Analysis Of Supervision of The Use of PPE On Workers in Company Sinar Alam Duta Perdana

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ABSTRACT

Occupational Health and Safety (K3) is our effort to create a healthy and safe work environment, so that it can reduce the probability of work accidents / diseases due to negligence that result in demotivation and deficiencies in work productivity. This study aims to determine the supervision of the use of PPE in workers at PT. Sinar Alam Duta Perdana II in 2024. This type of research uses a quantitative research method. The sampling technique uses a purposive sampling technique based on characteristics, namely field workers with a sample size of 40 people using a questionnaire measuring instrument, data analysis using the chi square test, the results of the statistical test show that there is a relationship between supervision (p-value = 0.034) and no relationship between training (p-value = 0.059) with compliance with the use of PPE at PT. Sinar Alam Duta Perdana II in 2024, There is no relationship between motivation (p-value = 0.0721) with compliance with the use of PPE at PT. Sinar Alam Duta Perdana II in 2024. For the Company, it is recommended to increase supervision of the use of PPE by workers.

Keywords: Supervision, Use of PPE, Workers

INTRODUCTION

Occupational Health and Safety (OHS) is our effort to create a healthy and safe work environment to reduce the probability of occupational accidents/diseases due to negligence, which results in demotivation and work productivity deficiencies. According to the Indonesian Basic Health Law No. 9 of 1960 Chapter I Article II (Setyarso, 2020). Occupational Health is a health condition that aims for the working community to obtain the highest degree of health, both physically, spiritually, and socially, with efforts to prevent and treat diseases or health problems caused by work and the work environment as well as general diseases.

One of the efforts to protect workers is to use Personal Protective Equipment (PPE) when carrying out work activities. The use of Personal Protective Equipment (PPE) is an effort to control the risk of harm while working. The company's obligation to provide PPE is regulated in Article 2 of the Minister of Manpower and Transmigration Regulation Number 8 of 2010 concerning PPE. The obligation of workers to use PPE is regulated in Article 6 of Permenakertrans Number 8 of 2010 (Regulation of the Minister of Manpower and Transmigration, 2010).

According to Geller in the safety triad theory, compliance is one of the factors in the behavior component, which is influenced by the interaction of factors in the person and environment components. Research on compliance using PPE has previously examined the factors that cause compliance using PPE based on workforce characteristics and Lawrence Green's behavioral theory Through this study, it is necessary to prove several factors related to compliance using PPE through the safety triad concept so that it becomes a company recommendation to create compliant behavior using PPE in terms of culture.

PT SADP is one of the companies trusted by PT PERTAMINA PATRA NIAGA (Persero) to supply fuel for retail outlets of gas stations and SPBBs in South Kalimantan and Central Kalimantan and supply fuel oil for ship bunkers passing through the Barito River. To meet the needs of industrial companies in serving customer demand, in 2003, Sinar Alam Group expanded by establishing PT Masada Jaya Lines, which handles explicitly coal logistics transportation. The Company's services cover almost all areas of Kalimantan, with various

transport capacities. As support in ship maintenance, the Company also has a specialized business unit for ship docking, PT Duta Bahari Menara Line Dockyard. PT DBML is managed by experienced professionals, starting from casting and maintenance; all aspects that improve ship performance can be done at the shipyard. PT. Sinar Alam Duta Perdana II has two work areas, namely the filling shed and fuel jetty area; the filling shed work area is the process of refueling in the tangka for orders, while the fuel jetty is carried out to moor ships or dock ships that will discharge & load cargo. PT Sinar Alam Duta Perdana II has a clinic facility that has also provided medical services in the form of disease treatment to employees and five neighborhood residents in the vicinity of the Company. The clinic is located behind the office; there is one general practitioner, one general practitioner, and one general practitioner.

