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THE RELATIONSHIP BETWEEN NURSES' KNOWLEDGE AND COMPLIANCE IN PERFORMING FALL RISK RE-ASSESSMENT

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Research Report

ABSTRACT

Introduction: The fall incidence will have a detrimental impact on the hospital, staffs and patients as the service recipients. This can be prevented by conducting fall risk reassessment. It is an assessment of patient's fall risk carried out by nurses. This study aims to determine the level of knowledge and compliance of nurses in carrying out a patient fall risk reassessment in the inpatient ward. Methods: This study used an observational analytical design with a quantitative method and a cross-sectional approach. A total sampling of 48 respondents were used as samples. Kendall Tau-b test was employed as the analysis technique. Results: The respondents were mostly female or as many as 33 people (68.8%). The educational level of the respondents was mostly D-III or as many as 32 people (66.7%). The majority of respondents' working period was 3-5 years or as many as 26 people (54.2 %). The average age of the respondents was 27.5 years, the respondents' knowledge was mostly good or as many as 24 people (50%), and the respondents' compliance in carrying out the fall risk reassessment was mostly compliant or as many as 41 people (85.4%). This study utilized the Kendall Tau-b test and obtained p value = 0.006 and Correlation Coefficient of 0.387. Conclusions: There is a significant relationship between nurses' knowledge of fall risk and their compliance in carrying out a fall risk reassessment in the inpatient ward of the PDHI Yogyakarta Islamic Hospital. The higher the knowledge, the higher the level of nurse compliance.

INTRODUCTION

Patient safety in hospitals is a service system in a hospital that provides safer patient care, including measuring the risk, identifying and managing the risk to patients of incident analysis, the ability to learn and follow up on incidents, as well as implementing solutions to reduce the risk (Harus & Sutriningsih, 2015). Patient Safety Goals become the main basic standard indicators in the 2012 version of Hospital Accreditation assessment (Setyani, Zuhrotunida, & Syahridal, 2016). Falls are considered as serious problem and require high costs for both patients and all health facilities (Ahsan, Dima, & Prasiska, 2018). Patient falls are defined as frequent hospital incidents which may result in serious injury and even death, as well as in the psychological impacts of fall risk such as shock after a fall and the fear of falling again which can have numerous consequences including anxiety, loss of self-confidence,

limitation in everyday activities and the fear of falling (Safitri & Murharyati, 2018).

There were 700.000 to 1.000.000 reported cases of patient falls in the hospital in the United States each year. Meanwhile, the data taken from hospitals and mental health units in the UK in 2011 reported that there were as many as 282,000 patient falls each year, of which 840 patients suffered from hip fractures, 550 patients experienced fractures, and 30 patients had intracranial injuries (Nur, Dharmana, & Santosa, 2017).

In Indonesia, data related to patient fall incidents based on the XII PERSI congress report in 2012 showed that the incidence of patient falls was included in the top three hospital medical incidents and was ranked second after medication errors. Data from the report displayed that there were 34 cases or equivalent to 14% of fall incidents happened in hospitals in Indonesia. This proves that the incidence of patient falls is still high and is still

far from the accreditation standard which expects that there should be no incident (0%) of falls occurred in hospital (Nur, Dharmana and Santoso, 2017).

Prevention of fall risk is the sixth patient safety goal and is necessary to be carried out for patient falls are very worrying incidents for all the inpatients and are regarded as the second most common adverse event in health care after medication errors (Nur, Dharmana and Santoso, 2017). A preliminary study conducted at a hospital found that there were already Standard Operating Procedures, training for all nurses on patient safety, nursing supervision, and a mentorship program to monitor and evaluate the implementation of fall risk assessment for patients in the hospitals.

However, not all of these steps are able to reduce the incidence of patient falls to 0% as suggested by the accreditation standards. Based on the data obtained from the target report and the realization of the hospital accreditation assessment, incidents of patient falls were still found. There were 3 incidents occurred in 2017, 6 incidents in 2018, and 7 incidents in 2019. The results of observations and interviews carried out to 12 nurses displayed that 7 nurses (58.3%) stated that they did not conduct fall risk reassessment due to various reasons, including being unaware of fall risk, having never attended fall risk training, not knowing how to fill it out, having no time to do fall risk reassessment, and forget to fill in because there is no reassessment sheet in the patient's medical record.

The results of the observations obtained from the medical records of patients who fell in the hospital showed that there were some medical records which assessment sheet were completely filled and those which were incomplete, that is only the first sheet was filled while the back sheet of intervention section was still blank or not filled. The data taken from the XII PERSI congress in 2012 showed that fall incident is included in the top three of hospital medical incidents and ranks second after medicinal error. In Indonesia, the incident of patient fall in hospital is still considered high and far from the accreditation standard which expects the fall incidents to be 0%. Therefore, a program is needed to further improve the process of patient safety services in hospitals. It requires attitude, skills and knowledge, as well as motivation which are necessary to be owned by a nurse (Jati, 2017).

MATERIALS AND METHODS

This study employed an observational analytical research design with a cross-sectional approach. The population in this study were all nurses (48 people) in the inpatient ward of the PDHI Yogyakarta Islamic Hospital. Total sampling was utilized as the sampling technique. This research was carried out at the PDHI Yogyakarta Islamic Hospital. The instruments used in this study were 2 questionnaires, namely nurses' knowledge questionnaire to determine nurses' knowledge and nurses' compliance questionnaire. The nurse's compliance instrument in carrying out a fall risk reassessment has been used and tested by a previous researcher, namely (Putrina, 2019) with 0,05 or valid results. The fall risk knowledge instrument as been used and has been tested by previous researcers with 0,26 or valid results (Manalu, 2018). The fall risk knowledge instrument as been used and has been tested for reliability by previous researchers with the result of 0,73 whic means reliable. The nurse's compliance instrument in the fall risk reassessment with a result of 0,83 whic means it is ery reliable. Kendall's tau-b correlation coefficient formula was used to analyse the data.

