

Analysis Of Factors Affecting The Performance Of Nurses In Raden Mattaher Regional General Hospital Jambi Province

Firza Khairullah Sembiring¹, Kamelia Kaban^{2*}, Maya Sari Mutia³, Ermi Girsang⁴

^{1,2,3,4} Program Study Master Of Public Health Faculty Of Medicine, Dental And Health Sciences
University Prima Indonesia Medan, North Sumatera, Indonesia

*Corresponding Author:

Email : karmilakaban@ymail.com

Abstract

The performance of nurses in hospitals is closely related to reliable, skilled, and professional human resources. Many factors are thought to influence the performance of nurses, namely age, education, length of work, training, motivation, incentives, work environment, and supervision. The purpose of this study was to analyze the factors that influence the performance of nurses. This research is an analytical study with a cross-sectional approach. The research was conducted at Raden Mattaher Hospital, Jambi Province. The study population was 406 people and a sample of 261 people. Sampling by purposive sampling. Data analysis was univariate, bivariate with a chi-square test, and multivariate with multiple logistic regression at a 95% confidence level ($=0.05$). The results showed that the factors that influenced the performance of nurses at the Raden Mattaher Regional General Hospital Jambi Province were education and training ($p=0.000$), motivation ($p=0.000$), incentives ($p=0.020$), and supervision ($p=0.002$). Variables that had no effect were age ($p=0.584$), education ($p=0.786$), length of work ($p=0.421$), and work environment ($p=0.166$). The most dominant variable affecting the performance of nurses is motivation with a value of $Exp(B)/OR = 5.626$, meaning that nurses who have high motivation have a 5.6 times higher chance of good performance than nurses with low motivation. This study concludes that education and training, motivation, incentives, and supervision affect the performance of nurses. The leadership of the Raden Mattaher Hospital in Jambi Province needs to hold regular education and training, provide incentives according to the nurse's responsibilities, the head of the room supervises properly so that it can improve the performance of implementing nurses.

Keywords: Nurse Performance, Training, Motivation, Incentives, Supervision.

I. INTRODUCTION

Human resources (HR) play an important role in hospitals compared to other supporting facilities and infrastructure. One of the human resources in hospitals is nurses who have the highest number reaching 60%-70% of all hospital employees (Nugroho, 2017). Good nurse performance is the answer to the quality of nursing services provided to patients who are currently in treatment. The main key to improving the quality of health services is that nurses have high performance (Effendi & Makhfudli, 2019). Gibson & et al, (2012) explain that there are three groups of variables that affect the behavior of personnel performance in carrying out documentation, and nursing care, namely: individual, organizational, and psychological variables. Individual variables were grouped into sub-variables of ability and background and demographics. Psychological variables consist of sub-variables of perception, attitude, personality, learning, and motivation. While the organizational variables consist of sub-variables resources, leadership, rewards, teamwork, and job design. Based on the performance theory from Gibson above, by the title of this study, the researchers chose individual variables, psychological variables, and organizational variables associated with nurse performance.

Several variables that are important to study are individual variables (age, education, length of work, education and training/training), psychological variables (motivation), and organizational variables (incentives, work environment, supervision). The performance of nurses in hospitals is closely related to reliable, skilled, and professional human resources. Therefore, the reliability, skills, and work professionalism of a nurse will be able to create a better hospital performance climate supported by the hospital management itself and the managerial elements that surround it (Marquis & Huston, 2016). The Raden Mattaher Regional General Hospital is a hospital-owned by the Jambi City government. From the data obtained from the department, the total number of nurses was 549 people consisting of 59 intermediate nurses, 39 junior nurses, 4 first nurses, 136 supervisory nurses, 52 advanced/advanced nurses, 1 executor, 1 learning task, 256 people contract, and a person functional process. The preliminary survey that the researchers conducted by observing the conditions at the Raden Mattaher Regional General Hospital Jambi

Province that problems related to the performance of nurses such as work motivation that still needed to be improved, nurses did not continue with higher education because they felt it was enough to carry out vocational tasks (nurses who have the authority to do their jobs).

