The Relationship Between Behavior of Hospital Officers with the Use of PPE to Prevent Nosocomial Infections in Thalia Irham Hospital Kab. Gowa

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ABSTRACT

One of the unexpected occurrences of activities in the hospital is nosocomial infection. Therefore, it takes attention from all hospital officials regarding the behavior of the use of qualified PPE to protect themselves from the infection. The purpose of the study was to find out the relationship between the behavior of hospital officials and the use of PPE to prevent nosocomial infections in Thalia Irham Hospital Kab. Gowa. This research was an analytical observational with cross-sectional research design. The samples as many as 70 hospital officials with sampling methods that are with total sampling. Data analysis processed with statistical tests. The results of the study at Thalia Irham Hospital Kab. Gowa was from the three variables studied as a whole has a significant relationship between knowledge (p-value = 0.000), attitude (p-value = 0.033), action (p-value = 0.027) with the use of PPE in 2021 to prevent nosocomial infection. The research conclusion is concluded that there is a relationship between the behavior of hospital officials and the use of PPE to prevent nosocomial infections.

Keywords: *Behavior, Hospital, Hospital officials, Nosocomial infection, PPE*

INTRODUCTION

Infectious diseases are diseases in which pathogenic microbes as a very dynamic cause. Microbes as living things certainly can survive by multiplying in a suitable reservoir and being able to find new reservoirs by moving or spreading (Darmadi, 2008).

One of the infectious diseases is nosocomial infection. Nosocomial consists of two words: *nosos* which means disease and *comeo* which means treatment, of which the two words are derived from the Greek. Nosokomion is defined as a place for treatment/hospital. So, a nosocomial infection can be interpreted as an infection that is obtained or occurs in the hospital (Darmadi, 2008).

Knowledge about the prevention of nosocomial infections can minimize the occurrence of this, especially by hospital officials both from the medical and nonmedical personnel. In the study conducted by Irdan (2018), there was a relationship between the knowledge, attitude, and actions of nurses regarding this nosocomial infection to the prevention of nosocomial infections that occurred in the Surgical Hospital Installation of Kayu Agung Hospital in OKI Regency. As for research from Novi and Rini (2020) to nurses at Dr. Rasidin Padang Hospital, researchers argue that there is a relationship between behavior in using PPE to prevent nosocomial infections because knowledge is the biggest factor that influences respondents' behavior related to the use of PPE. But the results of Erlani and Anugrah 's (2018) study are not in line and state that there is no significant relationship between knowledge and the use of PPE.

Some previous research predominantly raised the title of research on the nursing profession in applying prevention against nosocomial infections. But it also requires attention from all elements of hospital staff in the form of the behavior of using PPE so that this nosocomial infection can be suppressed. This is following the opinion of Ye Li *et. al* (2017) in their research journal stating that participation in surveillance of nosocomial infections is associated with a decrease in infection rates, then hospitals may consider conducting a nosocomial infection surveillance system that is reviewed based on their respective conditions.

MATERIAL AND METHOD

This type of research was an analytical observational study with a cross-sectional approach. The study was conducted at Thalia Irham Hospital Kab. Gowa was located on Jalan Poros Sungguminasa – Limbung KM.15 Panciro Village, Bajeng Subdistrict, Gowa Regency, South Sulawesi Province. Research time is divided into two stages: 1) The preparatory stage takes place in December 2020-January 2021; 2) Implementation Phase takes place in February-May 2021. The population in this study was all the officers of Thalia Irham Hospital Kab. Gowa as many as 70 samples. The samples in this study used total sampling, a sampling technique where the number of samples is equal to the population.

The type of data collection in this study is divided into two, namely primary data and secondary data. Primary data is obtained through questionnaires given to hospital officials and secondary data is obtained through literature searches in the form of book references, laws and regulations.

Data is processed using a computer. The data were analyzed with a Chi-square statistical test with a significant level of d = 0.05.

RESULT AND DISCUSSION

Based on the research results have been obtained with a questionnaire to an Officer of the General Hospital Thalia Irham that as many as 70 respondents as follows:

Table 1. Distribution of Respondents Based on Age on the Officer RSU Thalia Irham

No	Age	Total	Percentage
1	20-29 years old	37	52,86
2	30-39 years old	23	32,86
3	≥40 years old	10	14,29
Total		**70**	**100**

In table 1 it can be seen that the officers of the respondents amounted to 70 officers divided into 3 age groups. Which age group 20-29 years is the age group the highest with the percentage that is 52,86% with the number of officers 37 people, while for the age group with the lowest percentage of that age group ≥40 years had a percentage 14,29% with the number of officers 10 people.

Table 2. Distribution of Respondents By Gender on the Officer RSU Thalia Irham

No	Gender	Total	Percentage
1	Male	16	22,86
2	Female	54	77,14
Total		**70**	**100**

In table 2 it can be seen that the officer RSU Thalia Irham dominant female gender has a percentage of 77,14% with the number of officers 54 people.

Table 3. Distribution of Respondents Based on the Level of Use of PPE on the Officer RSU Thalia Irham

No	Hospital officers	Total	Percentage
1	Level I	32	45,71
2	Level II	38	54,29
Total		**70**	**100**

In table 3 it can be seen that the officer RSU Thalia Irham is divided into two levels, the use of PPE that is the level I (officers nonmedical) which has a percentage of 45,71% with the number of officers 32 people and level II (medical officer) who has 54,29% with the number of officers of 38 people.

The results of univariate analysis of respondents are divided into three categories, namely knowledge, attitudes and actions.

Table 4. Distribution of Respondents Based on the Categories of Knowledge on the Officer RSU Thalia Irham

No	Knowledge	Total	Percentage
1	Good	66	94,3
2	Less	4	5,7
Total		**70**	**100**

In table 4, the distribution of respondents based on knowledge is dominated by well-informed respondents at 94.3% and less-informed respondents at 5,7%.

