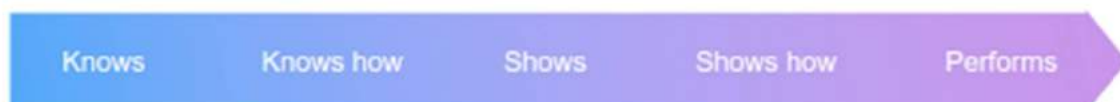




Medical Council of India

National Faculty Development Program



Perform Learn Teach Interpret Knowledge



**Faculty development initiatives for the
Undergraduate Medical Education
Program: ten years' experience – status
report**

2009-2018



**Medical Council of India
Pocket-14, Sector-8, Dwarka,
New Delhi- 110077**

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अध्यक्ष

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FOREWORD

Faculty Development Program: Status Report

India with the highest number of medical schools and medical teachers in the world is faced with the challenge of imparting quality medical education to its medical students. The ever-increasing number of medical colleges has posed a challenge to the administrators to ensure provision of adequate and modern infrastructural requirements in medical colleges, and that the colleges are manpowered by well qualified medical faculty who are knowledgeable in their chosen field of medical speciality. Thus, quality sustenance and quality enhancement of medical education is now a matter of national and global concern. The major issue facing medical educators and administrators is to ensure maintenance of quality and standardization of medical education across a large, culturally diverse population, separated by geographical boundaries, and compounded by the paucity of formal training of medical teachers in the principles of higher education and technology. It is aptly said by Jean Piaget that "*The most admirable of reforms cannot but fall short in practice if teachers of sufficient quality are not available in sufficient quantity*".

It was obvious to medical administrators that an urgent need existed for better equipping the medical teachers with core competencies in clinical training, laboratory methodologies, interpretation skills, assessment strategies and communication abilities and thus enable them to mentor suitably the Indian Medical Graduate. Realising the dire need for a systematic approach to faculty development in consonance with the desired attributes of an Indian Medical Graduate, MCI initiated a National Faculty Development Program in 2009 covering all medical colleges in India which are under the ambit of MCI. I understand that this unique Faculty Development Program (FDP) in medical education, with the goal of capacity building, undertaken for the first time by a regulatory body like Medical Council of India started in 2009 with the launching of five Regional Centres which has expanded today to 22 centres of which 12 are Regional Centres and ten are more advanced Nodal Centres. Till December 2018, 44,932 faculty have been trained by these Centres. This is indeed a mammoth effort and I congratulate the faculty of the Medical Education departments of the Centres and the Academic Cell of MCI on this remarkable achievement.

My best wishes to the FACULTY DEVELOPMENT PROGRAM of MCI and to its Centres.

**Chairman,
Board of Governors**

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MEDICAL COUNCIL OF INDIA
BOARD OF GOVERNORS
IN SUPERSESSION OF MEDICAL COUNCIL OF INDIA

FOREWORD

Faculty Development Program: Status Report

Faculty Development Programs are now accepted universally as crucial to the success of implementation of curricular reforms by providing the orientation, updated knowledge and skills necessary to the teacher-learner. These programs help in sensitizing medical teachers to the concepts involved in competency based medical education and help them to acquire knowledge and clinical skills needed to become competent and effective teachers, administrators, researchers and mentors. Recognising this need, Medical Council of India in 1997 mandated the establishment of Medical Education Units (MEUs) in all medical colleges but it was noted later that most of the MEUs so established were non-functional. The Council, therefore took steps to establish Regional Centres in Medical Education in those medical colleges with well functional MEUs. It is gratifying to note that today there are 22 functional Centres (10 Nodal and 12 Regional Centres), under MCI, conducting well scripted and closely monitored Faculty Development Programs of both basic and advanced levels across the medical colleges in the country. A total of 44,932 faculty have been trained in the Basic Course Workshops. This is perhaps the largest Faculty Development Program undertaken in the country and possibly in the world setting new standards in medical education training. These Centres were successful in training the core faculty in medical colleges in the implementation of first phase of the new competency based UG curriculum.

I congratulate the Conveners of all the Nodal and Regional Centres and the Academic Cell of the Council in achieving this distinction.

