Relationship of Knowledge And Attitude of Nurses With Hand Hygiene Application Behavior

Dewi Selfiana[1], Hamdana[2], Hermadin[3], Haryanti Haris[4]*
S1 Keperawatan Stikes Panrita Husada Bulukumba, Indonesia[1]
Departemen Keperawatan Medikal bedah, Stikes Panrita Husada Bulukumba, Indonesia[2,3,4]

*Corresponding Autor : dewiselfiana14@gmail.com

ABSTRACT

The high rate of nasocomial infections is a very important problem in the hospital. Nurses' awareness to do hand hygiene is a fundamental behavior in an effort to prevent nasocomial infections that occur in hospitals. The research objective was to determine the relationship between knowledge and attitudes of nurses and the behavior of applying hand hygiene in the inpatient room at Lanto Dg Pasewang Jeneponto Hospital in 2020. This type of research design was choreational with a cross sectional research approach. The research population was 180 people. The sample was taken using purposive sampling with a total sample of 36 respondents. Data collection tools in the form of questionnaires and observation sheets. Based on the results of statistical tests using the fisher's exact test, the results of the p value = 0.631> α = 0.05, so it can be concluded that there is no relationship between knowledge and the behavior of applying hand hygiene in the inpatient room of Lanto Hospital Dg Pasewang Jeneponto and for the relationship between attitude and behavior. The result obtained p-value of 0.715> α = 0.05, so it can be concluded that there is no relationship between attitude and behavior of applying hand hygiene in the inpatient room of Lanto Dg Pasewang hospital Jeneponto. Suggestions are expected that further researchers will expand the reach of the room / location.

Keywords: Nurse, Behavior, Knowledge, Attitude, Hand Hygiene

INTRODUCTION

The hospital is a source of care that is also a health care facility that will be a means of infection. Nasocomial infections can occur in those who come to the hospital (Septiari, 2012). HAIs is an infectious event that not only comes from hospitals but also obtained other health services in (Permenkes, 2017). The most common incidence of HAIs was in the Eastern Mediterranean and Southeast Asia at 11.80% and 10%. In Europe and the Western Pacific by 7.70% and 9% respectively (Hapsari, Wahyuni, Mudjianto, 2018). The prevalence of HAIs in Indonesia was taken from 10 active Education General Hospitals reported a figure of 6-16% with an average of 9.8%(Kemenkes, 2017).

Data from several hospitals in Makassar stated the incidence of nasocomial infections that occurred, namely RSUP Wahidin Sudirohusodo 18.78% (Ratnawati & Sianturi, 2018), Tajuddin Chalik Makassar Hospital 25 cases (Sumaryati, 2017),

Labuang Baji Makassar Hospital 2,38 %(Tirmanidhana, 2016), RS Stella Maris Makassar 8,3 % (Hamzah, 2017). LantoDg Pasewang Jeneponto Hospital is a type C hospital that has 180 nurses. Data on cases of nasocomial infections obtained in 2018 was about 3.2%.

From the data above, the prevalence of nosocomial infection is still high so it is necessary to carry out an infection prevention and control for all employees who are in the hospital. Nurses as health workers, have the highest risk as a means of transmission of nosocomial infections to patients, this is due to almost 24 hours together with patients(Sugeng, 2015). One of the most important efforts made in reducing the spread of nosocomial infections is by hand washing each patient. Hand hygiene is a way to minimize infection transmission so that nosocomial infections do not occur(Vikke, Vittinghus, & Giebner, 2019).

The purpose of this study is to know the relationship of knowledge and attitude of nurses with the behavior of hand hygiene application that occurs in the inpatient room of Lanto Dg Pasewang Jeneponto Hospital in 2020.

MATERIAL AND METHODS

In this study using correlational design that is research that aims to reveal the correlative relationship between dependent variables and independent variables using a cross sectional approach. The research population is subjects that have met the criteria(Nursalam, 2008). The population of this study is all nurses in the inpatient room. The number of implementing nurses who are in the inpatient room according to the field of nursing as many as 180 people. This study took samples using purposive sampling, so the samples were used as many as 36 people. This study uses questionnaire research instruments and observation sheets. In this study there are two types of questionnaires, namely questionnaires to assess the relationship of nurse knowledge and questionnaires to assess the relationship of nurse attitudes, as well as observation sheets to assess the application of hand hygiene.

The data is analyzed based on measuring scale and research objectives using computerized program software. Data analyzed by : (1). Univariate analysis, Analysis is done to see the proportions. (2). Bivariate analysis, Bivariate test is conducted to find the relationship between independent variable and dependent variable with test used is fisher's exact test.

