



IMPROVEMENT IN THE QUALITY OF MEDICAL EDUCATION AFTER BCME TRAINING OF FACULTY IN MEDICAL COLLEGES OF INDIA –A GAP ANALYSIS

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ABSTRACT

Background:

Faculty of the Medical college are responsible for mentoring and training the students. This study has evaluated the impact of Basic Course in Medical Education on the faculty and changes in their teaching modules.

Objective:

- 1] To assess the impact of Basic Course in Medical Education on the Medical faculty
- 2] And to evaluate the change in teaching module of the faculty after attending the training.

Study design: Prospective questionnaire based study.

Study Area: Government Medical College and ESI hospital, Coimbatore

Method: Ethical committee approval was obtained before initiating the study. A Questionnaire was answered by the faculty for which scores were obtained. Later students were asked to answer another questionnaire which was also scored.

Result: A significant change in the teaching Faculty understanding towards the modules and making their class fascinating was noticed. Students gave a positive feedback regarding new teaching modules and different approach to subject topics.

Conclusion: Therefore this study clearly proves that regular training for the faculty is needed to keep them updated and which will play a vital role in effectively educating the Medical Students.

Introduction

The foremost important factor which influence the quality of medical education is Faculty Development¹

Programs like instructional development, personal development and finally organisational development are the program relating to Faculty Development program

These programs will help us to assist faculty roles and also renew their mode of Teaching²

The faculty development program will introduce the faculty to the new curriculum approaches and will guide them to modify themselves according to the new norms³

Therefore National Medical Council (NMC) has developed Basic Course Medical Education(BCME) on Medical Education Technologies (MET) which is a three days workshop and during this workshop

topics like group Dynamics, adult learning, systematic approach, new trends in teaching , Medical Education and microteaching, small group teaching and practical examination are usually highlighted . This workshop is conducted in an interactive method⁴

Therefore this study was done in Government Medical College in South India and will assess the effectiveness of BCME conducted in their Medical College

Objective:-

1. To evaluate the effectiveness of BCME in MET conducted in the Medical College
2. To assess the changes in teaching practices and assessment methods of the faculty after undergoing the workshop

Materials and Methods:-

This study was conducted in Government Medical College and ESI Hospital, Coimbatore. The duration of the study was from April 2025 to July 2025. Convenience sampling method was used. All the faculty who have attended the workshop were included in the study. And in this study Kirk Patrick model with two level program outcomes (learning behaviour and results of the questionnaire were used to evaluate the effectiveness of FDP)

The first level learning ie perception of the faculties on the gain of knowledge and skill in different topics discussed. All Data were obtained by test forms.

To study the change in the teaching practices and assessments method and the faculty were given a preformed questionnaire which they were asked to answer and finally their score revealed the result. Students of the academic year 2021-2024 who provided consent were included in the study. The students included in the study were given a preformed questionnaire

By getting the feedback from the students using the questionnaire it was helpful to guide their change in approach to learning, and their attitude and confidence towards learning.

Results:-

A total of 98 faculties participated in the study. About 36% were from preclinical department 21% were from Para clinical department. While 45% faculties belong to the clinical department.

Majority of the faculty were females and were less than 40 years of Age (61%) only 3% were above 50 years.

Teaching experience was around 10 years for 50% of the faculties and 12% has more than 15 years' experience.

Regarding the training, faculties attending the workshop agreed that the facilitators were resourceful and sessions were interactive.

Preception of the faculties regarding the knowledge gain after the BCW in specific teaching learning methods are show in Table I.

Table I:-

	Yes	No
Learning Principles	91%	9%
Identity Lesion Objective	94%	6%
Using interactive Teaching	96%	4%
Integrated teaching	95%	5%
Care based learning	97%	3%
Problem based learning	96%	4%
Using AV Aid	99%	1%
Working in groups	92%	8%
Conducting Seminar	90%	10%
Getting Feedback	91%	9%

Perception of faculties of gain in knowledge on assessment procedure are shown in Table II.