Vats

(Dr. R.K. Vats)
Secretary General, BoG, MCI

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The Academic Cell is grateful to the members of the Expert group who provided guidance and continuous intellectual inputs on the changes needed in the Faculty Development program, curricular governance and preparation of modules for implementation of new UG curriculum. Dr. Avinash Supe, Chairman of the Expert Group was a pillar of knowledge and strength guiding all members through various intellectual activities and accompanying difficulties with utmost patience and consideration; we are indeed fortunate to have his advice and guidance through many difficult times. Dr. Krishna Seshadri, Member of the Expert Group has been of immense support to me and to the Academic Cell with his intellectual inputs in all areas particularly curriculum development and curriculum

governance and preparation of various modules, enriching the deliberations of the Expert Group discussions and challenging the thought processes of all members. Dr. Tejinder Singh with his profound knowledge in medical education was one of the first experts who prepared the basic course workshop program framework for the first Faculty Development Program; the current program owes much to his knowledge and uncompromising attention to detail. Dr. Subir Maulick has been of great support in developing various protocols and improving the quality of the modules. The contributors are thankful to the Conveners/Co-conveners of the following Nodal/Regional Centres for their commitment and cooperation in the conduct of FDP, which is responsible for it to have become, perhaps, the largest Faculty Development Program of the country:

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- Dr. Deepanjali Lomte, MUHS, Nashik;
- Dr. Asma Rahim, Dr. Geeta Govindraaj & Dr. Priya Chandran, Government Medical College, Kozhikode;
- Dr. Vinita Kalra, Dr. Juhi Kalra, & Dr. Deepa Singh, Himalayan Institute of Medical Sciences, Dehradun;
- Dr. Kadambari & Dr. Z. Zayapragassarazan, JIPMER, Puducherry,
- and the current Conveners of the MCI Nodal and Regional Centres who have spent their time, knowledge and intellectual resources in establishing, nurturing and developing their respective Centres and conducting FDP at their institutions and in the colleges allocated to them with great perseverance and devotion even under very difficult circumstances. **The success of the FDPs carried out under MCI umbrella would not have been possible without the inputs of the faculty of the Department of Medical Education in these MCI Centres.**
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Abstract

In the specialty of medical education, Faculty development (FD) is an important component meant for expertise development and academic enrichment. India has the highest number of medical colleges and consequently the highest number of medically qualified faculty. Medical Council of India (MCI) initiated in 2009 the Faculty Development Program (FDP) such as the Basic Course Workshop in Medical Education Technologies in conjunction with Orientation Program for MEU coordinators at the national level. Today, the FDP is being conducted by MCI at 10 Nodal and 12 Regional Centers across the country. Till December 2018, MCI has funded 904 pre-revised Basic Course Workshops, 520 revised Basic Course Workshops and 273 workshops on Attitude, Ethics and Communication module. Totally, 44,932 faculty have been trained in these Workshops. This longitudinal program has already created a network of trained faculty members who are now contributing to medical education in the country in various capacities including implementation of curriculum reforms and on-line training of medical college teachers in the nuances of the new competency based UG curriculum, as mandated by MCI. This trained pool of faculty will cater to the ever-expanding need for trainers to conduct curriculum design and implementation.

Key words: Faculty development, Basic Course Workshop, AETCOM, Advance Course, Nodal Centres, Regional Centres

Background

Medical education program in India is one of the largest in the globe, producing high quality physicians many of whom emigrate to the United States, the United Kingdom, and several other countries in search of better career prospects. Therefore, the quality of medical education in India has a broad global impact¹. There was a marked increase in the number of medical colleges in India offering undergraduate medical courses in the past 10 years, increasing from 297 colleges in 2009 (146 in the Government sector and 151 in the private sector) to the current total of 542 medical colleges in 2019 (280 in the Government sector and 262 in the private sector)². Due to the consequent increase in medical teachers in the country, quality sustenance and quality enhancement of medical education has become a matter of national and global concern^{3,4}. The major issue is to ensure maintenance of quality and standardization of medical education across a large, culturally diverse population,

separated by geographical boundaries, and compounded by the paucity of formal training of medical teachers in the principles of higher education and technology^{5,6}.

Medical Council of India (MCI), the central regulatory body in charge of medical education since 1934, has set Minimum Standard Requirements in terms of infrastructure, equipment and manpower as prerequisite for medical Institutes to be allowed to start undergraduate and postgraduate medical courses. Recognising the need for better equipping the medical teachers with core competencies in clinical training, laboratory methodologies, interpretation skills, assessment strategies and communication abilities, MCI, notified the Regulations on Graduate Medical Education (1997) which mandated the establishment of Medical Education Units (MEUs) or departments in all medical colleges to impart teaching skills and facilitate transition towards use of modern education technologies⁷. But, the MEUs established by many medical colleges were non-functional and prompted MCI to initiate urgent remedial measures like introduction of Faculty Development Programs.

