

RESEARCH ARTICLE

A study on reflection of entry-level foundation course by the first year medical students

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ABSTRACT

Background: The selection of the students as recommended by the Medical Council of India (MCI) is based on the merit of candidate at qualifying examination and/or a competitive medical entrance. The selection criteria do not take care of non-scholastic abilities of the students, there is diversity in cultural backgrounds and they also face difficulty in adapting to the new environment, introduction of foundation course would be of benefit and so the present study was conducted to review the from the students their inference of this foundation course at entry level. **Aims and Objectives:** This study aims to explore the student's feedback on foundation course in the 1st year MBBS. **Materials and Methods:** A foundation course and orientation program of 1 month (August 2–August 31) was conducted in Government Medical College, Nagpur, as per the MCI modification in the curriculum of MBBS program. This has been implemented for the 1st time in August 2019. The foundation course had different modules including orientation module, skill module, community visits, and stress management. Two feedbacks were taken from the students in the form of questionnaires (first regarding the topics of the modules and the other for the delivery of the module). The results were analyzed after 30 days. **Results:** The overall rating for the topics in the foundation course was satisfactory (score 4) by the students with few topics needed more understanding (score 1). Feedback questions for the assessment of teaching and learning methods were also reflected in the positive way. **Conclusion:** The students appreciated the inception of foundation course at entry level, with effective understanding and application of basic science knowledge, the feedback given by the students would certainly be of help in improvisation and betterment in future.

KEY WORDS: Feedback; Foundation Course; Orientation Module; MBBS Curriculum


INTRODUCTION

The aim of the medical education is to bring new perspectives regarding content, methodologies, assessment of medical curriculum, and facilitate students to enhance their learning.

The Medical Council of India has revised the undergraduate medical education curriculum so that the Indian Medical Graduate is able to recognize “health for all” as a national goal.^[2]

The aim is the production of health professionals that are better equipped to fulfill the needs of the community where they have to serve.^[3]

The selection of the medical students to medical colleges is merit based, so the selection criterion is not taking account of non-cognitive abilities, the entry-level students are in the age group of 17–19 years, at this stage of the transition from high school to a professional course, these students may

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face certain possible maladjustment to hostel life, food, and instruction in foreign language.

Therefore, it is necessary to develop and implement students' orientation program at the entry level of MBBS program to acclimatize them to campus environment, familiarize with teaching programs, help adapt to the academic challenges as they move from high school into undergraduate programs. 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 that are required in the dynamic and rapidly changing health-care system.^[4-8] Thus, the foundation course is aimed at providing an introduction to the MBBS program which will potentiate students from diverse backgrounds languages and varying degrees of technical and communication skills to adapt and enhance required skills.

The contents of the orientation module^[2] were as follows:

- Orientation
- Skills module
- Field visit to community health center
- Professional development including ethics
- Language/computer skills
- Sports and extracurricular activities.

The orientation module included the following topics, the medical profession and the physician's role in society, the MBBS program, medical ethics, attitudes, and professionalism, national health priorities and policies, universal precautions and vaccinations, patient safety, and biohazard safety.

The skill module included training the student on first aid, basic life support and safety, hand washing, needle/scalpel stick injuries, immunization requirements of health-care professionals, concept of biosafety, and handling biomaterial/biowaste management.

Orientation to community, this module included the following aspect;

- a. Visit a community health center
 - Introduction to healthcare workers and their role
- b. Introduction to and interaction with patients
 - Apart from this, the students were enabled to acquire enhanced skills in:
 - Language (local and English)
 - Interpersonal relationships
 - Communication
 - Learning including self-directed learning
 - Time management
 - Stress management
 - Use of information technology
 - Collaborative and interdisciplinary teamwork.

MATERIALS AND METHODS

The study was conducted in the Department of Physiology, GMC, Nagpur, after the institutional ethical clearance. The classes were taken by respective preclinical, paraclinical, and clinical faculties.

The study design was explained to the students and feedback form was given at the end of the lectures. Students were given the clarification and importance of feedback, and how it would be helpful for further improvisation and implementation.^[4]

Feedback form regarding the topics in the module was graded as scores 4, 3, 2, and 1 (4 – excellent, 3 – satisfactory, 2 – good, and 1 – needs more understanding).^[10]

Feedback questions for the assessment of teaching and learning sessions were also taken at the end of the foundation course, the questionnaire was in the form of Yes/No;

Using the predesigned questionnaire, data were analyzed.

