THE RELATION BETWEEN CHARACTERISTICS OF NURSES AND COMPLIANCE TOWARD THE IMPLEMENTATION PREVENTION OF PATIENTS FALLS IN REGIONAL PUBLIC HOSPITAL GOVERNMENT SAMARINDA

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ABSTRACT

Most patient safety standards (IPSG) specifically prevent the risk of falling applied by nurses. One of the internal factors that affect compliance is the characteristics of nurses. This study aims to determine the relation between the characteristics of nurses and adherence in the implementation of prevention of patients falling at Samarinda Government Daera General Hospital. The method used is a descriptive correlation with the cross-sectional approach. The instruments used in this study were questionnaires and observation sheets. The total sample of 51 nurses in nonintensive inpatient rooms with sampling techniques used purposive sampling. The analysis test in this study used Rank Spearman. Based on the results of the Spearman rank test of 4 variables, namely age (p = 0.026, rho = 0.312), gender (p = 0.366, rho = 0.129), education (p = 0.224, rho = -0.173), and work period (p = 0.151, rho = 0.204) there is only 1 variable, namely age, which has a relation with nurse compliance in the implementation of prevention of falling patients. There is a significant relation between the age of the nurse and compliance in the implementation of the prevention of falling patients. There is no relation between gender, education and the duration of employment of nurses with adherence to the implementation prevention of falling patients.

Keywords: Characteristics, compliance, prevention of patients fall

INTRODUCTION

In the last few decades, patient safety has become a priority for all health professionals in the hospital because providing patient safety services is very important in improving hospital quality. Reducing the risk of patients injured due to falls is one part of patient safety goals, if the risk of patients injured due to falls can be reduced, the healing process in patients will be faster. Patient safety in hospitals is a global and national issue, according to Law No. 44 / 2009 hospital is a health service facility that aims for better health recovery and maintenance.

Hospitals that obtain an international accreditation must apply the conditions set for patient safety namely, Six Goal Patient Safety (Six Goal Patient Safety) which is also used by the PERSI Hospital Patient Safety Committee (KKPRS) and the Joint Commission International (JTI). Nurses are one of the service providers who are at risk of making mistakes in patient safety because most of the patient safety standards / International Patient Safety Goal (IPSG) are
applied by nurses\(^1\). The largest number of health workers in hospitals is nurses (40-60\%), so nurses have an important role in determining the success of hospital accreditation.

In a study that data obtained reports of incidents of falling patients, as many as 250,000 people experience falls every year in British and Wales hospitals, 30-50\% of which cause physical injuries 1-3\% cause fractures\(^2\). In a study that data obtained from the 2012 PERSI congress XII report on data related to incidents of falling patients in Indonesia showed that as many as 34 cases or equivalent to 14\% of incidents fell in hospitals in Indonesia\(^3\). This proves that the incidence of falling patients is still high and is still far from the accreditation standard, which states for incidents of falling patients is not expected to occur in hospitals or 0\% of incidents. In an effort to support patient safety, nurse compliance is required in the implementation of nursing care. One of the internal factors that influence compliance is characteristics based on age, sex, education and years of service\(^6\).

From the results of interviews conducted on October 19, 2018 with the Head of Nursing and Head of the Emergency Room at one of the Samarinda General Government Regional Hospitals, it was found that based on reported incident report data, from 40 incidents recorded from July to October 2018, there were 2 cases of incidents of patients falling in the inpatient room. From the results of a preliminary study conducted to 10 nurses through the interview process in one of the inpatient rooms of the Samarinda Government Hospital, it was found that all nurses had good knowledge about preventing the risk of falling in patients, namely by installing a safety fence on the patient's bed and by giving a significant fall risk in patients at high risk of falling. However, at the time of observation in the room, of the 29 patients there were 11 patients who did not do the Morse Fall Scale assessment, 4 patients with a high risk of falling were not given a sign of fall risk, 2 patients with a high risk of falling in their beds were not lowered and 25 patients bed safety fence is not installed, if the condition continues to be left then it is likely that the incident of a patient falling in the hospital will re-occur.