Table 5 Distribution of Respondents Based on the Categories of Attitude on the Officer RSU Thalia Irham

No	Attitude	Total	Percentage
1	Good	66	94,3
2	Less	4	5,7
Total		**70**	**100**

In table 5, the attitude category is also dominated by respondents who are good at 94.3% and less at 5,7%.

Table 6 Distribution of Respondents Based on the Categories of Action on the Officer RSU Thalia Irham

No	Action	Total	Percentage
1	Good	61	87,1
2	Less	9	12,9
Total		**70**	**100**

In table 6, the category of actions is dominated by respondents who have good actions, which are 87.1% and fewer actions which are 12,9%.

Table 7 Distribution of Respondents Based on the Categories of Hospital Officers PPE on the Officer RSU Thalia Irham

No	PPE	Total	Percentage
1	Qualified	64	91,4
2	Nonqualified	6	8,6
Total		**70**	**100**

In table 7 are the results of the distribution of respondents by category of use of PPE on the highest officer of the RSU Thalia Irham that is qualified to 91.4% (64 people)

Bivariate analysis results with statistical test results obtained results that there is a relationship between the three categories with the use of PPE to prevent nosocomial infection.

Table 8 The relationship of Knowledge Officers with the Use of PPE

Knowledge	Use of PPE				Total	%	Statistical Tests
	Qualified		Nonqualified				
	n	%	N	%			
Good	63	95,5	3	4,5	66	100	p = 0,000 x^2 = 15,744
Less	1	25,0	3	75,0	4	100	

Table 9 The relationship of Attitude Officers with the Use of PPE

Attitude	Use of PPE				Total	%	Statistical Tests
	Qualified		Nonqualified				
	n	%	N	%			
Good	62	93,9	4	6,1	66	100	p = 0,033 x^2 = 4,530
Less	2	50,0	2	50,0	4	100	

Table 10 The relationship of Action Officers with the Use of PPE

Action	Use of PPE				Total	%	Statistical Tests
	Qualified		Nonqualified				
	n	%	N	%			
Good	58	95,1	3	4,9	61	100	p = 0,027 x^2 = 4,861
Less	6	66,7	2	33,3	9	100	

In the first category, knowledge obtained results x2 = 15,744 and p = 0.000 (p<0.05), the second category is the attitude obtained results x2 = 4,530 and p = 0.033 (p<0.05) and the third category is the action obtained results x2 = 4,861 and p = 0.027 (p<0.05).

The results of statistical tests on the categories of knowledge obtained p value=0.000 < 0.05, which means there is a significant relationship between the level of knowledge with the use of PPE to prevent nosocomial infections in the Thalia Irham Hospital. The results of this study are in line with research conducted by Novi and Rini (2020) and research by Lira and Khairul (2019) concluded that there is a relationship between knowledge with the use of PPE on the nurse with the respective results of the chi-square test 0,043 and 0.003. The hospital needs to maintain and improve the knowledge related to the use of PPE. One way that can be implemented, namely the attachment of the poster related to the safety associated with the use of PPE as well as the importance of the use of PPE in preventing nosocomial infections.

The results of statistical tests on the category of the attitude of the obtained value of p=0,033 < 0.05, which means there is a significant relationship between attitude and use of PPE to prevent nosocomial infections in the Thalia Irham Hospital. The results of this study are in line with research conducted by Novi and Rini (2020) and research by Nur et. al (2020) which concluded that there is a relationship between attitude and use of PPE at the nurse with the respective results of the chi-square test of 0.000 and to 0.032. Attitude is a response that is covered from person to stimuli or certain objects, which have been included factors argumentation and emotional of the respondents (happy/not happy, agree/disagree, good/not good, and so on) (Soekidjo, 2014). The results of this study also showed non-compliance of labor in the use of PPE is not always associated with the attitude of hospital personnel. This is because the respondents felt less comfortable than encourage respondents to not to use PPE. The solution is the attitudes of hospital staff to use the PPE that meets the requirements, due to the risk factors of transmission of nosocomial infections is a concern for the health and safety officers of the hospital if it does not comply with the terms of use of PPE.

The results of statistical tests on the category of the attitude of the obtained p-value=of 0.027 < 0.05, which means there is a significant relationship between the measures with the use of PPE to prevent nosocomial infections in the Thalia Irham Hospital. This research is in line with research Irdan (2018) concluded that there is a relationship between the actions with the prevention of nosocomial infections with the results of the statistical test using chi–square test with p-value = 0,024 < 0,05. Hospital personnel that has actions related to the use of PPE is greater than the officer who has measures that are less related to the use of PPE to prevent nosocomial infections. This means that the officer was aware of the importance of preventing the transmission of nosocomial infections is necessary compliance in the use of PPE.

Some research also has the result that the process of behavior change is not always such a theory that following the stages ranging from the knowledge – attitude – action. In addition, to get the data practices or actions of which the most accurate is through observation (observation) of the PPE used the officers of the hospital (Soekidjo, 2007).

Therefore, it is expected more motivation from the hospital and a fellow officer of the hospital related to the use of

PPE because the entire hospital staff has a responsibility to keep the safety of yourself and the patient from the transmission of nosocomial infections. In addition to the required rules or strict sanctions to officers who do not comply with the use of PPE. The rules are the standards that must be executed after the officer had a good knowledge about PPE to prevent nosocomial infections.

CONCLUSION

The conclusion from the results of the research that has been conducted that nosocomial infections can be prevented because there is a relationship between knowledge, attitudes and actions of the officers of the hospital with the use of PPE.

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