

Formative Assessment in Teaching and Learning Anatomy: Perception of Teachers in a Medical College of West Bengal

Sharmistha Biswas¹, Abhijit Bhakta²

¹Professor, Calcutta National Medical College, 32, Gorachand Rd, Beniapur, Kolkata, West Bengal 700014. India
Email: [drsarmisthabiswas\[at\]gmail.com](mailto:drsarmisthabiswas[at]gmail.com)

²Professor, N. R. S. Medical College & Hospital.138, A. J. C. Bose Road, Kolkata, West Bengal 700014. India
Email: [drabhijit3\[at\]gmail.com](mailto:drabhijit3[at]gmail.com)

Abstract: *The goal of continuous formative assessment (cFA) is to enhance learning. cFA gives feedback to teachers on teaching lacunae. Disadvantages are also there, including shortage of academic staff and implementation. From 2019, CBME curriculum implemented by MCI necessitated continuous formative assessment along with summative assessments. The aim of this study is to study perceptions of teachers towards cFA. This is a Cross Sectional study, performed during a period of 6 months in a medical college of West Bengal. Majority of students studying in 1st phase MBBS and all teachers of Anatomy Department participated. Standardized structured questionnaire was developed, distributed among participants, collected back and analysed. All faculty - members opined that cFA helps to improve students' performance and gave teachers feedback regarding their teaching lacunae. They said they consulted about topics, and gave feedback to students, which helped students perform better in future. Teachers were content with current frequency of cFA; they regarded formative assessment to be more helpful in learning than summative assessment. In general, majority of the faculty members accepted utility of cFA in academics.*

Keywords: assessment, formative assessment, continuous formative assessment, feedback

1. Introduction

Assessment is aimed to test student's acceptance toward the teaching process. ^[1] Literature has increasingly demonstrated the importance of formative assessments, and the positive effect they have on student outcomes. ^[2]

Continuous formative assessment has many advantages and some disadvantages.

In India, Anatomy is taught to the 1st year (1st Phase) MBBS students. From this year (2019), CBME curriculum implemented by the NMC requires implementation of continuous formative assessment of the students along with end - semester assessments and summative assessment. It is necessary to appraise the teachers' perceptions regarding continuous formative assessment, therefore the present study is undertaken.

This work aims to study perceptions of teachers toward continuous formative assessment and to check whether teachers get feedback on the learners' progress as well as the effectiveness of their own performance.

2. Literature Survey

Uses of the continuous formative assessment have a positive impact on both the academic achievement and the psychological status of students ^[3, 4, 5] and also gives feedback to students on their learning ^[6] and diagnosis of areas of their weaknesses. It gives feedback to both the teachers and students on their performance. It allows intermittent interactions between students and teachers. Feedback given to students related to how performance can

be more effective have a positive impact on the student's learning process and outcomes. ^[7] Formative assessment involves a continuous way of checks and balances in the teaching learning processes. The method allows teachers to check their learners' progress as well as the effectiveness of their own practice, thus allowing for self - assessment of the students and teachers.

Intermittent formative assessments foster student engagement in the content on a regular basis versus a cram session before a summative assessment. Students who are exposed to formative assessments periodically in preparation for the final high stakes exam show a significant increase in grade point. ^[8]

Its disadvantages include problems related to the academic staff and practice and implementation of continuous formative assessment. ^[9] Knowledge, time and resources are key barriers to implement formative assessments, which is supported in the literature. ^[10, 11]

Faculty often have difficulty with reconciliation of a balance between the workload associated with using formative assessments and their other academic responsibilities. ^[12] Teachers should view assessments not only as moments to gauge the knowledge base of their students, but as opportunities to engage them in meaningful learning for uncertain futures. Enabling faculty and students to self - regulate their teaching and learning processes respectively through the use of formative assessments has a positive effect on overall student outcomes. ^[13]

3. Methodology

This is a Cross sectional study. Study period: The study was performed during a period of 6 months (November, 2019 to April, 2020) in the Department of Anatomy in a medical college of West Bengal, India. Seven teachers of the Department of Anatomy, teaching 1st phase MBBS students, took part in the study. Any teacher unwilling to participate in the study was excluded. The study was conducted after obtaining permission of Institutional Ethics Committee.

