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Introduction of structured feedback for MBBS students: Perception of students and faculty

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Abstract:

INTRODUCTION: Feedback is an important part of the assessment process. However, one-to-one structured and constructive feedback to the students is not practiced mostly due to lack of practice and feasibility issues. The present study was conducted to understand the perception of students and faculty toward one-to-one structured feedback.

METHODOLOGY: All the 3rd MBBS professional students were included in the study. An orientation was given to the faculty regarding the importance of feedback and how to give structured feedback. A standardized format was provided to the faculty for providing the feedback to the students. After completion of the assessments, a one-to-one structured verbal feedback was given to all the students. Thereafter, faculty and student's perception on the feedback process was obtained through questionnaires. A focused group discussion was also conducted among the students.

RESULTS: A total of 42 students participated in the study out of 50. A positive response was received from all the students regarding the feedback. Nearly84.34% of the students acknowledged that feedback is important for understanding their mistakes, 92.84% of the students responded positively that feedback helps to build a good rapport with the teacher, and 92.85% of the students reported that they were satisfied with the overall experience of receiving feedback. Most of the faculty (80%) perceived that giving feedback after the assessment was a good idea. The faculty felt motivated to give feedback to the students after the hands-on experience. However, only 20% of the faculty agreed that the process of feedback was easy to carry out (mean score: 2.2 ± 1.09).

CONCLUSION: The positive responses received from both the students and the faculty highlight that the students are receptive toward feedback provided it is structured, constructive, and helps them to achieve their learning goals.

Keywords:

Feedback, perception, structured

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Introduction

Feedback is an important part of the assessment process. Research has already established the merits of feedback on learning. It has been described as "the most powerful single moderator that enhances achievement."[1] Feedback is personalized information based on direct observation, crafted and delivered so that receivers can use the information to achieve their best potential.[2] One of the main aims of giving feedback is to provide specific information to help close the gap between what is understood and what is aimed to be understood.[3] Effective feedback occurs when the trainees are offered insight into their actions and the consequences thereof.[4] Feedback should be constructive by focusing on behaviors that can be improved.[5] Giving feedback, whether reinforcing and corrective, is an essential component of

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clinical education. In a survey of residents' perceptions of the evaluation process at a large academic medical center, only 8% of the residents (n = 65) reported being "very satisfied" with the feedback process. Eighty percent of the residents reported never or infrequently receiving corrective feedback from their attending physicians.[6] In faculty development courses, clinical teachers frequently indicate that their greatest need is to learn how to give feedback more effectively. Difficulty in giving feedback may be based on reluctance to give offense or provoke undue defensiveness in the medical students.[7] Feedback techniques experienced by respondents substantiate the literature-based recommendations, and corrective feedback is regarded as helpful when delivered appropriately.[8]

Though the importance of giving feedback has been long back recognized by medical educators, the practice of giving structured feedback is not being regularly practiced in medical education either due to lack of awareness and orientation as well as feasibility issues. With this background, the present study was conducted with the objective of understanding the perception of faculty and students toward the process of providing one-to-one structured feedback.

Methodology

The present study is an interventional study conducted for a period of 6 months. The study population consisted of all the students belonging to the 3rd year professional MBBS (fifty students) and five faculty from the department of community medicine.

A core team for the implementation of the structured feedback process was formed. Feedback questionnaires were developed for faculty members as well as students to understand their perception on the process of one-to-one structured verbal feedback. The questionnaire was discussed with the core team members and revised and validated by the members of the Medical Education Unit of the Institute. The format for giving structured one-to-one verbal feedback was also developed. The topics and the blue print for assessment were finalized by the core team. A schedule was prepared for the implementation of one-to-one structured, verbal feedback after completion of assessments.

Students were given an informal 1 hour orientation on the concept and importance of feedback. Any queries related to the process were duly addressed. Thereafter, informed consent was taken from the students as well as the faculty. A faculty orientation session was also conducted on feedback, its importance, components of effective feedback, guidelines for giving structured feedback, and how to give effective feedback.

