ANALYSIS OF SELF-EFFICACY AND READINESS TOWARDS EARLY CLINICAL EXPOSURE AMONG NURSING STUDENTS

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Abstract

Early Clinical Exposure is a learning approach that integrates classroom learning with clinical practice since students take the academic stage. Nursing study program curriculum is determined based on theory (online and offline) and practical (laboratory and clinical environment). The objective of this study is to evaluate self-efficacy and readiness towards early clinical exposure among nursing students Universitas Muhammadiyah Purwokerto (UMP). The study design was cross sectional study. This study was conducted in the 3^{rd} semester at UMP, in which the number of samples were 218 BNS students. Data was collected using questionnaire via online by google form. There are 50 questions item in the questionnaire and 6 item for demographic such as age, gender, motivation to take nursing, course, name initial, former school. The result of this study shows that majority of students have high self-efficacy (98.2%) followed by moderate self-efficacy (1.8%) and there is no students fall under low self-efficacy. Therefore, majority of students have high readiness (97.7%) and moderate readiness (2.3%). The results of the correlation test shows that there was correlation (r = 0.545, p < 0.05) between self-efficacy and readiness towards early clinical exposure. The higher the student's self-efficacy, the more readiness to face the practice of early clinic exposure

Keywords: self-efficacy, readiness, nursing students, ECE

INTRODUCTION

Early clinical exposure (ECE) is a learning approach that integrates classroom learning with clinical learning since students take the academic stage. ECE is nothing but preparing first year nursing students to meet and learn patients in real clinical setting (Rawekar et al., 2016). ECE is the early initiation of professional socialization and the basics that exist in learning in their relevance to medical practice. The purpose was to inversitage whether ECE experiences or students' learning attitudes more closely correlated with medical students' academic performance (Tang et al., 2019). ECE will be a medium for students to apply knowledge gained in academic and laboratory learning to apply in clinical setting. In the clinical environment is used a method called Early Clinical Exposure (Haryanti, F., Kamil, H., Ibrahim, K., Hadi, 2016). ECE is an effort to help preclinical students to appreciate clinical relevance of basic science, (Kumar & Sumitra, 2017).

ECE needs to be a coordinated effort by the preclinical, para-clinical and clinical faculty. The Effective implementation of ECE can increase learning motivation and depth of learning, which will have an impact on better understanding and retention of knowledge. ECE also facilitate students in effective learning of clinical skills (Govindarajan et al., 2018). Effective clinical education is able to build self-confidence and help students to achieve competency. It is an important part in the nursing education process because it provides a lot of experience for students in cognitive, psychomotor and affective aspects (Löfmark et al.,

2012). Clinical education is vital for nursing students to apply knowledge in classroom to direct patient care, practice therapeutic communication, technical skills, caring behaviors, and to know or experience nursing roles (Benner et al., 2010). ECE makes students understand illness and concept of health and sickness (Bandung et al., 2012). Students are given the opportunity to adapt their role as a nurse in clinical environment to do nursing care correctly, using the nursing process approaching, professional attitudes, behavior and apply skills professionally. Professional education and practice is supported by the construct of Self-efficacy, because it is an assessment of someone's ability to manage and carry out their actions and accomplishments. More importantly increased self-efficacy has been linked to improve professional practice behaviors. This has potentially significant implications for nursing education and early clinical exposure or any other clinical practice (Cox & Simpson, 2016). Students have to feel confident about their ability to do clinical practice so they will be ready to do the clinical practice, prepare themselves to deal with clinical practice, challenges and tasks well Clinical practice becomes a difficult activity for students, some students needed further guidance and since the clinical experience is a primary source of clinical self-efficacy, nurse educators need to optimize learning in the clinical setting (Plemmons et al., 2017). According to Bandura & Watts (1996) self-efficacy is individual beliefs about their ability to carry the tasks or action to achieve an outcome. Factors that influence self-efficacy are experience in taking charge of something, social modeling, social persuasion, physical emotional condition.

