

# RELATIONSHIP ATTITUDE AND NURSE KNOWLEDGE ABOUT THE COMPLIANCE OF THE USE OF PERSONAL PROTECTIVE EQUIPMENT (PPE) IN OUTPATIENT INSTALLATION AT TANGERANG SELATAN HOSPITAL

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#### ABSTRAK

Hasil dari laporan Dewan Keamanan Nasional menunjukkan bahwa kejadian kecelakaan kerja di rumah sakit 41% lebih tinggi dibandingkan dengan pekerja industri lainnya. Kasus yang sering terjadi adalah jarum jarum, goresan, dan penyakit menular. Implementasi K3RS tentu saja ditentukan oleh kebijakan oleh rumah sakit oleh hukum dan peraturan yang berlaku. Tujuan dari penelitian ini adalah untuk melihat bahwa ada hubungan antara pengetahuan dan sikap dengan kepatuhan terhadap penggunaan PPE. Studi ini menggunakan metode analisis kuantitatif dengan desain studi cross-sectional. Penelitian ini dilakukan pada bulan November-Januari di Rumah Sakit Tangerang Selatan. Populasi dari sumber penelitian ini adalah semua Pekerja Rumah Sakit Tangerang Selatan, populasi sasaran adalah perawat di Rumah sakit Tangeranga Selatan. Ukuran sampel penelitian ini adalah 100 sampel. Mengambil sampel dengan menggunakan teknik random sampling. Analisis data penelitian menggunakan chi-square. Berdasarkan analisis, ditemukan bahwa semua variabel independen terkait dengan variabel tergantung. Termasuk, pengetahuan p-value 0.000 dan sikap dengan p-value 0.000. Diperkirakan bahwa rumah sakit akan melakukan sosialisasi rutin penggunaan PPE untuk perawat. Perawat Harus Lebih Mematuhi Penggunaan PPE.

Kata Kunci: Kepatuhan, pengetahuan, sikap, perawat, PPE

#### **ABSTRACT**

Results from the National Safety Council report show that the incidence of workplace accidents in hospitals is 41% higher compared to other industrial workers. Frequent cases are needle needles, scratches, and infectious diseases. The implementation of K3RS is of course determined by policy by the hospital by applicable laws and regulations. The purpose of this study was to see that there is a relationship between knowledge and attitudes with adherence to PPE use. This study used quantitative analysis methods with a cross-sectional study design. This study was conducted in November-January at South Tangerang Hospital. The population of this research source is all South Tangerang Hospital Workers, the target population is nurses at South Tangerang Hospital. The sample size of this study was 100 samples. Take samples using random sampling techniques. Analysis of research data using chi-square. Based on the analysis, it was found that all independent variables are related to dependent variables. Including, knowledge p-value 0.000 and attitude with p-value 0.000. It is estimated that the hospital will conduct routine socialization of the use of PPE for nurses. Nurses should be more compliant with the use of PPE.

Keywords: Compliance, knowledge, attitudes, nurses, PPE

### INTRODUCTION

Disobedient behavior or disobedience while at work is a form of unsafe act by workers. According to the Domino Theory by Heinrich, unsafe actions from humans (unsafety acts) can endanger the workers themselves and other people around them and can end in accidents, one of which is workers who do not use safety equipment while working (1). The implementation of K3RS is of course

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determined by the policy of the hospital by the applicable laws and regulations. It is necessary to convey the latest information that must be known by nurses in controlling patient safety with the increasing progress of technology today. Based on the results of the National Safety Council report showing that the occurrence of work accidents in hospitals is 41% greater than other industrial workers. Cases that often occur are needle sticks, scratches, and infectious diseases. In a study conducted at a hospital in Cianjur, it was stated that the number of nurses who had needle stick injuries and other sharp objects was quite high, namely 61.34% (2).

Based on data from the International Labor Organization (ILO), Indonesia ranks second lowest in the world in implementing OSH, which ranks 152 out of 153 countries. It is known that out of 15,043 large-scale companies in Indonesia, only about 317 companies (2.1%) apply SMK3 and work safety standards (3).

The use of PPE in nurses is still categorized as lacking in its implementation and application. Based on research that has been conducted (Siburian, 2012) it is explained that there is still a lack of attitude among health workers, especially nurses using PPE when serving patients, explained by the number 53.30% of nurses with a negative attitude. Another research conducted (Ningsih, 2014) Knowledge in the use of personal protective equipment in the workforce aims to find out all the impacts that occur if a worker does not use Personal Protective Equipment (PPE). Good knowledge will also have a good impact, on the contrary, if a worker does not understand the use of personal protective equipment it will have a bad impact on the worker (4).

Based on the results of observations made by researchers at RSU Tangerang Selatan, researchers assess that there are still many nurses or hospital staff who do not prioritize the correct use of PPE and apply it properly. The visits I conducted in several rooms such as the Emergency Room, ICU, PICU, NICU, and Poly Clinic found that nurses showed an attitude of not caring about wearing the correct PPE such as using masks that are always not worn when going in and out of the room, using protective clothing (gown) which not all nurses wear when in the outpatient installation room and protective shoes that only wear ordinary sandals. Based on the background and observations above, the researcher is interested in researching "The Relationship between Attitudes and Knowledge of Nurses on Compliance with the Use of Personal Protective Equipment (PPE) in Outpatient Installations at South Tangerang Hospital".

