The Impact of Workload and Work Stress with Work Motivation as Intervening Variables on the Performance

M. Nasrul Fadhli; Agustina Hanafi; Yuliani

Faculty of Economics, Sriwijaya University, Palembang, Indonesia

E-mail: handikapra2019@gmail.com

Abstract

Performance is a result of the efforts made by a person or organization in an activity that is by the authority and responsibility of each to create organizational goals. This study aims to obtain empirical evidence by knowing the direct effect of workload and work stress on the performance of health workers in hospitals. AR Bunda Prabumulih and the indirect effect of workload and work stress on performance through the work motivation of health workers in hospitals. AR Bunda Prabumulih. This study used a sample of 142 respondents from hospital health workers. AR Bunda Prabumulih used a survey method with a questionnaire. The study was analyzed using descriptive statistical analysis methods with quantitative data and SEM (Structural Equation Model). The test results show that the variable that workload has a direct effect on performance, workload has a direct effect on performance, work motivation has an effect on performance, workload has an effect on performance through motivation, work stress has an effect on performance through work motivation as an intervening variable. Based on the results coefficient workload, work stress and work motivation have a direct positive effect on the performance of health workers during the COVID-19 endemic in hospitals. AR Bunda Prabumulih as well as workload variables and work stress variables have a positive influence on the performance of health workers during the COVID-19 endemic at the hospital. AR Bunda Prabumulih through work motivation as an intervening variable.

Keywords: *Performance; Workload; Work Stress; Work Motivation*

Introduction

WHO declared Covid-19 on March 12, 2020 a pandemic. The number of cases in Indonesia continues to increase rapidly, until June 2020 there were 31,186 confirmed cases and 1851 cases died (Imam, 2011) (Kemenkes Rl, 2020), thus causing a level of anxiety in nurses seeing the many casualties, nurses feel stressed seeing the conditions of the work they are currently living. The rapid transmission of the COVID-19 virus adds to the workload of health workers, resulting in less than optimal patient care.

The number of functions and duties possessed by nurses makes the nursing profession one of the professions that has an excessive workload, and excessive workloads of nurses cause patient care to be not optimal (Umansky, J. dan Rantanen, 2016).

The nurse's workload is part of the development of nursing staff which is calculated based on the amount of time needed to provide services to patients per day, the positive and negative impacts of the nurse's workload are a matter of the nurse's perception of itself (Handini & Partiwi, 2013). Based on the death rate of health workers, especially nurses in Indonesia, from PPNI data on November 31, 2020 the number of nurses who died was 93 people spread across 34 provinces in Indonesia. The use of PPE while treating Covid-19 patients dramatically increases the workload of nurses (Lucchini, Iozzo, & Bambi, 2020). This is in line with the research conducted by (Kotfis et al., 2020) time to wear personal protective equipment (PPE), skin problems due to the use of masks, the need for communication distance between patients and relatives, and the need to manage the increase in incidents due to an isolated environment.

Based on the results of interviews conducted by researchers, it showed that nurses who were at the AR Bunda Prabumulih Hospital on average experienced a workload such as demands from the patient's family and the tasks assigned during shifts during the Covid-19 endemic. Nurses said they were worried about the tasks and work being done in their current conditions, which made them feel very stressed.

Performance is the result of work achieved by a person based on job requirements. A job has certain requirements to be carried out in achieving goals, which are also known as job standards (Wilson, 2012). So, performance is an ability that nurses must complete the tasks and responsibilities that have been given by the AR Bunda Prabumulih hospital. Performance at the AR Bunda Prabumulih Hospital can be seen from the work that has been given, such as curing and caring in nursing care.

Curing is a secondary duty of nurses, which means that they will deal directly with doctors about the patient's condition based on evidence/data at the time of the doctor's practice. Caring is the primary task of nurses who directly aim to assist in the implementation of treatment for the healing of patients. While nursing care is interrelated with caring, so nurses must be more concerned with their expertise, soft words, and touch in patient care, providing motivation for healing and constantly being by the patient's side to keep complaints or something else important. The ability of nurses between caring and curing must be balanced to produce optimal nursing care for patients at the AR Bunda Prabumulih Hospital.

