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Research Article

**FEEDBACK MECHANISM ROLE TO REDUCE FRUSTRATION
FOR BETTERMENT OF EDUCATIONAL EFFECTIVENESS: A
CROSS-SECTIONAL RESEARCH**¹Dr. Faiez Shafique, ¹Dr. Umair Akram, ²Dr. Muhammad Kashif ul Ehsan¹Central Park Medical College, Lahore²Senior Registrar Abwa Medical College and Research Hospital Khurianwala Faisalabad**Abstract:**

Background & Objective: In the outcome-based curriculum, feedback has been dubbed as a salient strategy for the sake of learning. Owing to students' beliefs and perceptions, students do not pay much heed towards the significance of the feedback. This lapse on the part of students will not boost improvement of the performance of the students. This research will focus to identify the feedback purpose, perception of students about useful feedback and prevalent beliefs about feedback mechanism.

Methods: Our cross-sectional was conducted at Services Hospital, Lahore (August, 2016 to September, 2017) on 121 students. Students who were in the clinical phase studies were registered. Data was obtained on the self-prepared questionnaire. Its analysis was carried it accordingly.

Results: Most of the students (45.5 percent) were of the view that getting grade is not the hallmark of the feedback. Tutor's lack of productive feedback was seen in 49.6 percent of the students. Upon asking about the objective of feedback, 62.8 percent seconded the two-way feedback. Approximately, two third i.e. 67.8 percent of the students were agreed that inadequate feedback was one of the reasons of their frustration.

Conclusion: As far as awareness of the students about the feedback objective is concerned, they are quite abreast of it. It is especially authenticated by the senior students who believed that feedback is vital in the academic performance and can be a factor in lessening their frustration. Such findings require enhanced structured feedback mechanism and call for improved engagement of faculty plugging of training gaps for efficient educational association.

Keywords: Outcome-based curriculum, Feedback, Training, Constructive and Strategy

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INTRODUCTION:

Feedback has a poignant significance in terms of teaching, learning and result-oriented curriculum. Reports on perception of students about this key factor has already been a part of literature [1]. It is considered a link between assessment and self-motivated study. In improving student's attitude towards learning, this approach is termed as cost effective [2]. It is meant to accept the views of result-oriented education [3]. It is a process in which student and teacher agree to acquire some pre-established goals. Purpose of the perception and feedback about the useful feedback and prevalent believes about feedback are significant factors in achieving those objectives [1, 4]. If there is no existence of feedback, inadequate performance cannot be ameliorated, a suitable practice will not be reinforced and the way of improvement cannot be sorted out [5]. Besides manners, a feedback is a motivational ingredient in order to polish clinical skills and acquire communication skills [6].

In medical education, insufficient feedback has been known as significant issue [7]. De-motivation can also be caused by ineffective and unprofessional delivery of feedback. Majority of the doctors are conversant with the principles and concepts of feedback. However, it is not commonly used practice due to emotional response to feedback, learning culture, peer relationships etc [8]. In various reports, it has been observed that those students perform better and feel comfortable who are exposed to feedback in their early career. These students improve not only their psychomotor skills but also excel in their learning [9]. It has also been reported in a study that many students do not pay attention towards the need of feedback and they rather are inclined to improve their grades to avoid failure [10]. In medical studies, feedback seeking behaviour can pave the way to learning improvement especially when an educator emphasises a particular area to improve. It is the responsibility of the educators that their message about feedback is fully understood [8, 10]. Students may be negligent of the application and understanding of feedback in numerous circumstances. Therefore, a mutual and an effective understanding should be developed to tackle this kind of implication [11].

This research will focus to identify the feedback purpose, perception of students about useful feedback and prevalent believes about feedback mechanism.

METHODS:

Our cross-sectional was conducted at Services Hospital, Lahore (August, 2016 to September, 2017) on 121 students. All participants were volunteers. In order to fill the questionnaire, an informed consent was sought too. By using enumeration sampling method, the data collection was ensured.

