

Research article

# Self-reported Confidence of the Dental Faculty Participants of “Training Workshop on Objective Structured Clinical Examination (OSCE)”

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## ABSTRACT

**Background and Objectives:** Objective Structured Clinical Examination (OSCE) is one of the assessment tools used to assess the clinical skills. Health Professions Training Committee (HPTC), Universal College of Medical Sciences (UCMS), Bhairahawa, Nepal organized 2-days Training Workshop on OSCE in Feb 13-14, 2020 for dental faculty. The objective of this study was to assess the feedback of the participants of training workshop on OSCE and their self-reported confidence using retro-pre-questionnaire.

**Material and methods:** The feedback was taken on the pretested semi-structured questionnaire comprised of four parts: A. Demographic Information, B. Overall feedback on the training workshop (closed-ended questions), C. Feedback on specific sessions conducted in the training workshop on retro-pre-questionnaire and D. Feedback on good points/strengths of the training workshop and areas for improvement (open-ended questions). Analysis was done with SPSS-21.

**Results:** The rating of the participants on training workshop for usefulness, course content of training, relevance of session & content, facilitation and overall was notable. Participants' self-reported confidence remarkably enhanced after participation in the training workshop (before vs after) on all four skills; develop blueprint for the assessment (1.33±0.5 vs 3.33±0.50), develop blueprint and test map for OSCE (1.22±0.44 vs 3.11±0.33), develop OSCE station (1.3±0.70 vs 3.67±0.50) and conduct OSCE examination (1.22±0.67 vs 3.33±0.50). Participants stated “the training workshop was interactive and participatory” and suggested to include more dental related tasks in training.

**Conclusion:** Overall the feedback of the participants was positive and noteworthy. Participants' self-reported confidence remarkably enhanced after participation in the training workshop.

**Key words:** Assessment, Dental faculty, Feedback, OSCE, Retro-pre, Training workshop

## INTRODUCTION

Objective structured clinical examination (OSCE) tool has continuously been used for the assessment of clinical skills since its

development in 1970s [1]. It is among the reliable, valid and objective methods of assessment for testing performance skills such as communication skills, history taking skills, clinical examination skills, procedural

skills, attitude, professionalism [1-4]. It is very resource intensive and demands a lot of time to invest and great efforts to put in for implementation. Generous understanding, experience and preparation are required for the development of OSCE stations and conducting OSCE examination with success [5-7]. OSCE for the assessment is used in all fields of the health professional education such as medicine, dentistry, nursing, pharmacy and public health [1-2, 6, 8-9].

Hence, training health professions faculty members in developing and implementing OSCE is critical for attaining its objective [2, 6]. Health Professions Training Committee (HPTC), Universal College of Medical Sciences (UCMS), Bhairahawa, Nepal organized 2-days Training Workshop on OSCE in Feb 13-14, 2020 for dental faculty. The objective of this study was to assess the feedback of the participants of training workshop on OSCE and their self-reported confidence using retro-pre-questionnaire.

## **MATERIAL AND METHODS**

This is a questionnaire-based study conducted by Health Professions Training Committee, Universal College of Medical Sciences (UCMS), Bhairahawa, Nepal in Feb 14, 2020.

UCMS organized 2-days Training Workshop on OSCE in Feb 13-14, 2020. The objectives of training workshop were to train dental faculty of Universal College of Dental Sciences (UCDS) in how to develop/construct OSCE/OSPE station/s and conduct OSCE/OSPE examination. The course contents covered during sessions were: 1) An overview on assessment including basic principles of assessment, 2) Blueprint for the assessment including developing blueprint, 3) An overview of OSCE/OSPE, skills and

competencies, 4) Blueprint for the Test and Test Map including developing Blueprint for the Test and Test Map, 5) Development of the OSCE/OPSE covering a) Develop OSCE/OSPE station profile and scenario for OSCE/OSPE, b) Prepare Instructions for examiner, examinee and patient, c) Prepare checklist and rating scale and list of resources required, d) OSCE/OSPE station review and 6) conducting OSCE/OSPE examination. Tutorial, brainstorming, activity based small group work and discussion, presentation of group work in plenary were the methods used for deliberation of training workshop.

Nine dental faculty members nominated by UCDS participated in the training workshop. The participants were divided into three groups- A, B and C for activity based small group work and discussion.

At the end of training workshop, written feedback was taken from the participants. Informed consent of the participants was obtained on semi-structured questionnaire. Ethical approval was obtained from the institutional review committee. The questionnaire designed by R M Piryani, principal author & Suneel Piryani, co-author and used for the feedback of the participants faculty in training conducted earlier utilized for this study [3].

The questionnaire consists of four parts: A) Demographic Information, B) Overall feedback on training workshop, C) Feedback on specific sessions conducted in training workshop on retro-pre-questionnaire and D) Feedback on good points of training workshop and areas for improvement.

**A. Demographic Information:** This part was limited to get info on age, sex, experience and training received before.

**B. Overall feedback on the training workshop:** This part contained one closed

ended question for rating the training workshop for its usefulness, course content, relevance of session and content, facilitation and overall rating on rating scale 1-10 (1= poor and 10= excellent).

**C. Feedback on the specific sessions of training workshop:** This part of questionnaire was retro-pre, contained four closed ended questions on 4-point Likert scale (1= Not confident, 2= Confident, 3= Very confident and 4= Highly confident) for their self-reported confidence before and after participation in the training workshop. The questions were i) developing blueprint (BP) for the assessment, ii) developing BP and Test Map for OSCE/OSPE, iii) developing OSCE /OSPE station and iv.) Conducting OSCE /OSPE examination.

