Research Article

Positive feedback: a tool for quality education in field of medicine

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ABSTRACT

Background: Feedback in medical education is an integral and important constituent of teaching as it encourages and enhances the learners' knowledge, skills and professional performance. Feedback has to be delivered in an appropriate setting; it should focus on the performance and not on the individual; should be clear and specific; delivered in non-judgmental language; should emphasize positive aspects; be descriptive rather than evaluative; and should suggest measures for improvement.
Methods: 20 Post Graduate Student from surgery department was selected for the study.
Results: Constructive feedback is defined as the act of giving information to a trainee through the description of his/her performance in the observed situation. It emphasizes the strengths of the session and areas which require improvement. The processes of giving and receiving feedback are skills that can be acquired only with practice with improvement in Pg student's skill and knowledge.
Conclusion: To integrate the concept of feedback in medical education, training of the trainers pertaining to techniques of adult learning and how to give feedback to trainees are foremost requirements. Interactive feedback is indispensable in bringing about professional development and overall improvement in doctors.

Keywords: Feedback, Medical education, Constructive feedback, postgraduate

INTRODUCTION

Feedback can be described as a process which comprises communication of information followed by reactions to such communication. It has been defined as specific information about the difference between a trainee's observed performance and a given standard with the target of achieving improvement in performance of the trainee.[1] Feedback in medical education is an integral and important element of teaching as it encourages and enhances the learners' knowledge, skills and professional performance. It aids in improvement of the performance of the learners with the basic aim of helping them achieve their goals in addition to the educational objectives.[2,3] In the absence of feedback from teachers, learners have to rely on self-assessment to determine what has gone well and what needs improvement. But this self-assessment does not consistently help in identifying learners' own strengths or weaknesses. Learners may also interpret an absence of feedback as implicit approval of their performance. The potential of feedback can be maximized provided the teacher is receptive to suggestions for change and willing to improve.[4] Feedback can be considered as constructive in the process of learning if it is delivered immediately and in a sensitive manner.[5,6] It is well documented that in academic settings, students learn more effectively when peer feedback is an inherent constituent of the overall assessment.[7] Many researchers have demonstrated the potency of feedback as a mechanism to improve learning outcome.[8] However, despite consensus that feedback is an important aspect of improved learning capabilities, the available literature on feedback has revealed an increase in numbers of reports of dissatisfaction both from learners' as well as educators' aspects.[9]

METHODS

20 Post Graduate Student was selected for the study. All Students were observed during various activities like morning round, history taking, approach to the patient, journal club presentation, seminar presentation, case presentation, teaching UG students and interns. Intraoperative skill and management of patient were all observed. PG students' behavior and their attitude toward UGs, patient and fellow post graduate student were observed. Timely feedback was given to each student after completion of the activities. Feedback was also given monthly at the end of the clinical posting of the student. Some student was also given negative feedback but in a constructive manner. Student was called separately and feedback was given privately. Motivating feedback was also given.

RESULTS

1. There was significant improvement in the behavior, attitude and approach of the PG students towards various activities.
2. Positive feedback encouraged the student to improve their history taking skill, management of patient and intraoperative skill.
3. There was a definite change in the overall development of the students into professional doctors.
4. Students were also motivated to study the subject, improve their theoretical knowledge which ultimately improved the patient management skills.
5. Students were also happy about the feedbacks given to them which encourage them to do their work sincerely.
6. Feedback also indirectly improved the UG and intern skill as well.

Figure 1: Various activity during which positive feedback where given to PG students.

Figure 2: Twelve tips for giving feedback effectively in the clinical environment.

