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Experience of Anesthesiology Nursing Students In Facing Objective Structured Clinical Examination (OSCE)



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Abstract

Background: Students' experience during OSCEs is generally anxiety, tension, fear of examiners which is influenced by a lack of self-confidence. So that many participants stated that they experienced lack of confidence, fear, and overthinking. Therefore, the researcher is interested in conducting a study entitled the experience of anesthesiology nursing students in facing OSCE. This study aims to determine how anesthesiology nursing students experience in facing OSCE at Harapan Bangsa University.

Method: This study used a qualitative method with a descriptive phenomenological approach. The population studied was anesthesiology nursing students at Harapan Bangsa University who had undergone OSCE. Data collection was carried out by in-depth interviews with samples selected by purposive sampling technique. There were five participants who participated in this study with predetermined inclusion and exclusion criteria.

Result: this study found five themes related to the experience of anesthesiology nursing students in facing OSCE, namely psychological disorders, views on OSCE, positive impact, learning process, feelings after OSCE.

Conclusion: This study describes the experience of anesthesiology nursing students in facing OSCE and to increase knowledge in the preparation and implementation of OSCE.

Keywords: experience, OSCE, anesthesiology, nursing, qualitative

Introduction

Objective Structured Clinical Examination (OSCE) is a program conducted to evaluate students' clinical skills in a series of simulations that include clinical skills such as communication, clinical examination and medical procedures. (Harden et al., 1975). Educational institutions also prioritize OSCE due to its high level of objectivity, fairness, reliability, content validity, credibility of skills

achieved and creating learning motivation. (Nair & Sathya, 2020).

The development of fundamental clinical skills is an important component in preparing students to fulfill their responsibilities as anesthesiologists in the future. OSCE is usually performed on health students, one of which is anesthesiology nursing students. (Qodriya et al., 2023).

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OSCE helps anesthesiology nursing students to improve their ability and understanding of skills. (Sunardi et al., 2023). OSCE is applied to anesthesiology nursing students as a benchmark for assessing the ability of skills that have been learned during education in one semester. (Raziani et al., 2022).

The OSCE consists of several round stations and is conducted in a structured manner. Each station has a different examiner and students are asked to demonstrate their clinical skills in front of the examiner. (Solà-Pola et al., 2020). Students will be asked to go through each of these stations after the bell rings and at each station will be given 5-10 minutes. Students and examiners are not allowed to talk to each other. (Pane et al., 2022).

Students' experience during OSCE will generally experience anxiety, tension, fear of examiners and the sound of the bell that makes memorization memories disappear. The problems that students face during OSCE are caused by several factors, including physical conditions that are less supportive to undergo OSCE, negative issues in the implementation of OSCE, inadequate facilities or equipment, the amount of material that must be studied, lecturer examiners, and difficulties in understanding the material and concerns about the results of the OSCE exam. (Pane et al., 2022).

The problems experienced by students when facing OSCE are also influenced by a lack of confidence when taking OSCE because they do not understand the material well, students also experience difficulty sleeping due to anxiety or because they use sleep time to study so that sleep time is reduced which causes physical condition when taking OSCE to be less good, as for students who feel normal because they are confident in their ability to face every station during OSCE. (Nopita & Indawati, 2023; Sandiana et al., 2022).

Methods

This study used a qualitative method with a descriptive phenomenological approach. Data collection in this study was carried out by in-depth interviews (Indepth Interview) to five anesthesiology nursing students who had undergone OSCE examinations at Harapan Bangsa University who were selected by purposive sampling with inclusion criteria: participants who are anesthesiology nursing students at Harapan Bangsa University who have active status and have carried out OSCEs (Table 1). This research has been approved by the ethics committee with letter number no. B.LPPM-UHB/412/05/2024

The tools used during the interview process were a mobile phone to record sound, field notes containing the interview guide, and blank notes to describe the participants' facial expressions, attitudes or conditions. In this study, triangulation was conducted with 3 people, namely close friends (friends) of the participants who were recommended by the participants (Table 2).

Data analysis in this study used a method adapted from Collaizi in determining keywords, categories and themes obtained from interviews during the research. At the end of the study, the researcher went back to the participants to clarify the themes that had been determined to ensure that the results were accurate.

