



**ANALYSIS OF THE IMPLEMENTATION OF THE K3 MANAGEMENT SYSTEM ON EMPLOYEE PRODUCTIVITY IN PRIVATE HOSPITALS IN MALUKU**

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**ABSTRACT**

Hospitals as a service industry have a variety of complex workforce problems with various risks. The K3 management system is one of the supporting factors for productivity including policy, commitment, planning, implementation, evaluation and review. If all K3 management systems are implemented well, the company can guarantee the health and safety of workers so that workers feel safer and more comfortable when doing their work. Objective: to analyze the implementation of the K3 management system in hospitals at three private hospitals in Maluku. Method: This research uses Observational Analytical Type with Cross Sectional Study. The research was conducted at 3 private hospitals in Maluku, namely RS. Kindergarten. II Prof. Dr. J.A. Latumeten, RS. Source of Life GPM and RS. Al-Fatah. Sample collection in this study used purposive sampling of 150 respondents, all of whom were related to the implementation of services at the hospital. To determine the relationship between more than one dependent variable, the logistic regression test is used. Results: K3 management system test results with employee work productivity obtained a value of  $p = 0.019$ . The results of the analysis of the relationship between K3 commitment and policy and work productivity obtained a  $p$  value = 0.015. The results of the K3 planning analysis with work productivity obtained a  $p$  value = 0.043. The results of the analysis of K3 implementation with work productivity obtained a  $p$  value = 0.045. The results of multivariate analysis using the logistic regression test show that the sig value of 0.034 is a very significant variable on employee work productivity. Conclusion: the conclusion of this research is that there is a relationship between the K3 management system, K3 commitment and policy, K3 planning, K3 implementation and work productivity. The results of the multivariate analysis state that K3 implementation is a variable with a strong influence on employee work productivity.

Keywords: employee productivity; hospitals; k3 management system

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**INTRODUCTION**

Hospital Occupational Safety and Health is an effort to create a safe, healthy and productive work environment in hospitals, abbreviated as K3RS (Hardi, 2022). K3RS is carried out to improve the quality of hospital services, especially in terms of safety and health for patients, visitors, workers and the surrounding community (Achmad, 2022). Occupational safety and health has been regulated in Law Number 1 of 1970 concerning Occupational Safety. Every employee has the right to receive protection for their safety in carrying out their work in order to improve the welfare of life and increase productivity. Indonesia has clarified and followed various occupational safety and health standards and requirements including the K3 management system. (H. Nugraha & Yulia, 2019).

Occupational safety and health programs have been implemented by many organizations with the aim of reducing or avoiding the risk of work accidents (Khairunnisa, 2017). The K3 management system is one of the supporting factors for employee work productivity, a good K3 management system will result in good employee work productivity (Simbolon et al.,

2024). The K3 management system includes policies and commitments, planning, implementation, evaluation and review. If all of these K3 management systems are implemented properly, the company can guarantee the health and safety of workers so that workers feel safer and more comfortable when doing their jobs, thereby increasing the productivity of the employees (Jamaluddin & Nurwana, 2023).

Globally, the ILO estimates that around 337 million work accidents occur each year, resulting in the loss of 2.3 million workers' lives. Meanwhile, data from PT Jaminan Sosial Tenaga Kerja (Jamsostek) shows that around 0.7 percent of Indonesian workers experience work accidents. Data from BPJS states that the number of work accidents in Indonesia is still high. Citing data from the Social Security Administering Agency (BPJS) for Employment, by the end of 2023 there had been 105,182 cases of work accidents. Meanwhile, for serious accidents resulting in death, there were 2,375 cases recorded from the total number of work accidents. Data from BPJS states that the number of work accidents from 2021 to 2023 increased by 20% (Ramadhany et al., 2019).

