# COMPETENCE OF *PRIMARY SURVEY* ASSESSMENT IN *JOURNAL SHARING OF CRITICAL CARE* (JSCC) METHOD IN NERS PROFESSION STUDENTS

# \*Heru Suwardianto, \*Vitaria Wahyu Astuti

\*Lecture Baptist Hospital Health Collage Jl. Mayjen Panjaitan 3B Kediri Indonesian Critical Care Nurses Association (ICCNA) Email: herusuwardianto@gmail.com

## **ABSTRACT**

Primary Survey is important to be achieved by nursing students in carrying out early detection of critical patient conditions. The innovation of learning methods is a challenge for teachers to improve the quality of student competencies. The research objective is the critical nursing competency nursing *Primary Survey* with the method of approach to journal sharing of critical care (JSCC)professional students. The research design is descriptive-analytic. The study population was all professional students in 2020. The research sample was professional students in 2020 using total sampling. The size of the study sample was 39 respondents with the inclusion of students who had completed the medical surgical nursing profession and followed the critical nursing profession to completion. Primary Survey independent variable. Data were collected using a questionnaire and analyzed using data frequency distribution. The results showed that the most respondents had critical nursing competency values primary survey obtained good value on the assessment airway of 53.8 respondents, assessment breathing of 56.4% of respondents, assessment Circulation of 61.5% of respondents, assessment Disability of 56.4 % of respondents, and Exposure Assessment by 59% of respondents. The implementation of learning methods for journal sharing of critical care has a positive impact on student competencies to carry out primary survey assessments and produce good student competencies. It is not only the learning process that supports a competency but also the ability of students to follow the learning method.

Keywords: Primary Survey, Journal Sharing, Critical Care,

## INTRODUCTION

Competence Critical nursing competence is one of the achievements in the nursing profession students in Indonesia. Achievement of competencies is done through various learning methods so that they can see the expected results of competencies. Nursing competence through the process of concept analysis to results. Various competency elements are assessed to see the results of the learning process. Nursing competencies apply skills in all domains in practical roles for students. Competencies are built that focus on specific outcomes or competencies, and also the need for supporting facilities to increase the level of competence, student accountability, practice-based learning, self-assessment, and individual learning experiences (Donna & Tilley, 2008). The impact of the learning process on nursing students is a significant difference in the construct of cultural competence (Kohlbry, 2016). potential value of nursing competency standards is needed to develop and test strong standards that can communicate the skills and knowledge needed by nurses in every health care setting (Halcomb & Steohens, 2016). The learning environment at the hospital or

on campus can improve and guarantee competence by involving learners in assessment and accountability, providing learning opportunities to students on a practical basis, and individualizing student learning experiences in the Achievement practice area. competency in students of the critical profession needs nursing continually developed and continues to be given input related to obstacles and challenges.

Nurses in Indonesia in 2019 reached 345,508 Nurses, Java has the highest number of nurses. distribution of nurses in East Java Province was 48,164 nurses. Central Java Province amounted to 45.107. West Java Province numbered 35,747 nurses, and in Jakarta there were 26,950 nurses. The distribution of nurses at least in West Sulawesi Island was 1550 nurses, North Kalimantan was 1.587 nurses, and North Maluku was 2.062 nurses. Based on the Data of the Health Human Resources Development and Empowerment Agency of the Ministry of the Republic of Indonesia in 2017 it was found that in 2016 the total health human resources utilized in health care facilities from 15,2563 Health service units throughout Indonesia reached 1,000,780 people. There were 601,228 of whom were 6 medical, paramedic and pharmaceutical health personnel. Nurses are the largest health workers who reach 49% of all existing health workers (296,876 nurses). **BPPSDMK** data (Agency for Development and Empowerment of Human Resources for Health) December 2016 total nurses in East Java reached 33,377 nurses (Ministry of Health, 2017). Other data shows that the ratio of nurses to one hundred thousand of Indonesia's population was obtained in 2014 which was 94.07 nurses per 100,000 population and estimated in 2015-2019 to be 180 nurses per 100,000 population (Ministry of Health, 2017). The Nurse Classification which has completed the professional level is Nursing around 10.84% in 2017. competence is evidenced

registration sign from the Indonesian Health Workers' Assembly and in 2016 219,654 nurses have a registration certificate with the proportion of issuance of the registration letter of 41.8 % (Ministry of Health, 2017).

