Original Article

Assessing The Impact Of Curriculum Transformation In Undergraduate Medical Education: Faculty Feedback From Rawalpindi Medical University

Ifra Saeed[1], Farzana Fatima[2], Amna Ahmed[3], Musharraf Baig[4], Areeba Baig[5]

Abstract

Objective: The objective of this study was to gather and analyze faculty feedback regarding the newly implemented undergraduate MBBS curriculum at Rawalpindi Medical University. The aim was to evaluate faculty satisfaction across areas such as curriculum structure, teaching methods, assessment strategies, policy changes, and institutional support systems.

Methods: A cross-sectional survey was conducted in December 2024, involving 31 faculty members from various departments. A structured questionnaire covering six key domains—circular organization, teaching and learning, assessments, policies, technological support, and general feedback—was administered. Responses were collected using a 5-point Likert scale ranging from "Strongly Agree" to "Strongly Disagree." Data were analyzed using frequency and percentage distributions to identify trends in satisfaction and areas needing improvement.

Results: Faculty feedback revealed strong support for the revised teaching strategies, with over 70% approving of both the timely scheduling and integrated teaching formats. Research-related activities were highly appreciated, receiving positive ratings from 81% of respondents. In contrast, assessment methods—particularly their frequency and duration were mixed responses, with 38.7% expressing dissatisfaction. A major concern emerged around workload, as only 22.6% found their duties manageable, while over half disagreed, pointing to significant faculty stress. Digital tools such as the Learning Management System (LMS) and biometric systems also received mixed reviews, with a large portion of faculty remaining neutral. Overall satisfaction with the curriculum changes stood at 48.3%, though nearly one-third were undecided, and 19.4% expressed dissatisfaction, indicating areas that still require attention.

Conclusion: The feedback revealed generally positive perceptions of integrated teaching formats, research activities, and digitalization initiatives. However, concerns were raised about faculty workload, assessment frequency, and the effectiveness of support systems like LMS and biometric tools. While over half of the participants agreed with most reforms, overall satisfaction with the curriculum changes was moderate. These findings underscore the importance of ongoing dialogue between faculty and curriculum planners to address operational challenges and improve the effectiveness of educational reforms.

Keywords: Curriculum evaluation, Faculty feedback, Medical education reform

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Introduction

The shift in medical education worldwide focuses on an integrated and competency-based curriculum with a focus on early clinical exposure and contextual understanding. Both horizontal (across disciplines) and vertical (between basic and clinical sciences) integration is proving to help develop clinical reasoning and improve the understanding of concepts. Integrated curricula have been shown to enhance students' motivation, confidence, and performance in clinical settings.[1,2]

An Indian study using the Kirkpatrick model reported that integrated Phase-I MBBS teaching culminated in enhanced retention of knowledge and elevated levels of satisfaction among students.[1] There is no question that there has been curricular change; the challenge there is how to effectively implement the gaps. In 2024, a multinational survey reported that not more than 44 percent of medical teachers reported they were comfortable teaching on integrated platforms, pointing towards gaps in faculty development and alignment of intended learning outcomes and assessment.[2,3]

The incorporation of technology has brought about new changes in medical education. Learning Management Systems (LMS), online assessments, digital attendance registers, audiovisual simulations, and online lectures have automated engagement and interaction with the curriculum. In 2019, a scoping review highlighted the impact of blended learning in not only enhancing engagement but also with knowledge outcomes.[4,5]

Materials And Methods

A cross-sectional descriptive study was carried out to assess faculty opinions of the recently updated undergraduate MBBS curriculum (2024). The study used a quantitative survey method to gather structured feedback on various aspects of the new curriculum.

Faculty members teaching undergraduate MBBS from various basic and clinical science departments comprised the target population.