For the sake of data collection, a self-constructed questionnaire was distributed amongst the respondents. In 2 phases, the validity and psychometric properties of the questionnaire were examined. During 1st phase, three field specialists commented and assessed validity of content. During 2nd phase, Split-half method and Cronbach Alpha was utilised for questionnaire reliability. In order to ensure good reliability of the questionnaire, 0.71 was the value of α . 21 items were included in the ultimate questionnaire. A five-point Likert scale was used having ranges such as "strongly disagree" to "strongly agree". The questionnaire was added with 2 open-ended questions in order to verify the judgement of students about current process of feedback and their recommendations for ameliorating the process of feedback.

By using SPSS, the analysis of the data was made. Quantitative and qualitative variables were presented in tabular form. Application of Fisher Exact and Pearson Chi-Square tests were ensured to check a connection among gender, feedback related questions and studying years. We also applied Pearson Correlation to identify link between GPA and general themes. By using thematic contents, the analysis of the open-ended questions was made. Identification of numerous themes was made and the relevant responses were classified on the basis of consensus between 2 experts.

RESULTS:

Most of the students (45.5 percent) were of the view that getting grade is not the hallmark of the feedback. Tutor's lack of productive feedback was seen in 49.6 percent of the students. Upon asking about the objective of feedback, 62.8 percent seconded the two-way feedback. Approximately, two third i.e. 67.8 percent of the students were agreed that inadequate feedback was one of the reasons of their frustration. A detailed outcomes analysis has been made in the given tables and figures.

Table – I: Students Perception of useful Feedback

| Student's Perception | | Fourth Year | | Fifth Year | | Sixth Year | | Total | | p-value |
|--|----------|-------------|------|------------|------|------------|------|-------|------|---------|
| | | N | % | N | % | N | % | N | % | |
| Feedback always contain marks/grades with it. | Disagree | 13 | 26.5 | 26 | 55.3 | 16 | 64 | 55 | 45.5 | 0.009 |
| | Neutral | 7 | 14.3 | 5 | 10.6 | 3 | 12 | 15 | 12.4 | |
| | Agree | 29 | 59.2 | 16 | 34 | 6 | 24 | 51 | 42.1 | |
| Feedback is only useful when marks are low. | Disagree | 28 | 57.1 | 28 | 59.6 | 15 | 60 | 71 | 58.7 | 0.539 |
| | Neutral | 11 | 22.4 | 5 | 10.6 | 3 | 12 | 19 | 15.7 | |
| | Agree | 10 | 20.4 | 14 | 29.8 | 7 | 28 | 31 | 25.6 | |
| In learning, Written feedback is more beneficial than the numbers only. | Disagree | 8 | 16.3 | 16 | 34 | 5 | 20 | 29 | 24 | 0.153 |
| | Neutral | 14 | 28.6 | 8 | 17 | 3 | 12 | 25 | 20.7 | |
| | Agree | 27 | 55.1 | 23 | 48.9 | 17 | 68 | 67 | 54.4 | |
| Constructive criticism is needed for students to improve their learning. | Disagree | 4 | 8.2 | 13 | 27.7 | 6 | 24 | 23 | 19 | 0.068 |
| | Neutral | 12 | 24.5 | 5 | 10.6 | 5 | 20 | 22 | 18.2 | |
| | Agree | 33 | 67.3 | 29 | 61.7 | 14 | 56 | 76 | 62.8 | |
| The trend of feedback should be more positive by the tutor(s). | Disagree | 16 | 32.7 | 17 | 32.6 | 13 | 52 | 46 | 38 | 0.262 |
| | Neutral | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Agree | 33 | 67.3 | 30 | 63.8 | 12 | 48 | 75 | 62 | |
| Tutor(s) provided me with enough written feedback. | Disagree | 16 | 32.7 | 28 | 59.6 | 16 | 64 | 60 | 49.6 | 0.047 |
| | Neutral | 3 | 6.1 | 2 | 4.3 | 1 | 4.00 | 6 | 5.00 | |
| | Agree | 30 | 61.2 | 17 | 36.2 | 8 | 32 | 55 | 45.5 | |
| Feedback rarely provides me with useful suggestions for improvement. | Disagree | 8 | 16.3 | 12 | 25.5 | 3 | 12 | 23 | 19 | 0.026 |
| | Neutral | 15 | 30.6 | 7 | 14.9 | 1 | 4 | 23 | 19 | |
| | Agree | 26 | 53.1 | 28 | 59.6 | 21 | 84 | 75 | 62 | |

