The Effect of Nursing Rounds on Nurse Knowledge: An Intervention Study

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ABSTRACT

Introduction: The nursing round is a nursing management approach that can enhance the quality of nursing services. The nursing process ensures that nurses fulfil their professional responsibilities for the care needs of patients. In general, nursing rounds are definitely not well structured and are not performed in a standardized way.**METHODS**: This type of research is a quasi-experimental pre-test-post-test group design. The sample was 72 nurses from the medical ward, collected by total sampling. The study was conducted in July and August 2021, collecting data through questionnaires given before and after the nursing round training program. **RESULTS**: The results of this study indicate that there is a difference in the average level of knowledge of nurses and the implementation of nursing rounds before and after nursing round interventions. The results of statistical tests using the Wilcoxon signed rank obtained the results of nurses' knowledge ($Z = -7.130$ and p-value 0.000). **DISCUSSION**: The Round Nursing intervention program will improve the skills and knowledge of nurses and will enable nurses to learn about the needs or problems of service needs in medical wards.

Keywords: Nursing Round, Routine Nursing Round, Knowledge, Nurses

I. INTRODUCTION

Nursing services, which are one of the determinants of increased health services, must continually strive to improve the quality of their services. Nursing services often serve as a focal point for a hospital's image. According to Potter, Perry, Stockert, and Hall (2017), an indicator of the quality of healthcare services in hospitals is the quality of nursing services. One of the strategies that allows nurses to develop processes and competencies to facilitate autonomy, decision-making, effective team relations and professional status for which nurses need to increase their knowledge.

Knowledge is an essential role in improving the quality of nursing services (Nursalam, 2014). Knowledge is the outcome of learning, and it happens when people feel a certain object. Nurses' knowledge about the implementation of nursing quality is very important, because lack of knowledge can lead to many negative outcomes for nurses and patients. Lack of knowledge is influenced by many factors, including level of education, duration of work, amount of training, access to lifelong learning and organizational resources(Yuswardi, Kamil, & Putra, 2021). A strategy to enhance the quality and knowledge of nurses is to participate in training, especially in the nursing round.

Nursing training is very important in supporting the quality of service and knowledge of nurses. Nursing Round training could improve performance, improve skills, solve problems, acquire new knowledge, improve satisfaction of needs, promotion readiness and management success (Weiss & Tappen, 2015). The nursing round is one of the primary nursing management approaches that can enhance the quality of nursing services. The nursing round will be a way for nurses to improve cognitive, emotional and psychomotor skills, sensitivity and critical thinking. The nursing round toward the application of theoretical concepts in nursing practice and service to patients (Negarandeh, Hooshmand Bahabadi, & Aliheydari Mamaghani, 2014).

A variety of research findings indicate that nursing rounds enhance the quality of nursing services. Negarandeh et al. (2014) found that implementing routine nursing rounds had a positive effect and could enhance patient care. The routine nursing practice allows for good nurse-client interaction. Woolley et al. (2012) reported that the nursing round increases the opportunity for nurses to engage with patients on a regular and systematic. The nursing round shows that there are nurses who

help predict needs and provide comfort and protection to patients.

The implementation of the nursing round is highly important for the quality of nursing services in hospitals (Weiss & Tappen, 2015). A study by Tiwow, Tandipajung, and Rumagit (2018) found that nurses' knowledge before training was lower (67%), and enhanced well after training.

The implementation of nursing cycles that are not perfect is the effect of poor understanding of nurses. Failure to implement nursing rounds may be one of the factors that increase length of stay in the patient's healing process. A further consequence of the lack of knowledge on the nursing process is the inability to conduct regular rounds of nursing care. Failure to conduct the nursing round will result in serious illness, danger of death and physical malfunction. Conditions such as these may adversely affect patients as users of nursing services and result in nursing services becoming non-professional, resulting in poor quality nursing services.

II.   METHODS

The research is a quantitative research using a quasi-experimental method consisting of an intervention group using the one-group pretest-posttest design approach to measure the effect of nursing round training provides for nurses. The number of samples is 72, sampled through total sampling. The data collection tool uses a questionnaire consisting of 15 questions in the form of multiple choice questions for knowledge that has met the content validity and construct validity tests (Cronbach's alpha 0.930). The data collection, training, implementation and post-test were conducted over a three-week period. The pre-test was conducted a week before nursing training and support activities. The training was conducted over two days. The training was conducted over two days in phases using modules developed by the researcher. The training module has been reviewed and expertly judged by expert lecturers from the Faculty of Nursing, Universitas Syiah Kuala. The training method consists of lectures, discussions,

and questions and answers that take place in an organized room following health protocols to prevent COVID-19. The post-test of nurses' knowledge of the implementation of the nursing cycle is conducted one (1) week following the completion of the series of mentoring activities. Data analysis used descriptive statistical tests and nonparametric inferential statistical tests, namely the Wilcoxon test. This research passed the ethical feasibility test of the team of the Research Ethics Test Board, Faculty of Nursing, Universitas Syiah Kuala, Banda Aceh.