Faculty development in medical education involves activities “designed to improve an individual’s knowledge and skills in areas considered essential to the performance of a faculty member as a medical teacher”⁴. Realising the dire need for a systematic approach to faculty development in consonance with the desired attributes of an Indian Medical Graduate, MCI initiated a National Faculty Development Program in 2009 covering all medical colleges in India which are under the ambit of MCI. Strategic planning for this was done by the Academic Cell of MCI and experts in medical education. This was administered through the Academic Cell of MCI with the mandate to ensure a uniform quality of faculty training and resultant quality teaching in medical colleges across the country by adequately trained faculty. This unique Faculty Development Program (FDP) in medical education, with the goal of capacity building, undertaken for the first time by a regulatory body started in 2009 by launching Regional Centres (RCs) in Medical Education Technologies, coinciding with the Platinum Jubilee celebrations of MCI. The Executive Committee of MCI in the meeting held on March 9, 2009 decided that the Regional Centres identified by MCI would implement the Faculty Development Program by conducting the first workshop from 1-3 July, 2009. Accordingly, five institutions viz., Christian Medical College, Ludhiana, Jawaharlal Nehru Medical College, Wardha, Smt. NHL Municipal Medical College, Ahmedabad, Sri Ramachandra Medical College & Research Institute, Chennai and St. John’s Medical College, Bangalore launched Regional Centres in their respective institutions (Table 1) by starting the first Basic Course Workshop in Medical Education Technologies (BCW) on July

1, 2009. The program for the course was prepared by a group of experts; quality of training imparted was monitored by (a) deputing a Resource faculty from the Regional Centre as observer to all MET training programs run by medical colleges, and (b) feedback from the Observer was channeled back to the college for taking appropriate corrective measures. Later, Regional Centres in MET were launched at Seth GS Medical College & KEM hospital, Mumbai on September 8, 2009 and at Maulana Azad Medical College, New Delhi on November 3, 2009. Additional Regional Centres in MET to reach a maximum of 20 Regional Centres by 2018 were identified gradually, after rigorous monitoring of Faculty Development Programs conducted by various medical institutions. The aim of this program was to sensitize, equip and empower medical teachers in discharging their teaching responsibilities in a cogent manner and to prepare institutions and faculty members execute various significant roles and responsibilities entrusted to them towards improving medical education.

In 2014, the Academic Council and Executive Committee of MCI made an important recommendation with significant future implications to the Faculty Development Program, that “training in Basic Course Workshop in MET would be compulsory for faculty of all the medical colleges at all levels including Professors and teacher administrators”. Recently this decision has been notified by MCI and gave a much required encouragement and thrust to the FDP. Simultaneously in January 2014, nine of the 20 Regional Centres were upgraded as Nodal Centres in Medical Education with the mandate to start the Advance Course in Medical Education (Table 1) in addition to the Basic Course in MET. One more Regional Centre at Jawaharlal Nehru Medical College, Belagavi was upgraded later as a Nodal Centre in medical education. The program of BCW was revised by the Expert Group to make it more contemporary and was named revised Basic Course Workshop.

Table 1: List of MCI Regional/Nodal Centres in India and date of launching

S. No.	Regional Centre	Date of launching
1.	Christian Medical College, Ludhiana*	July 1, 2009
2.	Jawaharlal Nehru Medical College, Wardha*	July 1, 2009
3.	Smt. NHL Municipal Medical College, Ahmedabad*	July 1, 2009
4.	Sri Ramachandra Medical College & Research Institute, Chennai*	July 1, 2009
5.	St. John’s Medical college, Bangalore*	July 1, 2009
6.	Seth GS medical College & KEM hospital, Mumbai*	September 8, 2009
7.	Maulana Azad Medical College, New Delhi	November 3, 2009
8.	Gandhi Medical College, Secunderabad, Telengana	May 19, 2010
9.	Government Medical College, Kottayam*	September 6, 2010

10.	SCB Medical College, Cuttack	November 26, 2010
11.	Pramukhswami Medical College, Karamsad*	December 10, 2010
12.	Christian Medical College, Vellore*	February 15, 2011
13.	Maharashtra University of Health Sciences, Nashik	March 23, 2011
14.	Jawaharlal Nehru Medical College, Belagavi*	May 14, 2011
15.	Sri Aurobindo Institute of Medical Sciences, Indore	May 26, 2011
16.	Government Medical College, Kozhikode	September 1, 2011
17.	King George's Medical University, Lucknow	April 2, 2012
18.	Andhra Medical College, Visakhapatnam	February 6, 2013
19.	Himalayan Institute of Medical Sciences, Dehradun	August 2, 2014
20.	JIPMER, Puducherry	July 6, 2015

