International Journal of Anatomy and Research,
Int J Anat Res 2019, Vol 7(4.1):7010-15. ISSN 2321-4287
DOI: https://dx.doi.org/10.16965/ijar.2019.287

Original Research Article

THE IMPACT OF FACULTY DEVELOPMENT PROGRAM: SELF-ASSESSMENT OF MEDICAL TEACHERS AFTER BASIC - MEDICAL EDUCATION TECHNOLOGY (MET) WORKSHOP

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ABSTRACT

Introduction: To achieve the goal of better health services, Medical Council of India (MCI) and Maharashtra University of Health Sciences (MUHS) are regularly conducting three days Basic Medical Education Technology (MET) workshop for faculty development of medical teachers. The purpose of the basic MET workshop is to provide basic knowledge, skills & attitude to all faculties in medical colleges which they can apply in day to day practice in different areas of teaching learning and assessment methods. Hence, there is a need to study the impact of faculty development program.

Aims & Objectives: The present study was done to assess practices and attitudes of the medical teachers towards basic MET workshop and to study effective professional benefits of basic MET workshop.

Materials and Methods: Total 71 faculty members who had undergone through basic MET workshop were responded to validated questionnaire.

Result: 54.9% faculty members have retained their knowledge completely about using audiovisual tools in teaching learning methods while 71.8% faculty members have retained their knowledge to large extent about domains of learning followed by preparing essay questions (67.6%) and objective structured practical examination (64.8%). 63.4% faculty members benefited completely from using audiovisual tools effectively in teaching methods while 71.8% faculty members benefited markedly from modifying large group teaching followed by domains of learning (66.2%), principles of adult learning and modifying small group teaching (64.8%).

Conclusion: The study has revealed that the impact of basic MET workshop on medical teachers is adequate. Overall retention of knowledge and effective benefit of workshop is more than average.

KEY WORDS: Faculty development, Medical Education Technology, teaching learning methods.

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Access this Article online	Journal Information
Quick Response code	**International Journal of Anatomy and Research** ICV for 2016 90.30 ISSN (E) 2321-4287 | ISSN (P) 2321-8967 **https://www.ijmhr.org/ijar.htm** **DOI-Prefix:** https://dx.doi.org/10.16965/ijar
DOI: 10.16965/ijar.2019.287	**Article Information** Received: 29 Jul 2019 Accepted: 12 Sep 2019 Peer Review: 30 Jul 2019 Published (O): 05 Oct 2019 Revised: None Published (P): 05 Oct 2019

INTRODUCTION

The medical education system in India is one of the largest educational systems in the world [1]. Medical schools in India have seen rapidly growing in the last 20 years almost doubling in strength [2]. The unprecedented growth of medical institutions in India has led to a shortage of teachers and created a quality challenge for medical education [3].

Teachers need to be trained, selecting appropriate teaching learning methods and proper evaluation methodologies applicable in

assessments of students during examinations at departmental level as well as at the university levels. In medical education system, various roles have been ascribed to the medical teacher of today and to function at the optimum, faculty development programmes play a very crucial role. Regular workshops should be conducted for teachers to update them regarding technology advances and its proper implementation.

Faculty Development Programme is a tool for improving the educational vitality of medical institutions. Bland et al. has described, faculty development is a "Planned program to prepare institution and faculty members for their academic roles including teacher, researcher, administrator, writing scholarship and career management" [4]. It is well documented that faculty development promotes and contributes to faculty members teaching knowledge, behaviours, skills, rekindling their motivation to change their attitude towards embracing effective learning strategies [5]. Faculty development also helps the teacher to "plan the curriculum, make rational use of media technology and design an assessment strategy.

The faculty development is possible only through a systematic approach" [6]. Emergence of "Medical Education Units" (MEU's) has been noted all over the country especially after its existence has been made mandatory by the Medical Council of India [7]. In order to boost the activity of MEU's that came up, MCI has been conducting Faculty Development Programme through selected 20 Regional Centres through the basic course workshops on Medical Education Technology (MET) since July 2009 [8]. As specified by the Medical Council of India (MCI), Faculty Development Programs aim to improve the quality of medical education by training and sensitizing teachers about new concepts in teaching and assessment methods; develop knowledge and clinical skills required for performing the role of competent and effective teachers, administrators, researchers and mentors; assist clinicians to acquire competency in communication and behavioural skills and update knowledge using modern information and research methodology tools [9].

Present study was done to assess the practices & attitudes of the medical teachers towards the basic MET workshop and to study effective professional benefits of basic MET workshop.