A standardized structured questionnaire was developed for the teachers. The questionnaires formed of close - ended questions and Likert's scale (five points).

Questionnaire was distributed among seven teachers of the Department of Anatomy.

Verbal informed consents were taken from all the participants, as discussed previously in Institutional Ethics Committee.

After filling up, the questionnaires were returned back. Data collected was analysed, using SPSS software.

4. Results and Discussion

In the present study, we tried to find out the perception of teachers regarding continuous Formative Assessment in Anatomy.

When asked whether continuous Formative Assessment (cFA) improves the students' performance, 4 out of 7 faculty - members of Anatomy (57.14%) responded that it was very helpful, and 3 out of 7 (42.8%) said it was helpful.

The faculty - members agreed (71.42%) or strongly agreed (28.57%) that feedback given by them help students perform better in their future work (vide Figure 1).

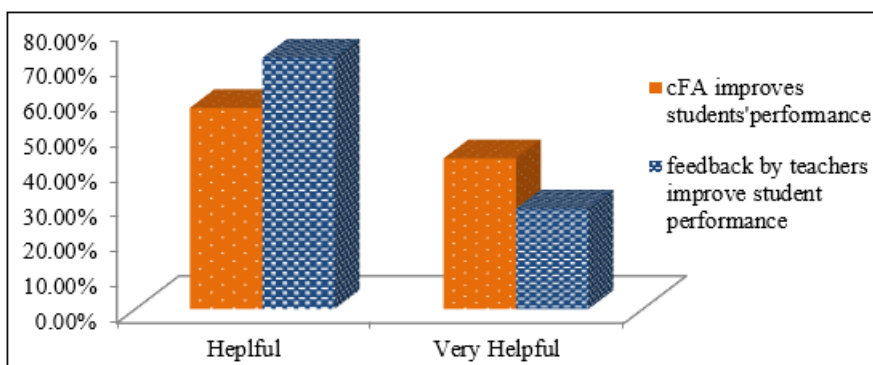


Figure 1: Faculty Perception Regarding Whether cFA and Teachers' Feedback Improves Students' Performance

57.18% of the faculty said that they consult with the class about what (Topics or chapters) will be assessed in the cFA, whereas 42.8% said they did not consult. Most of the

teachers (85.71%) commented that they gave feedback to the students after 'cFA', only 14.28% did not give feedback. (vide Table 2).

Table 1: Whether Teachers Consult the Class about Topic of cFA and Give Feedback

	Consult with the class about what (Topics / chapters) will be assessed in the cFA		Give feedback to the students after 'cFA'	
	Yes	No	Yes	No
% of faculty	57.18	42.8	85.71	14.28

In response to the query how frequently cFA should be taken, 71.42% said the present frequency was adequate, whereas 28.57% opined that it can be taken more frequently (vide Table 2).

Table 2: Faculty Perception Regarding How Frequently cFA should be taken

How frequently cFA should be taken	% of Faculty
Adequately frequent	71.47%
More frequent	28.57%

The teachers agreed (85.71%) or strongly agreed (14.28%) with the statement that formative assessment is more helpful in learning than summative assessment (SA). (vide Figure 2).

