

Using the Objective Structured Clinical Examination for Evaluation Nursing Students' Performances in Psychiatric Nursing Practicum

1st Kesorn Saithanu*

Faculty of Nursing
Ubun Ratchathani University
Ubunratchathani province, Thailand
E-mail: kesorn.s@ubu.ac.th

2nd Somchit Luprasong

Faculty of Nursing
Ubun Ratchathani University
Ubunratchathani province, Thailand
E-mail: dr.somchit.l@hotmail.com

3rd Sanguan Thanee

Faculty of Nursing
Ubun Ratchathani University
Ubunratchathani province, Thailand
E-mail: isanguan2002@yahoo.com

Abstract—The purpose of this descriptive research study was to examine the outcome of the Objective Structured Clinical Examination (OSCE) on nursing students' performances in psychiatric nursing area. The participants were 62 of 4th year nursing students in Faculty of Nursing, Ubun Ratchathani University, Thailand. Purposive sampling was employed to recruit participants. The research instruments were 1) the OSCE model, 2) the nursing students' perception questionnaires on psychiatric nursing performances 3) the nursing students' opinion questionnaires on OSCE. Descriptive statistics were used for data analysis. The result revealed that most of nursing students passed the OSCE test. Total 80.65% passed OSCE in the component of therapeutic relationship skill and 91.94% passed the test in the section of mental health problem screening and assessment skill. Nursing students' perception on psychiatric nursing performances had a good level, the highest score was the section of the perception on psychiatric nursing practice (\bar{x} = 3.88 SD = .61). This research showed that the OSCE helped distinguish nursing students' skills such therapeutic relationship skills and mental health screening and assessment skills. Accordingly, educational institutions should promote the use of the OSCE in all practicum subjects. The OSCE assists nursing students to gain self-perception on nursing skills which can lead to the improvement of their nursing performances.

Keywords—*Objective Structured Clinical Examination, Psychiatric Nursing Performance, Nursing students*

INTRODUCTION

Nursing is a profession within human life. To provide holistic care all evidences both sciences and arts have to be ground into nursing care with caring and enthusiastic. In Thailand, all nurses have to meet a core standard. Such knowledge and skills follow nursing and midwifery council guideline [1]. Nursing education in Thailand is required to establish teaching model and learning outcome pursued by the Thai National Qualifications Framework for Higher Education (TQF) in nursing, 2009. Total six domains from this TQF framework including ethical and moral development, knowledge, cognitive skills, interpersonal skills and responsibility, analytical and communication skills and professional practice skills have to be considered [1]. All nursing curriculums in Thailand have to be authorized by Thailand Nursing and Midwifery Council and a Higher Education Committee, Ministry of Education [2]. Generally, nursing courses in Thailand contain 2 main filed as follows: (1) theoretical subjects which focus on theoretical frameworks related to nursing sciences, and, (2) practicum subjects focusing on clinical practice and the application of all knowledge into practice. Instructors are main people who

facilitate and manage an environment for all learners. Instructors are also the people who encourage students to learn and develop their nursing skills to meet the standard. Simultaneously, nursing instructors will assemble learners to have a positive attitude toward nursing profession [2] [3].