Faculty with active involvement in instruction or evaluation in accordance with the updated 2024 MBBS curriculum, working full-time at Rawalpindi Medical University (RMU), and those who voluntarily consented to participate were included in the study.
Visiting and adjunct faculty members, without any active role in undergraduate MBBS teaching or assessment, were excluded from the study.
Thirty-one faculty members took part in the feedback process voluntarily.
The Department of Medical Education (DME) created and disseminated a structured questionnaire. Six major thematic domains comprised the questionnaire:
1. Circular Organization (software support, teaching schedules, module duration)
2. Methods of Teaching and Learning (integration, promotion of research)
3. Evaluation Techniques (frequency, clinical relevance, and digital efficiency)
4. The application of policies (duty distribution, performance review, and attendance)
5. Technological Instruments (biometric systems, digital initiatives, LMS)
6. General Contentment
A 5-point Likert scale was used to rate each item as follows:
• 5 for Strongly Agree
• Neutral = 3; Agree = 4.
Strongly Disagree = 1; Disagree = 2.
To ensure clarity and relevance, the questionnaire was piloted with a small group of faculty members who were not part of the final sample after being reviewed and approved by the Director of DME.
On December 17, 2024, at a formal faculty meeting hosted by the DME on the main campus, data was gathered. The study's goal was explained to the faculty, who were also given the assurance that their answers would be kept private and used exclusively to enhance the curriculum.
On the same day, the completed surveys were physically delivered back to the DME office. To ensure participant anonymity, no personal identifiers were gathered.
Microsoft Excel was used to enter the data, and descriptive statistical techniques were used for analysis. Frequencies and percentages were computed for every response category for every survey item.

• Across domains, patterns of agreement and disagreement were found.
• High neutrality or disagreement areas were marked as possibly concerning.

Before creating the final feedback report, the Assistant Director DME manually reviewed the analysis, and the Director DME verified it.
Since the study included standard quality assurance procedures without intervention or patient involvement, ethical approval was deemed exempt.
All faculty members gave their informed consent to participate in the feedback exercise voluntarily.
• Strict adherence to institutional ethical standards and data confidentiality was maintained.

Results

Thirty-one faculty members took part in –removed for blind review---curriculum feedback survey. Across the different areas of curriculum design and implementation, the responses showed a range of satisfaction, neutrality, and concern. The majority of faculty (67.7%) agreed that the length of modules, blocks, and academic sessions was appropriate in the area of curriculum organization, while 16.1% disagreed, and a comparable percentage were neutral. 74.2% of participants agreed that teaching schedules were shared on time, indicating a higher level of approval for timeliness. However, only 58.1% of respondents were satisfied with the Campus Management Software's (CMS) role in curriculum management, while 22.6% disagreed and 19.4% were neutral, indicating digital system usability or training issues. (Table 1)

Table 1: Curricular Organization

Statement	Agree (Strongly Agree + Agree)	Neutral	Disagree (Disagree + Strongly Disagree)	Analysis
The duration of modules and academic sessions was appropriate	21 (67.7%)	5 (16.1%)	5 (16.1%)	The majority were satisfied, but 1 in 3 faculty showed uncertainty or concern.
Teaching schedules were shared on time	23 (74.2%)	2 (6.5%)	6 (19.3%)	Generally well-managed, though some faculty cited delays.
Campus Management Software (CMS) supported curricular management	18 (58.1%)	6 (19.4%)	7 (22.6%)	Mixed results: nearly 1 in 4 were dissatisfied, highlighting a need for better training or technical improvements.

The majority of comments regarding teaching and learning strategies were favorable. Eighty-six percent of faculty agreed that research clubs and biomedical activities helped students grow academically, and about seventy-one percent thought the integrated teaching format was effective in delivering course content[7]. These findings demonstrate a strong commitment to student engagement and educational integration. (Table 2)

Table 2: Teaching & Learning

Statement	Agree	Neutral	Disagree	Analysis
The integrated teaching format is effective	22 (71%)	5 (16.1%)	4 (12.9%)	Strong support; integrated methods are appreciated.
Research Club and Biomedical activities promote growth	25 (80.6%)	3 (9.7%)	3 (9.7%)	Excellent feedback; these extracurricular initiatives are highly valued.

