

Original Article**TRAINING WORKSHOP ON TEACHING/LEARNING IN HEALTH PROFESSIONS EDUCATION FOR MEDICAL TEACHERS: FEEDBACK OF THE PARTICIPANTS****Rano Mal Piryani¹, Nasir Ali Afsar², Nudrat Zeba³, Suneel Piryani⁴*¹Department of Pulmonology and Medical Education, ²Department of Pharmacology, ³Department of Community Medicine, Bilawal Medical College, Liaquat University of Medical and Health Sciences, Jamshoro, Sindh, Pakistan.⁴Department of Public Health Professional, Karachi, Sindh, PakistanSubmitted: 20th-April-2024 Revised: 3rd-May-2024 Accepted: 20th-May-2024DOI: <https://doi.org/10.3126/mjen.v3i01.67447>**Abstract****Background**

For enhancing teaching skills of faculty members, 3-day Training Workshop on Teaching/Learning in Health Profession Education was organized at Bilwal Medical College Liaquat University of Medical and Health Sciences Jamshoro Sindh Pakistan. Main objective of the study was to assess feedback of the participants at New World Kirkpatrick's Model level 1 and 2.

Methods

This was cross-sectional study conducted using self-administered questionnaire. The questionnaire had 5-parts; 1) Demographics; 2) Rating of participants on attributes of training workshop at scale 1-10 (1=poor, 10=excellent); 3) Confidence level of the participants on skills learned in specific session at Likert scale 1-4 (1=Not-confident, 4=Extremely-Confident) on retro-pre-questionnaire; 4) Open-ended questions on strengths of workshop and 5) areas for improvement. The data was analyzed for central tendency. The data of retro-pre-questionnaire was normally distributed, so, t-test used for comparison of means. Data of open-ended questions was sorted manually.


Results

The rating on attributes of training workshop i.e. usefulness (8.59±1.18), content (8.53±1.12), relevance (8.59±1.23) and facilitation (9.18±0.95) was notable and overall (8.82±0.95) too. The perceived confidence level of participants was significantly (<0.001) enhanced on five Skills Learned in Specific Sessions of Training Workshop: developing learning objectives (before 2.24±0.44, after 3.29±0.47); developing effective PowerPoint presentation (before 2.59±0.51, after 3.06±0.56), conducting large group teaching (before 2.53±0.72, after 3.12±0.60), developing lesson plan for teaching (before 2.12±0.60, after 3.18±0.64), and conducting small group teaching (before 2.76±0.75, after 3.41±0.51)

Conclusion

Overall reaction of the participants was constructive and their confidence level was significantly enhanced on specific skills related to teaching/learning.

Keywords: Faculty, Feedback, Medical teachers, Teaching/Learning, Training, Workshop

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INTRODUCTION

Faculty development in health professions education empowers faculty members to advance knowledge, acquire skills, transform attitude, that enhance their capacity and performance in the roles they have to play in health professions institutions and foster their professional competence¹⁻². Faculty development programs (FDP) in medical education focuses on the roles of medical teachers such as educator, facilitator, assessor, mentor, researcher, resource developer etc. and range of the activities to be performed by the medical teacher i.e. teaching, assessment, mentoring etc^{1,3-4}. Training of the medical teachers to enhance their instructional skills (one of the key skills medical teachers must have) is essential to continuously enhance the learning of learners and improve the quality of learning³⁻⁵. Medical institutes should ensure that teachers educating the medical students possess required compulsory knowledge and have essential skills for the role they play and activities they execute. Medical schools must provide related training to teachers to perform their role and implement activities⁶. Workshops are a handy and useful tool to improve the skills of teaching faculty in a customizing manner⁷. Much emphasis is nowadays being given to layout guiding principles and train educators to develop effective workshops to suit a wide variety of needs.⁸⁻⁹ Keeping this in view, the medical education department of Bilwal Medical College (BMC), of recently established constituent college of Liaquat University of Medical and Health Sciences (LUMHS) Jamshoro, Sindh Pakistan organized a three-days Training Workshop on Teaching/Learning in Health Profession Education The main objectives of this study were to report a brief description of the Training Workshop on Teaching/Learning in Health Professions Education and assess the feedback of the medical teachers who participated in the Training Workshop targeting New World Kirkpatrick's Model (NWKM) level 1 and 2¹⁰.