RESULTS

The observation is depicted in Figures 1-4 and Table 1.

The topics in the orientation module were covered in the 1st week. As depicted in the bar chart, it can be appreciated that overall feedback of the module was satisfactory.

Among the topics of the orientation module: 48% of students founded MBBS program satisfactory, 32% excellent, and 2% needed more understanding.

Indian Medical Graduate and role of physician in society 34% scored as good, 17% excellent, and 40% of the students gave a feedback of needed more understanding for the topic of medical ethics.

The topic on universal precautions and vaccinations founded satisfactory by 39% of students, patient and biohazard safety 51% claimed to be satisfactory.

It was observed that every question was not answered by the students.

Students founded the session of the skill module very interesting and were very interactive throughout. The sessions of first aid (basic life support) were graded excellent by 57.6% of students. Similarly, safety measures and biomedical waste were graded excellent by 45% and 35% of students, respectively. It was also made more innovative by students role play.

From Figure 3, the module is constituted of community visits, language and computer skills, stress, and time management.

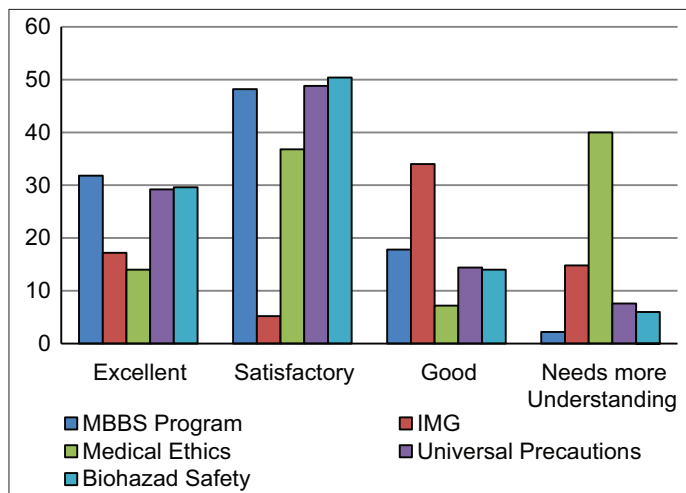


Figure 1: Orientation module

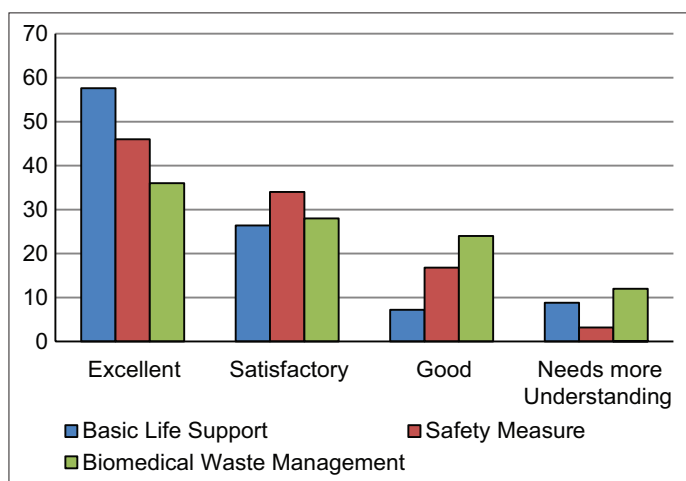


Figure 2: Reflection of the skill module



Figure 3: Community orientation

All these were spread over period of 21 days. As can be assessed from the bar charts that the topics under this module were rated excellent by majority of students.

The session was found very helpful to the students as many of them were from outside the state and not knowing the local

Particulars	Yes (%)
1. Module content and organization	
a. Objectives were cleared	185/250 (74)
b. Module was well organized	170/250 (68)
2. Student contribution	
a. Approximate level of your won attendance during the module	205/250 (72)
b. I have participated	210/250 (84)
c. I have made progress	180/250 (72)
3. Learning and teaching methods	
a. Module was well structured to achieve learning outcomes (balance of tuition)	170/250 (68.4)
b. Environment in the class was conducive to learning	231/250 (92.4)
c. Teaching and learning method encouraged participation	210/250 (84)
4. Learning resource	
a. Learning material was useful and relevant	220/250 (93.2)
b. Provision of learning resources in the library was adequate and appropriate	158/250 (63.2)
5. Quality of delivery	
a. The module stimulated my interest on the subject area	187/250 (74)
b. Ideas and concept was clearly presented	191/250 (76.4)
c. Need more understanding	85/250 (33.2%)

language. Stress management sessions entry level to be very convincing to the students.