Faculty of Nursing, Ubun Ratchathani University, Thailand [4] has been educating a bachelor degree students in nursing science (4 year course) and psychiatric nursing is one area in this program. All blueprints and learning outcomes in nursing from Faculty of Nursing, Ubun Ratchathani University are pursued by the Thailand Nursing and Midwifery Council and the TOF in nursing. To be a registered nurse all students who graduate from nursing courses have to pass the exam supervised by the Thailand Nursing and Midwifery Council and psychiatric is one of the requisite parts in the exam. Psychiatric nursing curriculum contains both theoretical and practicum subjects. Several concepts on psychiatric nursing teaching are, for instance, concept of psychiatric nursing, psychiatric nursing roles, health promotion and prevention in mental health problems, law and ethical codes in psychiatric nursing. The core concepts of psychiatric nursing are self-awareness, therapeutic relationship, nursing care for mental health problems, nursing roles for therapeutic and continuing care for mental health problem in communities, for example. Practicum subject in psychiatric nursing is provided for 4th year nursing students. This subject focuses on employing all body of knowledge of psychiatric nursing into practice. The objectives of this subject are for applying nursing process into practice and nursing care for clients in order to promote, prevent and care for people who are at risk of mental health problems and for people who suffer from mental health illness. All roles will be considered under nursing profession law and ethic regulations. Psychiatric nursing course encourages students to gain responsibility, volunteer spirit, have a good attitude toward nursing profession. Additionally, this course helps to improve team working and having a better quality of clinical practice skills in psychiatric area. The core concepts of psychiatric nursing practice are therapeutic relationship skill, and, mental health problem screening and assessment skill. Therapeutic relationship skill helps clients to express their feeling, understand their own problems and find the best solution to solve their problems. Moreover, therapeutic relationship skill helps patients to improve their abilities for solving problems [5]. To investigate patients' problems and needs, students are required to have the ability for mental health screening and assessment. This skill helps to refine nursing diagnosis, to plan and provide a good quality of

nursing care for all patients. Various patterns used for students' evaluation performances in psychiatric nursing program are such as an examination and clinical practice assessments.

The Objective Structured Clinical Examination (OSCE) OSCE is an evaluation method in clinical area. Several studies showed that OSCE is a high quality method that can differentiate knowledge and skills for learners. OSCE is well-defined pattern for skill assessments and OSCE is a reliable structure based on evidence [6] [7]. OSCE was first introduced in medical education by Harden in Scotland in 1975 [7] and now is an established part of the repertoire of clinical assessment skills in many nursing schools around the world [8] [9] [10] [11]. In Thailand, Nursing education started the employment OSCE as it can help nurses to evaluate clinical practice skills [12]. Most of them appear to be an assessment of nursing practice skills in other specialized fields such as Lohpaiboonkun & Palalakan (2011) was the study the impact of OSCE on knowledge and clinical practice skills assessment in primary medical care in nursing student. From this study, it was found that OSCE was suitable to evaluate clinical practice skills. This study provides insightful information to the development of clinical skills in basic medical treatment and allows nursing students to learn to practice in simulations. These experiences can be referred to the real situations when working. OSCE test is applicable for practical nursing course and could be applied in the assessment of students' knowledge for preparing clinical skills [10] as same as Ekthamasuth et al. (2017) who developed the OSCE model for nursing students who studied practicum of maternal and newborn nursing. The result indicated that the OSCE model could enhance the students' critical thinking [11]. In addition, there is a study of the application of OSCE in the course adult nursing area [13]. However, the implementation of OSCE in assessing specific psychiatric nurse practice skills is minimal.

This study, thus, aims to investigate (1) the outcome of the OSCE on nursing students' performances in psychiatric nursing area, (2) nursing students' perception on psychiatric nursing performances, and, (3) nursing students' opinions on the OSCE. A result from this study will be beneficial for the enhancement of learning outline and improve clinical practice skill for nursing students in psychiatric nursing area.

METHOD

Study design

This is a descriptive research design conducted between February - March 2017. The participants were 62 of 4th year nursing students in Faculty of Nursing, Ubon Ratchathani University, Thailand, in academic year 2017. Purposive sampling was employed to recruit participants.

Description of the OSCE model

This model was developed by Saithanu, et al. (2016) [12] including the process of OSCE, station for OSCE, scenarios and evaluation forms in psychiatric area. The OSCE model was designed following the contents taught in classroom and clinical placement experiences. All research instruments were validated by three psychiatric nursing professionals. There are 3 stages of OSCE as following: (1) Preparation stage, this step consists of developing the OSCE model by meeting with teams for planning the concept of OSCE, defining the topic for OSCE, selected necessary skills in accordance with objectives of learning and curriculum. Moreover, preparing

scenarios and assessment forms for OSCE, preparation teams, preparation simulation patient, preparation nursing students, and preparation necessary equipment (2) OSCE stage, nursing students must be evaluated with 2 skills (2 station). The first station is for evaluation the therapeutic relationship skill and the second station is for evaluation mental health problem screening and assessment skill. Nursing students will get into station one by one. Each station has one simulation patient and scenario. No more than 15 minutes for one station and when the time is end student has to stop and rotate to the next station. The examiner will observe students' behaviors and skills by using the evaluation forms and (3) Evaluation stage, the examiners will summarize the result and explain to nursing students to answer the questionnaire after the exam and group discussion to feedback the OSCE.

