

Barriers to effective feedback in undergraduate medical education: Case study from Saudi Arabia

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ABSTRACT

Objectives: Students' feedback is an essential source of data for evaluation and improvement of the quality of education. Nonetheless, feedback may be routinely practised for accreditation purposes, and it is considered as a ritual employed by students, which makes its effectiveness questionable. The aim of this study is to explore and analyze the students' perceptions about the importance of feedback and the barriers for effective feedback and suggest proper ways to overcome these barriers.

Methods: This cross-sectional, anonymous, questionnaire-based study was conducted in the College of Medicine, Qassim University. A total of 299 medical students, composed of 185 male and 114 female, from different levels during December 2015 participated. Mean value, standard deviation, and proportion were used to quantify the quantitative and categorical study and outcome variables.

Results: 47% of students responded to the questionnaire with more participation of juniors and females. Half of the students believed that feedback is not important and agreed for the presence of barriers for effective feedback. 5th level students exhibited higher resistance for participation in feedback, and there was a significant difference between male and female students. Promisingly, most of the participant did not believe the presence cultural barrier for feedback.

Conclusion: Saudi medical students are willing to involve in effective feedback. Some barriers that make feedback practised as tokenistic is present. They can be overcome through proper orientation and appropriate closing the loop with response to the feedback declared to students. Further investigation is needed to explore barriers to feedback in higher education settings and help designing an approach to enhance the effectiveness of feedback on a national level.

Keywords: Feedback, higher education, Saudi Arabia, undergraduate medical education

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Introduction

Feedback can simply be described as communication of information followed by reaction to this information. It should be an integral constituent of teaching in medical education as it enhances the learners' knowledge, skills, and professional performance.

Ramaprasad^[1] defines feedback as the sharing of information on actual student's performance to help guide the future performance toward a desired goal.^[1] Studies revealed that students are experiencing problems with feedback,^[2] and they do not believe that feedback is important to the extent that educators do.^[3] In the Saudi medical education context, Al-Haqwi *et al.*^[4] found that approximately 45% of participant students indicated that there were barriers that decrease the feedback efficacy. These included the unclearness of feedback

system, insufficient skills of teachers for dealing with proper feedback process. Although students' fear of insult due to feedback contributed to the barriers to a lesser extent, most of participant students (74%) expressed willingness to receive high-quality feedback in the future.

On the other hand, students' feedback provides crucial data about the quality of the educational processes, and it is an indispensable part of the course and program evaluation to improve the quality of program provision. However, students to some extent consider it as a ritual practised as tokenistic to satisfy accreditation purposes, which renders its effectiveness debatable.

Therefore, the current study is designed to explore and analyze the students' perceptions about the barriers for effective

feedback in College of Medicine, Qassim University and suggest a proper ways to overcome these barriers.

Methods

This cross-sectional, anonymous, and questionnaire-based study was conducted in the College of Medicine, Qassim University. The college was established in 2001 and pioneered the problem-based learning (PBL) and community-oriented medical education (COME) approach in the Kingdom of Saudi Arabia (KSA) by implementing an integrated curriculum with emphasis on research and evidence-based medicine.

The nature of the curriculum includes an extensive system of feedback; some feedback mechanism is integrated in each educational activities. For example, all PBL sessions are concluded by mutual feedback where students expect to receive feedback about their performance, and they are asked to give their feedback about the session including the contents, performance of the group, and the tutor. In addition, students are announced to give a more elaborate feedback about different aspects of the educational process at the end of each course. For this purpose, an online survey is used, and a meeting of students with course organizer and phase supervisors for a semi-structured discussion is regularly scheduled.

