CROSS-SECTIONAL STUDY EVALUATING REFLECTIONS OF MBBS PHASE I STUDENTS TOWARDS THE FOUNDATION COURSE IN CBME CURRICULUM

Medical Education

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ABSTRACT

Background: The National Medical Commission (NMC) has mandated a two-week Foundation Course for MBBS Phase-1 students under the Competency-Based Medical Education (CBME) curriculum. Understanding students' reflections is essential for improving this curriculum component. **Aim And Objectives:** To evaluate Reflections of MBBS Phase-1 students towards the Foundation Course and identify strengths and areas needing improvement. **Methods:** A cross-sectional descriptive study was conducted among 100 MBBS Phase-1 students at an NMC-recognized medical college in Karnataka after completion of the Foundation Course. A prevalidated four-item open-ended questionnaire based on NMC guidelines was administered. Thematic analysis (Braun & Clarke method) was used to derive themes. As the response rate varied for each question (Q1–Q4), percentages were calculated based on the number of students who responded to each respective question. **Results:** The results were analysed based on the number of students who responded to each question (Q1–Q4), and percentages were calculated accordingly. The response rates for the four open-ended questions were 37% (Q1), 25% (Q2), 18% (Q3), and 37% (Q4). Students appreciated sessions on First Aid/BLS, communication skills, and early clinical exposure. Suggestions included improved audio-visual arrangements, increased hands-on/practical sessions, and inclusion of medico-legal and research-related topics. **Conclusion:** Students demonstrated positive reflections towards the Foundation Course, emphasizing the importance of skill-based learning ,student support, and interactive teaching. Incorporating student feedback may enhance CBME curriculum effectiveness in future batches.

INTRODUCTION

The Foundation Course was introduced under the Competency-Based Medical Education (CBME) curriculum in India to facilitate a smooth transition of students into the MBBS Phase-1 program.[1] It aims to address the diverse academic, cultural, and social backgrounds of newly admitted medical students and to orient them toward professional roles and responsibilities in healthcare.[2,3]

The Foundation Course, conducted for a duration of Phase-I MBBS , includes modules on professional development, communication skills, basic life support, stress and time management, computer skills, local language training, and orientation to the institutional environment.[4,5] It also enables students to build peer relationships, learn ethical conduct, and feel confident in the new learning atmosphere.[6,7]

Student reflections serve as an essential quality indicator for curriculum improvement.[8] With increasing emphasis on student-centered learning, feedback collected from participants helps identify strengths and gaps in the current structure of the Foundation Course.[9,10] Previous studies in India have reported varied levels of satisfaction and highlighted potential areas for enhancement such as practical exposure and interactive teaching methods.[11,12]

Hence, this study was undertaken to evaluate the reflections of MBBS Phase-1 students toward the Foundation Course conducted under the CBME curriculum at an NMC recognized medical college.

MATERIALS AND METHODS

Ethical Considerations:
Institutional Ethics Committee approval was obtained prior to the study. Participation was voluntary, and confidentiality of responses was ensured throughout the study. The study adhered to the ethical principles of the Declaration of Helsinki.

Study Design And Setting:
A cross-sectional descriptive study was conducted among MBBS Phase-1 students at an NMC-recognized medical college in Karnataka immediately after completion of the Foundation Course.

Participants:
A total of 100 students who provided informed consent were included in the study.

Inclusion and Exclusion Criteria:
All MBBS Phase-1 students enrolled during the academic year were included. Students who were absent during data collection or unwilling to participate were excluded.

Open-ended Questions: The questionnaire consisted of the following four prevalidated open-ended questions:
Q1: What did you like the most in the Foundation Course?

Q2: What suggestions would you like to provide to improve teaching-learning during the Foundation Course?

Q3: What are your reflections on infrastructure and administrative facilities during the Foundation Course?

Q4:How was your overall experience toward the Foundation Course?

Data Collection Tool:
A prevalidated questionnaire based on National Medical Commission (NMC) Foundation Course guidelines was used to obtain students' reflections regarding strengths, areas for improvement, infrastructure-related experiences, and expectations for additional topics.[13,14]

Procedure:
Students were instructed to provide responses based on their personal learning experiences during the Foundation Course. Participation was anonymous to encourage free expression of opinions. Since the response rate varied for each question (Q1–Q4), percentages were calculated based on the number of students who responded to each respective question, as shown in the tables and figures.