DISCUSSION

Characteristics of an effective feedback

The mentoring relationship between teacher and learner is crucial in giving effective feedback. Feedback has to be delivered in an appropriate setting; should focus on the performance and not on the individual; should be clear, specific and based on direct observation; has to be delivered using neutral, non-judgmental language; should emphasize the positive aspects; be descriptive rather than evaluative; begin by encouraging self-assessment by the trainee. It should acknowledge and reinforce their exemplary behavior which will give them confidence in their skills; highlight areas requiring improvement; and suggest measures for the same. For a perfect outcome, the sender and receiver of feedback should work together as a team and thus help to achieve a better output for the trainees.[10,11] To improve the quality of teaching, qualitative and quantitative approaches have been used to obtain feedback from the participants on the course. The participants suggested meeting some pre-requisites (viz. establishment of an appropriate interpersonal climate; using an appropriate location; establishing mutually agreed upon goals; eliciting the learner's thoughts and feelings; being non-judgmental; and offering suggestions for improvement) in order to give feedback effectively.[12]

Types of feedback

Feedback can be broadly classified in two categories – positive (constructive feedback) and negative. Constructive/ positive feedback is defined as the act of giving information to a trainee through the description of their performance in the observed situation.[13] It emphasizes the strengths of the session and areas which require improvement. Major impact has been observed when a student compares the teacher's/audience feedback with his or her own performance. The discordance between the desired and the actual performance acts as a strong motivating factor.[13] The medical education unit of the National Academy of Medical Sciences, Nepal, has identified the principles which should be followed while giving constructive feedback: '*ABCDEFG IS'* - amount of information; benefit to the trainees; change behavior; descriptive language; environment; focused; group check; interpretation check; and sharing information.[11] Negative feedback can depress and discourage the learner and it should be avoided.[13] One of the other studies has classified feedback in three types: brief, formal and major. Brief feedback is usually given on a daily basis and is related to an observed action or behavior. Formal feedback involves setting aside a specific time for feedback, such as after an interaction with a patient in an outpatient clinic. Major feedback occurs during scheduled sessions at strategic points during a clinical rotation, usually at the midpoint, and serves to provide more comprehensive information to the learner so that he or she can improve before the end of the rotation, when the final evaluation is performed.[10]

Bridging the gap

Every medical college/institute should establish a medical education unit (MEU) in their institute. The members of the MEU must be trained in conducting faculty development programs as a part of MEU activities. This should be followed by the organization of regular workshops/courses to develop the faculty in the presence of external or a third party observers. These workshops can be used as a platform to inculcate the skills of giving effective feedback and to reinforce the fact that giving and receiving feedback are skills that can be acquired only with repetitive practice. The institution should also develop a process for monitoring the feedback process in lectures, practicals or in clinical postings. Video recording of the feedback sessions can prove a very useful technique for monitoring a feedback session. Teachers have a responsibility to provide meaningful feedback to learners and at the same time learners should expect and seek feedback (Schartel,[2] 2012).

Most clinicians are familiar with the concept and principles of giving feedback but often it remains underused, probably because the teacher is concerned about the impact of negative feedback upon the trainee and upon the future trainee-trainer relationship (Branch & Paranjape,[10] 2002). Although there are many resources available to assist medical educators with feedback delivery skills, an understanding as to why physicians and students struggle with feedback conversation is important. In a qualitative content-analysis review to identify the probable reasons for the apparent disconnect between what should be happening and what is actually happening during feedback conversations, it was revealed that though solutions are available to bridge this gap, nevertheless there was little or no explanation for the reasons behind the observed deficiencies.[14]

Considering that resident doctors play an important role in the education of medical students, a survey-based observational study revealed that peer observation and feedback of residents' teaching during work rounds is not only feasible but also rewarding for the involved residents and thus should be encouraged.[15] Moving a step further, the findings of another study revealed that the provision of feedback by faculty staff to resident doctors after observing resident-patient interactions is a complex and dynamic process. In this feedback-giving exercise, there is definite scope for the adoption of a potential newer approach that can assist in enhancing the effectiveness of the feedback of faculty members and thus, ultimately, in faculty development.[16] To integrate the concept of feedback in medical education, training of the trainers pertaining to techniques of adult learning and how to give feedback to trainees is one of the foremost requirements.[17]