The questionnaire has been developed after comprehensive review of relevant literature to include appropriate items to achieve the study objectives.^[4-8] It included the perception of students of the importance of feedback and the possible barriers that may hinder its effectiveness. The provisional barriers against giving effective feedback were discussed, through focus-group interviews, with students of both sexes and different levels, and teachers who have experiences in conducting and analyzing students' surveys before finalizing the questionnaire. The following potential barriers were chosen for probing: *"It is not fruitful; nobody will care," "It is after courses; we will not get any benefit," "College already knows our opinion with no action taken," "It is linked to our result so we do it as a routine."* In addition, due to the nature of Saudi community, the possibility of cultural constraints *"Feedback is not accepted in our culture"* was tested.

This study included the data obtained through the response to the questionnaire of 299 students of the College, (185 males and 114 females), from different program levels during December 2015. All participants were requested to give their opinions regarding the importance of the barriers. Students were requested to express their opinions regarding the importance of these barriers by rating each barrier on a 5-point Likert scale, 1 - strongly disagree, 2 – disagree, 3 - don't know, 4 - agree, and 5 - strongly agree. For analysis purposes, responses of strongly disagree and disagree were combined together as "disagree;" and responses of strongly agree and agree were grouped as "agree."

It was expected that the responses of students might rely on their levels of study or their experience, and therefore, we considered the 1st year students as "juniors" group, while 5th year students are considered as "seniors" group. Differences between these two groups were examined and analyzed. Comparison of responses of students from both genders was done as well.

Mean value, standard deviation, and proportion were used to quantify the quantitative and categorical study and outcome variables. Data have been analyzed using the Statistical Package for Social Sciences and Excel MS.

The proposal of this study was reviewed and approved by the Ethics Committee at the research center of the College of Medicine in addition to the Regional Research Ethics Committee - Qassim Province and this research funded by the Scientific Research Deanship, Qassim University.

Results

A total number of 299 students of 637 registered students in the college in the academic year 2014/2015, representing a response rate of 47%, have responded to the survey questionnaire. The rate of response among 1st year students "juniors" was 55%, while it was 36% of the 5th year students "seniors" [Table 1].

Barriers for students responding to feedback are summarized in Table 2.

Students feel that giving feedback to the college is not important because

| | |
|---|--|
| 1 | It is not fruitful, nobody will care |
| 2 | It is after courses, we will not get any benefit |
| 3 | College already knows our opinion with no action taken |
| 4 | It is linked to our result, so we do it as a routine |
| 5 | Feedback is not accepted in our culture |

Importance of feedback

Results showed that 51% of participant students do not realize the importance of feedback. 31% of participants agreed about the importance of feedback, while 18% could not decide and responded with "do not know" [Figure 1].

Figure 2 illustrates the perceptions of different students groups about the importance of feedback. Senior students exhibited more resistance to give feedback as 75% of them opined that they do not realize its importance while only 20% of juniors had same opinion [Figure 2a]. The difference is statistically significant ($P < 0.005$); however, almost one-third of juniors responded with the "do not know" option compared to 8% of the seniors. Male students were more rejecting the importance of feedback than female students. However, gender difference was statistically insignificant [Figure 2b].

Table 1: Number and percentage of students participated in this study

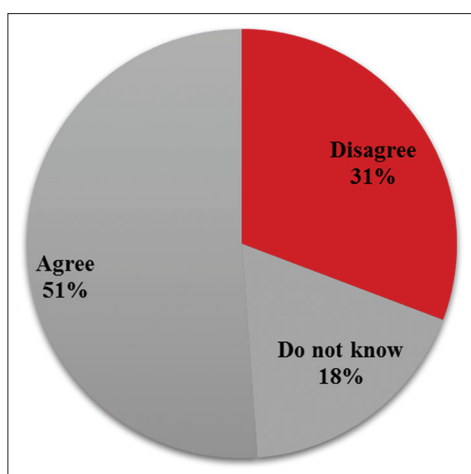
| Level | Students | | | | | |
|----------------------|--------------|-----------|---------------|-----------|--------------|-----------|
| | Boy students | | Girl students | | All students | |
| | Reg.* | Responded | Reg. | Responded | Reg. | Responded |
| | No. | n (%) | No. | n (%) | No. | n (%) |
| 1 st year | 109 | 68 (62) | 48 | 19 (40) | 157 | 87 (55) |
| 2 nd year | 85 | 44 (52) | 49 | 15 (31) | 134 | 59 (44) |
| 3 rd year | 75 | 14 (19) | 51 | 33 (65) | 126 | 47 (37) |
| 4 th year | 80 | 41 (51) | 40 | 29 (73) | 120 | 70 (70) |
| 5 th year | 65 | 18 (28) | 35 | 18 (51) | 100 | 36 (36) |
| Total | 414 | 185 (45) | 223 | 114 (51) | 637 | 299 (47) |