Based on the observations of researchers, it was observed that there was one worker who did not use personal protective equipment (PPE) such as hand protection when loading cargo in the filling shed work area, and one worker did not use hand protection when connecting pipes in the filling shed work area, with the reasons for workers who did not wear PPE, namely the location of the storage far from their work and in a hurry when doing work and one worker did not use a safety helmet properly because the worker felt hot/hot. Based on these problems, the author wants to conduct a study entitled Analysis of Supervision of the Use of PPE on Workers at the Sinar Alam Duta Perdana II Company in 2024.

METHOD

The research design uses a type of quantitative research. Cross-sectional research design where researchers study the analysis in supervision, motivation, and training with compliance with the use of personal protective equipment (PPE) on workers at PT Sinar Alam Duta Perdana II in 2024. The population in this study were all workers at PT Sinar Alam Duta Perdana II in 2024, totaling 65 people. The sampling technique used purposive sampling, which means the selection of research samples based on characteristics, namely workers in the field at PT Sinar Alam Duta Perdana II with a total of 40 field workers. The inclusion criteria are workers who work in the field using PPE, so 40 people are obtained as samples. The independent variables in this study are supervision and training. At the same time, the dependent variable is compliance with the use of PPE. In this study, using a list of statements and questions in the form of questionnaires related to the variables to be studied and interviews in which the questionnaires were distributed to workers to fill in and help explain what was not understood, this study was assisted by two people to collect data. Data analysis techniques were used using the SPSS application and the chi-square test.

RESULT AND DISCUSSION

Univariate Analysis

PPE Use Compliance.

Table 1. Distribution of Respondents based on Compliance with PPE Use at PT. Sinar Alam Duta Perdana II

Compliance	N	(%)
Compliant	31	77,5%
Non-compliant	9	22,5%
Total	40	100%

Table 1 shows that out of 40 respondents, most of the respondents' compliance was obtained, namely 31 respondents (77.5%) at PT Sinar Alam Duta Perdana II.

Supervision

Table 2. Diabetes Mellitus Knowledge Level in Medical and Non-Medical Students

Supervision	N	(%)

Good	33	82,5%
Poor	7	17,5%
Total	40	100%

Based on Table 2, it is known that out of 40 respondents, 33 respondents (82.5%) at PT Sinar Alam Duta Perdana II are well supervised.

Training

Table 3. Distribution of respondents based on training at PT. Sinar Alam Duta Perdana II

Training	N	(%)
Ever	32	80,0%
Never	8	20,0%
Total	40	100%

Table 3 shows that out of 40 respondents, most of the respondents training has participated in OHS training, namely 32 respondents (80%) at PT Sinar Alam Duta Perdana II.

Bivariate Analysis

Table 4. Differences in Time of Consumption of Sweets in Medical and Non- Medical Students

Supervision	PPE Use Compliance						*P-Value*
	Compliant		Non- Compliant		Total		
	N	%	N	%	N	%	
Good	28	84,8	5	15,2	33	100	0,034
Poor	3	42,9	4	57,1	7	100	
Total	31	77,5	9	22,5	40	100	

Based on Table 4, it can be seen that the proportion of respondents who have supervision Most of them are well compliant in the use of PPE, as many as 28 respondents (84.8%). The proportion of respondents who have supervision are less compliant in the use of PPE as many as three respondents (42.9%) at PT Sinar Alam Duta Perdana II Based on the results of statistical tests using the chi-square test, the p-value = 0.034, the p-value < α (0.05) means that Ha is accepted H0 is rejected, which means that there is a relationship between supervision and compliance with PPE use at PT Sinar Alam Duta Perdana II

Relationship between Training and Compliance with PPE Use

Table 5. Relationship between Training and Compliance with PPE Use at PT Sinar Alam Duta Perdana II

Training	PPE use compliance						*p-value*
	Compliant		Non- Compliant		Total		
	N	%	N	%	N	%	
Ever	27	84,4	5	15,6	32	100	0,059
Never	4	50,0	4	50,0	8	100	
Total	31	77,5	9	22,5	40	100	

Table 5 shows that the proportion of respondents who participated in the training was mostly compliant in the use of PPE, with as many as 27 respondents (84.4%). The proportion of respondents who participated in the training was mostly never compliant in the use of PPE as many as four respondents (36.4%) at PT Sinar Alam Duta Perdana II. Based on the results of statistical tests using the chi-square test, the p-value = 0.059, the p-value> α (0.05) means

that H0 is accepted, and Ha is rejected, which means that there is no relationship between training and compliance with the use of PPE at PT Sinar Alam Duta Perdana II.

