Bangladesh Journal of Medical Education Vol.-17, Issue-01, January, 2026
ISSN: 2306-0654(Print), 2313-4224 (Online)
DOI: https://doi.org/10.3329/bjme.v17i1.87044

Original Article

Integrated Teaching of MBBS Curriculum 2021 in Bangladesh: Challenges, Pitfalls and Solutions

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Abstract

Background: In medical education correlation of theoretical and practical knowledge is most important aspect of learning. Hence the teaching should also be done in integrated manner, where different subjects unify to teach a relevant topic in more effective manner. **Objective:** This study aimed to identify the major issues influencing the implementation of integrated teaching in MBBS curriculum 2021 and to suggest recommendations to solve these. **Methods:** A cross-sectional study was conducted among 337 MBBS students (2021 curriculum) and 176 faculty members from government and non-government medical colleges in Bangladesh. Institutes were selected through stratified sampling, and participants through random sampling. Data were collected via pretested questionnaires and in-depth interviews. Feedback on integrated teaching was analyzed using frequency, percentage, and appropriate statistical tests, while thematic analysis was applied to interview findings. **Results:** Students strongly supported the need for training of the educational workforce (mean 4.11±0.77), while their views on integrated teaching for OSPE were neutral (mean 2.99±1.12). Non-government respondents generally provided higher ratings, with significant group differences in areas such as teaching hours, student-teacher ratio, adequacy of workforce, resources, and training needs ($p<0.05$). Faculty interviews revealed dissatisfaction with selected topics, limited training and administrative support, lack of interdepartmental coordination, and inconsistent session formats. Recommendations included enhanced faculty training, stronger administrative initiatives, better coordination, and establishment of medical education units to support effective implementation of integrated teaching. **Conclusion:** The study highlights strengths and challenges of integrated teaching in Bangladesh's MBBS curriculum, stressing workforce preparation and the need for collaboration and support.

Keywords: *Challenges, Integrated Teaching, MBBS Bangladesh, Solutions*

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Introduction

Medical education trains individuals to become proficient healthcare professionals, equipping them with the knowledge and skills to navigate complex healthcare systems and treat illnesses[1, 2]. As medicine evolves, there's a growing need for

ISSN: 2306-0654(Print), 2313-4224 (Online)
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educational methods that promote critical thinking, collaboration, and practical skills[3].

A crucial component of medical education is the integration of theoretical and practical knowledge. Teaching should be conducted in a manner that unifies different disciplines to present relevant topics effectively[4]. In this context, integrated teaching has gained prominence in medical curricula worldwide. The term 'integration', derived from the Latin term integer, meaning 'whole', refers to the coordination of different disciplines for a harmonious learning experience[5]. The human body itself exemplifies this concept, as various systems work in synchrony to maintain function[6]. Integrated teaching connects separate subjects across levels, blending basic sciences, social sciences, clinical sciences, and humanities for a holistic understanding of healthcare[7,8].

Several curriculum integration models, like the SPICES model, place integration on a continuum from discipline-based to trans-disciplinary approaches. The 11 steps of integration ladder expanding from isolated to fully integrated teaching also gives emphasis on several levels of integration from simulated to real life patient dealing in four levels[9]. Bradley and Mattick described the purpose of an integrated curriculum as providing students with meaningful, clinically relevant knowledge that is deep, retrievable, and adaptable for lifelong learning. In contrast to the traditional medical curriculum-where basic sciences are taught separately in the early years, followed by clinical sciences-integrated teaching nurtures critical thinking, problem-solving, communication, self-directed learning, and professionalism[10-12].

Curriculum planning and revision is a dynamic, ongoing process aimed at enhancing medical education. In Bangladesh, the first documented undergraduate medical curriculum was introduced in 1988 through the Centre for Medical Education with support from the United Nations Development Programme (UNDP) and the World Health Organization (WHO). This curriculum aimed to train doctors with a community-oriented focus[13]. However, recognizing the need for improvement, the Undergraduate Medical Curriculum of 2002 was developed to incorporate competency-based learning. A subsequent revision in 2012 introduced integrated teaching, aligning the curriculum with national objectives and learning outcomes[14,15]. The latest revision, the MBBS Curriculum of 2021, emphasizes disciplinary foundations while integrating core and optional components, problem-based learning, and community-based approaches[16]. The introduction of integrated

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teaching in Bangladesh aims to transform medical education by fostering a more holistic learning environment.

