

Original Research



Novel foundation course for medical students: student and faculty perspectives

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Article info

Article History:

Received: 7 Apr. 2021
Accepted: 10 May 2021
published: 3 July 2021

Keywords:

Foundation course
First MBBS
MCI

Abstract

Background: According to the National Medical Council (NMC) recommendation, the foundation course was carried out in our institution for I MBBS 2019 and 2020 students. The current study was done to solicit the viewpoints of the students and faculty members about the connection of the topics included in the foundation course.

Methods: This cross-sectional study was carried out to seek the perspectives of students who took the foundation course and the faculties involving in teaching the topics allotted for the 2019 and 2020 MBBS students. Google Forms was used to collect the data, which was analyzed by Excel.

Results: The general experience of the students and faculty was uniformly positive for 100% for both students and faculty in the 2019 group, and 94.1% and 97.8% for students and faculty, respectively, in the 2020 group. In the 2019 group, the skills module was recognized as the most appropriate module in the foundation course with (77.8%), followed by sports and extra-curricular activities module (both at 64.6%). In the 2020 group, the professional development and ethics module was recognized as most appropriate by 89.3% of students, followed by the orientation module (83.3%) and language & computer skills module (80.9%)

Conclusions: This Foundation Course for MBBS students provided before the start of the medical curriculum is a novel and useful step. Feedback from various colleges across India can help make this course still more useful.

Introduction

Medical institutions around the world are planning orientation programs for their students as they move from high school to undergraduate courses along with important purpose of familiarizing them with academic programs to facilitate their adjustment.² In India, medical education requires training the students wide range of domains involving revelation of human interactions and interpersonal relationships in various settings including hospitals, communities, clinics. MBBS education is intense and requires great commitment, consistency and lifelong learning. Students enter a novel profession in their adolescence directly from high school, which is difficult and challenging to get adjusted. Therefore, it is important to acclimatize and familiarize the students to this new environment. This can be facilitated by including an introduction to course such as its structure, learning methods, technology use and compeer interactions which would help the students' transition from high school to

medical college.¹

Materials and Methods

The participants of this cross-sectional study were MBBS students and it was done in medical faculty in our institution for two consecutive MBBS groups (2019 and 2020) at the Basaveshwara Medical College and Hospital, Chitradurga, India.

Inclusion criteria

All freshmen of MBBS (2019 and 2020) undergoing the foundation course and medical faculty which involved in teaching the various topics in the foundation course were included in the study.

Exclusion criteria

Participants with no obtained feedback after two reminders and students who were absent for the foundation course were excluded.

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Study Tool

A prearranged semi-structured questionnaire was shared through Google Forms. It included general instructions for completing the form; a question on the general experience of the foundation course; questions about their viewpoints about the relevance of individual modules and the topics included in them; questions on knowledge of various modules in the foundation course; and questions on the importance of different modules in the foundation course. The same questionnaire was used for both students and faculty.

Modules covered in the foundation course per MCI included:

1. Orientation
2. Skills
3. Community orientation
4. Professional development and ethics
5. Enhancement of language and computer skills
6. Sports and extracurricular activities.

However, per the instructions from RGUHS, due to the COVID pandemic for the 2020 group, an online foundation course was conducted that included only three modules: orientation, professional development and ethics, and improvement of language and computer skills.

Data Collection

The study was carried out in October 2019 and January 2021 after the approval was obtained from the Institutional Ethics Committee. The Google Forms questionnaire was used to get the feedback from the students and faculty. Enough time was given to complete the questionnaire. Confusions regarding the questions were clarified online. The first part of the questionnaire involved the general experience of the foundation course. Likert-type response options were rated as positive, neutral and negative.

The second part of the questionnaire included relevance of individual modules as prescribed by MCI. 2019 students had all six foundation course modules presented in person and 2020 students had three modules in an online format. The Likert-type responses were scaled as relevant, neutral, and not relevant. The same questionnaire was used for both faculty and students. The data was analyzed using Microsoft Excel 2007.

