

MCI curriculum 2019: Evaluation of the foundation program- A questionnaire- based study

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ABSTRACT

Introduction and Aim: There is a paradigm shift in the attitude and learning behavior of the young generation. To address this and to keep Indian medical teaching at par with western countries, MCI provided new guidelines to teach undergraduate students. The new MCI curriculum is based on a competency program that includes a horizontal as well as vertical integration of subjects. In addition, the curriculum designers have provided a foundation course of one- month duration for the new entrants. The thought process behind this is to acclimatize new students towards the new academic atmosphere, the role of a medical graduate in society, and various national health policies/programs.

Methods: The organization of the foundation program was received with a mixed response from the faculty as well as by the new students. Feedback from the faculty and students was taken to evaluate the success of the foundation program.

Results: While the majority of teachers and students perceived it as a welcome step; many of them felt the duration was long and sessions were getting repetitive. Some students did not like the teachings of basic computer skills, as they are already aware of it. Some faculty members thought that the idea of running a foundation course is too optimistic approach; some topics are better learned with passage of time. In addition, a separate skilled staff should be employed for teaching skills not related to medical teaching. The comments were tabulated and analyzed.

Conclusion: The faculty and students perceive it as a welcome step. The main merit of the course is the orientation and sensitization of the new entrant. The main demerit is the long duration of one-month.

Keywords: MCI; curriculum; questionnaire; foundation course.

INTRODUCTION

There is a paradigm shift in the attitude and learning behavior of the young generation. Starting from their middle school, young children are adapted to technological tools such as computers, the internet, etc. Medical education is also changing with respect to its orientation and outcome. In 2002, a core committee was constituted to define the essential requirements in medical education at the global level (1). The committee formulated the guidelines based upon the essential global competencies. Further, they stated that there could be an addition of national/regional goals depending upon a nation's health priorities and policies.

There are 581 medical institutes in India, which are producing around 74,000 medical graduates each year. With an ever-increasing number of medical colleges and with an increase in the intake of students, this number is going to exceed 1 lac within the next few years. Globally that will account for every 3rd-4th medical graduate from India. Therefore, the regulatory bodies in India i.e. the Medical Council of India (MCI) had a well-defined task to bring medical education to a global level. The content, curriculum and evaluation of an Indian

graduate need to be restructured to come up to that level.

The first move towards this task was to implement a foundation program to orient students towards various aspects of medical education. The new MBBS session started in August-September 2019 and most of the medical institutes designed and organized the 'foundation course' as per MCI guidelines (2). There was a generalized mixed response during the one-month duration. While students were overall happy and comfortable, the faculty took it with a pinch of salt. For providing the feedback, a questionnaire was prepared for students and another questionnaire for faculty.

The present study was planned with an aim to find out the merits and demerits of foundation courses from students as well as from the faculty perspective. This will enable the authorities to propose modifications and further implementation.

METHODOLOGY

After the completion of the one-month, Foundation Course program in our institute feedback was taken from:

1. Students (149)
2. Faculty (38)

A separate questionnaire was prepared for both categories. The students were asked to write about their impressions on the most interactive, informative, and interesting sessions. In addition, their observations on didactic lectures delivered on various topics were noted. The questionnaire also included their ideas about their visit to rural and urban health centers and their role in providing health care to these areas. In addition, they were asked to give an opinion on the merits and demerits of the foundation course.

On the other side, faculty members were asked about the student's responses to their lectures. In addition, their opinion to emphasize different modules of foundation program was noted. The faculty also stated their ideas to modify or improve upon the organization of the foundation program. The response of students and teachers was tabulated, analyzed, and discussed in light of available literature.

OBSERVATIONS AND RESULTS

The foundation course was conducted in a span of one month, daily from 9 am to 5 pm. The time period was equally distributed among didactic lectures, the orientation of the hospital premises, activities including literary, cultural, sports, etc., interactive sessions such as basic life support, first aid, computer skills, etc.,

Interactive sessions were conducted on basic life support, for enhancing computer basic skills in MS Word, MS Excel, and hardware knowledge for students. Language enhancement skills by use of prerecorded conversations in vernacular language as well as in English were conducted among students to improve their communication skills among patients and themselves. Various activities like singing, dance, role-plays, drama, and sports were organized in the college premises. The following figures/tables present the students feedback for various modalities.