MATERIALS AND METHODS

Medical Education Technology unit of our medical institution, Navi Mumbai, Maharashtra has conducted many basic MET workshops since year 2011. About 90 medical teachers were trained through basic MET workshop since last six months to two years.

Prior permission was taken from Institutional Ethics committee to conduct this study. The validation of questionnaire was done by distributing questionnaire among Medical Education Unit members of the institution. Those validated questionnaire was given to faculty members who had undergone through basic MET workshop. Total 71 faculty members from both preclinical and clinical departments were responded to questionnaire

Participated faculty members rated their opinion regarding retention of their knowledge of basic MET workshop and its effective professional benefits. A Likert-type scale ("don't remember", "to some extent", "to large extent", "completely") was used for opinion of faculty members regarding retention of their knowledge of basic MET workshop while ("not at all", "partly", "markedly", "completely") was used for its effective professional benefits. The opinions of faculty members were analysed.

RESULTS

Medical council of India (MCI) and Maharashtra University of Health Sciences (MUHS) are regularly conducting basic MET workshops for medical faculties to sensitise and train medical teachers about various teaching learning methods, assessment methods and encourage in the participants more favourable attitude towards medical education. Total 71 faculty members from our medical institution, Navi Mumbai, Maharashtra who have completed basic MET workshop were responded to questionnaire of this study.

as shown in table 1, in this present study 54.9% faculty members have retained their knowledge completely about using audiovisual tools in teaching methods. 71.8% faculty members have

Table 1: Responses from faculty members about retention of knowledge after Basic MET workshop

Sr. No	Questions	Don't Rem. %	To some extent %	To large extent %	Completely %	Avg %
1	Principles of adult learning	0	15.5	57.7	26.8	3.11
2	Curriculum planning	0	19.7	60.6	19.7	3
3	Identifying domains of learning	0	8.5	71.8	19.7	3.11
4	Modifying large group teaching	0	12.7	52.1	35.2	3.23
5	Modifying small group teaching	0	2.8	60.6	36.6	3.34
6	Microteaching	0	7	63.4	29.6	3.23
7	Using audiovisual tool effectively	1.4	1.4	42.3	54.9	3.51
8	Mechanics of paper setting	0	12.7	59.2	28.2	3.15
9	Preparing essay questions	0	12.7	67.6	19.7	3.07
10	Preparing multiple choice questions	0	4.2	57.7	38	3.34
11	MCQ-Item analysis	0	16.9	54.9	28.2	3.11
12	Objective structured practical examination (OSPE)	0	18.3	64.8	16.9	2.99
13	Objective structured clinical examination (OSCE)	0	21.1	63.4	15.5	2.94

retained their knowledge to large extent about domains of learning. 67.6% and 64.8% faculty members have retained their knowledge to large extent about preparing essay questions and objective structured practical examination respectively. 63.4% faculty members have retained their knowledge to large extent about objective structured clinical examination and microteaching. Retention of knowledge by faculty members about curriculum planning and modifying small group teaching to large extent was 60.6% while 57.7% faculty members have retained their knowledge to large extent about principles of adult learning and preparing multiple choice questions. Retention of knowledge to large extent about mechanics of paper setting and MCQ –Item analysis was 59.2% and 54.9% respectively. 52.1 % faculty members have retained their knowledge to large extent about modifying large group teaching (Table 1).

as shown in table 2, knowledge about modifying large group teaching and domains of learning was markedly benefited by 71.8% and 66.2% faculty members respectively. 64.8% faculty members benefited markedly from principles of adult learning and modifying small group teaching while 63.4% faculty members benefited completely from using audiovisual tools effectively in teaching methods. Knowledge about objective structure practical examination was markedly benefited by 60.6% faculty members while 56.3% faculty members benefited markedly from curriculum planning, micro teaching, objective structured clinical examination and using interactive teaching techniques. Knowledge about preparing multiple choice questions and MCQ-Item analysis was markedly benefited by 53.5% faculty members. 49.3% and 47.9% faculty members benefited markedly from preparing essay questions and mechanics of paper setting respectively.

Table 2: Responses from the faculty members about effective professional benefits after basic MET workshop.