**MATERIAL AND METHOD**

This research uses a quantitative method design using descriptive design, with the cross-sectional approach. The population in this study were 129 nurses in the non-intensive inpatient room at the Samarinda Government Hospital. The number of samples obtained by purposive sampling technique amounted to 51 nurses who served in the inpatient room of Samarinda Government Hospital have a minimum Diploma III in Nursing and nurses who are willing to be respondents.

The instrument in this study was in the form of a questionnaire and a Morse Fall Scale observation sheet and assessment to measure nurses' compliance in the implementation of prevention of falling patients that had been carried out by expert tests and field validity tests at different Government Regional Public Hospitals. The study was conducted after the researcher received a study permit and exclusion after the respondent signed the informed consent. Analysis of the study used the Spearman rank test.
RESULTS AND DISCUSSION

1. Univariate

Characteristics of Respondents

Table 1.
Characteristics of Respondents Based on Identity

| No | Respondent's identity | Total | Percentage (%) |
|----|-----------------------|-------|----------------|
| 1  | Age                   |       |                |
|    | 17-25 years           | 7     | 13,7           |
|    | 26-35 years           | 34    | 66,7           |
|    | 36-45 years           | 10    | 19,6           |
|    | Total                 | 51    | 100            |
| 2  | Gender                |       |                |
|    | Male                  | 11    | 21,6           |
|    | Female                | 40    | 78,4           |
|    | Total                 | 51    | 100            |
| 3  | Education             |       |                |
|    | D3                    | 43    | 84,3           |
|    | D4                    | 2     | 3,9            |
|    | S1                    | 1     | 2,0            |
|    | S1+Ners               | 2     | 9,8            |
|    | Total                 | 51    | 100            |
| 4  | Years of service      |       |                |
|    | ≤ 3 years             | 14    | 27,5           |
|    | > 3 years             | 37    | 72,5           |
|    | Total                 | 51    | 100            |

Source: Primary Data 2019

In table 1 above shows that some of the respondents involved in the study in the age range 26-35 years or early adulthood, namely as many as 34 respondents (66.7%), and dominance by female nurses, as many as 40 respondents (78.4%). Based on the level of education, it is known that the majority of respondents were Diploma III graduates, totalling 43 respondents (84.3%).

Nurse Compliance

Table 2
Frequency Distribution of Nurse Tenure

| Obedience       | Total | Percentage (%) |
|-----------------|-------|----------------|
| Obedient        | 36    | 70,6           |
| Non-compliance  | 15    | 29,4           |
| Total           | 51    | 100            |

Source: Primary Data 2019
Based on the results of the study, obtained a description of the compliance of nurses in the implementation of prevention of falling patients in Samarinda Government Hospital is mostly compliant, as many as 36 respondents (70.6%), while those who are not compliant are 15 respondents (29.4%).
2. Bivariate

Table 3
Relation between Nurse Characteristics and Compliance in the Implementation of Prevention of Fall Patients

| Characteristics | Nurse compliance in the implementation of prevention of falling patients | Spearman’s rho | P |
|-----------------|--------------------------------------------------------------------------|---------------|---|
|                 | Obedient | Disobedience | Total |               |               |
| **Usia**        |          |              |       |               |               |
| 17-25           | 6 (11,8%) | 1 (2,0%)   | 7 (13,7%) | 0,312 | 0,026 |
| 26-35           | 26 (51,0%) | 8 (15,7%) | 34 (66,7%) |               |               |
| 36-45           | 4 (7,8%) | 6 (11,8%)   | 10 (19,6%) |               |               |
| **Total**       | 36 (70,6%) | 15 (29,4%) | 51 (100%) |               |               |
| **Gender**      |          |              |       |               |               |
| Male            | 9 (17,6%) | 2 (3,9%)   | 11 (21,6%) | 0,129 | 0,366 |
| Female          | 27 (52,9%) | 13 (25,5%) | 40 (78,4%) |               |               |
| **Total**       | 36 (70,6%) | 15 (29,4%) | 51 (100%) |               |               |
| **Education**   |          |              |       |               |               |
| D3              | 29 (64,4%) | 14 (27,5%) | 43 (84,3%) | -0,173 | 0,224 |
| D4              | 1 (2,0%) | 1 (2,0%)   | 2 (3,9%) |               |               |
| S1              | 1 (2,0%) | 0 (0%)     | 1 (2,0%) |               |               |
| S1+ Ners        | 5 (9,8%) | 0 (0%)     | 5 (9,8%) |               |               |
| **Total**       | 36 (70,6%) | 15 (29,4%) | 51 (100%) |               |               |
| **Years of service** |          |              |       |               |               |
| ≤ 3 years       | 12 (23,5%) | 2 (3,9%)   | 14 (27,5%) | 0,204 | 0,151 |
| > 3 years       | 24 (47,1%) | 13 (25,5%) | 37 (72,5%) |               |               |
| **Total**       | 36 (70,6%) | 15 (29,4%) | 51 (100%) |               |               |

