

## Analysis of the Factors Affecting Nurse Compliance to Gived Medicine with Procedural at Yowari Public Hospital Sub Province Jayapura

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### ABSTRACT

**Background:** Nurse as the provider of nursing services is one of the activities carried out, namely drug administration which is basically a collaboration between doctors, pharmacists and nurses. Nurses who provide drugs to patients are expected to have basic abilities regarding drugs and principles in drug administration, namely the principle of 6 right, namely true patients, correct medication, correct dosage, correct route, correct time and correct documentation, so that nurses are expected to comply within principles of drug administration.

**Research objectives:** factors that influence nurse adherence in the principle of drug administration in Yowari District Hospital Jayapura Regency

**Research Method:** Analytical cross sectional study design. The population was 163 nurses who served in the inpatient room as a sample with total sampling. Data were obtained using questionnaires and analyzed using chi square test and logistic binary regression.

**The results of the study:** Factors that have no effect on the principle adherence of drug administration at Yowari Regional General Hospital are age ( $p$ -value = 0.095; RP = 0.689; CI95% = (0.476 - 0.997), nurse education ( $p$ -value = 0.054; RP = 0.639; CI95% = (0.440 - 0.928) and the gender of the nurse ( $p$ -value = 0.475; RP = 0.839; CI95% = (0.564 - 1.250). While the factors that influence the adherence to the principle of drug administration in Yowari Regional General Hospital are years of service ( $p$ -value = 0.009; RP = 1.875; CI95% = (1.149 - 3.063), knowledge ( $p$ -value = 0.931; RP = 1.058; CI95% = (0.702 - 1.596), attitude ( $p$ -value = 0.000; RP = 2.194; CI95% = (1.558 - 3.095), supervision of the head of the room ( $p$ -value = 0.000; RP = 10.548; CI95% = (4.834 - 23.018),

punishment ( $p$ -value = 0.000; RP = 2.123; CI95% = (1.442 - 3.123). Factor dominant of Nurse compliance in the true principle of drug administration is supervision of the head of the room ( $p$ -value = 0.000; RP = 41.202 (15.504 - 109.494).

**Keywords:** Compliance, Principles of Giving Medicine, Nurses

### INTRODUCTION

Medication is the main therapeutic tool that doctors use to treat clients who have health problems, even though the drug benefits the client, the drug also causes serious side effects and risks causing harmful effects. The nurse is responsible for understanding drug work and side effects caused, giving the right medicine, monitor client responses, and help clients use them correctly and provide information to clients (Wahyuni, 2015).

According to the World Health Organization (WHO) events are not expected in health services in various countries, where 70% of incidents of medication errors can cause permanent disability in patients (WHO, 2015). Based on a national map of incidents of patient safety at the Persi congress, errors in administering drugs were ranked first (24.8%) out of the 10 reported incidents (Ministry of Health, 2015).

Nurses as nursing care providers are one of the activities carried out, namely the administration of drugs which is basically a collaboration between doctors, pharmacists and nurses. Nurses who give drugs to

patients are expected to have basic abilities regarding drugs and principles in the administration of drugs, namely principle 6 right, including true patient, correct medication, correct dosage, correct route, correct time and correct documentation. The nursing plan must include the plan for administering drugs depending on the assessment of knowledge about work and drug interactions, drug side effects, length of work and doctor's program (Widianintyas, 2015).

According to Cahyono (2015), revealed that there is a relationship between the level of nurse knowledge and compliance in patient safety practices in drug administration, where the higher the level of knowledge of nurses about patient safety, the better patient safety practices in nursing care are correct. In accordance with preliminary data collection on the implementation of the principle of drug administration in Yowari Hospital Jayapura Regency, there is no standard operating procedure (SPO) and drug delivery diary, so that the correct principles of drug administration are unknown. Based on these problems, the authors are interested in conducting a study entitled "Factors that Affect Nurses' Compliance in the Principles of Giving Medication in Yowari Hospital Jayapura Regency".

## MATERIALS AND METHODS

### A. Type of Research

This study is an observational analytic study. Observational analytic research is a study that aims to find relationships between variables by analyzing the data that has been collected. This study uses the Cross Sectional approach, which is by measuring the independent variables and dependent variables only once at the same time (Notoatmodjo, 2012).

### B. Place and time of research

#### 1. Research Place

The place of research is at Yowari General Hospital, Jayapura Regency.

#### 2. Research Time

The time of the study was carried out for one month in January 2018.

