



PERCEPTION OF MEDICAL STUDENTS ON FEEDBACK IN MEDICAL EDUCATION

Dr. Prof. B V Sreedevi

M.S., FRCS.,

Dr. Suprajha K. S.*

M.B.B.S. *Corresponding Author

ABSTRACT **Background:** Feedback constitute central aspect of learning. Though teaching is directly related with effective and appropriate feedback, it has been largely neglected particularly from the student point of view. This paper explores student perspective of feedback.

Objective: To conduct a study to find out from final year medical student about their knowledge of their feedback whether they receive feedback about their performance and how feedback helped them to improve their performance.

Method Of Study: 30 final year medical students were chosen among them, 18 students volunteered for the process and answered the questionnaire which was subjected to statistical analysis.

Result: Statistical analysis of the questionnaire were done which revealed medical students liked the feedback process and viewed that it has positive effects in improving their understanding of the subject, help to score more marks and nurture student teacher relationship.

KEYWORDS : Feedback, medical education, medical research

INTRODUCTION:

Feedback is an essential part of medical education and training which if carried out effectively, helps to motivate learners and develop their knowledge, skills and behaviour. Challenge for giving feedback is how to engage with learners in ways that are likely to result in these discernible changes.

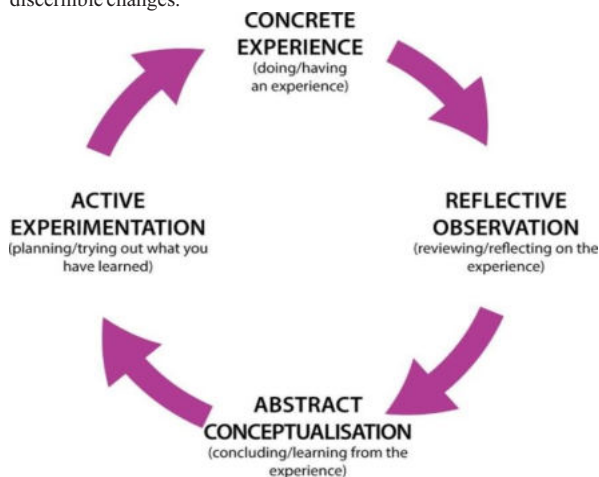


Fig 3

Definition

The definition of feedback in the Merriam-Webster dictionary is "the transmission of evaluative or corrective information about an action, event, or process to the original or controlling source," or "the return to the input of a part of the output of a machine, system, or process." The definition has acquired a more specific meaning in education, specifically medical education. Over the last few decades, feedback in medical training has obtained special importance and attention due to its growing importance in education. It was our better understanding of how we learn that helped us to realize the importance of feedback in the educational process. (1)

Components Of Feedback

A summary of the components includes:

1. Observation of performance - Thorough and detailed observation is the basis for accurate evaluation and feedback. Feedback providers have to observe with critical eyes the learners' performance to formulate their assessment. The crucial observation is an educational skill that needs development and continuous improvement.[2]

2. Evaluation of performance - Learners' level of performance has to be accurately evaluated to provide valuable feedback. Based on the accurate assessment, feedback providers can guide and facilitate learners to move to the next level of performance.

3. Guidance to the next level of performance- Guiding the learners to improve performance to the next level is an essential component of feedback. The guidance includes describing the next level of performance with some detailed description and relating it to the current level. It also includes discussing the importance and relevance of the next level to the goal of education as part of adult education.

4. Facilitation of performance improvement - After discussing the next level of learning, feedback providers should facilitate this journey, including educational resources, learning activities, and or timeline for the learning level.

Types of Feedback

Classification of feedback types may follow various purposes. Feedback can classify into different types depending on the purpose, content, process, and mode of delivery. No classification has universal acceptance. In this activity, all the possible variations will be included and briefly reviewed. It is useful to be familiar with the various types.

Classification According To:

1- Process and settings of feedback [3]:

A.) Formal feedback. It is a planned, structured, and scheduled feedback. It is usually conducted at mid-rotation or mid-course to assist learners in optimizing their learning in the remaining part of the rotation. It can occur at other times, e.g., end of the educational activity, after a significant educational event, or after observation of a substantial learning deficiency. Most of the recommendations, elements, and requirements of feedback focus on this type.

B.) Informal feedback. It is a short, immediate, and focused feedback. It usually takes place during or immediately after the educational activities.[4] It facilitates and enhances the learning experience while it is taking place. It mixes easily with traditional teaching or training. The difference between feedback and instruction in these situations is that feedback should focus more on principles, concepts, and patterns than particular facts or events. Also, feedback should guide and facilitate the progress of the learning process.

2- Purpose Of Feedback:

A.) Constructive feedback. It is task-focused feedback that aims at building and improving the learning experience. Ideally, all feedback should be constructive.

B.) Inspiring feedback. This feedback aims at motivating learners to enhance motives and optimize the self-confidence and achievement potentials. Inspiring feedback has proven to be a powerful tool in education. Inspiring is one of the most influential and most essential elements of leadership.