Data Analysis:
Qualitative data were analyzed systematically using Braun and Clarke's six-phase thematic analysis approach.[15] Responses were first read repeatedly for familiarization, followed by open coding to identify units of meaning. Codes were grouped into preliminary categories and later refined into final themes corresponding to Q1–Q4. To ensure analytical rigor, coding and theme development were performed independently by two faculty members, and discrepancies were resolved through discussion and consensus. Representative student responses were retained to support key themes. Data entry and descriptive statistics (frequencies and percentages) were performed using Microsoft Excel (Microsoft Corp., USA)

RESULTS:
A total of 100 MBBS Phase-1 students were included in the study. The response rates for the four open-ended questions were 37% (Q1), 25% (Q2),18 %(Q3),and 37% (Q4).

A total of N=100 MBBS Phase -I students participated in the study
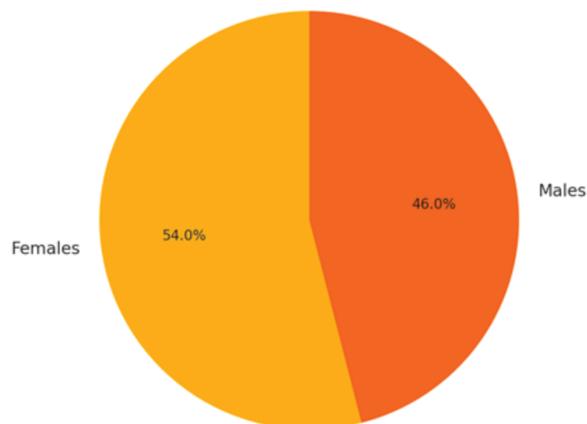
,including 54 females and 46 males.

Figure 1 showing the sex Distribution of MBBS Phase 1 Students (N=100)

As response rates varied across the questions (Q1–Q4), the analysis was based on the number of students who responded to each question, and percentages were derived using those respective denominators.

Student Engagement (Q1-Q4)
The response rate varied across the four open-ended questions, with the highest engagement seen for Q1 and Q4, as shown in Table 1, while Q2 and Q3 were lower at 25% and 18% respectively

Table 1: Student Engagement And Response Status Across Open-Ended Questions (N=100)

Question No.	Question	Total Responses	% of respondents	Neutral /No Response(n)
Q1	Suggested changes for quality/ effectiveness	37	37.0%	63
Q2	Additional topics/areas	25	25.0%	75
Q3	Additional comments	18	18.0%	82
Q4	Overall experience toward Foundation Course	37	37.0%	63

The qualitative responses for Q1 and Q2 were grouped by theme to quantify specific suggestions, as presented in Table 2. Percentages are based on the number of students who responded to each respective question.

A consolidated summary of thematic reflections across Q1-Q2 is presented in Table 2

Table 2: Thematic Analysis Of Suggested Changes (Q1) And Additional Topics (Q2)

Theme category	Specific Suggestion	Frequency (n=100)	% of respondents
I.High Satisfaction	No changes needed/Perfect/Good	25	25.0%
II.Pedagogical Preference	Use of more videos/ visual aids	8	8.0%
	More practicals/ individual involvement	5	5.0%
	Longer course duration	3	3.0%
III.Infrastructure/ Logistics	Mike/Audio system improvement	4	4.0%
	Timetable/Scheduling issues	3	3.0%
IV.Curriculum Gaps	Medico-Legal Rights/Research	4	4.0%
	Hospital/Rural Visits	2	2.0%

The Qualitative responses for Q1 and Q2 were categorised into themes

and quantified accordingly as shown in Table 2 .The distribution of these Themes is also illustrated in Figure 2 & 3.