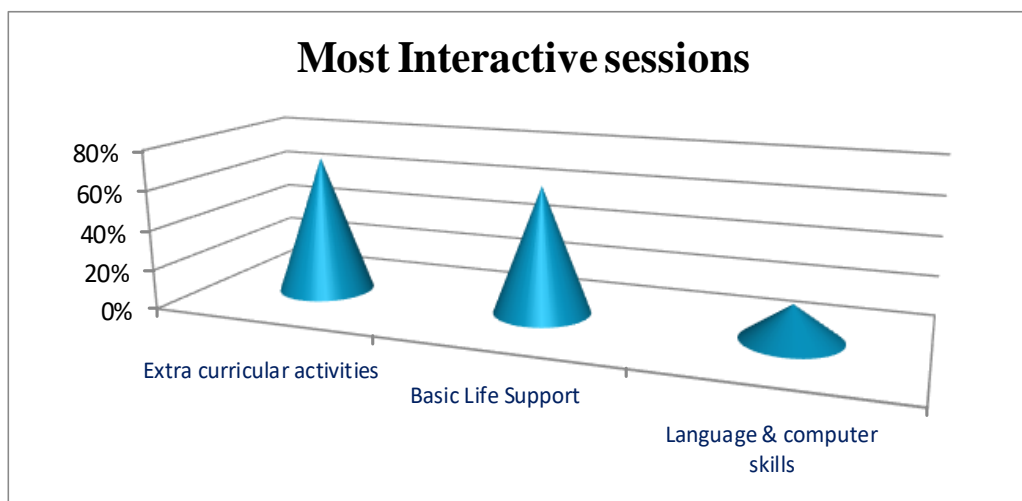


Fig. 1: Students’ preference for the most interactive sessions: Students found extra-curricular activities (70%) as the most interactive sessions followed by basic life support (BLS) session (63.7%). Only 17.4% of the students observed language and computer skills sessions interactive when compared to other sessions (Fig.1).

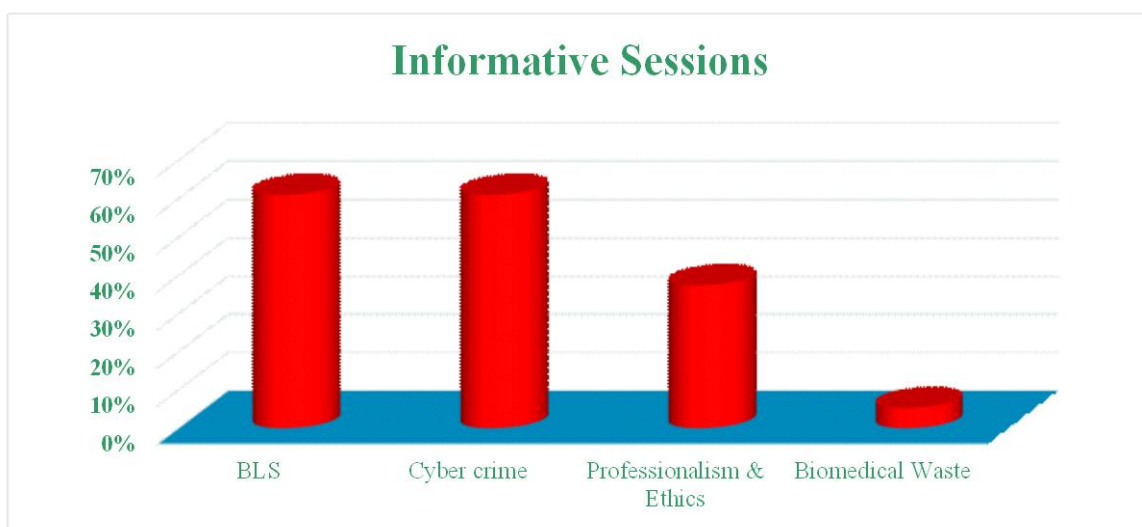


Fig. 2: Students’ opinion about most informative sessions: Most informative sessions experienced by the students were basic life support and cybercrime (61%) respectively. 38% of the students found lectures on professionalism and ethics informative. 5% of the students observed biomedical waste management and its disposal session to be the least informative at their stage (Fig. 2).