Scenarios

There are 2 situations in the exam, the first situation requires nursing students to interact with psychiatric patient who admitted in hospital (base on therapeutic relationship techniques) and the second situation for test of the mental health screening and assessment skill. Nursing students require to make decision on which tools will use for screening and assessment patients' problems (they had to consider to symptoms and patient conditions in this situation)

Checklist to assess nursing students' performances

I. Checklist to assess therapeutic relationship skill

There are 3 parts in this form and total 60 scores.

Part I: To assess nursing students' performances on the therapeutic relationship process consists of 3 phases; initial phase, working phase and terminating phase.

Part II: To assess nursing students' performances on communication techniques for initial phase, working phase and terminating phase.

Part III: To assess nursing students' personalities, behaviors and skills such as attitude toward psychiatric nursing, patient rights and understanding client.

II. Checklist to assess mental health problem screening and assessment skill

This checklist is to assess nursing students' ability on decision-making. Students have to select a suitable tool for evaluation client problems and needs such as stress, happiness and depression. Total score in this form is 50.

Important regulation

Only students who get a total score equal or more than 80 percent will be considered to pass the examination in each station

Measurement

The questionnaires of nursing students' perception on nursing performance in psychiatric area were conducted by literature review related to therapeutic relationship skills, mental health problem screening and assessment skill. The questionnaires were also following six domains of the Thai National Qualifications Framework for Higher Education in nursing, 2009. A total 28 questionnaires were developed in this form. The questionnaires were 5 points of Likert scale.

The questionnaires of nursing students' opinion on OSCE was developed by the researcher and teams. This form has three domains including the preparation for the OSCE, the OSCE processes and the benefits of OSCE. The questionnaires were 5 points of Likert scale.

All instruments in this study were validated by two lecturers in psychiatric nursing and one advance practice nurse (APN). Content validity and reliability were tested. The Index of Item Objective Congruence (IOC) for all items were 0.5 and above and calculate the reliability according to the Cronbach's alpha coefficient formula. A reliability of the questionnaires of nursing students' perception on nursing performance in psychiatric area was 0.82 and the questionnaires of nursing students' opinion on OSCE was 0.84.

Ethical Considerations

This research study was concerned about participants confidentially. Nursing students were informed about the nature of study, aims and all processes of this research. The participants were voluntary and can withdraw from this study at any time without any impacts. Inform consent was obtained for all eligible students who agreed to participate. All data and finding will be reported in overall and cannot be identified to any participants. An approval to conduct the study was obtained from Dean of Faculty of nursing to conduct the study.

Data analysis

Descriptive statistics including percentage, mean and standard deviation were used to analyze data in this study.

RESULTS

Nursing students' performances found that 50 nursing students passed the OSCE test (80.65%) and 4 nursing students (6.45%) very good in the component of the therapeutic relationship skill. In the section of mental health problems screening skill found 57 students passed the test (91.94%) and 11 nursing students (11.29%) very good in the test. Furthermore, this study found nursing students that fail in the OSCE at the score less than 80%, the therapeutic relationship skill test was 12 people and screening for mental health problem skill test was 5 people. (Chart 1 and Chart 2)

Chart 1: The result of the OSCE test of the therapeutic relationship skill (n=62)

