Short Communication

Training Workshop on developing Objective Structure Clinical Examination (OSCE) conducted at nursing campus in Nepal: Feedback of the nursing faculty participants

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ABSTRACT

Background and Objectives: The aim of this study was to get feedback from the nursing faculty participants about effectiveness of training workshop on developing Objective Structure Clinical Examination and their learning experiences.

Material and Methods: Seventeen faculty members participated in two and half days “Training Workshop on conducting OSCE”. There were two sessions of workshop- onsite (2 days) and online (half day). Methods used in sub-sessions of onsite session were tutorial on content, brainstorming, activity based small group work and discussion, and presentation of group work in plenary while assignment on developing OSCE for online session. The feedback of the participants was taken on semi-structured questionnaire containing seven questions; four closed and three open ended. Descriptive analysis was done in IBMS SPSS version 21.

Results: Rating of the participants on training workshop was notable on rating scale 1-10 (1 poor to 10 excellent) for usefulness of training 9.65±0.70, content 9.00±1.00, relevance of training and content 9.29±0.85, facilitation 9.59±1.00 and overall rating 9.41±0.79. The level of confidence of participants after training workshop was enhanced 4.06±0.24 rated at Likert scale 1-5 for developing blueprint for assessment in related subject, test blueprint and test map and OSCE station. Useful Group work, step wise approach, interactive session, active participation and conducive environment were among the positive features of workshop.

Conclusion: The feedback of the participants were constructive and remarkable. The training enhanced their level of confidence. The training was effective.

Key words: Assessment, Feedback, Nursing faculty, Nepal, OSCE, Training workshop
INTRODUCTION

Despite its limitations, objective structured clinical examination (OSCE) tool has been used for assessment of skills since its development by Harden et. al in 1970 [1-4]. OSCE is one of the reliable, valid and objective methods of assessment for testing skills; communication skills, history taking skills, clinical examination skills, procedural skills, attitude, professionalism, etc. [2,8]. It is very resource intensive; educator requires a lot of time and puts great efforts in implementing it. Substantial knowledge, understanding, experience and preparation is needed for development of OSCE and organization, administration and conducting OSCE examination successfully [4,5,6,9,10].

OSCE is being used as a tool of assessment in all fields of health professional education such as medicine, dentistry, nursing, pharmacy and public health [2,3,5,6,10,11]. Training of faculty members in developing and implementing OSCE is essential for achieving its objective [3,5]. OSCE as a tool of assessment of skills is included in undergraduate curriculum of nursing education, Bachelor of Nursing Sciences (BNS) program as well as in postgraduate curriculum of nursing education, Master of Nursing (MN) program of Tribhuvan University, Institute of Medicine, Nepal [12,13]. But it has not been properly implemented in nursing schools as faculty of nursing are not trained adequately in constructing OSCE station, conducting OSCE examination and evaluation of OSCE.

With the aim of training nursing faculty in developing OSCE, two and half day’s workshop was organized by Nursing Campus of Institute of Medicine Pokhara, Nepal. The objective of this study was to get feedback from the participants about effectiveness of this training workshop and their learning experience regarding development of blueprint for assessment, test blue print and test map for OSCE and OSCE station as feedback is valuable information that is to be used to make important decisions [3,4].

MATERIAL AND METHODS

Study design

Descriptive analysis of feedback from the nursing faculty participated in Workshop on constructing OSCE.

Study Period

Pokhara Nursing Campus, Institute of Medicine organized two and half days (20 working hours excluding breaks) “Workshop on constructing OSCE” in Pokhara Nursing Campus Nepal in June 23-25, 2017. The objectives of this training workshop was to train nursing faculty of Pokhara Nursing Campus in how to develop/construct OSCE/OSPE station/s and conduct OSCE/OSPE examination.

There were two sessions of workshop - onsite and online. The onsite session was held on first two days (16 working hours excluding breaks) while online on last half day (4 working hours excluding breaks).