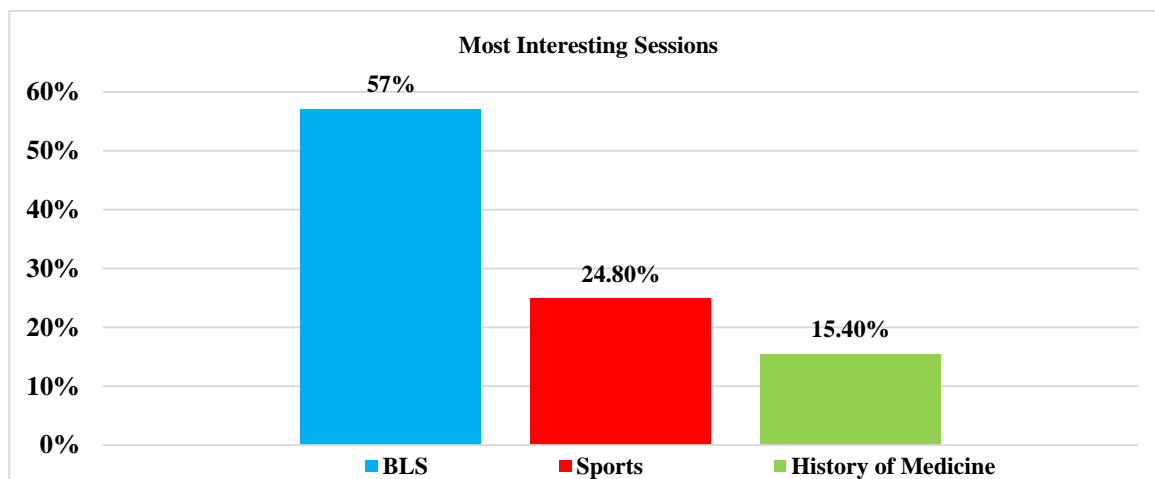


Fig. 3: Students’ statement about most interesting sessions: Basic life skill sessions were found to be the most interesting sessions by 57% of the students. Sports sessions also received a good response as 24.8% of the students recorded a regular participation. 15.4% students found a session on "History of Medicine" interesting too (Fig. 3).

Table 1: Outcome of skill enhancement module

Questions	Yes	No	May be
Will you be able to provide first aid in emergency after these sessions?	136 (91.2%)	1	12 (8%)
Will you be able to perform CPR after BLS sessions?	148 (99%)	1	-
Are you able to access online resources after computer skill classes?	142 (95.3%)	7 (4.6%)	-

More than 91.2% of students felt confident that they would be able to provide first aid to patients when needed. 99% of participants were confident that they would be able to give cardiopulmonary resuscitation and revive a dying patient after interactive lectures on

basic life support. 95.3% of students found that computer skill classes had taught them to access online resources more efficiently for betterment in their studies (Table 1).

Table 2: Observations on didactic lectures

Questions	Yes	No	May be
Is ‘History of Medicine’ Useful and informative?	127 (85.2%)	22 (14.7%)	-
Does the alternative practice of medicine useful for society?	147 (98%)	2 (1.3%)	-
Do you understand role of ‘Indian Medical Graduate’ after completion of MBBS?	149 (100%)	-	-

Some of the lectures were imparted on the role of an Indian medical graduate, the alternative practice of medicine, and the history of medicine. Most of the lectures were perceived well by the students. 100% of the students understood their role as medical graduates in society after completion of studies.

Almost 98% of the students were aware of the alternative practice of medicine in society after its respective lecture. Some (14.7%) of the students did not appreciate lectures on the history of medicine. Such students found didactic lectures too tiresome (Table 2).

