

Evaluation of a personal and professional development module in an undergraduate medical curriculum in India

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The study aimed at evaluating the personal and professional development (PPD) module in the undergraduate medical curriculum in Melaka Manipal Medical College, India. PPD hours were incorporated in the curriculum. A team of faculty members and a faculty coordinator identified relevant topics and students were introduced to topics such as medical humanities, leadership skills, communication skills, ethics, professional behavior, and patient narratives. The module was evaluated using a prevalidated course feedback questionnaire which was administered to three consecutive batches of students from March 2011 to March 2013. To analyze faculty perspectives, one to one in-depth interviews and focus group discussions were conducted by the coordinators with faculty members who conducted the PPD classes. Analysis of the course feedback form revealed that majority (80%) of students agreed that the module was well prepared and was "highly relevant" to the profession. Faculty found the topics new and interdisciplinary and there was a sense of sharing responsibility and workload by the faculty. PPD modules are necessary components of the curriculum and help to mould students while they are still acquiescent as they assume their roles as doctors of the future.

Key Words: Curriculum, Medical schools, Leadership, Professional development, Students

Introduction

The personal and professional development (PPD) module was introduced as a part of the medical curriculum, in September 2006, along with other curricular changes, to ensure that students not only grow professionally into good doctors, but also grow personally. In order to offer our students a humane and holistic experience in the medical curriculum, the personal and development module was introduced at the Melaka Manipal Medical College (MMMC), Manipal, India. The

module was designed with an objective to inculcate and impart in the students, a variety of fundamental skills to provide an environment that will extend their strengths, challenge their competencies, and work with their weaknesses. The module includes courses involving communication skills, ethics, working in groups and early patient contact through community visits [1]. The course has a significant focus on the activities designed to foster collaborative practices, commitment to life-long learning, and aid understanding of ethical, scientific and philosophical principles underlying the practice of medicine. This study aimed at evaluating the PPD

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module that was introduced in the undergraduate medical curriculum.

The MMMC is a private medical college that was flagged off in 1997 with classes commencing at Manipal, India. The Bachelor of Medicine Bachelor of Surgery (MBBS) curriculum of the Melaka Manipal Medical College is a 5-year academic program with the first two and half years in India and the next part of the program in Malaysia. The first batch of students was admitted into the twin campus program at Manipal, India, in September 1997 and the program grew in strength both in numbers as well as in academic quality and curricular innovations. Feedback and suggestions from accrediting bodies led to MMMC adopting a new curriculum in September 2006, 9 years after inception of the program.

This curriculum called the “six-strand integrated curriculum” (Table 1) had horizontal strands including normal human body and its function, body’s reaction to injury, and practice-based medicine and vertical strands including scientific basis of medicine, doctor, patient, health, community, and environmental module, and PPD module. The PPD module runs vertically throughout the first phase of the program. This module was introduced to foster collaborative practices, inculcate life-long learning and enable students to understand the ethical and philosophical principles underlying the scientific practice of medicine.

Table 1. Six Strand Integrated Curriculum

Six strand integrated curriculum					
	Scientific basis of medicine		DPHCE	PPD	Examinations
The normal human body and its function	1. Basic concepts, skin, muscle, bones, joints & blood 2. CVS, RS, GIT, nutrition & hepatobiliary system 3. Endocrine, reproduction, kidney & electrolytes 4. CNS, special senses & molecular biology	Anatomy Physiology Biochemistry Organ systems: four blocks	Early clinical contact and correlation, history taking and physical examination, community diagnosis and	Medical humanities, clinical skills, project-work, leadership skills & communication skills	Stage I University Exam
Body’s reaction to injury	1. Basic concepts, infection, inflammation, blood, immunity & neoplasia 2. CNS, ANS, special senses, skin, muscle, bones & joints 3. CVS, RS, GIT and hepatobiliary system 4. Endocrine, reproduction & renal system	Pathology Microbiology Pharmacology Forensic medicine Organ systems: four blocks	family case studies		Stage IIA University Exam
Practice-based medicine	Medicine, surgery, pediatrics, orthopedics, obstetrics & gynecology, psychiatry, ophthalmology, autopsy, primary care practices, palliative care, medical ethics	Clinical postings in various hospitals and community-based health centers			Stage IIB College Exam

DPHCE: Doctor, patient, health, community, and environmental, PPD: Personal and professional development, CVS: Cardiovascular system, RS: Respiratory system, GIT: Gastrointestinal system, CNS: Central nervous system, ANS: Autonomic nervous system.