Critical nursing competence in professional students is one of the broad demands in achieving it and requires high health teamwork has led to many learning methods initiatives in education and achievement of competence. Critical nursing competencies in professional students aim to build team competencies. Most of the efforts have been made and focused on conventional methods and usually rarely use interprofessional team methods, let alone using journals or research results as material in critical nursing care by professional students. Applications of research results such as journals need to be tried in learning for students of the nursing profession because in them there is current information in nursing care. If students are not exposed to journals or research results in nursing care it will be very difficult for the nursing profession to become better at sharing knowledge with colleagues or critical nursing teams (Barton & Bruce, 2018). Management of critically ill patients is a challenge in achieving competence by nursing students. The high prevalence of comorbidity causes a significant number of critical patients in the hospital (Kaldan et al., 2019). Curricula in the nursing profession are adaptable and can be used in intensive care units and can be continuously refined with research outcome approaches (Kopf et al., 2018).

Nursing student competencies include all core abilities needed to fulfill the role of students becoming a nurse (Fukada, 2018). It is very important the explanation of defining nursing competencies to build a foundation for the nursing education curriculum in Indonesia in preparing and providing specific learning strategies by applying research results in them such as the use of journals. The concept of fulfilling nursing competency methods

important to improve the quality of nursing, one of them is the Journal Critical Care (JSCC). Sharing Challenges remain in establishing existing competencies or that the definitions and structures for nursing for competencies students. provides student experience in analyzing journals and subsequently is used in conducting nursing care to patients. The level of competency required for nursing professionals varies greatly and the latest knowledge related to nursing care is required by students.

## **METHOD**

This research uses a descriptiveanalytic research design. Research. The purpose of this study was to determine the primary survey critical nursing competencies using the approach to nursing journal sharing of critical care (JSCC)professional students. The study population was all nursing profession students at STIKES Baptist Hospital in Kediri. The research sample was nurses, professional students, at STIKES Baptist Hospital in Kediri using the Total Sampling Technique. Total Sampling is a sampling technique that uses the entire population as research respondents. The independent variable of the study is the method of learning Journal Sharing of Critical Care (JSCC). The dependent variable of this study is the Primary survey in the form of Airway, Breathing, Circulation, Disability, Exposure assessment. The flow of research is 1) the students do an explanation related to the method of journal sharing of Critical (JSCC) using the application, 2) Students are given a format of work assignments to analyze journals or research results that focus on critical nursing care, 3) Students create integrated nursing care with interventions or measuring tools based on journals or research results that have been done before analysis. 3) The researcher measures the results of the Primary Survey research. Research has obtained

an Ethical Clearance form STIKES Baptist Hospital in Kediri. This research was conducted from March to April 2020. The data collection used a questionnaire based on the Eddlink Application and Google Form. The results of the study were tabulated and coded, then the frequency distribution data were analyzed.

#### RESULTS

The results of the study were solidified by 39 respondents with the composition of the sex being 7 respondents (17.9%) and the female sex were 32 respondents (82.1%), the age of the respondents most aged 27 years (69.2%), with an interest in critical nursing material that is the cardiovascular system as many as 22 respondents (56.4%). The results showed that most nursing students understood the medical problems of respiratory failure and coronary heart disease more than other medical problems. Students understand the medical diagnosis is interpreted that students understand the etiology of medical problems. clinical manifestations, pathophysiology, clinical diagnostics, medical management, assessment of nursing care, determine the diagnosis of problems based on primary assessment, arrange interventions and develop based on the results of research or evidence, and conduct evaluations.

The results showed that the evaluation of critical civil competency in the primary assessment showed that most students got good assessments. Research shows that more than fifty percent of students get good grades. Evaluation of student professionalism is obtained at most getting good grades. Competencies The majority of critical nursing care students get good grades. The majority of the Clinical Reasoning abilities of students are obtained by getting a good grade. The ability in terms of patient safety obtained by students at most has good grades. The results showed that the Critical Care Exam Score has a close

relationship with the primary assessment scores (airway, breathing, circulation, and exposure), nursing care competence, clinical reasoning process, and patient safety.

Table 1. Evaluation of Critical Nursing Competencies Primary Survey

		Student Competency Level							
Primary Survey	Not		Enough		Good		Very Good		Pearson
	Σ	%	Σ	%	Σ	%	Σ	%	
1. Airway	2	5.1	10	25.6	21	53.8	6	15.6	0.038
<ol><li>Breathing</li></ol>	2	5, 1	9	23.1	22	56.4	6	15.4	0.052
3. Circulation	2	5.1	8	20.5	24	61.5	5	12.8	0.029
4. Disability	2	5.1	10	25.6	22	56.4	5	12.8	0.107
5. Exposure	3	7.7	8	23.1	23	59	5	12.8	0.023