Strengths Identified(Q1)
Among those who responded to Q1 (n=37), students appreciated key strengths of the Foundation Course including high satisfaction with content delivery (25%), hands-on First Aid/BLS sessions (8%), communication skills training (5%), professionalism and ethics (4%), and opportunities for practical involvement (3%). Other positive remarks constituted 2% of responses (Figure 2).
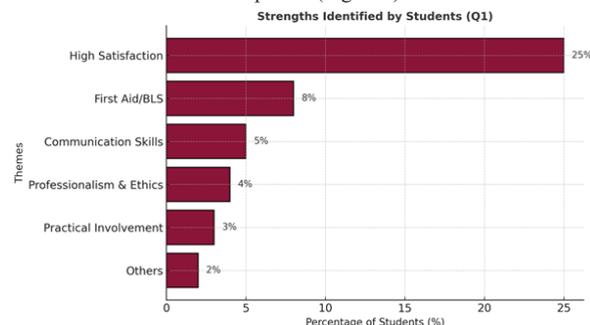

Figure 2: Thematic distribution of strengths identified by students regarding the Foundation Course (Q1; n=37).

Among the 25 students who provided additional topic suggestions, the majority (68%) felt no additional topics were needed, followed by requests related to professional or academic gaps (16%), future clinical opportunities (8%), and general clinical or 3D exposure (8%) (Figure 3).
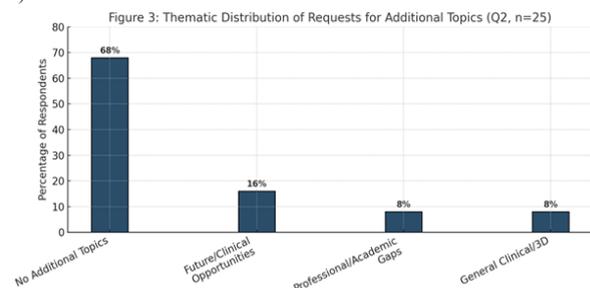

Figure 3: Thematic distribution of requests for additional topics (Q2, n=25)

Key Qualitative Findings (Q3 & Q4 –Overall experience):
The responses to Q3 and Q4 focused largely on affirming the course's positive impact.

A majority of respondents expressed high satisfaction and positive reflections regarding the Foundation Course. Students reported that the course boosted their confidence, improved communication skills, and helped them adapt smoothly into medical college life. They particularly appreciated the professionalism and ethics sessions, First Aid and BLS training, as well as interactive teaching formats that enhanced motivation and orientation toward MBBS learning. The Foundation Course was perceived as beneficial in easing the transition from school to the professional medical environment by creating an engaging and supportive learning atmosphere. These reflections on overall effectiveness and personal experiences are summarized in Table 2.

DISCUSSION
The present study evaluated the reflections of MBBS Phase-1 students toward the Foundation Course under CBME implementation. Overall satisfaction was observed among more than one-third of participants, indicating a positive transition into the first year of medical curriculum. Similar results were reported by Tikare et al., where students expressed favorable perceptions regarding readiness and adaptability.[16]

Communication skill sessions were notably appreciated by learners in this study. This aligns with findings by Shetty and Nayak, who emphasized that structured communication training enhances interpersonal confidence among new medical students.[17] First

Aid/BLS sessions also received positive responses, consistent with observations by Bhat and Naik.[18] Soft-skill sessions on professionalism, ethics, and teamwork are integral components of CBME, and similar benefits have been observed in earlier studies.[19]

However, students showed reduced interest in lecture-based pedagogy. A shift toward blended and interactive learning approaches has shown improved attention and academic engagement in several studies.[20–21] Learning environment and curriculum workload continue to play a crucial role in student motivation and satisfaction, as supported by previous literature.[22–23]

Gaps identified in teaching methodology and student engagement highlight the need for instructional refinement. Introduction of varied learning modalities and reduction in passive lecture hours can further optimize early medical training, as recommended in national and international standards for competency-driven medical education.[24-26]

Overall, the study reflects a strong acceptance of the Foundation Course while emphasizing the importance of continuous improvement to better accommodate evolving student needs in CBME.

CONCLUSION

The Foundation Course was perceived positively by Phase-1 MBBS students, supporting its role as an effective orientation program under the CBME curriculum. While the course enhanced communication skills and confidence among learners, student feedback emphasized the need to further strengthen practical skill-based components. Continuous review and integration of suggestions can help optimize the Foundation Course for future batches.

Conflict Of Interest

The authors declare that there are no financial or personal conflicts of interest related to this research study. This study was conducted solely for the purpose of curriculum quality assurance.

Acknowledgment

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