

# Experience on Training among the Participants of Teaching Methodology and Assessment

Hadi Md Habib Ullah<sup>1\*</sup>

Md Jalal Uddin<sup>2</sup>

Md Kamrul Hasan<sup>3</sup>

<sup>1</sup>Department of Medical Education Unit  
Chattagram Maa-O-Shishu Hospital Medical College  
Chattogram, Bangladesh.

<sup>2</sup>Department of Community Medicine  
Chattagram Maa-O-Shishu Hospital Medical College  
Chattogram, Bangladesh.

<sup>3</sup>Dental Unit  
Chattagram Maa-O-Shishu Hospital Medical College  
Chattogram, Bangladesh.

## Abstract

**Background:** Recent development in medical education have created increasing challenges for medical teachers. Teachers are not born, they are made. Some special initiatives can make one able to be a good teacher. Teaching is not an inborn quality. A professional training is needed to be a teacher. In Bangladesh medical professionals become teachers without any sorts of formal training of teaching methodology and assessment. A Medical Degree is not the only qualification of a medical teacher. Our medical professional become teacher without any sort of formal training of "Teaching Methodology and Assessment". To improve the quality of medical education in Bangladesh, training on teaching methodology and assessment for medical teachers is essential. This study was done to describe experience on training by trainers on teaching methodology and assessment.

**Materials and methods:** This Experiential study (Before and after trial study) was conducted in the teachers of various Department of Chattagram Maa-O-Shishu Hospital Medical College, Chattogram (CMOSHMC) from July 2022 to December 2022. Sample size: 63 (24 Male, 39 Female)

**Results:** 63 Participants were grouped into 3 groups, 21 participants were in each group. Each group participated in workshop for 4 days. They are trained with 12 modules supplied by CME. Pre-test and Post-test were conducted. Test results were analyzed for any significant difference. Among the First batch the mean score of pre-test was 8.8+/- 1.7 and post-test was 11.6+/- 2.96, which was statistically significant. Second batch-the mean score of pre-test was 7.23 +/- 2.46 and post-test was 11.55+/- 2.63, which was statistically significant. Third batch- the mean score of pre-test was 7.66+/- 2.17 and post-test was 11.31+/- 2.62, which was also statistically significant.

**Conclusion:** Training on teaching methodology and assessment is essential for medical professional development. So it should be continued periodically.

**Key words:** Assessment; Teaching methodology; Training.

## INTRODUCTION

Medical education is one of the most stressful fields of education because of its highly demanding professional and academic requirements. A Medical Degree is not the only qualification of a medical teacher. Our medical professional become teacher without any sorts of formal training of "Teaching Methodology and Assessment". Teaching is not an inborn quality. A professional training is needed to be a teacher. Bangladesh is facing many challenges in health care that are similar to other developing countries. High population density, rapid urbanization, aging population, emigration of qualified health care personnel, changing disease pattern, financial

\*Correspondence to:

Dr. Hadi Md Habib Ullah

Assistant Professor

Department of Medical Education Unit

Chattagram Maa-O-Shishu Hospital Medical College  
Chattogram, Bangladesh.

Mobile : +88 01863 87 36 96

Email : drhabib6789@gmail.com

Date of Submission □: 15.08.2023

Date of Acceptance □: 04.12.2023

[www.banglajol.info/index.php/CMOSHMCJ](http://www.banglajol.info/index.php/CMOSHMCJ)

