

Foundation Course for MBBS students at entry level: Experience at an Indian medical school

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Pramukhswami Medical College introduced an orientation course for new medical students. This seven day program titled Foundation Course presented the students with various learning experiences aimed at developing knowledge, skills and attitudes required for a medical professional. The evaluation of the

program was rated as successful by a majority of students. The authors recommend introduction of such foundation courses to be mandatory at the entry level in Indian medical schools.

Key words: Foundation course, MBBS, India, Entry level

Introduction

The selection of students as recommended by medical council of India to medical colleges is based on merit of the candidate at qualifying examination and/or a competitive entrance examination (Medical Council of India, Rules and Regulations 1997). The selection criteria do not take care of non-scholastic abilities of the students. Many students who pursued rote learning in secondary and higher secondary education may find it difficult to cope up with the different educational environment in medical college. Furthermore students from diverse cultural backgrounds may find difficulties adapting to the new environment. Medicine is a profession that requires not only the mastery of a large body of knowledge and the acquisition of clinical skills, but also high standards of behaviour and appropriate attitudes. It is also important to train the undergraduate students in techniques of learning which will motivate them to develop as self-directed learners.

Recently the Task Force on Medical Education for National Rural Health Mission of Ministry of Health and Family Welfare has suggested conducting a foundation course from the first year which can be reinforced later during the course, until the internship phase. The objective of the foundation course would be to sensitize the learners with essential knowledge and skills which will lay a sound foundation for their pursuit of learning across the subjects in the MBBS course and later on a career in medicine (National Rural Health Mission, 2007). This prompted faculty at Pramukhswami Medical College, Karamsad, Gujarat to develop, implement and evaluate a foundation course for students admitted to the MBBS course in August 2007.

Material and Methods

Medical Education Unit (MEU) in consultation with the administrative head of the centre (Chief Executive Officer) and faculty from various departments at the college developed and implemented a foundation course of seven days duration. In-house faculty with interest and expertise in the respective fields reinforced by external faculty was selected to deliver the topics. The selected faculty was oriented about the purpose and objectives of the course. Subsequently they designed delivery of individual topics using different teaching and learning methods. Three faculty from pre-clinical and para-clinical

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subjects were chosen for coordinating the programme efficiently. The module was designed with the objective of exposure of students at entry level to appreciate and understand the following;

- History of Medicine with reference to the evolution of medical knowledge
- Value of Professionalism and Ethics in Medicine
- Use of communication skills in Medicine
- Overview of curriculum at Pramukhswami Medical College and use of different teaching learning methods
- Ability to collect, analyze information from various sources and to correlate them
- Relevance of psycho-social factors in relation to the problem of health and diseases
- Importance of teaching-learning techniques and time management in a professional degree course
- Stress in medical profession and coping strategies
- Need to cultivate logical and scientific habits of thought (research aptitude), clarity of expression and independence of judgment
- Expectations of society from medical profession
- Skills of first aid and cardio pulmonary resuscitation
- Health and community orientation instead of only disease and hospital orientation
- Importance of proficiency in English language in a professional course

The programme began on first day with a welcome address to students and parents by the dean of the college, faculty dean and CEO of the centre. Orientation included a brief history of the centre and its vision and mission with specific reference to institutional commitment to excellence in teaching and learning. This also served as a platform for students to self introduce, get to know each other's background, interest and hobbies. The

parents had the chance to interact with faculty. Visits to different departments of Pramukhswami Medical College and Shree Krishna Hospital were conducted in groups of twenty five accompanied by guides. The didactic presentations on topics during the week were supplemented by different teaching/learning methods like; didactic sessions with interaction, structured interactive sessions, small group activities followed by presentations to the large group, role play, use of video clips, demonstration alone and with hands on experience and visit to library. On the last day, the foundation course was evaluated by written feedback from the students. A questionnaire was developed with a view to elicit students' response in respect to their prior knowledge, gain in knowledge and need for further knowledge on each topic. The students were also asked to indicate the extent to which various topics delivered in the foundation course helped them to understand the various skills and attributes required by a medical professional along with a need to understand a different learning environment in the midst of cultural diversity. An open space was provided for the students to express and share their views regarding overall impression and impact of the programme in making them self confident to pursue a challenging course of study in medicine. Since it was an anonymous questionnaire, no written informed consent was obtained.

Results

The class of 2007 consists of students from all corners of state of Gujarat and includes four non resident Indians. Fifty seven out of 100 students are from schools with Gujarati as medium of instruction while the rest had their schooling in English medium either in India or abroad. Ninety seven out of total hundred students responded to the feed back.

