Feedback after continuous assessment: An essential element of students' learning in medical education

Sir,

Regarding the philosophy and goals at all levels of education in Nigeria, section 1, paragraph 9(g) of the National Policy on Education (revised 2004) stated that, "educational assessment and evaluation shall be liberalized by their being based in whole or in part on continuous assessment (CA) of the progress of an individual."[1] In line with this recommendation, CA of students is requirements in contemporary undergraduate medical and dental education in Nigeria. Assessment is said to be continuous when it is regular, cumulative, and comprehensive. CA of learners' (often referred to as test or in-course assessment) can therefore be defined as a mechanism whereby the final conclusion about learners' achievement in all domains of learning in a particular subject systematically takes account of all performances during a specified period of time.

From my experience as a teacher, much emphasis is placed on the summative role (awarding grades and scores) of CA in medical education in Nigeria, with a little or no attention paid to the formative role (to improve learning). The formative role of CA through the mechanism of feedback offers a great opportunity for medical teachers to assess students' continuous progress and institute a deliberate plan to improve learning in a clinical environment. Feedback often described as, "the heart of medical education" is central to the process of learning and constitutes the core purpose of a formative aspect of CA.[2]

In the context of medical education, feedback is complex. It involves "someone's thoughts on another person's performance that are delivered in a form that enables the recipient to listen to what is being said, receive it constructively, reflect on what has been said, and consider how to take action as a result in the same or related activity."[3] Medical students have stated that feedback, when effectively given, is a key step in the acquisition of appropriate cognitive knowledge and clinical skills to achieve expected outcomes; yet feedback is often omitted or handled improperly after CA.[2] One needs only to poll a few students in our medical colleges or think back to one's own training to appreciate how little priority is given to feedback. CA is routinely conducted during or after students' completion of a clinical rotation either as a written paper or clinical work, at best scores are awarded; the information so obtained are hardly used for the key purpose where it will be most useful providing it to the trainees in such a way as to improve their learning. Some of my students indicate that feedback after CA can be rare but fault finding which has a negative impact on self-esteem and confidence is not.

Effective feedback after CA is thought to promote learning by informing trainees of their progress, advising them regarding observed learning needs and resources available to enrich their learning, and motivating them to engage in appropriate learning activities. It is noteworthy that in the absence of feedback from medical teachers, students have to rely on self-assessment to determine what has gone well and what needs improvement; however, such self-assessment does not consistently help in identifying learners' own strengths or weaknesses.[4] On the other hand, learners may left in a world of uncertainty and guesses in the absence of feedback, not having where to turn for help.

Feedback may be offered in a verbal or written format to medical students, however, "face to face" verbal feedback is known to be more beneficial as it allows discussion and explanation which ensures optimal communication and understanding.[4] This does not always happen with written feedback. It also encourages teachers to describe the rationale for his or her decisions which is a useful skill and overcomes defensive response to challenge.

As teachers, we have to be aware that not all feedbacks are known to be helpful to students. For feedback to be effective and promote learning in medical education, it needs to be provided according to some guidelines.[5] Learners are known to act on feedback when it is specific, timely, focused upon the attainable, and expressed in a way which will encourage them to reflect on learning and feel the necessity to change. Feedback can be provided in public so that specific issues addressed to a particular student can be benefitted from by other students, since students often make similar mistakes, provided the elements of shame and embarrassment are avoided. Experience shows there is leveraging when students know that other colleagues are not immune to mistakes and are made to receive corrective feedback also. The usefulness of giving feedback to learners' immediately after bedside teaching has been well-documented and is found effective in acquiring and developing clinical skills, communication skills, and professional bedside manner.[2,4] A frequently used method of providing feedback to learners

is the "Sandwich technique" in which the top slice of bread is a positive comment (namely., first, state what has been done well and comment/praise the effort), the middle of the sandwich is an area of improvement (namely., second, state what areas learner needs to improve and necessary actions learners need to take for such improvement), and the bottom slice of bread is another positive comment, to end the session on an upbeat note. The essence of this is to avoid negative criticisms first which is often so common, rather identifying things properly done before dwelling on less satisfactory aspects and learn to end positively to avoid discouraging the learner.

