

Original Article



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Barriers to Provide Timely and Constructive Feedback in Undergraduate Medical Education

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Abstract

Objective: This study aimed to identify and explore the challenges faced by faculty members in delivering timely and constructive feedback in an undergraduate medical education.

Methodology: This was a cross-sectional descriptive study conducted at CMH Kharian Medical College from January 2025 to May 2025. In this study seventy faculty members were involved in student assessment who were selected by non-probability purposive sampling technique. Data were collected using a structured, self-developed questionnaire incorporating demographic information and items related to feedback delivery and associated challenges, measured on a 5-point Likert scale. Content validity was ensured through expert consultation. Data analysis was performed using SPSS version 24, with descriptive statistics applied.

Results: The study identified multiple faculty-perceived barriers impacting timely and constructive feedback delivery, including workload, lack of training, time constraints, and insufficient institutional support.

Conclusion: Addressing faculty barriers is crucial to enhancing feedback quality in undergraduate medical education. Institutional initiatives focusing on faculty training and support systems may improve feedback practices, ultimately enhancing students' learning and professional development.

Keywords: Constructive feedback, Faculty barriers, Medical faculty development, Timely feedback, Undergraduate medical education



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Introduction

Feedback is defined as “specific information about the comparison between a trainee’s observed performance and a standard, given with the intent to improve the trainee’s performance.”¹ It is a keystone of medical education as it is related to the growth of learner by telling them their deficiencies in clinical and academics and in this way establishing good practices in them. Without feedback, learners cannot identify the areas of improvement in them that can lead to poor performances.² Constructive feedback is an upgraded and important type of feedback which is beyond the evaluation. It refers to feedback that is supportive, actionable, non-threatening, and goal-oriented, whose aim is to encourage the improvements in learners by maintaining their instigations and self-esteem.³ For critical thinking and continuous development the constructive feedback emphasizes on both strengths and areas for improvement.⁴ In educational institutions different types of feedback are in use including

Descriptive feedback provides specific and detailed information about a learner’s performance, helping them to understand what was done well and what needs improvement. In contrast, evaluative feedback focuses on judging the quality of the performance, often using grades or ratings to indicate how well an action was executed. Formative feedback is developmental in nature; it is offered continuously throughout the learning process to guide learners in improving their skills and deepening their understanding. Lastly, summative feedback is given at the end of a learning activity, course, or module to evaluate overall achievement and determine whether the intended learning outcomes have been met.⁵ In medical education the most commonly used type of feedback is formative feedback as it is the most authentic and educationally fruitful because it has direct influence on learning by identifying gaps and suggesting strategies for improvement.⁶ But for effective feedback it’s compulsory that it should be on time, because when the feedback is delayed it loses its effectiveness and significance.⁷ According to literature, when the feedback is on time, it increases the retention of knowledge, and before making any mistakes again, the learner will focus on their work. Despite of the importance of feedback it has so many challenges especially from the faculty point of view. Medical educators face problems such as time constraints, administrative workload and absence of proper training in feedback skills are negatively influencing the relationships between student and teacher.⁸ In clinical settings, these challenges are more intensified due to the responsibilities of patient care, making it difficult to arrange well-structured effective feedback sessions.⁹ In developing countries like Pakistan, the awareness of outcome-based medical education has been increased. Our medical curriculum is shifted towards integrated system. This has increased the extra pressure on facul-

ty to give timely, regular, and constructive feedback.¹⁰ But according to many faculty members this lack is not only due to workload or shortage of time but also related to inadequate institutional support and faculty developmental programs that should be focused on the feedback techniques.¹¹ According to a study done in Pakistan, faculty has positive approach towards the timely and constructive feedback but lack of standardization is another challenge. As there is no consistent or uniform method, format or guideline that faculty members follow when giving feedback to students.¹² Feedback at our institution is a part of formative assessments and the institution is working hard to train its faculty in provision of effective feedback but still there is no standardized format. During our research, the responses from the faculty members on feedback practices identified a gap in the timely and constructive delivery of feedback to students. This study aims to assess the perceptions of faculty involved in undergraduate medical education regarding timely and constructive feedback, identify barriers related to it, and ultimately inform future faculty development workshops and institutional policies to support a more effective feedback culture.