Table 3: Observations on didactic lectures imparted by social and preventive medicine department

Questions	Yes	No	May be
Were you given proper demonstration for handling bio-hazardous material?	143 (95%)	6 (4%)	-
Were you explained about immunization requirements for health care professionals?	147 (98%)	2 (1.3%)	-
Was the topic ‘Health Care systems in India’ informative?	140 (94%)	9 (6%)	-
Are you clear about National Health policies and Goals?	133 (89%)	16 (10.7%)	-

95% of the students perceived the demonstration of biohazardous material effectively. 98% of the students could explain the requirement of immunization for themselves and health care professionals, only 1.3% were yet not aware of the hazards of being unimmunized for diseases not encountered by them in the hospital; apart from the

regular immunization done in their childhood times. 94% of the students were able to enumerate different health care systems prevailing in India after the session. 89% of students knew the national health goals and 5–year programs running in India in the present year (Table 3).

Table 4: Impressions after visit to urban and rural health centers

Questions	Student response (%)
I was not aware of it before	85 (57%)
The centers are providing adequate basic health care to people	130 (87.2%)
The centers require further improvement in their functioning	10 (6%)

Many (57%) students were not aware of the presence of rural and urban health centers attached to the medical college for imparting maternal and childcare and also other health care programs to the society, especially the underprivileged. 130 (87.2%) students

were satisfied with the urban and rural center's functioning. However, some students 10(6%) felt the need for improvement in providing basic health care to society (Table 4).

Table 5: Importance of documentation

Questions	Yes	No	May be
Do you realize importance of documentation as a physician?	144 (96%)	5 (3.3%)	-
Were you explained the correct method of Documentation?	137 (91%)	12 (8%)	-
Were you sensitized about concept of Ethics among health care professionals?	144 (96%)	2 (1.7%)	-

To emphasize the overall personality development of a medical graduate, students were sensitized about ethics and the correct way of documentation. Post lectures, 96% of students realized the need for proper

documentation and the concept of ethics among health care professionals.

91% of students were satisfied with the faculty on explaining the correct method of documentation (Table 5).

Table 6: Impression about college rituals

Questions	Yes	No	May be
Did you appreciate the significance of 'White Coat Ceremony'?	140 (93%)	9 (6%)	-
Did you appreciate the significance of Mentorship Program?	145 (97.3)	4 (2.6%)	-

Every year, our institute organizes the inauguration of the new academic session. The highlight of the program is to provide students with white coats while emphasizing its significance in the medical profession. In addition, each new student is assigned one faculty member as his/her mentor for their entire

undergraduate period. 93% of the students appreciated the significance of the white coat ceremony. 97.3% of students felt that the mentorship program would enable them to sort out their problems by discussing it with experienced faculty (Table 6).

Table 7: Impressions about sports and extracurricular activities

Questions	Yes	No	May be
Have sports and extracurricular activities enhanced communication with your classmates and seniors?	127 (85%)	22 (14.7%)	-
Have sports and extracurricular activities enhanced communication with your teachers?	131 (87.9%)	18 (12%)	-

85% of students observed that sports and extracurricular activities enhanced communication among students within the class as well as with students of senior batches. A similar observation was also perceived with the teachers by 87.9% of students (Table 7).

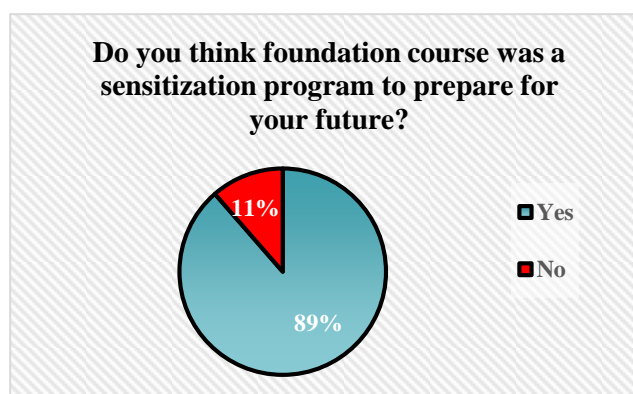


Fig. 4: Students' observations on foundation course: Overall majority of students stated that foundation course was an effective way to get sensitized for their future role (Fig.4).