constraints, corruption, and inefficiency constantly pressurize an overburdened health care delivery system. This is compounded by a significant shortage and mal-distribution of qualified doctors in the country. Training enough adequately qualified doctors therefore still remains a challenge in Bangladesh.<sup>1</sup> After passing from different institutes doctors are posted as teachers. Those who work as teachers should be trained about teaching methodology and the person concerned should have a commitment. Shortages and poor retention of health workers represent a significant problem of health systems in many developing countries which have a major impact on health care services. Heavy workloads, poor salaries and limited access to training, education, mentoring and Continuous Professional Development (CPD) are affecting the morale and commitment of healthcare workers.<sup>2</sup> The World Health Organization forecasts that the healthcare workforce deficit in Low and Middle Income Countries (LMICs) will reach 12.9 million skilled health professionals by 2035.<sup>3</sup> For this reason, a strong focus on strengthening the capacity of the healthcare workforce is important. In general education there is a scope of training for the teachers like PTI training for primary school teacher, BEd for high school teacher, MEd for college teachers. Compared to those there is less scope to train our medical teachers formally. From that point of view the journey was started by CME to train the focal persons of different Medical colleges of Bangladesh on Teaching Methodology and Assessment.<sup>4</sup> This framework is designed not only to provide guidance with regard to individual qualification profiles but also to support further advancement of the content, training formats and evaluation of faculty development initiatives and thus, to establish uniform quality criteria for medical education in Bangladesh.<sup>5</sup> Conducting training sessions on teaching methodology and assessment has been a transformative experience, creating a collaborative space for educators to enhance their professional skills. The diversity among participants has been a source of inspiration, echoing the sentiment captured by John Dewey: "Education is not preparation for life; education is life itself".<sup>6</sup> This diversity, spanning various subjects, grade levels, and educational contexts, has enriched the training environment, fostering a dynamic exchange of ideas and perspectives. The customization of content to meet participants' unique needs aligns with Lev Vygotsky's idea that "learning is a social process that occurs through interpersonal interactions".<sup>7</sup> Understanding the individual requirements of educators has allowed us to tailor the training to address specific challenges and opportunities within their respective teaching domains. This approach has contributed to a sense of relevance and applicability, as educators see direct connections between the training content and their daily teaching practices. This study was done to describe experience on training by trainers on teaching methodology and assessment.

## MATERIALS AND METHODS

This Experimental study was conducted during the period from July 2022 to December 2022 at Chattagram Maa O Shishu Hospital Medical College, Chattogram. Sample size: 63 (24 Male, 39 Female), using convenient sampling.

### Inclusion criteria

Teachers having postgraduate degree, No formal training on teaching methodology. Willing to be included in the study.

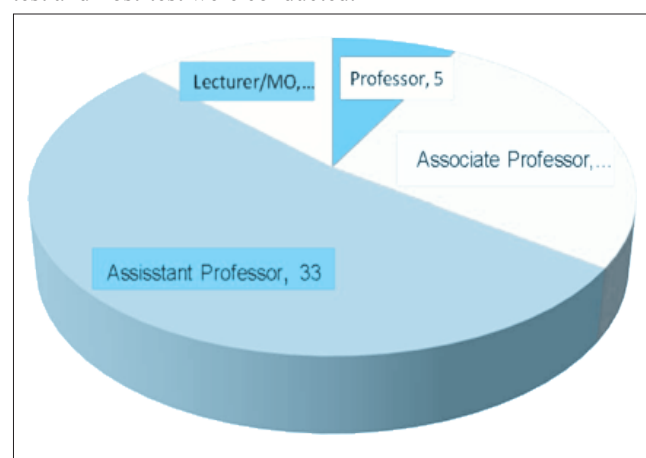
### Exclusion criteria

Without post graduate degree, with formal training on teaching methodology, unwilling to be included 63 participants were grouped into 3 groups, 21 participants were in each group. Each group participated in workshop for 4 days. They are trained with 12 modules supplied by CME. Pre-test and Post-test were conducted. Test results were analyzed for any significant difference.

Data was analyzed by MS-Excel and course evaluation was done in MS-Excel. The mean difference of marks obtained by the participants in pre-test and post-test (P value <0.05) was considered to be significant.