III.   RESULT

Table 1 describes the majority of nurses who are on average 32.63 years old. Most respondents were female, as many as 51 nurses (70.8%), and their marital status was generally 51 married nurses (70.8%). Dominant latest education is Diploma III as many as 38 nurses (52.8%), most of the employment status is non civil servant as many as 48 nurses (66.7%) with an average work experience of 7.63 years.

Table 2 shows nurses' knowledge about nursing before and after nursing round training. It can be concluded that the knowledge of nurses about the nursing round in dr.Fauziah Hospital Bireuen was in the low category as many as 48 people (66.67%). and after the nursing round training was in the high category as many as 57 people (79.19%).

Results of the study on the average pre-test and post-test of nurses' knowledge of the nursing round in the medical ward at dr.Fauziah Hospital Bireuen can be seen in table 3. Table 3, concluded that the knowledge of nurses about nursing rounds in Medical ward at dr.Fauziah Hospital Bireuen average rank on the pre-test was 6.83 and the post-test was 12.67. The result of Wilcoxon statistical test results was at = 0.05 obtained a Z value = -7.130 and a p-value of 0.000. It may be concluded that there are differences in nurses' understanding of the nursing cycle before and after training.

Table 1. Demographics of Respondents

No	Characteristics	f	%
1	Umur		
	Mean	32,63	
	Median	29	
	Mode	26	
	Min	23	
	Max	51	
	SD	8,046	

No	Characteristics	f	%
2	Gender		
	Male	21	29,2
	Female	51	70,8
3	Marital status		
	Not married yet	20	27,8
	marry	51	70,8
	Widow	1	1,4
4	Level of education		
	Diploma III in Nursing	38	52,8
	Bachelor Degree in Nursing	34	47,2
5	Employment status		
	Civil servant	23	31,9
	Non civil servant	49	68,1
7	Working Experience		
	Mean	7,63	
	Median	5	
	Mode	1	
	Min	1	
	Max	25	
	SD	7,747	

Table 2. Nurses' knowledge level about nursing round before and after training

No.	Category	Pre-test		Post-test	
		f	%	f	%
1.	High	5	6,94	57	79,17
2.	Moderate	19	26,39	15	20,83
3.	Low	48	66,67	0	0

Table 3. The Comparison of Mean Rank Differences of Nurses' knowledge about nursing round before and after training

No.	Nurses' knowledge	Mean	Mean Rank	Z	α	p-value
1.	Pretest	6,83	0,00	-7,130	0,05	0,000
2.	Posttest	12,67	34,00			

IV.   DISCUSSION

Nurses' knowledge about the nursing round increased after nurses in the medical ward completed a nursing round training at Dr.Fauziah hospital Bireuen, both to increase knowledge about the nursing process concept and to increase skills in implementing the nursing process properly and correctly. Training is provided through lecture courses, discussions, question and answer methods, and case simulations.

Marquis and Huston (2015) stated that training can be defined as an organized approach for people who have some knowledge and skills about their duties and work. This knowledge can enhance cognitive, emotional and psychomotor abilities for increased productivity or better performance results. Similarly, Zainal, Ramly, Mutis, and Arafah (2014)argue that training is a learning process that leads to the development and improvement of skills. The training took place outside the applicable education system in a relatively short time in the form of psychic skills, intellectual skills, social skills and managerial skills.

The learning process builds the cognitive capabilities of nurses. The cognitive domain includes the ability to reformulate concepts or principles that

have been studied concerning thinking skills, knowledge-building skills, introduction, understanding, conceptualization, determination and reasoning. Training for nurses is one of the activities designed to enhance nurses' cognitive abilities in the nursing process.

According to Indonesian Government Regulation No. 11 of 2017 concerning Management of Civil Servants as described in Regulation of the State Administration Agency number 12 of 2018 concerning Basic Training of Candidates for Civil Servants. Education and training are aimed at developing the knowledge and capabilities of human resources. A high level of proficiency is required and used as one of the activities to meet human resource development requirements. In this regulation of the State Administration Agency, it is stated that the basic training programme for candidates for the public service on character enhancement is carried out for 511 meeting hours or equivalent to 51 working days and the capacity building program is completed for 320 meeting hours or the equivalent of 30 working days.