Methodology

A cross-sectional descriptive study was conducted at CMH Kharian Medical College over a period of five months, from January 2025 to May 2025. The study targeted faculty members directly involved in providing feedback to undergraduate medical students. A total of 70 faculty members selected by non-probability purposive sampling technique participated in the study, of which 45 were female and 25 were male. No formal sample size calculation was performed as the entire relevant faculty population was included. Data were collected using a self-developed structured questionnaire consisting of items related to the timely and constructive delivery of feedback and the challenges encountered in this process. The questionnaire also included items to collect demographic information of the participants. Responses to feedback-related items were recorded on a 5-point Likert scale. A self-developed structured questionnaire was designed based on a review of relevant literature on feedback challenges in medical education. Key themes were extracted from previous studies, including workload, time constraints, lack of faculty training, institutional factors and student-related issues. The questionnaire consisted of 13 items. The content was validated by taking consultation with five medical education experts. Each item was rated for relevance and the Content Validity Index (CVI) was calculated. Items with I-CVI ≥ 0.78 were retained and the overall Scale-level CVI (S-CVI/Ave) was 0.89. Response process validity was ensured through interviews with five faculty members with minor word changes. The questionnaire was piloted with 10 faculty members to assess internal consistency, yielding a

Cronbach's alpha of 0.83, indicating good reliability.

Ethical approval was obtained from the Institutional Ethical Review Board (IERB) of CMH Kharian Medical College, and informed consent was obtained from all participants. The data was analyzed using SPSS version 24. Descriptive statistics, including percentages, means, and standard deviations, were used to summarize the responses.

Results

Faculty responses of 13 variables were recorded on a structured questionnaire as shown in table 1 and table 2. Table 1 presents the demographic data of faculty members who participated in this study. It includes age, gender and academic status. Data is represented

in the form of numbers and percentages. Table 2 indicated the overall response of participants regarding the challenges, academic significance and suggestions regarding timely and effective feedback. This data is presented as mean \pm SD and percentage.

Discussion

Feedback in medical education is a multifaceted process involving the transfer of verbal or written information from instructors (such as teachers or clinical supervisor) to learners, including students and residents, with the goal of enhancing their knowledge, clinical competencies, and professional behavior. An effective and constructive feedback approach is traditionally characterized by several key elements: it should

Table 1. Demographic data of participants (n=70)

Sr No	Demography		Number of participants(n)	Total percentage %
1	Age	25-40	51	72.8
		41-60	19	27.1
2	Gender	Male	29	41.4
		Female	41	58.5
3	Academic Status	Demonstrators	31	44.2
		Assistant Professors and Above	39	55.7

Table 2. Identified Challenges, Perceived Impact, and Faculty Suggestions for Improving Timely and Effective Feedback

Items	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Mean \pm SD
1. Heavy workload prevents me from giving timely feedback	-	4.0	16.0	64.0	16.0	3.92 \pm 0.702
2. Large class sizes make it difficult to provide individualized feedback	4.0	-	12.0	48.0	36.0	4.12 \pm 0.92
3. Time constraints limit my ability to provide detailed and constructive feedback	-	12.0	28.0	44.0	16.0	3.64 \pm 0.90
4. Students do not actively seek or utilize the feedback provided.	4.0	4.0	-	64.0	28.0	4.08 \pm 0.90
5. There is no structured system in place to ensure timely feedback delivery.	-	20.0	16.0	40.0	24.0	3.68 \pm 1.06
6. Delays in feedback negatively affect students' academic performance.	-	12.0	28.0	56.0	4.0	3.52 \pm 0.77
7. Lack of timely feedback reduces students' motivation to improve.	4.0	4.0	12.0	52.0	28.0	3.96 \pm 0.97

8. Students who receive delayed feedback struggle more with concept retention.	-	8.0	28.0	40.0	24.0	3.80 ± 0.91
9. Timely feedback enhances student confidence and learning outcomes.	-	8.0	20.0	44.0	28.0	3.92 ± 0.90
10. Digital platforms can help streamline the feedback process.	4.0	8.0	28.0	56.0	4.0	3.48 ± 0.87
11. Institutional policies should mandate a fixed timeline for feedback delivery.	-	4.0	24.0	60.0	12.0	3.80 ± 0.70
12. Faculty training on effective feedback strategies should be implemented.	-	16.0	28.0	44.0	12.0	3.52 ± 0.91
13. Reducing administrative workload would allow more time for effective feedback	-	8.0	20.0	64.0	8.0	3.72 ± 0.73

be timely, clear, regular, delivered in a private setting, focused on specific actions, unbiased, and thorough.¹³ This descriptive analysis evaluated major challenges in providing timely and constructive feedback, its educational impact on undergraduate medical students and suggestions by the faculty members of CMH Kharian Medical College, Kharian. Section 1 of the questionnaire included 05 questions related to possible challenges faced by faculty in providing timely and effective feedback. In our study 64% of faculty members indicated that heavy workload prevents the faculty from giving timely feedback. Second challenge that 64% of faculty highlighted is that students do not actively seek or utilize the feedback provided. Similar challenges were highlighted in the study of Parpucu, Harun and Al-Mabuk, Radhi who described the possible cause of this challenge is that students who are at the receiving end assume that feedback process doesn't impart significance in their professional growth and development.¹⁴ Moreover, students remain conscious and afraid of negative feedback and try to refrain from this process.¹⁵ According to ≥40% of faculty members pointed out another inherent problem of having large class size and time constraints. Mostly, the strength of a medical class is above 160, and the faculty-to-student ratio is very low, which poses a huge hindrance in providing timely and effective feedback at individual levels, considering the privacy of each student. Similar results are shown in the study of Katrina Weston. A method of providing engaging formative feedback to large cohort first-year physiology and anatomy students.¹⁶

