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Improving Nursing Objective Structured Clinical Examination (Osce) Readiness Through Students' Generated Question

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Abstract – Objective Structured Clinical Examination (OSCE) is an evaluation method to measure nursing students' clinical skills. The low percentage of students passing the internal campus OSCE is an evaluation of nursing education institutions in Indonesia. The factor that causes the low students' passing rate on the OSCE exam is students' lack of understanding in analyzing and answering OSCE questions in the form of case studies. One solution that can be done to overcome this problem is to provide additional learning to students with a student generated question strategy, namely students create their own questions in the form of cases according to the OSCE exam template and answer them themselves. The research design uses classroom action research which population is all students of grade III of Akper Kesdam I/BB Padang in 2024, and the sampling technique was carried out with a total sampling of 41 students. The research results obtained before the action were only 3 students who were able to generate them, in the first cycle only 26.11% of students were able to generate questions because the researcher determined which category that must be made, and in cycle II it increased to 73.1% because the researcher gave students the freedom to choose which category to make. As an indicator of students' ability to solve case problems in OSCE in writing, before being given action only 12.1% of students were able to complete it, in cycle I 36.5% and cycle II 85.36%. There was an increase in cycle 2 because students could be more optimal in explaining the answers in the OSCE vignette. The indicator for students' ability to present the results of discussions before action was only 17.1% capable, in cycle 1 26.8% and cycle II 90.2%. It shows that students have better mastery of the material they master. Meanwhile, in OSCE there are several reviews that they have to fulfill so that if students diligently create these generated questions, they will be trained and used to completing OSCE questions and they will be better prepared to face OSCE.

Keywords: OSCE, Student Readiness, Student generated question

1. INTRODUCTION

Health development is aimed to increase awareness, willingness and ability to live healthily for everyone in order to realize optimal health status as an element of welfare as intended in the Preamble to the 1945 Constitution. Health as a human right must be realized in the form of providing various service efforts quality and affordable health for the community. Nursing services are an integral part of health services aimed at individuals, groups and communities who have physical, mental and social problems in various health service settings. It is also stated that health as a human right is the responsibility of the government and all elements of society, and must be realized in the form of providing various health efforts through the implementation of quality and affordable health development. The National Nurses Association (PPNI) is a professional organization which is part of elements of society and contributes to improving the level of public health as mandated in the 1945 Constitution.

Health as a human right is the responsibility of the government and all elements of society, and must be realized in the form of providing various health efforts through the implementation of quality and affordable health development. This is of course not only the responsibility of the government which is centered on one element but also on various elements of society, one of which is the organization that oversees society related to health, namely PPNI. The National Nurses Association (PPNI) is a professional organization which is part of elements of society and contributes to improving the level of public health as mandated in the 1945 Constitution.

It is stated clearly that nursing is a form of professional service which is an integral part of health services, based on nursing knowledge and tips aimed at individuals, families, groups and communities, both healthy and sick, covering the entire process of human life, in the form of providing nursing care. Nursing care is a series of humanistic and comprehensive activities using a nursing process approach to help resolve actual and potential health/nursing problems. In order to provide comprehensive nursing care, the educational process is a very determining factor (Febrina, 2022). Nursing services are comprehensive professional services covering physiological, psychological, social, spiritual and cultural aspects provided to clients due to limited ability, will and knowledge in meeting actual and potential basic needs. Universally, a very basic responsibility of nurses is to fulfill basic needs in efforts to improve health, prevent disease, cure and restore health. The Nursing team SURVEY - HPEQ Dikti which was conducted in 2010 and 2011 in 32 Provinces regarding Nurse Competency Standards in various regions of Indonesia was intended to obtain an overview of community/client needs regarding Nursing. A survey conducted on Hospital Directors, Hospital Management Staff, Executive Nurses and Clients/community being treated in Hospitals and at Community Health Centers showed that 97.4% of the results stated that the desired Nurse was a Nurse who had Professional Nursing competency.

To ensure safe and quality nursing care/care for the community, it is necessary to establish competency standards for Indonesian nurses. This competency standard consists of competency standards for intermediate expert nurses, nurses and specialist nurses which can be used in determining macro policies. Akper Kesdam I/BB Padang as a vocational college that produces intermediate expert nurse graduates has Competency

standards consisting of competency areas which are described into core competencies, competency components and equipped with a list of nursing action skills. Intermediate Expert Nurses are able to master basic nursing science; carry out nursing care that has been planned skillfully in promotive, preventive, curative and rehabilitative efforts to meet bio-psycho-socio-spiritual needs holistically and based on nursing care standards, standard operational procedures; pay attention to patient safety, sense of security and comfort; Able to work collaboratively with the nursing team.

Nurse competency standards include; 1) Indonesian nurse competency framework, including professional, ethical, legal and culturally sensitive practices, delivery of care and management of nursing care, and development of personal and professional qualities; 3) Details of competency units with their codification; 4) Description of nurse competencies in implementing nursing care. Nursing services consist of nursing staff components, one of which is nursing students. To ensure that the performance of nursing students is in line with efforts to improve the quality of nursing services, competent clinical and academic nursing educators are needed to produce competent graduates.

