

Short Communication

Objective Structured Clinical Examinations have become a Challenge for Nursing Education in Taiwan

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ABBREVIATIONS

OSCE: Objective Structured Clinical Examination; USD: United State Dollar; MOE: Ministry Of Education

INTRODUCTION

Verifying that nursing graduates possess adequate competency and ensuring that future graduates remain current with various nursing contexts and needs are critical concerns. Nursing competency has been emphasized recently in Taiwan nursing education. In the past, the traditional written and skill examinations had been used to test the competencies of students. However, these methods only minimally verify their clinical competency. Thus, in recent years, multiple evaluation methods including objective structured clinical examination (OSCE) have been adopted to assess the clinical competency of nursing students. OSCEs have been extensively conducted in educating various healthcare professionals internationally including dietitians, dentists, physical therapists, and nurses etc.

In Taiwan, OSCE is beginning to be used to evaluate the nursing students. Now-a-days, Taiwan Ministry of Education (MOE) requests nursing department in technological and vocational schools to implement OSCE in the last semester to evaluate competencies of nursing students before graduation.

This article is a short commentary to describe the current status of OSCE implementation and to summarize five possible challenges when conducting OSCEs in Taiwan nursing education. We would share our experience, and receive feedback from experience of other nations to implement evaluation by OSCE.

DISCUSSION

Brief on OSCE and implementation in Taiwan nursing education

Objective structured clinical examination (OSCE) was introduced in 1975 by Drs. Harden and Gleeson for evaluating the clinical practice and competency of medical students at Dundee University, Scotland, United Kingdom. By simulating a

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Keywords

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clinical context with standardized patients, examiners assess students by using structured and well-designed checklists without intervening in the examination process [1]. In addition to objectively assessing students' competencies, OSCEs are good for students in transferring of learning and establishing abilities such as critical thinking, bed-side observation, and problem-solving, making students confident practitioners in the profession [2-4].

In Taiwan, most schools conduct OSCE mainly for evaluating the clinical competency of students before graduation, and the end of a curriculum to assess students. In addition, most hospital uses OSCE to train and test new nursing staff. With a special fund provided by the MOE, an OSCE project has launched in the beginning of 2015.

The possible challenges and difficulties

Many behavioral science studies have supported that OSCEs are an effective and objective evaluation of clinical practice and competency [5] but OSCE in Taiwan nursing education is still at a beginning stage. Thus, there are challenges and obstacles to overcome in conducting and implementation of OSCE. Reviewing the literature and interviewed with the nursing educators who utilize OSCEs, we sum up the challenges when conducting OSCE include

Spatial design and planning of hardware: Implementation of an OSCE requires a well-designed clinical skill examination center. In addition to space, the associated multimedia (e.g. audio or video equipment) and rotating station route play an essential role [6]. However, because of inadequate space and budgets in many Taiwan nursing colleges, such equipment is frequently insufficient and some schools borrow clinical skill laboratories for conducting OSCEs from other schools or hospitals.

Inadequate financing: Most researches on OSCE show that the implementation of OSCE requires huge expense. One of Taiwan medical centers provides a figure as reference: The average cost of assessing medical students in Taiwan through OSCE is NT\$9,000 per student (approximately USD300) [7]. The

Taiwan Ministry of Education has promoted OSCE and provided financial support to nursing schools for hardware and equipment setting since 2015. However, to implement OSCE consumes other costs such as personnel cost and etc. An average of nursing students graduate in Taiwan per year is more than 10,000, which is greatly more than that of medical graduates. Thus, the expense of OSCE for nursing schools will be enormous. Although OSCE is regarded as effective assessments of competencies of nursing graduates, the huge expense becomes a possible obstacle to its implementation.

Human resources development challenges: Ruthforth (2007) [2] recommended that conducting OSCE requires adequate human resources. The personnel required standardized patients, examiners, scenario and checklist designers, and related executive faculty. All the personnel and faculty require full and detailed preparation before OSCE implementation. Nowadays nursing schools hold workshops and seminars on OSCE for nursing educators. However, a nursing educator is in charge of examiners, scenario writing, and checklist designer at the same time, which results in overloading for nursing educators. Therefore, due to limited human resources, and time, this is also a challenge when implementing OSCE.

Design of the assessment content of OSCEs: Before OSCE implementation, defining the assessment objectives and determining the competencies to be evaluated is imperative [8,9]. This information determines the quantity of the stations, their durations, the intervals between stations, scenario designations, and subsequent personnel requirements. Each station typically tests only one task. Nevertheless, nursing competency not only entails nursing-knowledge reasoning and skill performance but also requires demonstrating holistic professional attitudes, such as caring, empathy, accountability, and a patient-centered communication etc. Determining how to use OSCEs to judge these capabilities in a student remains in debt [10]. Although Taiwan Nursing Accreditation council formulated the required 8 core competency items for nursing graduates, the competency items do not always match the course objectives and competencies developed by nursing colleges. Identifying which core competency that requires assessment and how to assess them requires further discussion and planning. After determining the evaluating goals and competency items, developing reliable and valid scenarios compatible with clinical contexts is challenging. Argument persist in the literature regarding the reliability and validity of the OSCE, including the reliability of rotating stations, consistency of performances by standardized patients, grading consistency of clinical examiners, passing criteria, and the predicting validity [5, 8, 9].

Stress on students: Studies have demonstrated that students experience more stress when undergoing OSCE than when experiencing other evaluation methods [11,12]. Stress might affect an examiner's performance preventing the determination of the examinee's competency with certainty [5]. Moreover, how nursing educators assist students in coping with stress is also challenging.

CONCLUSION

In conclusion, these challenges may affect the effectiveness of OSCE and all of the steps in the OSCE process, from planning to implementation and subsequent analysis are interlinked. Although Taiwan government has provided financial support in hardware and equipment, there are still issues to discuss and challenges to overcome. Particularly, nursing teachers involve in the all stages of OSCE and are essential to the success of OSCE. To nursing educators in Taiwan, OSCE is a novel evaluating method. Therefore, the first priority for promoting the OSCE is to strengthen teachers' ability to utilize OSCE in Taiwan nursing education. After implementing OSCE within one year or two, we plan to interview teachers to identify difficulties they have encountered so that appropriate strategies and solutions can be developed for future implementation. In addition to the teachers' view, students' perception about the OSCE need further study as well.

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