Source: Primary Data 2019

Based on the research results, it is known that the most respondents are in the age range of 25-35 years as many as 34 (66.7%) respondents, of which 26 (51.0%) are compliant and 8 (15.7%) are not compliant. It is known that the value of p = 0.026 (<0.05), there is a significant relation between the age of nurses with adherence in the implementation of the prevention of falling patients. Most respondents were female nurses, as many as 40 (78.4%), of which 27 (52.9%) were compliant and 13 (25.5%) were not compliant. It is known that the value of p = 0.366 (<0.05), there is no relation between the sex of nurses with adherence in the implementation of the prevention of falling patients.

The majority of the respondents' last education was Diploma (43 (84.3%), of which 29 (64.4%) were compliant and 14 (27.5%) were not compliant. Respondent. It is known that the value of p = 0.224 (<0.05); there is no relation between education and compliance in the implementation of the prevention of falling patients. Based on the results of the study, it is
known that the most respondents were nurses with a work period of > 3 years, namely 37 (72.5%), of which 24 (47.1%) were compliant and 13 (25.5%) were not compliant. It is known that the value of $p = 0.151 (<0.05)$, there is no relation between the length of service of nurses with adherence in the implementation of the prevention of falling patients.

Relation between Age of Nurse and Compliance in the Implementation of Prevention of Fall Patients The results in table 3 show $p = 0.026$, meaning that there is a significant relation between the age of nurses and adherence. A correlation value of 0.312 which shows a positive correlation with low correlation strength. The majority of respondents in this study were in early adulthood. In accordance with research which states that the compliance of a nurse is influenced by age\(^4\). The study showed that a significant relation between age and prevention measures fall risk.

An older age, a person will be better prepared to face an event\(^5\). At a young age, most are still inexperienced, so they do not really understand the benefits of the reconsideration and the reconsideration process. A person's knowledge can affect one's persistence in carrying out a procedure of action; the more age a person eats his knowledge will also increase\(^7\). Based on the abovementioned reasons, the researchers assume that the respondents in this study are based on age calculations starting from the time of birth until the time of age calculation, which is mostly included at the age of 26-35 years. The more mature a person is, the more knowledge and experience they will gain. A person's age will affect the ability to catch and mindset, the more a person ages, the more he develops, so that the knowledge he gets will get better. It is recommended that relatively younger nurses need to receive patient safety training, especially in the prevention of falls in each inpatient unit. In addition, it is important for senior nurses of relatively older age to provide guidance to younger nurses in preventative measures for falling patients.

Relation between Nurses' Gender and Compliance in the Implementation of Prevention of Fall Patients. The results in table 3 show $p = 0.366$, meaning that there is no significant relation between the sex of nurses and adherence. A correlation value of 0.129 shows a positive correlation with the strength of almost no correlation. Respondents involved in the study were dominated by female nurses. From the results of previous studies, the results obtained were almost all female respondents, namely 104 respondents (83.9%) of 124 nurses\(^8\). The study stated that there was no significant relation between male and female sexes with the implementation of patient safety goals.

Stated that in general, there was no significant difference between the sexes of women and the sexes of men in work productivity\(^9\). In the ability to solve problems, analytical skills, competitive encouragement, motivation, sociability and learning ability between men and women also no consistent difference. Based on this, researchers assume that gender does not affect all forms of activities and activities carried out by someone. The majority of respondents in this study were female nurses, but this does not mean that only women who implement the
implementation of prevention of falling patients because patient safety is the responsibility of every nurse who works in the hospital.

It is recommended that prevention of falling patients can be obeyed by all nurses, both men and women. Although male nurses are a minority, it must be identified and oriented and involved in regular reviews of preventative measures for falling patients. Between male and female nurses are also arranged so that an understanding arises that preventative measures for falling patients must be implemented and an important part of nurses in their daily work caring for patients.