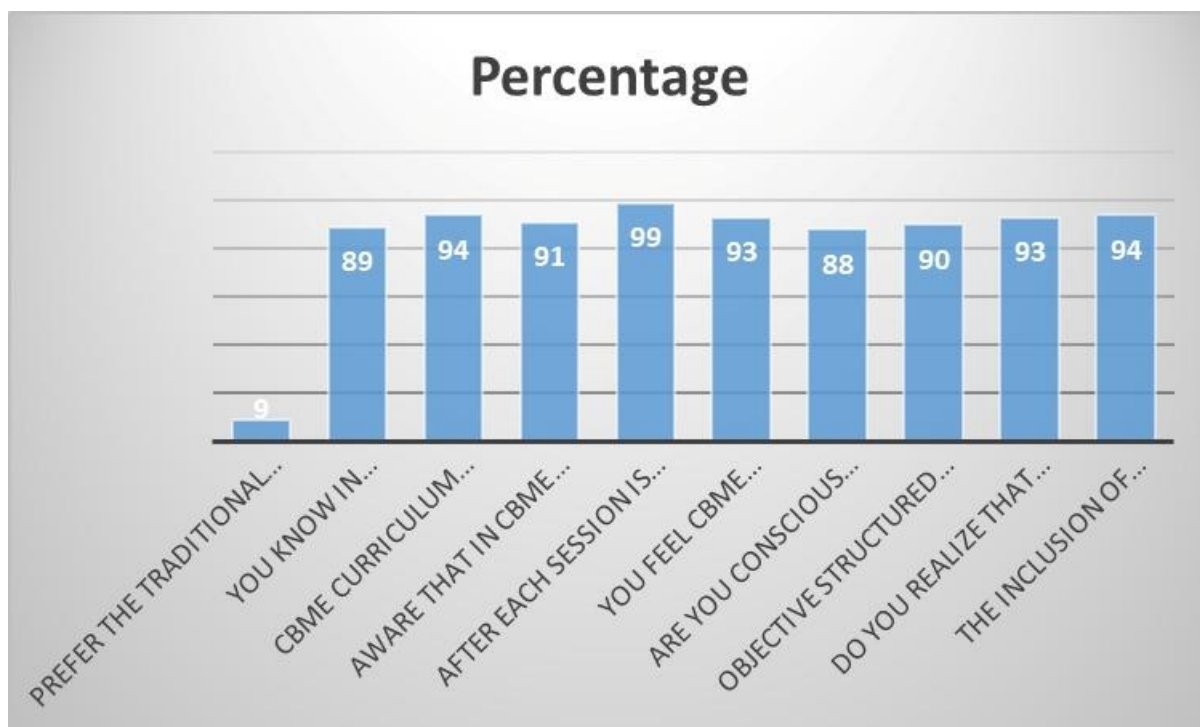
Table II:-

	Yes	No
Preparing Essay Questionnaire	90%	10%
Preparing MCQ [Multiple Choice Question]	92%	8%
Surprise MCQ Test	93%	7%
Structural Oral Questionnaire	90%	10%
OSPE [Objective Structured Practical Examination]	95%	5%

A performed questionnaire was given to the students shown Table III.

Table III:-

	Yes	No
Prefer the traditional teaching	9%	91%
With the Traditional teaching you will gain only inadequate knowledge	89%	11%
CBME Curriculum in Evidence Based Learning	94%	6%
Aware of CBME assessment programme	91%	9%
After each session in the feedback collected from you	99%	1%
Do you feel CBME Curriculum has changed your communication skills	93%	7%
Are you conscious that your Ethical Principles are modified by CBME	88%	12%
OSPE in useful in improving your practical skill	90%	10%
Do you Realize that after the CBME not only you will benefit but the community also will	93%	7%
The inclusion of clinical skill training into the curriculum has a positive impact on the way you approach the patient	94%	6%



So finally with the reply got from the faculty and student showed that BCME workshop had changed the faculty's vision towards teaching.

Discussion:-

This study was done to assess the existing program and to yield the valid new recommendations or Design for the future programme of faculty development program.

There are multiple studies have been done in India and the neighbouring countries showing the usefulness and the effectiveness of BCME in Medical Education for example a study conducted at the B.P KOIRALA Institute of Health Sciences and in Medical College in Dhahran, Nepal which proved the effectiveness of the teachers after attending workshop.⁴

Using Kirkpatrick method with two levels of program the outcome BCME in MET was done.

Around 98 faculties participated in this study. About 36% were from Preclinical Department 21% were from the Para clinical Department while 45% faculties belonged to the clinical department.

Student of the Academic year 2021-2024 also participated in the study.

All the faculties who participated in the study were have undergone the BCME workshop. They had a universal opinion that the new assessment method will be an efficient alternate technique to assess the student.

Maximum number of faculties stated they have started modifying their teaching behaviour in relation learning objective, care based learning and small group teaching.

Similarly a study conducted by Fareed H.Abdulahah, Abubakir M.Salim and Nazar P.Shabila at Hawlen Medical University Erbil, Iraq which provided the description of newly designed teaching course for the faculty in Medical College, it was noted that a high proportions of the participants said the scientific content was different and useful. Sessions like teaching method, and learning, tips to raise the standard of lecture and finally the principles of lecturing was found to be useful.⁵

In the present study most of the faculty were used to large group teaching in their institution. But, after BCME training the faculty informed they have started to implement the new interactive teaching method and the assessment technique.

Lectures on the students assessment was found beneficial by both the non-clinical and clinical faculties. The topics on assessment methods like the structured oral exam and OSCE presented during

the course had a great advantage and was found to help the faculty to implement their new assessment method. There are other showing the same results after FDP ⁶

Similarly as described by six month to a year the authors, of taking after the BCW and faculty development program a large proportion of the participants informed that they are using many of the new training techniques in their teaching program ⁷

A teaching programme that was offered by the Department of Medical Education at Ankara University School of Medicine for their faculty from different disciplines found the training programme useful and those faculty recommended that this training will be very useful to implement the new curriculum⁸ Several reasons were cited by few faculty regarding non-implementation of the newer skills, like lack of support from the other faculties in the department and lack of self-motivation. The lack of motivation among the teacher are because of poor recognition and lack of appreciation and reward for their work. Only a motivated teacher will fulfil their teaching and clinical commitments ⁹

The present study had the following outcomes:

- All the faculty were satisfied after attending BCW
- The main highlight was the practical and skill based focus which was valued by the participants
- A positive Attitudes was developed by the faculty after the workshop
- The participants reported increased knowledge of specific teaching like assessing learns needs, seminars, small group teaching and providing feedback.
- Faculty reported that they have developed greater involvement in teaching after the workshop.

Similar result and outcome was also noticed in a systematic review of faculty development by Yvonne stein art etal ^{10,11,12}

BCW which is designed by NMC for 3 day duration sensitizes the faculty to the new teaching learning methods and also the assessment methods.

Conclusion:

Evaluation of the workshop revealed many positive facts like satisfaction of participants, the faculty also felt this training changed their approach to teaching and assessment methods.

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