Can be seen the data of hospital patient complaints. AR Bunda Prabumulih in 2021, among others, we can see the following table:

Month	Number of cases	Follow-up (%)
January	25	5
February	27	10
March	20	9
April	28	8
May	21	0
June	19	9
July	12	7
August	32	12
September	27	5
October	28	7
November	24	3
December	25	8

Based on the results of an interview with one of the nurses at the AR Bunda Prabumulih Hospital, the nurse tried to do well the assigned tasks such as nursing care, caring, and curing, so that from the patient complaint data the table above experienced ups and downs neutrally and did not increase drastically. The table above is explained if the data includes all patient complaints from the AR Bunda Prabumulih Hospital. According to (Mangkunegara, 2017) work stress is a feeling of pressure in dealing with work experienced by employees. Meanwhile, according to (Robbins, 2017) reveals that work stress is a dynamic condition in which an individual is faced with opportunities, limitations, or demands in accordance with expectations, while the results to be achieved are in important and indefinite conditions.

Based on the interview, the identification of problems at the AR Bunda Prabumulih Hospital that caused work stress from the results of interviews when nurses met patients who were sometimes emotional, conscious or not because of pain and the nurse who faced the patient first. Things like this cause work stress for nurses, but they always hold back their emotions and are patient because nurses feel sorry for the condition of patients who complain of pain.

Other problems that occur at AR Bunda Prabumulih hospital can be seen from employee attendance data. Attendance in 2021 can be seen in the following table:

Number	Attendance	Year		
		2019	2020	2021
1	Present	92,51	89,23	87,57
2	Sick	0,11	3,33	9,18
3	Permission	1,85	4,48	6,28
4	Late and Come Home Fast	3,01	3,10	15,42

In the table above, there is a 2-3% decrease in employee attendance every year. This is due to the decreased performance and motivation of health workers. In 2016, the Minister of Health, Nila Farida Moeloek, stated that the current decline in the performance of Indonesian nurses had an impact on the low level of health services received by the community. Some hospitals in Indonesia experienced a decrease in the level of patient visits, which resulted in poor hospital productivity. (Source: http://news.liputan6.com accessed, March 17, 2016).

Hospital health personnel data. AR Bunda Prabumulih 2021 can be seen in table below:

| Position	Total	Percentage
Medical personnel	11	7,8
Nursing	98	69,5
Midwifery	12	8,5
Pharmacy	7	4,9
Public health	1	0,7
Nutrition	4	2,8
Physical Therapy	2	0,8
Medical Technician	1	0,7
Biomedical Engineering	5	3,5
Total	**141**	**100**

As we know, nurses are the largest proportion of health workers in hospitals. Almost all health and disease prevention services in hospitals and other places are carried out by nurses. This shows how important the role of nurses in supporting the vision, mission, and goals of the hospital as a health facility for the community, so nurses should be able to work professionally and have high competence.

According to (Astuti, 2018) defines workload as a set or number of activities that must be completed by an organizational unit or position holder within a certain period. The results of this study indicate that workload affects employee performance. Higgins (in Umar, 1998: 259) argues that there is a direct relationship between stress and performance, numerous studies have investigated the relationship between job stress and performance presented in the stress-performance model (inverse relationship) namely Yerkes Podson's law. The inverted U pattern shows the relationship between stress levels (low-high) and performance (low-high). If there is no stress, there is also no work challenge and performance tend to decrease. The results of the research by Lukito & Alriani (2018) which analyzed the influence of workload, work environment, work stress on employee performance at PT. Sinarmas Distribution Nusantara Semarang said that work stress has a negative and significant effect on employee performance.

The results of research from Yanti et al. (2017) who analyzed the Effect of Job Stress and Job Satisfaction on Employee Performance at UD. Garuda AgungKencana said that work stress has a negative and significant effect on employee performance. Kasmir (2016, p. 190) states if employees have a strong drive from within themselves or from outside themselves (for example, from the company), then employees will be encouraged to do something well. In the end, encouragement, or stimulation both from within and from outside a person will produce good performance, and vice versa. Research conducted by Hasbullah and Rumansyah (2011) states that there is a very strong positive influence on motivation and employee performance.According to (Mukti, Wulan, & Budi, 2018) Employee performance is the result or level of success of a person on the whole during a certain period in carrying out tasks compared to various possibilities, such as work standards, targets or targets or certain criteria that have been determined previously and have been mutually agreed upon. The results of this study indicate that motivation and workload have a simultaneous effect on employee performance.