On the other hand, opinions in the assessment domain were more divided. There was a perception of assessment overload, as evidenced by the significant 38.7% of faculty who disagreed with the 51.6% who thought the frequency and length of assessments were appropriate. Similarly, 25.8% of respondents were unhappy with assessments based on Learning Management Systems (LMS), and only 58% thought they were effective. 51.6% of respondents agreed that USMLE-based multiple-choice questions (MCQs) were in line with learning objectives, while 25.8% were neutral and 22.6% disagreed, suggesting that the content design may not be aligned. Practical assessments performed marginally better: 61.3% of respondents supported the use of Clinical OSCEs, Early Clinical Exposure (ECE), and Alpha Stations to improve practical learning, while 54.8% agreed that audiovisual OSPEs were pertinent and useful. (Table -3)

Table 3: Assessments

Statement	Agree	Neutral	Disagree	Analysis
The frequency and duration of assessments were appropriate	16 (51.6%)	3 (9.7%)	12 (38.7%)	This is a highly polarizing area; nearly 40% find assessments excessive or poorly scheduled.
LMS-based assessments were efficient	18 (58%)	5 (16.1%)	8 (25.8%)	Mixed feedback; suggests room for software/process improvement.
USMLE-style MCQs aligned with objectives	16 (51.6%)	8 (25.8%)	7 (22.6%)	Alignment between content and objectives is not yet optimal.
Audiovisual OSPEs were practical and relevant	17 (54.8%)	6 (19.4%)	8 (25.8%)	Some concerns exist about the clarity or execution of AV OSPE.
OSCEs, Early Clinical Exposure (ECE), and Alpha Stations aided learning	19 (61.3%)	8 (25.8%)	4 (12.9%)	Generally positive response to practical training formats.

Regarding the domain of policy implementation, 67.7% of faculty members endorsed the most recent modifications to the student attendance policy. However, only 45.1% of respondents thought the Performance Evaluation Report (PER) form was helpful, and 32.3% were undecided, indicating that there was some confusion regarding its purpose. The most alarming result was that only 22.6% of respondents agreed with the statement that faculty responsibilities were manageable, while 51.6% disagreed, underscoring the serious problem of workload imbalance. While a quarter of faculty disagreed, 54.8% of respondents felt that the DME, HoD, and university administration provided adequate administrative support. (Table 4)

Table 4: Assessed perceptions of new institutional policies.

Statement	Agree	Neutral	Disagree	Analysis
Student attendance policy changes were effective	21 (67.7%)	4 (12.9%)	6 (19.4%)	The majority approved the policy.
The Performance Evaluation Report (PER) form was useful	14 (45.1%)	10 (32.3%)	7 (22.6%)	Low satisfaction; nearly a third are unsure of its benefit.
Faculty duties and tasks were manageable	7 (22.6%)	8 (25.8%)	16 (51.6%)	The most negative response in the survey. Faculty overburdened.
Support by DME, HoD, and administration was adequate	17 (54.8%)	6 (19.4%)	8 (25.8%)	Mixed views on institutional support.

