

EXPLORING THE CURRENT CULTURE OF GIVING AND RECEIVING FEEDBACK AMONG FACULTY - REFLECTIONS OF MEDICAL EDUCATORS IN RAJASTHAN ON EFFECTIVE FEEDBACK BEHAVIOR, 2025

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ABSTRACT

Background: Feedback is a vital component of medical education that enhances learning, professional development, and performance improvement. With the implementation of Competency-Based Medical Education (CBME) in India, structured and timely feedback has become essential for formative assessment. However, factors such as hierarchical academic environments, lack of confidence, and concerns about professional relationships may influence the feedback culture among faculty. Understanding current practices is therefore important for strengthening effective feedback mechanisms in medical institutions. Present study was conducted to assess perceptions of trained faculty regarding giving and receiving feedback, to identify commonly used feedback models among Revised Basic Course Workshop (RBCW)-trained faculty, and to evaluate faculty satisfaction with existing feedback practices in relation to CBME guidelines. **Materials and Methods:** A descriptive cross-sectional mixed-methods study was conducted among RBCW-trained faculty from three government medical colleges in Rajasthan (GMC Pali, GMC Barmer, and S. K Government Medical College Sikar). Data was collected from 121 participants using a pilot-tested semi-structured questionnaire administered through Google Forms, followed by online focused group discussions. Quantitative data were analyzed using Epi Info version 7.3, while qualitative data were analyzed thematically using QDA Miner Lite software. **Results:** Significant improvements were observed in faculty self-perceived knowledge and feedback skills following training ($p < 0.0001$). Mean knowledge scores increased from 4.44 ± 1.46 to 8.04 ± 1.29 , while skills in giving feedback improved from 4.57 ± 1.68 to 8.15 ± 1.06 . Skills in receiving feedback and conceptual clarity also showed similar statistically significant improvements. Most faculty (89.5%) agreed that effective feedback leads to improvement. Structured models such as Pendleton's rules and the Sandwich model were preferred for undergraduate teaching, whereas reflective models including ALOBA, IDEA, and the Hattie-Timperley model were favored for postgraduate training. Nearly half of the participants reported that providing feedback positively influenced professional relationships. **Conclusion:** RBCW training significantly enhances faculty competence and confidence in delivering feedback. Adoption of structured feedback models and promotion of a supportive institutional feedback culture are essential to strengthen CBME-aligned teaching and assessment practices.

INTRODUCTION

Feedback is an essential part of medical education and training programmes. It helps teachers and learners to maximize their potential at different stages of training, raise their awareness of strengths and areas that require improvement, and identify actions to be taken to improve performance.^[1] Feedback is generally considered as an interaction between two people, mostly teacher and student in classroom setting, student and peer in formal or informal setting and between a doctor and patient in a clinical setting.^[2,3] Today medical education in India has become cost intensive and hence there are expectations from students and parents and community at large.^[4] Accountability is a factor that has come into play. We are moving to an era of CBME competency based medical education wherein competency-based approach to learning relies heavily on the collection of multi-source feedback.^[5] For students to perform well, faculty should give feedback to them regularly. In recent times number of different models have been developed for giving feedback in a structured and positive way.^[6,7] Usually generalized feedback is not related to facts, lack of respect for source of feedback, fear of upsetting colleagues, fear of damaging professional relationships, resistance while receiving feedback, personal agendas and lack of confidence are hindrances in giving effective feedback among medical educators.^[8-10]

This study is an attempt to understand the current feedback process being adopted by faculty who have undergone the revised basic course workshop since 2014. It is a mixed study aimed at capturing the perceptions and practices regarding giving and taking feedback among medical educators in select medical colleges of Rajasthan

The objectives of the study are:

1. To study the perception of trained faculty regarding giving and receiving feedback.
2. To study the patterns (methods and models) of feedback adopted by revised basic workshop trained faculty
3. To assess the satisfaction levels among faculty regarding feedback process in their Institutes
4. To assess whether the current perceptions and practices regarding feedback are in line with the CBME guidelines

MATERIALS AND METHODS

Study design: Descriptive Cross-sectional study - (Mixed methods study)

Study setting: All trained (revised basic workshop) faculty of respective study three study sites GMC Pali, GMC Barmer and S. K Government Medical College, Sikar.