The results of this study are supported by Barry (2018)who conducted a study on increasing knowledge, satisfaction and retention of nurses in long-term care (geriatric care) by implementing a geriatric further education program for 6 weeks for 1 hour to increase nurses' knowledge. This program was assessed through pre-test and post-test methods to see nurses' knowledge before and after the training program. Pairet T test results indicated a significant difference (p<0.05) between the mean pre-test (3.75) and the mean post-test (4.24). The researcher concludes that the training program has the potential to improve the knowledge of nurses in the geriatric care unit.

Based on research findings on nurses' knowledge of the nursing round, the average pre-test was 6.83 and the post-test was 12.67. The value of the results of the statistical test at alpha = 0.05 was Z = -7.130 and a p-value of 0.000. It can be concluded that there are differences in nurses' knowledge about the pre- and post- education nursing round.

There is a difference in knowledge before and after nursing rounds training at dr.Fauziah hospital Bireuen is also influenced by the age and whose average age of nurses is approximately 32.63. Results from the study by Truxillo, McCune, Bertolino, and Fraccaroli (2012)indicate that nurse performance has decreased with age (p < 0.05). Younger nurses were seen as well informed to perform the nursing round more positively than senior nurses.

Another factor influencing nurses' knowledge about the implementation of the nursing round is the Working experience of the work shift.

The working experience has a very significant relationship to the implementation of the nursing round, in which the average nurse worked 7.63 years. Koh, Park, Wickens, Ong, and Chia (2011) reported that nurses with longer work experience were able to demonstrate a proactive personality when performing their duties. Working experience as a nurse 5 years demonstrating higher priority in activities and anticipation of needs, working collaboratively with staff. On the other hand, experienced nurses made less mistakes and possessed more non-technical cognitive skills than inexperienced nurses.

According to the study by Dewi, Malawat and Herawati(2019)which indicates that the nursing round will improve nurses' skills and knowledge. and to provide nurses with an understanding of the needs or issues of service needs in the patient room. According to Hakvoort, Dikken, Derks, Wel and Schuurmans (2021)nurses should be provided with ongoing education and training. Ongoing education requires nurses to gain the capacity to transfer new knowledge into practice.

Nursing round training have a major impact on nurses and patients. Utama, Malini and Priscilla (2019)stated that efforts to improve nursing services in inpatient rooms required the cognitive development of nurses and applying the nursing process as the main professional nursing model. The implementation of the Nursing Round will improve the ability of nurses to make decisions about the provision of appropriate nursing care. Aitken, Burmeister, Clayton, Dalais, and Gardner (2011)argue that the nursing process can improve interpersonal relationships between physicians, nurses, analysts, and other health professionals. In addition, it may also be effective communication among health care workers. It is expected that patients will feel comfortable with their health and feel satisfied with the quality of nursing services provided by nurses.

The researcher believes that the level of education influences nurses' knowledge of the nursing process as well. The knowledge is about the ability of nurses to evaluate what they have done. Level of Education including Diploma in Nursing, Bachelor's degree in Nursing, Master's Degree in Nursing is a graduate category that has a direct link to the nursing process. Furthermore, nurses who have taken higher education have an awareness of self-devotion in health services, as stated in the 2009 Law of the Republic of Indonesia concerning Health Article 1 Paragraph 6, which means that a health worker is everyone who is dedicated to the health sector and have knowledge and expertise through education in the health

sector, which, for some types, requires the authority to carry out health efforts.

In addition, nurses' understanding of the nursing process has a significant impact on nurse satisfaction in the workplace and improves the quality of nursing services. Research carried out by Negarandeh, HooshmandBahabadi and AlileydariMamaghani(2014)on the implementation of nursing rounds, it was noted that nursing rounds have the potential to increase nurse-patient interaction, shorten hospital stays and increase patient and nurse satisfaction. In addition, the nursing round can increase nurses' perceptions and work satisfaction. Nursing rounds are also beneficial to patients and nurses, since patients feel comfortable when nurses visit them.

V. CONCLUSION

The application of Nursing round training is effective enhance the skills and knowledge of nurses and allow nurses to identify the needs or problems associated with in-patient ward service needs. Researchers hope that Nursing Round Training will be held regularly to build common understanding among all nurses. Furthermore, this program is expected to be used to increase nurse autonomy, involvement in decision making, professional relationships between health services. Nursing rounds Training also increases evidence-informed care services, patient-centered care and improves patient safety.

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