*Registered students

Table 2: Comparison of the perception of senior and junior students of the barriers to effective feedback

| Variables | n (%) | | P value |
|--|---------|----------|---------|
| | Agree | Disagree | |
| Students feel that giving feedback to the college is not important because | | | |
| It is not fruitful; nobody will care | | | |
| Junior | 63 (72) | 13 (15) | 0.071 |
| Senior | 28 (78) | 5 (14) | |
| It is after courses; we will not get any benefit | | | |
| Junior | 51 (59) | 23 (26) | 0.604 |
| Senior | 23 (64) | 11 (31) | |
| College already knows our opinion with no action taken | | | |
| Junior | 52 (60) | 15 (17) | 0.079 |
| Senior | 60 (69) | 7 (19) | |
| It is linked to our result, so we do it as a routine | | | |
| Junior | 62 (71) | 15 (17) | 0.025* |
| Senior | 31 (86) | 3 (8) | |
| Feedback is not accepted in our culture | | | |
| Junior | 21 (24) | 45 (52) | 0.125 |
| Senior | 8 (22) | 19 (53) | |

*statistically significant difference.

**Figure 1:** Overall percentage of responses about the importance of feedback

Barriers to feedback

Most students (58.3%) exhibited their objection about cultural non-acceptance as a barrier to effective feedback. Students attributed their refrainment of providing effective feedback to “*It is linked to our result so we do it as a routine,*” “*It is not fruitful; nobody will care,*” and “*College already knows our opinion with no action taken.*” They also ascribed their reluctance of giving appropriate feedback to the fact that “*It is after courses; we will not get any benefit*” [Figure 3].

Further analysis showed that senior students considered linkage of feedback to the announcement of results as the most challenging barrier reducing their participation in effective feedback, so they do it as a routine. The difference was statistically significant at $P < 0.05$. The junior students

exhibited a more tendency to consider that nobody will care about their opinions. However, the difference was statistically insignificant [Table 2].

Table 3 illustrates the gender difference of perception of the barriers to effective feedback. Male students significantly considered all barriers to be more consistent rather than female students. Tables 2 and 3 show that students regardless their gender or level in the program objected about the culture to be a barrier to effective feedback.

Discussion

The importance of students' feedback for improvement of the quality of program provision is unquestionable. The previous studies revealed that feedback is one of the most problematic issues during learning experience and pointed to some possible barriers that may hinder the effectiveness of the feedback process.^[2,4]

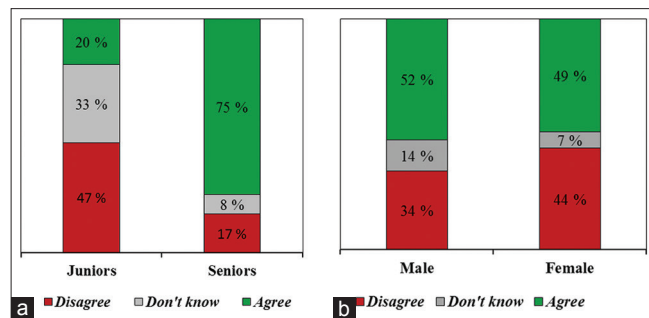


Figure 2: Responses of (a) juniors and seniors and (b) male and female to the importance of effective feedback

The present study revealed that more than half of students do not realize the importance of feedback, increasingly with advancement in the program. This matches to the low response rate of senior students to the current study questionnaire compared to junior students. This observation is in agreement with the finding of Al-Haqwi *et al.*^[4]

Almost one-third of junior students could not give a rigid opinion about realizing the importance of participation in feedback. The ratio declines to only 8% of senior students indicating increasing lack of interest of senior students in participation in effective feedback, which most likely reflects their experience during study years. It is striking that data from the present and previous studies^[4] suggest that early-year students are more cooperating in giving feedback, but they lose momentum as late-year students.