Whether or not final year nursing students who will graduate are competent or not, they must take the national competency test and OSCE. Competency testing is a process of measuring the knowledge, skills and behavior of students at health universities. The basis for implementing the Competency Test includes Law no. 36 of 2014 concerning Health Workers, and Minister of Education and Culture Regulation no. 2 of 2020 concerning Procedures for Implementing Student Competency Tests in the Health Sector. Apart from that, the Competency Test is an effort to guarantee the quality of graduates, implement the curriculum and as a basis for developing the quality of education in the health sector for the relevant ministries.

The competency test is an assessment of the abilities of Indonesian nurse graduates using the written test method via Computer Based Test (CBT) and the Objective Structured Clinical Examination (OSCE) method. The OSCE is a form of evaluating nursing students' clinical skills. OSCE is a tool for assessing clinical competency components such as history taking, physical examination, procedural skills, communication skills, interpretation of laboratory results, management and others which are tested using an approved checklist and students will take part in several stations.

Referring to the opinion above, OSCE can measure student competence, not only cognitive competence but competence will be achieved comprehensively, starting from assessing health history, analyzing client needs to procedural skills required by clients. This makes it easier for students as students to apply in the clinic later. Currently the implementation of OSCE is still at the institutional level, OSCE was chosen because it has the advantage of measuring the competency of nursing graduates to the stage of how specific skill achievements are displayed ("show how") by test participants. However, the percentage of OSCE exam results for final year students is still low. The low percentage of students passing the OSCE internal campus is an evaluation of nursing education institutions in Indonesia. One of them is Akper Kesdam I/BB Padang. The factor that causes the low student pass rate on the OSCE exam is students' lack of understanding in

analyzing and answering OSCE questions in the form of case studies (Silalahi, 2020). In the OSCE exam, students are required to be able to complete it.

Institutions have an important role in preparing students for graduation from the OSCE. These preparations can start from the beginning of the semester. Some of the methods that have been implemented by Akper Kesdam I/BB Padang are by implementing practical exams at the end of each semester using SOPs as a guideline for carrying out nursing actions. So that students no longer feel unfamiliar with questions based on case studies and problem solving. Many institutions only focus on preparing to face the national competency test so that the OSCE is often ignored, even though this is also one of the institutional indicators for graduating students. One solution that can be done to overcome this problem is to provide additional learning to students with a student generated question strategy, namely students create their own questions in the form of cases according to the OSCE exam template and answer them themselves. It is hoped that students will better understand the OSCE blueprint and be able to answer questions when the OSCE is carried out. (Rudini, 2021). Based on the results of Herlianita's research (2022), it was found that implementing student generated questions in OSCE could increase the competency of nursing students, especially in emergency clinical skills at PSIK FIKES UMM. In this method, students experience the experience of being tested and tested objectively with predetermined assessment standards. The research results showed that its implementation in clinical evaluation resulted in an improvement from poor to good. In general, the graduation results from the evaluation of emergency clinical skills for students in the VI Semester Class C Nursing Study Program showed a percentage of 77.78% (Herlianita, 2022).

Qotimah's (2020) research regarding improving students' mathematical communication skills using the Student-Generated Questions strategy carried out by researchers is limited by several indicators. Some of these indicators include student initiative in asking questions, the ability to use appropriate and varied strategies in discussions to solve problems. Apart from that, there is also the ability to express ideas, the ability to answer questions or problems and the ability to present the results of discussions. In carrying out actions in each cycle, every indicator that has been determined in research regarding mathematical communication skills has increased. By implementing the Student-Generated Question strategy regarding the subject of opportunities, it can be concluded that students' mathematical communication skills can improve. Increased communication skills can be seen from several research indicators that have been determined. The improvement in students' mathematical communication can be seen from several indicators including: (1) Demonstrating the ability to write mathematical questions before action 13.158%, cycle I 26.316% and cycle II 73.648%, (2) Demonstrating the ability to solve mathematical problems in writing before action 52.632% , cycle I 71.053% and cycle II 89.474%, (3) Demonstrate the ability to ask questions orally before the action 18.421%, cycle I 47.368% and cycle II 60.526%, (4) Demonstrate the ability to answer math questions orally before the action 26.316%, cycle I 50% and cycle II 78.947%, (5) Demonstrate the ability to present before action 13.158%, cycle I 31.579% and cycle II 63.158%

The results of other research conducted by Fahrurrozi, et al (2024) with the title implementation of the Student Generated Question method at MTs Miftahul Khair, obtained the following results: a) Increased Student Participation. Implementation of this method positively increases student involvement in the learning process. Students play a more active role in forming class understanding, feel valued, and have a meaningful contribution. b) Development of Critical Thinking Skills. This method opens up opportunities for developing critical thinking skills in students. They not only receive information, but also learn to ask relevant questions, hone their ability to formulate in-depth questions, and are actively involved in the learning process. c) Improved Memory and Understanding: Active participation in the question-and-answer process has a positive impact on students' memory and understanding. They tend to remember information more easily and understand complex concepts because they are actively involved in the learning context. The implications of using the Student Generated Question Method encourage students to ask questions, and can increase student involvement in learning. Students who actively ask questions tend to be more mentally and emotionally involved in the learning material. This could be an opportunity for other researchers to develop similar topics from different points of view by using this research as a reference for studying it more deeply. In the OSCE question template, there are several categories and competencies that students must understand in order to understand the instructions for the cases given, which can be seen in the following question template:

Table 1. OSCE question template

1.	Station number	
2.	Station title	
3.	Time required	
4.	Station destination	
5.	Competence	1. Communication, education and counseling 2. Assessment 3. Diagnosis and Planning 4. Implementation 5. Evaluation 6. Professional Behavior
6.	Category	1. Oxygenation 2. Circulation 3. Fluids and Electrolytes 4. Nutrition 5. Safe and comfortable 6. Psychosocial 7. Elimination 8. Activities and Rest

		9. Sexuality and Reproduction
7.	Instructions for Exam Participants	<u>CLINICAL SCENARIO:</u> <u>TASK :</u> 1. 2. 3.
8.	Instructions for Testers	<u>CLINICAL SCENARIO:</u> <u>TASK :</u> 1. 2. 3. <u>TESTERS INSTRUCTIONS:</u> 1. 2. 3.
9.	Instructions for standard clients/ mannequins	
10.	Setting Station:	
11.	Equipment required	
12.	Writer	
13.	Reference	

From the question template above, it can be seen that there are several reviews that students must understand in order to create a generated question that leads to a vignette according to the category of problem that will be raised. For more details, it will be explained as follows:

1. Station number : Is the station number (1-11)
2. Station title : Is a station title that is adjusted to competency

3. Time required : 15 minutes
4. Station destination : Explains what the station's goal is for the action taken
5. Competence :

In accordance with the PPNI competency framework, the following competency categories were developed:

- a. Therapeutic Communication, Education, and Counseling
 - (1) Communication: the ability to convey verbal and non-verbal messages about client care and health from nurses to clients and families and other health teams in accordance with communication techniques. (2) Education: the ability to provide information or messages delivered by nurses to clients and families in an effort to change healthy attitudes and behavior, improve healthy lifestyles and reduce morbidity rates at the individual and family level. (3) Counseling: the ability to provide consideration to clients and families so they are able to recognize their needs and make health behavior decisions. Competencies in this aspect, DIII nursing are communication and education.
- b. Assessment (Analysis and Physical Examination)

Is the activity of collecting data about the client's health status in a systematic, comprehensive, accurate, concise and continuous manner. The assessment includes: interview, physical examination and supporting examinations. Competency in DIII nursing: able to carry out simple assessments including interviews, physical examinations and supporting examinations. An example of a simple assessment in a heart examination is checking vital signs and performing a heart recording (ECG).
- c. Diagnosis and Planning (Analysis, Data Interpretation, Nursing Diagnosis, and Planning)

Is the activity of analyzing assessment data to formulate problems or nursing diagnoses and action plans to overcome health problems and improve client health. D-III nursing competency: is being able to formulate nursing problems and initial or simple nursing interventions, as well as being able to consult with professional nurses.
- d. Implementation (independent and collaborative)

Is the activity of implementing actions that have been identified in the nursing care plan. Implementation characteristics focus on how an action is carried out. D-III nursing competency: is being able to carry out nursing actions in accordance with SOPs based on plans that have been determined by professional nurses.
- e. Nursing Evaluation

Is the activity of evaluating the client's health development towards actions in achieving goals, according to predetermined plans and revising basic data and plans. D-III Nursing Competency: able to carry out formative and summative evaluations in accordance with predetermined outcome criteria.

f. Professional Conduct.

Behave or appear according to ethical rules, norms, culture and professional standards in carrying out nursing practice activities. Competency D-III Kep and Ners: able to apply knowledge, ethical and legal frameworks in health systems related to nursing, able to develop critical, logical and ethical thinking patterns in developing nursing care, as well as utilizing research results in an effort to improve the quality of nursing care.

6. Category

The main clinical competencies of nurses focus on meeting basic human needs:

1. Oxygenation

The scope of oxygenation includes meeting the oxygen needs of clients who experience ventilation, diffusion, perfusion and transportation disorders.

2. Circulation

The scope of circulation to fulfill blood circulation needs includes the heart pump, blood vessels/lymph vessels and blood.

3. Fluids and Electrolytes

The scope of fluids and electrolytes includes meeting fluid and electrolyte needs to help clients who experience problems regulating and meeting fluid, electrolyte and acid-base balance needs.

4. Nutrition

The scope of nutrition includes meeting nutritional needs starting from food intake, digestion, absorption and metabolism.

5. Safe and Comfortable

The scope of safe and comfortable disorders includes infection, physical injury, violent behavior, environmental insecurity, body defense processes (allergies), and thermoregulation, pain, pollution, social isolation.

6. Elimination

The scope of elimination (urine and fecal) includes the processes of secretion and excretion of the body's metabolic waste.

7. Activities and Rest

The scope of activity and rest includes impaired physical mobility, limited energy, sleep, rest and relaxation

8. Psychosocial

The scope of psychosocial disorders includes behavioral, coping, emotional, role and relationship disorders, and self-perception.