Practice nursing with certain limitations), while professional nurses require further education and are expensive. Other problems found were related to the work environment. In a work environment with a leadership style that tends to be authoritarian, the relationship between nurses and colleagues and the leader (head of the room) does not make nurses motivated to excel. The situation of other nurses at the Raden Mattaher Regional General Hospital Jambi Province related to the workability of nurses in carrying out their roles and functions is still lacking. The report of the Head of Nursing at the Raden Mattaher Regional General Hospital Jambi Province in 2020 that the performance of the workability of nurses was 65.7% but had not reached the set target of 80%. This condition can be seen from the documentation of nursing care for the last 3 months showing that only 43.8% of medical records of nursing care are filled. Based on the description above, the researchers are interested in taking the title "Analysis of Factors Affecting Nurse Performance at the Raden Mattaher Regional General Hospital Jambi Province".

II. LITERATURE REVIEW

2.1. Nurse Performance Concept

Performance is the appearance of the work of personnel both quantity and quality in an organization. Performance can be the appearance of individuals or workgroups of personnel. The appearance of the work is not limited to personnel holding functional and structural positions, but also to the entire line of personnel within the organization (Ilyas, 2017). Nurse performance is an activity carried out by nurses in implementing as well as possible an authority of duties and responsibilities to achieve the goals of the profession's main tasks and the realization of the goals and objectives of the organizational unit in providing nursing care (Kuntoro, 2017).

2.1.1. Performance Theory Model

Factors that influence the achievement of performance are the ability factor and the motivation factor. This is by the opinion of Keith Davis in Mangkunegara who formulated that: (a) Human performance is a combination of ability and motivation; (b) Motivation is a combination of attitude and situation; and (c) Ability is a combination of knowledge and skills (Mangkunegara, 2015).

2.1.2. Factors Affecting Performance

Gibson in Ilyas (2017) conveys a performance theory model and analyzes several variables that affect individual behavior and performance. Individual performance is influenced by individual, psychological, and organizational variables. Based on Gibson's theory, several organizational variables (supervision/supervision, resources, organizational structure, job design) and psychological variables (motivation) as variables to measure nurse performance.

2.1.3. Performance Indicator

Nurse performance indicators are variables to measure the performance of activity within a certain time. Indicators that focus on the results of nursing care to patients and the service process are called performance indicators. The nurse's performance can be seen in by role of the nurse's function as a provider of nursing care (Prajawanto, 2018). Nurse performance can be measured based on the implementation of the nursing process including assessment, diagnosis, planning outcomes, implementation, and evaluation. According to Henderson, nurse performance indicators can be seen from the implementation of nursing care standards which are the empowerment of the nursing process including a) Nursing assessment: data in anamnesis, to enforce nursing diagnoses; b) Nursing diagnosis: the patient's response which is formulated based on the data of the patient's health status; c) Nursing planning: prepared before carrying out the Action; d) Implementation or implementation of nursing actions: determined with the intention that the patient's needs are met to the fullest; and e) Nurse Evaluation: carried out periodically from all actions and action plans that are not implemented (Nurjannah, 2019).

2.1.4. Performance Measurement

Performance appraisal is the process of an organization evaluating or assessing the work of employees (Hasibuan, 2018). Performance appraisal is a useful tool not only to evaluate the work of employees but also to develop and motivate employees. The performance appraisal includes all aspects such as ability, craft, discipline, work relations, or special matters according to the field of duty of an employee (Simamora, 2012).

2.2. Nurse Concept

A nurse is defined as a person who nurtures, cares for, protects, and for the sick, injured, and elderly. A nurse is a person who is educated to become a paramedic to provide care for the sick or specifically to explore certain fields of care. Nurses are one of the important and strategic components in the implementation of health services. The nurse comes from the Latin word *nutrix* which means to care for or maintain (Nurkusuma, 2015).

Nurses provide services in the form of nursing care directly to clients (individuals, families, and communities) by their authority (Nursalam, 2017). Nursing care is provided to clients in all health care settings using the nursing process methodology, guided by nursing standards, based on nursing ethics and within the scope of nursing authority and responsibility (Sugiyono, 2018). In general, nurses have the responsibility to provide nursing care/services, increase knowledge and improve themselves as a profession. Providing nursing care to clients who are treated, includes bio-psycho-socio-cultural and spiritual aspects to fulfill their basic needs by using a nursing process approach (Sugiyono, 2018).

