**Title:** Initiating an integrated learning program ( I-ILP) in basic medical sciences

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**Key words**: integrated basic sciences, PBL, early clinical exposure, gastrointestinal system

**Background**:
Currently, the existing teaching program in basic science in my institution is planned and implemented independently by departments without integration. Moreover, it does not induce self-directed learning and students do no have a clinical exposure until after their preclinical training.

**Objectives**:
To develop and implement a module in basic sciences (Anatomy, Physiology and Biochemistry), which incorporates and focuses on integrated learning, self-directed learning and early clinical exposure. The purpose was to demonstrate the utility and feasibility of an integrated learning process in the preclinical years.

**Methods**:
Planning and preparation involved preliminary discussions and formation of a core group of faculty, which developed a three-week module focusing on the anatomy, physiology and biochemistry of the gastrointestinal system. Instead of a typical curriculum in basic sciences which is distinctly compartmentalized the faculty designed and implemented the I-ILP module which had the following components: (a) integrated lectures; (b) clinical visits; (c) Problem Based Learning (PBL); and (d) small group laboratory work. In addition Anatomy had their traditional lectures. Written, structured cases were developed to stimulate discussion and exploration of basic science concepts. Student groups of 6-7 with a faculty facilitator worked on each case during three two hour sessions after which students independently researched learning issues developed by the group. Three cases were used during the module. Four hours of lecture sessions, fifteen hours of laboratory work, three hours clinical sessions coordinated with each case were conducted. The faculty also developed tools for student assessment and program evaluation, and planned and conducted a faculty-facilitator training program as well as a student orientation program.

**Results**:
Identification and research of learning issues by students occurred in all groups. Facilitator rating sheet and PBL test demonstrated students' self-learning skills. PBL had an overall rating of (3.6), integrated lectures (3.7); small group laboratory work (4.0) and clinical visits (4.3) on a five point Likert scale. 93 % students (n=60) and 100% faculty (n=13) gave satisfactory to good/excellent rating of the integrated learning program. More than 90% of students and 100% of faculty wanted to continue or extend the program. Student knowledge, demonstrated by pre-existing assessment modalities, was shown to be adequate.

**Conclusion:**
Students and faculty found the integrated learning program to be a useful, feasible method of learning. Pre clinical students were able to identify and research basic science learning issues with an integrated clinical case oriented approach. The planning and implementation process was successful in enabling the three departments to work together for the first time on an integrated educational program. Based on this success, additional integrated learning units are being developed in the gastro intestinal system for the future batches of pre clinical students. PBL cases are also being developed in cardiovascular system. The three departments have agreed to collaborate in the future for making the timetable at the beginning of each academic year.

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