Most of participant students, regardless their gender or level in the program, exhibited their objection about the culture as a barrier to effective feedback. Similar results were shown by early studies in the Saudi context;^[4] this means that the culture and the community of the KSA encourage giving and receiving feedback. Students showed their interest and willingness for more professional feedback; however, negative feeling or experience with the feedback process resulted in their reluctance to participate.

Participant students considered linkage of giving feedback to the announcement of results as the most challenging barrier reducing their participation in effective feedback, so they do it as a routine. They reported that they are commanded to complete mandatory course evaluation questionnaires, without

Table 3: Comparison of the perception of male and female students of the barriers to effective feedback

| Variables | n (%) | | | P value |
|--|----------|----------|--|---------|
| | Agree | Disagree | | |
| Students feel that giving feedback to the college is not important because | | | | |
| It is not fruitful; nobody will care | | | | |
| Male | 124 (67) | 31 (27) | | 0.0097* |
| Female | 91 (49) | 9 (8) | | |
| It is after courses; we will not get any benefit | | | | |
| Male | 113 (61) | 52 (46) | | 0.004* |
| Female | 65 (35) | 30 (26) | | |
| College already knows our opinion with no action taken | | | | |
| Male | 114 (62) | 30 (26) | | 0.0064* |
| Female | 88 (48) | 15 (13) | | |
| It is linked to our result, so we do it as a routine | | | | |
| Male | 136 (74) | 21 (18) | | 0.0026* |
| Female | 81 (44) | 18 (16) | | |
| Feedback is not accepted in our culture | | | | |
| Male | 41 (22) | 107 (58) | | 0.07 |
| Female | 15 (13) | 69 (61) | | |

*statistically significant difference.