* updated as Nodal Centre in Medical Education in 2014

Details of the Faculty Development Program (FDP) of MCI:

The details of FDP conducted by MCI are given below:

1. Basic course workshop (BCW) in Medical Education Technologies (2009-2014):

The Basic Course Workshop in Medical Education Technologies was started in the year 2009 and continued until 2014. It was envisaged then that all faculty members in medical colleges should undergo training in this Course during early part of his/her career, preferably during the joining year. The course was of three days duration and covered all three curricular components viz. educational objectives, teaching-learning methods and assessment. A key component of the course design was the insights into principles of adult learning and their role in shifting the teaching-learning process from teacher-centred to being student-centred. Emphasis was given to interactive teaching as well as promotion of self-directed learning as detailed in various sessions and their objectives (Table 2). Additionally, leadership skills were introduced through sessions on systems approach, group dynamics and educational networking. The concepts of competency based education with special reference to the Indian Medical Graduate brought a unique national perspective to the Faculty Development Program. Sessions on giving feedback on written and performance assessment were introduced to enhance the quality of formative assessments. Experts who developed the curriculum wrote faculty guides and specific modules (available on MCI website) and identified resources that the Regional and Nodal Centres could refer to for preparing the sessions. This played a critical role in ensuring uniformity and quality across all the RC's and NC's across the country. Training was imparted at MCI to the RC and NC faculty for the implementation of the competency based UG curriculum. When courses were conducted in medical colleges, an Observer from the

respective Nodal/Regional Centre monitored the conduct of the program. The Council also provided financial support to the MCI Centres to conduct various FDPs like Basic Course workshops (pre-revised & revised), AETCOM program and Advance Course in Medical Education. The uniqueness of the MCI FDP program lies in the fact that a regulator of medical education of a country took up the important task of capacity building of faculty with rigorous implementation of the quality control of the programs. We could not find any reference where a regulator is involved in capacity building in the field of Medical education.

Table 2. Program of the revised Basic Course Workshop

Sessions and Objectives
<ul style="list-style-type: none"> • Concept of group dynamics and team based functioning • System's approach, Principles of adult learning, Learning process • Competency based medical education: Indian Medical Graduate – Goals, roles • Learning domains and progression of learning • Interactive and Innovative teaching methods including Large Group (Demo), Small Group (with demo) and appropriate use of media • Writing a lesson plan appropriate to the objectives and teaching learning methods • Effective clinical and practical skill teaching • Relationship between objectives, learning and assessment; utility of assessment • Writing the correct essay question, short answer question and MCQ • Internal assessment and Formative assessment • Feedback: giving feedback to students • Improving self-directed learning (SDL) through technology • Discussion on Attitude, Ethics and Communication (AETCOM Module): Reflections and Narratives • Educational networking - creating a network of educators

Results of BCW training (no. of faculty trained & workshops conducted):

From 2009-2014, 23,591 teachers were trained in 904 pre-revised Basic Course Workshops by the 20 Regional Centres and medical colleges (Table 3); of this, 9,235 teachers were trained by Regional Centres in 342 pre-revised Basic Course workshops

while medical colleges trained 14,356 teachers in 562 workshops under supervision of observer from Regional Centres (Table 3).

Table 3: Details of teachers trained by Regional Centres and medical colleges in pre-revised Basic Course Workshop (BCW)

Sr. No.	Name of the Nodal/Regional Centre	Number of teachers trained in BCWs conducted at RCs		Number of teachers trained in BCWs conducted at medical colleges	
		Teachers trained	Workshops conducted	Teachers trained	Workshops conducted
1.	Christian Medical College, Ludhiana	515	15	755	28
2.	Jawaharlal Nehru Medical College, Wardha	455	17	1009	38
3.	Smt. NHL Municipal Medical College, Ahmedabad	678	23	940	35
4.	Sri Ramachandra Medical College & Research Institute, Chennai	743	29	1603	70
5.	St. John's Medical College, Bangalore	526	19	1,137	42
6.	Maulana Azad Medical College, New Delhi	458	19	380	16
7.	Seth GS Medical College & KEM Hospital, Mumbai	632	20	683	25
8.	Gandhi Medical College, Secunderabad	550	20	388	14
9.	Government Medical College, Kottayam	564	21	734	28
10.	SCB Medical College, Cuttack	389	15	410	15
11.	Pramukhswami Medical College, Karamsad	540	23	1,920	76
12.	Christian Medical College, Vellore	597	22	746	30
13.	Maharashtra University of Health Sciences, Nashik	414	19	1,068	38
14.	Jawaharlal Nehru Medical College, Belagavi	486	16	645	22
15.	Sri Aurobindo Institute of Medical Sciences, Indore	507	20	531	24
16.	Government Medical College, Calicut	366	15	421	18
17.	King George's Medical University, Lucknow	373	12	555	25
18.	Andhra Medical College, Visakhapatnam	286	10	351	14
19.	Himalayan Institute of Medical Sciences, Dehradun	126	06	80	04
20.	JIPMER, Puducherry	30	01	-	-
	No. of pre-revised BCW workshops conducted & teachers trained	9,235	342	14,356	562