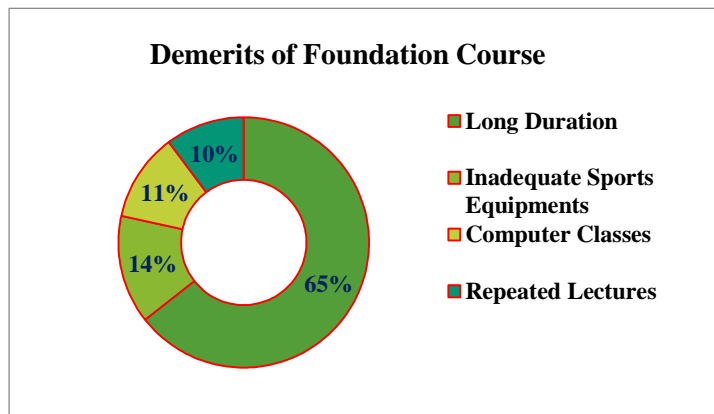


Fig. 5: Students’ observations on foundation course: 65% Students observed the course had a longer duration, 14% found sports equipment inadequate, 11% were not satisfied with computer classes and 10% observed that lectures were repeated during the course (Fig.5).

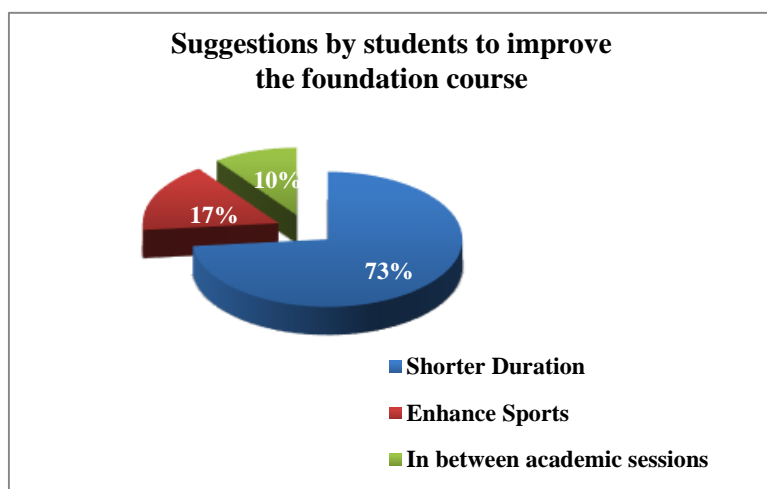


Fig. 6: Suggestions by students to improve the foundation course: Students felt that there were inadequate sports facilities like space, equipment and trained sport personnel. Students found didactic lectures too tiresome and of less significance. 73% students felt that one-month duration should be implemented in a staggered form (Fig.6).

Faculty observations on a foundation course

The faculty members were requested to give their opinion about the importance of various modules of the foundation course. According to them, the orientation and interaction is the most important module for a fresh entrant to the medical profession,

followed by emphasis to inculcate values for professionalism and ethics. Only 35% of faculty members felt the need for introducing more sports and extra-curricular activities in their academic calendar (Fig. 7).