III. METHODS

The type of research used is quantitative analytical study research, namely research conducted to obtain explanations to be studied. Quantitative analytic research aims to analyze the factors influencing the performance of nurses at the Raden Mattaher Regional General Hospital, Jambi Province. The research design used was cross-sectional, that is, all research variables were studied simultaneously at the time of the study. This research will be carried out at the Raden Mattaher Regional General Hospital, Jambi Province, which is located at Jln. Lt. Gen. Suprpto No. 31 Telanaipura, Telanaipura District, Jambi City from June 2021 to January 2022. Data collection was carried out in November 2021. The population in this study were all nurses who were in the inpatient room of the Raden Mattaher Regional General Hospital, Jambi Province, as many as 406 people. The sample in this study is part of the population whose size is taken using the Lemeshow formula (Sastroasmoro & Sofyan, 2015) as follows:

$$n = \frac{\{Z_{(1-\alpha/2)}\sqrt{Po(1-Po)} + Z_{(1-\beta)}\sqrt{Pa(1-Pa)}\}^2}{(Pa - Po)^2}$$

Lemeshow formula as follows:

n = Sample size

Z(1 - α /2) = Alpha standard deviation for = 0,05 Z = 1,96

Z(1 - β) = Beta standard deviation for = 0,10 Z = 1,282

Po = The proportion of nurses performance based on Hernika's 2015 research in the Inpatient Room at the Cut Nyak Dhien Meulaboh Hospital, West Aceh Regency, was 45.8% (0.458)

Pa = Estimated nurse performance improvement (0.558).

Pa-Po = The difference in proportion is 0.10 (determined by the researcher).

By using the formula above, the sample size is obtained as follows:

$$n = \frac{\{1,96\sqrt{0,458(1-0,458)} + 1,282\sqrt{0,558(1-0,558)}\}^2}{(558 - 458)^2}$$

n = 261 orang

Based on the above calculation, the minimum sample size is 261 people. Determination or sampling by purposive sampling, namely by selecting a sample of nurses in the inpatient room at the Raden Mattaher Regional General Hospital Jambi Province based on the consideration of the researcher or according to the

inclusion criteria. The sample inclusion criteria are nurses who are on duty in the inpatient room, nurses on duty (shift) in the morning, nurses who are not on leave, can communicate well, and are willing to be respondents. The method of data collection is through validity and reliability tests. The validity test was carried out at H. Abdul Manap Hospital Jambi as many as 26 people.

All questions use the Pearson Product Moment test with an overall correlation value greater than 0.388 which means that all questions are declared valid. The reliability test uses a reliability measurement that is carried out using one-shot where the measurement is only once and the results are compared with other questions or measure the correlation between the answers to questions. The statistical test used is the Cronbach Alpha test. All Cronbach Alpha statistical test results get a value > 0.600 so that all variables are declared reliable. The method of data analysis was carried out through 3 steps, namely univariate analysis to analyze the existing variables descriptively, bivariate analysis to determine the relationship between two variables, namely the independent variable, and multivariate analysis to determine the most dominant factor influencing the performance of nurses in general hospitals. The area of Raden Mattaher, Jambi Province.

IV. ANALYZE AND RESULT.

4.1. Description of Research Site

RSUD Raden Mattaher Jambi Province is a hospital-owned by the Jambi Provincial Government located in the city of Jambi, established in 1948 with type C and joined with the Jambi Army Health Service (DKT). At this time the Raden Mattaher Regional General Hospital has become a place for senior clinical clerkship students of PSPD UNJA who carry out medical professional education. In addition, there are other clinical clerkship students for health worker education, juniors, and other health worker education programs.

Types of infrastructure that directly affect the organization's operations include workspaces, meeting rooms, computer equipment, telecommunications equipment, and transportation equipment. So far, the condition of the infrastructure at Raden Mattaher Hospital in Jambi Province is considered adequate to support performance. Currently, the assets owned are in good condition. The number of health workers at the Raden Mattaher Regional General Hospital is 1,484 people, consisting of 893 civil servants, 580 contract workers, and 11 partners.

4.2. Analysis

4.2.1. Characteristics of Respondents

Based on the results of the study, most of the respondents were female as many as 197 people (75.5%), while 64 people were male (24.5%).