In order to provide feedback to the students, two assessments were conducted. One for the assessment of knowledge domain and another for the assessment of skills. Written assignment was given in theory, and objective structured clinical examination (OSCE) was conducted as a part of skill assessment. The practical assessment (OSCE) was done in three groups. After completion of the assessments, a one-to-one structured verbal feedback was given to the students. For providing feedback, students were divided into five groups, each group consisted of 8–9 students. Five faculties were involved for conducting the assessment and providing feedback to students, so each faculty gave feedback to eight students on an average.

For structured feedback, a five-step process was followed by all the faculty. In the first step, the teacher was instructed to begin the conversation by outlining the purpose of the meeting. The second step was to explain what was expected from the students in relation to the task given. The third step was to enumerate what was done well or correctly and to highlight the mistakes and weak points. In the fourth step, the student was asked to reflect on performance with the teacher, outlining the strategies for improvement, and finally the session was concluded with a word of encouragement.[9]

A focused group discussion (FGD) was also conducted among ten students who were selected randomly to get an in-depth understanding of their perceptions toward the process of structured feedback. The principal investigator acted as the moderator in the focus group and a recorder helped with note-taking.

Data were collected through questionnaires (prevalidated) after completion of the feedback process. The questionnaire consisted of questions (both open ended and close ended) regarding the perception of students and faculty on the process of giving feedback, motivation to learn, satisfaction level and the feasibility of incorporating it in the curriculum by the use of a Likert scale as well as effectiveness of the feedback process, and how it can be improved in further.

The collected data were entered into Microsoft Excel 2016. Faculty and students' "feedback responses" were analyzed in terms of percentages. Mean and median rating was calculated for each item of the feedback questionnaire. For open-ended questions, conceptual content analysis was done. Coding of text was done from the emerging data and further classified into specific content categories. Transcripts were prepared for FGD, and emerging themes were identified.

Results

A total of 42 students participated in the study out of 50.

Out of these, 18 were females and 24 were males. The response rate was 84%.

A positive response was received from all the students regarding the feedback. Most of the responses were in either "Agree" or "Strongly Agree." Nearly 84.34% of the students acknowledged that feedback is important for understanding their mistakes, 88.09% of the students responded that feedback should be given both after theory and practical exams, 92.84% of the students responded positively that feedback helps to build a good rapport with the teacher, 78.56% of the students responded that verbal feedback should be incorporated in the curriculum, and 92.85% of the students reported that they were satisfied with the overall experience of receiving feedback. With respect to the faculty perspective, most of the faculty perceived (80%) that giving feedback after assessment was a good idea. The faculty felt motivated to give feedback to the students after the hands-on experience. However, only one out of five faculty agreed that the process of feedback was easy to carry out (mean score: 2.2 ± 1.09) [Table 1].

The perception of students toward the feedback process by the use of a Likert scale has been highlighted in Table 2.

The mean and median scores for each parameter were calculated and highlighted in Table 3. Analysis of open-ended questions and FGD was done by identifying and highlighting the major themes emerging.

Feedback to open-ended questions

On inquiring the students on what they liked most about the activity, the responses could be broadly grouped into the following categories:

- Prompt feedback: Immediate and on-the-spot correction was made after the practical assessment
- Identification of weakness: It helped to identify weakness and improve performance
- Rapport: Helped to build a rapport with the teacher.

On inquiring the students on what could have been done better in the assessment process, the common content categories that emerged were:

- Regularity: Feedback after testes should be given on a regular basis
- Time: Some more time needs to be allotted to such interactions.

Focused group discussion

Thematic analysis was used for the FGD. The common themes along with some verbatim emerging from FGD were as follows.

Self realization

Verbatim: "helped me realize where I stood academically."

Motivation

Verbatim: "It was very fruitful and motivated me to go back and read the topics better."

Put to practice

Verbatim: "Feedback should be regularly practiced in every Department for the betterment of students."

Communication skills

Verbatim: "Helped to communicate better and overcome the fear of interacting with the faculty."