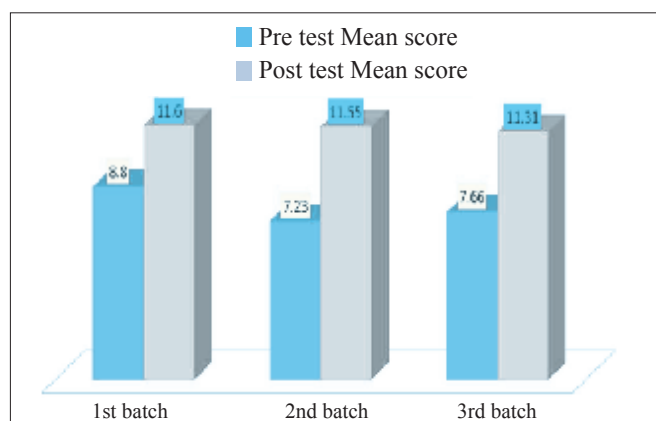
## RESULTS

63 participants were grouped into 3 groups, 21 participants were in each group. Each group participated in workshop for 4 days. They are trained with 12 modules supplied by CME. Pre-test and Post-test were conducted.



**Figure 1** Distribution of participants according to designation

Test results were analyzed for any significant difference. Among the First batch the mean score of pre-test was 8.8+/- 1.7 and post-test was 11.6+/- 2.96, which was statistically significant. Second batch-the mean score of pre-test was 7.23 +/- 2.46 and post-test was 11.55+/- 2.63, which was statistically significant. Third batch- the mean score of pre-test was 7.66+/- 2.17 and post-test was 11.31+/- 2.62, which was also statistically significant.



**Figure 2** Pretest and Post test Mean score of different batches

**Table I** Comparison of Pre-test and post-test marks of different batches of workshop

Batch	Pre Test Results	Post Test Results	p-Value
1st Batch	No. of Participants=21 Mean Score=8.8 Standard Deviation=1.7	No. of Participants=21 Mean Score=11.6 Standard Deviation=2.96	0.0004*
2nd Batch	No. of Participants=21 Range=02-12 Mean Score=7.23 Standard Deviation=2.46	No. of Participants=21 Range=07-15 Mean Score=11.55 Standard Deviation=2.63	0.000*
3rd Batch	No. of Participants=21 Range=03-12 Mean Score=7.66 Standard Deviation=2.17	No. of Participants=21 Range=07-14 Mean Score=11.31 Standard Deviation=2.62	0.000*

### Feedback from Participants

- Most of the participants graded the different session excellent/very good which expresses that session were interactive.
- I learnt a lot of new things and I saw a new style to have lessons.
- The methodology and the different activities were useful for my improvement.
- The course activities and assignments were appropriate I liked the group discussions.
- I liked the conversations in class and the interactions in groups.

### DISCUSSION

Interactive workshops have played a pivotal role in bringing the training content to life. As William James suggested, "The great use of life is to spend it for something that will outlast it".<sup>8</sup> The interactive nature of the workshops has enabled participants to actively engage with the material, share their experiences, and collaborate on solving real-world teaching and assessment challenges. This hands-on approach has not only deepened their understanding but has also fostered a sense of ownership over the learning process. Practical application has been a cornerstone of the training philosophy, resonating with the

words of Paulo Freire: "Education does not transform the world. Education changes people; people change the world".<sup>9</sup> Empowering participants to apply new teaching methodologies and assessment strategies in their classrooms has been a priority. This emphasis on practicality ensures that the training has a meaningful and lasting impact on their teaching practices. The continuous feedback loop established during the training process reflects the wisdom of Maya Angelou: "We may encounter many defeats, but we must not be defeated".<sup>10</sup> Actively seeking and incorporating participant feedback has allowed for the refinement and improvement of the training content. This iterative process emphasizes the collaborative nature of the training experience and reinforces a culture of continuous improvement. Incorporating technology into the training aligns with Seymour Papert's forward-thinking perspective: "You can't think seriously about thinking without thinking about thinking about something".<sup>11</sup> Integrating educational technologies has prepared educators to navigate the digital landscape of modern classrooms, equipping them with the skills necessary for effective teaching in a technology-driven era. The experience of training participants on teaching methodology and assessment has been marked by collaboration, customization and a commitment to practical application. As Nelson Mandela once stated, "Education is the most powerful weapon which you can use to change the world".<sup>12</sup> It is within the collaborative learning environment of training that educators are empowered with the tools to bring about positive change in the realm of education.