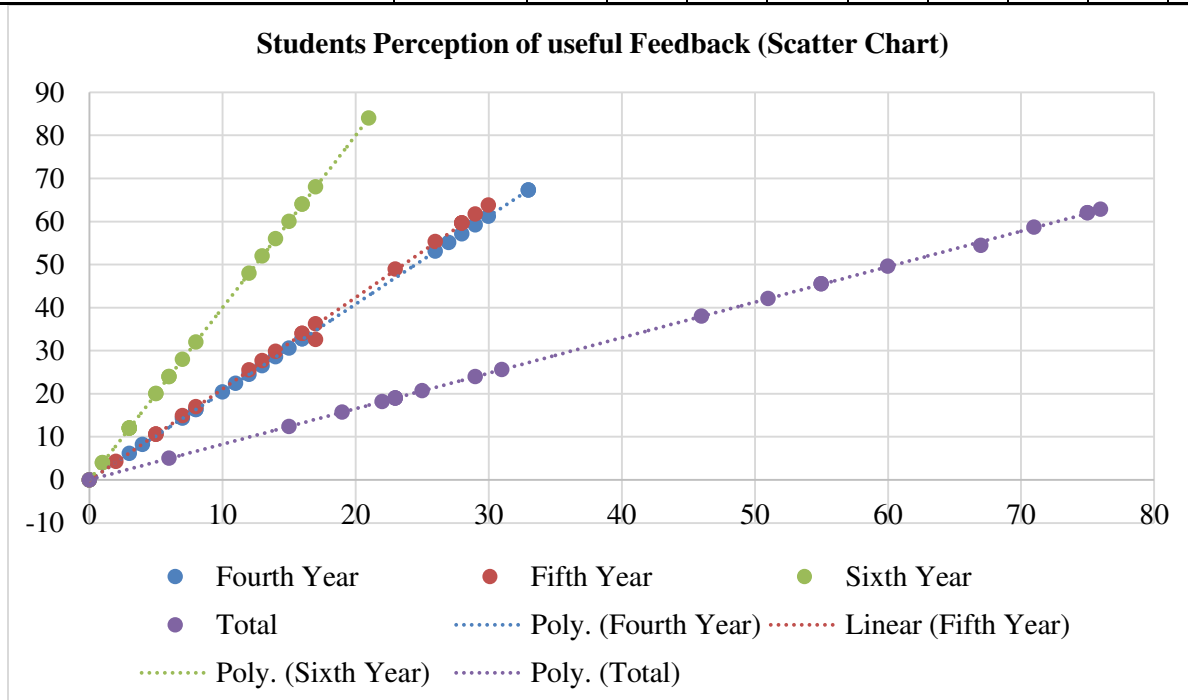


Table – II: Students perception of Purpose of Feedback

| Student's Perception | | Fourth Year | | Fifth Year | | Sixth Year | | Total | | p-value |
|---|----------|-------------|------|------------|------|------------|------|-------|-------|---------|
| | | N | % | N | % | N | % | N | % | |
| Feedback is a two-way process in which I am involved. | Disagree | 8 | 16.3 | 8 | 17 | 5 | 20 | 21 | 17.4 | 0.009 |
| | Neutral | 16 | 32.7 | 8 | 17 | 0 | 0 | 24 | 19.8 | |
| | Agree | 25 | 51 | 31 | 66 | 20 | 80 | 76 | 62.8 | |
| Feedback reflects the efforts I had put into the activities. | Disagree | 14 | 28.6 | 16 | 34 | 15 | 60 | 45 | 37.2 | 0.142 |
| | Neutral | 11 | 22.4 | 10 | 21.3 | 3 | 12 | 24 | 19.8 | |
| | Agree | 24 | 49 | 21 | 44.7 | 7 | 28 | 52 | 43 | |
| Feedback allows me to have an active discussion with the tutors about my weakness. | Disagree | 26 | 53.1 | 30 | 63.8 | 7 | 28 | 63 | 52.1 | 0.034 |
| | Neutral | 8 | 16.3 | 5 | 10.6 | 3 | 12 | 16 | 13.2 | |
| | Agree | 15 | 30.6 | 12 | 25.5 | 15 | 60 | 42 | 34.7 | |
| The Feedback helps me to identify areas for improvement. | Disagree | 24 | 49 | 25 | 53.2 | 5 | 20 | 54 | 44.6 | 0.013 |
| | Neutral | 10 | 20.4 | 9 | 19.1 | 3 | 12 | 22 | 18.2 | |
| | Agree | 15 | 30.6 | 13 | 27.7 | 17 | 68 | 45 | 37.2 | |
| Feedback helps me to engage in the process of learning and making an action plan. | Disagree | 8 | 16.3 | 8 | 17 | 7 | 28 | 23 | 19 | 0.714 |
| | Neutral | 8 | 16.3 | 9 | 19.1 | 5 | 20 | 22 | 18.2 | |
| | Agree | 33 | 67.3 | 30 | 63.8 | 13 | 52 | 76 | 62.8 | |
| Feedback helps me to assess self-learning and reflects on my improvement. | Disagree | 7 | 14.3 | 9 | 19.1 | 7 | 28 | 23 | 19 | 0.474 |
| | Neutral | 9 | 18.4 | 10 | 21.3 | 2 | 8.00 | 21 | 17.40 | |
| | Agree | 33 | 67.3 | 28 | 59.6 | 16 | 64 | 77 | 63.3 | |
| Feedback helps me to differentiate between my performance and expected performance. | Disagree | 21 | 42.9 | 15 | 31.9 | 3 | 12 | 39 | 32.2 | 0.021 |
| | Neutral | 12 | 24.5 | 8 | 17 | 4 | 16 | 24 | 19.8 | |
| | Agree | 16 | 32.7 | 24 | 51.1 | 18 | 72 | 58 | 47.9 | |