Lack of structured system of feedback delivery in medical curricula is another problem faced by faculty members. In current era, the organic informal and un-structured manner of feedback delivery is prevalent in medical sphere. A study by Sivapalan conducted in 2024 in Sri Lanka on Sri Lankan graduates discussed similar problems of having large class sizes and a lack of a structural system in the medical curriculum and

faculty guidance regarding the feedback program.¹⁷ Academic impact of these challenges were also explored in this study. Results of collected data showed that >40% of faculty members are that delays in feedback delivery negatively affect students' academic performance, reduce students' motivation to improve their knowledge, skills and attitude and impose hindrance in concept retention. Whereas, constructive feedback, if delivered timely, enhances student self-confidence and learning outcomes. Study of S.Shafian conducted in 2024 at Kerman University of Medical Sciences Southeast Iran also pointed out that delayed feedback reduces the capability of undergraduate medical students to recall their academic performance and induces stress and anxiety like negative sentiments hence the chances to implement betterment get reduced.¹⁸

One of the possible and adoptable solutions that our faculty suggested for these challenges is utilization of digital platforms to optimize and streamline the feedback process. Digital platforms include various artificial intelligence websites, mobile applications and google feedback performa.¹⁹ Particularly, after Covid-19 outbreaks, online teaching modalities have been introduced. This requires to adopt modifications in feedback process also particularly in resource limited institutions. Digitalization not only reduces faculty workload but also helps to maintain a record of non-verbal feedback. V.S Singaram and colleagues in 2024 worked on a detailed review of the data related to digitalization of feedback process and he concluded that if technical constraints and security issues are over held, various digital platforms would help to provide timely and individualized feedback, but also enhance the outcome of formative assessment and self-directed learning among medical students.²⁰ Our faculty also underscored that on institutional levels, the regulatory bodies should mandate a fixed timeline for feedback delivery so that this process is not delayed. Moreover, faculty training programs should be organized to im-

plement effective feedback strategies. S Mukhia and K Tenzin conducted a mix method study in Gyalpo University of Medical Sciences of Bhutan in year 2025 in which 14 faculty members of two departments got training program to enhance their skills in providing constructive feedback.²¹ Pre and post program, faculty perception and approach towards feedback was evaluated by help of questionnaires and it concluded that, targeted training programs regarding feedback process remarkably improved the perception and confidence of delivery of timely and constructive feedback, thereby inducing a positive impact on student learning outcomes.

Conclusion

This descriptive analysis concluded that heavy workload, large class sizes, lack of student's interest and lack of structured system induces time constraints and limit the ability of faculty to provide timely, individualized and constructive feedback. These issues, negatively affect students' academic performance, concept retention and effectiveness of feedback. Possible solutions to overcome these challenges highlight by same faculty members include designation of institutional policies to optimize a proper timeline of feedback delivery system and organize proper faculty development programs to improvise the understanding and application of timely and constructive feedback.

Last but not the least, adaptation of digital platforms for feedback process would not only reduce faculty workload, but also assist in streamlining this process.

It was an institutional based study which may limit the generalization to other institutions with different student population, policies and curricula. Some of the faculty members have participated in the survey with minimal interest that has limited the overall impact and potential benefits.

Based on the findings, it is recommended that a qualitative study be conducted to gain deeper insights into the underlying factors and faculty perceptions. Multiple institutions affiliated with different medical universities can be included to enhance the generalizability of the results

Interactive delivery methods prior to survey should be considered to enhance faculty participation e.g., faculty training workshop on timely and effective feedback can be conducted before receiving their responses. That can help to ensure that all participants have a clear and uniform understanding of what is the purpose of constructive feedback. This will help to minimize variability due to misconceptions or differing interpretations of feedback practices.

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Authors' Contribution Statement

WAB contributed to the conception, design, acquisition, analysis, interpretation of data, drafting of the manuscript, critical review of the manuscript, and final approval of the version to be published. AM contributed to the design, acquisition, analysis, interpretation of data, drafting of the manuscript, and critical review of the manuscript. UZM contributed to the acquisition, analysis, interpretation of data, and drafting of the manuscript. AQ contributed to the acquisition, analysis, interpretation of data, and drafting of the manuscript. AH contributed to the acquisition, analysis, interpretation of data, and drafting of the manuscript. All authors are accountable for their work and ensure the accuracy and integrity of the study.

Conflict of Interest

Authors declared no conflict on interest

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None

Data Sharing Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.