According to Meshram, Shaikh, & Khobragade (2016) readiness is the overall condition of a person who makes them ready to give a response or answer in a certain way to the situation. Adjustment of conditions some time will affect tendency to respond, readiness to face early clinical exposure is a condition that has been prepared to deal the activities with their confidence. The first year nursing undergraduate students often face difficulty in contextualizing their learning, integrating knowledge and skills into clinical settings (Siah et al., 2019).

Factors that influence readiness are internal factors such as health, physical, mental, emotional, availability of free time, hobbies, self-maturity, intelligence, skills, personality and external factors such as family, friends support, faculty facilities, problem encountered, relationship between friends, relationship between parents, environment influence (Nyambe et al., 2016).

Physical conditions referred to any permanent and temporary physical conditions such as organs sensory, body defects. Mental conditions related to intelligence where as children in the above normal category make it possible to do higher tasks, smart children have strong self-confidence and intelligence that has a function to help them adjust their environment. Emotional conditions also influence readiness to face early clinical exposure such as tension, anxiety, insecurity, feel that they are unable or even useless.

In the study of Nyambe et al., (2016) the average score of first-year students' readiness to face clinical practice is lower than second and third-year students because the first-year students have no experience in clinical practice. The first year of nursing education (especially the first two years) or 2nd semester are crucial to nursing students' success because the success is not only due to knowledge gained but practical in real environment, attitude, therapeutic communication, relationship with patients and family and also the senior nurses, perceptions formed in nursing students on the role of professional nurses and patients' status based on nursing knowledge. However, students' self-efficacy and readiness are important for students to complete their clinical practice not only about skills, knowledge and attitude of students. Students who have confidence in their abilities are ready to do early clinical exposure, ready to face challenges and not afraid of the obstacles. If the students' self-efficacy is low, they might not ready to do the clinical posting and not be able to get high results. And if the students have low self-efficacy and

readiness they cannot adjust the problems condition, students feel helpless when they faced the real situation undergoing clinical exposure.

The more important is that increasing self-efficacy will increase attitude of professional practice, be prepared to face any situation and will consider obstacles as challenge to be resolved. The graduates also meet the specified quality standard and prepare students to become professional health workers. Nursing students of Universitas Muhammadiyah Purwokerto have began to deploy for clinical practice in 3rd semester with Early Clinical Exposure method. That method only allowed 3rd semester nursing students to make observations and not allowed to make independent interventions without assistant from senior nurses. Students are expected to be able to apply what has been taught in preclinical learning during class, with the assistance of senior professional nurses and expected to pay attention, gain new knowledge that haven't taught in preclinical learning during class and lab skill. The general objective of this study is to evaluate self-efficacy and readiness towards early clinical exposure among UMP nursing students. And the specific objective is to identify level of self-efficacy, identify level of readiness and to identify is there any correlations between self-efficacy and readiness towards early clinical exposure among UMP nursing students.

METHODS

This study was an observational analytic descriptive study with a cross sectional approach (Sugiyono, 2017). Primary data were obtained using questionnaire through Google Form for this analysis. And the questionnaire was administered to respondents using the link from Google Form. The target for this study was 3rd semester bachelor nursing students at Universitas Muhammadiyah Purwokerto. The content of the instrument is demographic data such as age, gender, couse and motivation to take nursing, there are 50 questions item in the questionnaire. The 3rd semester BNS students were chosen because they did not experience any early clinical exposure yet so they still have no idea how is it feels to do early clinical exposure. In this study, as a total sampling methods where the number of samples is equal to the total number of students. This is because the researcher wants to get more specific results for the 3rd semester BNS students. For this study, the population of 3rd semester BNS students at Universitas Muhammadiyah Purwokerto were 292 active students but only 218 students respond to the questionnaire. The questionnaire was administered in Bahasa Indonesia while distributed to the respondent as it is the main Indonesian language and administered in English in this thesis as this is the language that can be read and understood globally. The ethical clearance of the research was obtained from the ethics department of Universitas Muhammadiyah Purwokerto Number KEPK/UMP/19/XI/2019. Study analysis in this research using correlation analysis with product moment pearson to reveal relationship between self-efficacy and readiness towards ECE