Perception of faculty was also obtained through a feedback questionnaire consisting of ten questions; the mean and median scores are highlighted in Table 1.

Discussion

The present study was carried out among the third-year professional MBBS students who were exposed to one-to-one structured verbal feedback. A positive perception toward the process of receiving structured feedback was received from the students, with more than 80% of students acknowledging that it helped them to understand their mistakes. The findings of our study are similar to a study conducted in Thailand which

Table 1: Mean±standard deviation and median rating of faculty regarding the perception of structured feedback

Item	Mean±SD	Median
Giving feedback after formative assessment is a good idea	4.2±2.07	4
Feedback should be provided only for positive points of performance	2.6±1.34	2
Feedback should be provided for both positive and negative points of performance	4±1.73	5
Feedback should be provided in a constructive way (strengths were mentioned, weakness were pointed out in a nonthreatening way, and suggestions were given on how to improve)	4.4±0.54	4
This process of giving feedback is easy to carry out	2.2±1.09	2
This approach enhances valuable exchange of ideas between teacher and student	4.2±0.83	4
The exercise has increased my knowledge on how to give feedback to students	4.6±0.54	5
Verbal one-to-one feedback is time consuming	4.4±0.54	4
Feedback helped me in the self-assessment of learning gaps	3.8±1.64	4
I am now motivated to give feedback to the students	4.2±0.83	4

SD=Standard deviation

Table 2: Perception of students regarding the feedback on Likert scale (*n*=42)

Item	Strongly disagree No (%)	Disagree No (%)	Neutral No (%)	Agree No (%)	Strongly agree No (%)
Feedback is important for making us understand our mistakes	-	-	-	7 (16.66)	35 (83.34)
Feedback should be given after all assessments	-	2 (4.76)	8 (19.04)	23 (54.76)	9 (21.42)
Feedback should be given immediately after assessment	-	3 (7.14)	11 (26.19)	18 (42.85)	10 (23.80)
Feedback should be provided only for practical exams	3 (7.14)	21 (50.00)	9 (21.42)	8 (19.04)	1 (2.38)
Feedback should be provided both for theory and practical exams	1 (2.38)	-	4 (9.52)	21 (50)	16 (38.09)
Feedback should be provided for both positive and negative points of performance	-	1 (2.38)	2 (4.76)	16 (38.09)	23 (54.76)
Feedback should be provided only for negative points of performance	6 (14.28)	21 (50)	8 (19.04)	3 (7.14)	4 (9.52)
During feedback, my strengths were mentioned and weaknesses were pointed out in a nonthreatening way	-	-	4 (9.52)	18 (42.85)	20 (47.61)
Feedback motivates us to learn the subject better	-	-	2 (4.76)	26 (61.90)	14 (33.33)
It provides us information on whether we are learning things the correct way	-	-	3 (7.14)	18 (42.85)	21 (50)
During feedback, I was given suggestions on how to improve	-	-	1 (2.38)	20 (47.61)	21 (50)
Feedback helped me to reflect on my weakness and gaps	-	-	-	22 (52.38)	20 (47.62)
Feedback helps to build a good rapport with the teacher	-	-	3 (7.14)	20 (47.61)	19 (45.23)
Adequate time was given by the faculty for the feedback	-	-	6 (14.28)	22 (52.38)	14 (33.33)
Verbal one-to one feedback can be incorporated in curriculum	-	-	9 (21.42)	20 (47.61)	13 (30.95)
I was satisfied with the overall experience	-	-	3 (7.15)	21 (50)	18 (42.85)

Table 3: Mean±standard deviation and median rating of students regarding the perception of structured feedback