Every activity carried out by humans is based on certain motivations. This motivation moves people to achieve something they want. If the motivation is high, then the energy it produces will be high. Conversely, if the motivation is low, the energy produced will be low as well. These results indicate that high motivation will encourage employees to improve their performance.Based on the theory and some previous research results, a conceptual research framework can be drawn up as a basis for formulating the influence of workload and work stress with work motivation as an intervention variable on the performance of health workers during the COVID-19 pandemic in hospitals. AR Bunda Prabumulih.

Framework of the study
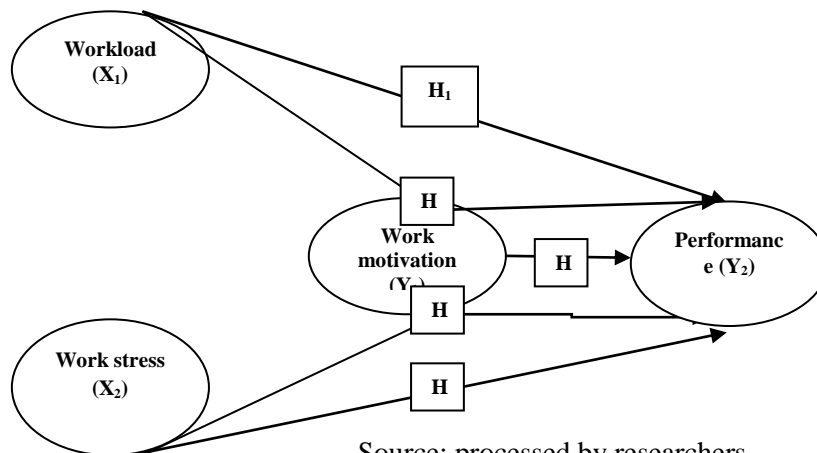
Source: processed by researchers
Figure 1: Framework for Thinking Using Path Diagrams

Based on the theoretical framework described, the following hypotheses can be proposed: H_1: Workload has a significant effect on performance, H_2: Work stress has a significant effect on performance, H_3: Motivation has a significant effect on performance, H_4: Workload has a significant effect on performance through work motivation as a variable intervening, and H_5: Job stress has a significant effect on performance through work motivation as an intervening variable.

Research Methodology

The scope of this research is to examine the effect of workload and work stress on work motivation with the performance of health workers at AR Bunda Prabumulih Hospital.

The thing of interest that the investigative researcher wants to become, the population in this study is hospital health workers. AR Bunda Prabumulih, amounting to 142 people. In this study, the sample used as respondents was 142 respondents from hospital health workers. AR Bunda Prabumulih, due to the relatively small size of the research population, this research was conducted by census or total sampling.

The type of data used in this research is qualitative data and quantitative data with the data source used is primary data collected by field survey method by collecting original data using questionnaires in the form of statements related to workload variables, work stress, work motivation, performance of health workers AR Bunda Prabumulih Hospital.

The data analysis technique in this study uses descriptive statistics with quantitative data and SEM (Structural Equation Model) which aims to obtain a comprehensive picture of the direct or indirect effects of workload and work stress on performance through motivation as an intervening variable. This research is deductive in nature, where inferential statistics are statistics used to analyze sample data and the results are generalized (differentiated) to the population where the sample is taken.

Research that uses an instrument in the form of a questionnaire must meet the requirements of validity and reliability. The questionnaire that has been prepared must be tested for validity and reliability before the actual research is carried out. In this study, the intervening variable was work motivation.