Despite its potential benefits, the adoption of integrated teaching in medical education faces several challenges. Faculty members may lack the training and support required to implement interdisciplinary teaching methods, such as problem-based learning and early clinical exposure. Additionally, inadequate infrastructure, limited classroom facilities, and technological constraints may hinder effective curriculum delivery[17]. Resistance to change, logistical challenges, and insufficient faculty coordination further complicate the transition to integrated teaching methodologies[18-20].

Studies from other countries have highlighted similar challenges. In the Netherlands, faculty members expressed concerns about sequencing topics, determining appropriate lecture hours, and adapting to instructional strategies such as problem-based learning[12]. Variations in teaching styles among faculty members may also lead to inconsistencies, making it difficult for students to follow a structured learning path. If faculty members feel unprepared or uncomfortable, they may resist adopting new instructional strategies.

In Bangladesh, several studies have examined different aspects of integrated teaching. Islam et al. evaluated the MBBS course structure and recommended shifting toward integrated teaching[21]. However, their study did not address the challenges encountered after implementation. There remains a scarcity of research on the pitfalls of integrated teaching, despite the critical need for feedback following its adoption. Understanding these challenges is essential for refining medical education policies and improving the learning experience for students.

The Directorate General of Medical Education (DGME), established in 2016 and operational since 2019, oversees medical curriculum formulation and updates. However, recent experiences indicate a need for modifications in the current system to align with evolving educational demands. This study aims to gather feedback from key stakeholders, including medical students, to identify barriers to implementing integrated teaching under the 2021 MBBS curriculum. The findings will provide policymakers with grassroots-level insights, guiding future reforms to enhance medical education in Bangladesh.

Methods

This cross-sectional study was approved by Ethical Review Committee of Chittagong Medical College, Chattogram, Bangladesh. The study population were MBBS students

ISSN: 2306-0654(Print), 2313-4224 (Online)
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of 2021 curriculum (till today latest curriculum) who have attended all 12 sessions of integrated teaching in Phase I and faculty members from departments mentioned in the curriculum for integrated teaching classes. Data were collected by survey and in-depth interview. Nine medical colleges were selected through stratified sampling, based on specific strata

- Government medical colleges (old)
- Government medical colleges (new) and
- Non-government medical colleges

Government medical colleges established before the year 2000 were considered as government medical colleges (old) and after the year 2000 were considered as government medical colleges (new). During the study period, Bangladesh had 14 old and 23 new government medical colleges, along with 67 non-government colleges. Two old, three new, and four non-government medical colleges were selected via stratified sampling. Sampling frame for students (N=10356) was managed from the student section and faculty members (N=3150) was managed from HR department of corresponding medical colleges. Students and the faculty members were selected by random sampling from selected institutes proportionately.

data were collected from 337 students and 171 faculty members between January and June 2024 using a web-based, semi-structured Google form questionnaire, focusing on their attitudes toward the integrated curriculum. The questions were prepared and modified methodically by the didactic professionals, in order to ensure the validity of the questionnaire. A pilot study was conducted with two separate clusters: faculty and students. The questionnaire, with qualitative components scored on a Likert scale, was distributed via email and WhatsApp to interested participants from selected medical colleges in Bangladesh. To prevent duplicate responses, the Google Form accepted one response per email. Reminders were sent on the 10th and 20th days.

The agreement survey, conducted among 337 students, consisted of 14 items and the value for Cronbach's Alpha for the survey was $\alpha = 0.892$ providing acceptable internal reliability.

A two-part questionnaire was filled up by 171 faculty members. The sufficiency agreement subscale consisted of 6 items ($\alpha = 0.798$) providing acceptable internal reliability and the inadequacy agreement subscale consisted of 8 items ($\alpha = 0.640$). Face to face in depth interview sessions were conducted among the five (5) interested focal persons. So, data for this study was collected

from 513 participants, 176 of whom were faculty members.

