



## The Reinforcing and Inhibiting Factors of the Effectiveness Implementation on the Occupational Health and Safety Management Systems in Puskesmas Kota Semarang

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### Abstract

Puskesmas was a workplace with a high risk to the health and safety of workers. The implementation of the occupational health and safety management system at Puskesmas Kota Semarang has not been effective. This study aimed to analyze the influence of reinforcing and inhibiting factors on the effectiveness of the implementation of the occupational health and safety management system at Puskesmas. The type of this research was analytic observation using cross-sectional. The population of this research was non-the occupational health and safety officers who work in Puskesmas Kota Semarang. The sampling technique used was cluster random sampling. Bivariate analysis using chi-square and multivariate analysis using logistic regressions. The research result from 88 respondents there was an influence between the occupational health and safety management commitment, occupational health and safety management supervision, quality human resources, wage level and social security, data and information management, and implementation of the occupational health and safety law enforcement on the effectiveness of the implementation of the occupational health and safety management systems at Puskesmas, and there was no influence on compliance variables against the las (behavior). The most influential factors are data and information related to the occupational health and safety OR (Exp B) 3,591. Suggestions that had given punishing and reviewing the occupational health and safety written policy, the officers obey the occupational health and safety directives and signs and play an active role in supervision, and for the occupational health and safety team to evaluate the occupational health and safety management and promotion once a month.

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## INTRODUCTION

The occupational health and safety were one of the most important issues. Work accidents, directly or indirectly, can cause losses for the company, including late completion of work, decreased productivity, and healing costs for employees (Todinga et al., 2015). The losses incurred are not only material losses for the company but can also cause casualties and suffering for workers who experience accidents (Caesario & RSA, 2015).

Work accident cases in Indonesia in 2017 experienced a significant increase of up to 123,000 from the previous year 2007 of 100,000. In 2018, temporary data for the first quarter of work accidents contained 5,318 cases (BPJS, 2018). Work accident cases in Central Java during the last three years tend to be fluctuating. In 2015 it reached 3,083 cases, this number increased in 2016 to 3,665 cases and decreased to 1,468 cases in 2017 (Humas Jateng, 2018).

Primary health centre as health service facilities at the first level have an important role in improving public health. The primary health centre was primary care facilities located around the community. Primary health centre and other health facilities are at high risk of workplace health and safety officer. Therefore, the implementation of occupational health and safety in primary health centre was to protect the primary health care officers. The primary health centre was a workplace that has health risks due to the transmission of diseases and diseases due to work accidents. There are other potential hazards, such as accidents (fire due to fire as well as electricity and explosion), radiation from dangerous chemicals, and ergonomic disturbances. All of these potential hazards can cause illness, disability and death (Kemenkes RI, 2010).

Puskesmas as one of the health service units must always improve the quality of service; this can be achieved by thinking about occupational health and safety aspects. Work accidents among health and non-health workers in Indonesia have not been well recorded. The most common cause of work accidents was the lack of awareness of workers and the quality and skills of inadequate workers. Many workers underestimate work risks,

so they do not use safety devices even though they are available (Tarwaka, 2008).

Siswanto's research entitled Analysis of Facilities and Power Competency on Implementation of Safety and Health Work in Puskesmas Distric of Tulungagung shows that more than half of the puskesmas have complete the occupational health and safety facilities and infrastructure, as many as 23 respondents (76.7%), more than half of the puskesmas 23 Puskesmas respondents (76.7%) had the competence of untrained the occupational health and safety officers more than half of the puskesmas. Having less health and safety management were 19 puskesmas respondents (63.3%) (Siswanto, 2018).

The occupational health and safety management system was a management system that had function to regulate occupational health and safety in an industry or building. Based on the results of preliminary observations at one of the health centres in Semarang City, it was found that the implementation of the occupational health and safety management system was not yet mature. Work environment with the slippery floor conditions that are not equipped with handrails, the occupational health and safety signs that have not been used effectively, this is part of the obstacle factor for the health and safety management system in the community health center so that it does not run effectively and efficiently.

