Influence of Characteristics, Knowledge and Nursing Skill on Implementation of Safety Patients in General Hospital H. Adam Malik Medan Year of 2015

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Abstract: Patient safety is the prevention of injury to the patient. Injury prevention free of Dangers that occur can be prevented as a result of medical treatment. Based on the data from the RSU. Malik hospital H. Adam quality of service issues related to various aspects of managerial RS, but relatively dominant in the field of patient safety and the lack of health infrastructure to support patient safety. This study aimed to analyze the influence of the characteristics, knowledge, and skills of nurses on the implementation of the safety of inpatients RSU. H.Adam Malik in 2015. This research is a quantitative research using cross-sectional study design. The population was all nurses who served in inpatient miss A, and B amounted to 249 people. The sample of 96 people. Collecting the data by questionnaires. Data analysis methods with univariate, bivariate analysis using chi-square test and multivariate analysis with multiple logistic regression. The results Showed education (95% CI = 1:06 to 3:31 with RP 1.87) statistically, duration of employment (95% CI = 1:07 to 3:17 with RP 1.84), knowledge (95% CI = 1:10 to 3:31) with RP 1.90) and skills (95% CI = 1.16 to 3.60 with RP 2.50) effect on the implementation of the safety of Patients age did not affect the implementation of patient safety. The results of multiple logistic regression unknown variables influencing the implementation of patient safety is education, length of work, knowledge, and skills. It is suggested RSU. Malik H. Adam needs to the make the procedures of the application procedure JCI standards of patient safety, to improve education, knowledge, and skills of nurses through education and training (Training) so that nurses could be interaction with Patients and alose can apply directly with optimal patient safety standards, as well as support the achievement of accreditation.

Keyword: Characters,Lifestyle,Hypertension

I. INTRODUCTION

To improve health services, institutions, hospitals always improve the quality of the three (3) elements of structure, process, and outcome with an assortment of basic concepts. Such programs have improved the quality of hospital services both in the aspect of structure, process and outputs and outcomes. However, the trouble, the quality of service has still occurred unexpected events that are not uncommon to end up with a lawsuit. Therefore, it needs a program to improve the service process further, because the incident is not expected in part to an error in the service process that actually can be prevented through a comprehensive service plan to involve patients based on their rights.

WHO (2004) collect figures hospital research in various countries: USA, England, Denmark, and Australia, found KTD with a range of 3.2 to 16.6%. Cronenwett (2002) in Ballard (2003) reported that KTD forms include: 28% is a reaction to medication or medications are given, 42% is the incidence of life-threatening but preventable, 20% of service in the clinic, 10-30% error in the laboratory. Meanwhile, other forms of unwanted pregnancy were reported by Mengis & Nicolini in Mustikawati (2011) is in the form of an error in drug delivery and related surgical intervention. With these data, various countries immediately conduct research and develop Patient Safety System.

Based on data from the general hospital H. Adam Malik estimated hospital quality of service issues related to various aspects of managerial RS, but relatively dominant in the field of patient safety and the lack of health infrastructure to support patient safety. Based on interviews with nurse-patient room and patient safety team RSU. H. Adam Malik (September, 2015), estimated the hospital patient safety issues related to (1) lack of knowledge of nurses, (2) lack of skills to patient safety. This type of study used cross-sectional design with studies in which measurements or observations were made at the same time the independent and dependent variable data (all the time). The research was carried out in public hospitals. H. Adam Malik. The research was

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conducted from December 2015 - July 2016 and the population in this study were all nurses who served in the inpatient unit A and B RSU missed. H. Adam Malik, amounting to 249 people. The conceptual framework of the research consisted of independent variables that characteristics (age, education, and long work), knowledge, and skills, The dependent variable is an implementation of patient safety, and Data collected included primary data and secondary data. Primary data were obtained through questionnaires and secondary data obtained from documents RSU. H. Adam Malik.

