



APPLICATION OF VIDEO RECORDING FOR PROCEDURE OBJECTIVE STRUCTURED CLINICAL EXAMINATION DURING COVID-19 PANDEMIC

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Background

- COVID-19 pandemic crisis has occurred in Thailand from January 2021 until now.
- One of national strategy to control COVID-19 pandemic is limitation of people in group activities.
- Procedure Objective Structured Clinical Examination (OSCE) for extern is a part of Thai medical licensing examination that previously includes more than 100 attendees per rotation.

Summary of work

- We used three strategies for limitation of people during the 11-station procedural OSCE.
- Firstly, video recording was used instead of direct examiner. The video clip was subsequently sent to examiner for evaluation.
- Secondly, limitation of examination assistants by preparation of equipment by medical students after finishing each station.
- Finally, splitting the examination area from one floor to two floors in order to promote social distancing.
- Location and number of camera as well as standing (or sitting) point for medical students for each station were evaluated by experts before the exam.
- Medical students were allowed to test the system one week before the examination.

Results

- The first and second procedure OSCE took place in August 20, 2021 and December 16, 2021.
- National and local policies during that time was limitation of people less than 50 and 100 in group activity, respectively.
- For the first examination, gathering of less than 30 participants including medical students, examination assistants, examiners and technicians was occurred during 1 period in each floor. Only 1 from 11 stations (defibrillation) required direct examiner.
- Technical problem about sound from video occurred all the time recorded in 3 stations. The minimal passing level was adjusted according to these errors.
- For the second examination, less than 40 people were gathered in 11 stations in one floor including 1 examination assistant in each station.
- Technical problem about sound from video occurred in 2 stations. One was solved promptly during the examination date. Another was detected after examination date as partial absent of sound.

Results (continued)

- The additional cost of procedural OSCE with video recording included 15 webcam with tripod (1-2 cameras per station) was 85,440 TB.
- PC computers, notebook computers, and Open Broadcaster Software were already available in the faculty.

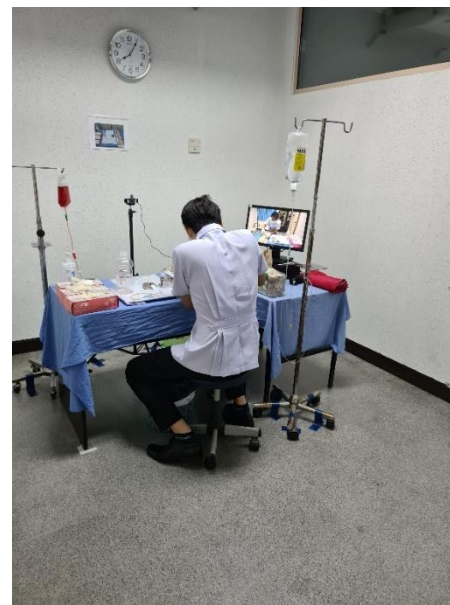


Figure 1: Medical students did the procedural skill OSCE using video recording

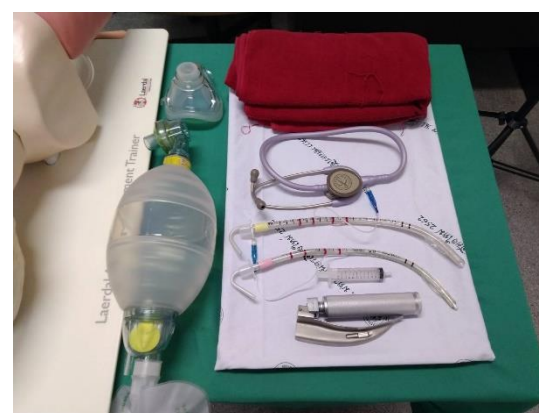


Figure 2: Guide for preparation of materials for medical students during procedural skill OSCE

Discussion and Conclusions

- This work showed that video recording could be used for evaluation of procedural skill.
- However, the technical problems might be occurred.
- The strategies to minimize these errors include using more than 1 camera in each station to back-up and regular check the equipment by technicians during the examination.

Take home message

Procedure OSCE by using video recording is feasible and can be applied during COVID-19 pandemic.