9. Sexual and reproductive

The scope of sexuality and reproductive health includes various matters related to sexual identity, sexual function and reproductive health.

7. Instructions for exam participants: vignettes and questions are provided here for exam participants, according to the competency areas and categories that have been determined

8. Instructions for examiners: here contains instructions that are also given to participants, but the difference is that here there are answers to questions given to participants
9. Standard client: is a healthy and normal person who is asked to act as a client as written in the client scenario. If you don't need a standard client, you can use a manikin as needed
10. station setting: how the station is set up for the exam
11. Equipment required according to station and case question
12. writer: question maker
13. references from cases made.

The template questions above will be used by students in creating generated questions, which aim to increase student readiness in facing the OSCE.

2. METHODOLOGY

This research was of the type Classroom Action Research. Classroom Action Research (CAR) is one type of research that can be carried out to find out the problems that cause students' low readiness in facing the OSCE. Carr and Kemmis (in Saur Tampubolon, 2014: 16) reveal that PTK is collective self-reflective research in an educational environment to improve reasoning and understanding according to the research location. The population was all students of third grade of Akper Kesdam I/BB Padang, totaling 41 people. The sampling technique was carried out using the total sampling method, where the entire population was sampled. The data collected from the research is in the form of information regarding students' abilities in preparing OSCE questions according to the template provided to increase students' understanding in facing the OSCE. To ensure the stability and correctness of the data collected and recorded in the research, appropriate methods were chosen and determined to develop the validity of the data obtained, in this research what would be used was Tringulation. Data analysis is an observation carried out to test the implementation of program planning. According to Miles and Huberman (Rochiati Wiriaatmadja, 2006: 130) this technique consists of 3 activity streams that take place simultaneously, namely data reduction, data presentation, drawing conclusions or verification.

3. RESULTS

The research results show that readiness in facing the OSCE before being given the student generated question strategy is still far from the hope of passing the OSCE and they have never received information regarding strategies for solving OSCE questions, even though in the academic process students have been directed towards solving cases. The low level of student readiness in taking the OSCE is a concern for institutions, because student readiness and abilities are very dependent on the education delivery process. The better the quality of the educational process, the better the quality of the graduates (learning outcomes). However, the quality control system for the nursing education process in Indonesia is still being improved and is not yet fully operational. This is in line with the results of previous research which stated that there was a relationship between

learning motivation and nursing students' learning readiness in facing the OSCE exam (p value > 0.05) (Argianti. P, 2023).

Student readiness to face OSCE is a problem that must be solved by institutions. Solving this problem must start from the learning process while students are studying. Institutions need to identify the characteristics of their students, and continue to innovate and trial various effective learning methods and determine these effective learning methods. The learning process must also be monitored and evaluated to ensure the learning process runs according to regulations. In this way, students' readiness and abilities in facing the OSCE can be better. Research regarding increasing student readiness in facing the OSCE using the Student-Generated Questions strategy carried out by researchers is limited by several indicators. Some of these indicators include students creating questions, the ability to use appropriate and varied review questions to solve problems and the ability to present the results of the questions created. In carrying out actions each cycle, every indicator that has been determined in research regarding readiness capabilities to face the OSCE has increased.

In cycle I, after the researcher provided a general description of the OSCE questions, especially by specifying the category, here the researcher took the nutrition category because there were many cases and students were familiar with nutrition issues, students were asked to make questions or questions regarding the OSCE questions according to the review in the template. Students create questions regarding the review within 60 minutes. However, in the research activity within 30 minutes, only 10 students were able to create problems or questions, while the other students still had difficulty creating questions. Among the 11 students who were able to write questions within the specified time, there were 3 questions referring to memorizing material and 7 questions referring to the application of nursing care to solve problems. Based on the 11 questions that students successfully wrote in the specified time, it can be seen that there are still students who have difficulty writing OSCE questions.

7.	Instalasi Untuk peserta Ujian	<u>SKENARIO KLINIK:</u> Seorang laki-laki (12 tahun) diantar ke IGD dengan diare. Hasil pengkajian pasien lemas. BAB cair sudah 6x selama satu hari dan disertai muntah, tekanan darah 100/90 mmHg, frekuensi nadi 100 x/1, frekuensi napas 20 x/1, turgor kulit kurang elastis, mukosa bibir kering, akil teraba dingin. <u>TUGAS:</u> 1. Lakukan pengkajian yang benar pada pasien. 2. Rumuskan diagnosa keperawatan pasien. 3. Lakukan pemasangan infus
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Figure 1: question 1 which was successfully created by students in cycle I