Feedback regarding integrated teaching reported by the students and faculty members were collected in a typical five-level Likert question:

- SS= Strongly satisfied (score 5)
- S= Satisfied (score 4)
- NSSD= Neither satisfied nor dissatisfied (score 3)
- D= Dissatisfied (score 2)
- SD= Strongly dissatisfied (score 1)

Treating Likert-derived data as ordinal-level data, the responses for each question were presented in frequency and percentage. Later, the data were treated as interval-level data. To observe the differences between government and non-government institutes means of satisfaction level of students and faculty members separately were compared by independent t-test or Mann Whitney U test as appropriate. P value was considered as statistically significant if it is less than 0.05 and confidence interval was set at 95% level. Findings from in depth interview was presented after thematic analysis. The data were analyzed using SPSS version 26.

Results

Regarding survey participants, among the 171 faculty members 45% (n=77) of them and among the 337 students 60.5% (n=204) of them belonged to government institutes (Figure 1). The ratio of male and female students was 1.53:1. Among the faculty members of different medical colleges 48.5% (n=83) were lecturers. Assistant professors, associate professors and professors were 31.0%, 15.2% and 5.3% respectively.

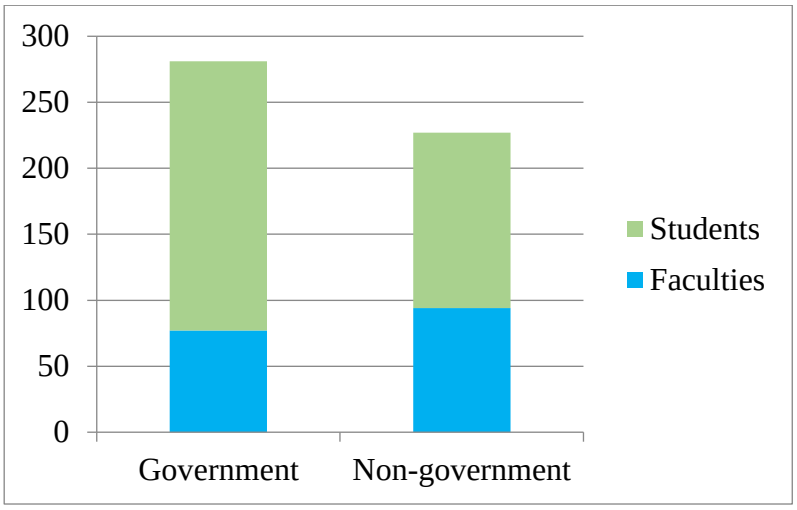

Figure 1. Distribution of respondents according to type of institute.

Bangladesh Journal of Medical Education
ISSN: 2306-0654(Print), 2313-4224 (Online)
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Students' feedback on different statements, expressed as the mean score, indicated the average level of agreement with each statement (Table 1). "Educational workforce should be trained up on new curriculum" had a high mean score (4.11±0.77), indicating strong agreement. In contrast 'Integrated teaching is helpful for OSPE' had a lower mean score (2.99±1.12), indicating a more neutral to slightly disagreeable response. When the differences between government and non-government institutes were observed (Table 1) the non-government students reported higher mean scores in almost all areas compared to government students, and there was statistically significant difference in several responses. For instance:

- The number of teaching hours is suitable (p=0.003).
- Learning objectives are clear and well defined (p=0.000).
- Number of educational workforces is suitable to achieve the outcomes (p=0.000).
- Learning resources are adequate and available when needed (p=0.001).