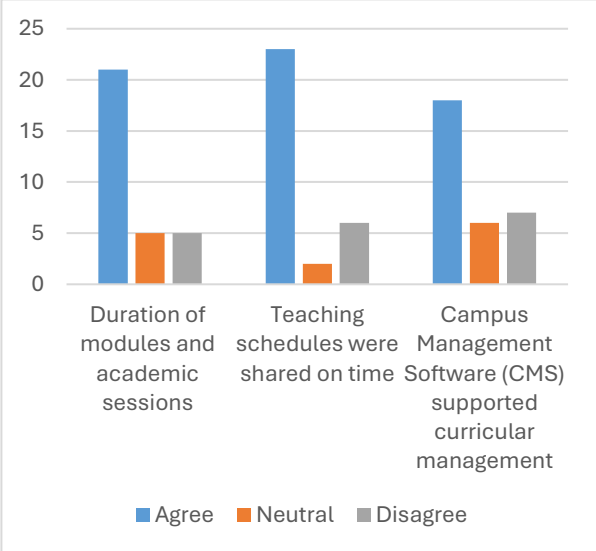

Figure 1: Curricular Organization

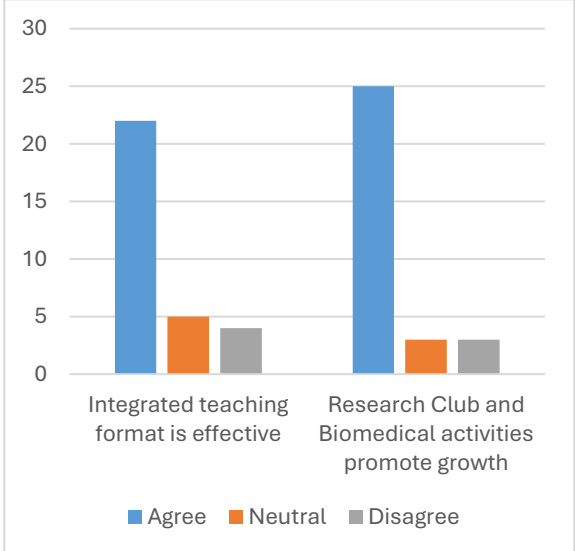

Figure 2: Teaching and Learning

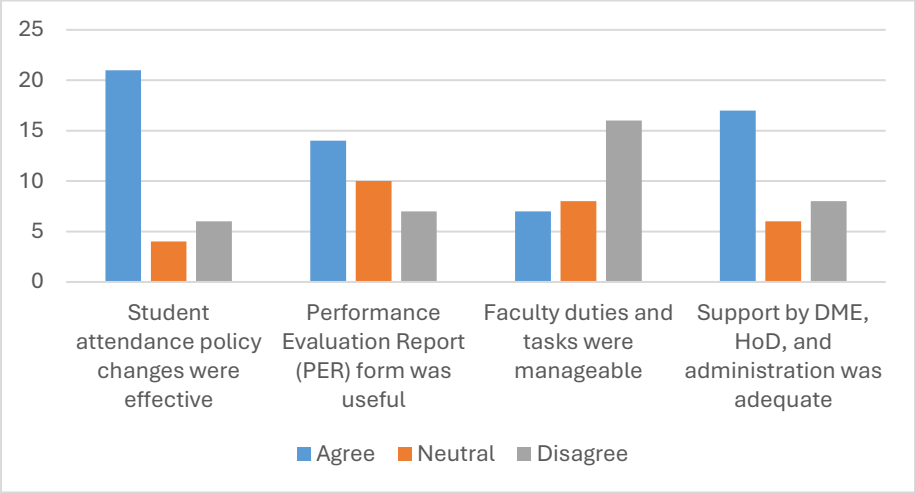

Figure 3: Assessed perceptions of new institutional policies.

In general, faculty members responded favorably to technology and digitalization initiatives, with 67.7% concurring that these efforts increased efficiency. However, only 41.9% of respondents thought biometric attendance tracking systems were useful and easy to use, and a sizable 35.5% were undecided, indicating possible implementation or unfamiliarity issues.

Lastly, when it came to overall satisfaction, 48.3% of faculty said they were happy with the curriculum changes, compared to 29% who said they were neutral and 19.4% who said they were unhappy. This indicates that faculty members have a cautiously optimistic outlook, with some areas needing institutional support and additional refinement.

Discussion

Our results show a complex faculty reaction updated 2024 MBBS curriculum, which is consistent with trends observed in both domestic and international literature. Even though technological advancements like digitalization and integrated teaching were generally well received, significant issues with faculty workload, administrative support, and assessment burden still exist.[6] Other research demonstrating that integrated curricula enhance conceptual clarity and develop early clinical reasoning skills is consistent with the strong support of integrated teaching formats and student research activities.[7,8] This is corroborated by local research, which shows that using integrated systems to deliver content improves student motivation and perceived coherence.[9] Nonetheless, nearly 39% of faculty expressed dissatisfaction with the frequency and format of assessments, which is consistent with issues raised in comparable curriculum evaluations. Both students' and teachers' cognitive overload, decreased engagement, and burnout have been related to overassessment.[10] Additionally, only roughly 50% of respondents thought that MCQs in the USMLE style were in line with learning objectives. Constructive alignment, a fundamental tenet of successful medical education, has been demonstrated to be undermined by this misalignment between assessment content and curriculum goals, which is commonly mentioned in curriculum reform literature.[11]