Item	Mean±SD	Median
Feedback is important for making us understand our mistakes	4.78±0.47	5
Feedback should be given after all assessments	3.92±0.77	4
Feedback should be given immediately after assessment	3.83±0.88	4
Feedback should be provided only for practical exams	2.59±0.96	2
Feedback should be provided both for theory and practical exams	4.21±0.81	4
Feedback should be provided for both positive and negative points of performance	4.45±0.70	5
Feedback should be provided only for negative points of performance	2.47±1.13	2
During feedback, my strengths were mentioned and weaknesses were pointed out in a nonthreatening way	4.38±0.66	4
Feedback motivates us to learn the subject better	4.28±0.55	4
It provides us information on whether we are learning things the correct way	4.42±0.63	4.5
During feedback, I was given suggestions on how to improve	4.47±0.63	4.5
Feedback helped me to reflect on my weakness and gaps	4.47±0.50	4
Feedback helps to build a good rapport with the teacher	4.38±0.62	4
Adequate time was given by the faculty for the feedback	4.19±0.67	4
Verbal one-to one feedback can be incorporated in curriculum	4.09±0.72	4
I was satisfied with the overall experience	4.35±0.61	4

SD=Standard deviation

highlighted that the impact of incorporating immediate feedback had changed the students' behavior as they became more motivated and have great enthusiasm to accomplish their goals.[10] In a study conductin Saudi Arabia regarding the student's perception toward feedback in clinical sciences, almost 47.9% of the students agreed that feedback helped them to find out their expected performance. The students also highlighted that there is a variation of feedback between tutor and tutor, and there is a demand to have some structured process for feedback.[11] Our study reported a higher percentage of students' satisfaction which may be due to the fact that the feedback provided was planned and structured. A study conducted among 200 students in the UAE reported that 89% of students mentioned that feedback makes them realize about their performance and the need to improve, and 95% of them felt that they deserved feedback when they had put so much efforts in assignments.[12] Another study conducted by Dinesh K Badyal on the impact of immediate feedback on students where he had compared two modules, one with feedback and the other without feedback, revealed that the Likert scale values were consistently in strongly agree/agree part, indicating a positive response to the feedback module. The major themes that emerged after FGD with students were that "Immediate feedback was

an excellent way for self-assessment and improved their deeper understanding of content areas. It supplemented their traditional learning habits, stimulated them to read more, and the students enjoyed its nonthreatening nature."[13] This is similar to the findings of our FGD where the students highlighted that feedback helped to enhance their motivation, self-realization, and communication skills. Our results are also similar to a study conducted by Aggarwal *et al*. where students were exposed to different types (written and verbal) and modes (group and one to one) of feedback. One of the findings of the study was that one-to-one feedback may be even more helpful in eliciting the learning gaps and motivating more accurate self-analysis by weaker students.[14] Thus, the present study has highlighted that students are highly receptive toward feedback provided it is structured, constructive, and helps them accomplish their learning objectives.

In the present study, most of the faculty (80%) felt motivated to give feedback to the students after the hands-on experience. However, only 20% of the faculty agreed that the process of feedback was easy to carry out, indicating that there was an apprehension among the faculty regarding the feasibility of giving feedback after assessments. The most common barriers identified by faculty are time and workforce constraints. A study conducted by Al-Hattami. A on the perception of teachers and students on the role of constructive feedback showed that both teachers and students realized the importance of feedback on students' learning. In this study, however, most teachers and students did not see that time or any other reason could be deemed a barrier to not providing constructive feedback.[15] In another qualitative study titled "Barriers and Facilitators to Effective Feedback"[16] conducted on multispecialty resident focus groups, the residents described the constraint between managing the busy pace of clinical work and making time for feedback, thus limiting the availability of feedback. In medical education context, feedback must be an integral constituent of the learning process and the perceived barriers can be overcome through proper planning and orientation of both students and faculty. Moreover, if consistently practiced, the feedback process becomes easier and feasible both for teachers and students.

Conclusion

The positive responses we received from both the students and the faculty indicate that the practice of giving feedback can be incorporated into the curriculum as it is well perceived by both students and teachers provided the feedback is structured and constructive. For the teachers, these interactions help in the assessment of their teaching strategies and enable them to re-design/plan effective learning strategies as per the needs of the learners. If properly planned and implemented, it can go a long way in motivating the students to become better learners in future. If consistently practiced, the feedback process becomes much easier and an integral part of the routine assessment process.

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Conflicts of interest

There are no conflicts of interest.

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