Results

This study involved anesthesiology nursing students totaling five participants. The number of participants is in accordance with the saturation of data obtained from the analysis of participants' answers. The participant characteristics table is as follows:

Table 1. Characteristics of Participant

Code	Initials	Gender	Age	Semesters	OSCE Frequency
P1	Ms. S	Female	22	8	6
P2	Ms. I	Female	20	4	2
P3	Ms. P	Female	21	4	1
P4	Ms. I	Female	22	8	6
P5	Ms. F	Female	22	8	6

Table 2. Characteristics of Triangulation

Code	Initials	Semesters	Description
T1	Ms. L	8	P1's best friend
T2	Ms. H	4	P2's best friend
T3	Ms. H	4	P3's best friend

In this study, 5 themes were obtained related to the experience of anesthesiology nursing students in facing OSCE. The five themes include 1) Psychic Disorders 2) View of OSCE 3) Positive Impact 4) Learning process 5) Feelings after OSCE.

Table 3. Theme 1

Code	Coding	Category	Theme
P1	Fear	Not Confident	Psychic Disorder
P2			
P5			
P3	Prejudiced	Overthinking	
P4			

Psychic Disorder. Participants did not feel confident in facing the OSCE because of bad feelings and negative thoughts. Here are some of the participants' statements in the following interview results:





"... so what I felt when I wanted to osce was anxious and scared, more like that..." (P1, Ms. S, 22nd)
 "... usually before the osce I get nervous but not really nervous, but if I'm already inside it's like a severe tremor ..." (P2, Ms. I, 20th)
 "...if it's a few hours before, it's definitely nervous, especially the first osce is really nervous..." (P5, Ms. F, 22nd)

A similar statement was also mentioned by a triangulation participant who stated that his best friend said he was afraid because he would face the OSCE exam. The following is an excerpt of the triangulation participant's statement from the results of the interview conducted:

"...yes it's true, what I see is that he is like that every time he wants to go to the osce, he is like nervous and then very anxious..." (T1, Friend of P1, 22 years old)
 "...as far as I remember, he was really anxious like that, like he was really thinking, afraid of you..." (T2, Friend of P2, 20th)

Participants who will face OSCE exams often experience overthinking or prejudice that may not happen. Participants think about what skills will be tested at each station and who will be the examining lecturer at the OSCE exam this semester, such as whether there is a lecturer who is already feared by many students to be an examining lecturer at one of the stations. This overthinking also affects the lessons that students have learned before the OSCE exam, the majority of students will go blank due to impaired concentration due to anxiety experienced. This can be seen from the following interview results:

"...what I felt during the first osce was definitely nervousness, which was really bad until we went blank and our minds were mixed up..." (P3, Ms. P, 21th)
 "...if you want to do osce even though you've done it 6 times, yes, 6 times, there must be some nervousness, the first time, no matter how hard we learn, sometimes there is a time when we can go blank..." (P4, Ms. I, 22th)

A similar statement was also mentioned by a triangulation participant who stated that his best friend said he was nervous because he would face the OSCE. The following are excerpts of triangulation participants' statements from the results of interviews conducted:

"...he was nervous anyway..." (T3, Friend P3, 20th)

Table 4. Theme 2

Code	Coding	Category	Theme
P1			
P2			Views
P3	Perception	Knowledge	on
P4			OSCE
P5			

Views on OSCE. Participants have their own views on OSCE, which is a program that aims to evaluate the clinical and critical thinking skills of each student. Here are some of the participants' statements in the following interview results:

"...osce is a clinical exam before practice, just to hone our skills..." (P1, Ms. S, 22nd)
 "...osce is like what in my eyes it's like a test, a test but one that we directly do, and it's what... difficult, it's quite difficult..." (P2, Ms. I, 20th)
 "...osce for me is a test to train our skills..." (P3, Ms. P, 21th)
 "...osce is the maturation of the material, yes, previously we had a skill lab, from the skill lab we continue to mature the exam in osce, it is more serious, more assessed..." (P4, Ms. I, 22)
 "...osce is like a practical exam for students, especially health students before they start practicing in the hospital..." (P5, Ms. F, 22nd)

Table 5. Theme 3

Code	Coding	Category	Theme
P1			
P2			
P3	Benefits	Advantages	Positive Impact
P4			
P5			

