

Research Article

Analysis of Knowledge, Perception and Attitude toward Safety and Health Working Behavior in Sinjai Regional General Hospital 2019

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Abstract: Occupational Safety and Health Behavior is an act or action done by someone to prevent work accidents (KK) and work-related illnesses (PAK). This study aims to examine the factors influencing the behavior of Occupational Safety and Health employees of the Sinjai District General Hospital. This research is quantitative, with a cross sectional study design, as well as a population of all Civil Servants and contract employees of the Sinjai District General Hospital and a sample of 220 respondents. Sampling using proportional random sampling. To find out the direct and indirect factors of OSH behavior, the path analysis test is used. The results showed that there was a direct influence on perceptions of OSH behavior (p value = 0,000), perceptions of attitudes (p value = 0,000), while knowledge indirectly affected K3 behavior through perception. However, there is no direct influence on knowledge of OSH behavior, knowledge of attitudes and attitudes toward K3 behavior. The Head of Regional General Hospital of Sinjai is advised to plan the training needed to improve and adjust employee competencies to better understand Occupational Safety and Health at the Hospital.

Keywords: Knowledge, Perception, OSH attitude and behavior.

INTRODUCTION

Hospital is a unique and complex workplace to provide health services to the community. The wider the health services and functions of the Hospital, the more complex equipment and facilities needed. This complexity causes the Hospital to have a huge potential danger, not only for patients and medical personnel, but also for visitors to the Hospital. Potential hazards in hospitals, besides infectious diseases, there are also other potential hazards that affect the situation and conditions in the hospital, namely accidents (blasting, fire, accidents related to electrical installations, and other sources of injury), radiation, hazardous chemicals, anesthetic gases, psychosocial disorders and ergonomics.

Study done by Singhal et. al (2010) found that out of 342 needle stick injury cases experienced by health care workers found 37 seropositive cases, 13 cases affected by HIV, 15 cases affected by HCV, nine cases for HBV. Data on the causes of wounds caused by

syringes were sixty six sharp wounds through trash bags, 43 injuries occurred during infusion, 41 cases during injection administration, 35 cases during needle recapping, 32 cases during blood sampling, 27 cases during random blood sugar monitoring (GDA), 24 of OT instruments, 17 cases of syringe disposal, 16 cases of using scalpel, 7 cases during suture and 34 cases from other sources.

The emergence of the above cases is due to many things, one of which is the implementation of OSH efforts that have not been optimal so that the workforce in the Hospital (as well as visitors to the Hospital) are not aware of the potential work accidents and occupational diseases that they can experience in the Hospital.

Theory of Planned Behavior mention that someone can do a behavior if they have an intention, because the intention is to make someone do a behavior. The theory of planned behavior has several factors that

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can influence behavior change in a person or workforce, namely attitude, subjective norm, and perceived (Ajzen, 2000).

Safety behavior has emerged as a key factor in preventing or reducing negative outcomes such as injury and illness in the workplace (Christian, Bradley, Wallace, & Burke, 2009). Safety behavior has been defined as behavior that promotes the safety and health of employees, the public, and the work environment (Burke, Sarpy, Tesluk, & Smith-Crowe, 2002). Therefore, more and more focused research identifies the antecedents of safety behavior in the workplace as a mechanism for reducing injuries and accidents in the workplace (Burke & Signal, 2010). Worker safety behavior has become an important determinant of organizational performance because of its impact on employee safety and health such as injury and accidents (Burke & Sarpy, 2003; Clarke, 2012).

According to Slameto (2010) perception is a process that involves the entry of messages or information into the human brain, through human perceptions constantly making contact with the environment. This relationship is carried out through the senses, namely the sense of sight, listener, touch, feeling, and kissing. Robbins (2003) also describes that perception is an impression obtained by individuals through the five senses and then analyzed (organized), interpreted and then evaluated, so that the individual obtains meaning. Social exchange theory states that if an individual has a perception that his organization is very concerned about everything that is good to them, they will be motivated to do everything they feel can benefit the organization (Griffin and Neal, 2006).

Attitude is a reaction or response that is still closed from someone to a stimulus or object (Notoatmodjo, 2003). According to Newcomb in Notoatmodjo (2003), one of the social psychologists stated that attitude is readiness or availability to act, and not an implementation of certain motives. Attitude is not yet an action or activity, but it is still a predisposition to an act of behavior. A person's attitude will influence health behavior, a person's positive attitude will produce positive health behaviors as well.