## C. Population and Samples

### 1. Population

Population is a generalization area consisting of objects / subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions drawn (Sugiyono, 2013). The population in this study were all nurses in Yowari Hospital as many as 206 people and nurses who served in the inpatient room as many as 163 people.

### 2. Samples

Samples are partially or representative of the population studied (Arikunto, 2010). The sample method used in this study was saturated sampling, ie all nurses working in the inpatient ward were 163 nurses who were actively working.

## RESULTS

### a. Effect of nurse age on adherence to the principle of drug administration

Table 1. The influence of the age of nurses on compliance with the principle of drug administration in Yowari Hospital Jayapura Regency

No	Age	Compliance with the principle of drug administration				Number	
		Not obey		Obey		n	%
		n	%	n	%		
1	< 30 age	46	37,1	78	62,9	124	100
2	≥ 30 age	21	53,8	18	46,2	39	100
Total		67	41,1	96	58,9	163	100
<i>p-value</i> = 0,095; <i>RP</i> = 0,689; <i>CI95%</i> = (0,476 – 0,997)							

Based on Table 1, it shows that of the 124 nurses aged <30 years as many as 46 people (37.1%) were not compliant with the principle of drug administration and as many as 78 people (62.9%) were obedient to the principle of drug administration. The number of 30 respondents aged >30 years, as many as 21 people (53.8%) were not compliant with the principle of drug administration and as many as 18 people (46.2%) obeyed the principle of drug administration. The chi square test results obtained  $p\text{-value} = 0.095 > 0.05$ . This means that there is no influence on the age of the nurse on compliance with the principle of drug administration. The prevalence ratio

test results were obtained Rp. 0.689; CI95% = (0.476 - 0.997) does not include 1 interpreted that age is not a risk factor for compliance with the principle of drug administration.

### b. Effect of nurse education on nurse performance

Table 2. Effect of nurse education on adherence to the principle of drug administration in Yowari Hospital Jayapura District

No	Education	Compliance with the principle of drug administration				Number	
		Not obey		Obey		n	%
		n	%	n	%		
1	D-III nursing	49	37,1	83	62,9	132	100
2	S-1 nursing	18	58,1	13	41,9	31	100
Total		67	41,1	96	58,9	163	100
<i>p-value</i> = 0,054; RP = 0,639; CI95% = (0,440 - 0,928)							

Based on Table 2, it shows that of the 132 nurses who were educated in Nursing D-III as many as 49 people (37.1%) were not obedient in the principle of drug administration and as many as 83 people (62.9%) were obedient to the principle of drug administration. The total of 31 respondents who were educated in Nursing S-I were 18 people (58.1%) were not obedient in the principle of drug administration and as many as 13 people (41.9%) were obedient in the principle of drug administration. The chi square test results obtained  $\rho$ -value = 0.054 > 0.05. This means that there is no influence of nurse education on compliance with the principle of drug administration. The prevalence ratio test results were obtained RP = 0.639; CI95% = (0.440 - 0.928) does not include 1 which is interpreted that education is not a risk factor.

### c. Effect of nurse gender on nurse performance

Table 3. The influence of nurse gender on compliance with the principle of drug administration in Yowari Hospital Jayapura District

No	Sex	Compliance with the principle of drug administration				Number	
		Not obey		Obey		n	%
		n	%	n	%		
1	Male	22	36,7	38	63,3	60	100
2	Female	45	43,7	58	56,3	103	100
Total		67	41,1	96	58,9	163	100
<i>p-value</i> = 0,475; RP = 0,839; CI95% = (0,564 - 1,250)							

Based on Table 4.4, shows that of the 60 nurses who were male as many as 22 people (36.7%) were not obedient in the principle of drug administration and as many as 38 people (63.3%) were obedient in the principle of drug administration. The number of 103 respondents who were female were 45 people (43.7%) were not compliant with the principle of drug administration and as many as 58 people (56.3%) were obedient to the principle of drug administration. The chi square test results obtained  $\rho$ -value = 0.475 > 0.05. This means that there is no influence of the nurse's sex on compliance with the principle of drug administration. The prevalence ratio test results were obtained Rp. 0.839; CI95% = (0.564 - 1,250) does not include 1 interpreted that gender is not a risk factor for compliance with the principle of drug administration.

