

Medical teachers' knowledge and attitude towards microteaching

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Abstract: Medical teachers try with various skills of communication to make teaching process more readily available to the students. The easiest way of teaching might be the transition from teaching the peer to teaching the student by undergoing microteaching. Microteaching, a powerful tool for teaching methodology, was an underutilized tool in this institution. So, this present pre-structured questionnaire based cross-sectional study was conducted among 35 medical teachers to evaluate their knowledge and attitude towards microteaching. The cumulative knowledge of medical teachers showed that 80% of the teachers had the knowledge about microteaching. Majority of the medical teachers (85.7%) agreed that, microteaching was individualized for every medical teacher. Microteaching provided opportunity for actual practice (97.2%) and it was needed to improve teaching skills in our institute (97.1%). Therefore, this study among medical teachers concluded that microteaching helped in improving teaching capabilities and it might be included as a part of teaching programme in medical institute.

Key Words: Medical Teacher, Medical Education, Microteaching, Peer group.

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I. Introduction

Teaching is a complex process. Educational goals have changed from teaching the students to help them in finding the relevant information in learning process. So, a teacher needs to acquire various skills to communicate effectively with the students.¹ Therefore, the emerging concept in education is to make the learning process more readily available to the students.²

Microteaching is defined as a specific teaching behaviour to practice teaching under controlled conditions.³ This form of teaching trusts in organized practice teaching and is a useful tool in acquiring and enhancing appropriate personal teaching skills.¹ It is an easy way to transition from teaching the peers to teaching students.⁴

Microteaching being a powerful tool for teaching methodology is an underutilized tool in this institution. Henceforth, the present study was conducted among the medical teachers to evaluate their knowledge and attitude towards microteaching and also to add some light on the changing form of medical education.

II. Materials And Methods

This pre-structured questionnaire based cross-sectional study was conducted in Tripura Medical College & Dr. B.R.A.M. Teaching Hospital among 35 medical teachers who had attended basic workshop on medical education technology as approved by Medical Council of India as a part of faculty development programme. The study was conducted over a period of 4 months (September to December, 2016). Medical teachers willing to participate were included on voluntary basis and those who were not willing to participate were excluded from the study.

After a full briefing of the study and assurance of confidentiality an informed consent was obtained. A pre-designed, pre-administered questionnaire was prepared and was distributed to assess the knowledge and attitude regarding microteaching. The teachers were encouraged to furnish their unbiased independent opinion and were also requested to select the preferences for each item in the questionnaire and to give their overall appropriate answers wherever required. The collected coded data were entered for analysis by using the Statistical Package for Social Sciences (SPSS), version 20.

III. Results

The present study was conducted among 35 medical teachers of TMC & Dr. B.R.A.M. Teaching Hospital, age ranged from 29 years to 67 years with a mean age of 47.74±12.32 years.

The socio-demographic characteristics of the study population are mentioned in Table I.

Table I: Socio-demographic characteristics of the study population

Sl. No.	Bio-social characteristics		Number (n=35)	Percentage (%)
1.	Gender	Male	34	97.14
		Female	1	2.86
2.	Designation	Professor	14	40
		Associate Professor	11	31.4
		Assistant Professor	10	28.6
3.	Teaching Experience	More than 10 years	15	42.8
		6 to 10 years	10	28.6
		1 to 5 years	10	28.6
		Less than 5 years	0	0

The cumulative knowledge of medical teachers about microteaching is depicted in Table II.

Table II: Knowledge of medical teachers about microteaching [in percentage (%)].

Sl. No.	Parameters of knowledge	Total Number (n=35)	Percentage (%)
1.	Microteaching emphasizes on how to teach	28	80
2.	Assessment of medical teacher by peer group in microteaching	20	57.1
3.	Assessment of medical teacher in microteaching is for all teaching skills	22	62.9
4.	Knowledge about the advantages of microteaching	19	54.29
5.	Knowledge about the disadvantages of microteaching	14	40

It was found that, 80% of the teachers had the knowledge about microteaching where emphasis has to be given on how to teach. Only 57.1% of them had the knowledge of assessment by peer group which was an essential component in microteaching where all teaching skills (62.9% of the teachers) might be assessed and improved. Knowledge on advantages and disadvantages of microteaching was observed among 54.29% and 40% of the medical teachers respectively (Table II).

Among the medical teachers, 97.1% of them opined that, prior lesson planning process was needed for effective teaching while 54.3% of them were aware about the longer duration (four times or more) required for proper lesson planning. Medical teachers (88.6%) had expressed their willingness for receipt of personal video-recording to improve teaching skill.