Study tools: Self-administered questionnaire (as a google form) and Online Focused group discussion using a pre prepared guide

Inclusion criteria: Should be permanent and trained faculty of the Institute

Exclusion criteria: Any trained faculty not willing to give consent

Sample size: All faculty who have undergone the Revised Basic Course in Medical Education at the study sites. Pali (60), Sikar (31), Barmer (30) –Total -121 trained faculties

Data collection: A semi structured questionnaire was pilot tested in GMC Pali and then self-administered as a google form to all trained faculty of the selected institutes

Data analysis: Quantitative Data was analyzed using Epi info Version 7.3 software. Qualitative data was analyzed using QD miner lite software

IEC considerations: Participants were briefed about the study and their consent to participate was taken in written informed. The protocol was reviewed and approved by the Institutional Ethical Committee, of GMC Pali (vide letter No. GMCP/IEC /2023/155 dated 14/7/2023). The identity of the participants was kept confidential. The data collected was used only for academic purposes.

RESULTS

A total of 121 faculty who had undergone the Revised Basic Course in Medical Education workshop responded to a semi- structured questionnaire self - administered as a google form from all the selected institutes. Three focused group discussions were held with 10 members each in each of the three study sites. Participants reported a significant improvement in their knowledge about the topic, with mean scores increasing from 4.44 ± 1.46 before the intervention to 8.04 ± 1.29 after the intervention ($p < 0.0001$). Self-perceived skill in giving feedback also showed a marked increase, rising from a pre-intervention mean of 4.57 ± 1.68 to a post-intervention mean of 8.15 ± 1.06 , which was statistically significant ($p < 0.0001$). Similarly, participants' skill in receiving feedback improved significantly, with scores increasing from 4.55 ± 1.78 before the intervention to 8.23 ± 1.26 after the intervention ($p < 0.0001$). Clarity of concepts—including characteristics, attributes, components, types, techniques, and models—also demonstrated a significant enhancement, with mean scores rising from 4.23 ± 1.75 pre-intervention to 8.30 ± 1.37 post-intervention ($p < 0.0001$).

The majority of faculty members expressed a positive perception regarding the organization of periodic parent-teacher meetings in medical colleges for formal feedback, with 74 (59.7%) agreeing and 18 (14.5%) strongly agreeing. However, a small proportion of participants disagreed (11.3%) or strongly disagreed (2.4%) with this statement. Most faculty perceived that reflections documented in students' logbooks serve as a valuable source of feedback for teachers about their teaching skills. This was supported by 76 (61.3%) participants who agreed and 26 (21.0%) who strongly agreed, while only a

minimal percentage disagreed (3.2% combined). A strong consensus was observed regarding the impact of effective feedback on improvement, with 68 (54.8%) agreeing and 43 (34.7%) strongly agreeing that effective feedback always leads to improvement. Very few respondents expressed disagreement (4.0% combined). Regarding the coverage of concepts such as feed up and feed forward during the training session, the majority of faculty members reported satisfaction, with 94 (75.8%) agreeing and 8 (6.4%) strongly agreeing. Only a small fraction of participants disagreed (1.6%), indicating overall positive perceptions of the training content.

Nearly half of the respondents reported that giving feedback to professional colleagues affects their working relationship positively, with 57 (46.0%) participants indicating a positive effect. A considerable proportion of respondents, 52 (41.9%), stated that the impact depends on the individual colleague and could not be definitively categorized. A small number of participants felt that providing feedback does not affect their working relationship, as reported by 5 (4.0%) respondents. Very few participants perceived an adverse effect on working relationships, with only 1 (0.8%) reporting a negative impact. Additionally, 7 (5.6%) respondents provided no comments regarding this aspect.

Table 1: Changes in Self-Perceived Knowledge and Feedback Skills Before and After Intervention

Self-Perception Question	Before	After	p-value
Knowledge about the topic	4.44±1.461	8.04±1.290	<0.0001
Skill in giving feedback	4.57±1.678	8.15±1.057	<0.0001
Skill in receiving feedback	4.55±1.782	8.23±1.257	<0.0001
Clarity of concepts (characteristics, attributes, components, types, techniques and models)	4.23±1.749	8.30±1.373	<0.0001