Occupational safety and health were one of the most important factors in work, for example, the construction of a project in the construction sector which is one of the supporting factors for advancing a country or services such as health services but in the implementation, there are many inhibiting factors and work risks. One of them was about the implementation of an occupational safety and health management systems where the lack of application of this system will result in bad things such as the risk of work accidents which also impact the company's losses by increasing costs due to minor and severe work accidents. Besides, the occupational health and safety management system can run effectively if there are reinforcing factors to overcome these obstacles (Awuy et al., 2017).

Based on the description above, reinforcing factors and inhibiting factors for the occupational

health and safety management system play a majority role in the improvement and effectiveness of occupational health and safety. The data above showed that there was still a lack of application of occupational health and safety management systems in puskesmas. Therefore, in order not to cause the risk of work accidents which impact on losses to patients and officers at the health centre, the authors conducted a study to analyze the effect of reinforcing and inhibiting factors on the effectiveness of implementing the occupational health and safety management system at the Puskesmas Kota Semarang.

**METHOD**

The type of this research was observational analytic using cross-sectional. The population of this research was non the occupational health and safety officers who work in Puskesmas Kota Semarang. The sampling technique used was cluster-random sampling, obtained 5 Puskesmas with a total of 88 peoples. Bivariate analysis using chi-square and multivariate analysis using multiple logistic regressions.

Data collection techniques used interview techniques using questionnaires, observation to observe directly of the occupational health and safety primary health centre conditions starting from its implementation and work environment. The documentation techniques have taken in the form of photos or pictures of activities or implementation related to the occupational health and safety at the health centre and their work environment.

**RESULT AND DISCUSSION**

Respondents in this study were 88 people. It was known that most of the respondents have Diploma III education as many as 43 respondents (48.9%) with most of the positions of nurses as many as 25 respondents (28.4%). The average working period is 15 years with a minimum work period of 1 year and a maximum work period of 31 years.

The next step was to conduct a univariate analysis of the variables used in the study; the results of the univariate analysis can be seen in table 1.

**Table 1.** Univariate Analysis

No	Variable	Frequency	Percentage (%)
1	The occupational health and safety Management Commitment		
	Less	30	34.1
	Good	58	65.9
2	The occupational health and safety Management Supervision		
	Less	29	33
	Good	59	67
3	Compliance with the laws		
	Less	18	20.5
	Good	70	79.5
4	The Quality of Human Resources		
	Less	24	27.3
	Good	64	72.7
5	Wage Rate and Scoail Granted		
	Less	26	29.5
	Good	62	70.5
6	Data and Information Management		
	Less	29	33
	Good	59	67
7	Implementation of the occupational health and safety law enforcement		
	Less	27	30.7
	Good	61	69.3

Based on table 1, it can be seen that there were 65.9% (58 people) of the good of the occupational health and safety management commitment, 34.1% (30 people) lack of the occupational health and safety management commitment. Meanwhile, the great of the occupational health and safety management supervision was 67% (59 people) and 33% less (29 people). 79.5% (70 people) had good compliance with laws, and 20.5% (18 people) had less

compliance. The quality of good human resources is 72.7% (64 people) and those who are less 27.3% (24 people). Meanwhile, a good level of wages and social security is 70.5% (62 people) and those who were less than 29.5% (26 people). Good management of data and information was 67% (59 people), poor 33% (29 people) and good implementation of the occupational health and safety law enforcement 69.3 (61 people) and less 30.7% (27 people).