METHODS

This is a descriptive cross-sectional study conducted at Bilwal Medical College (BMC),

Liaquat University of Medical and Health Sciences (LUMHS), Jamshoro Sindh Pakistan. The key objectives of the study were to 1) report brief description of the Training Workshop on Teaching/Learning in Health Professions Education and 2) assess the feedback of the medical teachers participated in Training Workshop at New World Kirkpatrick's Model (NWKM) level 1 and 2.

Objective Number 1 of the study

Brief Description of the Training Workshop on Teaching/Learning in Health Professions Education

A 3-day Training Workshop was organized by Medical Education Department of BMC in September 27-29, 2022. The General Objective of the training workshop was to enable the participant medical teachers to enhance their skills in Teaching/Learning. The specific objectives of the workshop were to 1) update the skills in writing learning objectives (behavioral learning objectives or intended learning outcomes); 2) enrich skills in preparation of the PowerPoint presentation and improve delivery of teaching through PowerPoint presentation 3) update skills in making large-group teaching interactive and effective using appropriate tools and technology, 4) developing lesson plan for teaching and 5) update skills for facilitating small-group learning.

Seventeen teachers from basic and clinical sciences participated in the training workshop. The methods used for conducting the training workshop were interactive tutorial with brainstorming; demonstration; group work exercise and assignment for individual task exercise. The outcome measures were evaluated in accordance to NWKM levels 1 and 2¹⁰.

The program schedule with sessions including interactive tutorials, group work exercises and individual task exercises is shown in Table I.

Table 1: Program Schedule: 3-day Training Workshop on Teaching/Learning in Health Profession Education.

Day-1 Tuesday September 27, 2022

Time	Session
09:00-09:10	Opening Remarks
09:10-09:20	<ul style="list-style-type: none"> • Introduction of the participants
09:20-09:30	<ul style="list-style-type: none"> • Expectation of the participants
09:30-09:45	<ul style="list-style-type: none"> • Objective and Methodology of Training Workshop
09:45-10:45	<ul style="list-style-type: none"> • Summary of Program Schedule Session-I Interactive Tutorial: “Writing Learning Objectives.” Tea Break
10:45-11:00	Activity-1
11:00-12:30	Group Work: “Writing Learning Objectives” <ul style="list-style-type: none"> • Formation of three groups of participants A, B & C • Development of learning objectives (LOs): Each group develops one LO for cognition, psychomotor and affective domain. • Presentation of learning objectives by the groups & discussion
12:30-14:00	Session-II Interactive Tutorial: “Presentation for Teaching students” <ul style="list-style-type: none"> • Types of presentation • How to make an effective power-point presentation Activity-2 Assignment 1: Prepare 5 minutes power-point presentation Each participant prepares power-point presentation on the topic of his/her choice from home and presents on the second day in morning.

Day-2 Wednesday September 28, 2022

Time	Session
09:00-09:10	Reflective Summary: Sessions & Activities of Day 1
09:10-10:50	Activity-3 Individual Task Exercise: “Power-point Presentation by individual participant”
10:50-11:30	Session-III Interactive Tutorial: “Large Group Teaching”
11:30-11:45	Tea Break
11:45-13:00	Session-IV Interactive Tutorial: “Lesson Planning”
13:00-14:00	Activity-4 Assignment 2: Prepare Lesson Plan for large group teaching Each participant prepares lesson plan for his/her presentation of 30 minutes duration on the topic of his/her choice and present lesson plan on third day Assignment 3: Prepare for Demo on small group teaching Each group prepares Demo on assigned topic for third day Group A- Show Demo on Bedside Teaching Group B- Show Demo on Case-Based Learning Group C- Show Demo on One-minute preceptor (OMP) Teaching