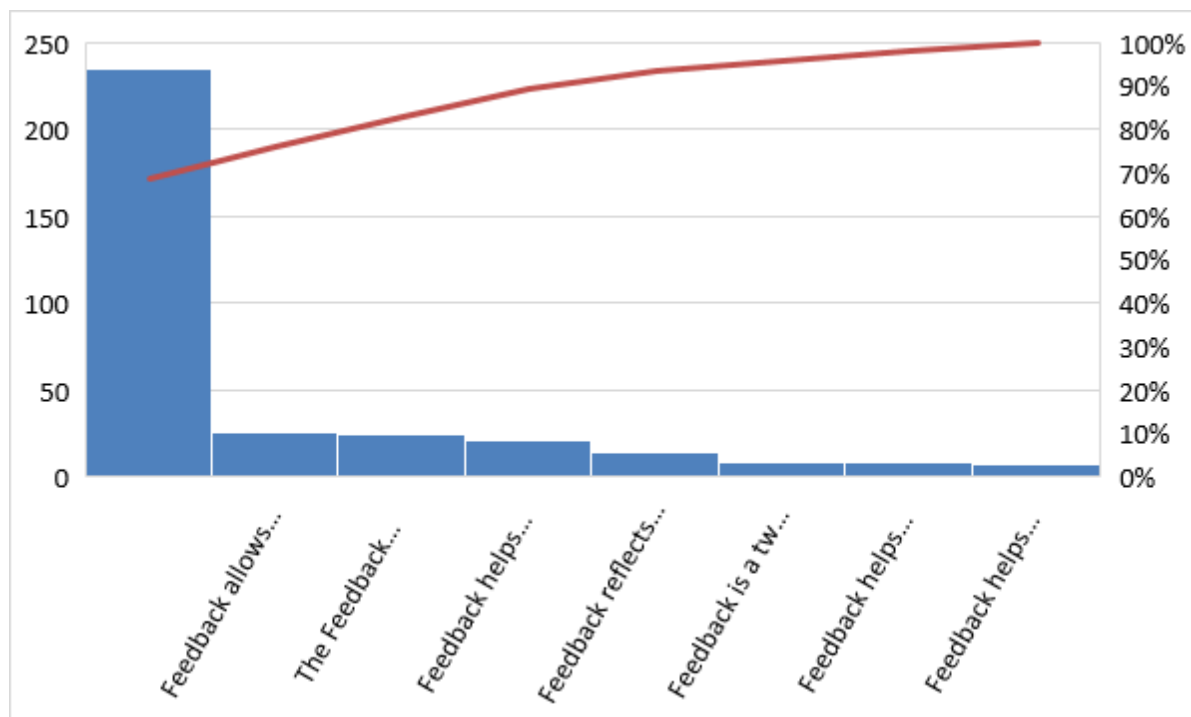


Table – III: Students believes about written Feedback

| Student's Perception | | Fourth Year | | Fifth Year | | Sixth Year | | Total | | p-value |
|--|----------|-------------|------|------------|------|------------|------|-------|-------|---------|
| | | N | % | N | % | N | % | N | % | |
| Feedback I received has a relationship with the given marks. | Disagree | 18 | 36.7 | 23 | 48.9 | 14 | 56 | 55 | 45.5 | 0.027 |
| | Neutral | 11 | 22.4 | 16 | 34 | 2 | 8 | 29 | 24 | |
| | Agree | 20 | 40.8 | 8 | 17 | 9 | 36 | 37 | 30.6 | |
| Feedback adequately explain why a mark was given and what would be required for improvement. | Disagree | 12 | 24.5 | 26 | 55.3 | 18 | 72 | 56 | 46.3 | 0.001 |
| | Neutral | 9 | 18.4 | 4 | 8.5 | 0 | 0 | 13 | 10.7 | |
| | Agree | 28 | 57.1 | 17 | 36.2 | 7 | 28 | 52 | 43 | |
| Limited feedback on given marks is the reason for frustration. | Disagree | 12 | 24.5 | 3 | 6.4 | 1 | 4 | 16 | 13.2 | 0.035 |
| | Neutral | 10 | 20.4 | 10 | 21.3 | 3 | 12 | 23 | 19.2 | |
