Evaluation of Problem-based Learning: A Lecturer’s Perspective

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Abstract

Introduction: The exponential growth in medical/dental knowledge and the ever-expanding influence and sophistication of information technologies have placed a burden of responsibilities on dental educators to fashion out a curriculum that can prepare students to face the coming challenges in the new millennium. Consequently, a curriculum reform took place in the Faculty of Dentistry, National University of Singapore in 1997. Problem-based learning (PBL) was first introduced to the Faculty in 1996 as a pilot project to the 4th year. The purpose of this project was to evaluate the 4-year experience in PBL teaching and learning from the lecturers’ point of view. Materials and Methods: All 12 lecturers, who had been involved in the PBL teaching, participated in this questionnaire survey, which was composed of 17 questions with a 5-digit Likert scale. Data analysis was carried out using the Spearman’s correlation, t-test, and the Mann-Whitney U test. Results: Six female, 5 male and 1 unidentified lecturers were recruited into this survey with a 100% response rate. In general, lecturers had learned more in teaching PBL and significantly took pleasure in the interactive learning and self-directed learning modes inherent to PBL (P = 0.004). Compared to the male lecturers, female lecturers had a greater propensity to feel that PBL teaching might not be cost-effective (P = 0.03). Senior lecturers felt more fulfilled compared with the younger ones (P = 0.026). Those lecturers who enjoyed the interactive learning experience in PBL seemed to like the self-directed learning and felt more fulfilled through teaching PBL compared to the traditional teaching (TT) (P < 0.01). They also felt that PBL may be cost-effective (P < 0.01). Lecturers did not have difficulties in being a facilitator (P = 0.04). Interestingly, lecturers who found difficulties in being a facilitator for the PBL class seemed to learn more in teaching PBL classes than in TT (P < 0.05). Overall, lecturers would like to suggest more PBL to be incorporated into the curriculum (P = 0.02). Nevertheless, lecturers were concerned about the knowledge gaps in students learning with PBL (P = 0.01) and the time constraint of students (P = 0.002). Conclusion: The results of this study reveal the pros and cons of the current PBL teaching method and may thus provide proper guidelines to shape the further development of PBL in our faculty.

Key words: Curriculum review, Dental education, Questionnaire survey, Teaching and learning

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