Sr. No	Questions	Not at all %	Partly %	Markedly %	Completely %	Avg %
1	Principles of adult learning	0	8.5	64.8	26.8	3.18
2	Curriculum planning	0	18.3	56.3	25.4	3.07
3	Identifying domains learning	0	4.2	66.2	29.6	3.25
4	Modifying large group teaching	0	2.8	71.8	25.4	3.23
5	Modifying small group teaching	0	2.8	64.8	32.4	3.3
6	Microteaching	0	5.6	56.3	38	3.32
7	Using audiovisual tools in teaching effectively	1.4	2.8	32.4	63.4	3.58
8	Mechanics of paper setting	0	5.6	47.9	46.5	3.41
9	Preparing essay questions	0	16.9	49.3	33.8	3.17
10	Preparing multiple choice questions	0	2.8	53.5	43.7	3.41
11	MCQ-Item analysis	0	15.5	53.5	31	3.15
12	Objective structured practical examination (OSPE)	0	12.7	60.6	26.8	3.14
13	Objective structured clinical examination (OSCE)	0	14.1	56.3	29.6	3.15
14	Using interactive teaching techniques	0	4.2	56.3	39.4	3.35
15	Creating a positive learning atmosphere	0	0	63.4	36.6	3.37

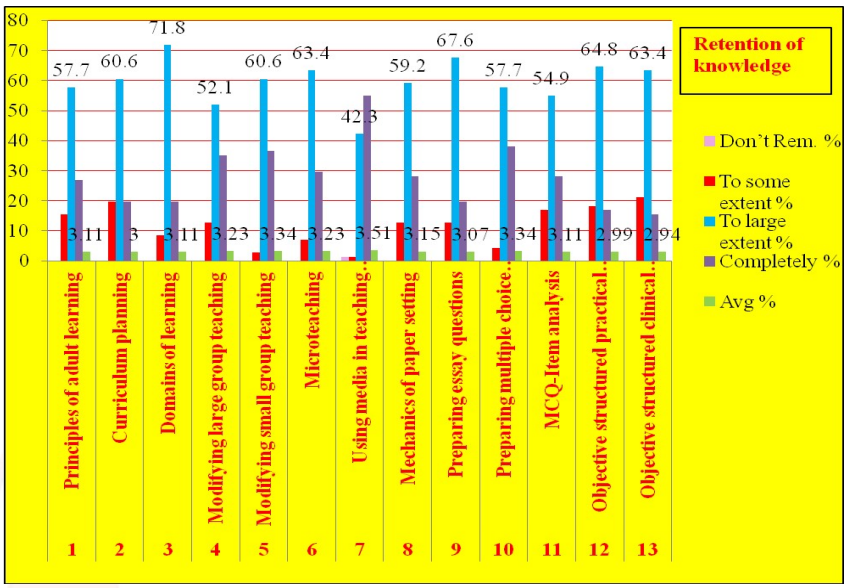

Fig. 1: Graph showing retention of knowledge of medical faculty members after basic MET workshop.

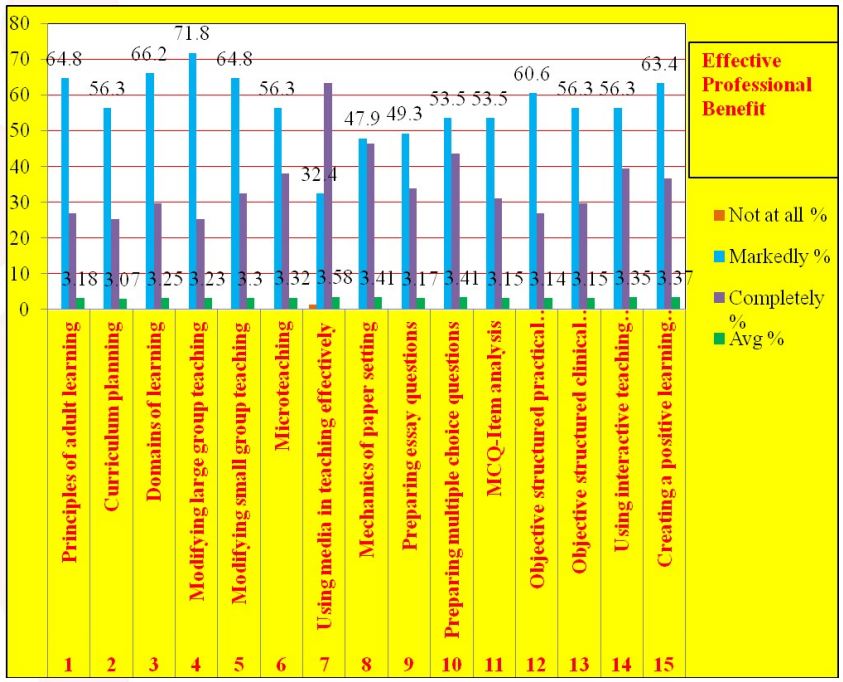

Fig. 2: Graph showing effective professional benefits after basic MET workshop.

DISCUSSION AND CONCLUSION

Faculty Development Programmes are especially important for adapting faculty members to their changing mission towards teaching to enhance efficacy and performance of their teaching skills.