C.) Corrective feedback. It is short, frequent, and task-focused feedback aimed at correcting frequent or significant mistakes or below normal performance.[5]

3 - Breadth Of Feedback:

A.) Formative feedback. It is a short ongoing type of feedback that is given frequently during learning to facilitate and improve the learning experience while it is happening. It follows the same principle of formative assessment in terms of the details and content.[6]

B.) Summative feedback. It follows similar details and content of the summative assessment, in addition to the guidance and facilitation of feedback. It usually takes place at the end of the educational event or major step. It focuses on overall performance, concepts, and patterns. It is structured and planned.

4 - Delivery Of Feedback:

A.) Sandwich feedback. The term derives from the fact that one layer (usually the weak points of feedback) becomes sandwiched between two layers of strength points or encouragement. It is a common style of providing feedback. It is a natural and traditional way of providing insight to make it acceptable and well perceived. There have been significant discussions, reviews, and criticism in the literature on this style.[7] It is not an ideal or highly valuable style. But it is a simple and convenient way for many feedback providers. Educators should not be discouraged from using sandwich feedback if this is what they know the most. But they should be encouraged to expand and improve their feedback styles.

B.) Pendleton feedback. This style of feedback came from Pendleton and his group and described in their book "The Consultation: An Approach to Learning and Teaching. Oxford University Press, Oxford". It is of high educational value, comprehensive yet straightforward, dialogue-based, learner centered discussion, and easy to reproduce. Medical educators claim that it is more likely to motivate adults to learn. The central concept of this style is that the discussion starts with and focuses on the learner's input. Then the feedback provider will share the educator's view.

It starts with the positive or strength points then shift to the weaknesses or points of improvement. So the educator will start the feedback by asking the learner about own perception of what went well. Then, it is the educator's turn to provide insight. A discussion of improvement points occurs in the same way. Then an action plan for improvement is made.

Challenges In Feedback

There are many challenges in using feedback at multiple levels, starting from knowing, reading, and studying feedback to seeing and measuring the educational outcomes from using the feedback.[8] A review of these challenges will be discussed here with comments and opinions on how to handle these challenges.

1 - Feedback underuse:

A common issue of feedback is that it often gets skipped in educational activities. This omission happens for a variety of reasons. Some of these reasons are busy clinical schedules, unplanned time or setting, unnecessary delays, lack of skills in providing feedback, and other reasons. Raising awareness of the importance of feedback in medical education, enhancing cultural and institutional feedback practice, regular faculty development activities, proper and advanced planning of providing feedback, the inclusion of feedback in the educational curriculum, and regular re-evaluation of the progress in enhancing the practice of feedback are among the solutions to raising the level of using feedback.

2 - Generality And Brevity:

Many feedback providers use brief and general feedback. Terms like "good job," "perfect," "well done," and other similar brief phrases have frequent use in suboptimal feedback. These terms and descriptions are inspiring and encouraging, but otherwise, have minimal feedback and educational value. Learners need to know what parts of their performance were high or low and why. They need to know how to optimize the high performance and improve the low performance with guidance and improvement efforts. Complete feedback is an essential component of education.

3 Delayed Feedback:

The feedback that is far from the time of performance time is of much less value than the immediate feedback. Depending on the type and purpose, feedback given soon after a performance is of higher educational value. It relates well to the events, contains enough and specific details, and has strong corrective influence. In a group

performance and feedback, immediate debriefing has high educational value. The exception of this rule is the summative feedback given for a term training or extended courses in which enough observation and evaluation are necessary before providing meaningful feedback.

4 Misperception:

This issue is one of the most challenging issues in providing feedback. Learners often misperceive their feedback and feel low when informed of their weak points, leading to avoiding feedback or justifying their performance. All efforts should be to facilitate learners' perception of feedback as an opportunity of learning, almost like one to one coaching. Offering giving feedback rather than forcing it, using dialogue rather than monologue feedback, giving the learner a leading role in their feedback, and choosing the right setting for feedback are all helpful points for the proper perception of feedback.

5- Improper Setting:

Feedback is often, unfortunately, given on the go, in the presence of others, in a rush, or when the learner is not aware and/or prepared. All of these circumstances are unfavorable settings for meaningful feedback. A busy clinical schedule with patients' care priorities often dictates such situations. It is a strong recommendation that feedback is scheduled and planned for in advance and that a debriefing time of a few minutes is done routinely after important clinical activity with an educational component.[9]

6 -Acceptance / Rejection:

Acceptance of feedback by learners is one of the most challenging and limiting factors. Learners would like to know how good their performance and find it challenging to accept weaknesses. This case is especially true when imposing the feedback on them. It becomes much easier when learners request and seek feedback themselves.