**Table 2.** Bivariate Analysis

Variable	Effectiveness				Total	P Value
	Sufficient		Good			
	F	%	F	%		
<b>The Occupational Health and Safety Management Commitment</b>						
Less	22	73.3	8	26.7	30	0.006
Good	23	39.7	35	60.3	58	
Total	45	51.1	43	48.9	88	
<b>The Occupational Health and Safety Management Supervision</b>						
Less	21	72.4	8	27.6	29	0.01
Good	24	40.7	35	59.3	59	
Total	45	51.1	43	48.9	88	
<b>Compliance with the Laws (Attitude)</b>						
Less	8	44.4	10	55.6	18	0.710
Good	37	52.9	33	47.1	70	
Total	45	51.1	43	48.9	88	
<b>The Quality of Human Resources</b>						
Less	20	83.3	4	16.7	24	0.001
Good	25	39.1	39	60.9	64	
Total	45	51.1	43	48.9	88	
<b>Wag Rate and Social Granted</b>						
Less	23	88.5	3	11.5	26	0.000
Good	22	35.5	40	64.5	62	
Total	45	51.1	43	48.9	88	
<b>Data and Information Management</b>						
Less	25	86.2	4	13.8	29	0.001
Good	20	33.9	39	66.1	59	
Total	45	51.1	43	48.9	88	
<b>Implementation of The Occupational Health and Safety Law Enforcement</b>						
Less	20	74.1	7	25.9	27	0.008
Good	25	41	36	59	61	
Total	45	51.1	43	48.9	88	

Based on table 2, it can be seen that out of 30 respondents with less commitment, 73.3% (22 respondents) the effectiveness of the implementation of the occupational health and

safety management system was sufficient. 58 respondents with good commitment 60.3% (35 respondents) the effectiveness of the implementation of the occupational health and

safety management system is good. Based on the chi-square statistical test, it is known that the p-value is  $0.006 < \alpha (0.05)$ , it can be concluded that there is an influence between the occupational health and safety management commitment to the effectiveness of the implementation of the occupational health and safety management system at the Puskesmas Kota Semarang.

The results of this study were in line with (Zulyanti, 2013) research that commitment has a positive influence on the effectiveness of the occupational health and safety implementation as evidenced by the success indicators of the company commitment to the implementation of the occupational health and safety policies. (Bayram, 2018) research showed that the occupational health and safety management commitment has a positive effect on employee satisfaction, and it has a direct significant impact on security performance. Also, the occupational health and safety management commitment affects safety performance indirectly through employee satisfaction.

Based on (Widiyanti, 2016) research, management commitment can be seen from management support for the implementation of the occupational health and safety in the company. One aspect of support was the occupational health and safety equipment and the implementation of the occupational health and safety training in the company. Based on the results of interviews with respondents at 5 Puskesmas in Semarang City, most of them explained that a written policy on the occupational health and safety exists, but the implementation has not been effectively carried out. The occupational health and safety policy began to be reviewed before the accreditation of the Puskesmas, such as reorganizing the organization, reviewing the standard operating procedures that had been made.

Supporting facilities and infrastructure for the K3 program were already available, such as the occupational health and safety equipment and there were the occupational health and safety signs and danger signs, although not entirely effective and efficient, such as the improper installation of evacuation route signs, excessive buildup of cable terminals, no direction of guidance. Up and down the stairs on the floor of the stairs, there was no

careful labelling of the electric voltage, the condition of the floor was still not suitable for the risk of slipping. Besides, the occupational health and safety policy is always disseminated to officers during morning apples and post-service meetings.

Training was a process of teaching certain knowledge, skills and attitudes so that health workers are increasingly skilled and able to carry out responsibilities by standards (Salawati et al., 2014). At the 5 Puskesmas have conducted the occupational health and safety related training, most of the workers have attended the occupational health and safety terakita training except for workers whose work period is less than one year. The training that has been carried out in 5 Puskesmas Semarang includes training on the use of APD, firefighters using APAR and emergency disasters, earthquakes and floods including epidemics and pandemics. Smith and Sonesh (2011) suggested that occupational health and safety training can reduce the risk of work accidents. Besides, training was a forum for exchanging information regarding any problems that often occur in the workers' environment. The advantage of training for workers was that safe habits and behavior can be instilled at work; these habits will carry over so that they can support efforts to prevent accidents in the workplace (Afini et al., 2012).