The overall scoring of Grade 4 in this session was more than 50%.

The feedback on teaching assessment was also strongly positive. The following heads were taken into consideration;

1. Module content and organization (objectives were clear, modules were well organized)
2. Student’s own contribution (his/her participation and progress)
3. Learning and teaching methods (module was well structured, environment of the class, teaching and learning method)
4. Learning resources (learning material, provision of learning resources)
5. Quality of delivery (whether the module created self-interest, concepts were clear, or needed more understanding).

While the assessment of the teaching methodology, it was found that 92% of students founded the classroom environment to be conducive for learning, 84% of the students commented on the positive impact of teaching which encouraged their participation.

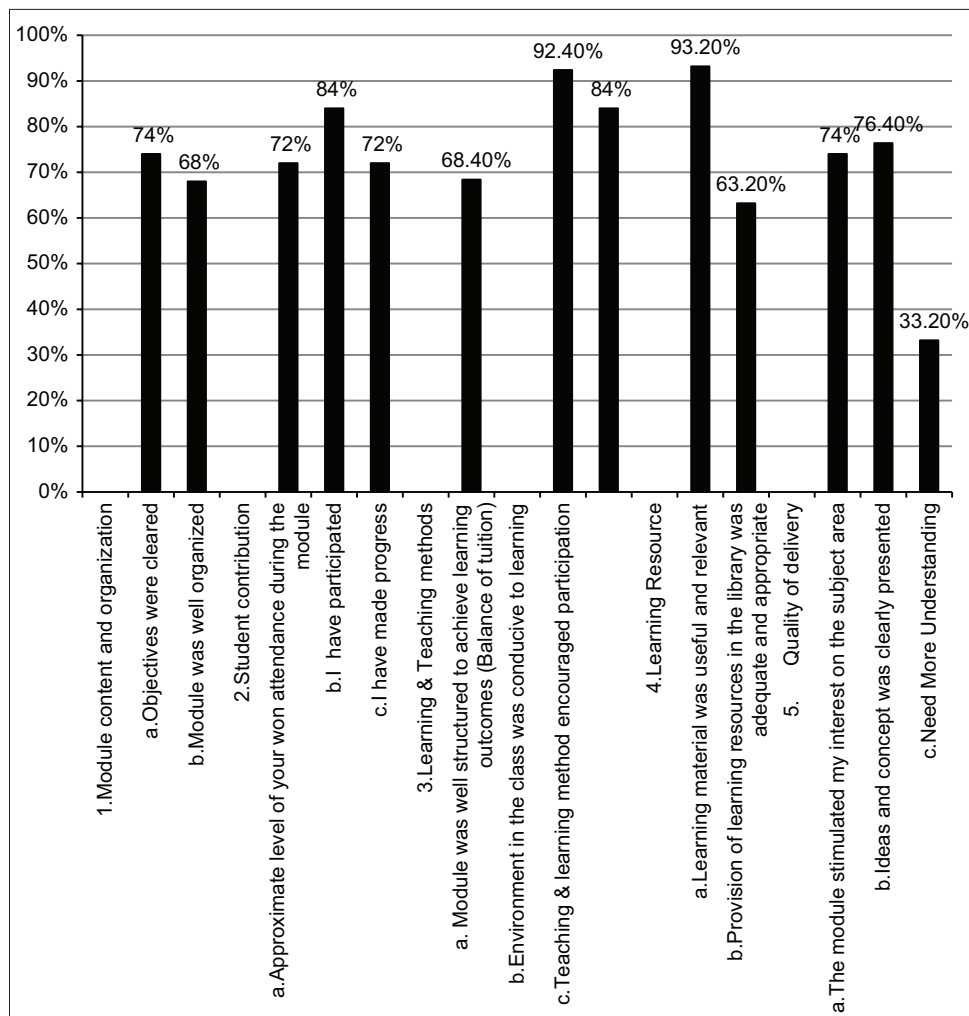


Figure 4: Feedback questions for assessing the delivery of topic and session

Regarding learning resource, 93% reported the learning material to be useful and relevant.