Total number of teachers trained: $9,235 + 14,356 = 23,591$

Total No. of workshops conducted: $342 + 562 = 904$

2. Revised Basic course workshop (rBCW) in Medical Education Technologies

After the Basic Course Workshop in MET in its initial format was operational up to 2014, and based on the experience gained at Regional/Nodal Centers and feedback from faculty as well as participants, the Expert Group meeting in December 2014 revised the course contents to make it more contemporary and to be in tune with the broader objectives of the proposed revised Regulations on Graduate Medical Education, 2019 part II and the competency based UG curriculum under preparation. The program of the **revised Basic Course Workshop** was meant to provide basic knowledge, skills, attitude and communication skills to faculty in medical colleges which they can apply in day to day practice in different areas of teaching and assessment (classroom, laboratory, clinical, field work).

Results of revised BCW training (no. of faculty trained & workshops conducted):

Until December 2018, Nodal & Regional Centres together had trained 6,170 faculty in the revised Basic Course Workshop, by organizing 222 revised Basic Course workshops at the Nodal and Regional Centres (Table 4). Once the MEU faculty of the medical colleges were trained at these centres, colleges were allowed to conduct training in revised Basic Course Workshop (rBCW) to their faculty under supervision of observer from Regional/Nodal Centres. Until December 2018, 7,819 medical college faculty have been trained in 298 revised Basic Course workshops in the colleges (Table 4). **Thus, total of 13,989 faculty have been trained in 520 revised Basic Course workshops until December, 2018.**

Table 4: Details of teachers trained by Nodal & Regional Centres and medical colleges in revised Basic Course Workshop (rBCW) (from January 2015 to December 2018)

Sr. No.	Name of the Nodal/Regional Centre	Details of training in rBCW at NCs & RCs		Revised Basic Course Workshops in medical colleges	
		No. of teachers trained in rBCW	No. of rBCW done	No. of teachers trained	No. of Workshops held
1.	Christian Medical College, Ludhiana	206	7	226	08
2.	Jawaharlal Nehru Medical College, Wardha	188	7	421	16
3.	Smt. NHL Municipal Medical College, Ahmedabad	240	9	447	18
4.	Sri Ramachandra Medical College & Research Institute, Chennai	312	11	578	21
5.	St. John's Medical College, Bangalore	339	12	634	24
6.	Maulana Azad Medical College, New Delhi	508	18	358	14
7.	Seth GS Medical College & KEM Hospital, Mumbai	321	11	680	24
8.	Gandhi Medical College, Secunderabad	405	14	323	11
9.	Government Medical College, Kottayam	335	11	544	23
10.	SCB Medical College, Cuttack	394	14	215	08
11.	Pramukhswami Medical College, Karamsad	231	9	510	21
12.	Christian Medical College, Vellore	323	11	375	14
13.	Maharashtra University of Health Sciences, Nashik	222	8	366	13
14.	Jawaharlal Nehru Medical College, Belagavi	307	11	312	11
15.	Sri Aurobindo Institute of Medical Sciences, Indore	263	11	136	06
16.	Government Medical College, Calicut	349	12	254	09
17.	King George's Medical University, Lucknow	445	16	686	29
18.	Andhra Medical College, Visahkapatnam	228	8	286	10
19.	Himalayan Institute of Medical Sciences, Dehradun	335	14	110	05
20.	JIPMER, Puducherry	219	8	358	13
	No. of teachers trained	6170	222	7819	298

Number of teachers trained in rBCW in RCs & NCs & colleges: 6,170 + 7819 = 13,989

Total No. of workshops conducted: 222 + 298 = 520

3. Training in Attitude, Ethics Communication (AETCOM) module

The Medical Council of India introduced a one-day training course in Attitude, Ethics and Communication (AETCOM) competencies from July, 2015⁸. The module was published by MCI in 2018.