#### **METHOD**

This research is a quantitative study with a cross-sectional study design. This research was conducted from November 2022 to January 2023 at the South Tangerang Regional General Hospital. The source population is all workers at the South Tangerang Regional General Hospital, the target population is nurses at the South Tangerang Regional General Hospital.



The sample size in this study was 100 samples with a sampling technique, namely Simple Random Sampling. The dependent variable in this study was Compliance with the use of Personal Protective Equipment (PPE) as measured by questions regarding compliance with the use of PPE. The independent variables of this study are attitudes, knowledge, and gender. Which is measured by a questionnaire instrument, with several questions regarding attitudes, and knowledge, This instrument has been tested for validity and reliability.

The data that has been collected is then processed and analyzed descriptively by analytic univariate, and bivariate. Descriptive analysis looks at the proportion, mean, and median, while the analysis looks at the chi-square, to see if the strength of the relationship is measured by the odds ratio. This research has received ethical clearance from the Health Research Ethics Committee, Faculty of Public Health, Muhammadiyah University, Jakarta with the number listed.

# RESULTS AND DISCUSSION

The results of the univariate analysis of gender variables showed that 30 (40%) were male nurses while 45 (60%) were female nurses. it is known that nurses at the age of < 17-25 are 59 (78.7%). While nurses aged > 26-35 were 16 (21.3%) nurses. most of the nurses complied with the use of PPE as many as 43 (57.3%) nurses and quite far with nurses who did not comply with the use of PPE as many as 32 (42.7%). nurses with good knowledge were 36 (48%). While nurses with poor knowledge were 39 (52%). nurses who behaved well were 42 (63%). While nurses who behave not well are 33 (37%).

**Table 1. Frequency Distribution** 

| Variable           | Category | Frequency |    | Percentage |
|--------------------|----------|-----------|----|------------|
| Gender             | Man      |           | 45 | 60.0       |
|                    | Women    |           | 30 | 40.0       |
| Age                | <17-25   |           | 59 | 78.7       |
|                    | >26-35   |           | 16 | 21.3       |
| PPE Use Compliance | Obey     |           | 43 | 57.3       |
|                    | Not obey |           | 32 | 42.7       |
| Knowledge          | Good     |           | 36 | 48.0       |
|                    | Not good |           | 39 | 52.0       |
|                    | Good     |           | 42 | 63.0       |
| Attitude           | Not good |           | 33 | 37.0       |

Based on the bivariate results, it was found that there was a significant relationship between knowledge and compliance with the use of PPE with a P value of 0.000. From the analysis, the OR value = 135.625 (95% CI = 16.048-1146.205) was obtained, meaning that nurses with good knowledge had a 0.000 times greater chance of being compliant with the use of PPE compared to nurses with poor knowledge. Based on the bivariate results obtained there is a significant relationship between attitude and compliance with the use of PPE with a P value of 0.000. From the results of the analysis obtained an OR value = 33.300 (95% CI = 9,200-120,528), meaning that nurses who have a good attitude have



a 0.042 times greater chance of being compliant with the use of PPE compared to nurses who are not good.

Table 2. Distribution of The Relationship between The Independent Variables and The Dependent Variable

| Variable  | p-value | Description             |
|-----------|---------|-------------------------|
| Knowledge | 0.000   | There is a relationship |
| Attitude  | 0.000   | There is a relationship |

The results of the analysis showed a relationship between attitude and compliance with the use of PPE. most of them were compliant with the use of PPE in nurses who had a good attitude, namely 37 (88.1%), compared to nurses who were not good, namely 6 (18.2%). From the results of the analysis obtained an OR value = 33.300 (95% CI = 9,200-120,528), meaning that nurses who have a good attitude have a 0.000 times greater chance of being compliant with the use of PPE compared to nurses who are not good.

The results of research conducted by Gladys A., et al (2016), that respondents who have more negative attitudes (62.5%) respondents have negative behavior in using PPE, compared to respondents who behave positively (37.5%). Meanwhile, there were more respondents with a positive attitude (82.6%) of whom had good behavior in using PPE, compared to respondents who behaved less (17.4%) in use. So it can be seen that there is a very significant relationship between attitude and behavior in using PPE in health workers at Banjarbaru Hospital with the Fisher's Exact statistical test results obtained value (p-value = 0.0001).

The results of the analysis of the relationship between knowledge and compliance with the use of PPE show that nurses with good knowledge are 35 (97.2%), compared to nurses with poor knowledge, namely 8 (20.5%). The results of the analysis obtained an OR value = 135.625 (95% CI = 16.048-1146.205), meaning that nurses with good knowledge have a 0.000 times greater chance of being compliant with the use of PPE compared to nurses with poor knowledge. The results of this study are in line with the research of Saputro (2015), it is known that there is a relationship between knowledge and the use of PPE (p-value = 0.002). However, in Putra's research (2012), it was found that there was no relationship between knowledge and the use of personal protective equipment (p = 0.465) (5).

# **CONCLUSION AND SUGGESTIONS**

There is a significant relationship between knowledge and adherence to the use of PPE in nurses at Tangerang Selatan Hospital in 2023. There is a significant relationship between attitudes and adherence to the use of PPE in nurses at the Tanggerang Selatan Hospital in 2023.

Suggestions, Carry out regular socialization of the use of PPE and provide education regarding the risks that occur to create nurses who have good knowledge and adherence to the use of PPE. Nurses

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must be more compliant with the use of PPE by participating in OSH training on the use of PPE that has been provided by the hospital.

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