RESULTS

Table 1. Frequency distribution based on respondent characteristics In hospital room Lanto Dg PasewangJeneponto

Karakteristik responden	Jumlah (f)	Persentase (%)
Jenis kelamin		
Laki-laki	9	25.0
Perempuan	27	75.0
Pendidikan		
S1+Ns	17	47.2
DIII	19	52.8
Masa Kerja		
≤ 5 tahun	21	58.3
> 5 tahun	15	41.7
Umur		
<30 tahun	21	58.3
≥ 30 tahun	15	41.7
Total	**36**	**100**

Based on table 1 shows most of the genders of respondents in the inpatient room of Lanto Dg Pasewang Jeneponto Hospital are women as many as 27 respondents (75.0%). Based on the level of education, the majority of respondents' education in the hospital ward lanto Dg Pasewang Jeneponto is D III as many as 19 respondents (52.8%). Based on the working period, shows that the working period of respondents in the inpatient room of Lanto Dg Pasewang Jeneponto Hospital the majority working ≤5 years is 20 respondents (55.6%). Based on age level shows the majority of respondents aged 25-29 years (58.3%).

Table 2. Frequency distribution based on the knowledge of nurses in the inpatient room of Lanto Dg Pasewang Jeneponto Hospital

Knowledge	Amount (f)	Percentage (%)
Good	31	86.1
Not Good	5	13.9
Amount	**36**	**100.0**

Based on Table 2, it can be known that most of the respondents are knowledgeable in doing hand hygiene, which is 28 respondents (77.8 %) and a small percentage were poorly knowledgeable as many as 8 respondents (22.2%).

Table 3. Frequency distribution based on the attitude of nurses in the inpatient room of Lanto Dg Pasewang Jeneponto Hospital

Attitude	Amount (f)	Percentage (%)
Good	24	66.7
Not Good	12	33.3
Amount	**36**	**100.0**

Based on Table 3, it can be known that most of the respondents were kind to hand hygiene which is 66.7% and a small part of being un kind which is 33.3%.

Table 4. Frequency distribution based on the behavior of nurses in the inpatient room of Lanto Dg Pasewang Jeneponto Hospital

Behavior	Amount (f)	Percentage (%)
Can Do	25	60.4
Cannot Do	11	30.6
Amount	**36**	**100.0**

Based on Table 4, it can be known that most respondents can apply hand hygiene behavior either five moments or six steps of hand washing which is 60.4% and a small percentage do not apply hand hygiene behavior which is 30.6%. Based on Table 4, it can be known that most respondents can apply hand hygiene behavior either five moments or six steps of hand washing which is 60.4% and a small percentage do not apply hand hygiene behavior which is 30.6%.

Table 5. Distribution Of Frequency Of Knowledge Relationship With Hand Hygiene Implementation Behavior In Hospital Room Lanto Dg Pasewang Jeneponto

Knowledge	Implementation Behavior Hand Hygiene				Amount		P Value
	Can Do		Cannot Do				
	f	%	f	%	n	%	
Good	22	71.0	9	29.0	31	100.0	**0.631**
Not good	3	60.0	2	40.0	5	100.0	
Amount	**25**	**69.4**	**11**	**30.6**	**36**	**100.0**	

Based on table 5 above shows that the proportion of respondents who are good and can conduct hand hygiene implementation behavior correctly is as many as 16 people (66.7%) compared to those who can not apply hand hygiene that is as many as 8 people (33.3%), while for respondents with a bad attitude and can apply hand hygiene well as many as 9 people (75.0%) and respondent who have a bad attitude and can not apply hand hygiene as many as 3 people (25.0%).

DISCUSSION

Based on the results of the statistical test analysis used shows that out of 22 people (71.0%) nurses with good knowledge tend to apply hand hygiene behavior well compared to nurses whose knowledge is not good at 9 people (29.0%), so the results showed that there is no meaningful relationship between knowledge and nurse behavior in conducting hand hygiene evidenced by the statistical test value fisher's exact test p-value 0.631. This research is also in line with the results of research conducted by Ria Risti at Ade Muhammad Djoen Sintang Hospital showing that there is no very strong

significant relationship between knowledge and hand washing with a value of p value= 0.890 (Risti ria, 2017). Knowledge factors can not always affect the behavior of a seseoramg. These factors can also come from within the nurse or external factors that encourage not to do hand washing such as lack of supervision from the head of the room, workload that is not in accordance with the personnel and inadequate facilities.