The Ambon City Manpower Office in 2023 has succeeded in exceeding the target of reducing the number of work accidents realized by 8.57% from the target of 5% with an achievement percentage of 171.43%. From the number of work accidents in 2020, there were 35 cases, decreasing in 2022 to 32 cases. From the results of interviews during the initial data collection, it was found that the K3 Management system in three hospitals in Maluku had not implemented a comprehensive K3 management system. Based on the background above, the purpose of this study is to analyze the application of the occupational health and safety management system to employee productivity in private hospitals in Maluku.

## **METHOD**

This research design uses the type of Analytical Observation research with a Cross Sectional Study approach to measure or observe independent and dependent variables at the same time. The research was conducted at 3 private hospitals in Maluku, namely RS. TK. II Prof. dr. J.A. Latumeten, RS. Sumber Hidup GPM and RS. Al-Fatah. The sample collection in this study used purposive sampling, which is a sampling technique by selecting samples from the population according to the wishes of the researcher which is adjusted to the inclusion criteria. The distribution of respondents in this study was 150 respondents who were all related to the implementation of services at the Hospital. Primary data in this study were obtained from respondents during the study and secondary data included a general description of the research location, number of workers, and division of working hours. The data analysis method in this study is to use univariate analysis of each variable from the research results in general in this analysis only produces the distribution and percentage of each variable. The data from this study are described in the form of tables, graphs and narratives, followed by bivariate analysis used to find the relationship between independent variables and dependent variables with statistical tests adjusted to the existing data scale and to find out the relationship of more than one dependent variable, then continued by conducting multivariate analysis. The statistical test used is the logistic regression test where the p value  $<0.25$  to find out which independent variable is more closely related to the dependent variable.

## **RESULT**

The respondents of this study amounted to 150 respondents. This characteristic aims to assess several general characteristics of the sample including respondent age, respondent gender, respondent education, respondent length of service, K3 management system and employee work productivity.

Table 1.  
Distribution of Respondent Characteristics Based on Age At Private Hospitals in Maluku

Variabel	Mean	SD	Minimal-Maksimal	95% CI
Umur	36,13	6,44	22-52	35,09-37,17

Table 1, it was found that the average age of respondents was 36.13 years, with a variation of 6.44 years. The youngest age was 22 years and the oldest age was 52 years. The results of the analysis concluded that 95% believed the average age of respondents was between 35.09 years and 37.17 years.

Table 2.  
Distribution of Respondent Characteristics Based on Gender

Characteristics	Category	f	%
Gender	Male	69	46,0
	Female	81	54,0
Last Education	Elementary School	0	0,0
	Junior High School	40	26,7
	Senior High School	13	8,7
	DIII	44	29,3
	S1	53	35,3
Length of service	< 5 years	81	54,0
	> 5 years	69	46,0
Ever attended K3 training	Never	50	33,3
	Ever	100	66,7
K3 Management system	Less	34	22,7
	Enough	115	76,7
	Good	1	7
K3 commitment and policy	Less	58	38,7
	Enough	46	30,7
	Good	46	30,7
K3 planning	Less	42	28,0
	Enough	49	32,7
	Good	59	39,3
K3 implementation	Less	112	74,7
	Enough	35	23,3
	Good	3	2,0

Table 2, it is found that out of 150 respondents at Private Hospitals in Maluku, most of the respondents were female, namely 81 respondents (54.0%) with a final education of S1 as many as 53 respondents (35.3%). Based on the Table, it is found that out of 150 respondents at Private Hospitals in Maluku who have a length of service <5 years are 81 respondents (54.0%) and a length of service ≥5 years are 69 respondents (46.0%). The majority of respondents have attended K3 training as many as 100 respondents (66.7%). The K3 management analysis obtained a value that was mostly sufficient as many as 115 (76.7%) respondents. Based on the Table, it is found that out of 150 respondents at Private Hospitals in Maluku, the majority assessed the K3 commitment and policy in the category of less as many as 58 (78.7%) respondents. Respondents assessed the K3 planning as mostly in the category of good as many as 59 respondents (39.3%). The results of the analysis of K3 implementation showed that the majority of respondents were in the inadequate category, namely 112 respondents (74.7%).