#### DISCUSSION

Based on the results of the study showed that most students have a critical nursing interest in the cardiovascular system. Most nursing students understand the medical problems of respiratory failure and coronary heart disease than other medical problems. This shows that students are more interested cardiovascular cases that are likely to occur quite a lot in critical nursing at the ICU. Cases of patients with respiratory failure are also very numerous and require specific nursing care and challenge students to carry out nursing care compared with interventions or tools based on research journals or based on evidence such as sleep hygiene, VAP, (Suwardianto, and others 2018: Suwardianto & Sari, 2020, 2019). Implementation of JSCC students is asked to study cases that often occur and become a student's interest, in this case, is a patient with respiratory failure or a patient with cardiovascular disorders. The results of the study also students can do a journal analysis using PICO (population, intervention, comparison, and outcome). The results of the learning process with the JSCC approach many students use Evidence-based practice such as a bundle of Ventilator mechanic, Bundle of VAP (ventilator-associated pneumonia).

The results showed that students were able to understand medical

diagnoses to look for the relationship of nursing care. This understanding will facilitate students in finding journals or research results that can be applied and compared to nursing care. Students undertake PICO Analysis of journals whether they are following nursing care and nursing care plans written. Students can explain cases according to the patient's condition. Students can find the main problem based on the primary assessment in the case. The meaning is that students understand the etiology of medical problems, clinical manifestations, pathophysiology, clinical diagnostics. medical management, assessment of nursing care, determine the diagnosis of problems based on primary assessment, arrange interventions and develop based on the results of research or evidence, and conduct evaluations. Understanding critical nursing important for students to prepare themselves to face real practices in hospitals (Suwardianto & Richard, 2017; Suwardianto & Selvia, 2015). Prepare yourself with a variety of learning methods one of them with JSCC is very good to try.

Based on the results of the study showed that in the evaluation of critical nursing competence in professional students, the majority obtained a good assessment on several aspects including the assessment aspects of understanding primary assessment, professionalism, competency in critical nursing care,

Clinical Reasoning, patient safety, and Critical Care Exam Score. The JSCC learning process is concluded to be effective and students can feel something new in the learning process. Students initially experience difficulties due to new challenges and have never done it in a tight schedule and are analyzed quite a lot. Students gain new experience and try to do their best so they can complete critical nursing care well (Suwardianto, 2014, 2018; Suwardianto & Rimawati, 2018; Yusiana& Suwardianto, 2018). Many interventions or measurement tools can be used for critical nursing care that is beneficial for patients.

Critical nurse competencies prepared through learning methods will create nurses' experience caring for patients with intensive care. The discovery of problems and the process of finding solutions to students through journals or research results is very beneficial and students get the best solutions in working on critical nursing care. Students will be able to pass the nursing care reporting process through sharing journals of critical care (JSCC) that have been done previously. It is very finding a way to help through the process of their professional education. Students will gain meaningful experience ranging from knowing complaints to patient safety, this is following the results of previous studies which state that there is in the experience of understanding nurses will find problems of fatigue, mental status, patient safety (Sánchez Expósito et al., 2018).

Students are expected to collaborate with professionals improving patient care in the intensive care unit (ICU) later. The competency framework for students will continue to improve their quality of interprofessional competencies. This is an effort used to support the development of attitudes, knowledge, skills, and behaviors needed for an interprofessional approach to care. Nursing students in the application of journals need to be continuously improved to support the quality of further learning. The nursing profession needs to be continuously improved and developed through journal applications to be able to use the JSCC method to demonstrate inter-professional communication, role understanding, and teamwork, which collaborative supports some key competencies. This is consistent with research that interprofessional competence can play an important role in promoting the knowledge, attitudes, behaviors and needed. Competencies that promote collaboration between professionals depend on a set of contextual factors that allow (or inhibit) individuals to truly create competency (Deacon et al., 2017; Goldman et al., 2018). The results also show that the important competencies prospective nurses that have prognostication, conflict mediation. empathic communication, and aspects of family-centered care, and the most important competency aspects of familycentered care (Schram et al., 2016)

## **ACKNOWLEDGMENTS**

We say Thank you to the Ministry of Research and Technology of the Republic of Indonesia for the 2019 research grant. 2020 research implementation. We also do not forget to thank the respondents and all those involved in it.

## REFERENCES

Barton, G., & Bruce, A. (2018). Teaching teamwork: nurses Integrative review of competency-based team training in nursing education. Nurse Education in Practice, 32, 129–137.

