

The Relationship Between Motivation And Nurse Compliance In The Use Of Personal Protective Equipment In The Internal Medicine Room Of Blambangan Hospital Banyuwangi

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ARTICLE INFORMATION

ABSTRACT

Article history Received (7 July 2024) Revised (12 July 2024) Accepted (20 July 2024)	Introduction : Disease transmission can be at risk for all health workers if during the action the patient does not pay attention to preventive measures by using PPE. The application of the use of personal protective equipment that is not optimal can be caused by the low compliance factor of the nurse herself in doing it. The purpose of the study was to determine the relationship between motivation and nurse compliance in the use of personal protective equipment in the Internal Medicine
Keywords	Room of Blambangan Hospital Banyuwangi in 2024.
Motivation, compliance, PPE	Methods : The research design used is analytical by design cross sectional. The population in this study is all nurses in the Internal Medicine Room of Blambangan Hospital Banyuwangi 2024, as many as 34 people, with techniques total sampling. Research instruments using questionnaire sheets are then analyzed using tests rank spearman. Results of the study found that most of the 26 respondents (76.5%) in the high motivation category, and most of the 28 respondents (82.4%) in the compliant category used PPE. Calculation results by test rank spearman, obtained the value $\rho = 0.000 < \alpha 0.05$, The Spearman rank test resulted in a value of $\rho = 0.000 < \alpha 0.05$, indicating that there is a relationship between motivation and nurse compliance in the use of personal protective equipment in the Internal Medicine Room of
	Blambangan Banyuwangi Hospital in 2024. With a high level of closeness (r = 0.835).
	Conclusion : Seeing the results of this study, nurses need to increase usage PPE in providing nursing care according to SOPs set by the hospital

Introduction

Nurses are human resources in the hospital environment who provide health services to patients and have direct interaction with patients. Nurse compliance in using Personal Protective Equipment (PPE) is one way to prevent the incidence of infection and disease transmission in nurses (Fitriani, Anggraheni, & Setyawan, 2018). Disease transmission can be at risk to all health workers if they do not pay attention to preventive measures by using PPE while taking measures on patients. Lack of motivation or compliance in using Personal Protective Equipment (PPE) can cause disease transmission from patients (Kasim, Mulyadi, & Kallo, 2017).

In a study conducted by the World Health Organization (WHO), the highest frequency of nosocomial infections was reported from hospitals in the Eastern Mediterranean region (11.8%) (Al Anshori, 2022). According to a survey of 11,282 patients across 183 hospitals in the US, 4% of patients had at least one form of HAI infection. The Ministry of Health reports that the rate of HAI infections in Indonesia was 15.74%, significantly higher than the rate in developed nations, which is between 4,8 and 15.5% (Rahmawati & Dhamanti, 2021). The Indonesian This is an Open Access article





National Nurses Association (PPNI), during the Covid-19 pandemic, recorded 274 nurses died and more than 15,000 others were exposed to the Covid-19 virus (Guritno & Krisiandi, 2021). In East Java in 2021, there were 426 health workers (health workers) exposed to Covid-19 nosocomial infection, 191 of whom were nurses, 113 doctors and the rest were other supporting health workers. The most nurses who died due to Covid-19 nosocomial infection in East Java were from the city of Surabaya, namely 28 people (Azmi, 2021). In Banyuwangi Regency, in 2021, there were 3 Doctors Died and 140 Health Workers in Banyuwangi Exposed to COVID-19. Meanwhile, there are 9 cases of nosocomial infection at Blambangan Hospital infected with covid 19 (Fanani, 2021). Based on a preliminary study in the second week of June 2023 conducted in the Internal Medicine Room of Blambangan Hospital Banyuwangi from 10 nurses, 7 people used PPE according to SOPs, and 3 people used PPE not according to SOPs. Of the 3 people, 1 person was exposed to nosocomial infections.

Nurses are one of the health human resources who interact with patients the longest. To protect yourself from exposure to nosocomial infections, personal protective equipment (PPE) is needed. Personal protective equipment is equipment needed to protect health workers in danger at work, minimize disease transmission and accelerate patient recovery. The application of the use of personal protective equipment that is not optimal can be caused by the low compliance factor of the nurse herself in doing it. Obedience can be interpreted as a form of response to an order, recommendation, or accuracy through a concrete activity (Nahrisah, Ardilla, & Riskina, 2021). The consequences of failing to use personal protective equipment (PPE) include a rise in workplace mishaps and the possibility of patients' diseases spreading to medical personnel and vice versa (Prihandani, Pradiptha, & Dermana, 2022). In hospital treatment rooms, PPE is used in an attempt to promote occupational safety and health for nurses. Alternative preventive strategies for nurses to safeguard themselves against the risk of disease transmission while interacting with patients include wearing personal protective equipment, such as gloves, masks, and glasses. Personal protective equipment must be used when carrying out actions that are at risk of contact with body fluids, secretions, blood, incomplete skin mucus and contaminated objects (Berkanis, Anwar, & Gerontini, 2019). Obedience requires motivation, motivation and obedience are directly proportional in the sense that the higher the motivation that exists within oneself, the higher the level of compliance (Kasim et al., 2017).