The AETCOM module endeavors to strike a balance between the five identified roles of an 'Indian Medical Graduate (IMG)' viz; Clinician, Leader and Member of health care team, Communicator, Life-long learner and Professional, right from the first professional year of training. This module is based on the premise that changing a person's attitude can change his/her behavior. This module consists of various competency-based case scenarios to be conducted in small groups in class rooms. The proposed teaching-learning and assessment methods for implementation of this module across the three professional years are also given. It was envisaged that the successful implementation of the AETCOM module will be the forerunner of the transition to competency based undergraduate medical education program proposed by Medical Council of India.

In 2015, teaching of the AETCOM module was mandatorily introduced in the FDP after conduct of each 3-day revised Basic Course Workshop, with competency based instruction as a component, initially at the Regional and Nodal Centres and since 2018, in all Faculty Development Programs held in colleges, Regional and Nodal Centres.

Results of AETCOM training (no. of faculty trained & workshops conducted):

Until December 2018, Nodal & Regional Centres together have trained 6020 faculty in AETCOM module in 224 workshops at the Regional and Nodal Centres (Table 5). In medical colleges, 1332 teachers were trained in 49 AETCOM workshops conducted under observership from Centres (Table 5). **Thus, total of 7,352 faculty have been trained in 273 AETCOM workshops until December, 2018.**

Table 5: Details of teachers trained by Nodal & Regional Centres and medical colleges in AETCOM module (from January 2015 to December 2018)

Sr. No.	Name of the Nodal/Regional Centre	Details of training in AETCOM at NCs & RCs		AETCOM Workshops in medical colleges	
		No. of teachers trained	No. of AETCOM Workshops done	No. of teachers trained	No. of Workshops held
1.	Christian Medical College, Ludhiana	242	9	111	04
2.	Jawaharlal Nehru Medical College, Wardha	238	9	59	02
3.	Smt. NHL Municipal Medical College, Ahmedabad	220	8	75	03
4.	Sri Ramachandra Medical College & Research Institute, Chennai	251	10	50	02
5.	St. John's Medical College, Bangalore	378	14	nil	nil
6.	Maulana Azad Medical College, New Delhi	315	11	30	01
7.	Seth GS Medical College & KEM Hospital, Mumbai	341	12	291	10
8.	Gandhi Medical College, Secunderabad	305	11	57	02
9.	Government Medical College, Kottayam	316	11	36	02
10.	SCB Medical College, Cuttack	354	13	NIL	NIL
11.	Pramukhswami Medical College, Karamsad	278	11	123	05
12.	Christian Medical College, Vellore	279	10	29	01
13.	Maharashtra University of Health Sciences, Nashik	230	9	NIL	NIL
14.	Jawaharlal Nehru Medical College, Belagavi	269	10	30	01
15.	Sri Aurobindo Institute of Medical Sciences, Indore	300	11	22	01
16.	Government Medical College, Calicut	362	13	117	04
17.	King George's Medical University, Lucknow	491	18	127	05
18.	Andhra Medical College, Visakhapatnam	268	10	85	03
19.	Himalayan Institute of Medical Sciences, Dehradun	353	15	30	01
20.	JIPMER, Puducherry	230	9	60	02
	No. of teachers trained in AETCOM module	6020	224	1332	49

Number of teachers trained in AETCOM in RCs & NCs & colleges: 6,020 + 1332 = 7,352

No. of workshops conducted: 224 + 49 = 273

Thus, under the Faculty Development Program of MCI, 44,932 faculty have updated their basic knowledge in medical education in 1697 workshops conducted by Regional and Nodal Centres and medical colleges combined, from 2009 until December 2018, as given below.

Summary of training of teachers in Faculty Development Program

Name of the Workshop	No. of teachers Trained	No. of workshops conducted
Pre-revised Basic Course Workshop	23,591	904
Revised Basic Course Workshop	13,989	520
AETCOM	7,352	273

Total no. of teachers trained in NCs/RCs/MCs in BCW (pre & post revision) + AETCOM=23591+13,989 + 7,352 = 44,932.

Provisional outcome:

Provisional outcome over the last 10 years' efforts has been that nearly 50% of the medical teachers in the country were sensitized to medical education principles and ~ nearly 2000 faculty mentors have voluntarily registered for the more intense Advance Course in Medical education.