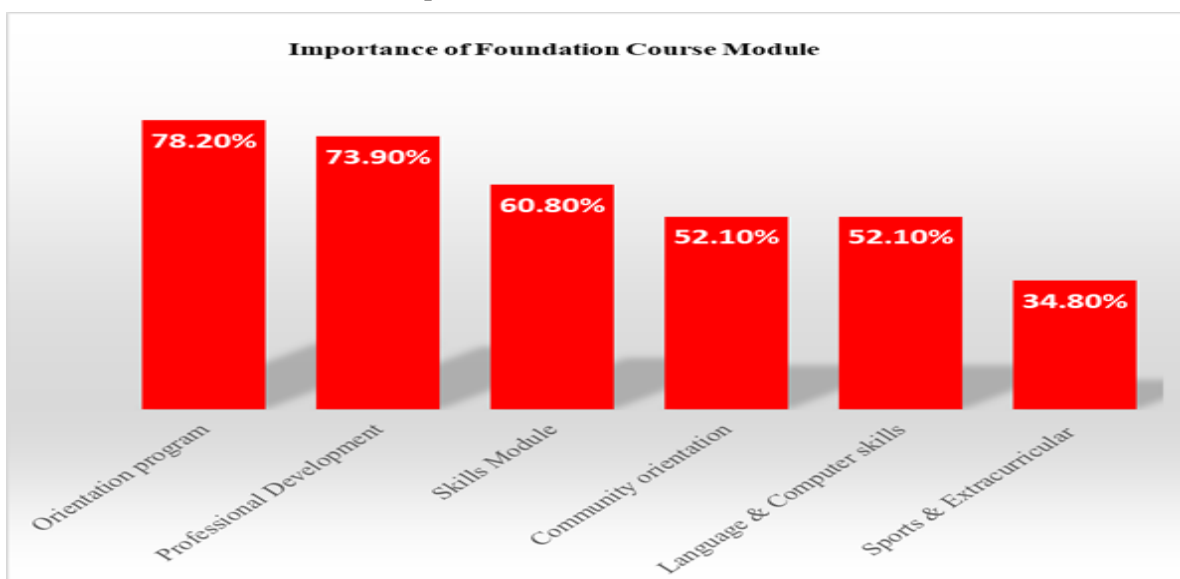


Fig.7: Faculty observations on foundation course

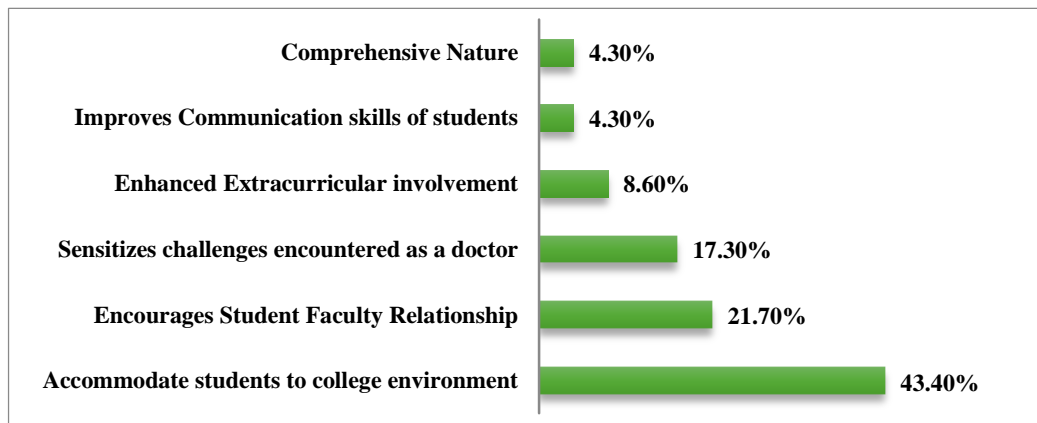


Fig.8: Advantages of the course: Faculty assessment: Regarding faculty assessment on the advantages of foundation course (Fig. 8); the members felt that this kind of exercise will help students to accommodate in the new environment and will encourage better bonding with senior students and with faculty. In addition, it will prepare the young minds for the future challenges as a professional.