Table 1 shows the students' perception of extent of existing knowledge, gain in knowledge from the respective sessions in foundation course and importance of the same in medical course.

Table 1. Perception of students regarding prior knowledge, gain of knowledge and need for knowledge of each session covered in the Foundation Course August 2007 at Pramukhswami Medical College. [Data: N=Number of students who responded out of 97 in a batch of 100]

Sr. No.	Session	Knowledge prior to session			Knowledge gain after session				Knowledge essential for medical profession			
		Yes	No	not attempted	not at all	to some extent	to great extent	not attempted	not at all	to some extent	to great extent	not attempted
1	History of Evolution of Medicine	7	85	5	3	66	23	5	14	54	26	3
2	Professionalism & Ethics	24	70	3	12	41	43	1	8	42	46	1
3	Communication Skills	26	69	2	1	37	57	2	2	43	50	2
4	Overview of MBBS course	27	66	4	2	34	58	3	5	50	40	2
5	Use of Library & Internet	50	45	2	19	58	20	0	14	34	47	2
6	Holistic Medicine	26	70	1	16	55	25	1	11	55	26	5
7	Study skills & Learning techniques	48	48	1	6	28	63	0	6	26	62	3
8	Time management	50	45	2	9	35	46	7	6	36	55	0
9	Stress: How to manage stress	24	71	2	11	39	46	1	15	15	64	3
10	Research aptitude	21	75	1	6	45	43	3	7	46	37	7
11	Medical profession in the view of common man	32	64	1	8	54	31	4	3	63	30	1
12	First aid	24	73	0	1	21	75	0	4	12	79	2
13	Cardiopulmonary resuscitation	3	88	6	4	20	69	4	5	19	73	0
14	Community health care	28	68	1	9	37	46	5	15	36	44	2
15	English Proficiency	54	37	6	2	34	56	5	1	23	69	4

Many of the students stated that they did not have prior knowledge of topics covered in most of the sessions except for learning skills and time management, library and internet usage, and proficiency in English language. Majority of students stated that they had a considerable gain in knowledge about the respective topics. It was further observed that students appreciated topics dealing with skill development namely communication skills, learning skills, first aid, cardiopulmonary resuscitation and English proficiency. Majority of students appreciated the importance of all the topics except for

history of medicine, holistic medicine and medical profession in the eye of society. Table 2 shows the students' response to the extent of understanding of physical environment of learning in medical course, various skills and learning styles and importance of community health care and scientific approach in medical profession. At the end of course majority of students stated that they understood the learning environment and style better than research and community health. Table 3 shows open ended response of students regarding their overall impression and suggestions for the foundation course.

Table 2. Students' perception of understanding of physical and learning environment, learning styles and skills, research and community health care after attending the Foundation Course [Data: N=Number of students who responded out of 97 in a batch of 100]

Sr. No.	Item	Not at all	To some extent	To great extent	Did not respond
1	To understand the different physical and learning environment in a professional college	5	36	55	1
2	To understand the various skills-learning techniques, time management, first aid, CPR, communication skills, skill of using academic resources and their importance in medical profession	4	39	54	0
3	To understand the importance of research aptitude and community health care in medical profession	6	52	39	0

Table 3: Major themes regarding the foundation course emerging from open ended responses of students

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1. A good program which helped me to get oriented with campus and learning environment.
 2. The program helped me to develop confidence to face the challenging medical course.
 3. I liked the whole program, especially sessions dealing with acquiring skills like learning skills, time management, coping with stress, first aid and cardiopulmonary resuscitation.
 4. We got to know each other. Overall it was a very good beginning to the medical course.
 5. Though lengthy, it was useful.
 6. All medical colleges should have such a program.
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Discussion

Colleges and universities worldwide develop and implement students' orientation programs to acclimatize them to campus environment, familiarize them with teaching programs, helping them to adapt to the academic challenges as they move from high school into undergraduate programs (Taylor & Massy, 1996). A literature search conducted on the Google search engine and Pubmed using key words "Foundation Course", "Orientation Course", "Medical College", yielded no published paper from India on the subject. The first attempt by faculty at Pramukhswami Medical College to introduce a foundation course for medical students focused on development of behavioral competency, methods to familiarize students to campus environment, learning techniques and ways to facilitate the stress coping strategies of the students. The participation in sessions and feedback of newly admitted students was very encouraging. The feedback response very clearly indicated the extent of satisfaction on the part of students. Such a structured foundation course would help students coming from a very different learning environment to cope with the vast body of knowledge and skills required in the dynamic and rapidly changing healthcare system. We recommend that a foundation course should be made mandatory at the entry level in the MBBS course.

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