Based on table 2, it can be seen that out of 29 respondents with less supervision, 72.4% (21 respondents) the effectiveness of the implementation of the occupational health and safety management system was sufficient. 59 respondents with great supervision, 59.3% (35 respondents) the effectiveness of the implementation of the occupational health and safety management system was great. Based on the chi-square statistical test, it is known that the p-value is  $0.01 < \alpha (0.05)$ , it can be concluded that there is an influence between the occupational health and safety management supervision on the effectiveness of the implementation of the occupational health and safety management system at the Puskesmas Semarang City.

The effectiveness of supervision would run and affect workers who would be reluctant to commit violations and the feeling of security that workers would get if the supervision is carried out

(Noviastuti et al., 2018). Based on Chandra's research (2011), where people behave more obediently if there is supervision and behave less well if there is no supervision. There was also in line with Karimah's (2017) research which states that there was a relationship between supervision and unsafe behaviour. The more higher the supervision, the most lower the unsafe behavior.

Work supervision has an important role in reducing the rate of work accidents, with proper supervision it will be able to increase employee morale and reduce the rate of work accidents if supervision was carried out by company-determined policies and work supervision has a positive impact on employee performance (Harini & Taufik., 2019).

Based on the results of observations and interviews at 5 Puskesmas in Semarang City, the occupational health and safety management supervision was taken over by the the occupational health and safety management holder, namely health promotion officers (promkes), several puskesmas were taken over by environmental health officers and Infection Prevention Prevention (PPI). Supervision and monitoring carried out by supervisors of workers/officers are not carried out every time, in some health centres the supervision of workers/workplace inspections is carried out every 3 - 6 months and never carry out unannounced inspections even though it was a long period but under supervision, supervisors / Occupational health and safety management holders at the puskesmas are assisted by supervisors or responsibilities per room to help each other, they are friendly, and do not hesitate to reprimand or remind each other if a worker does work incorrectly even with his co-workers.

Based on table 2, it can be seen that of the 18 respondents with poor compliance, 44.4% (8 respondents) had sufficient effectiveness in the implementation of the occupational health and safety management system. 70 respondents with good obedience 47.1% (37 respondents) of them had a good the occupational health and safety management system implementation effectiveness. Based on the chi-square statistical test, it is known that the p-value is  $0.710 > \alpha (0.05)$ , it can be concluded that there is no influence between statutory compliance (behaviour) on the

effectiveness of the implementation of the occupational health and safety management system at the Puskesmas in Semarang City.

This study was in line with Suyono & Nawawinetu research (2013) which shows that the percentage of respondents who have good behaviour is greatest in respondents who have the good perception (97.9%) of the occupational health and safety rules and procedures compared to respondents who have the fairly good perception (88%). Regarding of the occupational health and safety regulations and procedures. However, the results of the Continuity Correction statistical test between the occupational health and safety regulation and the procedure variables and the occupational health and safety behaviour showed there was no relationship between the two variables.

Based on the results of observations and interviews at 5 Puskesmas in Semarang City, it was found that there was no relationship between statutory compliance (behaviour) on the effectiveness of the implementation of the occupational health and safety management system at the health centre due to differences in individual characteristics that could affect workers' perceptions of work safety, especially perceptions of the occupational health and safety regulations and procedures. In this case, the individual characteristic referred to is experience or years of service. Workers' perceptions of the implementation of occupational safety and health are the views of employees on what is provided by the health centre aims to ensure that workers are protected and guaranteed occupational safety and health. Of the 5 health centres, all implement the occupational health and safety management system in accordance with the Law (UU) and Government Regulation (PP), the latest information on the occupational health and safety is always disseminated through apples and during meetings, and there is a team in the occupational health and safety supervision and the workers' environment, there are directions about hazards in the work environment.