4.2.2. Univariate Analysis

Table 1. Frequency Distribution of Respondents Based on Variables Age, Education, Length of Work, Training, Motivation, Incentives, Work Environment, Supervision, and Performance of Nurses at Raden Mattaher Hospital Jambi Province in 2021

No	Age	f	%
1.	Middle adulthood	221	84,7
2.	Early adulthood	40	15,3
Amount		261	100.0
No	Last education	f	%
1.	D3	163	62,5
2.	S1	98	37,5
Amount		261	100.0
No	Length of working	f	%
1.	1-10 years	156	59,8
2.	>20 years	105	40,2
Amount		261	100.0
No	Education and Training	f	%
1.	Once	173	66,3
2.	Never	88	33,7
Amount		261	100.0
No	Motivation	f	%

1.	High	160	61,3
2.	Low	101	38,7
Amount		261	100.0
No	Incentive	f	%
1.	Adequate	177	67,8
2.	Inadequate	84	32,2
Amount		261	100.0
No	Work environment	f	%
1.	Good	176	67,4
2.	Not good	85	32,6
Amount		261	100.0
No	Supervision	f	%
1.	Good	178	68,2
2.	Not good	83	31,8
Amount		261	100.0
No	Nurse Performance	f	%
1.	Good	175	67,0
2.	Not good	86	33,0
Amount		261	100.0

Table 1. shows that most of the respondents' ages in the early adult category were 221 people (84.7%), and a small portion of the respondents' age in the middle adult category were 40 people (15.3%). Based on education, most of the respondents have D3 education as many as 163 people (62.5%), a small portion with S1 education as 98 people (37.5%). Based on the length of work, most of the respondents worked in hospitals for 0-10 years as many as 156 people (59.8%), a small proportion of respondents worked in hospitals for >10 years as many as 105 people (40.2%). Based on the training, most of the respondents stated that they had attended training/education as many as 173 people (66.3%), a small part stated that they had never attended training/education as many as 84 people (32.2%). Based on motivation, most of the respondents have high motivation as many as 160 people (61.3%), and a few respondents have low motivation as many as 101 people (38.7%).

Based on incentives, most of the respondents stated that the incentives were adequate for as many as 177 people (67.8%), and a small part of the respondents stated that the incentives were inadequate for as many as 84 people (32.2%). Based on the work environment, most of the respondents stated that the work environment was in a good category as many as 176 people (67.4%), a small percentage of respondents stated that the work environment was in a poor category as many as 85 people (32.6%). Based on the supervision, most of the respondents stated that the supervision was in a good category as many as 178 people (68.2%), a small part of the respondents stated that the supervision was in the poor category as many as 83 people (31.8%). Based on the performance of nurses, most of the performance of nurses at the Raden Mattaher Regional General Hospital Jambi Province was in the good category as many as 175 people (67.0%). (33.0%).

4.2.2. Bivariate Analysis

4.2.2.1. The Effect of Age on Employee Performance

Based on the results of research data processing, the effect of age on the performance of nurses at the Raden Mattaher Regional General Hospital Jambi Province can be seen in table 2.

Table 2. Effect of Age on Nurse Performance

No	Age	Nurse Performance				Amount		p-value
		Good		Not good		f	%	
		f	%	f	%			
1	Early Adulthood	150	67,9	71	32,1	221	100,0	0,584
2	Middle Adulthood	25	62,5	15	37,5	40	100,0	

Table 2 shows that of the 221 respondents with good early adulthood, 150 people (67.9%) performed well, and the minority with poor performance was 71 (32.1%). Of the 40 respondents in middle adulthood, the majority of them performed well as many as 25 people (62.5%), the minority with poor performance was 15 people (37.5%). The results of statistical tests using the chi-square test obtained a p-value of $0.584 > 0.05$, meaning that there is no significant effect of age on the performance of nurses at the Raden Mattaher Regional General Hospital Jambi Province in 2021.

4.2.2.2. The Effect of Education on Nurse Performance

Based on the results of research data processing, the effect of education on the performance of nurses at the Raden Mattaher Regional General Hospital Jambi Province can be seen in table 3.

Table 3. The Effect of Education on Nurse Performance

No	Last Education	Nurse Performance				Amount		p-value
		Good		Not good		f	%	
		f	%	f	%			
1	D3	108	66,3	55	33,7	163	100,0	0,786
2	S1	67	68,4	31	31,6	98	100,0	

Table 3 shows that of the 163 respondents with D3 nursing education, the majority of them performed well as many as 108 people (66.3%), and the minority with poor performance was 55 people (33.7%). Of the 98 respondents with a bachelor's degree in nursing, the majority had a good performance as many as 67 people (68.4%), and the minority with poor performance was 31 people (31.6%). The results of statistical tests using the chi-square test obtained a p-value of $0.786 > 0.05$, meaning that there is no significant effect between education on the performance of nurses at Raden Mattaher Hospital, Jambi Province in 2021.