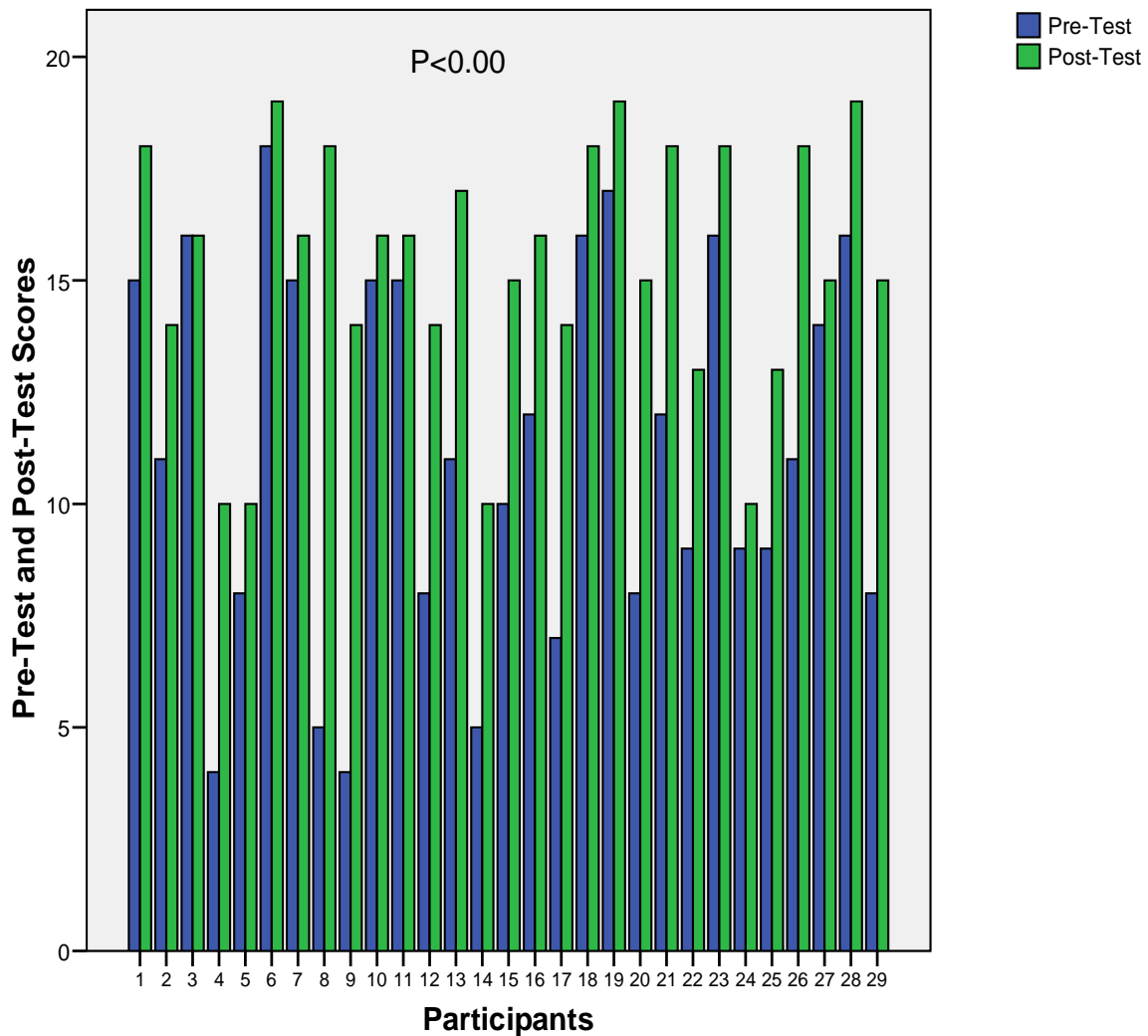
4. Feedback from participants on Basic Course Workshops

As the faculty development program being implemented by MCI has completed a decade, it was felt prudent to analyze and reflect upon the feedback and suggestions from participants and resource persons. Structured feedback and evaluation (formative and summative) of every revised Basic Course Workshop and AETCOM was incorporated within the activity as a mandatory component. The concept of appropriate feedback was emphasized in sessions and implemented.