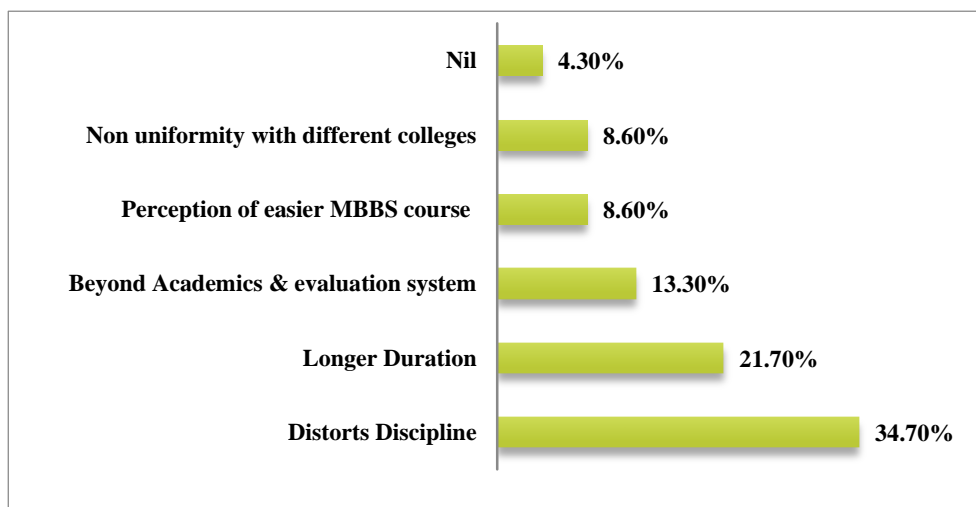


Fig. 9: Disadvantages of the course: Faculty assessment: Taking about disadvantages (Fig. 9), the teachers felt that after the completion of foundation course students are not disciplined any more as per the expectations and norms in Indian medical schools. They also felt that because of diverse topics in orientation, the new students do not comprehend the tough academic requirement for graduation. They start the basic subjects in a casual manner and the next 2-3 months there is undue stress when the performance is not up to their expectations. The faculty also agreed with students that the initial duration of the course could be shortened.

DISCUSSION

It is a worldwide practice to induce new entrants to an academic professional course with an induction/orientation/foundation course in the beginning. These courses help them to adapt to the new environment as they move from high schools to professional institutes. The orientation programs include an overview of the academic challenges, rules, and regulations of the institute and expectation of the society form them as a professional.

In the medical profession, it was recognized that educators of the undergraduate medical program are responsible for inculcating the values of integrity, empathy, and self-management to prepare them for their future role as medical professionals. Further, the students must be sensitized towards national policies and goals, existing healthcare infrastructure in their country, and the history as well as advancement in medical sciences (1). In view of the above, the Core committee at the international level was established in 2002, and in response to that in India, the Medical Council of India (MCI) formulated a document

'Vision 2015' (2). Based upon this, a new MCI Curriculum has come into existence in 2019 which contains changed curriculum and introduction of new teaching elements (3). The initiation of the new curriculum is with the implementation of a one-month foundation course.

Srimathi (4) reported positive feedback from students after the completion of 8-day orientation program held in Sri Ramachandra University, Chennai. She concluded that the foundation course will help new students to learn basic skills. Further, there should be the next phases of orientation throughout the para-clinical and clinical years to cover remaining relevant aspects. However, the study did not observe the faculty's response. In a newspaper, Shelar published an article (5) in which Dean, G.S. Medical College, stated that this introductory course will aim to change the student's outlook to a certain extent. Mittal *et al.*, emphasized the need to organize such courses to lay a strong foundation for future medical practitioners (6). In their feedback proforma after the conduct of two days orientation program, they observed that students graded it as very good and useful for them.

However, the orientation program was only for 2 days, and the faculty's opinion was not recorded. Rajasekhar and Kumar highlighted the challenges in implementing a new curriculum from the faculty's perspective (7). They stated that prior to starting this new program; there is dire need to train the teachers adequately by organizing faculty development programs. Basheer also emphasized that there is a need for basic and advanced faculty training for successful implementation. He lauded the provision of a one-month foundation course to orient students towards the requirements of medical education and to develop professionalism and the right attitude (8).

According to Shrivastava and Shrivastava, the change from 'teachers driven curriculum to the learner's based system is a welcome step and thoughtful approach for flexibility but more accountability (9). However, the authors opined that it may overcomplicate medical training and therefore become impractical. Sharma, *et al.*, talked about the challenges in the implementation of the new curriculum (10). They stated that more faculty are required in each subject; also, additional skilled staff is needed for teaching languages, computer skills, sports, and cultural activities. They also observed that MCI has not given clear cut instructions for the late admissions; whether foundation course should be held for them again or not. Their suggestion was for MCI to increase the number of faculty, more capacity building courses, and gradual replacement of existing curriculum to achieve the desired outcome.