4.2.2.3. The Effect of Work Length on the Nurse Performance

Based on the results of research data processing, the effect of length of work on the performance of nurses at the Raden Mattaher Regional General Hospital Jambi Province can be seen in Table 4 below.

Table 4. The Effect of Working Length on Nurse Performance

No	Length of working	Nurse Performance				Amount		p-value
		Good		Not good		f	%	
		f	%	f	%			
1	0-10 years	108	69,2	48	30,8	156	100,0	0,421
2	>10 years	67	63,8	38	36,2	105	100,0	

Table 4 shows that of the 156 respondents with working years of 0-10 years, the majority performed well as many as 108 people (69.2%), and the minority with poor performance was 48 people (30.8%). Of the 105 respondents with a length of work >10 years, the majority had a good performance as many as 67 people (63.8%), and the minority with poor performance was 38 people (36.2%). The results of statistical tests using the chi-square test obtained a p-value of $0.421 > 0.05$, meaning that there is no significant effect between the length of work on the performance of nurses at Raden Mattaher Hospital Jambi Province in 2021.

4.2.2.4. The Effect of Education and Training on Nurse Performance

Based on the results of research data processing, the effect of education and training on the performance of nurses at the Raden Mattaher Regional General Hospital Jambi Province can be seen in Table 5 below.

Table 5. The Effect of Education and Training on Nurse Performance

No	Length of working	Nurse Performance				Amount		p-value
		Good		Not good		f	%	
		f	%	f	%			
1	Once	151	87,3	22	12,7	173	100,0	0,000
2	Never	24	27,3	64	72,7	88	100,0	

Based on the results of the study, it showed that there was an effect of education and training on the performance of nurses at the Raden Mattaher Regional General Hospital Jambi Province in 2021, $p = 0.000 < 0.05$. The education and training variable (education and training) which has a value of Exp (B)/OR = 4.902 means that nurses who have attended education and training have a 4.9 times higher chance of good performance than nurses who have never attended education and training (training).

According to the researcher, from the results of this study, most of the nurses at the Raden Mattaaher Regional General Hospital, Jambi Province in the category of having attended the training. Nurses who have attended education and training tend to perform well, while nurses who have never attended training tend to perform poorly. This shows that participating in the training will increase the knowledge and skills of nurses in improving their performance. Nurses who have attended the training will certainly provide services to patients according to what they have obtained at the training site. The training will increase the knowledge of individual nurses, will also improve the abilities and skills, and competencies of nurses in providing nursing care.

4.2.2.5. The Effect of Motivation on Nurse Performance

Based on the results of research data processing, the influence of motivation on the performance of nurses at the Raden Mattaaher Regional General Hospital Jambi Province can be seen in Table 6 below.

Table 6. The Effect of Motivation on Nurse Performance

No	Motivation	Nurse Performance				Amount	<i>p-value</i>
		Good		Not good			
		f	%	f	%		
1	High	142	88,8	18,11,3	160	100,0	0,000
2	Low	33	32,7	68	67,3	101	

Based on the results of the study, it showed that there was an influence of motivation on the performance of nurses at Raden Mattaaher Hospital Jambi Province in 2021, $p = 0.000 < 0.05$. The motivation variable that has a value of $\text{Exp(B)/OR} = 5.626$ means that nurses who have high motivation have a 5.6 times higher chance of good performance than nurses with low motivation. Motivation is the most dominant variable affecting the performance of nurses at the Raden Mattaaher Regional General Hospital, Jambi Province. According to the researcher, the results of this study have proven that motivation is the dominant variable for nurses in Raden Mattaaher Hospital, Jambi Province.