Onsite session

The contents covered during sub-sessions of onsite session were:

1) Overview on Assessment including basic principles of assessment,
2) Blueprint for assessment including developing blueprint,
3) Overview of OSCE/OSPE, skills and competencies,
4) Blueprint for Test and Test Map including developing Blueprint for Test and Test Map, 
5) Development or Construction of the OSCE/OPSE a) Develop OSCE/OSPE station profile and scenario for OSCE, b) Prepare Instructions for examiner, examinee and patient, c) Prepare checklist and rating scale and list of resources, d) OSCE/OSPE Station review and
6) conducting OSCE/OSPE examination. Tutorial on content, brainstorming, activity based small group work and discussion, presentation of group work in plenary were the methods used for deliberation of training workshop. Seventeen nursing faculty members participated in workshop. The participants were divided into four groups- A, B, C and D for activity based small group work and discussion.

Online session

Individual participants completed assignment on developing OSCE station including station profile, scenario, instructions for examiner, examinee and patient and checklist, rating scale and list of resources and submitted online to resource person for review. The principal author was the lone resource person for the workshop. At the end of training workshop, written feedback of the participants were taken on semi-structured questionnaire.

Technical Information

The questionnaire contained seven questions; first four were closed-ended and last three were open ended. The question one was on rating (scale 1-10; 1 poor and 10 excellent) the workshop for its usefulness, content, relevance, facilitation and overall rating. The questions two, three and four were on the level of confidence after participation in workshop about developing blueprint for assessment in related subject, developing test blueprint and test map and developing OSCE station respectively. The questions two, three and four were rated at Likert scale 1-5 (5= highly confident, 4= confident, 3= to some extent confident, 2= unsure 1= very unsure). The question five was about good points of workshop, question six on area of improvement and seven for additional comments. The questionnaire was piloted in one day "Workshop on constructing OSCE conducted in January 12, 2017 at Chitwan Medical College, Bharapur, Nepal for feedback on training workshop.

Statistics

The collected data was checked for completeness, accuracy and consistency. The collected data was coded and entered in IBMS-SPSS version 21 for analysis. Descriptive analysis was done. The mean and standard deviation were computed.

Ethical approval

The verbal consent was taken from the participants nursing faculty of Nursing Campus of Institute of Medicine Pokhara, Nepal for taking feedback and publishing findings.

RESULTS

Seventeen nursing faculty members participated in the training workshop on constructing OSCE.
Faculty members rated the workshop on scale of 1-10 (1= poor, 10, excellent); rating on workshop were remarkable. (Table 1)

**Table 1: Rating of Faculty members for training workshop on constructing OSCE/OSPE**

<table>
<thead>
<tr>
<th>Q: 1</th>
<th>Items of question one</th>
<th>Mean Rating Score±SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Usefulness of training (Scale 1-10)</td>
<td>9.65 ± 0.70</td>
</tr>
<tr>
<td>b.</td>
<td>Content of subject (Scale 1-10)</td>
<td>9.00 ± 1.00</td>
</tr>
<tr>
<td>c.</td>
<td>Relevance of training and content (Scale 1-10)</td>
<td>9.29 ± 0.85</td>
</tr>
<tr>
<td>d.</td>
<td>Facilitation of training (Scale 1-10)</td>
<td>9.59 ± 1.00</td>
</tr>
<tr>
<td>e.</td>
<td>Overall (Scale 1-10)</td>
<td>9.41 ± 0.79</td>
</tr>
</tbody>
</table>

The level of confidence of faculty members after participation in training workshop on constructing OSCE/OSPE rated at Likert scale 1-5 (5= highly confident, 4= confident, 3= to some extent confident, 2= unsure 1= very unsure); the rating was notable (Table 2).