### d. Effect of nurse's working period on Nurse's performance

Table 4. The influence of the nurse's working period on compliance with the principle of drug administration in Yowari Hospital Jayapura Regency

No	Working period	Compliance with the principle of drug administration				Number	
		Not obey		Obey		n	%
		n	%	n	%		
1	New	53	48,6	56	51,4	109	100
2	Old	14	25,9	40	74,1	54	100
Total		67	41,1	96	58,9	163	100
<i>p-value</i> = 0,009; RP = 1,875; CI95% = (1,149 - 3,063)							

Based on Table 4. it shows that of the 109 nurses whose new service period was 53 people (48.6%) were not compliant with the principle of drug administration and as many as 56 people (51.4%) were obedient to the principle of drug administration. The total of 54 respondents who had a long working period of 14 people (25.6%) were not compliant with the principle of drug administration and as many as 40 people (74.1%) were obedient to the principle of drug administration. The chi square test results obtained  $\rho$ -value = 0.009 < 0.05. This means that there is an influence of the nurse's working period on compliance with the principle of drug administration. The prevalence ratio test results were obtained

RP = 1,875; CI95% = (1,149 - 3,063) includes 1 which is interpreted to mean that the new working period is at risk of non-compliance with the principle of drug administration of 1.875 times higher than nurses who have a long service period.

**e. Effect of nurse knowledge on nurse performance**

**Table 5. Effect of nurses' knowledge on adherence to the principle of drug administration in Yowari Hospital Jayapura District**

No	Knowledge	Compliance with the principle of drug administration				Number	
		Not obey		Not obey			
		n	%	n	%	n	%
1	Less	18	42,9	24	57,1	42	100
2	good	49	40,5	72	59,5	121	100
Total		67	41,1	96	58,9	163	100
<i>p-value = 0,931; RP = 1,058; CI95% = (0,702 - 1,596)</i>							

Based on Table 5, it shows that out of 42 nurses who lack knowledge as many as 18 people (48.6%) are not compliant with the principle of drug administration and as many as 24 people (57.1%) adhere to the principle of drug administration. The number of 121 respondents who had good knowledge as many as 49 people (40.5%) were not compliant with the principle of drug administration and as many as 72 people (59.5%) were obedient to the principle of drug administration. The chi square test results obtained  $p\text{-value} = 0.931 > 0.05$ . This means that there is no influence on nurses' knowledge of compliance with the principle of drug administration. The prevalence ratio test results were obtained 1.058; CI95% = (0.702 - 1,596) with a lower value that does not include 1 which is interpreted that knowledge is risky but not meaningful to compliance with the principle of drug administration.

**f. Effect of nurse attitudes on Nurse's performance**

**Table 6. Effect of nurses' attitudes towards compliance with the principle of drug administration in Yowari Hospital Jayapura Regency**

No	Attitude	Compliance with the principle of drug administration				Number	
		Not obey		Not obey			
		n	%	n	%	n	%
1	Less	33	66	17	34	50	100
2	Good	34	30,1	79	69,9	113	100
Total		67	41,1	96	58,9	163	100
<i>p-value = 0,000; RP = 2,194; CI95% = (1,558 - 3,095)</i>							

Based on Table 6, it shows that of the 50 nurses who lacked attitudes as many as 33 people (66%) were not obedient in the principle of drug administration and as many as 17 people (34%) were obedient in the principle of drug administration. The number of 113 respondents with good attitudes as many as 34 people (30.1%) were not obedient in the principle of drug administration and as many as 79 people (69.9%) were obedient to the principle of administering the drug. Chi square test results obtained  $p\text{-value} = 0,000 < 0,05$ . This means that there is an influence on the attitude of nurses to compliance with the principle of drug administration. The prevalence ratio test results were obtained 2.194; CI95% = (1,558 - 3,095) includes 1 which is interpreted that the attitude of respondents who are less at risk of compliance with the principle of giving drugs is 2.194 times higher than the attitude of respondents who are good.

**DISCUSSION**

1. Effect of the age of the nurse on compliance with the principle of drug administration

The results showed that the age of nurses in Yowari Hospital did not influence the application of the correct principles of drug administration ( $p\text{-value} = 0.095$ ). This research is in line with what was done by Wardana (2015) who revealed that age was not meaningful to the application of the correct principles of drug administration to patients. The age of nurses <30 years old as many as 46 people (37.1%) were not obedient in the principle of drug administration and as many as 78 people (62.9%) were obedient in the principle of drug administration. The number of 30 respondents aged >30 years, as many as 21 people (53.8%) were not compliant with the principle of drug administration and as many as 18 people (46.2%) obeyed the principle of drug administration. This shows that the age of nurses aged <30 years and >30 years has equal opportunities for good or less performance. The absence of

influence can be caused by other factors that influence nurses in the application of the right principles in drug administration because in terms of drug administration does not require heavy physical, but the environment in the hospital such as the attitude and supervision of the head of the room.