Nurses who have high work motivation tend to perform well and vice versa nurses who have low work motivation tend to perform poorly. This is because nurses with low motivation tend to carry out tasks, not on time, lack enthusiasm in providing services to patients, show less dedication as nurses, and have no ambition to provide services to patients (aspirations) well. Conversely, nurses with high motivation tend to have high enthusiasm in carrying out their work in providing nursing care to patients. Always trying to finish the job on time, sure to succeed in every action taken, the salary received as an incentive to do a better job. In addition, encouragement from superiors such as directives every time they carry out work will encourage nurses' motivation to work better. According to research by Suwarno & et al, (2020) salary is very influential on job satisfaction of nurses in hospitals.

4.2.2.6. The Effect of Incentives on Nurse Performance

Based on the results of research data processing, the effect of incentives on the performance of nurses at the Raden Mattaaher Regional General Hospital Jambi Province can be seen in Table 7 below.

Table 7. The Effect of Incentives on Nurse Performance

No	Incentive	Nurse Performance				Amount	<i>p-value</i>	
		Good		Not good				
		f	%	f	%			
1	Adequate	147	83,1	30	16,9	177	100,0	0,000
2	Inadequate	28	33,3	56	66,7	84		

Based on the results of the study, it showed that there was an effect of incentives on the performance of nurses at Raden Mattaaher Hospital Jambi Province in 2021, $p = 0.020 < 0.05$. Incentive variables that have a value of $\text{Exp(B)/OR} = 2.550$ mean that nurses who state incentives are adequate to have a 2.5 times higher chance of good performance than nurses who state incentives are inadequate. According to the researcher, the results of this study have proven that incentives affect the performance of nurses at Raden Mattaaher Hospital, Jambi Province.

Nurses who say that incentives are adequate to have good performance, on the other hand, nurses who state that incentives are inadequate tend to perform poorly. Like nurses who feel that the incentives they receive are small, they are not by the tasks they carry out, there are even some nurses who complain that the

tuition fees are large, but when they work, the incentives they get are not by what they spent in college. Another complaint stated by some nurses was related to the incentive variable, namely, the incentives received every month sometimes not on time, the salary received was not by the workload at Raden Mattaher Hospital Jambi Province. Raden Mattaher Hospital Jambi Province is not sufficient to meet the needs of daily life.

4.2.2.7. Effect of Work Environment on Nurse Performance

Based on the results of research data processing, the influence of the work environment on the performance of nurses at the Raden Mattaher Regional General Hospital Jambi Province can be seen in Table 8 below.

Table 8. The Effect of Work Environment on Nurse Performance

No	Work environment	Nurse Performance				Amount		p-value
		Good		Not good		f	%	
		f	%	f	%			
1	Good	143	81,3	33	18,8	176	100,0	0,000
2	Not good	32	37,6	53	62,4	85	100,0	

Table 8 shows that of the 176 respondents who stated that the work environment was in a good category, the majority had a good performance as many as 143 people (81.3%), the minority with poor performance as 33 people (18.8%). Of the 85 respondents who stated that the work environment was in the unfavorable category, the majority had poor performance as many as 53 people (62.4%), the minority with good performance as 32 people (37.6%). The results of statistical tests using the chi-square test obtained a p-value of $0.000 < 0.05$, meaning that there is a significant influence between the work environment on the performance of nurses at Raden Mattaher Hospital Jambi Province in 2021.

4.2.2.8. The Effect of Supervision on Nurse Performance

Based on the results of research data processing, the effect of supervision on the performance of nurses at the Raden Mattaher Regional General Hospital Jambi Province can be seen in Table 9 below.

Table 9. The Effect of Supervision on Nurse Performance

No	Supervision	Nurse Performance				Amount		p-value
		Good		Not good		f	%	
		f	%	f	%			
1	Good	147	82,6	31	17,4	178	100,0	0,000
2	Not good	28	33,7	55	66,3	83	100,0	

Based on the results of the study, it showed that there was an effect of supervision on the performance of nurses at Raden Mattaher Hospital Jambi Province in 2021, $p = 0.002 < 0.05$. The supervision variable that has a value of $\text{Exp(B)/OR} = 3,500$ means that the nurse who states that the supervision is in a good category has a 3.5 times higher chance of performing well than the nurse who states that the supervision is in the poor category. According to the researcher, the results of this study prove that supervision has a significant effect on the performance of nurses at Raden Mattaher Hospital, Jambi Province. Nurses who state that supervision is good tend to have good performance, and conversely, nurses who state that leadership is not good tend to have poor performance as well. This is because nurses also depend on supervision in giving orders or assignments, whether these tasks are by their abilities and skills or not.