Table 1. Students' feedback regarding the integrated teaching in the MBBS curriculum 2021 and comparison of students' feedback (n=337)

	SD) f (%)	D f (%)	NSSD f (%)	A f (%)	SA f (%)	Score (Mean ±SD)			p
						Over all	Govt	Non-Govt	
Score	**1**	**2**	**3**	**4**	**5**				
The number of teaching hour is suitable for achieving learning objectives.	20 (5.9)	51 (15.1)	82 (24.3)	150 (44.5)	34 (10.1)	3.38 ±1.05	3.24 ±1.02	3.59 ±1.06	0.003
The learning objectives of the courses are clear and well defined.	10 (3.0)	28 (8.3)	75 (22.3)	181 (53.7)	43 (12.8)	3.65 ± 0.91	3.51 ±0.89	3.87 ±0.89	0.000
Integrated teaching will be helpful for better understanding and retention of the topic.	15 (4.5)	11 (3.3)	49 (14.5)	188 (55.8)	74 (22.0)	3.88 ±0.94	3.83 ±0.87	3.95 ±1.04	0.262
Integrated teaching is helpful for OSPE.	35 (10.4)	79 (23.4)	106 (31.5)	88 (26.18)	29 (8.6)	2.99 ±1.12	2.94 ±1.07	3.07 ±1.20	0.312
Integrated teaching is helpful for SAQ.	21 (6.2)	44 (13.1)	70 (20.8)	159 (47.2)	43 (12.8)	3.47 ±1.07	3.41 ±1.01	3.57 ±1.15	0.185

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Integrated teaching is helpful for PBQ	15 (4.5)	29 (8.6)	94 (27.9)	130 (38.6)	69 (20.5)	3.62 ±1.04	3.60 ±0.96	3.65 ±1.16	0.671
Integrated teaching is helpful for SBA.	26 (7.7)	49 (14.5)	92 (27.3)	138 (40.9)	32 (9.5)	3.30 ±1.08	3.30 ±1.00	3.30 ±1.19	0.965
Integrated teaching is helpful for Oral exam.	13 (3.9)	22 (6.5)	59 (17.5)	188 (55.8)	55 (16.3)	3.74 ±0.94	3.69± 0.85	3.82 ±1.06	0.254
This method of teaching enhances student-teacher relationship.	12 (3.6)	20 (5.9)	48 (14.2)	178 (52.8)	79 (23.4)	3.87± 0.96	3.79 ±0.96	3.98 ±0.96	0.069
Learning resources (books, handouts) are adequate and available when needed them.	8 (2.4)	55 (16.3)	89 (26.4)	146 (43.3)	39 (11.6)	3.45 ±0.98	3.31 ±0.92	3.68 ±1.01	0.001
This teaching method is suitable for small group of teaching.	12 (3.6)	26 (7.7)	72 (21.4)	176 (52.2)	51 (15.1)	3.68 ±.95	3.64 ±0.93	3.73 ±0.96	0.364
The number of educational work forces (office staffs) is suitable to achieve the outcomes.	16 (4.7)	45 (13.4)	105 (31.2)	136 (40.4)	35 (10.4)	3.38 ±0.99	3.15 ±0.91	3.74 ±1.02	0.000
Educational workforce should be trained up on new curriculum.	4 (1.2)	5 (1.5)	44 (13.1)	181 (53.7)	103 (30.6)	4.11 ±0.77	4.13 ±0.71	4.08 ±0.86	0.613
Integrated teaching is preferred over traditional teaching.	29 (8.6)	38 (11.3)	88 (26.1)	121 (35.9)	61 (18.1)	3.44 ±1.16	3.38 ±1.10	3.53 ±1.5	0.234

According to faculty members' feedback (Table 2), highest response was observed 'strongly agreed' regarding several statements such as 'the number of educational workforces', 'the learning resources', 'the equipment' and 'the facilities' to be adequate for integrated teaching. Highest response was observed 'agreed' regarding several statements such as 'This teaching method is more time consuming', 'Management of integrated teaching of different discipline is difficult' and 'Some subject areas are difficult to fit for integrated teaching.

Table 2: Faculty members' feedback regarding the integrated teaching in the MBBS curriculum 2021 and comparison of faculty members' feedback (n=171).