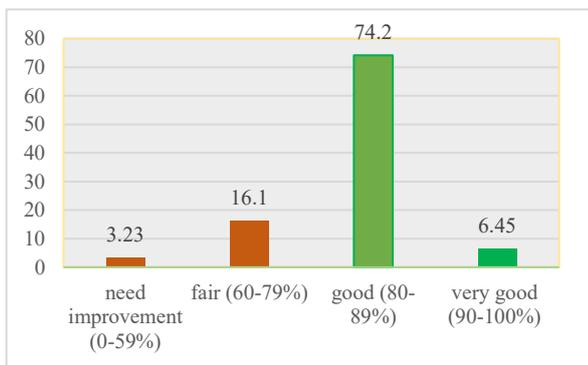
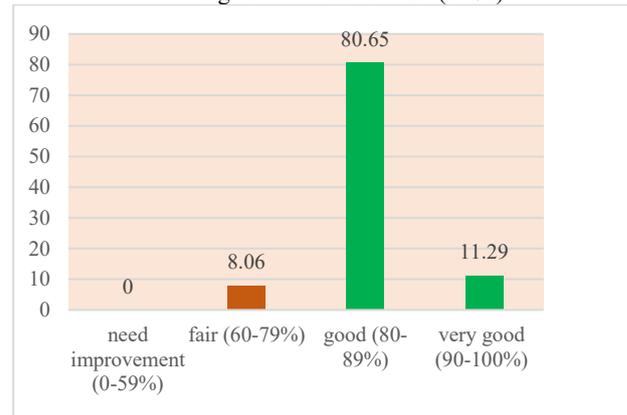


Chart 2: The result of the OSCE test of mental health problem screening and assessment skill (n=62)



The result of nursing students' perception on nursing performances in psychiatric area found that nursing students had a good perception on psychiatric nursing clinical practice overall (\bar{x} = 3.80 SD = .62), the perception on therapeutic relationship skill (\bar{x} = 3.81 SD = .60) and the perception on mental health problem screening and assessment skill was the lowest score (\bar{x} = 3.70 SD = .65). (Table 1)

Table 1: Nursing students' perception on nursing performance in psychiatric area (n=62)

Evaluation domains	Mean	S.D.	Level
Therapeutic relationship skill	3.81	0.60	good
Mental health problem screening and assessment skill	3.70	0.65	good
Psychiatric nursing clinical practice overall	3.80	0.62	good

Over all nursing students had an opinion on the OSCE at a good level (\bar{x} = 3.87 S.D. = 0.55). The highest score was the benefits from the OSCE (\bar{x} = 3.93 S.D. = 0.55) following by the processes of OSCE (\bar{x} = 3.91 S.D. = 0.56) and the lowest score was the OSCE preparation (\bar{x} = 3.78 S.D. = 0.54). (Table 2)

Table 2: Nursing students' opinion on the OSCE (n=62)

	Mean	S.D.	Level
The OSCE preparation			
Instructors' preparation	4.09	0.57	good
Review of nursing practice skills before exams	3.42	0.56	poor
Review knowledge on the exam topics	3.88	0.57	good
Supportive facilities for students	3.48	0.50	poor
OSCE processes explanation	4.03	0.52	good
Average score	3.78	0.54	good
The benefits of OSCE			
Increasing critical thinking	4.03	0.64	good
Improving decision-making skill	4.06	0.49	good
Applying nursing knowledge to practice skills	3.91	0.53	good

	Mean	S.D.	Level
Self- perception on nursing skills	4.03	0.58	good
Self-perception on limitation point to improve nursing skills	3.64	0.54	good
Average score	3.93	0.55	good
The OSCE processes			
The OSCE processes	3.79	0.53	good
The situation for OSCE	3.85	0.56	good
Station for OSCE	3.85	0.54	good
Time for OSCE	3.88	0.53	good
Location for OSCE	4.06	0.60	good
Equipment for OSCE	4.03	0.63	good
Average score	3.91	0.56	good
Overall average score	3.87	0.55	good

In addition, from group discussion activity with all students who fail the OSCE test found that nursing students have not good quality to prepare themselves before OSCE test. Some nursing students got confused on the process to create a relationship with client. Students were excited and stressed with the test as they were worrying on the result. Additionally, the information from students who passed the OSCE showed that the situations for OSEC were well-defined. The scenarios helped them to understand their roles such as what they should do and how to react. The simulation patient played a good role and time for OSCE was suitable to finish the test. Nursing Students claimed that OSCE encouraged them to review body of knowledge and skills related to psychiatric nursing and OSCE increased self-perception on their weak points which led them to improve their skills. The OSCE assisted students to think and making decision accurately. Moreover, OSCE helped students to be confidence on nursing skills and considered more on ethical dilemmas.