The SEM model equation for the measurement model/outer reflective model is written as follows:

$$x = \lambda x \xi + \delta x \text{ and } z = \delta z \varepsilon + \varepsilon z$$

Information:
1. x and z are indicators for exogenous (ξ) and endogenous (ε) latent constructs.
2. x and z are loading matrices that describe simple regression coefficients, which relate latent variables and indicators.
3. z and x are measurement error residuals. The equation of the measurement model/outer formative model can be written as follows:
$$\xi = \Pi \xi y + \delta \xi$$
$$\varepsilon = \Pi \varepsilon y + \varepsilon \varepsilon$$

Information:

1) (ξ) and (ε) are exogenous and endogenous latent constructs.
2) y is a variable manifestation or indicator for latent constructs exogenous (ξ) and endogenous (ε).
3) and are multiple regression coefficients for latent variables and indicator blocks.
4) and are residuals from the regression.

Results and Discussion

The results of reliability test, we can see following table:

	Scale Mean if It.em Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PERFORMANCE	11.7961	3.917	803	.990
WORK MOTIVATION	11.7294	4.239	.973	.9142
WORKLOAD	11.7727	4.043	.949	.938
WORK STRESS	11.7900	4.144	.944	.940

According to table, it shows that the reliability test with Cronbach's Alpha value > 0.60 all questions (items) on all variables is valid, so that the resulting data can be analyzed further.

To test the validity of the dimensions of the construct in this study, it was done by looking at the standard factor mutant values of each indicator in the overall model (Full Model). The indicator is declared valid if it has a standard factor load value greater than 0.5.
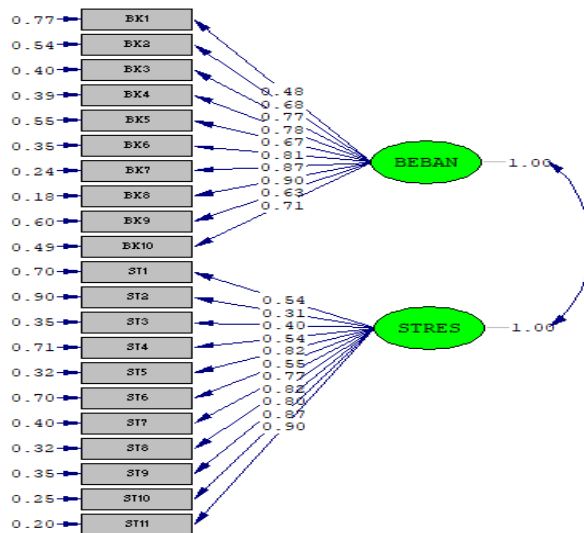

Figure 2: Model 1 CFA Exogenous Constructs.

Based on Figure 2. above, in Model_1 CFA of Exogenous Constructs there is still a loading factor value of less than 0.5, namely BK1 on the Workload variable and indicators ST2 and ST3 on the Work Stress variable, meaning that these indicators are not yet valid and should be included in the subsequent analysis. So that the Exogenous Construct Model_2 CFA is obtained as follows:
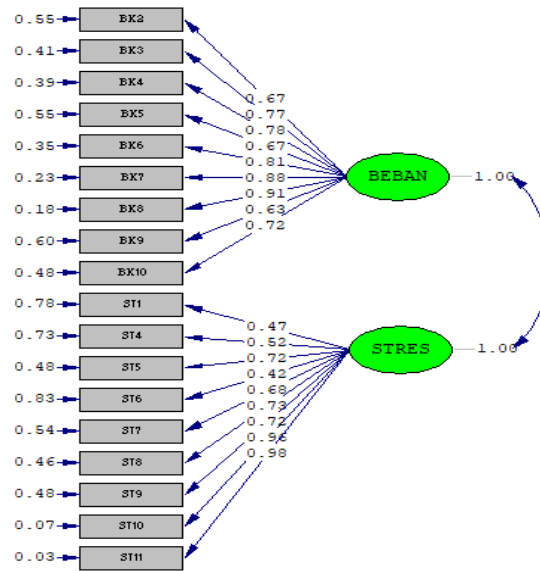
Figure 3: Model_2 CFA Konstruk Eksogen.