Based on Table 3, it shows that the statistical test results obtained a p value = 0.019, which means that there is a significant relationship between the K3 management system and employee work productivity. The results of the analysis of the relationship between commitment and K3 policies and work productivity obtained a p value = 0.015, because the p value <math>\alpha = 0.000</math> means that there is a significant relationship between K3 policy commitment and employee work productivity. The results of the statistical test obtained a p value = 0.043,

because the p value  $< \alpha = 0.000$ , which means that there is a significant relationship between K3 planning and employee work productivity. The results of the analysis of the relationship between K3 implementation and work productivity obtained the results of the statistical test obtained a p value = 0.045, which means that there is a significant relationship between K3 implementation and employee work productivity.

Table 3.

Relationship between K3 Management System, K3 Commitment and Policy, K3 Planning and K3 Implementation with Work Productivity

Variable	Work Productivity				Σ	%	P-value
	Less	%	Good	%			
<b>K3 Management System</b>							
- Less	30	88,2	4	11,8	34	100	0,019
- Enough	103	89,6	12	10,4	115	100	
- Good	0	0,0	1	100	1	100	
<b>K3 Commitment and Policy</b>							
- Less	46	79,3	12	20,7	58	100	0,015
- Enough	43	93,5	3	6,5	46	100	
- Good	44	95,7	2	4,3	46	100	
<b>K3 Planning</b>							
- Less	40	95,2	2	4,8	42	100	0,043
- Enough	39	79,6	10	20,4	49	100	
- Good	54	91,5	5	8,5	59	100	
<b>K3 Implementation</b>							
- Less	103	92,0	9	8,0	112	100	0,045
- Enough	27	77,1	8	22,9	35	100	
- Good	3	100	0	11,3	3	100	

Table 4

The Influence of K3 Commitment and Policy, K3 Planning, K3 Implementation, Respondents on Employee Work Productivity At Private Hospitals in Maluku

Variabel	B	Sig.	OR	95% C.I.for EXP(B)	
				Lower	Upper
K3 Management System	-.221	.809	.802	.134	4.807
K3 Commitment and Policy	-1.694	.064	.184	.031	1.105
K3 Planning	.430	.713	1.538	.155	15.222
K3 Implementation	2.247	.034	9.462	1.181	75.836

Table 4 shows that based on the multivariate analysis conducted using the logistic regression test, it can be explained that the variable that is very significant or has a strong influence on employee work productivity is the implementation of K3 with a sig. value of 0.034 and a B value of 2.247.

## DISCUSSION

### Relationship between Commitment and OHS Policy with Work Productivity

Based on the research results obtained by the researcher, that commitment and OHS policy are related to employee work productivity at private hospitals in Maluku. It can be seen from the OHS regulations and procedures that are not too complicated so they are easy to understand, easy to implement correctly, sanctions are imposed if there are violations and periodic improvements are needed. The hospital also provides a proportional workload to employees (Kovacs & Lagarde, 2022). This study is in line with research conducted by A. A. P. Nugraha et al., (2024), An OHS policy must start from top management, realized with attention to OHS and attention to dangerous actions that threaten OHS. This OHS policy is made for the welfare of workers starting from workers leaving home, arriving at work and returning home. The hospital makes an OHS policy that is consulted in advance with the workforce to help the hospital create OHS work programs that are integrated and in accordance with the needs of workers in the workplace (Dorman, 2022).

Company management that has a high commitment to occupational safety can help workers in doing their jobs and can increase work productivity that benefits the company in terms of quality, quantity and timeliness (Mohammadfam et al., 2017). Company management does not only refer to certain parts but all employees who work (Osborne & Hammoud, 2017). Good management starts with a good leader who is able to help employees be somewhat more productive in their work. All workers from management to supervisors are responsible for the health and safety of all workers, this means that company management does not only refer to certain parts (Priyashantha & WIN, 2016).