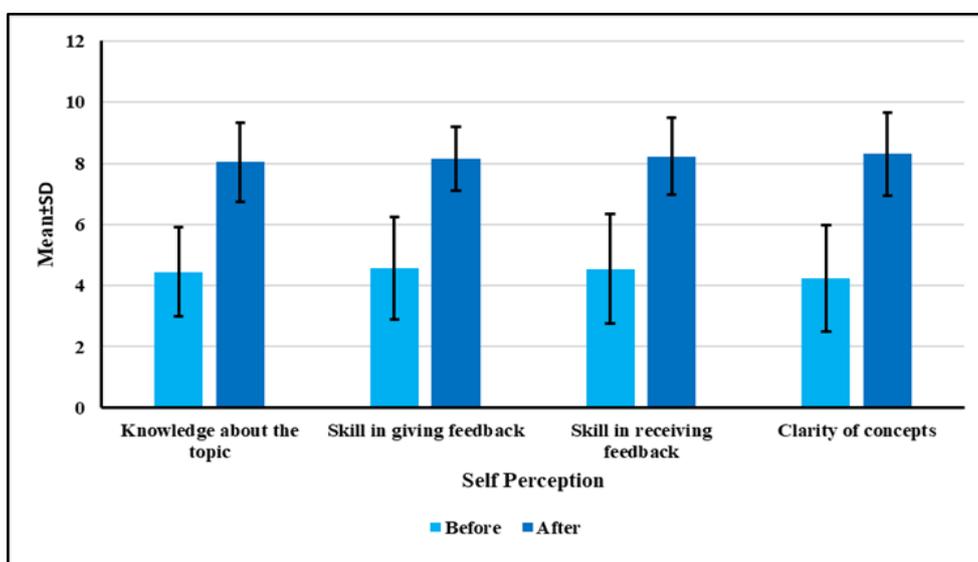


Fig 1: Changes in Self-Perceived Knowledge and Feedback Skills Before and After the Intervention

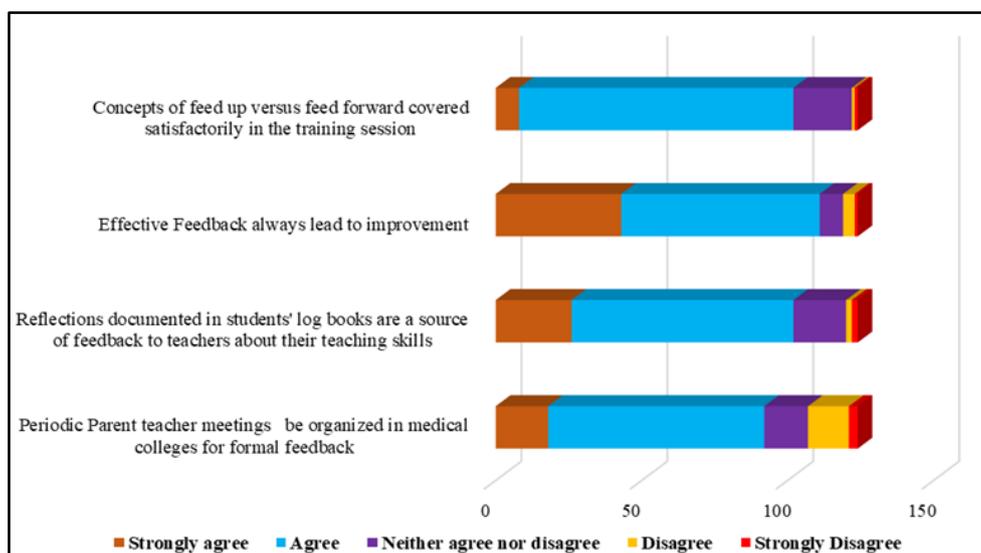


Fig 2: Faculty Perceptions and Reflections on Feedback and Training Practices

Table 2: Impact of Giving Feedback to Professional Colleagues on Working Relationships

Giving feedback to professional colleagues effect your working relationship with them	Frequency	Percentage
Positively	57	46.0
Agree	2	1.6
Can't say - depends on the person	52	41.9
Does not affect the working relationship	5	4.0
Adversely	1	0.8
No comments	7	5.6

Qualitative analysis through focused group discussions with Faculty:

Table 3: Selected additional comments from faculty specific to the models of feedback they prefer for Undergraduates and Postgraduates