The retro-pre-questionnaire design is one of the instruments used to evaluate the efficacy of training program. It is used to avoid the sensitivity of pretest and reduce the speculation. It assesses the learners' self-reported changes in knowledge, awareness, skills, confidence, attitudes, or behaviors [10].

**D. Feedback on good points/strength of training workshop and areas for improvement:** This part contained three open ended questions about the good points/strengths of sessions, area for improvement and additional comments if any. The collected data was checked for completeness, accuracy and consistency and entered in IBM SPSS version 21 for analysis. The descriptive analysis was done for the frequency, mean and standard deviation.

## RESULTS

The findings are explained under four headings: A) Demographic Information, B) Overall feedback on the training workshop, C) Feedback on the specific session of training workshop on retro-pre-questionnaire and D) Feedback on good points/strengths of training workshop and areas for improvement.

### A. Demographic Information

Nine faculty members of dental sciences participated in the OSCE training workshop; 6(66.7%) were males and 3(33.3%) females. The mean age of the participants was  $34.22 \pm 3.30$  years (range 30-42 years). More than half (55.6%) graduated in 2012 and rest before; majority (77.8%) completed post-graduation after 2015 and majority (77.8%) joined Universal College of Dental Sciences (UCDS) after 2015. The mean total teaching experience was  $4.44 \pm 3.09$  years (range 6 months-11 years); the mean teaching experience after graduation was  $0.44 \pm 1.01$  years (range 0 month-3 years) and the mean teaching experience after post-graduation was  $4.0 \pm 3.05$  years (range 6 month-11 years). Two third (66.7%) of the participants received basic teachers training before, while none got OSCE related training.

### B. Overall feedback on training workshop

Dental faculty members rated the training workshop on scale of 1-10 (1= poor, 10, excellent); rating on workshop were notable. (Table 1).

**Table 1:** Rating of the participant dental faculty members on Training Workshop on OSCE.

S. No	Item	Rating (Mean $\pm$ SD)
1	Usefulness (Scale 1-10)	7.67 $\pm$ 0.50
2	Course content (Scale 1-10)	7.56 $\pm$ 1.13
3	Relevance of session & content (Scale 1-10)	7.78 $\pm$ 0.44
4	Facilitation (Scale 1-10)	8.00 $\pm$ 0.50
5	Overall (Scale 1-10)	7.67 $\pm$ 0.70

**Table 2:** Self-reported confidence of the dental faculty members before and after participation in training workshop on OSCE

S. N	Statement	Self-reported confidence before	Self-reported confidence after
1.	Confident to develop blueprint for assessment	1.33 $\pm$ 0.5	3.33 $\pm$ 0.50
2.	Confident to develop Test Blueprint and Test Map for OSCE/OSPE	1.22 $\pm$ 0.44	3.11 $\pm$ 0.33
3.	Confident to develop OSCE/OSPE station	1.33 $\pm$ 0.70	3.67 $\pm$ 0.50
4.	Confident to conduct OSCE/OSPE examination	1.22 $\pm$ 0.67	3.33 $\pm$ 0.50

### C. Feedback on specific sessions of training workshop on retro-pre-questionnaire:

The self-reported confidence on 5 statements/items were analyzed for four categories (not confident= 1, confident=2, very confident=3 and highly confident=4) on Likert scale 1-4. There was marked difference in the level of self-reported confidence of the participant dental faculty members after participation in training workshop on OSCE shown in above Table 2.

### D. Feedback on good points /strengths of assessment sessions and areas for improvement:

*Good points /strengths of Training Workshop on OSCE:* Good points /strengths shared by the participants were: working in groups and group discussion, inclusiveness of the participants in various group activities, active involvement of all participants, good insight

for developing OSCE/OSPE, team work, interaction with resource person and among participants, relevant course content, overall good learning environment and streamlined presentation by the resource person. One of the participants mentioned "Before this workshop I was not able to differentiate between MCQs, spotters and OSCE. In this workshop the vision was clear and I am able to work on it.". Another participant revealed "The workshop ignited my quest to know more about OSCE/OSPE examination pattern."

*Areas for the improvement in Training Workshop on OSCE:* More tasks should be included in the training workshop. More example from the dentistry related subjects needs to be included in presentation. Videos on OSCE may be included. OSCE may be demonstrated practically. One of the participants stated that the duration session

could be shortened while other mentioned duration of workshop should be more than 2 days.

## DISCUSSION

This study assessed the feedback of the dental faculty participants of training workshop on OSCE and their self-reported confidence using retro-pre-questionnaire as feedback serves guide for the improvement in the facilitation, presentation and process of conducting sessions in training [11].

The rating of the participants of training workshop on OSCE was noteworthy for usefulness of the training, course content of the training, relevance of session & content, facilitation done and overall rating.

Remarkable difference was noted in self-reported confidence of the participants after participation in training workshop on OSCE in i) developing blueprint (BP) for the assessment, ii) developing BP and Test Map for OSCE/OSPE, iii) developing OSCE /OSPE station and iv) conducting OSCE /OSPE examination.

Working in groups and group discussion, inclusiveness of the participants in various group activities and active involvement of all participants were among the strengths of workshop shared by the participants, while incorporation of more example and tasks dentistry related subjects and Videos on OSCE and demo on OSCE suggested by the participants.

Other studies also reported positive feedback of the participant faculty members on trainings related to OSCE, improvement in their self-reported confidence after participation and participant faculty members from different programs such medicine, dentistry, nursing, public health

recognized the importance of such trainings [3, 12, 13, 14].

## CONCLUSION

From the feedback of the participants it is obvious that they rated training workshop on OSCE high for usefulness, course content, relevance and facilitation and their self-reported confidence levels substantially enhanced for the developing Blueprint, Test Map, OSCE/OSPE stations and conducting OSCE/OSPE examination.

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