# An overview of Perception of first year medical students on Foundation course under Competency Based Medical Education (CBME) curriculum: A Cross sectional Study

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# Abstract

**Background:** Foundation course was introduced by National Medical Council to make first year MBBS students acclimatise to professional course.

**Aim:** Present study was aimed at evaluating the perception of overall content, quality, and usefulness of each module of Foundation course.

**Materials and methods:** A crosssectional study was conducted among first year medical students admitted in 2022 at Karwar Institute of Medical Sciences, Karwar. 129 students fulfilling inclusion criteria were asked to respond to feedback form by grading overall content, quality and usefulness of all modules of the foundation course on 5point Likert scale. Collected data was entered on Microsoft Excel worksheet. Percentages were used to present the data.

**Result:** In our study we observed that 25.84% of students found that overall content of all the modules was Good and 31.50% of students reported that the overall quality of foundation course modules was Very good, whereas 29.84% of students felt that all the modules were extremely useful. More than 80% of students were satisfied over the way in which foundation course was conducted at this college.

**Conclusion:** students appreciated the inclusion of foundation course at entry level for effective understanding and application of basic science. Feedback given by them would certainly help us in further improvisation and betterment in conduct of foundation course in successive years.

Keywords: Foundation course, Modules, Competency Based Medical Education (CBME).

#### Introduction:

Competency Based Medical Education (CBME) curriculum insists on foundation course, for first year medical students on entry, to sensitize fresh medical students with required knowledge and skills which will assist them in adapting and making them familiar to new professional environment. CBME curriculum emphasizes on Indian Medical Graduates coming out of a medical institute to be competent enough to diagnose and manage common health problems of the individual and the community using his/her clinical skills based on history, physical examination and relevant investigations.

As proposed by National Medical Council, an Indian Medical Graduate should have attributes like

clinician, lifelong learner, leader, communicator and professional<sup>[1]</sup>. Recently learning has become more student centric than teacher centric. The Purpose of the Foundation Course is to Orient the students to all aspects of the medical college environment, equipping them with certain basic & important, skills required for patient care and also enhancing their communication, language, computer and learning skills.

As this is a new initiative in Medical Curriculum, adequate data in this regard is yet to come and there is no literature from Karnataka in this regard. Hence, the present study was carried out to evaluate the feedback given by undergraduate medical students for the foundation course under CBME. In this regard it is important to know whether the students are satisfied

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Assistant professor, Department of Physiology, Karwar Institute of medical sciences, Karwar, Karnataka, India Email: rupaliwaghmare78@yahoo.com with overall content, quality, usefulness and grading of each module of Foundation course would help further in refinement of the same in subsequent years.

#### Materials and Methods

A Crosssectional study was conducted among first year medical students admitted in 2022 at Karwar Institute of Medical Sciences, Karwar after obtaining approval from institutional ethical committee. As foundation course of previous batches (2020 and 2021) were affected by covid we thought of conducting present study over 2022 batch. No specific sampling method was used, however among students fulfilling inclusion criteria complete enumeration method was used. Informed consent was obtained from all students. Confidentiality was maintained by not asking any identifying information such as name, registration number, or any information that will reveal their identity. Institutional ethical committee clearance was obtained before conducting the study.

**Inclusion criteria:** Students admitted in 2022 for MBBS course and willing to participate in the study.

**Exclusion criteria:** Students admitted in 2022 for MBBS course who have attended less than 75% of sessions of foundation course.

Foundation course was conducted for the period of one month. The major components of foundation

course included six modules.

- 1. Orientation module
- 2. Skill module
- 3. Field visit to Community and Primary Health Centre (PHC)
- 4. Professional development including ethics
- 5. Enhancement of Language/Computer skills/ Learning skills
- 6. Sports and Extracurricular activities.

Each module has various competencies. Students were oriented to the components of feedback form on the first day of foundation course. At end of each module students were asked to fill feedback form. Feedback form was designed in which quality, content and usefulness for each module was scaled by the students using a fivepoint Likert scale, where 5 is Excellent, 4 is very Good, 3 is Good, 2 is Average, and 1 is Below Average. Students were asked to submit the form at the end of each module. The responses of Good, very Good, and Excellent were further grouped together and labelled as satisfactory, whereas average and below average was labelled as unsatisfactory. Collected data was entered on and analysed by Microsoft Excel 2019 worksheet, and data was represented in percentage.

## Results:

Table 1: Grading of Content of each module of foundation course.

Grades	Orientation (%)	Skill (%)	Community orientation (%)	Professional Development and Ethics (%)	Language & Computer skill (%)	Sports and Extracurricular activities (%)
5 - Excellent	18(13.95)	74(57.36)	33(25.58	29(22.48)	22(17.05)	16(12.40)
4 - Very good	39(30.23)	31(24.03)	56(43.41)	54(41.86)	27(20.93)	12(9.30)
3 - Good	60(46.51)	9(6.98)	27(20.93	31(24.03	43(33.33	30(23.26)
2 - Average	11(8.53)	6(4.65)	9(6.98)	10(7.75)	32(24.81)	17(13.18)
1 - Below Average	1(0.78)	9(6.98)	4(3.10)	5(3.88)	5(3.88)	54(41.86)

Out of 129 students ,74 of them felt that overall content of skill module was excellent, whereas 54 of them felt that sports and extracurricular activities module was below average