The answers obtained from respondents are that there are still nurses who think that their supervision is not good, they do not control and evaluate the progress of nurses' work, they do not build positive relationships with nurses through effective communication, and they rarely control the presence of nurses. Some respondents think that the head of the room does not explain the details of the team leader's duties. The thing that makes nurses at Raden Mattaher Hospital Jambi Province as much as 68.2% stated that supervision was good, namely the head of the room made a formulation of the assignment system for each nurse, the head of the room supervised and evaluated the quality of nursing care for patients. In addition, the head of the room delegates tasks to nurses according to their abilities. However, some nurses at the Raden Mattaher Regional General Hospital Jambi Province also stated that the head of the room did not build a positive

relationship with nurses through effective communication, there was also the head of the room was authoritarian towards subordinates, making nurses uncomfortable in carrying out their work.

4.3. Multivariate Analysis

To analyze the factors that influence the performance of nurses at the Raden Mattaher Regional General Hospital, Jambi Province, multivariate data analysis was simultaneously carried out using multiple logistic regression through several steps.:

1. Conducting the selection of potential variables to be included as candidate models. The variables selected as candidates are variables that have a significant value.
2. In this modeling, the candidate variables are variables that have a p-value <0.25 in bivariate analysis (chi-square test) which are included together in multivariate analysis. The use of a statistical significance of 0.25 as a requirement in multiple logistic regression tests to allow variables that are hiddenly considered to be less related are very important to be included in the multivariate model.
3. Based on the results of bivariate analysis, the variables that can be used as candidate models in the multiple logistic regression test in this study because they have a significant value of <0.25 as many as 5 variables, namely education and training ($p=0.000$), motivation ($p=0.000$), incentives ($p=0.000$) = 0.000), work environment ($p = 0.000$), and supervision ($p = 0.000$). The variables that were not used as candidate models in the multiple logistic regression test in this study because they had a significant value > 0.25 as many as 3 variables, namely age ($p = 0.584$), education ($p = 0.786$), and length of work ($p = 0.421$).
4. Further testing was carried out with multiple logistic regression simultaneously with the forward conditional method to identify the most influential variables on the nurse's performance. The forward conditional method is to enter one variable at a time from the results of the correlation of variables and meet the criteria for statistical significance to enter the model until all variables that meet these criteria are included in the model. The first entered variable is the variable that has the largest partial correlation with the dependent variable and which meets certain criteria to enter the model.

Based on the results of the multiple logistic regression test that has been carried out, it shows that of the 5 variables tested, 4 variables that affect the performance of nurses are training, motivation, incentives, and supervision. The complete multiple logistic regression test results can be seen in the following table.

Table 10. Multiple Logistics Regression Test Results

Variable	B	sights.	Exp (B)	95% CI for Exp (B)
Education and training	1,590	0,000	2,902	2,230-10,777
Motivation	1,727	0,000	5,626	2,623-12,069
Incentive	0,936	0,020	2,550	1,162-5,595
Supervision	1,253	0,002	3,500	1,614-7,592
Constanta	-7,994	0,000		

The variable with the greatest influence in this study is the motivation variable which has a value of $\text{Exp(B)}/\text{OR} = 5.626$, meaning that nurses who have high motivation have a 5.6 times higher chance of good performance than nurses with low motivation. The education and training variable (education and training) which has a value of $\text{Exp (B)}/\text{OR} = 4.902$ means that nurses who have attended education and training have a 4.9 times higher chance of good performance than nurses who have never attended education and training. The supervision variable which has a value of $\text{Exp(B)}/\text{OR} = 3,500$ means that the nurse who states that supervision is in a good category has a 3.5 times higher chance of good performance than the nurse who states that the supervision is in the poor category.

Incentive variables that have a value of $\text{Exp (B)}/\text{OR} = 2.550$ mean that nurses who state incentives are adequate to have a 2.5 times higher chance of good performance than nurses who state incentives are inadequate. Based on the results of the multiple logistic regression test, it also shows that the variable that does not affect the nurse's performance because it has a significant value > 0.05 is the work environment variable. More details can be seen in Table 11 below.