The training program, spanning four days and involving three groups of 21 participants each, showcased compelling evidence of its efficacy through pre-test and post-test analyses. The participants, exposed to a comprehensive curriculum of 12 modules provided by CME, exhibited statistically significant improvements across all three batches.

In the first batch, the initial mean pre-test score of 8.8+/-1.7 demonstrated a significant rise to 11.6+/-2.96 in the post-test. This substantial increase underscores the effectiveness of the workshop in enhancing participants' understanding and application of the training content.

Similar noteworthy findings were observed in the second batch, where the mean pre-test score of 7.23+/-2.46 increased significantly to 11.55+/-2.63 in the post-test. The statistical significance of this improvement highlights the consistency of positive outcomes across different participant groups.

The third batch, too, yielded remarkable results. With a mean pre-test score of 7.66+/-2.17, participants demonstrated a statistically significant increase to 11.31+/-2.62 in the post-test. These findings affirm the robust impact of the training program on knowledge acquisition and skill development.

The statistical significance observed in all three batches implies that the training, enriched by the structured modules from CME, effectively bridged knowledge gaps and enhanced participants' competencies. The consistent pattern of improvement suggests that the workshop was successful in

achieving its intended outcomes across diverse participant groups.

These results not only emphasize the quality of the training content but also underscore the skillful delivery and engagement strategies employed during the four-day workshop. The statistical significance in the test score differences reinforces the notion that the training was not merely informative but also transformative, leading to tangible improvements in participants' understanding and application of the concepts covered.

## CONCLUSION

In conclusion, the data reveals a compelling story of success, where the training program, supported by CME's modules, elicited statistically significant improvements in participants' knowledge and skills. The positive outcomes across multiple batches provide a strong foundation for considering the training program as an effective tool for professional development in teaching methodology and assessment.

## ACKNOWLEDGEMENT

We are grateful to honorable DGME, Director of CME and other officials. Special thanks to Principal and Vice Principal, CMOSHMC, Chattogram.

## DISCLOSURE

All the authors declared no competing interest.

## REFERENCES

- 1□ Amin Z, Merrylees N, Hanif A, Talukder MHK. Medical Education in Bangladesh. *Medical Teacher*. 2008; 30: 243-247.
- 2□ Crisp N, Chen L. Global supply of health professionals. *N Engl J Med*. 2014; 370:950–957.
- 3□ Campbell J, Dussault G, Buchan J, Pozo-Martin F, Guerra Arias M, Leone C, Siyam A, Cometto G. A universal truth: no health without a workforce. Forum report, third global forum on human resources for health, Recife, Brazil. Geneva: Global Health Workforce Alliance and World Health Organization. 2013.
- 4□ TapuTT, Subhan SS, Talukder HK, Flora TA, Talukder MAS. A large scale training on Teaching Methodology and Assessment: An Enthusiastic Journey by CME. January 2023.
- 5□ Anja Görlitz, Thomas Ebert, Daniel Bauer, Matthäus Grasl, Matthias Hofer, Maria Lammerding-Köppel, Götz Fabry. Core Competencies for Medical Teachers (KLM) – A Position Paper of the GMA Committee on Personal and Organizational Development in Teaching. May 2015.
- 6□ Dewey, J. *Democracy and Education*. New York, NY: The Macmillan Company. 1916.
- 7□ Vygotsky, L. S. *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press. 1978
- 8□ James, W. *The Principles of Psychology*. New York, NY: Henry Holt and Company. 1890.
- 9□ Freire, P. *Pedagogy of the Oppressed*. New York, NY: Continuum. 1970.
- 10□ Angelou, M. *I Know Why the Caged Bird Sings*. New York, NY: Random House. 1969.
- 11□ Papert, S. *The Connected Family: Bridging the Digital Generation Gap*. Atlanta, GA: Longstreet Press. 1996.
- 12□ Mandela, N. *Long Walk to Freedom: The Autobiography of Nelson Mandela*. Boston, MA: Back Bay Books. 2003.