

MICROTEACHING - A TOOL USED TO IMPROVE TEACHING SKILLS AND TEACHING BEHAVIOR IN POST GRADUATE STUDENTS

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ABSTRACT

Background: Medical teachers most often do not receive a special training in pedagogic techniques. Lack of such training results in ineffectivity of the delivered lecture, communication gap between the teacher and the student, which ends up in lowering the quality of teaching and standard of education. "Micro Teaching" technique is used with the aim of helping budding teachers to sharpen their teaching skills and teaching behaviors. **Aims & Objective:** To inculcate teaching skills and teaching behaviors in Postgraduate (PG) students and to develop the interest in teaching of PG students. **Methodology:** It was descriptive longitudinal study on eight first year PG student from various department of our institute. It was a four week study each participant underwent two sessions, in first session 10 minute presentation by participants in front of peer group, followed by peer group feedback on teaching skills, second session two weeks later after incorporating suggestions of first session to see the improvement. After second session participants asked to fill "self-evaluation" forms. **Results:** After comparing first session with second session results it was found statistically significant improvement in teaching skills and everyone agreed that microteaching helps to improve teaching skills and teaching behaviors, develop interest in teaching and boost confidence. **Conclusion:** This study has confirmed earlier research findings regarding the benefits of the microteaching technique in assisting individuals to develop their professional competence and confidence.

Key words: Microteaching, Small group teaching, Teaching-Learning methods, Teach-re-Teach

INTRODUCTION

In traditional methods of teaching, medical teachers do not receive a special training, so their ability to teach therefore largely depends on self training, either by trial and error while teaching or by observation of colleagues, which may or may not be helpful [1]. In order to get rid of this Microteaching was invented in the mid -1960's by Dwight W. Allen. Microteaching is a teacher training technique for learning teaching skills and teaching behaviors, where stress is given on "How to teach" than "What to teach". Knowledge acquisition, skill acquisition, and transfer are the three different phases of microteaching [2]. In India, Microteaching technique is under-estimated and under-utilized for various reasons. Practicing the economical, simpler methods of microteaching would help develop better teachers for the country [3]. This, we believe and hence the aim of this study was to sensitize the PG students (prospective student teacher) and teaching faculty of

the institute about the advantages of microteaching, to improve teaching skills and thereby improves the standard of medical education.

MATERIALS AND METHODS

Study design: It was descriptive longitudinal study

Ethics approval: Institutional Ethics Committee approval was taken before starting research. Informed consent was obtained from the participants.

Study location: Conducted in Department of Dermatology of Dr. VVPF's Medical College and Hospital, Ahmednagar (MS).

Study duration: The study duration was 4 weeks from 01st September 2015 to 30th September 2015.

Inclusion criteria: Total 08 first year post graduate (PG) students from various departments of institute 02 students from dermatology, 02 from medicine, 02 from ophthalmology and 02 from pediatric department were consented to participate.

Methodology:

The participants were briefed about microteaching before the session. During study each participant underwent two microteaching sessions, in first session (baseline) participants were asked to prepare and present a micro lesson of 15 minutes on topic of their choice in front of faculty of the same subject and other participants. Sessions followed by peer group review



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(include five PG students and two faculties) who gave constructive feedback regarding their presentation for improvement in teaching skills and teaching behavior. The parameters on which participants were assessed are given in Table1.

They were again assessed on the same points during second session two week later after incorporating suggestions of first session to see the improvement. A validated questionnaire was used to obtain participants’ perceptions about the project (Appendix-1) and data analysis was done with MS excel & SPSS 20.

Table 1. Teaching skills & teaching behaviors on which participants were assessed

Teaching Skills			Yes	To Some Extent	No
Set Induction	a	Aroused interest in the beginning			
	b	Specified objectives of the presentation			
Planning	a	Organized material in a logical sequence			
	b	Used relevant content matter			
Presentation	a	Fluency in language			
	b	Used non verbal clues, eye contact			
Interaction	a	Allowed Question from audience			
	b	Asked questions			
	c	Rewarded pupil effort			
	d	Clarified doubts			
Use of Audio-Visual (AV) aids	a	Used proper AV aids			
	b	Used the aid effectively			
Summarization	a	Summarized the important points at the end			
	b	Checked that all the audience understood the points			
Lesson on whole was effective					
Note: One Mark (v) is allotted to each skills and Total Score is 105					

RESULTS

A total of 08 first year post graduate students participated in the study; the results of their performed teaching skills collectively tabulated in Table 2, as assessed by the faculty on parameters given in Table 1 during micro-teaching sessions. The Table 2 shows overall average percentage of getting “Yes”, was improved from 42% in

session I to 59% in session II, observations were statistically significant p=0.000 (Paired ‘t’ test). Overall average percentage of getting “No”, was reduced from 26% in session I to 10% in session II, this improvement was also statistically significant p=0.002 (Paired ‘t’ test).