Furthermore, feedback becomes helpful to learners when worded in a descriptive and nonevaluative format. A statement like "The differential diagnosis did not consider the possibility of a traumatic ulcer" is more effective as a feedback and preferable to "Your differential diagnosis is inadequate." In a clinical setting, especially feedback information should deal with specifics, making use of real examples; generalizations, such as references to a trainee's organizational ability, efficiency, or diligence, that are rarely useful information and are found to be too broad and may not be helpful and effective for students as a feedback.[6] In addition, feedback information becomes more effective to promote learning when it deals with actions, not interpretations or assumed intentions. For example, "The etiology of this condition was not considered in the treatment plan" is not likely to elicit negative feelings in the learner than would "Your choice of treatment plan indicates a lack of appreciation for the etiological factor."

Focusing on the learners' decision rather on the decision maker allows for a dispassionate review by both teacher and learner. Simply commenting on student's scripts to "work harder" or "you do not seems to understand the question" does not possess the qualities of formative feedback because it does not inform why and what they need to do. Failure to formulate an action plan addressing the deficiencies noted in the trainee's performance results in failure to close the "learning loop" and correct the identified performance deficiency.

Worthy of consideration is also the characteristics of an effective positive feedback. Appropriate positive feedback in medical education lets the trainee know that the task was done correctly, however it should be directed at the specific task rather than the trainee.[6] A statement like "That presentation of the patient's history was a very detailed and useful picture of the patient" will promote further learning, while statement like "You are excellent in your history presentation" will likely not. In fact, learners themselves should be encouraged to make efforts to elicit feedback by asking for it. Individual who sought feedback frequently is likely to improve their work performance by setting feedback based goals. As individuals gain feedback information, they will be better able to adapt their goals, which will benefit their work in the long run.

Despite the strengths associated with effective feedback after CA, one needs to recognize some barriers to the implementation in medical colleges in Nigeria. First is the large number of students admitted to medical schools coupled with limited faculty time. Considering that resident doctors play an important role in the education of medical students, the involvement of senior residents in providing effective feedback to students' is not only feasible but may also be rewarding for the involved residents and thus, should be encouraged. An awareness campaign sensitizing faculties to the impact of feedback on learning outcomes should be done, and institutions should create an enabling environment that appreciates faculties' contributions to feedback through rewards and incentives.

Second is the limited skill of most teachers in our medical colleges in providing effective feedback. I have recently begun training some of my colleagues how to give effective feedback, and the experience reminded me of Henderson *et al.*[3] comment that the ability to give effective feedback is a life-long skill, and one that all medical teachers need to develop if they are to engage in reflective practice in their teaching profession. Currently, few opportunities exist for such development. The establishment of the Departments of Medical Education in Nigeria medical colleges can play a major role in the implementation of effective feedback by providing training, monitoring, and evaluation of the process.

In conclusion, medical and dental students require regular sign offs in competencies logbook, summative use of assessments records, and in addition, they need ongoing supervision and effective feedback that promote learning through on-the-job discussions with their medical teachers. It is our responsibility to let learners benefit fully from such experience. More importantly, competence in teaching is now a requirement for medical teachers and professionalism and scholarship in medical education is now expected; teachers in medical colleges in Nigeria cannot be an exemption. It is my submission that a more holistic training of medical teachers in educational methodologies needs to be urgently addressed through compulsory formal faculty development programs in Nigeria Medical colleges.

Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.

HO Olasoji

Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, College of Medical Sciences, University of Maiduguri, Maiduguri, Borno State, Nigeria

Address for correspondence:
Prof. HO Olasoji,
Department of Oral and Maxillofacial Surgery,
University of Maiduguri Teaching Hospital,
Maiduguri, Borno State, Nigeria.
E-mail: soji273@yahoo.com

References

1. Federal Republic of Nigeria. National Policy on Education. 4th ed. Lagos: NERDC Press; 2004.
2. Branch WT Jr., Paranjape A. Feedback and reflection: Teaching methods for clinical settings. Acad Med 2002;77(12 Pt 1):1185-8.
3. Henderson P, Ferguson-Smith AC, Johnson MH. Developing essential professional skills: A framework for teaching and learning about feedback. BMC Med Educ 2005;5:11.
4. Milan FB, Dyche L, Fletcher J. How am I doing? Teaching medical students to elicit feedback during their clerkships. Med Teach 2011;33:904-10.
5. Ramani S, Krackov SK. Twelve tips for giving feedback effectively in the clinical environment. Med Teach 2012;34:787-91.
6. Ende J. Feedback in clinical medical education. JAMA 1983;250:777-81.

Access this article online

Quick Response Code:

Website: www.njcponline.com

DOI: 10.4103/1119-3077.188696

How to cite this article: Olasoji HO. Feedback after continuous assessment: An essential element of students' learning in medical education. Niger J Clin Pract 2016;19:692-4.