Based on table 2, it can be seen that the majority of respondents have Diploma III education as many as 43 respondents (48.9%) work according to their skills, abilities, and education, so

that the quality of human resources at Semarang City Puskesmas is in a good category. Based on the analysis, of the 24 respondents with the quality of human resources, 83.3% (20 respondents) of them had sufficient the occupational health and safety management system implementation effectiveness. 64 respondents with good quality human resources 60.9% (39 respondents) of them have a good the occupational health and safety management system implementation effectiveness. Based on the chi-square statistical test, it was known that the p-value was  $0.001 < \alpha (0.05)$ , it can be concluded that there is an effect of the quality of human resources on the effectiveness of the implementation of the occupational health and safety management system at the Puskesmas Kota Semarang.

The occupational health and safety was an important thing that needs to be considered by companies. It related to the company's goals to be achieved, during the period of achieving the goals, the company needs supporting capacity in the form of adequate human resources, this is because HR is an active manager of other resources owned by the company. Companies must ensure occupational safety and health so that employees can carry out their duties smoothly. So that, no employee does not work because of illness or injury (Denik et al., 2017). According to Apriandi & Widowati (2015), companies are required to provide competent human resources to carry out the occupational health and safety management system.

The results of this study were in line with Sitanggang's research (2019) that the results of statistical tests between the quality of human resources and the implementation of the occupational health and safety management system were obtained  $p = 0.001$ . These results indicate that  $p < 0.05$ , so it can be concluded that there is a significant relationship between the quality of human resources and the implementation of the occupational health and safety management system at Santa Elisabeth Hospital Medan ( $H_0$  was rejected).

The quality of human resources is an important factor in the success of an organization, higher the quality of human resources was better the resulting work performance (Leuhery, 2018). It means that if workers have high-quality human resources, the better the workers will be in carrying

out their work, including implementing the occupational health and safety.

The quality of human resources in 5 Puskesmas in Semarang City is already good, it can be seen that the majority of respondents stated that their work was following their skills, abilities, and education so that the quality of human resources in the 5 Puskesmas was in a good category. Respondents always do the tasks given by their superiors well and on time, besides that respondent also use the easiest and fastest way to complete their work. It indicates that the level of effectiveness and efficiency of the officers was great.

Based on Table 2, it can be seen that the results of the research of 26 respondents with a level of wages and social security of less than 88.5% (23 respondents) of them have sufficient effectiveness in the implementation of the occupational health and safety management system. 62 respondents with a good level of wages and social granted, 64.5% (40 respondents) of them had a good the occupational health and safety management system implementation effectiveness. Based on the chi-square statistical test, it was known that the p-value was  $0.000 < \alpha (0.05)$ , it concluded that there was an influence between the level of wages and social security on the effectiveness of the implementation of the occupational health and safety management system at the Puskesmas in Semarang City.

The results of this study were in line with Amri's research (2007) that the Somers' d test results with a 95% confidence level ( $\alpha = 0.05$ ) obtained p results of 0.018. These results indicate that  $p < 0.05$ , so it can be concluded that there is a relationship between the level of wages and social security with the implementation of the occupational health and safety management system at Balung Hospital, Jember Regency ( $H_0$  was rejected).

Health and safety security for workers must be prioritized or prioritized and taken into account so that workers feel there is security for the work they do, whether it is risky or not (Kusuma & Darmastuti, 2010). According to Kartikasari & Swasto (2017) that companies provide health insurance the occupational health and safety so that workers feel safe at work and can reduce the

risk of work accidents and increase the comfort of the working environment so that workers feel protected at work.

Based on Soehartono & Amariyansah research (2017) The application of the Occupational Safety and Health Management System in the Nayara housing development project based on a safety passport which is a factor that causes work safety and health programs to be hampered by 6 rules, namely workers think that safety is restrictive, safety requires a lot of money (high wage rates) and safety was not something to worry about.