Delivering feedback

The feedback can be offered in different ways to the learners.[10,18] A frequently-used method is the 'feedback sandwich' in which the top slice of bread is a positive comment (viz. about what the learner has done well); the middle of the sandwich is an area of improvement (viz. in what areas learner needs to improve); and the bottom slice of bread is another positive comment, to end the session on an upbeat note.[19] Another technique, PEARLS, describes the skills which can be used for developing trust between the educator and the learner. These skills include fostering a partnership for joint problem solving, empathic understanding, apologies for barriers to the learner's success, respect for the learner's values and choices, legitimization of feelings and intentions, and support for efforts at correction.[19] Medical graduates have to learn key clinical skills like history taking, physical examination, communication and counseling skills through patient care; as also in simulated experiences. As the learner progresses from amateur to competent practitioner, experienced faculty staff must observe the performance and take an account of key areas of success or remediation. This direct observation forms the basis of the feedback session. Feedback on behaviors based on direct observation by the teacher has been reported to be more learner-friendly and instructive than feedback based on second-hand reporting.[20] Ultimately, learners themselves should be encouraged to make efforts to elicit feedback either by

asking for it verbally or asking their audience to fill out a form.[21] Twelve tips for giving feedback effectively in the clinical environment Figure 2.

Feedback-seeking behavior

Feedback-seeking behavior can be defined as the conscious devotion of effort towards determining the correctness and adequacy of one's behaviors for attaining valued goals. In a literature review to gain a better understanding of feedback-seeking behavior, five key aspects of feedback seeking have been identified: the method used to obtain feedback; the frequency of feedback-seeking behavior; the timing of feedback seeking; the characteristics of the target of feedback seeking; and the topic on which feedback is sought.[22] A study reported three key factors influencing learners' feedback seeking behavior. The first and foremost parameter deals with the intention and characteristic of the feedback provider. It was observed that the learners were more receptive to feedback provided by people whom they trust. The second parameter was the nature of the relationship between the feedback seeker and provider as it assists in creating an enabling environment for better learning outcomes. The third factor was observed to be the motive of the learner.[23] Another study showed that individuals who sought feedback frequently were able to improve their work performance by setting feedback-based goals. As individuals gained feedback information, they were better able to adapt their goals, which benefited their work in the long run.[24]

Utility of constructive feedback

Giving constructive feedback has been considered a commitment between teachers and students for overall academic and professional development.[25] In the findings of a thesis it was concluded that the art of giving feedback to medical students about their performance and competence can act as a strong motivating factor.[26] The usefulness of giving constructive feedback privately to medical students at the time of bedside teaching has been well documented and is found effective in acquiring and developing clinical skills, communication skills and professional bedside manner by medical students.[27,28] In a randomized controlled trial done to determine the impact of a pocket card and feedback session on Internal Medicine residents, it was concluded that residents in the intervention arm felt that their clinical and professionalism/ communication skills have improved to a significant extent based on the feedback obtained from the inpatients.[29] A novel system of prescribing feedback to reduce errors was introduced as a pilot project in the paediatric unit of the University of Salford, United Kingdom. The initial results indicated that this technique could be easily adopted in different settings as there was a statistically significant reduction in the error rate between baseline and completion at 3 months of the pilot project.[30] In a nonrandomized comparative study to assess the effect of feedback on improving handovers it

was concluded that regular, real-time feedback can improve the accuracy and completeness of handovers in patient care.[31]