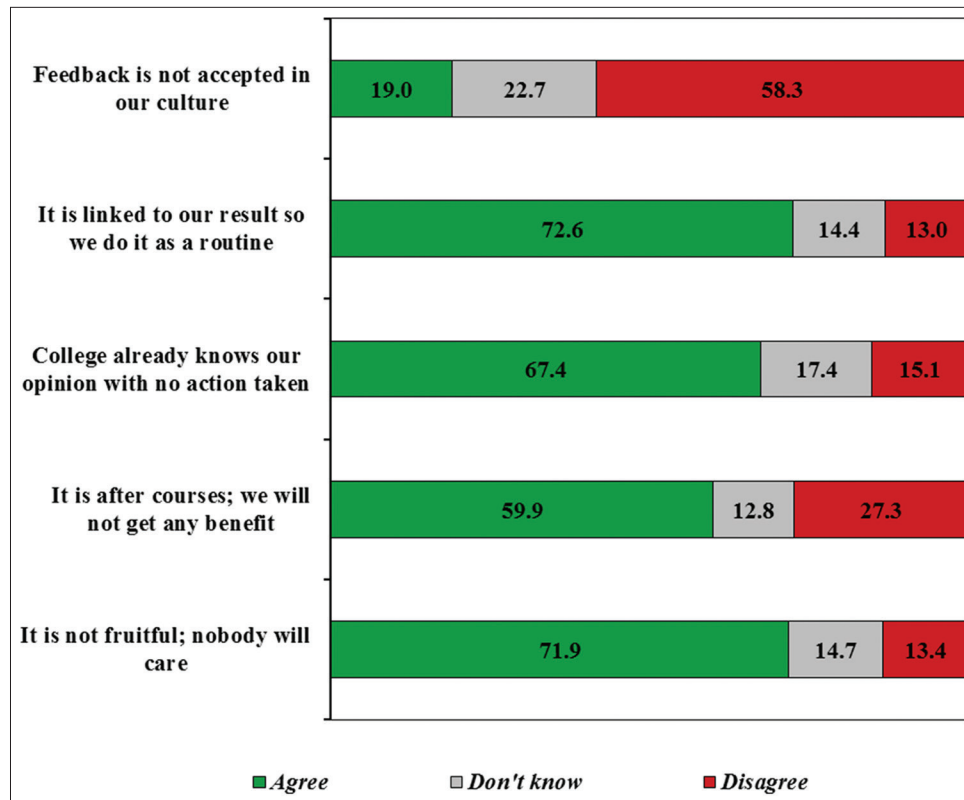


Figure 3: Students opinions about the barriers that may prevent the participation in feedback

ever seeing the “fruits of their effort.” They did not believe that any change was going to result from their opinions. They felt that this collection of feedback represented a ritual, employed by staff to satisfy accreditation purposes.

The current findings clearly indicate that the reluctance of students in the participation of effective feedback is related to the orientation and management of feedback process and its outcome and benefit. The observed gender variation provides support to this assumption; the lower perception of the barriers by female students is likely because of the closer of student-faculty contact in the female campus provides more opportunities for listening and exchanging opinions.

To counter students tendency for refrainment of giving feedback, it is important, as recommended by Molloy and Boud,^[9] that educators take on leadership in this feedback space.

Changing feedback practices are not a matter of tweaking verbal interactions or simply increasing the frequency of feedback exchanges but rather demand a thoughtful obligation to curricular reform with purposeful and structured opportunities for learners to involve in feedback activity, to put into place improvements based on feedback and finally, and to reassess performance against newly set standards. This system-orientated approach to feedback needs up-skilling

of both teachers and learners and requires consideration of context, culture, and relationships to learning.^[9]

In medical education context, feedback must be an integral constituent of the learning process as it encourages the learners’ knowledge and skills improvement and enhances their professional development. It supports improvement of performance of learners helping them achieving their goals toward the educational objectives.^[10,11]

Awareness about the importance of feedback in medical education must be achieved through intensive tutorials to students and educators. In addition, the college must care about the opinions of students given in the feedback and action plan must be taken and communicated to them.

Students should be oriented that their feedback would be acted on by the college, and therefore, it is worthwhile investing in the process as it will be going to benefit them and their colleagues. Students should feel that there is a genuine effort from the college administration to implement their suggestions to improve the quality of education. These will improve student satisfaction and enhance their appropriate participation in effective feedback.

Course and program evaluation based on students’ feedback acts as potent data to improve the quality of education.^[9] Medical school leaders should “perceive” and “sell” the feedback

process as a tool for quality improvement, rather than as a duty that must be done to respond accreditation requirements. Educators should respond to the results of student feedback to make students believe that any change has resulted from their opinions “fruits of their effort.”

To the best of our knowledge, this research is the first study conducted on a large number of male and female Saudi medical students to explore the sources of barriers to effective feedback. A similar study was done by Al-Haqwi *et al.*^[4] conducted on 168 male Saudi medical students. The study proved the presence of obstacles, as perceived by male medical students that could significantly disturb the process of feedback and minimize its utilization by medical students.

Conclusion

It is concluded from the present and previous studies which revealed that Saudi medical students are willing to involve in effective feedback. Some barriers are present that makes feedback practised as tokenistic to satisfy accreditation purposes; still, these barriers can be overcome through proper orientation and appropriate closing the feedback loop mechanisms.

The sources of barriers to effective feedback in this and other studies are slightly different. Further investigation is needed to explore different barriers to feedback in higher education settings on a national level. Investigating students as well as educators opinions related to these barriers would suggest a proper way to enhance the effectiveness of feedback.

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