management: The workshop was started and concluded on time and well organized.

Organization of content: They appreciated the interactive nature of the workshop, which provided a clear understanding of the PBL method.

Efficient facilitation: Participants emphasized that the workshop was fruitful for both tutors, with concise and easy-to-understand explanations. The active role of the facilitator and good explanation contributed to the effectiveness of the workshop.

Improvement in communication skills: The small group interactions allowed for better communication and development of communicable skills. Participants appreciated the equal participation of each member of the group, and the enthusiasm of all participants was evident throughout the session. The workshop provided opportunities for sharing information and knowledge, with clear communication and well-organized content. Participants enjoyed the brainstorming session, which facilitated active participation of all group members.

Relevance

Participants highlighted the development of skills and the relevance of the workshop to the different faculties. The availability of offline and online guidelines for conducting PBL, as well as adequate content, made it easier for participants to apply the PBL Method.

Overall, the participants found the workshop to be effective in providing a clear understanding of the PBL method, with ample opportunities for active participation and group work. They believed the

workshop would be beneficial for tutors and for learning of students and would have a positive impact on teaching and learning.

b. Suggestions Provided by the Participants

The participants provided several suggestions for improving the workshop.

Multidisciplinary approach: One of the main recommendations was the implementation of a multidisciplinary approach. Participants suggested that the workshop should involve professionals from different fields to share their expertise and knowledge. This would provide a more comprehensive understanding of the subject matter and enable participants to learn from a variety of perspectives.

Logistics: Another area of concern was the internet facilities. Participants suggested that the internet should be more reliable and faster to enable smooth and uninterrupted online learning. Additionally, the room was small and congested, making it difficult for group activities. Participants suggested that a larger training hall should be used to accommodate groups participating with comfort. The seating arrangement also proved to be a challenge for participants. The absence of tables made it difficult for participants to take notes during presentations. Participants suggested that the organizers arrange tables for group work.

Time: Extend the time period to enable more practical demonstrations and discussion. It would be better if the workshop was organized for a longer duration rather than a single day.

Descriptive: Furthermore, participants suggested that the workshop should be more descriptive, and the discussion after the presentation should be extended to enable participants to ask more questions and clarify their doubts. Participants recommended that

the workshop should be more interactive in the future, with a greater focus on the role of the tutor in practiced scenarios. More examples on PBL information and clear instructions during activities should be given.

Motivation: Additionally, all faculty members should be motivated to take part, and nursing education should be given more focus.

DISCUSSION

For the effective implementation of PBL, faculty development is critical step. Training workshops for tutor enhances knowledge about PBL, foster understanding the tasks within PBL process, nurture developing PBL package and improve core facilitation skills required for interactive learning, self-directed learning and group learning during PBL tutorial process. The training workshop varies in duration from one-day minimum of 5 hours to three days. We conducted two trainings, each workshop was of five hours duration covered essential elements of PBL required for the teacher to become tutor or facilitators. The participants recognized the importance of training workshops.^{6,7} In a study conducted by Sabita et. al. in the same institute among students, most of the students agreed to different themes of PBL and they were positive about this form of learning.⁸ 91.3 % of tutors agreed that PBL is a great tool for student learning. Tutors believed that PBL can develop students' ability for group/teamwork. Tutors also identified some barriers in applying PBL. For example, they mentioned a lack of relevant skills to apply PBL in higher education. Tutors found the PBL to be a suitable learning tool for their curriculum.⁹ In this study the rating of the Participant Tutors on "Training Workshop on PBL for Tutors" was remarkable for usefulness (7.89±0.90), content (7.83±0.76), relevance (7.83±0.98), facilitation (7.91±1.11) and overall process (8.13±0.82); the findings are consistent with study

conducted by Piryani et.al; in Pakistan.¹⁰ The rating of the participant tutors on specific sessions conducted was remarkable. The training was rated by participants to be fruitful in various aspects such as usefulness, content, relevance and facilitation. The interactive tutorial and the group work were rated by participants moderately to extremely important. This kind of training will be beneficial for the faculty members to understand the different aspects of PBL and enable them to conduct it in their own learning environment. The academic institutions need to train their faculties periodically in order to improve their PBL conducting skills. The Participants of this study suggested that the workshop should be extended to 4-5 days to enable more practical activities and a better understanding of the subject matter which was supported by Nayer in Canada revealed that longer tutor training on PBL programs is needed. Evidence being collected in the literature strongly suggests that tutors require instruction in the content of the PBL cases.¹¹

CONCLUSIONS

The significance of PBL trainings was recognized by the participants. Overall, their feedbacks on training workshops were positive. Most of the participants found the sessions moderately important. Majority of the participants recommended for increasing duration of workshop, allocate adequate time for the practice session.

Limitation: The study was conducted in only one setting.

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