Positive Impact. Each participant had a different response regarding the benefits felt when undergoing the OSCE exam. The advantages and positive impacts felt from the OSCE exam make participants more convinced of the benefits of the OSCE exam. Here are some of the participants' statements in the following interview results:

"...the first is for myself, and the second is that when I practice, I will be more confident to perform actions on patients, and I know where the limits of my skills are..." (P1, Ms. S, 22 years old)
 "..., so we learn a lot of the material right, so when we go to the hospital we really don't get confused, so we keep repeating it, and we also definitely study more than usual, so we understand more about how the procedures will be at the hospital ..." (P2, Ms. I, 20th)
 "...osce is not only to provoke us to learn, but also to train our skills as well, and also to determine our accuracy in performing procedures..." (P3, Ms. P, 21th)
 "...before the osce, we have to study really well so that we pass, don't get remedied, there if we keep studying, our brains will keep remembering that, now when we take action at the hospital, we will remember the steps we learned before..." (P4, Ms. I, 22 years old)

Table 6. Theme 4

Code	Coding	Category	Theme
P1			
P4	Repeating		
P5		Methods	
P2	Learn	Learn	
P3	Watch Video		
P1	Maintaining Health and Learning		Learning Process
P2		Self-preparation	
P3	Learn		
P5			
P4	Preparing and Studying		

Learning Process. Participants who carry out OSCEs will prepare themselves. Participants who will carry out OSCE will prepare their





learning methods according to the learning style of each participant. This can be seen from the participants' statements in the following interview results:

"...because I've been to the 6th osce, so if the first osce was more eee... memorizing, this time I understand more, so we just repeat from the previous osce, and we learn more from previous experiences..." (P1, Ms. S, 22th)

"...I'm a forgetful person so the method that I do so that I don't forget is usually I record my own voice, then I listen to it over and over again so I remember better..." (P2, Ms. I, 20th)

"...so I have to look for learning videos..." (P3, Ms. P, 21th)

"...I feel like I understand more, not just because I read the tools, but while looking at google and watching the videos too, like how to do it..." (P3, Ms. I, 22)

"...learned from the tools..." (P5, Ms. F, 22nd)

Participants who will carry out OSCE will prepare themselves as much as possible. Each participant will prepare himself in different ways according to the ability of each participant. This can be seen from the following interview results:

"...I take care of my sleep pattern, secondly my health and study optimally..." (P1, Ms. S, 22)

"... I usually prepare it on the second day, that's when I really write down everything so that I can remember it better, and then I just understand it..." (P2, Ms. I, 20th)

"...for studying, I usually pay in installments from 7 days before osce if not 6 days before osce..." (P3, Ms. I, 21th)

"...learning preparation, yes, we also prepare from the clothes and what to bring, such as pens, and there are some material tools that must use watches that have needles to count seconds and all that, so the most besides learning to prepare clothes, pens and yes, the most adequate rest..." (P4, Ms. I, 22th)

"...I started studying on the day before, then in the morning if I got the morning group, I woke up early to repeat the material and learn to practice the skills..." (P5, Ms. F, 22 years old)

Table 7. Theme 5

Code	Coding	Category	Theme
P1			
P2	Calm down	Serenity	Feelings After OSCE
P3			
P4			
P5			

Feelings after OSCE. Participants showed feelings of calmness and relief after carrying out the OSCE. The participants described the experience after carrying out the OSCE in the form of a sense of calmness and participants could focus more on continuing their preparation for practice in the hospital. This can be seen from the following interview results:

"...after osce, I feel quite calm..." (P1, Ms. S, 22 years old)

"...I'm really relieved, it feels like I'm really calm, just thinking about practice right..." (P2, Ms. I, 20th)

"...it feels to me that after osce it's like eee... the burden on our brain is half gone, like yes, osce has passed..." (P3, Ms. P, 21th)

"...the system is that if osce is done, forget it, we just have to wait for the grade if there are remedied ones, then we just have to follow the remedied assignments..." (P4, Ms. I, 22th)

"...relief is definitely like finally the exam is over..." (P5, Ms. F, 22)

Discussion

This study found that there was a psychological disturbance in the experience of anesthesiology nursing students in facing OSCE. Participants recognized that they were unsure about what to study so they overthink about it (Sol et al., 2019). (Sol et al., 2019). Factors that cause participants to experience psychological disturbances during OSCEs include negative feelings in the form of self-confidence and also the examining lecturer. (Ha & Lim, 2023).