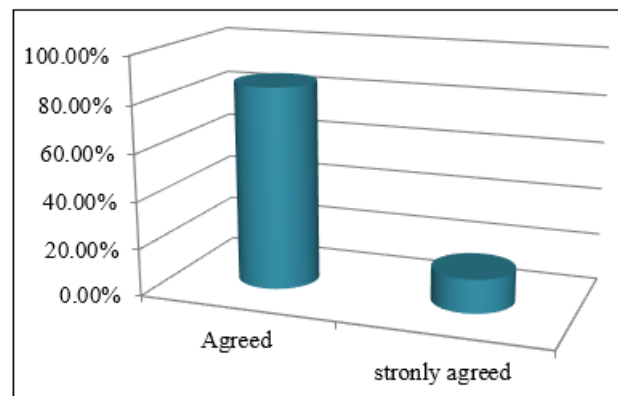


Figure 2: cFA more helpful in learning than SA

Out of 7 teachers, 5 teachers (71.42%) agreed and 2 (28.57%) strongly agreed that continuous Formative Assessment (cFA) helps teachers to get feedback regarding their teaching lacunae (Vide Figure 3).

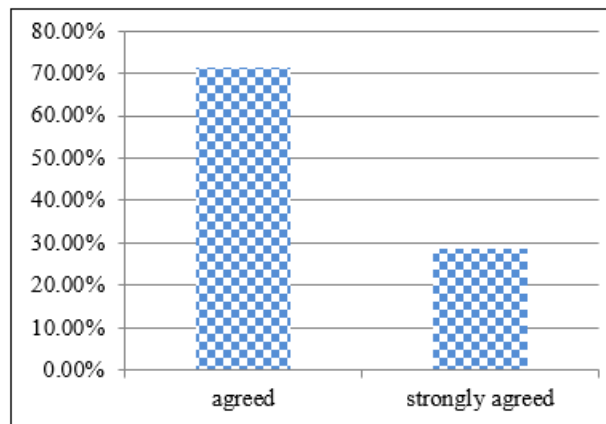


Figure 3: Faculty perception of cFA giving feedback regarding their teaching lacunae

Baseline information about faculty is given in Table 3.

Table 6: Baseline information about faculty

Total Number	Age in yrs				Sex		Teaching experience in years		Whether attended FDP	
	20 – 30	30 - 40	40 - 50	50 - 60	M	F	<10	>10	Yes	No
7	1	2	2	2	5	2	5	2	6	1

In the present study, all the faculty - members of Anatomy opined that continuous Formative Assessment (cFA) helps to improve the students' performance. The teachers opined that they consulted the class about topics of cFA, and gave feedback to the students. They also agreed/strongly agreed that feedback given by them help students perform better in their future work. This was at par with the study conducted by Price et al (2010), which stated that the staff recognised the place of feedback in learning and had faith that it made a contribution to learning, believing it helps student to 'leapfrog to the next level' [14].

In our study, most of the faculty - members were content with the current frequency of cFA, few said the number of FA should be increased. The finding was in congruence with a study by Panchbhai A et al (2014). [15]

Most of the teachers in the present study regarded formative assessment to be more helpful in learning than summative assessment, unlike in the study by Al Kadri et al (2009), where teachers were more in favour of summative assessment. [16]

When asked whether cFA helps teachers to get feedback regarding their teaching lacunae, majority of the teachers participating in the present study agreed. Formative assessment helps the teacher to device appropriate teaching strategy to serve the needs of the learners and continuously improve the teaching learning process. [17]

5. Conclusion

In general, the majority of the faculty members accepted the utility of cFA in the academics.

The teachers perceived that they consulted the class about topics of cFA, and gave feedback to the students. They opined that feedback given by them help students perform better in their future work. Most of the faculty - members were content with the current frequency of cFA, few said the

number of FA should be increased. Most of the teachers regarded formative assessment to be more helpful in learning than summative assessment.

When asked whether cFA helps teachers to get feedback regarding their teaching lacunae, majority of the teachers participating in the present study agreed. This feedback can help the teacher to continuously improve the teaching learning process.

6. Future Scope

The study was conducted among a limited number of faculty members of a single department. There is a scope to further the study by including more number of teachers from different departments of a medical college, also more medical colleges of a state, or the country.

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