<p>Sandwich & Pendleton's method is the sandwich model. Softening harsh criticisms, encouraging specificity in the feedback process, increasing students' receptiveness to criticism, and Ending meetings on a positive note.</p> <p>Sandwich model, ease of administration and bring reflection of students on their strength and weakness</p> <p>Pendleton's model is ideal for MBBS undergraduate teaching because it is structured, learner-centered, psychologically safe, and aligned with CBME principles.</p>
<p>Pendleton's Rules for Feedback because it reduces anxiety- its feasible and comprehensive</p>
<p>Postgraduates:</p> <p>IDEA models appear best for PG teaching. It is specific, draws a plan and less time consuming.</p> <p>IDEA model, as affective domain is covered comprehensively</p> <p>ALOPA model. As it focuses on trying to achieve the desired outcome by using a set of skills, rather than criticizing the learner about what was done wrongly</p> <p>For postgraduate medical education, ALOBA is the most effective feedback model because it is learner-driven, reflective, dialogic, and outcome-focused, fully aligning with adult learning theory, CBME, and workplace-based assessment.</p> <p>Hattie and Timperley model of feedback. As it demands active self-assessment of students and future planning by themselves. PG students, being mature adult learners, can do it better</p>

Thematic Analysis:

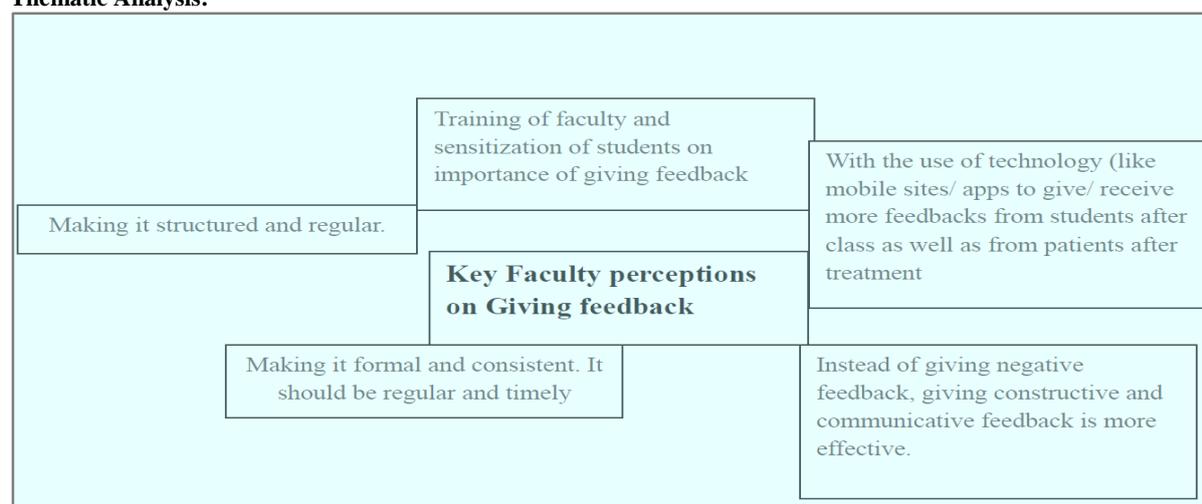


Fig 3: Key Faculty perceptions about giving feedback in medical education

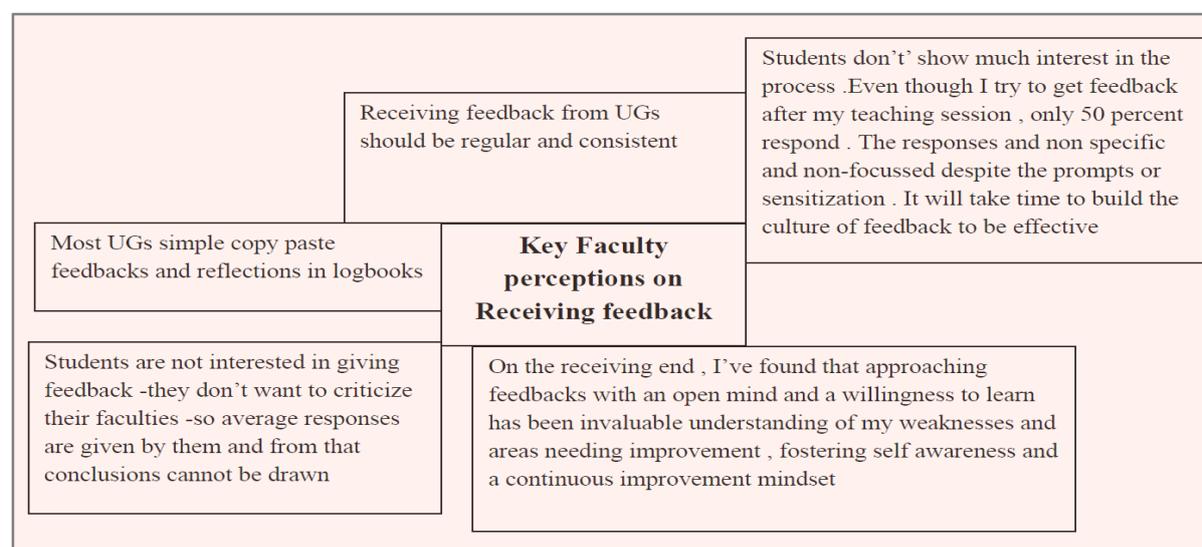


Fig 4: Key Faculty perceptions about receiving feedback in medical education

DISCUSSION

‘Feedback is widely regarded as one of the most powerful influences on learning and professional development in medical education. Ende first conceptualized feedback as information provided to learners about observed performance with the intent to guide future behavior, clearly distinguishing it from summative evaluation.^[11]

Over time, the concept has evolved from a unidirectional transmission model to a dialogic, learner-centered process embedded within educational relationships.^[12,13] The present study explored the prevailing culture of feedback among Revised Basic Course Workshop (RBCW)-trained faculty across selected medical colleges in Rajasthan within the context of Competency-Based Medical Education (CBME).

Our findings demonstrate a statistically significant improvement in self-perceived knowledge, skills in giving and receiving feedback, and clarity of feedback concepts following training ($p < 0.0001$). These results are consistent with previous evidence suggesting that structured faculty development programs significantly enhance educators’ confidence and competence in delivering formative feedback.^[14,15] In particular, Kavya et al emphasized that alignment of feedback practices with CBME principles requires clarity regarding feedback types, timing, and structure.^[16] The improvement observed in our study indicates that RBCW training is effective in strengthening conceptual and operational understanding of feedback among faculty.