In contrast to research conducted by (Nair & Sathya, 2020) showed that OSCE does not make students anxious compared to other exams. OSCE is also a strategy to implement a clinical competency assessment system for nursing students. Descriptions used to explain the differences in strategies applied during each OSCE station (Bdair et al., 2019). This suggests that there are differences and tests performed during each OSCE station, which are indirectly or directly related to the demonstration of various clinical competencies. (Avraham et al., 2023).

However, the use of OSCE also has a negative impact on students such as the amount of material that must be learned, students become overthinking about the examiner, cannot perform the procedure properly and OSCEs that do not pass. (Fountain & Sherman, 2020). OSCE has an important role in preparing anesthesiology nursing students for clinical practice. (Ha & Lim, 2023). OSCE has a great impact on the field of health sciences and improves health professionals in dealing with patients who will experience future developments in accordance with the procedures and standards of each institution. (John et al., 2020).

In contrast to research conducted by (Fountain & Sherman, 2020) that there are negative impacts of this OSCE exam, namely students becoming stressed because of the amount of material that must be learned, students who do not pass the OSCE will be given remedials, and students are not competent in their scientific field.

Students' skills and knowledge in facing OSCE because the methods applied in the implementation of OSCE will improve their abilities during clinical practice. (Ha & Lim, 2023). However, in research conducted by Sol et al., (2019) anxiety is considered an important





component that encourages students to learn, but it can also hinder their learning. Students spent more time preparing for the OSCE than because they were unsure of what to expect or what they had to learn. Instead, students identified that the anxiety generated by the OSCE prevented adequate preparation. (Fountain & Sherman, 2020).

The OSCE procedure at each institution is certainly different, in general, students will wear a predetermined uniform, students are required to arrive a maximum of 15 minutes before the exam starts, some even have to quarantine first, students will be given a serial number by the OSCE committee, after a sign in the form of a bell rings students are welcome to enter the exam room where each station has a predetermined time of 5 - 10 minutes. (Al-Hamed, 2021). Various preparations and requirements are needed during the OSCE, so as to improve students' skills in carrying out OSCEs and this has been confirmed by experts in validity and reliability. (Criscione-Schreiber, 2020).

The application of OSCE is carried out by linking the involvement of theoretical knowledge that is carried out for practice using different case situations such as role play into patients or using mannequins that have been adapted to the standard. (John et al., 2020).

The anxiety felt by students when they just started the OSCE exam is very common, because for nursing students this is their first clinical experience. (Conde & Clemente-Suárez, 2021) Therefore, students feel that it is best to do the OSCE exam at each station and feel calm after taking the OSCE exam. However, according to research researched by Fountain & Sherman, (2020) there are students who still experience a little anxiety after carrying out OSCEs because students still think about the final score of the OSCE, because they feel they have not maximized the exam at each station.

Conclusion

In this study, anesthesiology nursing students' experiences in facing OSCE were discussed in five main themes based on the interview results. The themes found include psychological disorders such as fear and overthinking. The view of OSCE is the knowledge of anesthesiology nursing students in perceiving the meaning of OSCE itself. The positive impact of OSCE brings many benefits to anesthesiology nursing students such as students become more active in learning and can prepare themselves for the next clinical practice. The learning process includes self-

preparation and learning methods of each anesthesiology nursing student in facing OSCE. Calmness arises when anesthesiology nursing students have finished carrying out the OSCE exam which affects the feelings of each student. With the hope of understanding the feelings of anesthesiology nursing students in facing OSCE by providing support and motivation for students.

Limitations

In the process of conducting this research there were some limitations in the research procedure that may have impacted the results of the study, participants who did not understand the questions asked by the researcher during the interview.

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Author's contributions

Made substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data: IY, SS, HSM, AM, TH; Involved in drafting the manuscript or revising it critically for important intellectual content: IY, SS, HSM; Given final approval of the version to be published. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content: IY, SS, HSM, AM, TH; Agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved: IY, SS, AM. All authors read and approved the final manuscript.

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Availability of data and materials

The data that support the findings of this study are available from the corresponding author, [IY], upon reasonable request

Declarations

Ethics approval and consent to participate
Not applicable

Competing Interest





The authors declare no competing interest

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