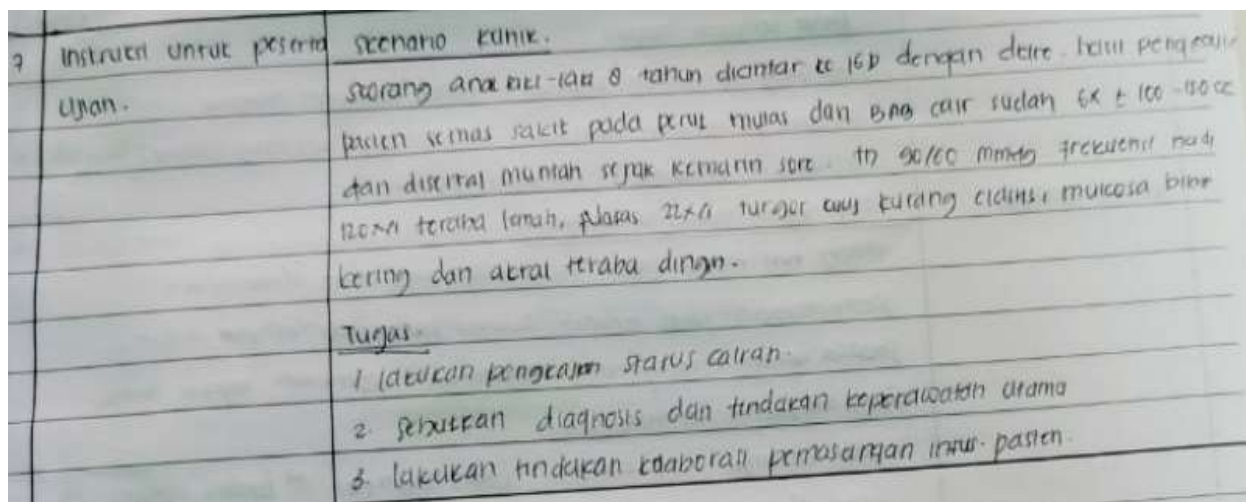


Figure 2: question 2 which was successfully created by students in cycle I

Figure 1 shows that the questions made by students which are about the nutritional categories determined by the researchers, can be seen from the vignette which explains the patient's condition, the direct question is what action should be taken to the patient. Meanwhile, questions like Figure 2 are questions that test students' memory and understanding regarding the use or selection of the appropriate formula to solve a problem. Memorizing questions can be solved with students' memory and understanding. In contrast to the problem as in Figure 2, it is a problem where solving the problem requires steps or stages to be able to solve the problem. In cycle II, after being given a general overview of the material, students are asked to create problems or questions regarding the next OSCE questions according to which category they understand best. Students create problems or questions regarding the material within 30 minutes. There were 30 students who were able to write questions within the specified time. Most students are able to create and ask questions.

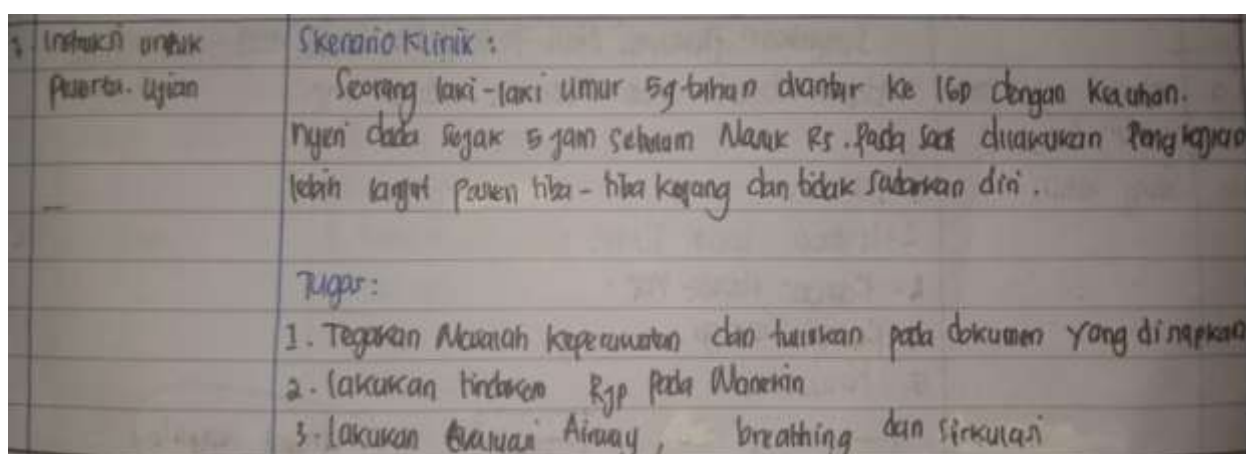


Figure 3: question 1 which was successfully created by students in cycle II

Based on the questions created by students in cycle II, as shown in Figure 3, students are able to create questions that refer to problem solving regarding the material studied, namely the probability of an event. Students are able to create questions that require a higher level of thinking than rote memorization. In cycle II, the questions created by students were better than the questions created in cycle I. Two questions were chosen from each individual to be submitted to other groups and then solutions to the problems were sought from the questions obtained.