| | Agree | 27 | 55.1 | 34 | 72.3 | 21 | 84 | 82 | 67.8 | |
| Feedback is used to justify or explain the given marks. | Disagree | 9 | 18.4 | 14 | 29.8 | 6 | 24 | 29 | 24 | 0.332 |
| | Neutral | 14 | 28.6 | 7 | 14.9 | 3 | 12 | 24 | 19.8 | |
| | Agree | 26 | 53.1 | 26 | 55.3 | 16 | 64 | 68 | 56.2 | |
| In feedback, it did not appear whether the marks were high or low. | Disagree | 11 | 22.4 | 22 | 46.8 | 5 | 20 | 38 | 31.4 | 0.073 |
| | Neutral | 12 | 24.5 | 7 | 14.9 | 5 | 20 | 24 | 19.8 | |
| | Agree | 26 | 53.1 | 18 | 38.3 | 15 | 60 | 59 | 48.8 | |
| Feedback is according to assessment criteria as mentioned in the module. | Disagree | 4 | 8.2 | 13 | 27.7 | 10 | 40 | 27 | 22.3 | 0.01 |
| | Neutral | 12 | 24.5 | 11 | 23.4 | 2 | 8.00 | 25 | 20.30 | |
| | Agree | 33 | 67.3 | 23 | 48.9 | 13 | 52 | 69 | 57 | |
| Feedback is going to help me in scoring more marks in the final assessment. | Disagree | 6 | 12.2 | 9 | 19.1 | 16 | 64 | 31 | 25.6 | <0.001 |
| | Neutral | 6 | 12.2 | 9 | 19.1 | 2 | 8 | 17 | 14 | |
| | Agree | 37 | 75.5 | 29 | 61.7 | 7 | 28 | 73 | 60.3 | |