Judging from the age limit of a nurse aged > 30 years the oldest is 41 years old and the youngest is 23 years old, so that physically does not affect the performance of nurses who are still in their productive age. The average nurse aged <30 years is a nurse with an employee honor status or contract, so nurses will compete - race to create good performance in order to be considered and a priority in the reception of civil servants. The same thing was done by nurses aged > 30 years, most of whom were civil servants and had an influence on satisfaction and motivation for career divisions that were good and the same - at the same risk of having good performance, so as not to influence the principle of drug administration This is in accordance with the theory proposed by Mangkunegara (2012), that age has an indirect effect on individual behavior and performance. The older a person is, not necessarily able to show intellectual maturity both cognitively and psychomotor when doing work. This is probably due to the personal values of the individual concerned, flexibility and other psychological factors that influence.

## **2. Effect of nurse education on nurse performance**

The results of the study showed that nurses' education in Yowari Hospital did not influence the application of the correct principles of drug administration (p-value = 0.639). The education level of the respondents was the highest number of nurses with Nursing D-III education or 81% of respondents from the total nurses who worked in the inpatient ward. Nurses with Nursing D-III education levels were 49 people (37.1%) were not obedient while nurses who had Nursing S1 as many as 18

people (58.1%) were not obedient in the principle of drug administration. This shows that the proportion of nurses who are educated in D-III Nursing and Nursing S-I show the same opportunities that are not compliant in the correct principle of drug administration.

This research is in line with what was done by Fatimah (2015) which revealed that education was not meaningful to the application of the correct principles of drug administration to patients. This is in line with the research conducted by Masela (2014) that the higher the level of education may not necessarily be attributed to compliance with nurses according to standard operating procedures. Education is formal education that has been obtained by someone. In general the categories of nurses can be distinguished technically and professional nurses. Nurses with diploma nursing education are categorized as technical nurses while nurses with higher education for more than four to six years are called professional nurses, where a professional nurse has experience and level of education longer than diploma so that professional nurses better understand the risks of what done (Haslina, 2011).

There is no influence of education due to the standard operating procedures for applying the correct principles in the administration of medicines that have been made and known by each nurse so that the important thing is the compliance of nurses in the correct principle of drug administration which is a rule followed by nurses with existing work steps. In addition, the education level of the Nurse S1 was mostly D-III Education and participated in the development of HR in Yowari Hospital through education.

## **3. Effect of nurse gender on Nurse's performance**

The results showed that the sex of nurses in Yowari Hospital did not influence the application of the correct principles of drug administration (p-value = 0.475). The highest number of nurses is female (63.8%).

This happens because the nursing profession is generally more attractive to women, considering that the nursing profession is closer to the problems of mother instinct, even though it is under globalization or other reasons such as gender equality or also due to space needs and the development of Science and Technology. Men also began to be considered and taken into account (Nursalam, 2014). This research is in line with what was done by Perwitasari (2012), that gender does not affect the implementation of the right principles in drug administration. 22 nurses in Yowari General Hospital (36.7%) were not obedient in the principle of drug administration and as many as 38 people (63.3%) obeyed the principle of drug administration. The numbers of 103 respondents who were female were 45 people (43.7%) were not compliant with the principle of drug administration and as many as 58 people (56.3%) were obedient to the principle of drug administration.

The results of the study were supported by researchers from Auburn University in 36 hospitals and nursing homes in Colorado and Georgia, USE, in 2002, out of 3216 types of drug administration, 43% were given at the wrong time, 4% were given the wrong drug, of 312 types drug, there was 17% given at the wrong dose. The results of research conducted by the Institute of Medicine in 1999, namely medical errors caused one million injuries and 98,000 deaths a year. And the data obtained by JCAHO also shows that 44,000 of the 98,000 deaths that occur in hospitals each year are caused by medical errors (Kinninger & Reeder, 2003 in Wardana, 2015).

This happens because the sex of a woman or man can make a mistake in giving the drug. Medical errors can occur anywhere in the chain of medicine services to patients, ranging from industry, prescribing, recipe reading, compounding, surrender and supervision to patients. In each link there are several actions, each action has the potential as a source of error.