II. RESEARCH AND METHODS

2.1 Univariate Analysis
A univariate analysis performed to obtain a picture of the frequency distribution of each of the independent variables include characteristics (age, education, and long work), knowledge, and skills and the dependent variable is the implementation of patient safety. The univariate analysis are presented in tables and graphs.

2.2 Bivariate Analysis
Bivariate analysis is used to see the relationship between the independent variables characteristics (age, education, and long work), knowledge, and skills with the dependent variable implementation of patient safety by using the chi-square test at 95% confidence level, and to determine the size of the risk of using *prevalence ratio* (RP)

2.3 Multivariate Analysis
Multivariate analysis is to look at the effect of several independent variables together to the variable implementation of patient safety so as unknown variables of the most dominant influence on patient satisfaction by using multiple logistic regression (binary logistic regression).

III. RESULTS AND DISCUSSION

3.1 Characteristics Influence of Age with Patient Safety in General Hospital Adam Malik in 2015
The results of analysis of the relationship of age to patient safety can result in that age> 20-39 years as many as 47 people where patient safety is not proper as many as 18 people (38.3%) and a good many as 29 people (61.7%). Age 40-58 years 49 that is not a proper patient safety as many as 14 people (28.6%) and both were 35 (71.4%). The results of the statistical test Chi-Square test showed no significant relationship between age and safety of the patients ($p = 0.312$).

Based on the assumption of the age of researchers associated with the action in response or to perform an activity. When linked to the stages in the life cycle, at the age of 21-30 years is the starting point for any future work, at the age of 31-40 years is the time for a career with excellent maturity. At the age of 41-50 years is the peak period in a person's career and age above 50 years is the time to prepare for the retirement of an employee. Age between 30 years up to 45 years are the ages that can induce a feeling less satisfied with the work, shows that employees are less satisfied concerning the implementation of patient safety activities that are not willing to continue to develop the implementation of patient safety.

Opinion Mconnell and Philipcalk (1992), a person psychological factors related to age factor which will determine the attitude of a person. Increasingly age, level of maturity and strength of a person will be more mature in thinking and be working.

Table 1. Cross Tabulation Age relationship with Patient Safety in General Hospital H.Adam Malik 2015

Age	Patient Safety				Amount		*P*	RP(95% CI)
	Not good		Good					
	n	%	n	%	n	%		
20-39 years	18	38.3	29	61.7	47	100.0	0, 312	1.34
40-58 years	14	28.6	35	71.4	49	100.0		0.75 to 2.37

IV. CHARACTERISTICS INFLUENCED THE PATIENT SAFETY EDUCATION IN GENERAL HOSPITAL ADAM MALIK IN 2015

The results of analysis of the relationship of education to patient safety can result in that the D-III nursing education as many as 39 people where patient safety is not proper as many as 18 people (46.2%) and both were 21 (53.8%). S1 nursing 57 people, who carry no first patient safety as many as 14 people (24.6%) and a good many as 43 people (75.8%). The results of the statistical test Chi-Square test showed no significant relationship between education and safety of the patients ($p = 0.028$). From this analysis also obtained RP value (Prevalence Ratio) = 1.87 (RP> 1) means a group that has a nursing S1 1.87 times more likely to implement patient safety than those who have a D-III was nursing education.

Based on the results of logistic regression analysis, the education variable values obtained (Exp B) of 1.85 means that in the group with S1 nursing education 1.85 times more likely to implement patient safety than with a D-III nursing education.

Based on the assumptions of researchers open the opportunity to attend continuing education for employees, especially nurses in the department. H. Adam Malik will be facilitated by the availability of various types and levels of education so that the educational opportunities be the motivation to pursue a better career and a chance develop the knowledge and insight.

The results are consistent with research conducted Faizin, Achmad and Winarsih (2007), which examines the relationship between the education level of nurses and nurse's performance in RSU Pandan Arang Boyolali. Based on these studies it is known that there is a relationship between the level of education and nurse's performance. The higher the level of education a person then that person's knowledge will be higher and more comfortable with getting information. Conversely, low education would hinder the development of a person's attitude towards the values of the newly introduced (Henry and Goddess, 2010).