Kulkarni, *et al.*, emphasized the need to shift from conventional teaching to the outcome-oriented student's learning method (11). Although they felt that there are several hurdles along the way such as inertia among faculty to change, absence of adequate infrastructure, and paucity of training among medical faculty. However, the new emphasis on ethics, professionalism, integrity, and leadership qualities will bring out the required changes in an Indian medical graduate. Singh, *et al.*, advocated the introduction of a foundation course at the beginning of the MBBS course stating that it should be mandatory (12). The authors opined that it would acclimatize students coming from a diverse learning environment to cope with the stress and challenges of the healthcare system.

The change is universal phenomena; retrospection and introspection into the professional course teaching is the compulsion of the modern world and time. Students entering the medical profession are to be tackled with a feather's touch and at the same time, they have to be trained and tuned with modern world research and orientation. Students entering the first professional of MBBS may not be essentially hostlers in the past; thereby these students are being challenged emotionally, psychologically, and academically. There are reports where it had been

shown that many students suffer because of depressive episodes when they enter into the medical college away from their parents.

It is hence the moral obligation of the medical fraternity to acclimatize the young entrants to the medical college and to the campus environment and to make them skillful in the expression both verbally and through the pen. It is also mandatory to build their perspective with respect to the professional values, ethics, and health priorities in India to prepare them for their future goals towards medical practice and the right attitude towards medical research.

It is also important that young minds may be tuned in such a manner that they start observing medical teaching skills in between the lines. Strong observation is the key point in making a young mind tilted towards research, which may go a long way in treating the patient community and finally shining the name of self and nation (13).

However, the changes cannot be and should not be so abrupt that both teachers and taught may be left squinting. The changes may be brought and incorporated gradually into the existing system of medical education. Let the new curriculum be critically evaluated to make the final progression, as speculated or desirable.

The new medical curriculum has a too optimistic approach; certain topics are to be learned with the passage of time. One-month spent on the foundation course is too long a period. Otherwise, the academics will be diluted with a playful way attitude. The transition from the old system of medical education to competency based medical curriculum should be gradual to avoid the sudden shock and to prevent the knee jerk reactions for effective implementation and smooth sailing with presumptive benefits.

Since this program has been implemented recently, there was no available literature regarding the perception of students as well as faculty. Based on our analysis, from the student's perspective, the foundation course was a welcoming step for proper acclimatization, which helped to break the ice between students versus faculty and versus senior students. It also helped them to learn new skills (such as first aid, BLS) and to be sensitized towards national health scenarios including goals, policies, immunization programs, etc. They were made aware of the status of community health services, rural and urban health care centers attached to hospitals. The students did not show enthusiasm towards language enhancement, computer skills, and didactic lectures. They also felt that there were inadequate sports facilities like space, equipment, and trained sports personnel as till now most of the medical institutes were not sensitized towards equipping themselves for these amenities. They also felt that the one-month duration should be implemented in a staggered form.

Faculty members found it more cumbersome as lectures of general nature were imposed upon them. Adding to their woes is the rescheduling of the whole curriculum with the introduction of competency-based teaching and evaluation methods have become more cumbersome. The faculty members felt that a one-month duration is too long and after one month, the fresh students are not disciplined anymore. Nevertheless, besides the initial hiccups, the teachers welcomed the concepts of introducing foundation courses in respect of acclimatization, emphasis on future goals, and breaking the communication gap.

CONCLUSION

The suggestions for the regulatory bodies are:

- The frequency of organizing AETCOM modules to teach and train faculty should be increased in the initial years.
- Implementation should be in a staggered manner; 15 days in the beginning and fixing some activities such as sports, ECA at regular intervals.
- Some modules such as infection control, biosafety hazards, etc. can be taken after the completion of the first professional year.
- MCI should create jobs for skilled people to manage activities such as language enhancement, computer skills, physical education, extracurricular activities, etc.

CONFLICT OF INTEREST: There is no conflict of interest among the authors.

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