Efforts can be made by the hospital in order to increase nurse motivation by providing PPE equipment and conducting periodic treatment, disciplining health workers by providing sanctions in the form of reprimands and writing for those who do not apply PPE correctly and informing SOPs for the use of PPE in each room.

Based on the background description above, the researcher is interested in conducting research with the aim of determining the relationship between motivation and nurse compliance in the use of personal protective equipment in the internal medicine room of Blambangan Banyuwangi Regional Hospital in 2023.

Methods

The design of this research is the whole of planning to answer the research questions and anticipate some difficulties that may arise during the research process. In this study, the design used is correlational, which is to examine the relationship between variables (Nursalam, 2020).

The research method used is *a correlational* method with *a cros sectional* approach. The cross-sectional research design is a study to study the dynamics of the correlation between risk factors and effects, by means of an observation approach or data collection at a time (*print time approach*). This means that each research subject is only observed and measurements are made on the status of the character or variables of the subject at the time of examination (Notoatmodjo, 2018).





The sampling technique is a sample selection process used in research from the existing population, so that the number will represent the entire existing population (Jaya, 2020). Sampling was carried out on *a total sampling* basis. The sample used in this study was all nurses in the RPD room of Blambangan Banyuwangi Hospital, 35 respondents. The instrument used in this study used a compliance and motivation questionnaire with a rankspearman analysis test.

Results

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The results of the research were obtained

Table 1.Characteristics of respondents based on age in the Internal Medicine Room ofBlambangan Hospital Banyuwangi in 2023

<u> </u>			
N	o Age	Frequency	Percentage
1	17-25 years	6	17,6%
2	26-35 years	12	35,3%
3	36-45 years	14	41,2%
4	46-55 years	2	5,9%
	Total	34	100%

Based on table 1 above, it shows that almost half of the 14 respondents (41.2%) were aged 36-45 years

Table 2.	Characteristics of respondents based on gender in the Internal Medicine Room of		
Blambangan Hospital Banyuwangi in 2023			

No	Gender	Frequency	Percentage
1	Law Law	10	29,4%
2	Woman	24	70,6%
	Total	34	100%
-			

Based on table 2 above, it shows that most of the 24 respondents (70.6%) were female.

Table .3	The characteristics of respondents are based on the level of education in the Internal
Medicine	Room of Blambangan Hospital Banyuwangi in 2023.

No.	Education Level	Frequency	Percentage
1	D3	7	20,6%
2	S1/Profesi	27	79,4%
	Total	34	100%

Based on table 3 above, it shows that most of the 27 respondents (79.3%) have S1 education.

Table 4. Characteristics of respondents based on Employment in the Internal Medicine Room of Blambangan Hospital Banyuwangi in 2023.

No	Work	Frequency	Percentage
1	Head of Room	1	2,9%
2	Wakil Karu	1	2,9%
3	Managing Nurse	32	94,2%
	Total	34	100%

Based on table 4 above, it shows that almost all 32 respondents (94.2%) are implementing nurses.

Table 5.The characteristics of respondents are based on the length of work in theInternal Medicine Room of Blambangan Hospital Banyuwangi in 2023.

	No	Length of Work	Frequency	Percentage
	1	< 5 years	6	17,6%
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2	5 – 10 years	16	47,1%
3	> 10 years	12	35,3%
	Total	34	100%

Based on table 5 above, it shows that almost half of the 16 respondents (47.1%) worked 5 – 10 years.

Table 6.	haracteristics of respondents based on Motivation of nurses in the Inter-	rnal
Medicine Roor	of Blambangan Hospital Banyuwangi in 2023.	

No	Motivation	Frequency	Percentage	
1	Tall	26	76,5%	
2	Кеер	8	23,5%	
3	Redah	-	-	
	Total	34	100%	

Based on table 6 above, it shows that most of the 26 respondents (76.5%) are in the high motivation category.

Table 7.Characteristics of respondents based on compliance with the use of PPE inthe Internal Medicine Room of Blambangan Hospital Banyuwangi in 2023.