Table 2. Cross Tabulation Relations with Patient Safety Education in General Hospital H.Adam Malik 2015

Education	Patient Safety				Amount		P	RP(95% CI)
	Not good		Good					
	n	%	n	%	n	%		
D-III Nursing	18	46.2	21	53.8	39	100.0	0,028	1.87
S1 Nursing	14	24.6	43	75.8	57	100.0		1.06 to 3.31

V. OLD CHARACTERISTICS INFLUENCE PATIENT SAFETY AT WORK WITH THE GENERAL HOSPITAL ADAM MALIK IN 2015

Results of the analysis of a long relationship working with patient safety can result in that work ≤ five years old, and there are 26 where the safety of patients is not proper as many as 13 people (50%) and a good many as 13 people (50%). Working time> 5 years to 70 people that is not a proper patient safety as many as 19 people (27.1%) and both were 51 people (72.9%). The results of the statistical test Chi-Square test showed no significant relationship between the length of employment with the safety of the patients (p = 0.035). From this analysis also obtained RP value (Prevalence Ratio) = 1.84 (RP> 1) means that the group has a long working> 5 years 1.84 times more likely to implement patient safety than those who have had a working time ≤ five years,

This is consistent with the theory that the more / longer life of someone in a particular job then the experience acquired more and more, so the level of proficiency on the job as their task will be higher because it is supported by the ability and experience of adequate employment would result from / performance high for the workers themselves, also show the quality of work performed (Prabandari, 2003).

Table 3. Cross Tabulation Working Long Relationship with Patient Safety in General Hospital H.Adam Malik **2015**

Length of working	Patient Safety				Amount		P	RP(95% CI)
	Not good		Good					
	n	%	n	%	n	%		
≤ five years	13	50	13	50	26	100.0	0, 035	1.84
> 5 years	19	27.1	51	72.9	70	100.0		1.07 to 3.17

VI. EFFECT OF THE PATIENT SAFETY KNOWLEDGE IN GENERAL HOSPITAL ADAM MALIK IN 2015

Based on the results of the analysis of the relationship of knowledge to patient safety can result in that knowledge of less 33 persons where patient safety is not proper as many as 16 people (48.5%) and both were 17 (51.5%). Good knowledge of 63 people is not a proper patient safety as many as 16 people (25.4%) and well as many as 47 people (74.6%). The results of the statistical test Chi-Square test showed no significant relationship between knowledge and safety of the patients (p = 0.023). From this analysis also obtained RP value (Prevalence Ratio) = 1.9 (RP> 1) means that the group has a good knowledge 1.9 times more likely to implement patient safety than those who have had less knowledge.

Based on the results of logistic regression analysis, the variable values obtained knowledge (Exp B) of 2.04 means that the group has a good knowledge of two times more likely to carry the knowledge of patient safety than less.

According to Hughes (2008), nurses are essential in the development of quality through patient safety. To establish the safety of the patient requires commitment influenced by knowledge of nurses. Nurses who have a good knowledge of the safety of patients must have had an excellent attitude to improve the quality of healthcare. This is supported by Majid (2011) who argued that knowledge be the root of the attitudes, while attitudes will lead to a person's actions.

Table 4. Cross Tabulationknowledge Relationship with Patient Safety in General Hospital H.Adam Malik 2015

Knowledge	Patient Safety				Amount		*P*	RP(95% CI)
	Not good		Good					
	n	%	n	%	n	%		
Less	16	48.5	17	51.5	33	100.0	0,023	1.90
Good	16	25.4	47	74.6	63	100.0		1.10 to 3.31

VII. INFLUENCE SKILLS WITH PATIENT SAFETY IN GENERAL HOSPITAL ADAM MALIK IN 2015

The results of analysis of the relationship skills to patient safety can result in that less skill total of 37 people where patient safety is not proper as many as 18 people (48.6%) and a good many as 19 people (51.4%). Good skills 59 people that patient safety is not proper as many as 14 people (23.7%) and both are 45 (76.3%). The results of the statistical test Chi-Square test showed no significant relationship between skills with the safety of the patients (p = 0.012). From this analysis also obtained RP value (Prevalence Ratio) = 2.05 (RP> 1) means a group that has a useful skill of 2.05 times more likely to implement patient safety than those who have had less skill.