Based on Figure 3. above, in Model_2 CFA Exogenous Constructs there is still a loading factor value that is less than 0.5, namely the ST1 indicator on the Work Stress variable, meaning that these indicators are not valid and must be reported in the next analysis. So that the Exogenous Construct Model_3 CFA is obtained as follows:
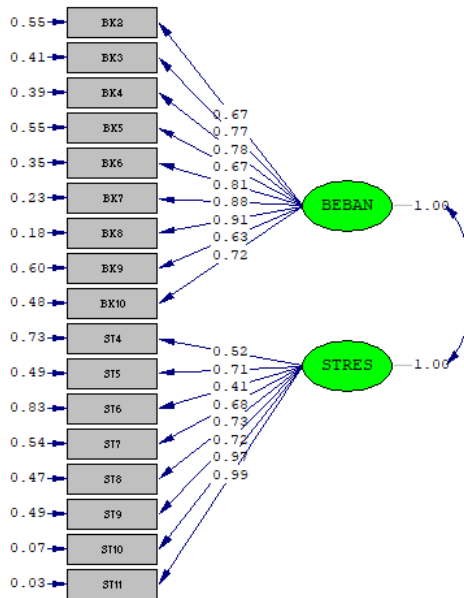

Figure 4; Model_3 CFA Exogenous Construct

Based on Figure 4.3. above, in Model_3 CFA of Exogenous Constructs there is still a loading factor value of less than 0.5, namely the ST6 indicator on the Work Stress variable, meaning that these indicators are not valid and must be calculated in the next analysis. So that the Model_4 CFA of Exogenous Constructs is obtained as follows:
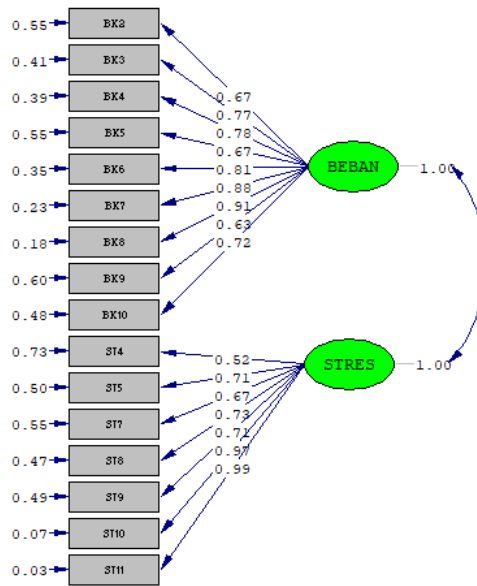
Figure 5: Model_4 Exogenous Construct CFA

Based on Figure 5. above, it indicates that in Model_4 CFA Exogenous Constructs there are no loading factor values that are less than 0.5, so all indicators on Exogenous variables have shown to be valid. The results of reliability calculations using Construct Reliability from Confirmatory Factor Analysis (CFA) for endogenous variables.
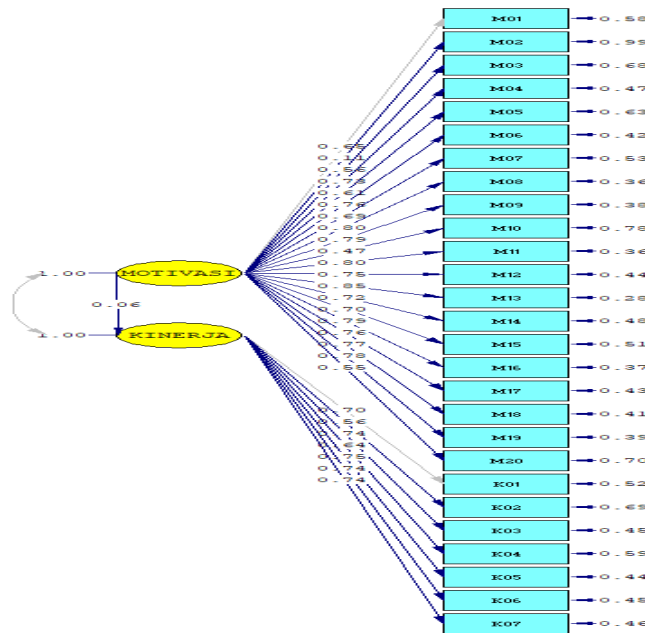

