Problem Reformulation Based on Student’s Feedback is Viable in Dynamic PBL Medical Curriculum

Faculty of Medicine, King Fahad Medical City, Riyadh, Saudi Arabia

Background
Problem reformulation is increasingly becoming the center of attention in dynamic PBL medical schools with surging interest in continuous quality improvement of delivered medical education. The use of students’ feedback as a tool has recently been used to improve problem design through reformulation. Our aim is to evaluate the students’ feedback as an effective tool driving reformulation of educational block problems. Our Faculty of Medicine, at King Fahad Medical City has adopted since inception 4 years ago, a dynamic, student centered, community oriented, hybrid problem-based learning (PBL) curriculum. Weekly educational activities are based on carefully constructed clinical problems, designed to cover and integrate in a spiral approach all basic medical sciences through 3 phases: (I) Pre-medical, (II) Basic Medical Sciences and (III) Clinical Phase.

Summary of Work
Continuous problem reformulation is paramount to achieve the desired curricular outcomes. Therefore, a non-parametric, scaled feedback questionnaire was used to reflect on the clarity, difficulty, integration readiness, cognitive stimulation, observation of spirality factor, and achievability of our problems. The questionnaire was distributed to Year-4 students post problem Review Sessions of all Nervous System Block problems. Our Review Session marks the end of a typical week that includes 6 different Learning Activities all planned to assist students achieve the learning objectives of the week.

Summary of results
Initial data analysis shows a significant overall students’ approval of offered problems, thus testifying to success of the principals observed while constructing the problems. Further, item analysis of the questionnaire revealed that 75% of the students approved clarity, difficulty, integration readiness, cognitive stimulation, observation of spirality factor, and achievability of the problems. However, 41 % of the students report that problems fell short at motivating Self-Directed Learning (SDL).

Conclusions
Therefore, the results support our hypothesis that Students’ Feedback is a viable tool to improve problems reformulation.

Take home messages
We recommend a shift from PBL design toward Problem Solving-based design to medical students reaching the end of the preclinical phase, commensurate with implementation of the appropriate facilitation style (i.e. collaborative/autonomous) in pursuit of improving SDL.