	0	1 7	0
No	PPE compliance	Frequency	Percentage
1	Obedient	28	82,4%
2	Disobedient	6	17,6%
	Total	34	100%

Based on table 5.7 above, it shows that most of the 28 respondents (82.4%) of the compliant category use PPE.

Table 8The relationship between motivation and nurse compliance in the use of persona	l				
protective equipment in the internal medicine room of Blambangan Hospital Banyuwangi in 2023					

Motivation	PPE compliance		Total	
MOUVALION	Obedient	Disobedient	Total	
Tall	26	0	26	
I all	(76,5%)	(0%)	(76,5%)	
Voor	2	6	8	
Кеер	(5,9%)	(17,6%)	(23,5%)	
Total	28	6	34	
Total	(82,4%)	(17,6%)	(100%)	

Based on the table above, it can be seen that most of the 26 respondents (76.5%) nurses have high motivation with the level of compliance with PPE compliance in the compliant category. Test Results Table *rank spearman*

Table 9.

Correlations

			Motivatio	
			n	Compliance
Spearman's	Motivation	Correlation Coefficient	1,000	,835**
rho		Sig. (2-tailed)		,000
		Ν	34	34
	Compliance	Correlation Coefficient	,835**	1,000
		Sig. (2-tailed)	,000	
		Ν	34	34

**. Correlation is significant at the 0.01 level (2-tailed).





Based on the results of the spearman *rank test* analysis using SPSS with a significant level of $\alpha = 0.00$ (5%), a value of $\rho = 0.000 < \alpha 0.05$ was obtained, then the alternative hypothesis was accepted and the null hypothesis was rejected, meaning that there was a relationship between motivation and nurses' compliance in the use of personal protective equipment in the Internal Medicine Room of Blambangan Banyuwangi Hospital in 2023. The correlation value (r) of 0.835 which advances the correlation power is very strong with the direction of the relationship that occurs is positive. Because the value (r) is positive, there is a tendency that the higher the motivation, the more obedient they will be to use PPE.

Discussion

Motivation of Nurses to Use PPE in the Internal Medicine Room of Blambangan Hospital

Table 5.1 above shows that the majority of the 26 respondents (76.5%) belong to the high motivation category. This group is represented by nurses who consistently wear masks when performing actions on patients and who are legally required to prioritize PPE SOPs appropriately and correctly.

Motivation is a feeling or thought that encourages a person to do work in applying universal precaution. Motivation is an effort to create stimulation, encouragement to a person or group of people who are willing to do and cooperate optimally to carry out something that has been planned to achieve the goals that have been set (Kustriyani, Kharisa, & Arifianto, 2018).

The results of the study showed that the motivation of nurses in the Internal Medicine Room of Blambangan Hospital was in the high category. This shows that there is awareness from nurses to always behave and behave in a healthy and safe manner in taking all necessary actions while caring for patients in the Internal Medicine Room. Most nurses are required to use personal protective equipment (PPE) to ensure their safety and health as best as possible because they understand that the risk they face when providing nursing care is the possibility of transmission from patient to nurse or from nurse to nurse. In addition, nurses who fail to use PPE appropriately and correctly while carrying out nursing duties will face consequences. Sanctions can be in the form of a written or verbal reprimand from the administration of Blambangan General Hospital, Banyumangi Regency.

Based on table 5 above, it shows that almost half of the 16 respondents (47.1%) worked 5 – 10 years. The length of an employee's tenure is correlated with his or her level of expertise, knowledge, and work ability. The longer a person's working life, the more work experience, knowledge, and skills he or she will gain (Dewi & Suartina, 2022).

One of the factors that motivates nurses to use PPE is the length of work. Nurses who have long work experience in hospitals, of course, will have a high awareness to keep themselves from being infected or contracting a disease. Therefore, the longer nurses work, the more experience they get, the more workers will care about their health, such as using PPE properly and correctly

The high motivation carried out by nurses in using PPE is in line with the results of research conducted by (Berkanis et al., 2019), out of 35 people as many as 27 people (77.1%) have motivation in using PPE. The reason for the high level of work motivation among nurses is that, in general, respondents want to reach their full potential and succeed in their careers, which encourages them to carry out their responsibilities in accordance with the guidelines and directions of hospital SOPs, including wearing personal protective equipment.

Another factor that affects motivating nurses to use PPE is the type of work. Based on table 4 above, it shows that almost all 32 respondents (94.2%) are executive nurses. This shows that the role of the implementing nurse is to provide health services in the form of comprehensive nursing care which includes providing nursing care, providing direct assistance to those who experience problems with the need for a sense of security. Thus, the implementing nurse is



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always in direct contact with the patient and the patient's family every day. In order to create a sense of security for both nurses and patients and patients' families in providing nursing care, there needs to be a high motivation from nurses to use PPE according to the SOPs that apply in the internal medicine room.