Every health worker in this chain can contribute to errors caused by human error (Cohen, 2014). Errors made by nurses at Yowari Hospital in administering drugs can be caused by doubts about the drug and drug dosage, nurses inaccuracy, and lack of concentration when giving the drug. All these errors are not directly related to gender.

#### **4. The influence of the nurse's working period on the performance of the Nurse**

The results showed that there was an influence on the working period of nurses in Yowari Hospital in the application of the right principle in drug administration ( $p$ -value = 0.009). Nurses with a new working period of 53 people (48.6%) were not obedient in the principle of drug administration and as many as 56 people (51.4%) obeyed the principle of drug administration. While nurses with a long working period of 14 people (25.6%) were not obedient to the principle of drug administration and as many as 40 people (74.1%) were obedient to the principle of drug administration. In I shows the results of the prevalence ratio test that the new working period is at risk of non-compliance in the principle of drug administration of 1.875 times higher than nurses who have a long service period. This research is in line with previous research conducted by Wardana (2015), that the working period has an effect on nurses in implementing the correct principle of drug administration. The application of appropriate nursing practices should be applied in hospitals in each region, so as to minimize the level of medical errors caused by human error itself in nursing practice, especially in the administration of drugs that can be fatal. Indicators of errors in drug administration, namely: wrong patient, wrong name, wrong time, wrong way, wrong dose, wrong medication, and wrong documentation (Nursalam, 2014).

According to Swanburg (2002) in Mulyatiningsih (2013) states that the longer a person is in clinical service, the better his

clinical appearance will be. Learning experiences during work can develop the ability to make decisions that are manifestations of the integration of reasoning scientifically and ethically which departs from real problems in the field of work. in the working period of 6-10 years it is considered to have experience in working even more so if the work period is >10 years, while the working period of <5 years is the period the nurse seeks a deeper experience in increasing professionalism at work.

A longer working period should have an effect on behavior and performance in carrying out patient safety appropriately, but it can also be the opposite of this as stated by Robbins, (2003) in Mulyatiningsih (2013) that people who have worked long

### **5. Effect of nurse knowledge on Nurse's performance**

The results showed that there was no effect on nurses' knowledge in Yowari Hospital in applying the correct principles in drug administration ( $p$ -value = 0.931). Nurses who lack knowledge as many as 18 people (48.6%) are not compliant with the principle of giving while nurses who have good knowledge as many as 49 people (40.5%) are not compliant in the principle of drug administration. This research is in line with the previous research conducted by Umaternate (2015), that there is no effect of nurses' knowledge in the correct principle in drug administration. Knowledge is the result of knowing and this happens after people do sensing a particular object. Sensing occurs through the five human senses, namely the senses of vision, hearing, smell, taste and touch. Knowledge or cognitive is a very important domain in shaping one's actions (overt behavior) (Prayoto, 2014).

Most nurses have good knowledge (74.2%) so that knowledge is one of the factors in human beings that is crucial in the stage of acceptance of stimuli. In the process of direct perception, people who have experience will always be smarter in responding to everything than those who

have absolutely no experience (Simamora, 2012). Knowledge is an important factor in someone making a decision but not always someone's knowledge can avoid him from undesirable events, for example nurses who have good knowledge do not always carry out patient safety properly because all actions taken are at risk for errors in this case identification of patients it is very important to distinguish patients from one another. This can occur due to fatigue and lack of accuracy in work.

### **6. Effect of nurse attitudes on Nurse's performance**

The results showed that there was an influence on the attitude of nurses in Yowari Hospital in applying the correct principle in administering drugs ( $p$ -value = 0,000). There were 33 nurses (66%) who lacked adherence to the principle of drug administration and 17 people (34%) were obedient to the principle of administering the drug. Whereas 34 people (30.1%) were not obedient in the principle of giving drugs and as many as 79 people (69.9%) obeyed the principle of drug administration. This shows that the attitude of nurses who are equally good increases the compliance in implementing the correct principles of drug administration. The attitude of respondents who are less at risk of compliance with the principle of giving drugs is 2.194 times higher than the attitude of respondents who are good.

The Natasia study (2014) revealed that there was an influence of attitudes towards compliance with the operational standards of procedures. This research is in accordance with the research conducted by Pagala (2017) with the results of the study that attitudes influence nurses' compliance in the implementation according to the operational standard procedures. A good attitude by nurses will carry out better operational standard procedures. Attitude is a form of evaluation or feeling reaction. A person's attitude towards an object is a feeling of supporting or favorable (feeling) and feeling not supporting or

unfavorable (unfavorable) on the object. Attitude is a kind of readiness to react to an object in certain ways (Azwar, 2009 in Virawan, 2014).