Results

Responses were obtained from 99 of 99, 2019 students and 84 of 100, 2020 students attending the foundation course. The response rate was 100% for 2019 faculty and 95% for 2020 faculty who taught the foundation course topics. Faculty were not identical from 2019 to 2020. For the 2020 group, 84 students attended the foundation course and 16 did not attend. The first part of the questionnaire had a question on the general experience of the foundation course. In 2019, 100% students and faculty gave positive feedback. Among the 2020 group, the majority of the students (94.1%) responded positively, while 5.9% gave a

neutral response; among the 35 respondents in the faculty group, the majority (97.1%) gave positive feedback, and the responds of 2.9% were negative (Table 1).

The second part of the questionnaire included the relevance of the individual modules as prescribed by MCI. 2019 students had all six modules presented in person and 2020 students had three modules in the online format, so these disparate experiences could not be compared.

Analysis of the 2019 students' responses showed that the skills module was recognized as the most appropriate module in the course, with 77.8% (n = 77) students regarding it favorably, that was followed by sports and extracurricular activities, to which 64.6% (n=64) gave a positive response. Either the orientation module and the module on professional development or ethics were found appropriate by 59.6% of students. The least appropriate modules, in their viewpoint, were a community orientation and improvement of language and computer skills, with only 38.4% and 36.4% (n = 38 and n=36), respectively, giving a favorable response (Table 2).

Analysis of 2020 students' responses revealed among the three modules, the professional development and ethics module was recognized as most appropriate by 89.3% of students, followed by the orientation module (83.3%) and improvement of language and computer skills module (80.9%) (Table 2).

Analysis of the 2019 faculty responses showed that skills module was recognized as the most appropriate module in the course, with 100% of faculty being in its favor, followed by the professional development and ethics module, to which 89.3% of faculty gave a positive response. Either the orientation module or the module on development of language and computer skills was found appropriate by 67.8% and 64.3% of faculty, respectively. The least appropriate modules, in their opinion, were community orientation and sports and extracurricular activities (Table 3).

Analysis of 2020 faculty responses showed that, among the three modules, the professional development and ethics module was recognized as most appropriate by 88.6% of faculty, followed by the improvement of language and computer skills module (82.9%) and the orientation module (65.7%) (Table 3).

Discussion

In accordance with NMC Medical Education Program of 2019, foundation course was designed and implemented

Table 1. Overall experience of foundation course

Group		General Experience n(%)			
		Positive	Neutral	Negative	Total
2019	Students	99 (100%)	0	0	99 (100%)
	Faculty	28 (100%)	0	0	28 (100%)
2020	Students	80(94.1%)	4 (5.9%)	0	84 (100%)
	Faculty	34 (97.1%)	0	1 (2.9%)	35 (100%)

Table 2. Relevance of various modules as recognized by students

Module	Group	Relevant	Neutral	Not relevant	Total	P value
Orientation	2019	59 (59.6%)	11 (11.1%)	29 (29.3%)	99 (100%)	<0.001
	2020	70 (83.3%)	14 (16.7%)	0	84 (100%)	
Skills	2019	77 (77.8%)	2 (2.02%)	20 (20.2%)	99 (100%)	-
Community orientation	2019	38 (38.4%)	31 (31.3)	30 (30.3%)	99 (100%)	-
Professional development and ethics	2019	59 (59.6%)	15 (15.2%)	25 (25.2%)	99 (100%)	<0.001
	2020	75 (89.3%)	8 (9.5%)	1 (1.2%)	84 (100%)	
Enhancement of language and computer skills	2019	36 (36.4%)	42 (42.4%)	21 (21.2%)	99 (100%)	<0.001
	2020	68 (80.9%)	16 (19.04%)	0	84 (100%)	
Sports and extracurricular activities	2019	64 (64.6%)	28 (28.3%)	7 (7.1%)	99 (100%)	-