The medical teachers' attitude towards micro-teaching is again well represented in Table III.

Table III: Attitude of medical teachers towards microteaching.

Sl. No	Parameters on attitude	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1.	The utility of microteaching program is individualized	10 (28.6%)	20 (57.1%)	1 (2.9%)	1 (2.9%)	3 (8.6%)
2.	Watching personal video-recording helps in overcoming initial nervousness	13 (37.1%)	17 (48.6%)	1 (2.9%)	3 (8.6%)	1 (2.9%)
3.	Microteaching offers to help with students' problems in taking class	10 (28.6%)	14 (40%)	3 (8.6%)	7 (20%)	1 (2.9%)
4.	Microteaching shows tolerance to other's points of view	5 (14.3%)	23 (65.7%)	2 (5.7%)	4 (11.4%)	1 (2.9%)
5.	The objective of microteaching is to improve the teaching skill	16 (45.7%)	16 (45.7%)	2 (5.7%)	1 (2.9%)	0
6.	Microteaching gives opportunity for actual practice	12 (34.3%)	22 (62.9%)	1 (2.9%)	0	0
7.	Preference to include microteaching to improve teaching skill in your institute	13 (37.1%)	21 (60%)	0	1 (2.9%)	0

[** Percentage is denoted by “%”]

The majority of the medical teachers (85.7%) agreed that, microteaching was individualized for every medical teacher and might help to overcome the initial nervousness (85.7%) by watching personal video-recording. This might in turn help in facing students' problems during classes. The above observation depicted that, microteaching helped in improving tolerance towards other's point of view (80%) and also to improve the teaching skills (91.4%). The medical faculties (97.2%) felt that, microteaching might provide opportunity for

actual practice. They (97.1%) also opined that microteaching might be included in our institute to improve teaching skill (Table III).

IV. Discussion

Learning is basically a change in behaviour which can be brought about at any age. When the learner is experienced, learning becomes more effective. Medical teachers unlike most other teaching professionals are unique in the fact that they do not possess any special or formal medical education qualification in addition to their undergraduate and postgraduate qualifications. Their personal ability to teach depends largely on by observing other teachers as well as by trial and error method during real time classroom teaching.¹

Anshu et al. had evaluated the results and impact of microteaching as a useful study for honing the teaching skills of the health professionals. All the participants in their study valued the interactive friendly nature of the sessions and also appreciated the non-condescending nature of the feedback imparted. The positive critique technique was encouraging to the first-timers. They also found the constructive feedback was more acceptable and less offensive than criticism.⁵ In the present study, majority (80%) of the medical teachers knew the concept of micro-teaching and also 54.29% of them were aware regarding the advantages of micro-teaching.

A case study on 'microteaching lesson study' combining the elements of Japanese lesson study and microteaching technique reported that the pre- and post-lesson plans had successfully demonstrated growth in teachers' knowledge on teaching.⁶ Similar way in the present study, most (97.1%) of the teachers opined that, prior lesson planning process was needed for effective teaching.

Microteaching as a technique for personality development and confidence-building of health professionals was observed in a model study of a dental education program, "teach, critique, re-teach".⁷ The study in our institute also evaluated the opinion of the majority (85.7%) of the teachers for microteaching as an individualized for every medical teacher. This in turn helps to overcome the initial nervousness (85.7%) by watching personal video-recording which helps in facing students' problems during classes.

However, Ramesh A in his article opined that, longer duration was the major limitation for microteaching sessions. This hurdle resulted in time constraint. All the skills could not be practiced. The re-planning and re-teaching activity could be done.⁸ Our study also revealed that at least 54.3% of the medical teachers were aware about the fact that longer duration (four times more) is required for proper lesson planning.

A study in a pharmacy college tried to determine the impact of a microteaching experience on development of performance-based skills. A microteaching activity incorporated within a professional development seminar series was proved to be an effective method to enhance and develop communication, problem-solving, and critical-thinking skills in pharmacy students.⁹ The present study also showed that, microteaching helped in improving tolerance towards other's points of view (80%) and also to improve the teaching skills (91.4%). The medical faculties felt that, microteaching provided the opportunity for actual practice (97.2%) and it was indeed needed to be included to improve teaching skill in our institute (97.1%).

V. Conclusion

Therefore, this study concluded that micro-teaching, is an important tool for the medical teachers which helps in arming their teaching skills towards improvement of their teaching capabilities and the teaching programme in the medical institute. The present study also adds additional rays of light regarding the attitude of medical faculties towards microteaching which plays a key role in modern era of medical educational technology. Probably, this novel concept will contribute in changing the teaching methodology among the medical faculties in a concise manner.

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