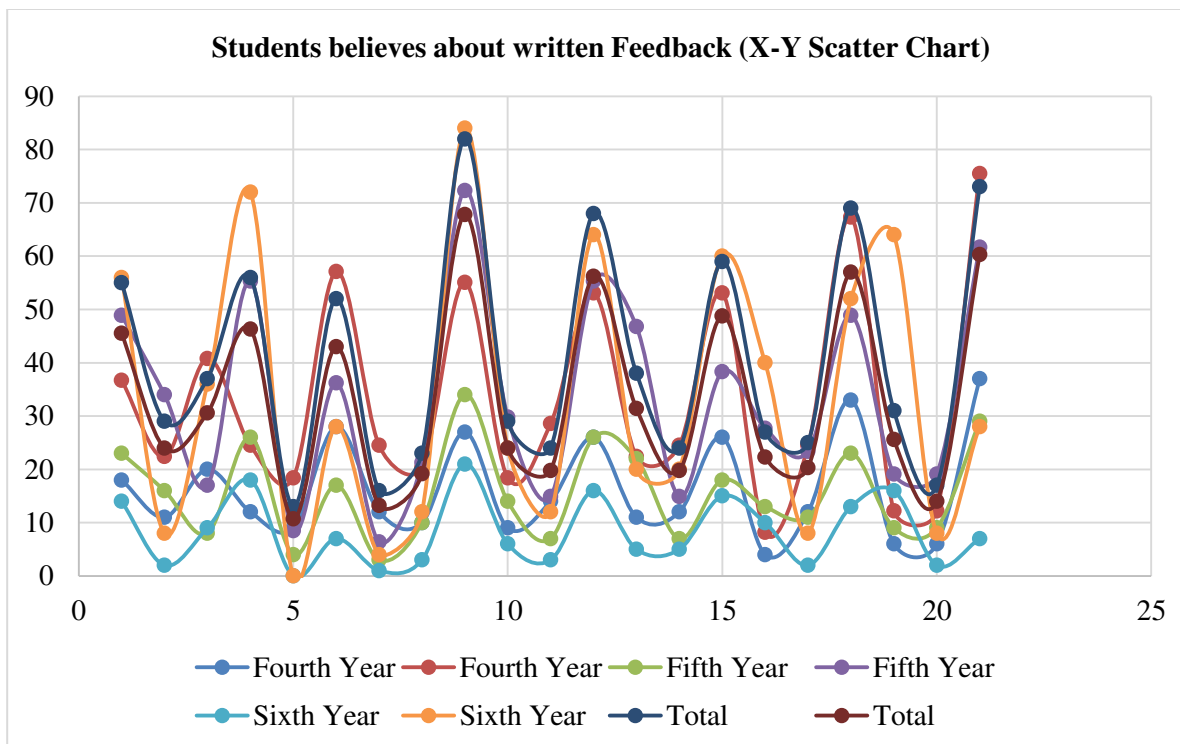
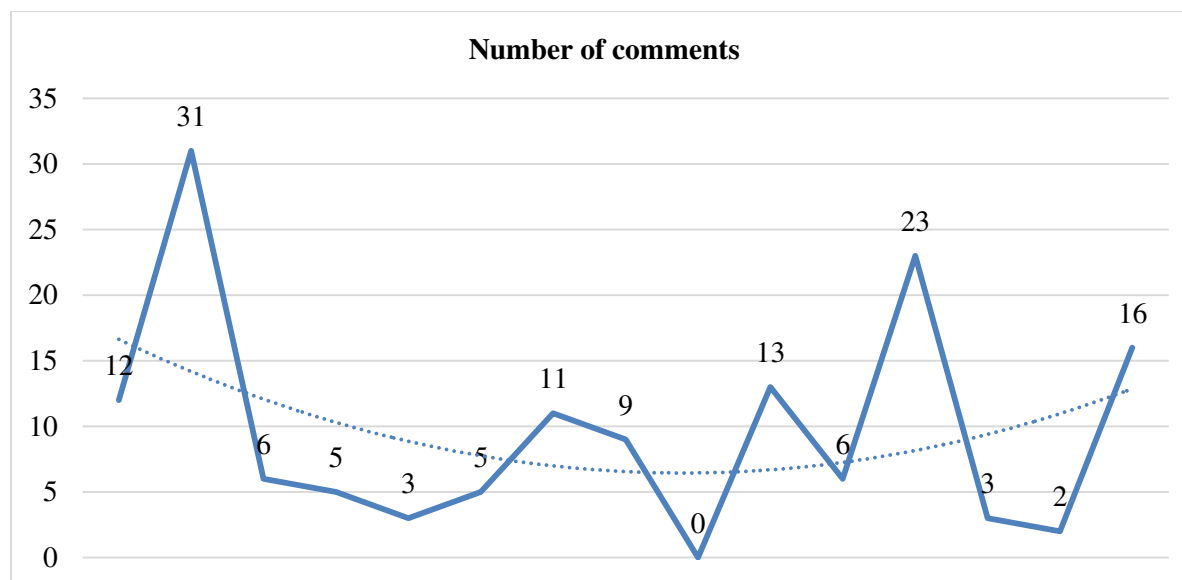


