

DETERMINATION OF THE EFFECT OF BASIC COURSE IN MEDICAL EDUCATION WORKSHOP ON TRAINED FACULTY MEMBERS AT A TERTIARY CARE MEDICAL COLLEGE IN INDIA

Medical Education

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ABSTRACT

Background And Objectives: The medical profession has become a stressful field due to several changes that are constantly taking place in response to advancements in medicine, the changes in healthcare delivery system, and patients' requirements and expectations. A continuously evolving, high quality medical education system is required to ensure the continued delivery of high quality healthcare. Thus, Medical Council of India has made mandatory the establishment of Medical Education Units in order to empower faculty members in delivering good health education. For this, Medical Council of India has been conducting Basic Course Workshops in Medical Education Technologies since 2009. This study has been conducted to determine the effect of Basic Course in Medical Education Workshop on trained faculty members and also to know their perception about it. **Methods:** It was a prospective, questionnaire-based study. Data was collected from all the participants of the BCME training. The Impact of the BCME Training was assessed by means of a pre-test and post-test questionnaire score analysis, feedback questionnaire forms and focussed group discussions. **Results:** As per the results of both pre- and post-test questionnaire, there was a significant difference between the two proportions as seen using the chi-squared test and it was seen that there is a significant difference between the knowledge levels before and after the BCME Training ($df=3$, $p<0.001$). In the feedback questionnaire forms, 70% of participants strongly agreed that BCME is beneficial in acquiring new concepts and knowledge. In the focussed group discussion, 70% participants strongly agreed that BCME should be made compulsory for each medical teacher. **Interpretation and Conclusion:** There was a significant rise in the knowledge levels of the participants after the training. 70% participants agreed that BCME is beneficial in acquiring new knowledge, while, 83.3% agreed that BCME should be made compulsory for each medical teacher. It can be concluded from this study that the BCME training has had a significant impact on the knowledge levels of the faculty members. Thus, BCME must be an integral part of the faculty development programme but its modules should be regularly updated time to time.

KEYWORDS

basic course in medical education workshop, trained faculty members, tertiary care medical college, graduate medical education

INTRODUCTION:

The medical profession has become a stressful field due to several changes that are constantly taking place in response to advancements in medicine, the changes in healthcare delivery system, and patients' requirements and expectations. (1) This revolution in medical practice needs to be mirrored by similar changes in the medical education system and the acceptance of new roles by medical teachers in order to cope with the the rapid advancement of medical science. (1) A continuously evolving, high quality medical education system is required to ensure the continued delivery of high quality healthcare. (2)

Faculty members of medical colleges are being asked to perform academic tasks for which they have not received any formal training. These include case based tutorials and computer based instructional programs to name a few. Attending frequent faculty development programs is essential for the medical teachers to succeed at these new teaching tasks. (3)

Hence, The Medical Council of India, by the MCI Regulations on Graduate Medical Education, 1997, made it mandatory for all medical colleges to establish Medical Education Units (MEUs) or departments in order to empower faculty members to avail modern education technology for teaching. In order to boost this activity, MCI has been conducting Basic Course Workshops in Medical Education Technologies since 2009. (4)

Most of the times, we do not come to know how much learning takes place after these workshops. The impact of the training on actual medical teaching is not always assessed. There is limited data available as well on effect of basic course in medical education workshop (BCME) on medical education technology on trained teachers. (5) So, this study has been carried out with the aim to determine the effect of revised basic course workshop (BCME) on trained faculty members of our medical college and also to know the trained faculty members' perception on the basic course in medical education workshop.

MATERIALS AND METHODS:

The study was initiated after seeking clearance from the institutional ethics committee (MC/KOL/IEC/NON-SPON/1802/02/2023). It was a prospective, questionnaire-based study. The BCME training was conducted for 3 days in the second week of February 2023. Data was collected from all the participants of the BCME training. The data analysis was done from April to June 2023.

The BCME Training was carried out in a tertiary care medical college

in Eastern India, by the college's Medical Education Unit (MEU). The training was held under the supervision of the NMC (National Medical Commission) Regional Centre.

