

ORIGINAL ARTICLE

Students' Perception of Formative Assessment at IIMCKomel Zulfiqar¹, Shabana Ali², Amena Rahim³**ABSTRACT****Objective:** To assess the perception of students regarding the usefulness of formative assessments.**Study Design:** Cross-sectional descriptive study.**Place and Duration of Study:** Islamic International Medical College, from January to June 2015.**Materials and Methods:** A structured questionnaire was distributed to 150 medical students. Response rate was 90%. There were six questions regarding the scheduling, strategy and components of formative assessment while four questions were regarding the effectiveness of formative assessment in learning.**Results:** It was found out that majority of the students (60%) were satisfied with placement of formative assessments in each module while 76.3% agreed that assessment were arranged regularly, though 22% disagreed with assessment plan. About 64 % students agreed that it facilitates learning process and motivates students to learn more. On the other hand only 20% students disagreed with its role in learning. Feedback and remedial were relatively weaker as only 33 % students thought that feedback was effective and timely while most of students disagreed but were satisfied with remedial offered by each discipline.**Conclusion:** The medical students consider formative assessment an important tool to enhance their learning process. More efforts are required to enhance the usefulness of formative assessments by improving the quality of feedback and the remedial offered for improvement.**Key Words:** *Assessment, Constructive Feedback, Learning, Remedial Measures.***Introduction**

Formative assessment is the process used by teachers and students to recognise and respond to students' learning in order to enhance learning. It helps in learning by generating feedback information that is beneficial for both students and teachers. It is suggested that feedback enables students to reconstruct their understanding and skills and hence improve their performance. Rick Stiggins concluded "most of the teacher change their instructional strategy according to the demand of the students or modify their teaching modalities according to their students' needs, hence owning their own learning".¹ Michael Scriven derived the term in 1967, during those times information gathered through formative evaluation was used to assess the effectiveness of a curriculum and guide school system choices to adopt

a suitable curriculum.² Later on Allal and Lopez traced the history of formative assessment from Scriven's original definition of "formative evaluation" of educational programs, found out that term "assessment" had "progressively replaced 'evaluation' during 1967. Benjamin Bloom used the term in 1968 in his book Learning for mastery and he described the role of formative assessment as a tool for improving the teaching-learning processes for students and how it can be accommodated in content.³ Formative assessment is the only mean by which subsequent educational decisions can be altered. The true purpose of formative assessment is fulfilled when it is applied on a frequent and regular basis to see students' progress and understanding and helps to identify their learning needs and adjusting the teaching appropriately. It is a midstream tool that is used by teachers to measure student understanding of specific topic or skill they are teaching. Formative assessment is said formative because it leads to adjustments according to learners need to form new learning because every formative assessment is followed by feedback provided to students regarding their performance and taken from students regarding content, learning and teaching strategies etc. Therefore it helps teacher to adjust or modify their learning strategy and student

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to improve their learning by provision of timely, frequent and constructive feedback.⁴ This feedback has strong influence on student's future performance since it closes the gap between current and desired performance and delivers high quality information to students about their learning. It also encourages and motivates student.⁵

At Islamic international Medical College, formal introduction of formative assessments in the modules was incorporated about two years ago, with the aim to support students learning. Purpose of these assessments was to embody the programmatic model of assessment in the students' curriculum.⁶ Programmatic assessment model is based on the concept that arranged set of longitudinal assessment activities should be incorporated in order to enhance the effectiveness of formative assessments. Every formative assessment must be complemented by certain assessment points which must be aggregated towards the final or summative assessments.⁷ One important and critical component of formative assessment is the feedback which is used by students at one end to find out their deficiencies in their learning and teachers to tailor the teaching and learning strategies according to learners need at the other end.

Materials and Methods

This was a quantitative cross-sectional study. A structured questionnaire was designed on five point Likert scale and construct validity was assured by expert opinion of four medical educationists. Purposive sampling technique was applied for collection of data. Fifty students each from 1st, 2nd and 3rd year MBBS students were selected randomly without the discrimination of gender. Fourth year and final students were not included since these students were not available at basic science campus due to clinical rotations. Students included were regularly taking their formative assessments. The students filled questionnaire in a given time. All the participants were given ten minutes to complete the questionnaire. Questions were asked under three themes.