Relationship between Supervision and Compliance with PPE Use at PT Sinar Alam Duta Perdana II

In this study, supervision is categorized into 2 (two): good and less. Based on Table 7, of 40 respondents, 27 (84.4%) respondents were well supervised and compliant in the use of PPE, and 4 (50.0%) respondents were less supervised and compliant in the use of PPE. The proportion of respondents with good insight and non-compliance in the use of PPE was 5 (15.6%), while respondents with less insight and non-compliance in the use of PPE were 4 (50.0%). Based on the results of statistical tests using the chi-square test, the p-value is 0.037, and the p-value <α (0.05) means that Ha is accepted, Ho is rejected, which means that there is a relationship between attitude and compliance with the use of PPE at PT Sinar Alam Duta Perdana II.

This study's results align with Joni Siagian's research (2012) with tThe Impact of Oversight and Adherence on Nurses' Use of Personal Protective Equipment in Preventing Hospital-Acquired Infections at Kisaran Regional General Hospital. The results of this study show that supervision affects the use of PPE with a probability value of 0.060. In addition, it is in line with research conducted by Wibowo (2010) on factors that affect compliance with PPE, one of which is supervision. Previous research by Bustanul Arifin (2013) stated that as much as 53.1% of supervision of compliance with the use of PPE was classified as not good. The Influence of Supervision and Compliance on Nurses' Utilization of Personal Protective Equipment in Mitigating Nosocomial Infections at Kisaran Regional Hospital (Bustanul & Arif, 2013).

Relationship between Training and Compliance with PPE Use at PT Sinar Alam Duta Perdana II

This study's results align with Joni Siagian's research (2012) with the title The Effect of Supervision and Compliance on the Use of Personal Protective Equipment on Nurses in Preventing Nosocomial Infections at the Regional General Hospital in Kisaran. The results of this study show that supervision affects the use of PPE with a probability value of 0.060. In addition, it is in line with research conducted by Wibowo (2010) on factors that affect compliance with PPE, one of which is supervision. Previous research by Bustanul Arifin (2013) stated that as much as 53.1% of supervision of compliance with the use of PPE was classified as not good. The chi-square test results obtained a p-value of 0.002, which shows a relationship between the supervision of operator workers and compliance with the use of PPE.

Based on the results of the study show that research conducted at the aluminum sulfate production unit of PT Liku Telaga cannot prove this hypothesis because the results of the study state that there is no significant relationship between training using PPE and compliance using PPE (Fidigan et al). This may be because the design of the training method obtained by the workforce has not been able to help workers gain knowledge, skills, attitudes, and behavior using PPE (Fairyo & Wahyuningsih, 2018)..

CONCLUSION

From the results of this study, it was found that there is a relationship between supervision and compliance with the use of PPE at PT Sinar Alam Duta Perdana II (p-value = 0.034). There is no relationship between OHS training and compliance with PPE at PT Sinar Alam Duta Perdana II (p-value = 0.059). So, this idea aligns with research in workplace safety, suggesting that hands-on leadership and accountability through supervision can have a more

immediate impact on safety practices compared to training sessions, which may not always translate into action.. Suggestions in this study Suggested recommendations to companies to make clear written policies on the use of PPE, including the types of PPE required for each type of work. Conduct periodic evaluations of the use of PPE, make strict regulations to increase supervision not only supervise the work process but also supervise the use of PPE workers about PPE wearers, and impose strict sanctions on workers who do not use PPE when working or entering the work environment.

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