RESULTS

Table 1. Respondent's characteristics

Variable	Frequency	Percentage (%)
Gender		
Men	15	31,3
Women	33	68,8
Educational Level		
Diploma III	32	66,7
Bachelor of Nursing	16	33,31
Length of Service		
1-2 years	15	31,3
3-5 years	26	54,2
> 5 years	7	14,6
Nurse's knowledge		
Good	24	50

Average	20	41,7
Poor	4	8,3
Nurse's compliance		
Compliance	41	85,4
Non-compliance	7	14,6

Most nurses or as many as 33 people (68.8%) are women, have educational level of D-III Nursing or as many as 32 people (66.7%), have length of work of 3-5 years, have good knowledge as many as 24 people (50%), and are regarded as compliant as many as 41 people (85.4%).

Table 2. The Average Age of Respondents

Variable	Statistics				
	n	Minimum	Maximum	Mean	Standard Deviation
Age	48	24	40	27,5	3,476

The average age of nurses is 27.5 years. The youngest age is 24 years and the oldest age is 40 years.

Table 3. Results of the relationship between knowledge and compliance

Variable	Compliance						Correlation Coefficient	P Value
Knowledge	Compliance		Non-compliance		Total			
	n	%	n	%	n	%		
Good	23	47,9	1	2,08	24	50		
Average	17	35,4	3	6,25	20	41,7	0,387	0,006
Poor	1	2,1	3	6,25	4	8,3		
Total	41	85,4	7	14,58	48	100		

Based on the Kendal Tau-b correlation employed in this study, the results found P Value = 0.006 which is smaller than 0.05. Thus, it indicates that there is a significant relationship between knowledge and nurses' compliance in the inpatient ward of the PDHI Yogyakarta Islamic Hospital. The correlation coefficient value of 0.387 showed that the relationship between nurses' knowledge on the fall risk and their compliance in carrying out patient fall risk reassessment in the inpatient ward of the PDHI Yogyakarta Islamic Hospital has an average level of closeness.

DISCUSSION

There is a significant relationship between nurses' knowledge and their compliance in the inpatient ward of the PDHI Yogyakarta Islamic Hospital. The correlation coefficient value of 0.387 indicates that the relationship between nurses' knowledge on fall risk and their compliance in carrying out patients fall risk reassessment in the inpatient ward of the PDHI Yogyakarta Islamic Hospital has an average level of closeness. The implementation of a fall risk reassessment at the PDHI Yogyakarta Islamic Hospital showed that there is a relationship between knowledge and compliance, that is to say that the implementation of a fall risk reassessment is the duty and obligation of ward nurses in reducing the incidence of falls.

This research is supported by (Faridha & Milkhatun, 2020) who stated that nurses' knowledge and compliance in the implementation of patient fall prevention has a significant relationship. According to (Pagala, Shaluhiyah, & Widjasena, 2018), there is a relationship between nurse's knowledge and nurse's compliance in carrying out Standard Operating Procedures for patient safety incidents. The lack of training on patient's safety and evaluation, especially in preventing patient falls, can be due to the nurses' lack of knowledge. Therefore, hospitals are expected to able to increase the knowledge on the implementation of patient's safety by providing training to nurses on a periodic basis (Jati, 2017). Compliance is a person's willingness to obey and follow specifications, standards, or rules that have been clearly regulated by the company concerned and other authorized institutions (Afriza, Lestari, & Yetti, 2018). Compliance is the basic principal for someone to behave. Changes in attitudes and behaviour of an individual begins with the process of

obedience, identification and the internalization as the final stage.

This research is supported by Budi and Wijaya who stated that nurses' knowledge will affect the level of their compliance in carrying out an action in reducing the incidence of falls (Budi & Wijaya, 2020). Experience, knowledge, and sources of information influence nurses' accuracy in conducting a fall risk assessment. The sources of information in this study were obtained from trainings, seminars or workshops on patient safety in order to increase nurses' knowledge on patient safety through training, seminars, as well as formal and informal education (Yusuf, 2017). Knowledge can be increased by conducting training to improve knowledge and technical skills as well as to increase knowledge and to achieve the expected goals in nursing care (Nugraheni, Widjasena , Kurniawan, & Ekawati, 2017). The higher a person's level of knowledge, the better the knowledge that person. Education and training can be seen as forms of intervention. Therefore, organizations or agencies that wish to develop themselves need to pay attention to their employees' education and training (Notoadmodjo, 2012). The purposes of the training are to figure out and identify what skills are needed by employees in order to support the needs of institution. Based on a research conducted by Budiono, socialization and training are things that need to be done to increase the knowledge of health workers, especially nurses (Budiono, Sarwiyata, & Alamsyah, 2014). According to Bawelle's research, there is a relationship between nurses' knowledge and compliance in the implementation of patient safety in the inpatient ward of Liun Kandage Regional Hospital. Knowledge can be increased by conducting a training aimed to improve knowledge and technical skills as well as to increase knowledge and to achieve the expected goals in carrying out nursing care. Increasing nurses' knowledge about patient safety is necessary, so that they are able to apply the knowledge that they know and compliance in minimizing the incidence of patient falls (Selleya C. Bawelle, Sinolungan, & Rivelino , 2013).

CONCLUSIONS

There is a significant relationship between nurses' knowledge about the risk of falling with their compliance in carrying out a fall risk reassessment in the inpatient ward of the PDHI Yogyakarta Islamic Hospital. Nurses' knowledge on Morse fall risk is expected to be the basis for nursing care and can prevent the incidence of falls in patients.

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