	SD) f (%)	D f (%)	NSS D f (%)	A f (%)	SA f (%)	Score (Mean ±SD)			p
						Over all	Govt	Non-Govt	
Score	**1**	**2**	**3**	**4**	**5**				
Sufficiency agreement									
Integrated teaching involves sufficient faculty members.	5 (2.9)	14 (8.2)	17 (9.9)	108 (63.2)	27 (15.8)	3.81 ±0.90	3.7 4±0.85	3.86 ±0.95	0.383

ISSN: 2306-0654(Print), 2313-4224 (Online)
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The student-teacher ratio is acceptable.	22 (12.9)	57 (33.3)	23 (13.5)	67 (39.2)	2 (1.2)	2.82 ±1.12	2.27 ±1.01	3.28 ±1.01	0.000
The number of educational workforces (office staffs) is sufficient.	7 (4.1)	17 (9.9)	23 (13.5)	39 (22.8)	85 (49.7)	2.54 ± 1.11	2.12 ±0.83	2.89 ±1.19	0.000
The learning resources of integrated teaching are adequate.	5 (2.9)	14 (8.2)	23 (13.5)	63 (36.8)	66 (38.6)	2.88 ±1.09	2.73 ±1.06	3.00 ±1.01	0.104
Equipment of integrated teaching are adequate.	4 (2.3)	16 (9.4)	26 (15.2)	48 (28.1)	77 (45.0)	2.69 ±1.05	2.38 ±0.87	2.95 ±1.12	0.000
The facilities of integrated teaching are adequate.	7 (4.1)	15 (8.8)	27 (15.8)	51 (29.8)	71 (41.5)	2.79 ±1.09	2.47 ±0.97	3.05 ±1.12	0.000
Inadequacy agreement									
This teaching method is more time consuming.	2 (1.2)	46 (26.9)	15 (8.8)	88 (51.5)	20 (11.7)	3.46 ±1.05	3.61 ±0.86	3.33 ±1.17	0.073
Management of integrated teaching of different discipline is difficult.	3 (1.8)	37 (21.6)	13 (7.6)	93 (54.4)	25 (14.6)	3.58 ±1.04	3.82 ±0.96	3.39 ±1.07	0.007
It adds an extra burden to faculty members	9 (5.3)	53 (31.0)	27 (15.8)	65 (38.0)	17 (9.9)	3.16± 1.13	3.21±1 .10	3.13±1 .16	0.646
Some subject areas are difficult to fit for integrated teaching.	3 (1.8)	28 (16.4)	21 (12.3)	105 (61.4)	14 (8.2)	3.58± 0.92	3.70±0 .86	3.48±0 .96	0.112
Interdisciplinary co-operation is needed before each session.	2 (1.2)	0 (0.0)	4 (2.3)	81 (47.4)	84 (49.1)	4.43± 0.66	4.49±0 .75	4.38±0 .57	0.277
This teaching method is suitable for small group of teaching.	5 (2.9)	28 (16.4)	29 (17.0)	31 (18.1)	78 (45.6)	3.54 ±1.06	3.77 ±0.92	3.36 ±1.14	0.011
Training of educational workforces on new curriculum is needed.	1 (0.6)	3 (1.8)	8 (4.7)	73 (42.7)	86 (50.3)	4.33 ±0.70	4.49 ±0.66	4.19 ±0.71	0.005
Financial supports for management of new curriculum are needed.	1 (0.6)	6 (3.5)	12 (7.0)	54 (31.6)	98 (57.3)	4.16 ±0.75	4.18 ±0.84	4.14 ±0.67	0.706

When the differences between government and non-government institutes were observed (Table 2) the non-government faculty members reported higher mean scores in all areas of 'sufficiency agreements' compared to government faculty members but regarding 'inadequacy agreement' government faculty members reported higher mean scores than their non-government counterparts. Statistically significant difference was observed in several responses.

In-depth-interviews of the focal person were conducted to ascertain the major issues interfering with implementation of integrated teaching (as identified from survey) and to generate viable suggestions for perfect implementation of integrated teaching in MBBS curriculum 2021.

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Theme: Dissatisfaction on contents

Nearly every focal person remarked that the topics selected for integrated sessions need to be changed. It was also stated that *"some subjects or topics need adjustment"*.

According to all focal persons, students were not motivated to actively participate in these sessions and the sessions have little effect on Objective Structured Practical Examination (OSPE).