Figure 6: Model_1 CFA Endogenous Construct

Based on Figure 6. above, in Model_1 CFA Endogenous Constructs there are still loading factor values that are less than 0.5, namely M02 and M10 on the Work Motivation variable, meaning that these indicators are not yet valid and must be reported in the next analysis. So that the Endogenous Construct Model_2 CFA is obtained as follows:
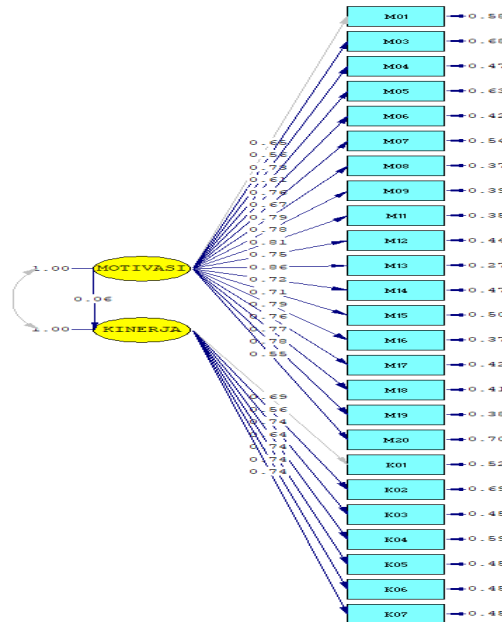
Figure 7: Model_2 CFA Endogenous Construct

Based on Figure 7. above, it indicates that in Model_2 CFA Endogenous Constructs there is no loading factor value less than 0.5, so all indicators on endogenous variables have shown to be valid. The results of reliability calculations with Construct Reliability from Confirmatory Factor Analysis / CFA of endogenous variables.

Based on Figure 7.that in Model_1CFA Endogenous Constructs there is no loading factor value less than 0.5, thus showing all indicators on endogenous variables are valid. While the value of Construct Reliability (CR) shows that of all the Endoogenous constructs above 0.7. Thus, it can be concluded that all dimensions and research variables in the Full Model have good reliability.

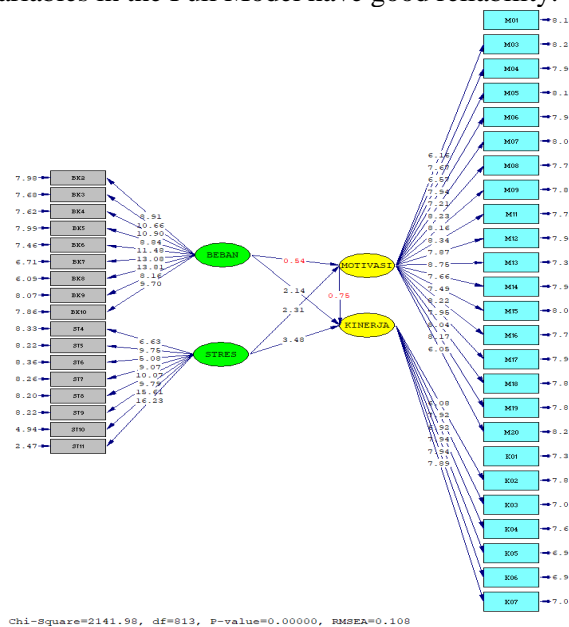Chi-Square=2141.98, df=813, P-value=0.00000, RMSEA=0.108