According to Nursalam (2014) suggested that attitude is a determinant of behavior. In the form of preparedness for mental preparedness, which is learned in one period of time and organized by experience, and has a certain influence on one's responsiveness to other people, objects, and situations related to it. Attitudes are determined by three components, namely cognitive, affective and behavioral.

The influence of nurses' attitudes is very important in the principle of administering drugs, because with caution is very necessary so that nurses can provide the right medicine. The nurse needs to ascertain whether the drug to be given is on the right track. Nurses also need to consult a doctor if they are not included in the route of administration. Nurses who are lacking or not careful in administering drugs without checking the condition or medical records of patients can have an impact on unwanted events.

Nurses who have a good attitude but are not obedient in the principle of giving drugs properly, this condition indicates that the attitude of nurses in this case does not end in the formation of a behavior, meaning that the positive attitude of the officer is not always realized in the form of positive behavior. This is where the theory put forward by Notoatmodjo (2012), states the attitude as a factor that exists in humans and can cause human tendency to do or behave towards the object at hand

### **7. The effect of head room supervision on Nurse's performance**

The results of the study showed that there was an effect of the supervision of the head of the nurse's ward in Yowari Hospital in the application of the right principle in drug administration ( $p$ -value = 0,000). As many as 61 nurses (76.3%) supervised the head of the room who were not obedient in the principle of drug administration and as

many as 19 people (23.8%) were obedient to the principle of drug administration. The number of 8 respondents who supervised the head of a good room as many as 6 people (7.2%) were not obedient in the principle of drug administration and as many as 77 people (92.8%) obeyed the principle of drug administration.

The highest prevalence ratio test was obtained at 10,548; CI95% = (4,834 - 23,018) which was interpreted that the supervision of the head of the respondent's room who was less at risk for compliance with the principle of drug administration was 10,548 times higher than the supervision of the head of the respondent's room who was good.

This research is in line with the one carried out by Sagala (2017) that supervision influences nurse compliance in implementing the correct principle of drug administration. Supervision by the head of the room toward nurses who are less compliant with the standard of administration in drug administration is more common in nurses who have supervisors who do not support or lack supervision. Supervisors have big responsibilities in the organization / company, because supervisors are people who are directly related to group members. They lead, manage, admonish, direct, give examples, communicate and motivate. Leadership and communication are the main skills that a supervisor must have. Supervisors must be able to create an environment that supports effective communication, stimulates creativity and motivation. Supervisor works as optimal as possible conducive and comfortable working conditions that cover the physical environment, work atmosphere, and the number of sources of resources needed to facilitate the implementation of tasks. Services that lead to patient safety have a lot to do with the role of nurses as service providers. The nurse's ability to provide safe services for patients is influenced by leadership care, training, communication and consultation.

## CONCLUSION

The results of this study can be concluded that the significant and significant factors and the dominant factors that influence nurse compliance in the principle of drug administration are as follows:

1. There is the influence of the nurse's working period on compliance with the principle of drug administration. The prevalence ratio test results were obtained ( $p$ -value = 0.009 RP = 1.875; CI95% = (1,149 - 3,063)
2. There is an influence of nurses' attitudes towards adherence to the principle of drug administration ( $p$ -value = 0,000; Rp. 2,194; CI95% = (1,558 - 3,095).
3. There is the influence of supervising the head of the nurse room on adherence to the principle of drug administration ( $p$ -value = 0,000; RP = 10,548; CI95% = (4,834 - 23,018).
4. There is the influence of nurses' punishment on compliance with the principle of drug administration ( $p$ -value = 0,000 Rp = 2,123; CI95% = (1,442 - 3,123)
5. There is no influence on the age of the nurse on compliance with the principle of drug administration ( $p$ -value = 0.095; RP = 0.689; CI95% = (0.476 - 0.997).
6. There is no influence of nurse education on adherence to the principle of drug administration ( $p$ -value = 0.054; RP = 0.639; CI95% = (0.440 - 0.928).
7. There is no influence of nurse gender on adherence to the principle of drug administration ( $p$ -value = 0.475RP = 0.839; CI95% = (0.564 - 1,250)
8. There is no influence of nurse knowledge on compliance with the principle of drug administration ( $p$ -value = 0.931 Rp. 1.058; CI95% = (0.702 - 1,596).

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