RESULTS

Descriptive analysis has been used in this study to define respondents demographic profile which includes age, gender, course in high school before taking nursing and motivation take nursing. A total number of 218 participant responded to the questionnaire, the majority of subjects population were approximately young adults with the age range 18-24 years old. Among the participants from this study, there were 182 female and 36 male respondents and most of them are 19 years old (69.7%). All of participants were Indonesian, coming from high school and vocational high school before took the degree with courses was science course there are 120 (55%) respondents, followed by health science course 42 (19.3%) respondents, social course 36 (16.5%) respondents and non-health science course 20 (9.17%). Out of 218 participants, 121 (55.5%) were took Nursing as their own choice, 89 (40.8%) were chosen by parents, 5 (2.3%) were provide accepted and 3 (1.4%) were motivated by other people

Table 1. Demographic Data of the Study Population (n=218)

Demographic	n (%)	Mean	SD
Age	<u> </u>	19.06	1.343
18 years old	22(10.1)		
19 years old	152(69.7)		
20 years old	36(16.5)		
21 years old	5(2.3)		
>21 years old	2(1)		
Gender			
Male	36(16.5)		
Female	182(83.5)		
Course		1.81	1.032
Science	121(55.5)		
Social	36(16.5)		
Non health science	20(9.17)		
Health science	42(19.3)		
Motivation Take Nursing		1.65	0.627
Self motivation	121(55.5)		
Parents	89(40.8)		
Other people	3(1.4)		
Provide accepted	5(2.3)		

Cronbach's Alpha reliability was used to evaluate the measurement scale's precision. The reliability test was used to analyze whether reliable (Nursalam, 2015) and because researcher used Likert on questionnaire. The results for readiness (0.831) indicates a high level of reliability and for self-efficacy (0.669) indicates as good level of reliability.

Table 3. Level of Self-Efficacy and Readiness

	Self-Efficacy	%	Readiness	%
Low	0	0	0	0
Moderate	5	1.8	5	2.3
High	213	98.2	213	97.7

Table 3 shows that the level of self-efficacy is high (98.2%) and readiness among nursing students in UMP is high (97.7%). It means that 3rd semester BNS have high level of self-efficacy and readiness towards early clinical exposure. Correlation test is utilized to analyze whether there is any relationship among the variables.

Table 4. Pearson Correlation Test

		Readiness	
Self-Efficacy	r	0.545**	
	p	< 0.001	
	n	218	

Table 4. shows that there is significant at the 0.01, positive correlation between self-efficacy and readiness (r = 0.545, p<0.05). Therefore, Ha1 that there is significant difference in level of self-efficacy towards early clinical exposure among UMP nursing students and Ha2 that there is significant difference in level of readiness towards early clinical exposure among UMP nursing students are approved.

Based on the physical analysis, the finding in Table 1 clearly shows that majority of the respondent are 19 years old, 83.5% of them are females, 121 of the respondents coming from science course at high school before taking nursing course in university and 55.5% of them have self motivation to take nursing. As for

the level of self-efficacy and readiness in Table 3 shows that 3rd semester BNS students at UMP have high level of self-efficacy (98.2%) followed by moderate self efficacy (1.8%) and no students fall in low self-efficacy category. Meanwhile, majority of the students have high level of readiness (97.7%) followed by moderate readiness (2.3%) and no students fall in low readiness. The students were expected to achieve the desired achievement on clinical exposure based on their high self-efficacy and readiness. From this study also shown that there were correlation (r= 0.545, p<0.05) between self-efficacy and readiness towards early clinical exposure it means that self-efficacy could affect readiness among the students towards early clinical exposure, as high as self-efficacy so is readiness will be high.