The sessions included in the first day of the basic course in medical education workshop (BCME) training were-introduction: group dynamics, systems approach, learning process, adult learning, goals, roles and competencies of an Indian Medical Graduate, learning domains and progression of learning, developing objectives from competencies, linking learning and assessment with competencies and introduction to assessment.

The topics covered on the second day were- choosing a teaching method for objectives and competencies, interactive and innovative teaching methods including large group (demonstration), small group (with demonstration) and appropriate use of media, writing a lesson plan, assessment planning and quality assurance, writing the correct essay question, short answer question and multiple choice question, internal assessment and formative assessment and summative assessment.

The third day included sessions on- discussion on attitude, ethics and communication (AETCOM) module: reflection and narrative, matching assessment to competency, objectives and learning workshop - choosing the right assessment, effective clinical and practical skill teaching, assessment of clinical and practical skills, improving self directed learning through technology, feedback and educational networking for growth.

A total of 30 participants who were a mix of Professors, Associate Professors and Assistant Professors, participated in the BCME training. They were subjected to a pre- and post-test data analysis. Feedback questionnaire was given to them regarding their opinion on the BCME training and their responses were collected. All faculties who underwent BCME training were selected for focused group discussion (FGD).

The effect of the BCME training was assessed by the following methods:

- 1) Pre- and post-test questionnaire analysis: At the beginning of the BCME workshop, each participant had to fill up a pre-session questionnaire and similarly a post-session questionnaire immediately after the completion of workshop. Scores in these pre-test and post-test questionnaire were reviewed to determine

the immediate impact of the workshop on their knowledge levels.

- 2) Feedback questionnaire: Feedback from the participants of the BCME training using pre-validated, pre-tested feedback questionnaire was collected.
- 3) Focused Group Discussion (FGD): Two groups of 15 faculty members each were formed for FGD. Faculties were asked questions on their opinion regarding the BCME training provided. They were also asked to give their suggestions for further improvement in the program. Their answers and opinions were noted down and they were analysed by qualitative methods.

RESULTS:

The total number of participants is 30. 23% participants are Professors, 57% are Associate Professors and 20% are Assistant Professors.

The knowledge regarding various aspects of BCME was determined for all the participants in terms of both pre- and post-test questionnaire. The difference between the two proportions was sought using the chi-squared test and it was seen that there is a significant difference between the knowledge levels before and after the BCME Training ($df=3$, $p<0.001$). The analysis clearly showed that there was a significant rise in the knowledge levels of the participants after the training. Table 1 shows the pre and post test analysis of participants.

The feedback of the participants who were trained in BCME was taken on various aspects of the training. Feedback forms were distributed to the participants at the end of the training and their responses were collected back. The responses were recorded and are shown in Figure 1.

20% of participants strongly agreed that BCME is beneficial in acquiring new concepts and knowledge, while 50% agreed, 20% answered neutral, 6.6% disagreed and 3.3% strongly disagreed.

23.33% of participants strongly agreed that the three-day duration of BCME is too lengthy, while 36.67% agreed, 23.33% answered neutral, 10% disagreed and 6.6% strongly disagreed.

16.67% of participants strongly agreed that implementation of some part of modules of BCME require more teaching faculty, while 30% agreed, 40% answered neutral, 10% disagreed and 3.3% strongly disagreed.

26.67% of participants strongly agreed that they had attended BCME for the purpose of getting the certificate and promotion, while 46.67% agreed, 16.67% answered neutral, 6.6% disagreed and 3.3% strongly disagreed.

Focused group discussions were conducted amongst the teachers trained on the BCME. The responses were collected from the trained faculties. The responses were collected on the basis of rating on a Likert scale. The responses were analysed and are presented in the Table 2.

70% participants strongly agreed that BCME should be made compulsory for each medical teacher, while 13.3% agreed, 10% answered neutral, 3.3% disagreed and another 3.3% strongly disagreed. 60% participants strongly agreed that they were happy with the curriculum and schedule of the RBCW that was conducted in our institute, while 20% agreed, 13.3% answered neutral, 3.3% disagreed and another 3.3% strongly disagreed. 53.3% participants strongly agreed that they felt that there is a need of regular refresher courses for medical education, 30% agreed, 6.7% answered neutral, another 6.7% disagreed and 3.3% strongly disagreed.