Regarding the effectiveness and usability of digital platforms like LMS and biometric systems, faculty members were also divided. The effective use of digital tools necessitates sufficient faculty training, responsive design, and continuous IT support, even though they can increase flexibility and lessen administrative burden.[12] Despite their potential to improve curriculum delivery, studies have shown that faculty frequently resist or underuse digital systems if they are not trained.[13]

The study revealed that faculty workload was a crucial area of concern. In line with previous studies showing that greater administrative and instructional responsibilities in integrated curricula can lead to job discontent and burnout, more than half of the respondents felt their responsibilities were too much to handle.[14] Time is needed for coordination, interdepartmental collaboration, and feedback sessions, all of which increase faculty time pressure if they are not adequately supported.[15] Limited support was also given to the PER form, which was designed as a performance feedback tool. This illustrates a larger issue with institutional policy adoption, where instruments that are introduced without a clear goal, training, or evidence of their impact are typically met with resistance or apathy.[16] Around the world, organized faculty development programs are becoming more and more linked to successful curriculum reform. For example, a Pakistani institution's six-month item-writing training program resulted in quantifiable gains in faculty confidence and assessment quality.[17] Similarly, workshops and interdepartmental support structures were found to be more effective before simulation-based learning was implemented.[18,19]

Three important recommendations are made in light of these findings. The assessment approach should first be updated to decrease frequency, better match learning objectives, and implement progressive models like entrustable professional activities (EPAs) or programmatic assessment. Second, organizations need to put faculty support first, not just by adjusting workloads but also by offering incentives, recognition, and ongoing professional development.[20,21] Third, to guarantee adoption and relevance, digital tools must be combined with unambiguous training and feedback systems.[22]

In conclusion, although the curriculum reform is generally welcomed, its success depends on more active faculty participation, assessments that are more in line with the curriculum, and accommodating institutional support. These results are consistent with modern frameworks such as the Master Adaptive Learner model, which emphasize the value of reflective teaching, contextual adaptability, and iterative feedback in the reform of medical education.[23]

Conclusions

The undergraduate MBBS curriculum changes represent a forward-thinking move toward outcome-based learning, digitization, and integration. In line with international best practices in competency-based medical education, faculty feedback shows a strong appreciation for integrated teaching methodologies and research-enhancing initiatives. The university's successful efforts to modernize medical pedagogy are demonstrated by the positive reception given to the implementation of blended learning tools and structured clinical exposures such as OSCE and AV OSPE. But the study also identifies important areas that need careful consideration. Implementation mechanisms need to be reevaluated in light of issues with assessment frequency, content alignment, faculty workload, and administrative tool usability. Although these difficulties are common during curriculum changes, proactive measures are needed to guarantee the sustainability and scalability of the changes.

We need to make investments in organized faculty development programs, guarantee that assessment and learning objectives are in line, and offer sufficient institutional support for digital integration in order to maximize the impact of these curriculum innovations. Furthermore, to support responsive and data-driven curriculum evolution, iterative feedback loops—like frequent faculty and student consultations—should be incorporated into the quality assurance framework.

Being one of Pakistan's top public medical schools, it is in a unique position to set an example for curriculum innovation. The university can strengthen its dedication to providing high-quality medical education by filling the operational gaps found in this study. This will result in graduates who are not only clinically competent but also flexible, introspective, and research-focused, ready to tackle the challenges of healthcare in the twenty-first century.

Author Information

1. Professor, Rawalpindi Medical University 2. Assistant Professor, Rawalpindi Medical University 3. Demonstrator, SCD 4. Professor, Wateem Medical and Dental College 5. MHPE Student, Rawalpindi Medical University.
Corresponding author: Dr. Farzana Fatima drfarzanafatima@gmail.com

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