In general, the level of wages and social security provided at the 5 puskesmas to employees was great. According to respondents, the salary they received was following their workload. According to respondents, the salary they received was following their workload to reduce the risk of work accidents (Alowie, 1997). However, most respondents stated that when they worked overtime, they did not receive compensation such as overtime pay and so on. Some workers are forced to do additional work so that their physical condition becomes tired and weak, so they tend to reduce work productivity and even cause work accidents.

Based on table 2, it can be seen that of the 29 respondents with insufficient data and information management, 86.2% (25 respondents) the effectiveness of the implementation of the occupational health and safety management system was sufficient. The 59 respondents with good data and information management 66.1% (39 respondents) the effectiveness of the occupational health and safety management system implementation was good. Based on the chi-square statistical test, it is known that the p-value was  $0.001 < \alpha (0.05)$ , it can be concluded that  $H_a$  was accepted, meaning that there was an influence between data and information management on the effectiveness of the implementation of the occupational health and safety management system at the Puskesmas in Semarang City.

The results of this study were in line with research by Amir (2007) that the Somers' d test results with a 95% confidence level ( $\alpha = 0.05$ ) obtained p results of 0.033. These results indicate that  $p < 0.05$ , so it can be concluded that there is a

relationship between data and information related to the occupational health and safety and the implementation of the occupational health and safety management system at Balung Hospital, Jember Regency ( $H_0$  is rejected).

A good information distribution process will reduce the occurrence of miscommunication so that it will reduce the occurrence of distortions or application deviations. Therefore, what is the goal and objectives of the policy must be channelled to the target group (Rachim et al., 2017).

All documentation and information used in the implementation of the occupational health and safety need to be identified and controlled, which is the responsibility of the occupational health and safety expert. Another effort for work control is administrative control, where there are the occupational health and safety documents governing work implementation, such as standard operating procedures. Documentation in the form of results of hazard potential identification, the occupational health and safety risk assessment and control, reporting of work accidents and occupational diseases (Kasyfan & Koesyanto, 2018).

Setiawan et al research (2019) showed that the occupational health and safety information and data shows the most influencing variables on the implementation of the occupational health and safety management system because a piece good information about the occupational health and safety will affect knowledge and will have a positive impact on the behaviour of the occupational health and safety implementation in the field.

In general, data and information related to the occupational health and safety in 5 Puskesmas in Semarang City are good. In the implementation of the occupational health and safety program in each unit, incidents of PAK (Work-related Diseases) and KAK (Work-related Accidents) experienced by officers are recorded and reported. The completeness of data and information related to the occupational health and safety was important because the existing the occupational health and safety data and information can be used as a means of determining the level of success of an OHS (Occupational Health and Safety) program. Besides, data and information on the occupational



health and safety will make it easier for the puskesmas management to determine the priority and concentration of handling work accident problems at the puskesmas. Respondents who stated that they sometimes did not always record and report their work related accidents because they forgot and or they considered accidents such as needling to be minor incidents that did not need to be recorded or reported. However, most respondents stated that they had never recorded and reported work related diseases because they had never experienced work related diseases.

Based on table 2, it can be seen that of the 27 respondents with the implementation of the occupational health and safety law enforcement, 74.1% (20 respondents) lacked the effectiveness of the implementation of the occupational health and safety management system. The 61 respondents with a good implementation of the occupational health and safety law enforcement 59% (36 respondents) the effectiveness implementation of the occupational health and safety management system was good. Based on the chi-square statistical test, it was known that the p-value is  $0.008 < \alpha (0.05)$ , it can be concluded that there was an influence between the implementation of the occupational health and safety law enforcement on the effectiveness of the implementation of the occupational health and safety management system at the Puskesmas Kota Semarang.