Theme: Familiarity with the concept of integration

One of the focal persons said, "*faculty members should be familiar with the concept of integrating the ladder. Training for this is needed for the success of new curriculum*". According to almost all focal persons, faculty members did not go through the curriculum thoroughly and received no training. These resulted in poor conception during implementation.

Theme: Administrative and structural support and their impact on teaching quality

While one focal person commented that "*The student-teacher ratio is insufficient*". Another one was pleased as they were able to implement integrated teaching properly because they had proper student teacher ratio, and also, they had some trained-up faculty members - as a result the sessions were more interactive and students enjoyed the sessions.

Lack of classrooms and trained faculty members led to large group presentations. Though faculty members used different techniques this remained less interactive between teachers and students as the sessions were solely focused on presentations. Two focal persons remarked that small group instruction is required for more effective sessions.

Theme: Discrepancies in practical implementation

Regarding the format of integrated sessions, it was noticed that the faculty members from different institutes don't follow any fixed format to carry out the sessions. That's why the majority of the lessons were centred around students. Only a few mentioned of instances of students' active involvement in these sessions.

Theme: Interdepartmental coordination

They all specified that interdepartmental coordination was insufficient. As the faculty members have to play numerous roles, they

ISSN: 2306-0654(Print), 2313-4224 (Online)
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often fail to collaborate in specified time despite being willing.

Theme: Recommendations

'*Implementation of medical education unit is a burning question*' was all focal persons' concern. Every focal person in the discussion agreed that lack of personnel, funding, and equipment is the biggest obstacle to implementing integrated teaching and learning. So, the conducted integrated sessions did not match the instructions of the curriculum.

They all opined that

- faculty members need to receive further training on integrated teaching.
- Administrators need to take the initiative for this training.
- faculty members need to take the initiative, despite initial challenges, to improve integrated teaching practices in Bangladeshi undergraduate medical education.

Self-preparedness should be assessed by peers and senior faculty members.

Discussion

Medical education is undergoing significant changes with the integration of diverse teaching methodologies to enhance the quality of healthcare training. The incorporation of integrated teaching methods aims to bridge the gap between various disciplines, providing a more cohesive learning experience[22]. In the context of Bangladesh, the adoption of integrated teaching in the 2021 MBBS curriculum represents a move toward improving the effectiveness and applicability of medical education. This study highlights the challenges faced in implementing integrated teaching, as perceived by both students and faculty members, and offers suggestions to address these obstacles.

Integrated teaching has been recognized globally for its potential to improve the understanding of medical concepts and foster interdisciplinary collaboration. Bangladesh Medical and Dental Council (BMDC) has emphasized the importance of integrated teaching within a competency-based curriculum. The focus is on both vertical integration—linking preclinical subjects with clinical applications—and horizontal integration, which connects disciplines within the same educational phase. Similar initiatives have been undertaken in neighboring countries like India and Pakistan, where Competency-Based Medical Education (CBME) models have been

adopted[23,24]. These countries have also stressed the importance of early clinical exposure and interdisciplinary approaches to improve the overall learning experience[25].

The MBBS curriculum in Bangladesh underwent significant revisions, particularly in 2021, where specific instructions were provided on integrated teaching sessions. Unlike the 2012 curriculum, which lacked clarity on topics, disciplines, and allotted teaching hours for integrated sessions, the 2021 version aimed to provide a more structured approach to integrated teaching[16]. However, the implementation of integrated teaching has not been without its challenges, as revealed by the analysis of feedback from both students and faculty.

One key finding of this study is that students generally did not report concerns about the teaching hours or learning objectives. This contrasts with the findings of studies conducted in Andhra Pradesh, India, where students expressed dissatisfaction with the duration and structure of integrated sessions[22]. Despite these regional differences, the current study found that about 77% of students in Bangladesh felt that integrated teaching improved their understanding and retention of the topics. This aligns with a similar study in India, where 75% of students reported that integrated teaching helped them apply their knowledge in clinical settings[27]. This demonstrates the potential of integrated teaching to enhance comprehension and its positive impact on students' academic performance.