Furthermore, prevention studies and interventions to change people's attitudes and behaviors in various fields such as health and public health psychology state that what people know can influence their attitudes about targets, and how their feelings about targets can then influence their behavior (Schrader & Lawless, 2004). Consistent with this statement, previous research shows that the influence of relevant information about targets can be successful in changing attitudes, which in turn can affect intentions and behavior (Nwokocho & Nwakoby, 2002).

Work Accidents can be caused by various activities in the Hospital. The results of the 2013 Occupational Safety and Health Administration (OSHA) report showed that the occurrence of workplace accidents in hospitals was 2 times greater than in other industries. Causes of injury to health workers include fatigue due to movement related to the handling of patients (48%), sprains or falls (25%), contact with dangerous devices (13%), acts of violence from patients (9%), exposure to hazardous substances (4%), and other causes (1%).

Research conducted by Asghar Bagheri *et al.* (2019) trying to study the knowledge, attitudes, and perceptions of apple farmers on the use of pesticides and their impact on the behavior of farmers using pesticides in Meshkinshahr, Iran. Farmers' knowledge about the use of pesticides is the most important variable that influences the behavior of pesticide use by apple farmers followed by attitudes and perceptions.

The results of preliminary observations from the Hospital Accreditation Commission (KARS) survey team in searching the Hospital rooms that the staff of the Sinjai District General Hospital have not been able to explain and demonstrate actions to eliminate, reduce / minimize or report on activities and work on Safety and Occupational Health (OSH). The knowledge of the Employees of the Regional General Hospital of Sinjai Regency also does not yet understand each Occupational Safety and Health program so that it has not been able to carry out its responsibilities effectively in the event of an emergency.

METHODOLOGY

Research Design

The research design used was observational analytic with Cross Sectional approach. Cross Sectional Research is research that looks at the influence between independent variables and the dependent variable by observing both simultaneously (measured at the same time). This research was conducted at the Sinjai District General Hospital. The type of research used is quantitative. This study will look at the effect of knowledge, perceptions, and attitudes toward occupational safety and health behavior on employees of the Sinjai District General Hospital.

This study uses a path analysis model. The analysis is used to facilitate the influence or causal of exogenous variables on endogenous variables. This study has four variables, namely the variable knowledge, perception, attitude, and behavior of OSH.

Population and Sampling

The population used in this study were all Civil Servants and Contract Employees at the Sinjai District General Hospital. Sampling in this study was carried out by proportional random sampling method. The sample in this study were employees of the Sinjai

District General Hospital who were selected based on inclusion criteria, namely willing to become respondents as evidenced by a letter of willingness to become research respondents, working as Civil Servants and Contract Employees at the Sinjai District General Hospital. exclusion criteria, namely not entering work at the time of data collection and suffering from any type of disease that can obscure the results of the study.

Data Collection

The process of collecting data is obtained in two ways, namely primary data, namely data obtained directly from respondents by conducting interviews and observations. Respondents were given the opportunity to fill out a list of questions given in the questionnaire. Furthermore, secondary data is in the form of data on the number of employees and profiles of the Sinjai District General Hospital.

Data Analysis

The collected data is processed and analyzed by a computerized system of SPSS programs and AMOS applications through editing, coding, entry, cleaning and data analysis and presented in tables and narratives. Variables measured by knowledge, perceptions, attitudes and behaviors of OSH and described based on table distribution and analysis of the influence of exogenous and intervening variables on endogenous using path analysis.

RESULTS

Table 1. Respondent Characteristics

Respondent Characteristics	Frequence		Total	
	n	%	n	%
Sex				
Male	48	21.8	220	100 %
Female	172	78.2		
Age				
21-30 y.o.	51	23.2	220	100 %
31-40 y.o.	143	65.0		
41-50 y.o.	22	10.0		
>50 y.o.	4	1.8		
Education				
High School	56	25.5	220	100 %
Diploma 3	88	40.0		
Undergraduate	75	34.1		
Master degree	1	0.5		
Employment status				
Area	106	48.2	220	100 %
Contract	114	51.8		
Years of Service				
≤ 10 Years	160	72.7	220	100 %
11-20 Years	56	25.5		
21-30 Years	4	1.8		
OSH Training				
Ever	52	23.6	220	100 %
Never	168	76.4		