This research was in line with the research of Sitanggang (2019), it can be seen that the results of the Somers'd correlation test carried out was significant for the relationship, namely  $p = 0.0001$  which is smaller than the critical point ( $p < 0.05$ ), this indicates that there was a relationship between the implementation of law enforcement and the implementation of the occupational health and safety management system. This is also in line with Awuy et al research (2017) on a contraction project in Manado City which states that there was no sanction given to workers who do not implement the occupational health and safety such as not giving sanctions for not using Personal Protective Equipments, which was an inhibiting factor for implementing the occupational health and safety management system. Because the implementation of law enforcement was not strict, workers will

work according to their own will without following the stipulated rules.

According to Prasetyo (2017), the safety punishment system was a threat program that aims to improve offending employees, maintain applicable regulations and provide lessons to offenders in the company's work environment to minimize the occurrence of work accidents. According to (Indah, 2017) research, the obstacle to implementing the occupational health and safety, in general, was the budget, the culture of workers who are not familiar with the implementation of the occupational health and safety.

According to Fridayanti & Rono (2016) research, the last obstacle in the implementation of the occupational health and safety at PT Ferron Par Pharmaceuticals is the unclear law enforcement against some sanctions for workers who violate company regulations. According to Kamdhari & Estralita (2018) research, the inhibiting factor for implementing the occupational health and safety management system in the Female Apartment Adhigrya Pangestu project itself was the sanction for not using Personal Protective Equipments. Usually, every worker who does not use Personal Protective Equipments will receive a warning from the head of the the occupational health and safety section.

Overall, the implementation of the occupational health and safety at the 5 Puskesmas in Semarang City was in a good category, but the Puskesmas does not yet have written provisions and rules regarding sanctions imposed for any violation of the occupational health and safety provisions or procedures related to the occupational health and safety, it's just that sanctions are obtained through oral, such as officers who forgetting to wear Personal Protective Equipments with laboratory coat only to be reprimanded verbally and given the next opportunity not to repeat it. This was following what the researchers found at the puskesmas, where the occupational health and safety supervision that was not carried out by the team and giving strict sanctions for violations of the occupational health and safety policies had not been implemented. Sutarto's research (2008) explained that the firm policy of imposing

sanctions for violations was very important to support the implementation of the occupational health and safety management system.

**Table 3.** Multivariate Analysis

Variable	Exp(B)
Commitment of the occupational health and safety	0.906
Management Supervision	1.383
Quality of Human Resources	1.727
Wage Rate and Social Granted	2.651
Data and Information Related to the occupational health and safety	3.591
Implementation of law enforcement	1.260

Based on table 3, the independent variables that most affected the variable of the effectiveness of the occupational health and safety implementation management system at Puskesmas Kota Semarang were the data and information related to the occupational health and safety with an OR (Exp B) value of 3.591 it means that the respondents with the occupational health and safety data and information had less risk of the effectiveness of the occupational health and safety implementation which was sufficient for 3.5 times higher than respondents with good data and information.

All documentation and information used in the implementation of the occupational health and safety need to be identified and controlled, which is the responsibility of the occupational health and safety expert. Another effort for work control is administrative control, where there are the occupational health and safety documents that regulate work implementation, such as standard operating procedures (Kasyfan & Koesyanto, 2018).

The good information distribution process will reduce the occurrence of miscommunication so that it would reduce the occurrence of distortions or application deviations. Therefore, what was the goal and objectives of the policy must be channelled to the target group (Rachim et al., 2017).

## CONCLUSION

Based on the results of research and discussion, it concluded that there was an influence

between the commitment of the occupational health and safety management, the occupational health and safety management supervision, quality of human resources, wage levels and social granted data and information management and implementation of the occupational health and safety law enforcement on the effectiveness of the implementation of the occupational health and safety management system at the Puskesmas Kota Semarang. The factors that most influenced the variable of the effectiveness of the implementation of the occupational health and safety management system at the Puskesmas Kota Semarang were data and information related to the occupational health and safety.

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