Feedback in the Era of CBME: The introduction of CBME in India has fundamentally shifted assessment paradigms toward formative, workplace-based, and longitudinal evaluation. Feedback forms the backbone of this framework, enabling learners to bridge the gap between current and desired performance.^[12] Hattie and Timperley’s model conceptualizes feedback as answering three essential questions: “Where am I going?” (feed-up), “How am I going?” (feedback), and “Where to next?” (feed-forward).^[12,17] Encouragingly, a large proportion of faculty in our study reported satisfaction with the coverage of feed-up and feed-forward concepts during training, indicating alignment with global best practices.

Telio et al. introduced the concept of the “educational alliance,” highlighting that feedback effectiveness depends on trust, shared goals, and relational safety between teacher and learner.^[13] Although most faculty in our study believed effective feedback leads to improvement, nearly 42% reported that the impact of feedback on professional relationships depends on the individual. This suggests that relational dynamics significantly influence feedback culture, echoing prior findings that psychological safety and trust determine receptiveness to feedback.^[18,19]

Feedback Models in Undergraduate and Postgraduate Education: Faculty in our study demonstrated contextual preference for different

feedback models based on learner level. For undergraduate (MBBS) students, structured and psychologically safe models such as Pendleton’s Rules and the Sandwich model were favored. Pendleton’s approach encourages learners to first identify what went well before discussing areas for improvement, thereby reducing defensiveness and promoting reflection as also stated by Brown et al.^[6,20] Although some literature critiques the sandwich model for potentially diluting constructive criticism, it remains popular due to ease of use and perceived emotional safety.^[20]

As observed by Knowles et al and Sargeant J et al for postgraduate teaching, faculty preferred reflective and outcome-oriented models such as ALOBA (Agenda-Led Outcome-Based Analysis), IDEA, and the Hattie & Timperley model. Adult learning theory suggests that mature learners benefit more from dialogic, self-directed feedback processes.^[21,22] The R2C2 model (Rapport, Reaction, Content, Coaching), described by Sargeant et al., similarly promotes coaching conversations and reflective practice.^[22] The preference for these models among postgraduate faculty in our study reflects an understanding that feedback must evolve with learner maturity and clinical responsibility.^[23]

Feedback Culture and Institutional Context: Feedback does not operate in isolation but within institutional culture. Studies have shown that in hierarchical clinical environments, learners may hesitate to provide upward feedback due to fear of repercussions.^[19,24] In our study, while majority perceived feedback positively, a small proportion expressed concern regarding potential adverse effects on working relationships. This highlights the importance of cultivating a non-threatening, growth-oriented feedback environment.

Research by Watling and Lingard emphasizes that feedback must be embedded within a culture of learning rather than performance judgment.^[18] When learners perceive feedback as summative or punitive, they may disengage. Conversely, when feedback is perceived as developmental and supportive, it enhances motivation and self-regulation.^[12,17] Faculty perceptions in our study that reflections documented in logbooks provide feedback to teachers demonstrate emerging bidirectionality in feedback processes, consistent with modern CBME philosophy.