Table 2. Session-wise Performed Teaching Skills by Participants.

Participant No.	Yes Score		To Some Extent Score		No Score	
	Session I	Session II	Session I	Session II	Session I	Session II
1	6 (5%)	33 (31%)	32 (30%)	36 (34%)	67 (63%)	36 (34%)
2	48 (45%)	71 (67%)	34 (32%)	31 (29%)	23 (21%)	03 (2%)
3	26 (24%)	39 (37%)	22 (20%)	43 (40%)	57 (54%)	23 (21%)
4	63 (60%)	84 (80%)	24 (22%)	17 (16%)	18 (17%)	04 (3%)
5	70 (66%)	80 (76%)	19 (18%)	23 (21%)	16 (15%)	02 (1%)
6	58 (55%)	64 (60%)	32 (30%)	37 (35%)	15 (14%)	04 (3%)
7	62 (59%)	89 (84%)	35 (33%)	14 (13%)	08 (7%)	02 (1%)
8	31 (29%)	46 (43%)	48 (45%)	43 (40%)	26 (24%)	16 (15%)



Fig 1a. Briefing session



b. Microteaching session



c. Faculty feedback

Feedback was taken from participants about their experience of this exercise, almost all of them liked the concept and agreed on points that microteaching will help prospective student teacher to improve their teaching skills and teaching behavior, some could overcome the first time teaching anxieties and most of them felt improved confidence levels.

DISCUSSION

Microteaching is technically a scaled-down teaching. Microteaching reduces the complexities of normal classroom teaching, thus allowing the teacher to concentrate on the acquisition of a teaching skill [4]. The core skills of microteaching such as presentation and reinforcement skills help the novice teachers to learn the art of teaching at ease and to the maximum extent. The principle of microteaching is based on “Plan-Teach-Feedback-Replan-Reteach-Refeedback” [1, 5]. It is a useful technique in acquiring appropriate teaching skills and a proven way to help the teacher to get off to a strong start.

The overall purpose of this study was to examine prospective teachers’ perceptions regarding the application of microteaching. Above results after microteaching sessions showed there is both objective and subjective improvement for the students in their teaching skills and teaching behavior. Although the students were told about the teaching skills in briefing session, but still the improvement occurred only after their presentations, this implies that these teaching skills can be best learnt by doing those skills themselves, this is also reported in study done by Lumma-Sellenthin A 2012 and Steinert Y 1996 [6, 7]. To overcome the first time teaching anxieties students still perceive small group learning to be more effective than large group learning in the initial stage same observation noted in study done by de Jong Z et al 2010 [8]. Teaching skills improved in the following fields like starting presentation, aroused interest in the beginning and summarizing. In spite of microteaching sessions participants could not do well were-involving the audience by asking questions, allowing them to ask questions and parameters which were not affected with microteaching were using audio-visual aids and relevant contents. This

is almost similar with a study conducted by Faizen et al 2014 [9].

Observed strength of this study was consistent with the study done by Lumma-Sellenthin A 2012[6], Edwin G. Ralph 2014 [10], and Popovich NG et al 2009 [11] like it builds confidence and competence, overcome the first time teaching anxieties, offers self-peer-mentor feedback, peers learn by evaluating each other, develop communication, critical-thinking and problem solving skills and less expensive than other approaches. A limitation of the study were small sample size, availability of same faculty for all sessions, variations in assessment of teaching skills and time management of the students as well as faculty to come together, similar findings seen in study done by Faizen et al 2014[9] and Saif omar et al [12].

This finding stressed the need for conducting further studies to investigate the issue of assessing students’ performance during microteaching sessions

CONCLUSION

We too agreed that microteaching works as an effective tool to improve teaching skills and teaching behaviors in participants. It also helps to boost participants confidence, develops communication, critical thinking and problem solving skills. Effective student teaching should be the prime quality of a teacher, so we recommend the introduction of microteaching at institute level to help prospective medical student teacher to deliver their lectures effectively.

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Conflict of interest : Nil

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Appendix-1
“Self-Evaluation Form”

Name of the student teacher:

Date:

Topic:

Do you feel microteaching is useful to you:

Do you feel there is need of improvement in your teaching after going through microteaching session:

Do you feel student will come over of their shortcomings after going through microteaching:

Do you feel microteaching will help prospective student teacher to improve their teaching skills and teaching behaviors

Your opinion on microteaching concept after going through activity:

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