Previously, written exams included Multiple True/False (MTF) multiple-choice questions (MCQs) and knowledge-based short answer questions (SAQs). The updated curriculum now incorporates equal Single Best Answer (SBA) and MTF, MCQs, along with SAQs and Structured Essay Questions (SEQs). The oral exam is now a Structured Oral Examination (SOE). Skills and competencies will be assessed through OSPE/OSCE (Objective Structured Practical Examination/Clinical Examination), alongside traditional long and short case evaluations[16]. These new assessment methods are designed to evaluate higher-level cognitive skills such as analysis, synthesis, and evaluation, alongside the traditional recall-based assessments. However, despite these advancements, students expressed that integrated teaching did not significantly impact their

performance in OSPEs. This could be due to the fact that integrated teaching sessions, typically conducted through large group lectures, may not be conducive to practical skill development. Many students expressed that smaller group learning or hands-on sessions would be more effective in developing clinical and practical skills.

The mean scores of the students' views regarding 'preference of integrated teaching over traditional teaching' was 3.44 (Table 1). This suggests that they were strongly inclined towards integrating teaching methods for the future. In a study conducted by Neeli D et al, it was discovered that students generally favored integrated teaching over traditional methods as an effective teaching approach same as the current study[22]. Even the observation of present aligns with the findings of Islam MR et al. in Bangladesh where they found mean score of 3.47[21].

The study found significant differences between government and non-government medical students in perceptions of teaching hours, learning objectives, resources, and faculty adequacy, likely influenced by institutional factors like funding and management. In Khyber Pakhtunkhwa, Pakistan, 58% of students appreciated the learning environment, while most were satisfied with resources. Satisfaction with teaching quality and assessment was 50% and 71%, but less than half were content with module organization[28].

Faculty perspectives differed from students, likely due to their role in implementing integrated teaching. They cited challenges like the need for smaller groups, extensive equipment, interdisciplinary collaboration, time constraints, and inadequate training and funding. A study in Saudi Arabia and Egypt reported similar issues, including missed subjects, poor cooperation, and students passing without meeting discipline-specific requirements, leading to unrecognized knowledge gaps[29].

A study in Bangladesh found that 76% of respondents saw inadequate teacher training, while 48% of teachers cited poor interdepartmental coordination[30]. In this study, 93% of faculty members emphasized the need for training, and 70% called for better coordination.

After gathering feedback from students and faculty members, in-depth interviews with focal persons revealed key issues. They agreed that faculty lack awareness of

ISSN: 2306-0654(Print), 2313-4224 (Online)
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integration and suggested improving assessment impact and strengthening the medical education unit to enhance integrated teaching.

The MBBS curriculum in the United Kingdom is widely regarded as a model of integrated medical education, characterized by early patient exposure beginning in the first or second year of study. In contrast, medical education in Bangladesh introduces clinical sciences at a later stage and remains largely dependent on traditional didactic lecture-based teaching. The UK curriculum incorporates diverse student-centered learning strategies, including problem-based learning (PBL), team-based learning (TBL), and case-based learning, whereas the adoption of simulation-based teaching methods in Bangladesh is still in its early stages. Furthermore, assessment of clinical skills is more strongly emphasized in the UK compared with the current practices in Bangladesh[31,32].

The success of the 2021 MBBS curriculum depends on effective integrated teaching, influenced by factors like curriculum design, resources, and faculty training. Limited resources in rural and non-government institutions pose challenges, and reliance on technology may hinder effectiveness in remote areas.

Conclusion

Both students and faculty highly valued integrated teaching for improving understanding. However, successful implementation requires well-trained faculty, adequate infrastructure, and sufficient resources. Interdepartmental coordination was found to be lacking due to faculty involvement in multiple tasks. The study highlights the need for ongoing monitoring and evaluation to enhance the effectiveness of integrated teaching. In cases where full implementation is not feasible, a traditional learning approach could be considered as an alternative.

Acknowledgments

This work was fully funded by the Research, Publication & Curriculum Development (RPCD) wing of Director General of Medical Education (DGME), Bangladesh. We wish to extend our sincere thanks to Professor Dr. Khondker Manzare Shamim and Professor Dr. Rukshana Ahmed for their exceptional guidance, motivation, and deep knowledge. Their ongoing support and suggestions have significantly advanced my research.

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