Day-3 Wednesday September 29, 2022

Time	Session
09:00-09:10	Reflective Summary: Sessions & Activities of Day 2
09:10-10:30	Activity-5 Individual Task Exercise: Presentation of lesson plan by individual participant
10:30-11:15	Session-V Activity-6 Demo by the groups: Small Group Teaching/Learning <ul style="list-style-type: none"> • Bedside Teaching (Group A) • Case-Based Learning (Group B) • One-minute preceptor (OMP) Teaching (Group C)
11:15-11:30	Tea Break
11:30-13:30	Interactive Tutorial: “Small Group Teaching/Learning”
13:30-14:00	Feedback & Certificate Distribution Closing Remarks

Objective Number 2 of the study

Assessment of the feedback of the medical teachers participated in Training Workshop

The written feedback was taken from the participants. The feedback questionnaire was comprised of five parts:

First Part- Demographic Characteristics of the Participants: Info was taken for age, gender, teaching experience and research experience of the participants.

Second Part- Rating of the Participants on attributes of training workshop: This part contained one question i.e. “rating training workshop” on scale 1 to 10 (1=poor, 10=excellent) for usefulness, content, relevance, facilitation and overall.

Third Part- Feedback on Skills Learned in Specific Sessions of Training Workshop: This part contained retro-pre-questionnaire having five questions on the level of confidence of participants before and after participation on Likert scale 1 to 4 (1=not confident; extremely confident). The questions were: developing learning objectives; developing effective PowerPoint presentation; conducting large group teaching; developing lesson plan for teaching, and conducting small group teaching.

Fourth Part- Feedback on Strengths of Training Workshop: In this, participants were asked about strengths of training workshop.

Fifth Part- Feedback for the improvement: In this, participants were asked to suggest areas for improvement in training workshop.

Informed consent was taken from the participants

and study was approved by Principal of BMC. All seventeen participants filled the questionnaire. The data collected was entered in SPSS version 23; checked for completeness, accuracy and consistency. It was analyzed for the central tendency (mean with standard deviation; median with interquartile range). As data of retro-pre-questionnaire was normally distributed, hence, t-test was used for comparing means of the level of confidence of participants before and after training workshop and p-value was computed for significance.

RESULTS

All 17 medical teachers provided the feedback after completion of the workshop. The findings are mentioned under five sub-headings as follows:

I. Demographic Characteristics of the Participants

These are presented in Table 2.

Table 2: Demographic Characteristics of the Participants of Training Workshop on Teaching/Learning in Health Professions Education

Characteristic	Finding
*Age in years	Median 36 (IQR 31-46)
Gender	Male 6 (35.3%), Female 11 (64.7%)
*Teaching experience in years	Median 3 (IQR 1.5-7.5)
*Research Experience in years	Median 2 (IQR 1.0-6.5)

*The distribution was skewed, so median with IQR documented.

I. Rating of the participants on Training Workshop on Teaching/Learning in Health Professions Education

Participants rated on the attributes of the Training Workshop on scale 1-10 (1=poor, 10=excellent) i.e. usefulness, content, relevance, facilitation and overall; score is mentioned in Table 3.

Table 3: Rating of the Participants on attributes of Training Workshop on Teaching/Learning in Health Professions Education

Item	Score (mean±standard deviation)
Usefulness (1-10)	8.59±1.18
Content (1-10)	8.53±1.12
Relevance (1-10)	8.59±1.23
Facilitation (1-10)	9.18±0.95
Overall (1-10)	8.82±0.95

Rating training workshop” on scale 1 to 10 (1=poor, 10=excellent)

I. Level of the confidence of participants of Training Workshop on skills learned in specific sessions

Level of the confidence of the participants on skills learned in specific sessions of training workshop assessed through retro-pre-questionnaire is presented in Table 3.

Table 3: Feedback on Skills Learned in Specific Sessions of Training Workshop: Level of the confidence of the participants before and after participation in Training Workshop on Teaching/Learning in Health Professions Education.