In this present study 54.9% and 42.3% faculty members have retained their knowledge completely and to large extent respectively about using audiovisual tools in teaching methods while study by Nagdeo NV, Chari S reported that 36.58 % and 48.78 % faculty members have retained their knowledge completely and to large extent respectively about using audiovisual tools in teaching methods [10].

The findings in this present study and study by Nagdeo NV, Chari S about retention of knowledge to large extent about principles of adult learning (57.7% and 56.1%) , identifying learning objectives (71.8% and 56.1%), modifying large group teaching (52.1% and 39.2%), small group teaching (60.6% and 48.8%), preparing essay essay questions (57.7% and 56.1%), preparing multiple choice questions (67.6% and 48.8%), MCQ- Item analysis (54.9% and 39%), objective structured practical examinations (64.8% and 28.6%) and objective structured clinical examinations (63.4% and 50%) were reported [10].

As shown in table 3, the findings about markedly effective benefits of principles of adult learning of present study was 64.8% while 51.2% and 43.20% was reported by Nagdeo NV, Chari S and Ozlem Sarikaya et al respectively [10, 11]. The completely effective benefit about domains

Table 3: Comparison of effective professional benefits of items of basic MET workshop.

Items	Responses of faculty members (%)	Present study	Nagdeo NV, Chari S	Ozlem Sarikaya et al
Principles of adult learning	Partly	8.5	6.82	39.8
	Markedly	64.8	51.21	43.2
	Completely	26.8	17.07	11
Domains of learning	Partly	4.2	21.95	18.6
	Markedly	66.2	46.34	55.9
	Completely	29.6	29.26	22.9
Modifying large group teaching	Partly	2.8	31.7	--
	Markedly	71.8	31.7	--
	Completely	25.4	26.82	--
Modifying small group teaching	Partly	2.8	19.51	--
	Markedly	64.8	39.02	--
	Completely	32.4	36.58	--
Using audiovisual tools in teaching effectively	Partly	2.8	7.31	22
	Markedly	32.4	41.46	48.3
	Completely	63.4	51.21	26.3
Preparing essay questions	Partly	16.9	26.82	30.8
	Markedly	49.3	41.46	50.5
	Completely	33.8	24.39	9.3
Preparing multiple choice questions	Partly	2.8	12.19	22.4
	Markedly	53.5	46.34	62.6
	Completely	43.7	39.02	10.3
MCQ-Item analysis	Partly	15.5	21.95	42.1
	Markedly	53.5	43.9	32.7
	Completely	31	29.26	7.5
Objective structured practical examination (OSPE)	Partly	12.7	14.28	22.8
	Markedly	60.6	38.09	12.5
	Completely	26.8	33.33	16.7
Objective structured clinical examination (OSCE)	Partly	14.1	10	36.1
	Markedly	56.3	70	39.8
	Completely	29.6	20	13.3
Using interactive teaching techniques	Partly	4.2	12.19	24.6
	Markedly	56.3	46.34	57.6
	Completely	39.4	41.46	15.3
Creating a positive learning atmosphere	Partly	0	12.19	20.3
	Markedly	63.4	46.34	55.1
	Completely	36.6	41.46	22

study (29.6%) matches with findings of Nagdeo NV, Chari S (29.26%) and Ozlem Sarikaya et al (22.90%) [10, 11].

The findings of present study about modifying large and small group teaching (25.40% and 32.40%) were similar with findings of Nagdeo NV, Chari S study (26.82% and 36.58%) [10, 11].

Effective benefits about items like using audio-visual tools in teaching effectively, preparing essay questions, preparing multiple choice questions, MCQ-Item analysis, using interactive teaching techniques were more or less similar with Nagdeo NV, Chari S study under markedly scale while completely effective benefit findings about items describing OSCE, OSPE and creating a positive learning atmosphere were more or less similar with study of Nagdeo NV, Chari S study [10].

Baran N et al reported that such training workshop will have a greater impact on the ability of teachers in effective teaching in real classroom situations [12].

Hence the present study has revealed that the impact of basic MET workshop on medical teach-

-ers is adequate. Overall retention of knowledge and effective benefit of workshop is more than average.

Conflicts of Interests: None

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How to cite this article:
Jyoti Gaikawad, Varsha Navgire. THE IMPACT OF FACULTY DEVELOPMENT PROGRAM: SELF-ASSESSMENT OF MEDICAL TEACHERS AFTER BASIC- MEDICAL EDUCATION TECHNOLOGY (MET) WORKSHOP. Int J Anat Res 2019;7(4.1):7010-7015. **DOI:** 10.16965/ijar.2019.287