Table 2: Grading of Quality of each module of foundation course

Grades	Orientation (%)	Skill (%)	Community orientation (%)	Professional Development and Ethics (%)	Language & Computer skill (%)	Sports and Extracurricular activities (%)
5 - Excellent	14(10.85)	70(54.26)	38 (29.46)	31 (24.03)	24 (18.60)	15(11.63)
4 -Very good	60(46.51)	35 (27.13)	49 (37.98)	52(40.31)	30 (23.26)	15(11.63)
3 - Good	39(30.23)	11 (8.53)	28 (21.71)	33 (25.58)	47(36.43)	33(25.58)
2 - Average	9(6.98)	5 (3.88)	8 (6.20)	9 (6.98)	24 (18.60)	21(16.28)
1 - Below Average	2(1.55)	8 (6.20)	6 (4.65)	4 (3.10)	4 (3.10)	45(34.88)

Around 70 out of 129 students graded the quality of skill module as excellent and only 8 of them graded it as below average

Table 3: Grading of Usefulness of each module

Grades	Orientation (%)	Skill (%)	Community orientation (%)	Professional Development and Ethics (%)	Language & Computer skill (%)	Sports and Extracurricular activities (%)
5 - Excellent	34 (26.36)	73(56.59)	42(32.56)	38(29.46)	25(19.38)	19(14.73)
4 - Very good	41 (31.78)	34(26.36)	44(34.11)	47(36.43)	34(26.36)	23(17.83)
3 - Good	40(31.01)	9 (6.98)	29(22.48)	29(22.48)	42(32.56)	29(22.48)
2 - Average	13 (10.08	2(1.55)	10(7.75)	11(8.53)	21(16.28)	20(15.50)
1 - Below Average	1 (0.78)	11(8.53)	4 (3.10)	4 (3.10)	7 (5.42)	38 (29.45)

Among 6 modules of foundation course majority of students felt that skill module was useful to them in comparison with other modules

Table 4: Satisfactory score of Quality and usefulness for each module of foundation course

Module		Content (n=129) n%	Quality (n=129) n (%)	Usefulness (n=129) n (%)
1. Orientation	Satisfactory	117 (57.6)	113 (87.59)	115(89.14)
1. Orientation	Unsatisfactory	12 (9.30)	16 (12.41)	14(10.85)
2. Skill	Satisfactory	114 (88.37)	116 (89.92)	116(89.92)
Z. SKIII	Unsatisfactory	15 (11.62)	13 (10.08)	13(10.08)
2 Community orientation	Satisfactory	116 (89.90)	117 (57.6)	115(89.14)
3.Community orientation	Unsatisfactory	13 (10.07)	12 (9.30)	14(10.85)
4.Professional development and ethics	Satisfactory	114 (88.37)	116 (89.90)	114(88.37)
4.Professional development and ethics	Unsatisfactory	15 (11.62)	13 (10.07)	15(11.62)
5. Language and computer skill	Satisfactory	92 (71.30)	101 (78.29)	101(78.29)
5. Language and computer skin	Unsatisfactory	37 (28.68)	28 (21.71)	28(21.71)
6 Sports and autrocurricular activities	Satisfactory	58 (44.96)	63 (48.83)	71(55.03)
6. Sports and extracurricular activities	Unsatisfactory	71 (55.03)	66 (51.17)	58(44.96)

Out of 129 students more than 56% of them were satisfied with overall content, usefulness and quality of each module foundation course

#### **Discussion**

In our study we observed that 25.84% of students found that overall content of all the modules were Good and 31.50% of students reported that the overall quality of foundation course modules was Very Good. whereas 29.84% of students felt that all the modules were Extremely useful. Regarding satisfactory score of Orientation, skill, community orientation and professional development and ethics module, out of 129 students more than 110 of them found it to be satisfactory whereas language and computer skill and sports and extracurricular module found to be less perceived. A study conducted at Bengaluru, students who attended all the sessions on all days of foundation course were included in the study. Out of 250 students, they observed that more than 90% of students were happy and satisfied with regard to content, quality and usefulness[2]. The reason behind better perception of Orientation, skill, community orientation and professional development and ethics module might be hands-on training, exposure to new environment and self-involvement by the students

included in our study. Less perception of language and computer skill and sports and extracurricular module could be attributed to conduct of these modules in the afternoon session. Similarly, study conducted on 100 students and 35 faculties, were asked to give feedback on the foundation course, 63% of students and 69% of faculty positively opined about overall experience of the foundation course and 73% of students perceived skill module as relevant but 52% of students reported enhancement of language and computer skill module as relevant[3]. But in our study more than 50% of the students were happy with overall conduct of skill module and only 33% of them felt that conduct of enhancement of language and computer skill module was good but faculties were not included in our study. In a study conducted by Khilnani AK et al on 148 students, 33 of them responded to it to be excellent, 62 of them reported it to be very good, 50 of them responded it as good, 2 of them shared experience as poor whereas only 1 student reported it to be very poor. The reason behind poor rating was students felt that some topics covered in the course were unnecessary and duration of course was also long[4]. Patel J et al did study on students of Gujarat, 89% of students found foundation course useful, 78% found

it to be effective<sup>[5]</sup>. In a study done among students of Hyderabad by Devi JN, Kumari AS & Murthy DS found that, students who had difficulty in performing the skills initially were found to be more skilled<sup>[6]</sup>. A study carried at Vishakhapatnam and Kerala to assess the understanding of foundation course reported that orientation module was better perceived by majority of students followed by communication skill<sup>[7,8]</sup>.

#### **Conclusion:**

Our study makes it evident that all the modules of foundation course are very much necessary for the students entering MBBS course and feedback given by them could be used as a remedial measure in further improvising the conduct of course for the next subsequent years.

Sample s as the study was conducted over one batch of student.

**Recommendations:** Collective feedback from students would be helpful in further refinement of modules of foundation course for future implementation in successive years.

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