Nurse Compliance Using PPE in the Internal Medicine Room of Blambangan Hospital

Based on table 7 above, it shows that most of the 28 respondents (82.4%) of the compliant category use PPE. The factors that affect the level of compliance are everything that can have a positive effect. Factors that affect compliance can be categorized into internal factors, namely the characteristics of the nurse itself (age, gender, religion, education, marital status, personality, attitude, ability, perception and motivation) and external factors (characteristics of organizations, groups, work and environment) (Rinawati, 2021).

The results of the study showed that the use of personal protective equipment (PPE) by nurses was relatively compliant. Hospital management has determined that the use of personal protective equipment (PPE) in accordance with standard operating procedures (SOPs) is recommended to ensure the health and safety of nurses. Individuals who have understood this provision can be used to measure nurses' compliance in using this PPE. Thus, the use of personal protective equipment (PPE) before handling patients is one way to reduce potential risks, as well as a way for nurses to act professionally when performing medical procedures and to ensure their safety and security in the workplace.

Based on table 3 above, it shows that most of the 27 respondents (79.3%) have a bachelor's degree in Nursing. The level of education determines a person's understanding of the knowledge acquired. Higher education levels will make it easier to receive information so that more knowledge will be possessed and the more they will show their compliance to use PPE properly and correctly (Fatmawati, Priyanto, & Margowati, 2021). All respondents who work in the Internal Medicine Room of the Hospital have a higher education, especially health education. With the education they have today, making it easier for nurses to understand well the risks that will be obtained if they do not comply with the use of PPE. There is a warning or reprimand from the hospital administration, or the possibility of getting sick, making nurses believe that wearing personal protective equipment (PPE) is important. This is also influenced by the desire of nurses to use PPE and the existence of SOPs that must be complied with by nurses. This result is in accordance with research conducted by (Kristina, Artini, & Dewi, 2022), where most respondents had a category of compliance with the use of personal protective equipment as many as 95 people (64.2%). Meanwhile, a small part of them are in the non-compliant category as many as 53 people (35.8%).

The relationship between motivation and nurse compliance in the use of personal protective equipment in the Internal Medicine Room of Blambangan Hospital Banyuwangi in 2023

Based on the results of the spearman rank test analysis using SPSS with a significant level of α = 0.00 (5%) obtained a value of ρ = 0.000 < α 0.05, then the alternative hypothesis is accepted and the null hypothesis is rejected, meaning that there is a motivational relationship with nurse compliance in the use of personal protective equipment in the Internal Medicine Room of Blambangan Hospital Banyuwangi in 2023. With the category of high relationship closeness (r = 0.835). Based on the table above, it can be seen that most of the 26 respondents (76.5%) nurses have high motivation with the level of compliance with PPE compliance in the compliance category

A health worker uses personal protective equipment (PPE) in every action that endangers himself or his patients, leaders should monitor and evaluate the behavior of nurses in the use of





PPE. The use of personal protective equipment (PPE) by health workers is influenced by their compliance with the measures that have been set. It is very important for hospitals to help health workers to encourage nurses to follow SOPs. Hospital administrations can also increase motivation and compliance by offering a reward system, standards-compliant PPE facilities and infrastructure, and focused monitoring to help nurses become more proficient in enforcing current rules. This result is in accordance with research conducted by (Kustriyani et al., 2018), namely there is a significant and positive relationship between nurse motivation and compliance with the use of personal protective equipment (handscoon and masks) in the inpatient installation of RSUD dr. Loekmono Hadi Kudus with a moderate level of relationship

The results of this study are in line with research conducted by (Kristina et al., 2022) that 140 respondents (94.6%) had high motivation and most of the respondents had compliance with the use of personal protective equipment as many as 95 people (64.2%) The results of the statistical test with the correlation of Rank Spearman obtained a p value of 0.002, which means that there is a relationship between motivation and compliance with the use of PPE.

Conclusion

Nurses have high motivation of 26 respondents (76.5%) in the use of personal protective equipment at Blambangan Banyuwangi Hospital and most of the nurses are compliant in the use of protective equipment amounting to 28 respondents (82.4%).

The results of the *spearman rank test* analysis using SPSS with a significant level of $\alpha = 0.000$ (5%) obtained a value of $\rho = 0.000 < \alpha 0.05$ which means that there is a relationship between motivation and nurses' compliance in the use of personal protective equipment in the Internal Medicine Room of Blambangan Banyuwangi Hospital in 2023, with closeness having a positive direction with a value of r = 0.835, meaning that the closeness of the relationship is very strong.

Ethics approval and consent to participate

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