Table – IV: Students Opinion and Suggestions for Current Feedback Process

| Opinion | Number of comments |
|--|--------------------|
| Appropriate feedback is not received during activities | 12 |
| The marks were given without qualitative written comments | 31 |
| We received the feedback in the form of oral comments | 6 |
| Feedback is usually given to those with low marks | 5 |
| Feedback is usually received in the form of compliments or critique, without any details | 3 |
| Strengths also need to be highlighted | 5 |
| Tutors do not provide feedback on weakness and how to improve them | 11 |
| The feedback received varies between tutor-to-tutor; lacking structured pattern | 9 |
| Suggestions | Number of Comments |
| There should be a uniformly structured feedback system by faculty | 13 |
| Written comments are better than oral feedback | 6 |
| Must highlight weakness and area for improvement | 23 |
| There is a need to receive Comments from peers and year coordinator | 3 |
| There should be an electronic feedback system | 2 |
| Student need session for interpretation and how to utilize comments | 16 |



DISCUSSION:

The development of feedback perception on the part of students has a complicated sort of mechanism i.e. role of educator, self-beliefs to understand, construe and usage of feedback, environment pertaining to learning etc [12]. Productive feedback means the better learning. No association of marks with feedback has been viewed in 45.5 percent of the students in our study. Our method of assessment may be reason for this kind of perception. However, there is slow shift towards formative assessment from junior to senior class in which the provision of corrective feedback is ensured in the activities such as mini-cex, case-based discussion etc. Senior class understands better the utility of written feedback. This finding is akin to the results obtained in another study in which senior students praise the feedback [13].

It is pertinent to note that our findings have revealed that 58.7 percent of the students from all three groups have indicated the significance of written feedback necessary for learning. The findings have indicated that the students like to receive feedback in the form of comments to perceive their mistakes. Around the world, the quality and frequency of inadequate feedback has been reported [9, 14]. About half of our students (49.6 percent) have reported that enough feedback was not received by them. In response to our open-ended questions, the students greatly emphasised the need to include their strengths and weaknesses in the written feedback. Faculty responded that despite adequate feedback on their part, the response from students is not satisfactory [7, 14]. Sixty two percent of students have reported that feedback rarely provides them with valuable

suggestions. Students in response to open ended questions had suggested that written comments were far better than those of oral or informal comments. The reasons for students' dissatisfaction can be multiple such as absence of a clear system of feedback, barriers of language and unprofessional approach in giving feedback [15]. It is noteworthy here that feedback is important not only for learners but also helpful in evaluating the teaching strategies on the part of the tutors [16].

Since 62.8 percent of the students agreed that feedback is a two-way process, they do realise the feedback purpose. 52.1 percent of the students have revealed that feedback hampers their active discussion. By setting feedback-based objectives, students who get feedback, can ameliorate their academic performances [17]. Upon asking whether the current feedback is providing them opportunities of improvement, all three cohorts responded that one-way feedback is inadequate to meet the academic challenges. In responses given to open ended questions, the students highlighted the need that feedback providers should include the corrective measures to overcome the weak areas while presenting feedback so that it can be a better roadmap for learning and achieving the desired skills [18].

A summative assessment which lacks proper guidance and adequate comments can pave the ways to demoralization and anxiety amongst the learners and thus poor performance of education [19]. Almost half of the students disagreed that there exists a relationship between marks and feedback. 67.8 percent of the students reported the frustration due to

insufficient feedback. In order to grade the transcripts of the students, the educators are required to present their feedback explicitly [20]. The students also responded that the differences in tutor to tutor feedback are other impediments which need to be corrected by giving some uniform way of feedbacks. This study has guided us about the feedback perception, its usefulness and the related beliefs prevailing amongst the medical students. The students have suggested to organise activities in order to perceive the feedback process in an effective manner.

CONCLUSION:

To conclude, as far as awareness of the students about the feedback objective is concerned, they are quite abreast of it. It is especially authenticated by the senior students who believed that feedback is vital in the academic performance and can be a factor in lessening their frustration. Such findings require enhanced structured feedback mechanism and call for improved faculty engagement in training to plug the gaps in order to create an efficient educational association.

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