DISCUSSIONS

Readiness for the students is very important because if they are not ready, they will feel afraid that they cannot do the early clinical exposure well. They will be professional healthcare and they must have self-efficacy, self-confidence, self-beliefs, readiness besides knowledge, skills and else. It is in line with the research by Akhmad et al., (2019) also showing that majority of the students have high self-efficacy (56.8%) and majority of students have high readiness (89.6%). So it can be assumed that high self-efficacy will raise self-confidence towards something they do. Self-efficacy is a self-confidence in any individuals in estimating their abilities while doing tasks or any activities that needed to achieve some goals or results. Readiness influenced by confidence self-ability or self-efficacy. Self-efficacy is one of social cognitive knowledge or self-knowledge (Arifin et al., 2014). As high as the self-efficacy, readiness towards early exposure will also high. In the opposite, as low as the self-efficacy then the readiness towards early exposure will also low. It also means that self-efficacy could affect the readiness of the students'.

Self-confidence in their abilities could affect in setting the path of early clinical exposure. Low self-efficacy will close their attention undergoing early clinical exposure even though they have an interest in early clinical exposure but if their readiness is low it could make them afraid and worried they cannot do the early clinical exposure well and get satisfying results. And a result of a study The Impact of Self-Directed Learning Readiness on Critical Thinking and Self-Efficacy among the Students of the School of Physical Education and Sports found that there is positive significant relationship between self-directed learning readiness and general self-efficacy (r= .623 p= .000). The results of the study suggest that self-directed learning readiness affects critical thinking and general self efficacy characteristics and influences other aspects related to education (Turan et al., 2018). Same with researcher's results that there is positive significant relationship between self-efficacy and readiness towards early clinical exposure, self-efficacy affect readiness and might be influences other aspects related to education such as knowledge, attitude and the others.

A results by Meshram, Shaikh, & Khobragade, (2016) is most of the students believed that ECE increased their interest in study. They believed ECE helped them in visualizing concepts and remembering facts about their medical lessons more than those who were not exposed to clinical settings. It means that ECE have a big impact to students and help the students to understand more about clinical practice, made them more familiar with various fields'. Most students appreciated the ECE experience as inspiring, motivating, interesting, awesome, useful, good way of learning, evoked self-interest. They felt it helped them see the relevance of basic science in clinical practice. Interested students also contacted the clinicians the speciality of their choice later and pursued their interest in the subject (Govindarajan et al., 2018). The ECE program was introdulated to first year medical students as an approach to augment the traditional teaching sessions in clinical. The effectiveness of this study manifested in the skills gained by the students through ECE being helpful prospectively in their routine clinical postings (Rawekar et al., 2016). ECE is very helpful for the students in their routine clinical postings, and it is very important for them to gain their self-efficacy to get them ready for clinical postings and they can achieve high results.

From a research the relationship between readiness for reatment of substance use and self-efficacy based on life skills (Moeini et al., 2020), the results is this study found that there was a significant relationship between self-efficacy, the substance users' readiness for treatment improves. In the present study was showed that the self-efficacy model predicts 20% to 25% of the readiness for treatment variance. Significantly predictors of readiness for the treatment variables are communication and assertiveness, but ambivalence is highly carrelated with problem solving abilities. This results has the same results as the researcher's research that there was a significant relationship between self-efficacy and readiness, it means that self-efficacy is really affecting the students' readiness to do the early clinical exposure in order for them to get satisfying and high results. Clinical practice experiences provides nursing students an opportunity to apply what they have learned in lab practice skills and interact with patients, families, nurses in real environment. The higher self-efficacy, the higher readiness will be. The higher the self-efficacy the more motivated and ready a person can be to achieve high results (Rowbotham & Owen, 2015).