Figure 8: Full Model Estimation Results based on t-value

Based on Figure 8. almost all the parameters in the Full Model are all significant (t-count value greater than 1.96), except for the effect of workload on motivation and motivation on the performance of health workers during the Covid 19 endemic in hospitals. AR Bunda Prabumulih was not significant at the 0.05% level.
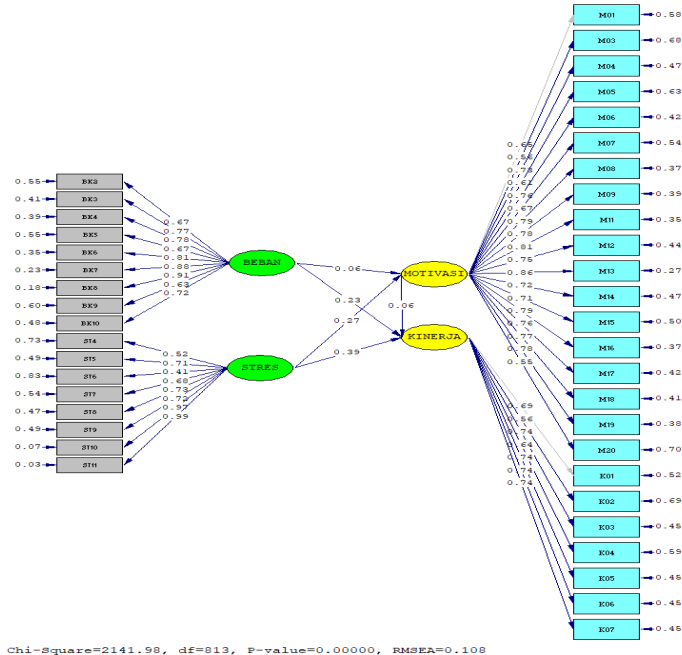

Chi-Square=2141.98, df=813, P-value=0.00000, RMSEA=0.108

Figure 9: Full Model Estimation Results based on Standard Loading

MOTIVATION = 0.062*LOAD + 0.27*STRESS

Based on the sub-structural model, it can be explained that motivation is directly influenced by workload and work stress. This shows that the workload has a positive effect of 0.062 on motivation and work stress has a positive effect of 0.27 on the motivation of health workers during the Covid 19 endemic at the hospital. AR Bunda Prabumulih. This means that work stress has a greater influence on the workload of health workers during the Covid 19 endemic in hospitals. AR Bunda Prabumulih.

PERFORMANCE=0.061*MOTIVATION+0.23*LOAD + 0.39*STRESS

Based on the structural model above, it can be explained that the performance of health workers during the Covid-19 endemic at the hospital. AR Bunda Prabumulih is directly affected by motivation, workload, and work stress, but only motivation has an insignificant effect on performance, while the direct effect of workload and work stress is significant on performance of health workers during the Covid-19 endemic in hospitals. AR Bunda Prabumulih.

The three variables, namely Motivation, Workload, and Work Stress all have a positive effect on performance, meaning that if motivation, workload, and work stress increase, the performance of health workers during the Covid-19 endemic at the hospital. R Bunda Prabumulih will increase at the 95% confidence level.

The magnitude of the influence of workload on the performance of health workers during the Covid 19 endemic in hospitals. AR Bunda Prabumulih is 0.23, while motivation is 0.06 and work stress is on the performance of health workers during the Covid-19 endemic at the hospital. AR Bunda Prabumulih is 0.39, meaning that work stress has a greater influence on the performance of health workers during the

Covid 19 endemic in hospitals. AR Bunda Prabumulih from the workload and motivation for health workers during the Covid 19 endemic at the hospital. AR Bunda Prabumulih. We can see direct influence in the follewong tabl:

	WORKLOAD	WORK STRESS	MOTIVATION
MOTIVATION	0.06	0.27	
PERFORMANCE	0.23	0.39	0.06

According to table. the magnitude of the direct effect of workload on motivation is 0.06, the direct effect of workload on the performance of health workers during the Covid 19 endemic in hospitals. AR Bunda Prabumulih is 0.23. The Direct Effect of Motivation on Performance is 0.06. The direct effect of work stress on the work motivation of health workers during the Covid 19 endemic in hospitals. AR Bunda Prabumulih is 0.27. and the direct effect of work stress on the performance of health workers during the Covid 19 endemic in hospitals. AR Bunda Prabumulih is 0.39. We can see indirect influence in the following table:

	WORKLOAD	WORK STRESS
MOTIVATION		
PERFORMANCE	0,0036	0,0162

According to table. the magnitude of the indirect effect of workload performance on performance is 0.0036 and the indirect effect of work stress on performance is 0.0162.