Impact of Feedback on Learning Outcomes: A systematic review by Ivers et al. demonstrated that audit and feedback interventions significantly improve professional practice, particularly when baseline performance is low and feedback is specific and actionable.^[24] Similarly, Norcini and Burch highlighted that workplace-based assessments integrated with structured feedback improve clinical performance.^[25] These findings support our observation that faculty strongly believe effective feedback leads to improvement.

However, the effectiveness of feedback is not uniform. Kluger and DeNisi’s meta-analysis found

that while feedback generally improves performance, poorly delivered feedback may hinder progress.^[26] Therefore, quality, specificity, and delivery style remain critical determinants of effectiveness. Our findings underscore the importance of structured training in minimizing variability and promoting constructive practices.

Learner Engagement and Reflective Practice:

Feedback is most effective when learners actively engage with it. Boud and Molloy argue that sustainable feedback practices require learners to develop feedback literacy—the ability to understand, interpret, and apply feedback.^[27] Faculty in our qualitative discussions emphasized reflective components, particularly in postgraduate contexts, aligning with adult learning principles and self-regulated learning theory.

Rapid feedback strategies, as described by Katz-Sidlow et al., enhance learner responsiveness and promote timely improvement.^[28] Given increasing academic and clinical workload in Indian medical colleges, structured rapid-feedback approaches may help sustain meaningful feedback exchanges.

Limitations

This study has certain limitations. First, the data were self-reported, which may introduce social desirability bias and overestimation of competence. Second, the study was limited to selected government medical colleges in Rajasthan, potentially restricting generalizability to other regions or private institutions. Third, objective observation of real-time feedback sessions was not conducted; therefore, actual behavioral practices may differ from reported perceptions. Finally, the cross-sectional design limits causal inference regarding long-term sustainability of improved feedback practices.

Future longitudinal and observational studies are recommended to assess behavioral translation of feedback training and its impact on learner performance and patient care outcomes.

CONCLUSION

The evolution of medical education in India towards a Competency-Based Medical Education (CBME) framework has necessitated a paradigm shift in how feedback is conceptualized and integrated into the learning cycle. Our findings demonstrate that interventions, such as the Revised Basic Course Workshop (RBCW), yield statistically significant improvements in faculty self-perceived knowledge and skills. Post-intervention, faculty reported a marked increase in their ability to deliver feedback, with mean scores rising from 4.57 to 8.15 ($p < 0.0001$), and a similar enhancement in their skill too. For MBBS students, faculty displayed a clear preference for structured, psychologically safe models like Pendleton's Rules and the Sandwich method. These models are favoured for their ability to reduce defensiveness and align with CBME principles by first highlighting strengths before

addressing areas for growth while for postgraduate trainees, faculty pivoted toward more dialogic and outcome-oriented frameworks, such as ALOBA (Agenda-Led Outcome-Based Analysis), IDEA, and the Hattie & Timperley model. This transition reflects a mature understanding of adult learning theory, recognizing that advanced learners require feedback that promotes active self-assessment and collaborative future planning.

While nearly half of the respondents viewed peer feedback as positive, 41.9% noted that its impact depends heavily on the individual, and a small subset feared adverse effects on working relationships. Most respondents perceived giving and receiving feedback as a positive step for self-improvement. Most faculty felt that UG and PG orientations are needed to empower students to give well thought out feedback and reflections otherwise it is a mere copy paste exercise. Also, parents' teacher meetings in under graduation were supported by 60% of the respondents. All felt a formal system of giving and receiving feedback between students and faculty are needed in medical education.

RECOMMENDATIONS

Based on our findings, the following recommendations are proposed:

1. **Strengthening Faculty Development:** Regular advanced workshops beyond RBCW should focus on coaching skills, emotional intelligence, and feedback culture development.
2. **Institutionalizing Structured Feedback Cycles:** Integration of scheduled formative feedback sessions within clinical postings and academic modules.
3. **Promoting Bidirectional Feedback:** Encouraging students and residents to provide structured upward feedback in psychologically safe environments.
4. **Embedding Reflective Documentation:** Systematic use of logbooks and e-portfolios to enhance feedback continuity.
5. **Monitoring Feedback Quality:** Periodic institutional audits of feedback practices to ensure alignment with CBME guidelines.

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