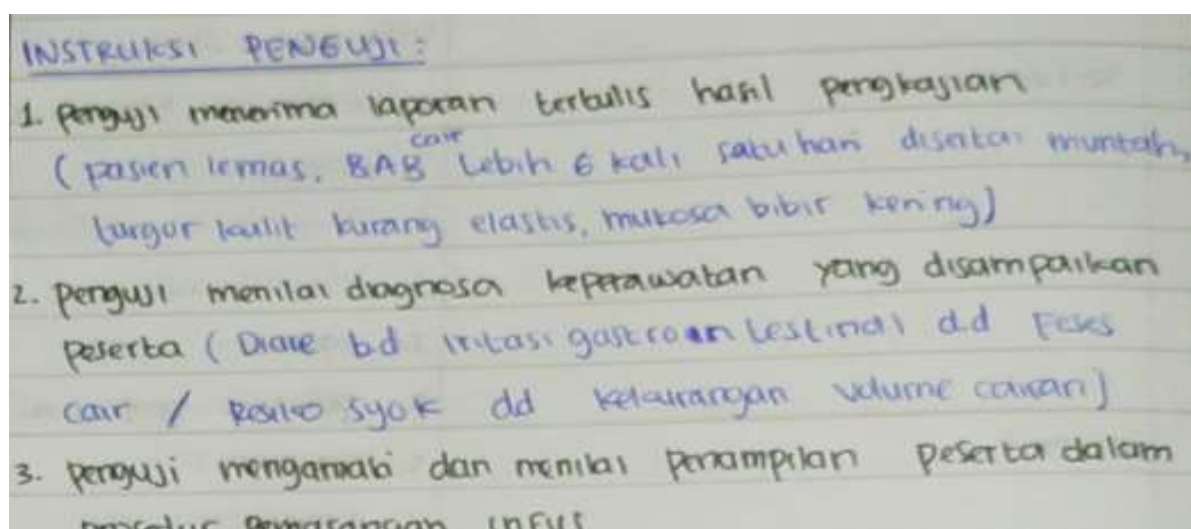


Figure 4: Solving question 1 in cycle I

INSTRUKSI UNTUK PENGUJI	<u>Scenario klinis.</u> Seorang anak laki-laki 8 tahun datang ke IGD dan diare. Hasil pengkajian pasien lemas, sakit perut, mual, dan BAB cair sudah 6x ± 100-150 cc dan disertai muntah sejak kemarin sore. TD 90/60 mmHg, N 120x/m, RR 22x/m. Turgor kulit kering, mukosa bibir kering, aeral dingin. <u>Tugas</u> 1. Lakukan pengkajian status cairan 2. Sebutkan diagnosis dan rencana tindakan keperawatan 3. Rencanakan tindakan kolaborasi pemasangan infus. <u>Instruksi Penguji</u> 1. penguji mengamati prosa pemasangan status cairan. a. didapatkan TD 90/60 mmHg, N 120x/m, RR 22x/m b. Turgor kulit kurang elastis, mukosa bibir kering, aeral dingin. 2. peserta menyebutkan dx kep (Hipovolemia bal dlm output cairan yang berlebihan dd diare). - tindakan dilakukan yaitu kolaborasi pemasangan infus. 3. setelah kandidat menjawab pertanyaan, berikan instruksi berikutnya untuk melakukan pemasangan infus kepada pasien.
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Figure 5: Solving question 2 in cycle I

Solving questions in cycle I as shown in Figure 4 and Figure 5 contained obstacles. In Figure 4, to see how to install an IV according to the SOP, it is feared that students will not be able to understand it and do it smoothly during the exam. In Figure 5 the answer requires using a formula to check fluid status, which has not been explained in detail so the answer is not optimal.