DISCUSSION:

Most teachers who join in medical education institutions have thorough knowledge of their respective disciplines, but generally have little or no educational knowledge on the basics of classroom teaching. Thus, these workshops are necessary to fill this gap. (6)

This study provides an idea about the impact of the BCME Training on trained teachers. It will help to understand to what extent this type of faculty development workshop is actually fulfilling the purpose which it is supposed to fulfil.

Programs to advance teaching and learning can be a one-time program (like a retreat) or can be regularly scheduled workshops. In one review,

medical faculty teaching development programs have been found to have beneficial effects which has been measured by participants' self-evaluation of teaching ability, knowledge of effective teaching methods, and teaching evaluations. (7) Musal et al. (8) and Ozyurda (9) have evaluated the opinions of participants about the efficiency of the training programme.

Several studies have been conducted in India and in neighbouring countries showing the usefulness and effectiveness of Medical Education workshops like in a study conducted at the B.P. Koirala Institute of Health Sciences, Dharan, Nepal to assess the effectiveness of the teacher training workshop, enrolling 26 teachers, it has been found that there was a significant gain in the knowledge of participants ($p<0.001$) and all the participants (100%) agreed upon the training being informative and learned new things about assessment. (10)

A teaching programme was offered by the Department of Medical Education at Ankara University School of Medicine for their physical The Journal of Medical Research 103 educators, including 150 professors from different disciplines. 97.5% to 100% participants assessed the course as either good or very good. 82% participants gave optimal rating to the topics covered and time management and 100% recommended that it should be attended by all faculty members. (9)

In our study, in pre- and post-test data analysis, there was statistically significant difference between two proportions ($p<0.001$). This implies that the immediate impact of BCME was good in cultivating the knowledge of the participants. This indicates effectiveness of the BCME training on medical teachers.

Medical teaching institutions must recruit a core of medical faculty according to its mission, define the attributes and teaching competences, implement faculty development programs, and finally, support academic vitality. (11)

In the study conducted by Yadav AK et al., majority of the faculty thought that basic course workshop was helpful in acquiring new concepts or knowledge. More than fifty percentage of the faculty thought that present module of basic course required some changes and implementation of some parts of modules of basic course workshop require more teaching faculty in the department. (12)

The role of teachers training in improving teaching effectiveness is well established. Preparing healthcare professionals for teaching is regarded as essential for enhancing teaching effectiveness. (13) Although many reports describe various faculty development interventions, there is a paucity of research demonstrating their effectiveness. Therefore, more studies like ours are required to assess the effectiveness of faculty development programs.

CONCLUSION:

It can be concluded from this study that the BCME training has had a significant impact on the knowledge levels of the faculty members. Thus, BCME must be an integral part of the faculty development programme but its modules should be regularly updated time to time. Most of the analysis related to feedback from the participants and also the Focused Group Discussions brought out the several advantages of the workshop but at the same time also mentioned the drawbacks and modifications required to address the existing gaps. Studies of the same type will help in improving the medical education of India.

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Conflict Of Interest: None

Tables:

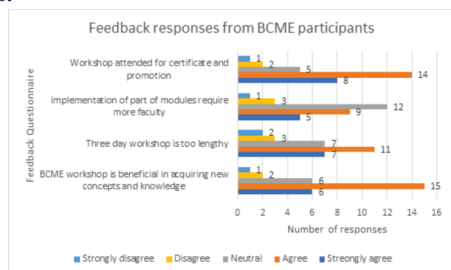
Table 1: Pre- and Post-Test Analysis of Participants

Marks obtained	Pre-Test No of participants	Post-Test No of participants
Below 5	6	0
5-10	9	1
10-15	8	6
15-20	7	23

Table 2. Feedback of the BCME trained teachers taken in the form

of Focussed Group Discussion

Questions for Focussed Group Discussions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
BCME should be made compulsory for each medical teacher	70%	13.30%	10%	3.30%	3.30%
I am happy with the curriculum and schedule of the BCME conducted in our institute	60%	20%	13.30%	3.30%	3.30%
There is a need of regular refresher courses for medical education	53.30%	30%	6.70%	6.70%	3.30%

Figures:**Figure 1:** Feedback responses from BCME participants**REFERENCES:**

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