**Table 2: Level of confidence of faculty members after participation in training workshop on constructing OSCE rated at Likert scale 1-5**

<table>
<thead>
<tr>
<th>Q 2-3</th>
<th>Item</th>
<th>Mean Rating Score±SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>About developing blueprint for assessment in related subject</td>
<td>4.06 ± 0.24</td>
</tr>
<tr>
<td>3</td>
<td>About developing test blueprint and test map</td>
<td>4.06 ± 0.24</td>
</tr>
<tr>
<td>4</td>
<td>About developing OSCE station</td>
<td>4.06 ± 0.24</td>
</tr>
</tbody>
</table>

Likert scale 1-5 (5= highly confident, 4= confident, 3= to some extent confident, 2= unsure 1= very unsure)

Good points in training workshop on constructing OSCE and area for improvement shared by the participants are given in tables 3 & 4 respectively.

Additional comments of the participants were as under:

The time duration for practice in workshop may be extended, other tools of assessment of skills may be included in workshop content and the workshop should cover methods of assessment in all domain. Overview of OSCE/OSPE, Developing blue print, Developing Test blue print, Developing OSCE station, and Conducting OSCE/OSPE examination were most liked session.

**Table 3: Good points of for in training workshop on constructing OSCE shared by the participants**

<table>
<thead>
<tr>
<th>Points</th>
<th>No of the participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good Facilitation</td>
<td>7</td>
</tr>
<tr>
<td>Useful Group work &amp; discussion</td>
<td>5</td>
</tr>
<tr>
<td>Step wise systemic approach of resource person</td>
<td>4</td>
</tr>
<tr>
<td>Good presentation by resource person</td>
<td>4</td>
</tr>
<tr>
<td>Very interactive session</td>
<td>4</td>
</tr>
<tr>
<td>Active participation</td>
<td>3</td>
</tr>
<tr>
<td>Worthy practice session</td>
<td>3</td>
</tr>
<tr>
<td>Important content</td>
<td>3</td>
</tr>
<tr>
<td>Conducive environment</td>
<td>3</td>
</tr>
</tbody>
</table>

**Table 4: Area for improvement in training workshop on constructing OSCE suggested by the participants**

<table>
<thead>
<tr>
<th>Areas</th>
<th>No of the participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>More time needed for practice</td>
<td>3</td>
</tr>
<tr>
<td>Content of workshop may be provided in advance</td>
<td>3</td>
</tr>
<tr>
<td>Real demonstration on OSCE station</td>
<td>2</td>
</tr>
</tbody>
</table>

**DISCUSSION**

The participant nursing faculty members’ feedback was notable on “Training Workshop on developing OSCE”. From participant’s very high rating on usefulness of training, content of subject, relevance of training and content, facilitation of training and overall rating on training, it appears that the training was
effective. Their level of confidence was also enhanced on developing blueprint for assessment in related subject, developing test blueprint and test map, and developing OSCE station. This feedback is also remarkable and further supports effectiveness of training. In various studies at different contexts, such training programs on OSCE have been shown effective [3, 14, 15, 16].

There was active participation in sessions, step wise systemic approach of resource person and good presentation by resource person. The sessions were interactive, group work and discussion was useful, practice session was worthy and the environment for learning was very conducive. The participants suggested to incorporate sub-session on real demonstration on OSCE station, provide content in advance and increase time for practice.

This study has some limitations. The sample size was small as the number of participants in training workshop was restricted to seventeen. The long term implications of training needs to be studied. The results of this study supports the concept that such short term training programs in OSCE are effective.

**CONCLUSION**

Overall the feedback of the participant nursing faculty members was constructive and remarkable. The training workshop boosted their level of confidence. The training was effective. But there are some limitations of this study, the sample size was small and no prediction on the long-term implications of training. The results of this study support the concept that such short-term training programs in OSCE are effective.

**ACKNOWLEDGEMENT**

Nursing Campus of Institute of Medicine Pokhara, Nepal

**AUTHOR’S CONTRIBUTION**

RMP-Conceptualization, formal analysis, methodological visualisation; SP-data collection, formal analysis and methodology

**SOURCE OF SUPPORT:** Nursing Campus of Institute of Medicine Pokhara, Nepal

**CONFLICT OF INTEREST:** There is no conflict of interest.

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