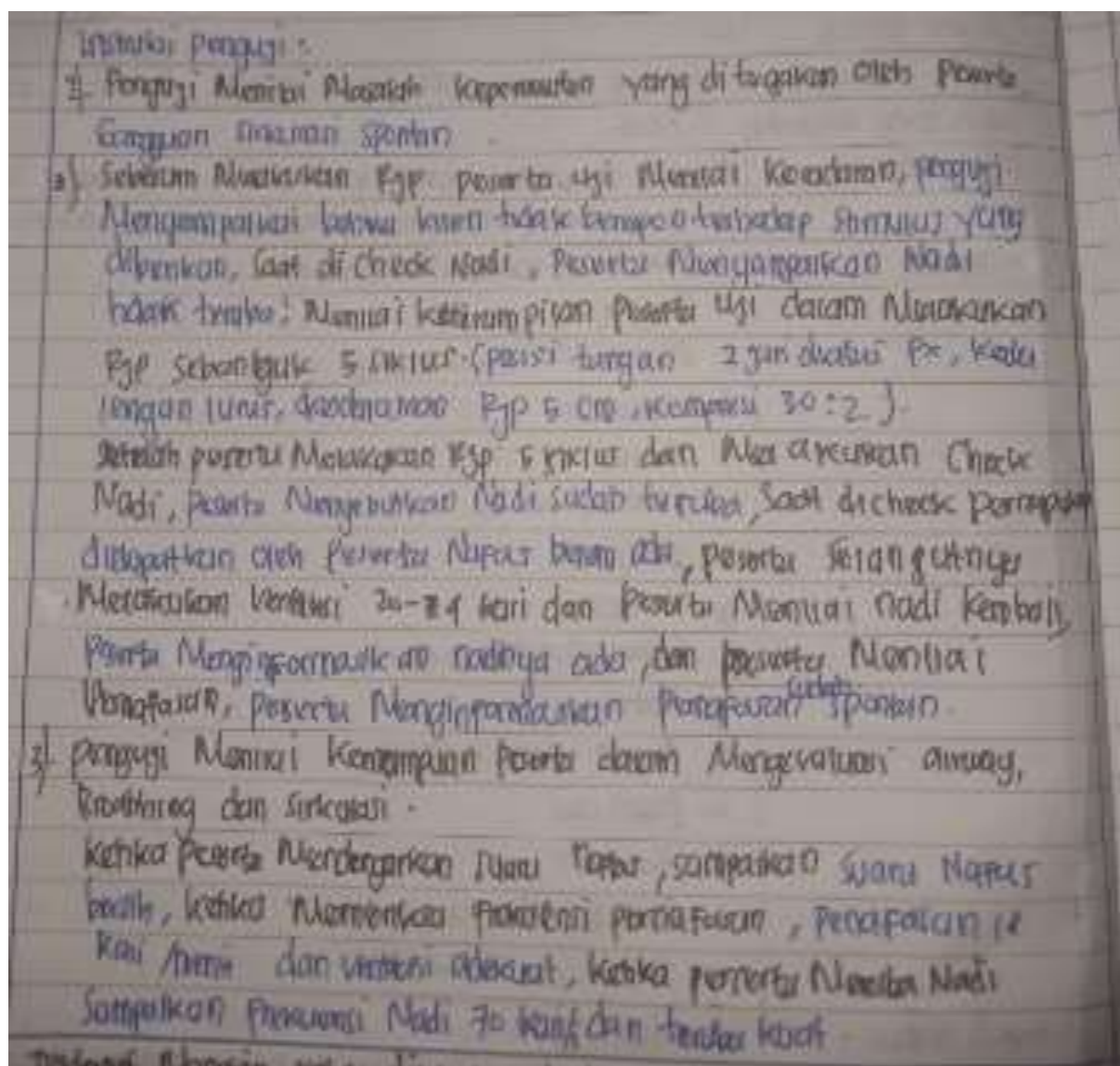


Figure 6: Solving question 1 in cycle II

Solving the questions in cycle II as shown in Figure 6, students have been able to solve the questions systematically, distinguishing the colors in each part that needs to be emphasized. After each student has finished creating the questions, then the student representative must present the results of the questions and answers that have been created. Student representatives present the results of their discussions and other

students are allowed to ask questions if something is not clear. The implementation of actions in cycle I did not show a maximum increase in student readiness, but in cycle II student readiness had increased and reached research indicators. This is shown by data on action results and observation results starting from before the action, cycle I to cycle II, including the following table.

Table 2 Data on increasing student readiness

No	Research Indicators	Before Action	Cycle I	Cycle II
1.	Ability to compose OSCE questions in writing	3 (7.31 %)	11 (26.8 %)	30 (73.1 %)
2.	Ability to resolve OSCE problems in writing	5 (12.1 %)	15 (36.5%)	35 (85.36 %)
3.	Ability to present discussion results	7 (17.1%)	11 (26.8 %)	37 (90.2 %)

From the table above, it is explained that the indicator of students' ability to make OSCE questions was obtained before the action, only 3 students were able to make them, in cycle I only 26.11% of students were able to make questions because the researcher determined which categories should be made, and in cycle II it increased became 73.1% because the researchers allowed students to choose which categories to create. As an indicator of students' ability to solve case problems in OSCE in writing, before being given action only 12.1% of students were able to solve them, in cycle I 36.5% and in cycle II 85.36%. There was an improvement in cycle 2 because students could be more optimal in deciphering the answers in the OSCE vignette. Indicators of students' ability to present the results of discussions before action were only 17.1% capable, in cycle 1 26.8% and cycle II 90.2%. This shows that students have better mastery of the material they master. Meanwhile, in OSCE, there are several reviews that they have to fulfill, so that if students diligently create these generated questions, they will be trained and used to completing OSCE questions and they will be better prepared to face OSCE. An illustration of increasing student readiness in facing the OSCE can be seen in the following diagram:

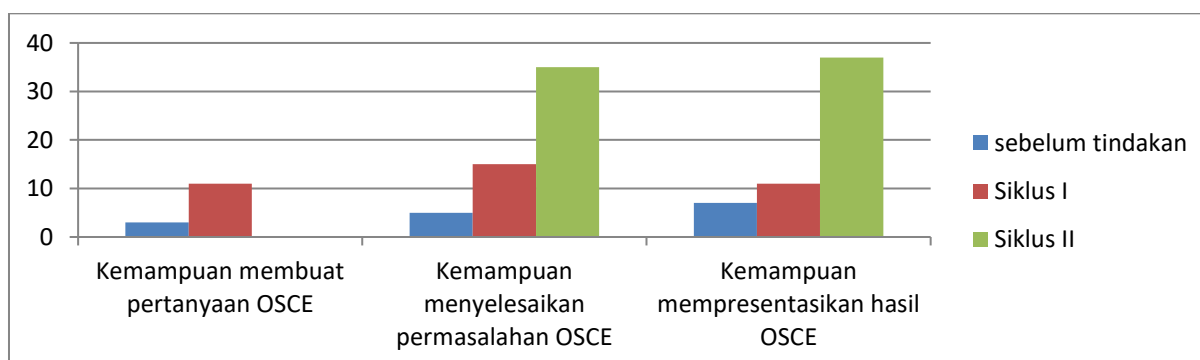


Diagram 1. Illustration of increasing student readiness in facing the OSCE

Increasing students' mathematical communication skills in mathematics learning on the subject of opportunities can be seen from the results of research that has been carried out, including:

1. Ability to write OSCE questions

Students who write OSCE questions mean they have succeeded in combining their knowledge and understanding their knowledge. In this study, it shows before the action only 3 students were able to create them, in cycle I only 26.11% of students were able to create questions because the researcher determined which categories should be created, and in cycle II this increased to 73.1% because the researcher allowed students to choose which categories to create.