The results of the analysis of nurse attitudes about hand hygiene through questionnaire answers were obtained that as many as 16 people or 66.7% of nurses were good at applying hand hygiene and as many as 8 people or 33.3% were unable to apply hand hygiene. The results showed that there is no meaningful relationship between attitudes and behaviors in the application of hand hygiene as evidenced by the statistical test value of p-value 0.715.

This study is also in line with the results of research conducted by syamsulastri in the IGD and ICU rooms of Ade Muhammad Djoen Sintang Hospital showing that there is no very strong significant relationship between attitude with hand washing with statistical test of p-value value of 0.961 (syamsulastri, 2017). The attitude of nurses towards hand washing, requires the stimulation of the existing work environment such as motivation from colleagues, education or training in handwashing, the availability of handwashing facilities, and supervision from the head of the room.

CONCLUSIONS AND SUGGESTIONS

Based on the results of research and discussion that has been described earlier, it can be concluded that there is no relationship between the knowledge and attitude of nurses with hand hygiene behavior in the inpatient room of Lanto Dg Pasewang Jeneponto Hospital in 2020. To increase knowledge, nurses follow an educational program about continuous hand hygiene with information that is always updated while to improve the behavior of the application of hand hygiene, efforts to implement cooperation procedures and equality of perception to the importance of hand hygiene can reduce nososcomial infections in hospitals. In addition, one way to improve the application of hand hygiene is to reward nurses who carry out hand hygiene well and punishment for those who do not do hand hygiene well.

REFERENCES

Hamzah, Z. R. (2017). *Faktor-Faktor yang Berhubungan dengan Kinerjaperawat Pelaksana Dalam Melaksanakan Pencegahan Infeksi Nosokomial Di Ruang Rawat Inap Rumah Sakit Pemerintah dan Rumah Sakit Swasta Kota Makassar*.

Universitas Islam Negeri Alauddin Makassar.

Hapsari, A. P., Wahyuni, C. U., & Mudjianto, D. (2018). Knowledge of Surveillance Officers on Identification of Healthcare-associated Infections in Surabaya. *Jurnal Berkala Epidemiologi*, *6*(2), 130. https://doi.org/10.20473/jbe.V6I22018.130-138

Kemenkes. (2017). Pencegahan dan pengendalian infeksi di RSJS Magelang.

Nursalam. (2008). *Konsep dan Penerapan Metodologi Penelitian Ilmu Keperawatan*. Jakarta: Salemba Medika.

Permenkes. (2018). Peraturan Menteri kesehatan RI No 4 Tahun 2018 tentang Kewajiban Rumah Sakit dan Kewajiban Pasien. Retrieved February 3, 2020,fromhttps://www.persi.or.id/images/regulasi/permenkes/pmk42018.pdf

Ratnawati, L., & Sianturi, S. R. (2018). Faktor – Faktor Yang Berhubungan Dengan Kepatuhan Perawat Dalam Menerapkan Hand Hygiene. *Jurnal Ilmu Keperawatan Dan Kebidanan*, *9*(2), 148. https://doi.org/10.26751/jikk.v9i2.458

Syamsulastri. (2017). *Faktor Yang Berhubungan Dengan Kepatuhan Perawat Dalam Melakukan Hand Hygiene Di Rsud Ade Muhammad Djoen Sintang*. Universitas Muhammadiyah Pontianak.

Septiari. (2012). *Infeksi Nasokomial*. Jogjakarta: Nuha Medika.

Sumaryati, M. (2017). Pengaruh Tingkat Pengetahuan Perawat dengan Perilaku Pencegahan Infeksi Nosokomial pada Diruang Perawatan RS Tajuddin Chalik Makassar. *Jurnal Ilmiah Kesehatan Sandi Husada*. Retrieved from https://www.neliti.com/id/publications/283259/pengaruh-tingkat-pengetahuan-perawat-dengan-perilaku-pencegahan-infeksi-nosokomi

Tirmanidhana, F. (2016). Analisis Pelaksanaan Pencegahan Dan Pengendalian Infeksi Nosokomial Di Intensive Care Unit Rsud Labuang Baji Makassar. *Journal of Chemical Information and Modeling*, *53*(9), 1689–1699. https://doi.org/10.1017/CBO9781107415324.004

Vikke, H. S., Vittinghus, S., & Giebner. (2019). Compliance with hand hygiene in emergency medical services: An international observational study. *Emergency Medicine Journal*, *36*(3), 171–175. https://doi.org/10.1136/emermed-2018-207872