Significance Of Feedback

The importance of feedback has received extensive emphasis on medical education literature. Medical educators consider feedback as the cornerstone of medical education. Its delivery and effectiveness is an area of discussion and ongoing efforts in real medical education practice. Technology will likely contribute a significant role in feedback in the near future. Feedback is evolving, and innovative objective feedback methods are necessary for medical education. New technologies will likely play a significant role soon.

Best Teacher reflects and develops their teaching strategy based on feedback offered by students.

The most valuable form of feedback that is commonly used by teachers is a dialogue based on the reflection of the students.

Method Of Study:

30 final year medical students were chosen. Briefing was done about what is feedback with its implementation. 18 students took part in the process. Each were given clinical case scenario and clinical presentation was heard and feedback was given to them. Later questionnaire was given which they answered and returned.

Analysis:

No	Question	Answer	
		Yes	No
1	Do you know what is feedback?	12	6
2	Whether feedback sessions were conducted regularly?	6	10
3	Whether discussion type of feedback was good?	14	4
4	Does feedback help in clearing doubts?	16	2
5	Does feedback motivate you?	14	4
6	Does feedback help in scoring more marks?	18	0
7	Do you think you need feedback after every clinical presentation?	16	2
8	Do you think you need feedback after your theory exams?	12	6
9	Do you think feedback helps you to know what you have studied in that chapter?	10	8
10	Does it bring bonding on student teacher relationship?	14	4

Fig.1

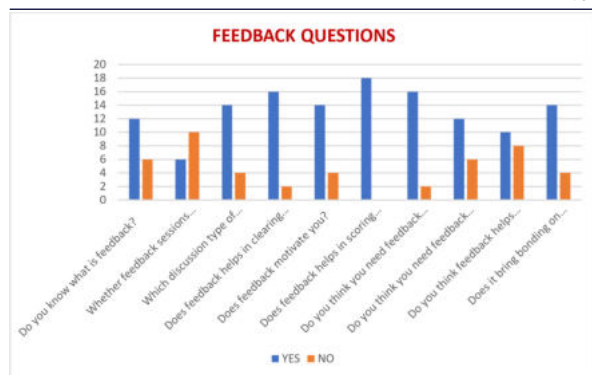


Fig2

CONCLUSION:

From statistical analysis, it is found out that medical students are aware of what is meant by feedback and they have a liking to get feedback often so that it improves their learning ability, performance and overall scoring capacity.

Students felt feedback is most important and it has the ability to assist in preparation for examinations and for applying skills in their area of study. They also emphasised its role as a strong motivator for a better learning and self esteem.

REFERENCES

1. Carr BM, O'Neil A, Lohse C, Heller S, Colletti JE. Bridging the gap to effective feedback in residency training: perceptions of trainees and teachers. *BMC Med Educ.* 2018 Oct 03;18(1):225.
2. Kogan JR, Conforti LN, Bernabeo EC, Durning SJ, Hauer KE, Holmboe ES. Faculty staff perceptions of feedback to residents after direct observation of clinical skills. *Med Educ.* 2012 Feb;46(2):201-15. [PubMed]
3. PubMed] Pelgrim EA, Kramer AW, Mookink HG, van der Vleuten CP. The process of feedback in workplace-based assessment: organisation, delivery, continuity. *Med Educ.* 2012 Jun;46(6):60412. [PubMed]
4. Gonzalo JD, Heist BS, Duffy BL, Dyrbye L, Fagan MJ, Ferenchick G, Harrell H, Hemmer PA, Kernan WN, Kogan JR, Rafferty C, Wong R, Elnicki MD. Content and timing of feedback and reflection: a multi-center qualitative study of experienced bedside teachers. *BMC Med Educ.* 2014 Oct 10;14:212. [PMC free article] [PubMed]
5. Katz-Sidlow RJ, Baer TG, Gershel JC. Providing rapid feedback to residents on their teaching skills: an educational strategy for contemporary trainees. *Int J Med Educ.* 2016 Mar 20;7:83-6. [PMC free article] [PubMed]
6. Junod Perron N, Louis-Simonet M, Cerutti B, Pfarrwaller E, Sommer J, Nendaz M. The quality of feedback during formative OSCEs depends on the tutors' profile. *BMC Med Educ.* 2016 Nov 15;16(1):293. [PMC free article] [PubMed]
7. Brown LE, Rangachari D, Melia M. Beyond the Sandwich: From Feedback to Clinical Coaching for Residents as Teachers. *MedEdPORTAL.* 2017 Sep 18;13:10627. [PMC free article]
8. Kornegay JG, Kraut A, Manthey D, Omron R, Caretta-Weyer H, Kuhn G, Martin S, Yarris LM. Feedback in Medical Education: A Critical Appraisal. *AEM Educ Train.* 2017 Apr;1(2):98-109. [PMC free article] [PubMed]
9. Aggarwal M, Singh S, Sharma A, Singh P, Bansal P. Impact of structured verbal feedback module in medical education: A questionnaire- and test score-based analysis. *Int J Appl Basic Med Res.* 2016 Jul-Sep;6(3):220-5. [PMC free article] [PubMed]