In table 1 shows that more respondents are female (172.2%) than men, 48 (21.8%) respondents. The age group of the respondents was the most at the

age of 31-40 years with 143 (65.0%) respondents and the least age group being the age group > 50 years, only 4 (1.8%) respondents. The respondents age category was younger at 133 (60.5%) and there were 87 (39.5%) respondents in the old age category. The education level of many respondents at the Diploma 3 level was 88 (40.9%) respondents, undergraguate as many as 75 (34.1%) respondents, High School as many as 56 (25.5%) respondents and Master only 1 (0.5%) respondents. There were 106 (48.2%) with regional employee status and 114 (51.8%) with contract employee status. The maximum working period of respondents is at intervals of ≤ 10 years, namely as many as 160 (72.7%) respondents and the minimum working period is 21-30 years of work, ie only 4 (1.8%) respondents. that more respondents who never attended training were 168 (76.4%) respondents and there were 52 (23.6%) respondents who had attended training.

Table 2. Tabulation of Knowledge and Perception of Attitude

Research Variable	Attitude				Total	
	Less		Enough		n	%
	n	%	n	%		
Knowledge						
Less	24	35.3	44	64.7	68	100
Enough	28	18.4	124	81.6	152	100
Perception						
Negative	24	55.8	19	44.2	43	100
Positive	28	15.8	149	84.2	177	100

Table 2 shows that there are 44 (64.7%) respondents with a level of lack of knowledge and 124 (81.6%) respondents with a level of knowledge enough to have a fairly good attitude, while based on perception there are 19 (44.2%) respondents with negative perceptions and 149 (82.9%) of respondents in the category of positive perceptions have a fairly good attitude regarding Occupational Safety and Health at the Sinjai Regional General Hospital.

Table 3. Tabulation of Knowledge, Perception, and Attitude towards OSH Behavior

Research Variable	OSH Behaviour				Total	
	Less		Enough		n	%
	n	%	n	%		
Knowledge						
Less	36	52.9	32	47.1	68	100
Enough	32	21.1	120	78.9	152	100
Perception						
Negative	26	60.5	17	39.5	43	100
Positive	42	23.7	135	76.3	177	100
Attitude						
Poor	25	48.1	27	51.9	52	100
Good	43	25.6	125	74.4	168	100

Table 3 shows that there are 36 (52.9%) respondents with a level of lack of knowledge and 120 (78.9%) respondents with a level of knowledge enough to have good OSH behavior, while based on

perceptions there are 17 (39.5%) respondents with negative perception categories and 135 (76.3%) respondents with a positive perception category have a fairly good OSH behavior regarding Occupational Safety and Health at the Hospital, based on the attitude

there are 25 (48.1%) respondents with poor attitude categories and 125 (74.4%) respondents with sufficient attitude categories both have pretty good OSH behavior.

Table 4. Effects of Coefficients and their Relation to the Direct Effect Research Hypothesis

No	Research Variable	Direct Effect		
		Estimate	Value p	Conclusion
1	Knowledge → Perception	.946	.002	Significant
2	Knowledge → Attitude	.357	.136	Not Significant
3	Perception → Attitude	.482	.000	Significant
4	Attitude → Behaviour	-.011	.880	Not Significant
5	Knowledge → Behaviour	.163	.129	Not Significant
6	Perception → Behaviour	.320	.000	Significant

Table 5. Effect of Coefficients and Relation to the Indirect Effect Research Hypothesis

Hypothesis (Path)	Indirect Effect	Total Effect
Knowledge → Attitude → Safety Behaviour	.000	.507
Perception → Attitude → Safety Behaviour	.005	.310

Table 4 shows that there is a relationship of knowledge to perceptions (p value = 0.002), perceptions of attitudes (p value = 0,000), perceptions of OSH behavior (p value = 0,000), but does not have the effect of knowledge on attitudes (p value = 0.136) , knowledge of OSH behavior (p value = 0.129) and attitudes toward OSH behavior (p value = 0.880). Table 5 shows the influence of knowledge on OSH behavior through perception but there is no influence of perceptions of OSH behavior through attitude.

DISCUSSION

The results of the study show that the model in this study has a value that means it can be used and then see the influence between the dependent and independent variables either directly or indirectly. The inter-variable influence is found that there is a direct influence of employee perceptions on employee Occupational Health and Safety behavior, but there is no direct influence between knowledge of employee Occupational Safety and Health behavior.