Level of confidence	Before participation in training workshop	After participation in training workshop	p-value
In developing learning objectives	2.24±0.44	3.29±0.47	< 0.001
In developing effective PowerPoint presentation	2.59±0.51	3.06±0.56	< 0.001
In conducting large group teaching	2.53±0.72	3.12±0.60	< 0.001
In developing lesson plan for teaching	2.12±0.60	3.18±0.64	< 0.001
In conducting small group teaching	2.76±0.75	3.41±0.51	< 0.001

Retro-pre-questionnaire rating on Likert scale 1-4 (1=not confident; 4=extremely confident).

I. Strengths of Training Workshop on Teaching/Learning in Health Professions Education

- Knowledgeable, professional and well-

- organized resource persons and facilitator
- Interactive and active engaging sessions
- Healthy discussion
- Conducive environment
- Active participation

II. Suggestions for improvement in Training Workshop on Teaching/Learning in Health Professions Education

- Majority of participants suggested “include short break after each session and each activity”.
- Some proposed “decrease duration of training workshop and complete in two days, while few recommended increase duration of training workshop.
- Some of the participants specifically mentioned in feedback that what they learnt in the workshop was applied practically.

DISCUSSION

The main objectives of present study were to 1) document brief description of the Training Workshop on Teaching/Learning in Health Professions Education and 2) assess the feedback of the medical teachers who participated in Training Workshop New World Kirkpatrick' Model Level 1 and 2.

As elaborated by Carlson and McGowan, it is wrong to assume that content expertise transfers to teaching expertise, implicating that a faculty development program is a handy and important method to hone the teaching skills among faculty¹¹. Similarly, van Schaik has attempted to suggest eight guiding principles to develop a sustainable faculty development program⁸. Keeping these recent developments, we organized a workshop to improve the teaching skills of the faculty members and have reported our method in this article. This may facilitate other medical schools in organizing similar training workshop for the medical teachers.

The second objective of the study was to assess the feedback of the participants to get to know the immediate effect of the training workshop. The responses of participants were assessed on some of the items of level 1 and 2 of The New World Kirkpatrick' Model; the Level 1 is Reaction of

participants (they consider the training constructive, engaging and relevant to their jobs) and Level 2 focus on Learning (participants attain the intended knowledge, skills, attitude, confidence and commitment based on their participation in the training)^{10,12}.

The rating of the participants on usefulness, content, relevance, facilitation and overall was notable. There was significant ($p < 0.001$) positive change in the level of confidence for developing learning objectives, developing effective PowerPoint presentation, conducting large group teaching, developing lesson plan for teaching and conducting large group teaching, perceived by the participants. Professional and well-organized resource persons; interactive and active engaging sessions; conducive environment were main strengths of training workshop revealed by the participants. Their key suggestion was “include of short break after each session and each activity” during proceedings of workshop. It is noteworthy that some of the participants explicitly declared in the feedback “What is learnt, will apply in practice”.

The findings of present study are consistent with the findings of other studies. A study done by Gjerde et al. revealed FDP helped in improving self-confidence of the teachers¹³ Bilal et al. in their systematic review and meta-analysis concluded that FDPs foster the teaching skills of medical teachers². Baral et al in their study acknowledged that teachers training workshops in teaching learning methods and assessment tools improve the ability of medical teachers in teaching⁵. Alroweithy and Al Saleem in their study documented that teaching and learning training programs” enhances the faculty members' teaching skills¹⁴.

There are certain limitations of this descriptive cross-sectional study. The findings of the study cannot be generalized as the study was conducted for one training having less than 30 participants from same institution. Further, only NWKM level 1 and 2 were targeted for this study which only indirectly predict the final level 4. The data of the study is perceptual i.e. based on the immediate perceptions of the participants, so, the long-term

impact of the training cannot be deduced but anticipated.

Based on the positive findings of the assessment of immediate feedback at level 1 & 2 of The New World Kirkpatrick' Model¹⁰ this training workshop has been successful in imparting medical teachers the teaching skills. For the

strengthening of instructional skills, the continuous professional learning is required in order to strive in the era of technology and artificial intelligence.

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