Regarding the quality of delivery, 74% gave positive feedback that module stimulated interest in the subject area by the ideal interactive way of quality of delivery of lectures.

About 33% overall needed more understanding.

DISCUSSION

The main motive of our study was to explore the student's feedback on foundation course which has been implemented for the very 1st time in the MBBS curriculum so that the strengths and lacunae could be identified and rectified for betterment in subsequent academic years.

As can be very well appreciated from the charts the foundation course is cherished by the students.

The topics in the orientation module [Figure 1] which were covered over a period of 1st week were found to be satisfactory by the students and very few (2%) needed more

understanding for which efforts were taken by the teaching faculties.

Figure 2 which gives the reflection of skill module was found to be very interesting and interactive throughout. The sessions of first aid (basic life support), safety measures, and biomedical waste were found to be beneficial by the students.

Figure 3 reflects the module of community visits, language and computer skills, stress, and time management which were spread over a period of 21 days and as can be observed from the bar charts that the topics under this module were rated excellent by majority of students.

Stress management and language (both English and local) sessions were found to be very convincing to the students.

Figure 4 that shows the feedback for teaching and learning session was indeed helpful for the faculties, it would definitely be helpful for the faculty members to hone their performance in a logical extension. The feedback provided a fair and reasonable assessment which would help in future to add more sources of information, instruction material.

In nutshell, majority of the sessions were satisfactory to the students. They would be more keen to learn the basic sciences if they realize their clinical application in subsequent MBBS phases^[9] as well as their future role in society as Indian Medical Graduate.^[2]

As observed, students were not acquainted with most of the except internet skills and time management.^[9,12] and thus introducing the foundation course would definitely be supportive to them.

The study done by Suman, in 2007,^[10] on introduction of Foundation Course for MBBS students at entry level, is similar to our study, wherein they also concluded that foundation course for medical students at entry level is a way that would facilitate them to get familiarized with the campus, help them to cope up with a vast knowledge and skills required in the dynamic and rapidly changing health-care system.

Srinath, 2014,^[11] carried out the feedback analysis of the first MBBS students and concluded that the foundation course in the beginning of the first phase of the course enables the students to acquire the basic knowledge and subsequently would be helpful in the later phases and practice.

The study done by Modi, 2015 *et al.*^[5] also concluded that professionalism is an integral part of medical profession and must be, therefore, an explicit part of the medical curriculum.

In the work done by Jitendra and Pratik, 2017,^[4] where they studied the perception of the 1st year MBBS students toward orientation program at entry level, in accordance with our study that the foundation course helps to reduce anxiety among students, boosts up their confidence.

Mahsood and Khan, in 2019,^[6] also carried out a foundation module of 6 weeks in the MBBS students and concluded that the foundation course would help in better understanding and application of basic science knowledge and the students feedback would be helpful in improving the quality of curriculum.

The time invested in foundation course aims to orient the students to the national health scenario, health economics, and learning and communication skills. Along with this, an overview of entire curriculum study and assessment pattern would be introduced. As observed in our study as well as the previous studies, the students were not acquainted with all the topics before sessions, except internet skills and time management;^[9,12] therefore, entry-level exposure to basic topics would be used to them in all the MBBS curriculum phases.

Our orientation program was found to be useful and informative; students could acquire the basic skills which shall be helpful to them in their paraclinical and clinical phases also.

The orientation course also was brainstorming regarding critical thinking and research, and how should we start and apply technique of scientific competencies as early as possible that would help the learners in their research orientation career in future.^[1]

The feedback session on the conduction of sessions was indeed of use in faculty development, improving the resource material, which was taken very positively by the faculties.

Although the session was found to be very useful, their pre-existing knowledge was not tested in this study so a comparison could not be as to their gain in the knowledge. A pre- and post-session feedback can also be thought for next session.

In nutshell, student's feedback was encouraging, they were enjoying their studies as well as learning to manage the burden of curriculum.^[4,12]

CONCLUSION

Thus, the foundation course was a wonderful ice breaking among students, as well as good teacher-student interaction. The students got well acquainted to each other as well as to the institutional campus.

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