**Relation of Nurse Education with Compliance in the Implementation of Prevention of Fall Patients**

The results in table 3 show \( p = 0.224 \), meaning that there is no significant relation between the sex of nurses and adherence. A correlation value of 0.173 shows a negative correlation with the strength of almost no correlation. The majority of respondents involved in research are Diploma III graduates.

The results of previous research, it is known that the majority of respondents have not completed their education up to the nursing profession and most graduates are Diploma III\(^{10}\). Education affects the learning process of a nurse, the higher the level of one's education, the higher the comprehension of information\(^{10}\). Cognitive becomes one of the very important domains for the formation of one's actions going forward\(^5\). He also believes that one of the factors that influence a person's knowledge is education. It is known that education is an attempt made to develop personalities and abilities inside and outside of school that lasts a lifetime.

Based on this, the researcher assumes that a person's education level greatly influences a person's ability level. The higher the level of one's education, the easier it is for that person to accept and develop knowledge and technology, because if nurses have not gone through the profession, then their professional competence has also not increased, so that it will affect their performance in the implementation of preventing falling patients.

It is important for nurses to tie up the level of education, such as Diploma III graduates proceeding to S1 Nursing, so that abilities are further improved. With the increase in education, it is recommended that nurses can also apply the knowledge and skills acquired while attending education. This is done in order to reduce the incidence of falling patients.

**The Relation Between Nurse's Working Period and Compliance in the Implementation of Prevention of Fall Patients**

The results in table 3 show \( p = 0.151 \), meaning that there is no significant relation between the length of service of nurses and compliance. A correlation value of 0.204 shows a
positive correlation with the strength of almost no correlation. The majority of respondents involved in the study were nurses who had more than 3 years of service.

According to Anderson's theory that, the longer a person's work experience, the more skilled they have\(^\text{11}\). The longer he works, the easier he will understand the task so that it provides opportunities to improve achievement and adapt to one's environment, the better one's experience will be.

Length of work is categorized into two, namely the length of work of the new category ≤ 3 years and the old working time category > 3 years\(^\text{12}\). The results of previous studies found that the majority of nurses who had not worked long ago were ≤ 2 years and there was no significant relation between the length of nurses working with adherence to the implementation of SPO patient safety targets\(^\text{13}\).

Based on this, the researcher assumes that a person's service period can affect compliance in carrying out an action. The longer nurses work in an institution, the more experience they have and the opportunity to be able to increase productivity because they already understand the work patterns in their work environment well.

The nurse's service period > 3 years is included in the senior category, which means that the nurse has a longer work period. It is very supportive of nurses in implementing patient safety goals, especially in the implementation of the prevention of falling patients since they are declared to be part of nursing services at the hospital. Researchers suggest that between nurses, whether they have a work period of fewer than 3 years and those who have more than 3 years, can exchange ideas or opinions both in knowledge and skills they have.

**CONCLUSION**

There is a significant relation between the age of nurses with adherence in the implementation of the prevention of falling patients. There is no relation between sex, education and length of service of nurses with adherence in the implementation of prevention of falling patients.

1. For nurses

   It is expected that nurses can carry out tasks that are already the responsibility of nurses in their profession, namely by carrying outpatient prevention measures in accordance with existing procedures. It is also expected that nurses can increase their knowledge of patient safety, especially in the prevention of falling patients with training organized by the Samarinda Government Hospital.

2. For the management of Samarinda Government Hospital.

   It is expected to increase the knowledge of nurses in inpatient installations about patient safety, especially in the prevention of falling patients by holding periodic training and orienting new nurses about patient safety. As well as conducting routine supervision of the performance of
nurses in order to make nurses become more compliant with existing regulations and improve the quality of hospital services.

3. For educational institutions

The results of this study are expected to be a source of information for educational institutions in teaching or explaining the importance of the implementation of the prevention of falling patients in accordance with standard procedures. As well as an input field in the learning process activities in research programs relating to nurse compliance in the implementation of prevention of falling patients.

4. For further researchers

Future researchers are expected to be able to carry out continuous research using independent variables and different methods and it is hoped that further researchers will add theories and references to perfect previous research.

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