According to Baiti, Abdullah, & Rochwidowati, (2017), the higher self-efficacy is followed by higher readiness, while lower self-efficacy is followed by lower readiness. This study also shows that there is positive significant correlation between self-efficacy and readiness towards early clinical exposure. It is shown in Table 4 that the results for Pearson Correlation is r=0.545, p<0.05 for both self-efficacy and readiness. It can be assumed that self-efficacy influence the readiness, as high as readiness it is also high readiness. Self-efficacy ariable contribute readiness of the students (Baiti et al., 2017). A results by another study about The Relation between Self-Efficacy and Readiness for Change: The Mediator Roles of Employee Empowerment demonstrated that there is significant influence on self-efficacy towards readiness (Emsza et al., 2016). There is a relationship between self-efficacy and work readiness. Therefore, a results from a study Self-efficacy with Vocational High School Students Work Readiness shown that there is positive and significant correlation between self-efficacy and work readiness with coefficients r= .676 and p= .000; p<0.05 it means that the higher the self-efficacy the higher the readiness and vice versa (Utami & Hudaniyah, 2013).

The results of a research by (Reed et al., 2019) stated that there was a relationship between self-efficacy and readiness to change. It means that self-efficacy and readiness to control heavy drinking may be important factors. As same as researcher's research that self-efficacy and readiness is important factors for students to get high results on early clinical exposure because it was an internal factors, they have to believe in themselves and be ready to do the early clinical exposure so they would do the early clinical exposure well with satisfy and high results, with the self-efficacy and readiness they also could face all of the obstacles without any doubt because they are believe in themselves.In another study (Alfaiz et al., 2017). Self-efficacy as a students' readiness prediction factors doing college tasks, it is shown that self-efficacy has a influence on self-capability and affect every activity, self-confidence produces self-readiness and the results showed that the students' self-efficacy had an effect on self-capability and individual student activity. Self-efficacy have an effect to every students' moves, when the students have high self-efficacy their readiness will also high and be able to do all the activities such as social. Moreover, a study by Mitchell & Mcmillan (2018) shows that self-efficacy improved where assignments of increasing complexity were used to stimulate critical thinking, analysis and reflexivity and course subject instructors, not writing instructors, were the primary assignment-specific writing supports.

Furthermore, another study by Fitriati, A. N., & Kep, (2018) shows that the results was the higher students' self-efficacy the higher evaluation results will be obtained. All of the result supported researcher's results that the higher students' self-efficacy the higher their readiness towards early clinical exposure. Students who have high self-efficacy and readiness are expected to improve quality so that they can achieve the desire achievement. Self-efficacy that the students have is related to readiness and it can help the

students to be sure of their own abilities to do the tasks or actions needed to achieve certain satisfying and high results. To have high self-efficacy, the students need the opportunity to develop through exercises that are carried out continuously according to students' capabilities. In this case, the exercise such as preclinical (class theory) and laboratory exercise. These things can be a reference for the students to be more confident of their ability to face the problems, more confident and motivated to achieve goals and students are able to face early clinical exposure tasks and obstacles (Omer, 2016). The Changes in the nursing curriculum that encourages more of student centered study activities can cause a change in the nursing students' confidence level in the clinical setting (Panduragan et al., 2011).

Self-efficacy and readiness concept is important to undergo clinical posting so in preparing early clinical exposure, efforts are needed to improve self-efficacy so that self-confidence increases and develops optimally so the students will get satisfying results. Readiness shows a condition where someone can give their responds to undergo early clinical exposure using mind, body strength, skills, knowledge. Moreover, to support the students' readiness, they need positive self-concept from self-confidence, accept themselves. Another thing to support the readiness is self-efficacy through decision making, confidence in their abilities, believe in their self on how far they can identify their abilities to do early clinical exposure with satisfying results (Yuwanto et al., 2016)

CONCLUSIONS

It is concluded that there was positive significant correlation between self-efficacy and readiness towards early clinical exposure among 3rd Semester Nursin Students UMP. The higher the student's self-efficacy, the more readiness to face the practice of early clinic exposure

AUTHOR CONTRIBUTION

Shinta Antin Kumalasari: writing draft and revision, data curation, formal analysis, resources, validation Sri Suparti: writing draft and revision, corresponding author, project administration, methodology Kala Raani: writing draft and revision, investigation



CONFLICT OF INTEREST

The authors declare no conflicts of interest.

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