Table 3. Relevance of different modules as recognized by faculty

Module	Group	Relevant	Neutral	Not relevant	Total	P value
Orientation module	2019	19 (67.8%)	8 (28.6%)	1 (3.6%)	28 (100%)	0.85
	2020	23 (65.7%)	11 (31.4%)	1 (2.9%)	35 (100%)	
Skills module	2019	28 (100%)	0	0	28 (100%)	-
Community Orientation module	2019	15 (53.6%)	10 (35.7%)	3 (10.7%)	28 (100%)	-
Professional development and ethics module	2019	25 (89.3%)	3 (10.7%)	0	28 (100%)	0.82
	2020	31 (88.6%)	2 (5.7%)	2 (5.7%)	35 (100%)	
Enhancement of language and computer skills module	2019	18 (64.3%)	7 (25%)	3 (10.7%)	28 (100%)	0.18
	2020	29 (82.9%)	2 (5.7%)	4 (11.4%)	35 (100%)	
Sports and extracurricular activities	2019	13 (46.4%)	6 (21.4%)	9 (32.2%)	28 (100%)	-

in our institution for freshmen of MBBS students in the 2019 – 2020 batch. This study was carried out to opine the MBBS students and faculty who involved regarding their general experience of the foundation course, the relevance of the modules, and suggestions for improvement.

A review of the literature was conducted on this subject. This study was not comparable outside India as medical education systems are different around the globe. In India, these studies were done by many medical colleges to evaluate their foundation courses of varying durations and course contents.

The general experience of both students and faculty was uniformly positive at 100% for the 2019 group, and for the 2020 group, 94.1% and 97.8% for students and faculty, respectively. Shalini Sobti et.al.³ showed this as 63% and 68.57%, respectively, for students and faculty for in 2019.

In our study, in the 2019 group, the skills module was recognized as the appropriate module in the course at 77.8%, that was followed by sports and extracurricular activities (64.6%). For the 2020 students, professional development and ethics was perceived as the most relevant by 89.3% of students, followed by orientation (83.3%) and enhancement of language and computer skills (80.9%) Similar results were reported by Arvind Kumar Pandey et al.⁴ and Shalini Sobti et al.³ whereas skills module received the highest rating by students.

In our study, for the 2019 group, faculty responses showed that the skills module was perceived as the most

relevant module in the course(100%) followed by the professional development and ethics module, to which 89.3% gave a positive response. For the 2020 group, faculty responses showed that the professional development and ethics module was recognized as most appropriate one by 88.6% of faculty. In a study by Arvind Kumar Pandey et al.,⁴ faculty rated the orientation module as the highest, with 47.8% of faculty marking this module as ‘very good.’ Shalini Sobti et al.³ reported that 81.43% of faculty gave a pleasing response to the inclusion of sports and extracurricular activities.

A study done in Gujarat showed that 78% of students responded positively to orientation, 88% responded positively to the foundation course overall, and the students were greatly satisfied with the program.⁵ In a study done in Kerala, 40% of students found the orientation program to be excellent, 50% rated it as very good, 7% as good, and 3% satisfactory.⁶ Generally, These results indicate that such foundation courses are considered positive by students .

Conclusion

Implementation of a Foundation Course for MBBS students before the beginning of their medical curriculum is a novel and useful step which can be made more useful by making modifications after getting feedback from various colleges throughout India.

Ethical approval

Reviewed and approved by the Institutional Ethics Committee of *Basaveshwara Medical College and Hospital, Chitradurga, Karnataka, India*.

Competing interests

None.

Authors' contributions

Conceptualization of the study was done by AAM, VM and GCP. AAM, VM, GCP, and YD were involved in this study to design and draft the research and the manuscript. AAM, VM, and YD provided the qualitative design. AAM wrote the first and second drafts of the paper. VM, GCP, and YD reviewed the first and second drafts of the paper and improved them. All authors have read and approved the final version of the manuscript. Conceptualization: AAM, VM, GCP, Data curation: AAM, VM, YD Formal analysis: AAM, VM, Methodology: AAM, VM, GCP, YD, Visualization: AAM, VM, Writing–original draft: AAM, Writing review & editing: AAM, VM, GCP, YD

Acknowledgments

We sincerely appreciate and acknowledge the foundation course faculty for their support in conducting this study.

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