Non-Significant Multiple Logistics Regression Test Results

No	Variable	Sig. (p-value)
1	Work environment	0,166

V. CONCLUSION

Based on the results of the research that has been done and has been presented in the previous chapter, it can be concluded as follows:

1. There is no effect of age on the performance of nurses at Raden Mattaher Hospital Jambi Province in 2021, $p=0.584>0.05$.
2. There is no effect of education on the performance of nurses in Raden Mattaher Hospital Jambi Province in 2021, $p=0.786>0.05$.
3. 3. There is no effect of length of work on the performance of nurses at Raden Mattaher Hospital Jambi Province in 2021, $p = 0.421 > 0.05$.
4. There is an effect of education and training on the performance of nurses at Raden Mattaher Hospital Jambi Province in 2021, $p = 0.000 < 0.05$.
5. There is an influence of motivation on the performance of nurses at Raden Mattaher Hospital Jambi Province in 2021, $p = 0.000 < 0.05$.
6. There is an effect of incentives on the performance of nurses at Raden Mattaher Hospital Jambi Province in 2021, $p=0.020<0.05$.
7. There is no influence of the work environment on the performance of nurses at Raden Mattaher Hospital Jambi Province in 2021, $p = 0.166 > 0.05$.
8. There is an effect of supervision on the performance of nurses at Raden Mattaher Hospital Jambi Province in 2021, $p=0.002<0.05$.
9. The motivation variable has a greater influence on the performance of nurses at Raden Mattaher Hospital, Jambi Province in 2021 with a value of $\text{Exp(B)}/\text{OR} = 5.626$, meaning that nurses who have high motivation have a 5.6 times higher chance of performing well than nurses with low motivation.

REFERENCES

- [1] Effendi, F., & Makhfudli. (2019). *Keperawatan Kesehatan Komunitas: Teori dan Praktek Dalam Keperawatan (Cetakan 2)*. Jakarta: Salemba Medika.
- [2] Gibson, J. L., Ivancevich, J. M., & Donnelly, J. H. (2012). *Organisasi, Perilaku, Struktur, dan Proses (jilid 1 da; A. B. oleh N. Andiarni, Ed.)*. Jakarta: Binarupa Aksara.
- [3] Hasibuan, S. P. M. (2018). *Manajemen Sumber Daya Manusia (Revisi)*. Jakarta: Bumi Aksara.
- [4] Ilyas, Y. (2017). *Kinerja Teori, Penilaian dan Penelitian*. Jakarta: Pusat Kajian Ekonomi Kesehatan Fakultas Kesehatan Masyarakat Universitas Indonesia.
- [5] Kuntoro, A. (2017). *Buku Ajar Manajemen Keperawatan*. Yogyakarta: Nuha Medika.
- [6] Mangkunegara, A. P. (2015). *Evaluasi Kinerja Sumber Daya Manusia (Cetakan Pe)*. Bandung: Refika Aditama.
- [7] Nugroho, Y. (2017). *Kinerja Rumah Sakit Pemerintah (Aplikasi Balanced Scorecard)*. Jakarta: Tunas Media.
- [8] Nurjannah, I. (2019). *Proses Keperawatan Nanda, NOC, dan NIC*. Yogyakarta: MocoMedia.
- [9] Nurkusuma, D. (2015). *Faktor Yang Berpengaruh Terhadap Kejadian Methichilin Resistant Staphylococcus Aureus (MRSA) Rumah Sakit Semarang*. Universitas Diponegoro.
- [10] Prajawanto, A. (2018). *Pengembangan Manajemen Kinerja (PMK)*. Jakarta: Indeks Kelompok Gramedia.
- [11] Sastroasmoro, S., & Sofyan, I. (2015). *Dasar-Dasar Metodologi Penelitian Klinis*. Jakarta: Sagung Seto.
- [12] Simamora, H. (2012). *Manajemen Sumber Daya Manusia (Edisi 1)*. Yogyakarta: STIE YKPN Yogyakarta.
- [13] Sugiyono. (2018). *Metode Penelitian Kuantitatif, Kualitatif dan R & D (Cetakan 3)*. Bandung: Alfabeta.
- [14] Suwarno, Bambang., Rusiadi., Alamsyah, Bhakti., Handiko, Firman., (2020). The Effect of Salary and Work Environment on Job Satisfaction on Non-Civil Servant Nurses in the Hospital Medan. *IOSR Journal of Business and Management (IOSR-JBM)*, e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 22, Issue 11. Ser. V (November 2020), PP 25-30.