Barriers to feedback in medical education

A cross-sectional questionnaire-based study was conducted at the College of Medicine by the Department of Medical Education, Saudi Arabia, to explore the views of undergraduate medical students regarding the presence and sources of barriers to effective feedback in their settings. The study revealed that almost 45% of the undergraduate students indicated the presence of barriers to effective feedback (viz. absence of a clear system of feedback; inadequate skills of teachers for provision-effective feedback; and students' fear of insults due to feedback).[32] Another reported barrier in the feedback process is the role of culture and language in communication, which is of significance for international medical graduates whose first language, is not English.[33] Also, feedback delivered publicly, in a manner associated with shame and embarrassment to the learner, can make it more difficult for them to participate in feedback inquiry. Medical teachers may not be involved in curriculum development, so they might be uncomfortable in defining expectations from their learners.[34] Brief interaction with learners and busy schedules will result in limited opportunity for direct observation of learners.[35] Some of the myths associated with giving feedback generally encountered are: the ability to give effective feedback is the sole responsibility of the faculty; shouting is a form of effective feedback; residents are not able to give feedback effectively to their peers; and residents can't give effective feedback to the faculty.

Newer measures for strengthening the feedback process

The Medical Education Unit of Melbourne Medical School, Australia has devised the Communication and Language Feedback (CaLF) methodology to counter the barrier of language between teacher and international medical graduates. CaLF comprises a written tool and a video recording of role-plays of patient-doctor interactions in a classroom setting/in an objective structured clinical examination (OSCE) practice session with a simulated patient. The international medical graduates' trainees receive verbal feedback not only from their hospital-based medical clinical educator, but also from the simulated patient and linguists. The CaLF methodology acts as an efficient tool for medical educators and language practitioners to work collaboratively with international medical graduates to enhance their communication and language skills.[33] Another study finding suggested that these challenges can be mitigated by acknowledging the anxieties that learners (international medical graduates) may have, and by ensuring that all (learners and supervisors) are trained in feedback skills, and thus have a clear set of expectations.[36] Multisource feedback (MSF) has been recommended by the Accreditation Council for Graduate

Medical Education (ACGME) as a key method for assessing several of the competencies, including professionalism, and interpersonal and communication skills. MSF is an assessment approach that uses input from peers and colleagues to gather information about an individual's behavior in the workplace.[37] The Assessment of Professional Behaviours (APB) is one of the MSF programs developed by the National Board of Medical Examiners to provide physicians, medical students, resident doctors and fellows with feedback on the professional behaviors that are essential to the safe, effective, and ethical practice of medicine. The participants believed that the APB program had an appropriate structure and a clear focus on 'professionalism' rather than being an add-on to existing assessments. The behavioural focus of the form was perceived as an improvement over current practice.[37]

Implications for further research

It is essential to conduct broad-scale studies to determine various mechanisms for promoting quality feedback as a part of teaching-learning methods. Future research work should answer questions pertaining to different domains of the process of feedback such as quantifying/measuring outcomes of interventions aimed at improving strategies of trainees/learners to encourage feedback; current levels of teacher knowledge and skill in the area of feedback in the local settings of the institute; factors which can affect the success of feedback; and practical strategies to encourage feedback-seeking behavior among the students. Results derived from these studies will help the medical education unit members to modify/emphasize/ strengthen existing strategies so that the ultimate challenge of improving the learners' knowledge, skills and professional performance is met.

CONCLUSION

To conclude, interactive feedback is indispensable in bringing about professional development and overall improvement in doctors. It provides learners with information on past performances so that future performance can be improved. In the absence of adequate feedback, good performance is not recognized and problems with regard to clinical competence go uncorrected for long periods of time. In view of recent changes in medical working patterns, we have to create newer opportunities to observe trainees and thus provide quality & timely feedback to facilitate learning. Providing feedback to learners can sometimes be challenging to even the most experienced teachers. Frequently, there is a mismatch between educators' and learners' perceptions of the adequacy and effectiveness of feedback. Staff development is a key in increasing the teachers' comfort and skills in providing effective feedback. Given the complexity of medical education, the need is for better and complete understanding of the processes of giving, receiving, interpreting, and using feedback as a basis for real progress toward meaningful evaluation.

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