Case report

1. Methods and subjects

1) The PPD module in Phase 1 (two and half years in Manipal)

In the first year of the MBBS program, PPD classes are conducted in topics related to doctor patient relationship, professional ethics and humanities related topics. In the second year, students of the institution are required to pursue a project involving in-depth study of an area of interest and prepare a written, referenced report of scholarly substance. The project is conducted under the guidance of a faculty mentor. This helps the student to gain insight into research methodology and to

Table 2. Personal and Professional Development Series of Lectures/ Role Plays/Narratives/Creative Writing

PPD series
My first day in medical school
Meet the cadaver
Discovering class talents
My story
Qualities of a good doctor
Concept map
Attitude of a doctor
Qualities of a good doctor
Mentor mentee interaction
Learning approaches
Traditional & complementary medicines
Questionnaire designing
Managing stress
Team work
Team building
The art of learning anatomy
Yoga and health
Being dedicated but unattached
Lessons in life
Group discussion: PBL process in MMMC
Primary feeling, secondary feeling
Description and evaluation
Primary and secondary feeling

PPD: Personal and professional development, PBL: Problem-based learning, MMMC: Melaka Manipal Medical College.

encourage the development of critical thinking skills.

In the first half of the third year, students are introduced to a few topics in Palliative care.

As a first step, 2 hours per week of PPD was incorporated in the time-table for the first year medical students. A group of faculty and a coordinator identified relevant topics such as medical humanities, leadership skills, communication skills, ethics, professional behavior and patient narratives (Table 2) that would be introduced to students. All faculty were requested to identify topics of their choice so that they could conduct the sessions in an engaging manner. There were also hours set aside for creative essay writing, role plays and theater by the students.

2) Evaluation of the PPD module

In terms of students, the quality of the module such as content, presentations and engagement were evaluated by using a prevalidated module specific questionnaire with 10 items. A total of 528 students from three different batches from March 2011 to March 2013 were enrolled to give module feedback. The effectiveness of the module was studied by using a longitudinal survey using a modified course evaluation form. It was a 16-item questionnaire, with 16 closed and an option to write open comments, where students could explain about any personal/professional improvements they would attribute to the PPD experience. The same students responded to this questionnaire when they reached the clinical phase.

In terms of faculty, personal interviews and focus group discussions were conducted by the coordinator, with eleven faculty members who conducted the PPD classes.

2. Results

Following analyses were done. Continuous feedback is an important tool that helps to improve quality on an ongoing basis. The analysis of student responses showed

that majority of them agreed that the module was useful and the results are as follows: A good percentage (67%) of the students found the course to be relevant. They also found the teaching effective (good, 27%; and very good, 63%) and well-paced (92%). The PPD workload was not a major issue and 97% of the students found that it was reasonable. The course was well understood by the students (55%). The students strongly agreed that the course was well coordinated (65%), course materials were well prepared (55%), group discussions were effective (65%), and role plays helped in understanding the topics (85%).

The students expressed that the sessions were useful, enjoyable, and engaging. However, a few students wanted discussion on tourism in India, Indian culture, art, and food. Other useful tips from students included interactions with senior doctors from the hospital to share experiences and local community visits. Students communicated that they were able to carry the content forward from what was taught and applied it in their day to day contexts. Modules provided a range of opportunities to apply theoretical knowledge in different ways (case studies, labs, interactive activities, and so forth). Individual comments suggested that the courses challenged them to think about humane aspects of medicine, provided opportunities to develop self-directed learning skills, to develop skills and abilities to work as a team member, advanced skills of inquiry to pursue projects in second year and to develop professional attributes and behaviors in the clinical setting.

Evaluation form given at the clinical phase had varied responses. However, they have made many positive comments about the perceptions of modules and its effectiveness. Often, students have been able to share their learning with colleagues, either informally or through groups developed in PPD for collaborative/team work. Students identified many benefits especially when

they worked on their projects. In discussions on impact, students make comments such as enhancing study skills, empathy, team spirit, helping to change classroom practice, and participating proactively in clinical discussions.

Students assessed the modules as useful because they saw improvement in their affective skills. Students rated the topics taken as “highly relevant” to the medical profession. Faculty found the topics new and interdisciplinary, handling such topics, and creating interest and engaging the students were a challenge. But there was a sense of sharing responsibility and workload by the faculty.

Conclusion

With an objective to introspect and reflect upon the challenges and experiences of faculty and students with the PPD module that was introduced at the Melaka Manipal Medical College, and identify key strategies to sustain and improve the module in the curriculum. Students’ expression on the PPD sessions was similar to results obtained with the PPD module introduced in another Indian university [2]. Systematic, future directed, continuous cycle of goal setting, planning, managing, and reviewing is essential for quality improvement of any program. Analyzing student and faculty feedback is a simple, but rich and valuable source of information for quality enhancement. For any program to grow, stabilize, improve, be effective and sustainable, the program needs to be reviewed. Positive response of the students towards the PPD module was encouraging. The course was highly rated for imparting skills and values. The drawback of this module was that there was no formal assessment for each of the sessions. Hence it was difficult to measure life skills and values imparted to

students. However, reflective summaries are now introduced and used to assess skills acquired through this module. In conclusion, implementation of PPD modules in the undergraduate medical curriculum in Melaka Manipal Medical College, India was successful case since students could improve their affective skills.

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