### **Relationship between K3 Planning and Work Productivity**

Based on the research results obtained by researchers, K3 planning is related to employee work productivity at private hospitals in Maluku. It can be seen from the planning carried out by the hospital which considers all risks and hazards in every activity carried out. Testing the work environment such as the quality of machine noise, the quality of lighting that affects the level of employee productivity (Cahyani, 2020). This study is in line with the research conducted by Apriyanti & Sukwika, (2024) regarding good occupational safety and health program planning is a must. Workers really need protection from the risk of accidents and occupational diseases so that workers feel safe from work accidents and are always in a healthy state at work. By protecting workers from the risk of work accidents and occupational diseases, their work productivity will increase. Increasing workforce productivity can have a positive impact on the progress and development of hospitals (Nabilou et al., 2016). Work planning carried out by considering hazard identification, risk control assessment in the activities carried out is one of the very good programs if the hospital implements it. This hazard identification is carried out to find out what hazards can occur in the workplace, this can help hospitals to avoid the risk of work accidents (Widiastiti, 2023).

Risk assessment and control is a continuation of the hazard identification activity. After the hazards are identified, several hazards that can occur are found. Furthermore, these hazards are assessed to determine the priority scale in following up on the hazards. After the assessment activity, the next step is risk control, this control is carried out according to what is obtained during the risk assessment. The most detrimental risk is the main priority in risk control. This risk control is divided into several parts, namely elimination, substitution, engineering control, administrative and personal protective equipment (Qamarani & Vikaliana, 2024). All of these controls are very important for the company to carry out, depending on the type of risk from the work being carried out. Periodic testing of the work environment, including testing the quality of machine noise, air quality in the work environment and testing the quality of lighting are some of the efforts made to minimize the risk of work accidents. This work environment testing is carried out to determine the types of hazards that can occur, this activity is included in hazard identification. If a hazard risk is found during the work environment testing, the company is obliged to follow up on this.

The hospital is obliged to involve workers in hazard identification and control to better understand what needs to be improved or fixed to reduce the number of work accidents that have an impact on employee work productivity. Determination of goals and targets for each plan that will be carried out should be consulted with the labor representative, in this case the head of the department. The hospital has carried out planning and engineering to control the risk of accidents and occupational diseases, planning from hospital management and forwarded to each employee (Cecep D, 2022).

### **Relationship between K3 Implementation and Work Productivity**

Based on the research results obtained by the researcher, that the implementation of K3 is related to employee work productivity in private hospitals in Maluku. It can be seen from the implementation of K3 carried out in the form of socialization of matters related to SMK3, such as socialization of the K3 program, use of PPE, fire extinguishers, and safety talks affecting the level of employee work productivity. The implementation of K3 held by the hospital aims to increase employee productivity and train employees to avoid work accidents and protect themselves in the event of a work accident. This study is in line with research conducted by Armadani (2020), that the implementation of work safety in hospitals has been maximized, both the facilities and infrastructure provided by the company to support the work safety of its employees and work productivity. The supporting facilities and infrastructure for K3 such as APAR which must be available on every floor of the building, safety helmets, safety shoes, ear plugs, gloves, and masks that must always be worn when working in each room (Riestiany, 2021). Installation of K3 signs such as high voltage signs, flammable, and smoking prohibitions, etc. Clear K3 SOPs, such as SOPs for the proper and correct use of scaffolding, the correct way to use cheaters. Installation of K3 sign boards in the form of slogans that remind of the need

### **CONCLUSION**

K3 management system test results with employee work productivity obtained a value of  $p = 0.019$ . The results of the analysis of the relationship between K3 commitment and policy and work productivity obtained a  $p$  value = 0.015. The results of the K3 planning analysis with work productivity obtained a  $p$  value = 0.043. The results of the analysis of K3 implementation with work productivity obtained a  $p$  value = 0.045. The results of multivariate analysis using the logistic regression test show that the sig value of 0.034 is a very significant variable on employee work productivity. The conclusion of this research is that there is a relationship between the K3 management system, K3 commitment and policy, K3 planning, K3 implementation and work productivity. The results of the multivariate analysis state that K3 implementation is a variable with a strong influence on employee work productivity.

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