Many centres (eg., MUHS, Pune; Seth GS MC, Mumbai; JLMC, Wardha etc.) carried out evaluation of Basic Course Workshop using well known methods; one such example from MUHS, Pune is given below:

- Pre-test- post-test design:** The pre- and post-test had 20 Multiple Choice Questions. The same questions in pre-test were administered for post-test. The mean score of post-test marks (15 ± 3) was found to be significantly more ($p < 0.000$) using 'paired t test' than the mean score of pretest marks (11 ± 4). **A sample analysis is given in Fig. 1.**

Comparison of Pre-test Post- test Marks



- Program Evaluation Part 1: Daily Session Evaluation**

Daily session evaluation feedback forms were administered to the participants at the end of each day's session. Participants scored about **“What was good about the session”** and **how this session could have been made better.**

- Program Evaluation Part 2: Program Evaluation Questionnaire**

This was given at the end of the program with the purpose of finding out the effectiveness of the program in the given MCI format. This included a) participants' rating of the overall workshop, b) participants' rating of the organization of the workshop, c) content analysis of the participants' response to the open-ended questions: "How it could be made better?"

- **Program Evaluation Part 3:** Retro-pre-evaluation Questionnaire which included: 1. Importance of sessions before and after the workshop, and 2. Skills learned before and after the workshop.

5. Feedback from participants on Attitude, Ethics and Communication (AETCOM) Module

The workshop on AETCOM was received well by participants and faculty⁸ who appreciated the concept and the contents of the document. But there was concern that the shortage of faculty in some colleges may cause difficulties in its smooth implementation since this requires collaboration among faculty members. The comments of the participants included that: (1) the cases are authentic and interesting with good case scenarios, (2) the longitudinal approach of attitude, communication development and hierarchy of competency is rational and effective, (3) but, limited time is available for implementation, (4) there is need for intense faculty training in this area, (5) Principals/Deans/Heads of Departments/senior faculty members to be trained first for assured implementation, and (6) need for inclusion of AETCOM training in the revised Graduate Medical Education Regulations, for assured success. It was suggested that every college must create a special team of at least 30-35 trained faculty members (from all disciplines), for delivering the AETCOM module.

Discussion

This paper provides information on the efforts put in by India's medical education regulator, the Medical Council of India, from 2009 to 2018, to improve the knowledge, attitude and teaching skills of the faculty in its constituent colleges thereby improving the execution of the undergraduate teaching curriculum. This has come to be of major importance in view of the revamping of the undergraduate teaching curriculum which is now competency based and expects the teaching faculty to acquire a variety of skills. The

Faculty Development Program thus provides a mechanism to medical schools in designing professional growth opportunities for their faculty. Bligh noted that faculty development programs are tangible indicators of the institutions' inner faith in their academic workforce⁹.

Way forward

The success of this program depends on its uniform implementation in all the medical colleges; however, it is essential to monitor and record its long-term impact and identify the lacunae. Since the new Regulations on Graduate Medical Education (Amendment) 2019 has been notified, the curricular reforms required to implement the Competency based Undergraduate Curriculum will help in producing more skilled Indian Medical Graduates. It is hoped that the ongoing Faculty Development Program of MCI will facilitate smooth implementation of the new curriculum across the country and the Curriculum Committee of a college will be the nodal agency in implementing these curricular reforms. The introduction of the Curriculum Implementation Support Program (CISP) will go a long way in implementing the competency based UG curriculum.

It might be premature to add, but this may be an appropriate time to create a Resource Centre for Faculty Development which might function as focal center for educational innovations and reforms. It is envisaged that finally, all FDP activities initiated by Medical Council of India would result in better implementation of revised curriculum leading to a competent "Indian Medical Graduate" who would impact health care service delivery in the country for better.

Conclusions

While training is an important input for changing medical practices, it is equally important to have an educational environment, wherein trained people can apply the newly acquired knowledge and skills. Without this, we may not be able to have the desired effects. The responsibility for developing such a climate and mentoring and supporting trained faculty to apply the newly acquired knowledge and skills in their teaching practices is the responsibility of the Medical Education Units/Medical Education Departments and the colleges.

Faculty development the world over has been a difficult issue to implement successfully for multiple reasons. Our experience shows that it requires plenty of time, patience, effort and resources to develop, deliver and sustain a program covering more than 500 medical colleges. Since the effects are not immediately visible, buy-in for this program is initially slow. However, Medical Council of India, as the regulator of medical education in India, has taken this unique step to add science to the art of teaching. Initial results are encouraging and so we must continue our efforts, particularly for the colleges that are newly established. To keep the faculty motivated, the FDP curriculum must be regularly updated including new global developments in educational methodology. Perhaps, a longer waiting period may be needed to see if the program has actually resulted in improving medical education and thereby better health status of the population.

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