This study proves the theory proposed by Gibson (2003), the skill is a skill-related task that is owned and used a person at the right time. Skills have a function, namely: shortening the distance between the times of completion of tasks by the beginning of the task at hand, stimulate the urge to act, fill your leisure time, giving greater satisfaction. Patient safety must be viewed from the standpoint of clinical risk. Although the hospital's medical staff according to their competencies to provide services based on professional standards and service standards, but potential risks remain, so patients still potentially get injured.

Table 5.Cross Tabulation Relationship Skills with Patient Safety in General Hospital H.Adam Malik 2015

Skills	Patient Safety				Amount		*P*	RP(95% CI)
	Not good		Good					
	n	%	n	%	n	%		
Less	18	48.6	19	51.4	37	100.0	0,	2.05
Good	14	23.7	45	76.3	59	100.0	012	1.16 to 3.60

VIII. MULTIVARIATE ANALYSIS

After multivariate logistic regression analysis showed that the education variable with a value of p = 0.044, longer working with p = 0.046, knowledge with p = 0.032 and skills with a value of p = 0.026 affect the safety of patients at the General Hospital H. Adam Malik Medan Year 2015. The most dominant variable effect on patient safety is a variable skill with regression coefficient B = 1.74

Table 6. Multiple Logistic Regression Results

Variables	B	Sig	Exp B	95% CI	
				Lower	*Upper*
Education	1,617	.044	1,854	1,716	4,803
Length of working	1,551	.046	1,736	1,631	4,776
Knowledge	1,715	.032	2,044	1,787	5,306
skills	1,741	.026	2,197	1,512	5,417
Constant	-.900	.041	.406		

The results of logistic regression analysis, the education variable values obtained (Exp B) of 1.85 means that in the group with S1 nursing education 1.85 times more likely to implement patient safety than with a D-III nursing education. Variable length of employment obtained value (Exp B) of 1.73 means that the group thathas a working time of> 5 years 1.73 times more likely to implement than the old patient safety work 1- 5 years. Acquired knowledge variable value (Exp B) of 2.04 means that the group has a good knowledge of 2.04 times more likely to carry the knowledge of patient safety than less. Variable values obtained skills (Exp B) of 2.197 means that the group has a useful skill 2,197 times more likely to implement patient safety than less skill.

IX. CONCLUSION

Based on the results of research and discussion can take several conclusions as follows:

1. Nurse education affect the safety of patients at the General Hospital Adam Malik. S1 nursing 1.87 times more likely to implement patient safety than those who have a D-III nursing education. Working long effect on patient safety nurse at General Hospital Adam Malik. Working time> 5 years 1.84 times more likely to implement patient safety than those who have had work ≤ 5 years old.
2. Knowledge of nurses affect the safety of patients at the General Hospital Adam Malik. Good knowledge 1.90 times more likely to implement patient safety than those who have had less knowledge.
3. Skills of nurses affect the safety of patients at the General Hospital Adam Malik. Good skills 2.05 times more likely to implement patient safety than those who have had less skill.

   Based on the above conclusions, the suggestions can be submitted are as follows:

1. For the department. H. Adam Malik need to create procedures for the application of the procedure JCI standards of patient safety, by improving education, knowledge and skills of nurses through education and training (Training), so that the nurses who interact directly with patients can apply optimal patient safety standards, as well as support the achievement of accreditation.
2. For Nurses in the department. H. Adam Malik need to improve labor discipline and adherence to Standard Operating Procedures (SOPs) have been established hospital management and cultivating an attitude of care for nursing practice so as to minimize the occurrence of errors medical measures that can have an impact on patient safety

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