Hypothesis testing shows that the workload variable has a direct positive effect on the performance of health workers during the Covid-19 endemic in hospitals. AR Bunda Prabumulih is 0.23.Hypothesis testing shows that the workload variable has a direct positive effect on the performance of health workers during the Covid-19 endemic in hospitals. AR Bunda Prabumulih is 0.39.Hypothesis testing shows that the work motivation variable has a direct positive effect on the performance of health workers during the Covid-19 endemic in hospitals. AR Bunda Prabumulih is 0.06.Hypothesis testing shows that the effect of the workload variable has a positive influence on the performance of health workers during the Covid-19 endemic in hospitals. AR Bunda Prabumulih through work motivation as an intervening variable of 0.0036.Hypothesis testing shows that the work stress variable has a positive influence on the performance of health workers during the Covid-19 endemic in hospitals. AR Bunda Prabumulih through work motivation as an intervening variable is 0. 0162.

Conclusions and Suggestions

Based on the results of the research that has been described and discussed, the conclusion of this study is, workload and work stress have a direct positive effect on the performance of health workers during the Covid-19 endemic in hospitals. AR Bunda Prabumulih. Work motivation has a direct positive effect on the performance of health workers during the Covid-19 endemic in hospitals. AR Bunda Prabumulih. the workload variable has a positive influence on the performance of health workers during the Covid-19 endemic in hospitals. AR Bunda Prabumulih through work motivation as an intervening variable. The work stress variable has a positive influence on the performance of health workers during the Covid-19 endemic in hospitals. AR Bunda Prabumulih through work motivation as an intervening variable.

To improve the performance of health workers during the Covid-19 endemic at the hospital. AR Bunda Prabumulih needs to pay attention to the workload of health workers so that there is no excessive workload that can trigger work stress on health workers.

The achievement of the work target is the right factor to be evaluated, from the results of achieving the target it can be seen the ability of health workers during the Covid-19 endemic at the hospital. AR Bunda Prabumulih in completing his workload.

Reference

Astuti, R. (2018). Pengaruh Motivasi dan Beban Kerja terhadap Kinerja Perawat pada Rumah Sakit Umum Mitra Medika Medan. *Jurnal Ilman Vol. 6, No. 2, Pp. 42-50, September 2018*, 6(2).

Bangun, W. (2012). Manajemen Sumber Daya Manusia. Jakarta: Erlangga. *Internatinal Journal*.

Handini, E., & Partiwi, S. G. (2016). *Perbaikan Sistem Kerja Untuk Meningkatkan Produktivitas dan Mengurangi Burnut pada Perawat UGD (Studi Kasus RSU Haji Surrabaya). 10*(1), 98–107.

Imam, G. (2011). Aplikasi Analisis Multivariate dengan Program SPSS Cetakan IV. *Semarang: Badan Penerbit Universitas Diponegoro, Semarang*.

Kemenkes Rl. (2021). Situasi Terkini Perkembangan Coronavirus Disease (COVID-19). *Kemenkes*.

Kotfis, K., Williams Roberson, S., Wilson, J. E., Dabrowski, W., Pun, B. T., & Ely, E. W. (2020). COVID-19: ICU delirium management during SARS-CoV-2 pandemic. *Critical Care*, Vol. 24. https://doi.org/10.1186/s13054-020-02882-x

Lucchini, A., Iozzo, P., & Bambi, S. (2020). Nursing workload in the COVID-19 era. *Intensive and Critical Care Nursing*, *61*, 102929. https://doi.org/10.1016/j.iccn.2020.102929

Mangkunegara, A. A. A. P. (2017). *Manajemen Sumber Daya Manusia Perusahaan*. Bandung: PT. Remaja Rosdakarya.

Mukti, A., Wulan, H. S., & Budi, L. (2018). Pengaruh Beban Kerja, Motivasi Dan Komitmen Terhadap Kepatuhan Intruksi Kerja Dan Efektifitas Pengen. *Journal Of Management*, *4*.

Robbins. (2017). *Organisasi merupakan kesatuan sosial yang dikoordinasikan secara sadar dengan dengan sebuah batasan yang reaktif dapat diidentifikasikan, bekerja secara terus menerus untuk mencapai tujuan. 9*(September).

Umansky, J. dan Rantanen, E. (2016). Workload in Nursing Proceedings of the Human and Ergonomics Society 2016. *Annual Meeting Rochester Institute of Technology New York*, *2*(01).

Copyrights