- The placement of formative assessments in each modules
- Role of formative assessment in their learning
- Effectiveness of feedback

Results

Response rate was 90% as 135 filled questionnaires were received. Results were analyzed by using SPSS 21 for each while compiling the results male to female ratio was ignored. Most of the students (60%) were satisfied with placement of assessments in each module by concerned disciplines. However 76.3% agreed that formative assessment were arranged regularly by each discipline although 22% disagreed with assessment plan. About 64 % students agreed that it always facilitates learning process and it also motivates students to learn more. On the other hand only 20% students disagreed with its role in learning. However very few number of students i.e. only 33% agreed that feedback was provided to them in time and remedial measures offered in each discipline were helpful in their learning.

Table I: Frequency of students response on usefulness of formative assessment estimated by using 5-point Likert scale (N=135)

Themes	Parameters	Likert scale				
		Not at all	Sometimes	Neutral	Most of time	All the time
Placement in each module	Suitable Placement	–	4 (10.4 %)	–	40 (29.6 %)	81 (60 %)
	Regularity in assessment plan in each module	–	2 (1.5 %)	–	30 (22.2 %)	103 (76.3 %)
Role of formative assessment in their learning	Helpful in learning process	1 (0.7 %)	27 (20.0 %)	–	21 (15.6 %)	86 (63.7 %)
	Enhances Motivation	2 (1.5 %)	24 (17.8 %)	–	23 (17.0 %)	86 (63.7 %)
Effectiveness of feedback and remedial measures	Timely feedback Given	6 (4.4 %)	58 (43.0 %)	–	26 (19.3 %)	45 (33.3 %)
	Remedial Measures used if required	10 (7.4 %)	42 (31.1 %)	–	15 (11.1 %)	68 (50.4 %)

Discussion

Formative assessment is strongly emphasized over summative assessment in a competency-based education program. It underscore the development of proficiency through conscious practice. This concept underlines the need for effective instruction, mentoring, and feedback to the students. The content, plan, rate and timing of assessment are important factors to establish an assessment policy in any medical school.⁸

This study was designed to evaluate the process of formative assessment and perception of student'

regarding its usefulness in learning. Study revealed that accurate and proper placement of formative assessment is assured in each module, but improvement in effective feedback with remediation offered is utmost need of the students.

Nijhuis et al. specified three elements of the learning environment which may affect student's learning. These elements are lucidity of the goals, aptness of the workload and the usefulness of the literature. The surface learners recognize these elements negatively.⁹

Academic reporting of achieved competencies has amplified the perplexity and decreased the motivation to learn in students. The current system of summative assessment encourages the students to find only right answers but opposes the true learning process. Learning is not merely the collections of right and wrong facts.

Regular formative assessments have a greater impact on academic achievements in students. It entails the students about their deficiencies in studies. Therefore proper scheduling of assessment is important. Regular formative assessment (76.3%) in every module will facilitate learning process. The students get motivated (63.7%) to become involved in the learning process as it helps to promote their growth. Regular formative assessment also increases the learning of students (63.7%) and hence the academic achievements as it guide them to the path of accomplishments. It has a great impact on student academic success, especially in constant low achievers.¹⁰

Feedback is taken for granted but it helps in self-correction and improvement. Indirect forms of feedback maintain student motivation and selfconfidence.¹¹ It should be precise, positive, encouraging, and frequent and substantial.¹²

Successful feedback should clearly specify to the student what is wrong and right. Effective feedback may be considered as a single most important tool for professional development of students.¹³ The timely feedback was overlooked (33.3%) and was irregularly given (43%) to students. Clear and suitable assessment criteria shall be given to the students to judge their own progress during taking the remedial. Formative assessment assists the students to realize the standards that teachers may expect from them.

Therefore, formative assessment can be used in medical education to assess need, progress of medical students and to recognize and remediate the suboptimal performance of students. The optimum placement of formative assessment in each module for each subject with properly arranged effective constructive feedback to students may provide students to improve their learning.

Recommendations

- Implementation: It should be the integral part of program design. It should be implemented gradually but consistently.
- Enabling environment: the institution should provide an environment which nurtures the development of faculty and create awareness about need of formative assessment.
- Faculty training: Faculty should be trained to construct creative methods of assessment and to give timely and quality feedback. It has maximum effect on student's learning and future performance.¹⁴
- Student's training: students must be informed about formative assessment and reason why it is carried out. They should know how to receive feedback and improve their weaker areas.
- Student's feedback: it should be taken in routine to check the effectiveness of formative assessment in developing their concepts, modifying the way of delivery of content.
- Role of department of medical education: they should incorporate formative assessment in curriculum without compromising the content.
- Periodic evaluation of curriculum: regular formative assessment feedback given and taken from students may help in evaluation of curriculum.¹⁵

Conclusion

Expanded use of formative assessment should be followed by prompt feedback, and stress on remedial measures in order to enhance usefulness of formative assessments.

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