Title: A pilot project: PBL for tiny tots and mothers-to-be

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Context and setting: Medicine in Chile has traditionally been taught based on lectures and seminars with little innovation in the teaching methods. Teaching has not been interactive and memorization has been emphasized.

Why was the change necessary: Two important competencies that need to be obtained by a physician are: (1) remain up- to- date on the changes which occur during his/her professional life and (2) be able to critically evaluate and interpret new medical information. The purpose of this project was to introduce problem based learning (PBL) a methodology that theoretically can enhance active learning as well as critical problem solving skills. A pilot, using PBL in addition to lectures was introduced in the fifth year Pediatric and Obstetrics courses**.**

What was done? External faculty knowledgeable about PBL conducted a two day workshop for PBL tutor training. None of the ten clinical faculty participants knew of the PBL methodology before. After the workshop, the faculty established the learning objectives and wrote three cases for pediatrics and three for obstetrics.
The 49 students were divided into two groups. In the first semester, one group used the pediatric cases while the other group did the obstetrics cases in small tutorial groups of six to five students with one tutor. In the second semester these groups switched over. Each case was designed to be completed in three 3-hour sessions. At the end of the three cases the tutors evaluated the performance of each student in the group on five domains: interpersonal skills, learning Skills, knowledge development and objectives achievement and clinical reasoning skills. Scores ranged from 4 to 7 on a 7 point scale with a 6.2 average. The total score comprise 10% of the total grade of the course. In addition one small essay question for each case was posted in the final test.

Evaluation of the results and Impact: Evaluation of the learning intervention was performed using a student self-report questionnaire with sixteen 5-point Likert scale type question and an open comments section. Three aspects were measured: the application of the method, learning preferences, and development and analysis of critical thinking. More than 90% of the students reported that PBL increased their ability to think in a critical way, and 98% that the method made them review more literature than did conventional teaching. Students also reported differences in their perception of the different tutors.

Impact of the study: The present study documents the potential for PBL in a poorly resourced school. As assessed by tutors, students acquired the desired pediatrics and obstetrics performance on the five domains measured. They also preferred this method and reported increased self-learning and increased critical thinking. The intervention had a positive impact on the attitude of faculty who are sustaining a new teaching methodology.

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