Deacon, KS, Baldwin, A., Donnelly, KA, Freeman, P., Himsworth, AP, Kinoulty, SM, Kynaston, M., Platten, J., Price, AM, Rumsby, N., & Witton, N. (2017). The National Framework Competency Registered Nurses in Adult Critical Care: An overview. Journal of the

- Intensive Care Society, 18(2), 149–156.
- https://doi.org/10.1177/1751143717691985
- Donna, & Tilley, S. (2008). Competency in Nursing: A Concept Analysis. *The Journal of Continuing Education in Nursing*, 39(2), 58–64.
  - https://doi.org/https://doi.org/10.39 28/00220124-20080201-12
- Fukada, M. (2018). Nursing Competency: Definition, Structure, and Development. *Yonago Acta Medica*, 61(1), 001–007. https://doi.org/https://doi.org/10.33 160/yam.2018.03.001
- Goldman, J., Kitto, S., & Reeves, S. Examining (2018).the implementation of collaborative competencies in a critical care setting: Key challenges competency-based enacting education. Journal Interprofessional Care, 407–415. https://doi.org/10.1080/13561820. 2017.1401987
- Halcomb, E., &Steohens, M. (2016).

  Nursing competency standards in primary health care: an integrative review. *Journal of Clinical Nursing*, 25, 9-10. https://doi.org/https://doi.org/10.11 11/jocn.13224
- Kaldan, G., Nordentoft, S., Herling, SF, Larsen, A., Thomsen, T., &Egerod, I. (2019). Evidence characterizing skills, competencies, and policies in advanced practice of critical care nursing in Europe: a scoping review protocol. *BMJ Open*, 9(9), e031504.
  - https://doi.org/10.1136/bmjopen-2019-031504
- Ministry of Health. (2017). Indonesian Ministry of Health Data and Information Center: Nursing Man Situation.
- Kohlbry, PW (2016). The Impact of International Services - Learning on Nursing Students' Cultural

- Competency. *Journal of Nursing Scholarship*, 48(3). https://doi.org/https://doi.org/10.11 11/jnu.12209
- Kopf, RS, Watts, PI, Meyer, ES, & Moss, JA (2018). A Competency-Based Curriculum for Critical Care Nurse Practitioners' Transition to Practice. *American Journal of Critical Care*, 27(5), 398–406. https://doi.org/10.4037/ajcc201810
- Sánchez Expósito, J., Leal Costa, C., Díaz Agea, JL, Carrillo Izquierdo, MD, & Jimenez Rodríguez, D. (2018). Ensuring relational competency in critical care: Importance of nursing students' communication skills. *Intensive and Critical Care Nursing*, 44, 85–91.
  - https://doi.org/https://doi.org/10.10 16/j.iccn.2017.08.010
- Schram, AW, Hougham, GW, Meltzer, DO, &Ruhnke, GW (2016). Palliative Care in Critical Care Settings: A Systematic Review of Communication-Based Competencies Essential for Patient and Family Satisfaction. American Journal of Hospice and Palliative Medicine®, 34(9), 887–895. https://doi.org/10.1177/104990911 6667071
- Suwardianto, H. (2014). The effectiveness of deep breathing and slow stroke back massage to decrease the blood pressure on a patient with hypertension. Indonesian Nursing Journal of Education and Clinic (INJEC), 1(1), 1–12.
- Suwardianto, H. (2018). Level of Perception Emergency Skills In Youth Red Cross. *JOURNAL OF NURSING PRACTICE*, 2(1), 17-24.
- Suwardianto, H., & Richard, SD (2017).

  Emergency Nursing Care and
  Emergency Management
  Management. CV Adjie Media
  Nusantara.
- Suwardianto, H., & Rimawati. (2018).

Explicit Instruction Model (EIM): Towards Skills of Participants the Youth Red Cross Emergencies Preparedness (DTEP). Conferences, The 2ndJoint *International*, 2(2), 403–410.

Suwardianto, H., & Sari, D. (2020). Environmental Factors of Sleep Hygiene That Influences the Level of Pain on Critical Ill Patients in Intensive Care Unit. STRADA Journal of Health Scientific, 9(1 SE-Articles).

https://doi.org/10.30994/sjik.v9i1.2 66

Suwardianto, H., & Sari, DAKW (2019). Pain Levels in Critical Patients With Sleep Hygiene Care In the Intensive Care Unit. Journal of Practice, Nursing 3(1 Articles).

https://doi.org/10.30994/jnp.v3i1.6

Suwardianto, H., &Selvia, D. (2015). Emergency Nursing **Teaching** Textbook (Perspectives, Concepts, **Emergency** Principles, and PT. Management). **REVKA** PETRA MEDIA.

Yusiana, MA, & Suwardianto, H. (2018). The Effectiveness Of Breathing And Slow Stroke Back Massage To Decrease The Blood Pressure On A Patient With Hypertension. Indonesian Nursing Journal Of Education And Clinic (INJEC), 1(1), 31–39.