DISCUSSION AND CONCLUSION

From the assessment of psychiatric nursing performances, it can be concluded that the majority of nursing students had a good skill on therapeutic relationship to patient by passing the OSCE test at score 80-90% and a few nursing students had a score more than 90%. As a result, OSCE helped nursing students to be more confident in therapeutic relationship skill and this will lead nursing students to meet the patient satisfactions. As for the skill of mental health problem screening and assessment, it was found that most of the nursing students passed the OSCE as well. If nursing students have a good clinical practice skills, they will be able to facilitate patients on their problems as each patient has a different problem [11] [12] [14]. For the minority of nursing students who fail the OSCE, it was found that several reasons caused them to fail the test such as lack of confidence in practice skill, stress and nervousness. As well as Bani-issa et al.(2019) study to explore the experiences of undergraduate nursing students and examiners with the OSCE that found participants also perceived the exam to be a stressful experience, citing the need for more time [15]. All causes that mentioned before can impact decision-making, critical thinking, and judgment in nursing practice [11]. Nevertheless,

nursing students will gain more experiences and learn to develop their own weak points.

Nursing students had a good perception on psychiatric nursing performances and this met the standard of the Thai Qualifications Framework for Higher Education in nursing, 2009 [1]. Additionally, from group discussion part showed that OSEC assisted nursing students to perceive their abilities both good and weak points. The OSCE helped nursing students to improve their psychiatric nursing skills. Associated with the study claimed that nursing students perceived that OSCE is a good model for evaluation nursing skills[11] [14] and OSCE is a diversity patterns which is very challenging for all students [13] [15]. Additionally, OSCE can differentiate nursing students' problems and abilities individually. It was not only improve nursing students skills on the other hand OSCE encouraged lecturers to improve their teaching blueprints.

Nursing students' opinion on the OSCE displayed that nursing students had an opinion on OSCE at a good level (\bar{x} =3.87 S.D.= 0.55). The highest score was the benefits from OSCE (\bar{x} =3.93 S.D.= 0.55) following by the processes of OSCE (\bar{x} =3.91, S.D.= 0.56) and the OSCE preparation was the lowest part (\bar{x} =3.78 S.D.= 0.54). A good quality of OSCE model is suitable to use for evaluation nursing students' skills. Correlated with the studies presented that students were satisfied on OSCE at a high level therefore, OSCE is suitable to use for evaluation learning outcomes in nursing field [13][16]. As well as the study of Saunders et al.(2019) that found predominantly agreed that the OSCE encouraged peer learning and attainment of key learning outcomes [17]. However, several factors have to be concerned such as rich information on the test to explain for nursing students and nursing students should understand the purposes of OSCE. All factors can effect on the students' perception and attitude on OSCE. In this study, it was found that the preparation procedure for OSCE was the lowest score in the poor level (\bar{x} = 3.42, S.D. = 0.56). Shows that nursing students have to review nursing practice skills before self-examination alone may not be appropriate. Therefore must encourage nursing students to review by themselves and teachers may arrange a review by emphasizing important content before the actual exam. In addition, must provide learning support for knowledge review, including videos, textbooks, etc. At the same time, teaching process may be has to improve as it will assist nursing students to understand how to apply their knowledge and skills into clinical practice. As it can help nursing students to build a better decision- making on clinical practice[17][18][19][20].and reduced anxiety, improved confidence in undertaking key clinical skills, and promotion of authentic practice activities [17]. Timing for the OSCE is also necessary to focus and it should be suitable with nursing students'ability [10][21].

This study supports evidence of the value of the OSCE as an appraisal of psychiatric nursing practicum in nursing students

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