The application of Student-Generated Questions can make students accustomed to creating OSCE questions, by asking questions according to vignettes and templates they can improve their analytical skills.

2. Ability to resolve OSCE problems in writing

Based on various thoughts, a solution method can be chosen which can then be used to solve the vignette problem in writing. Students' ability to solve problems in written vignettes has increased. In this research, it shows Before the action was given, only 12.1% of students were able to complete it, in cycle I 36.5% and in cycle II 85.36%. There was an improvement in cycle 2 because students could be more optimal in deciphering the answers in the OSCE vignette.

The ability to complete OSCE cases can be increased by implementing Student-Generated Questions by familiarizing students with lots of practice in solving vignette problems in writing.

3. Present the results of the discussion

Students who are brave and able to present the results of discussions show that these students have good communication skills. In research conducted by researchers, students' ability to present the results of discussions was demonstrated Before the action only 17.1% were capable, in cycle 1 26.8% and cycle II 90.2%. The application of Student-Generated Questions can build students' confidence in communicating the results of their work through presentation activities. This means that the research hypothesis that the researcher has formulated can be accepted with the support of the research results. Based on research data that has met research achievement indicators, the Student-Generated Question learning strategy can increase student readiness in facing the OSCE

The research results showed that students' readiness to face the OSCE after being given the student generated question strategy experienced a significant increase. By creating vignette questions and answering them directly, it provides students with their own understanding in solving cases. This is in line with the results of previous research which stated that the practical laboratory exams taken every semester played a role in passing the OSCE. Students who pass practical exams every semester have a positive impact on OSCE passing (Sundari, 2019). Laboratory practice is one of the learning methods carried out in several nursing courses. However, this laboratory practice is

different from the student generated question strategy. Because in laboratory practice in learning, students only carry out one nursing action according to the case obtained. The actions given are based on questions that have been provided by the campus which students may have guessed because they are in accordance with the competencies issued in that semester. Meanwhile in the OSCE, students cannot predict what form of questions will come out according to the disruption of basic needs in 9 categories, plus there is a lack of practice and lack of preparation. This will of course have an impact on students' OSCE passing.

Through the student generated question strategy, students can create vignette questions according to 9 categories of basic human needs and immediately create answers based on the OSCE question template. Indirectly, the problem solving patterns created by students through student generated questions are the most important thing that students must master, because each category tested has different competency achievements and different nursing actions. The results of the research show that there is a very significant influence of the student generated question strategy on students' readiness to face the OSCE. The increase in students' abilities after being given the student generated question strategy means that this strategy is very important to give to students before taking the OSCE. This is in accordance with what is mandated by AIPVIKI that every institution providing nursing education must equip its students to prepare their abilities to face the OSCE (AIPVIKI, 2022). Various methods or methods are used by institutions to increase OSCE student passing rates. One way that has proven effective is by providing a student generated question strategy for 4 weeks. The more complex the student's cognitive abilities, the longer the time required. The student generating question strategy in question is that students create OSCE questions according to the template and answer them directly in the question book that has been prepared. Students can explore their ability to create questions according to the 9 categories of basic human needs. Then these questions are discussed guided by lecturers who have attended OSCE training if students encounter difficulties during the process of creating and answering questions. So that the questions created by students can be more focused and in-depth.

4. CONCLUSION

OSCE is a method for testing clinical competency objectively and structured in the form of station rounds for a certain time which is standardization of competency for nurses. Therefore, students' abilities to take OSCE must be prepared from the start, namely when students are studying. However, if after students have finished their education and it is felt that this is not enough, then other preparations can be made. One way that can be taken is by providing a student generated question strategy. This strategy has been proven to increase the readiness of nursing students to face the OSCE. Before the action, only 3 students were able to create them, in cycle I only 26.11% of students were able to create questions because the researcher determined which categories should be created, and in cycle II this increased to 73.1% because the researcher allowed students to choose which categories to create. As an indicator of students' ability to solve case problems in OSCE in writing, before being given action only 12.1% of students were able to solve them, in cycle I 36.5% and in cycle II 85.36%. There was an improvement in cycle

2 because students could be more optimal in deciphering the answers in the OSCE vignette. Indicators of students' ability to present the results of discussions before action were only 17.1% capable, in cycle I 26.8% and cycle II 90.2%. This shows that students have better mastery of the material they master. Meanwhile, in OSCE, there are several reviews that they have to fulfill, so that if students diligently create these generated questions, they will be trained and used to completing OSCE questions and they will be better prepared to face OSCE.

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