Innovation in Problem Based Learning: Transition to the Clinical Learning Environment

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Introduction/background:
Medical programs using problem-based learning (PBL) curricula in the early years of the program often find PBL challenging to implement in the later years when students are located within the clinical environment, necessitating a shift to alternative formats. We report on an innovative new format of PBL at the end of the second year of a 4 year medical program, designed to assist students with this transition to the clinical learning environment.

Purpose/objectives:
At Griffith University, as in most other institutions, the PBL process in years 1 and 2 involves students working in small groups, two times a week with a tutor who has a role of facilitator rather than a provider of content. However, during the last four weeks of Year 2 at Griffith, the PBL sessions consist of an initial tutorless session early in the week followed by a large group session for the entire class convened by two clinicians. This new format also presented the students with undifferentiated presentations without cues such as the likely body system or mechanisms that underpin the problem or case presentation. The goal of this new format PBL was to facilitate the transition to Case-Based-Learning (CBL) in year 3, and to further develop the students’ clinical reasoning skills, skills in developing differential diagnoses, and in justifying those to consultants.

Results:
Student satisfaction surveys about this new format of PBL (168 students from two cohorts of students; response rate of 81.6%) showed that the students were very positive about the new format, with 96.3% agreeing or strongly agreeing that they enjoyed the format. Interestingly, 47.5% of the 2005 student cohort and 73.3% of the 2006 student cohort agreed or strongly agreed that the use of this new format should be expanded to use earlier in the curriculum. The new format was perceived by students to be more effective than conventional PBL in developing skills in clinical reasoning and differential diagnosis.

Discussion:
Our rationale for introducing a student-led Tutorial 1 was to help prepare students for the independent learning of CBL in full time clinical practice in year 3. The undifferentiated presentations were challenging for the students, but this reflects the realities of clinical practice. The new format of PBL may have advantages over traditional formats in developing students’ clinical reasoning and differential diagnosis skills and in asking students to justify these to experienced clinicians. The majority of students agreed that the use of the new format should be expanded to use earlier in the curriculum. However, we would caution the adoption of this format earlier in a medical program when the students may not be ready for the required level of independence from faculty tutors.

Conclusions:
This preliminary evaluation study has shown that the new format of PBL is a useful method to consider for limited use in a transitional unit, preparing students for learning in the clinical environment.

Issues for exploration/ideas for discussion:
This preliminary evaluation study suggests fruitful areas of research in the future, including a detailed analysis of the steps groups, and individual students, are taking in reasoning through the cases, the impact of the new format on assessment performance of students at the end of second year and the impact of the transitional unit on students’ preparedness for the clinical years.