The results of this study are in line with the research of Bakri Nasution *et al.*, (2015) stating that there is no relationship between the level of knowledge and perceptions of OSH towards unsafe behavior of workers in the production of PT. X. Knowledge is influenced by the amount of information a person has as a result of sensing certain objects. A person's knowledge is influenced by the ability to remember, understand, and apply the information received. In contrast to the research of Stevanus Yonathan Kalalo *et al.*, (2016) states that there is a relationship between knowledge about OSH and the incidence of workplace accidents in groups of fishermen in Belang Village. Similarly, the research conducted by Cahyono (2015) states that there is a relationship between the level of nurse knowledge and patient safety practices.

Different theories which states that knowledge is a foundation for someone to do something and behave. Knowledge-based behavior will be better than behavior that is not based on knowledge. Knowledge is a very important domain in shaping one's actions. Just as Adenan (1999), the more positive the behavior will be.

Perception is the earliest stage of a series of information processing. Perception is a process of using existing knowledge (stored in memory) to detect or obtain and interpret stimuli (stimuli) received by the sensory organs such as the eyes, ears and nose (Junita, 2005). In short, it can be said that perception is a process of interpreting or interpreting information obtained through the human sensory system. For example, when someone sees an image, reads a writing or hears a certain sound, then that person will interpret it based on the knowledge he has and is relevant to those things.

The results of path analysis found that there is a direct effect of perceptions of OSH behavior with an estimate of 0.305, meaning that if perception points experience a one point increase, OSH behavior will increase by 0.305 points. This is in line with the research conducted by Agiviana Putri (2015) states that the results of the study show that the variables of perception, attitude, knowledge and workplace variables explain that simultaneously affect safety behavior. And there is a relationship between age, years of service, knowledge, attitudes and perceptions of employee behavior (Shiddiq, 2014). An employee will apply safe behavior at work if they know what the goals and benefits are for their own security and the dangers that will occur if they do not implement them (Geller, 2001). People's perception is very influential on their behavior. Someone who has a good OSH perception generally has safe behavior. The process of perception

can add and reduce actual events that are perceived by someone (Handoko *et al.*, 2012).

Attitudes do not directly influence OSH behavior. This is consistent with the research of Tjipto, S and Mohammad (2014) which states that attitudes are not certain to change the behavior of workers. Attitude is only a tendency to act. The attitude influences behavior when someone believes that he does it then he will know the results. Attitudes can also be seen from the effects of these behaviors, can be positive or negative impacts on the workforce (Ajzen, 2018).

It is not in accordance with study conducted by Prakoso dan Fatah (2017) in research at PT. X stated that the average workforce is good at work and is followed by good intentions in applying OSH behavior. Research has consistently found that employee attitudes are strong predictors of behavior and performance in the workplace (Harrison, Newman, & Roth, 2006; Riketta, 2008). This shows that the workforce with a good attitude is always followed by the intention of good safety behavior too. Similarly, study conducted by Asgedom *et al.*, (2019) revealed that permanent workers have a higher proportion of positive responses to knowledge and attitudes towards chemical health hazards in the behavior of PPE use.

According to Eka, D (2015) states that workers who do not adhere to using personal protective equipment while working are workers who have a bad attitude. This is consistent with research that states that attitudes greatly affect the behavior of workers in using personal protective equipment while working. Research by several experts and research on attitude or labor attitudes toward safety behavior concludes that attitudes do not always influence labor behavior.

CONCLUSION

Based on the results of the study it can be concluded that there is an influence of knowledge on employee behavior through employee perceptions. However, there is no direct influence of knowledge on employee attitudes, employee attitudes toward OSH behavior and knowledge of OSH behavior in Sinjai District Public Hospital employees. The Head of the Sinjai Regional General Hospital in order to plan the training needed to improve and adjust employee competencies to better understand Occupational Safety and Health at the Hospital.

REFERENCES

1. Agiviana, A. P. (2015). Analisis Pengaruh Persepsi, Sikap, Pengetahuan Dan Tempat Kerja Terhadap Perilaku Keselamatan Karyawan. *Jurusan Manajemen Fakultas Ekonomika Dan Bisnis Universitas Diponegoro*, 4, pp. 1–64.
2. Ajzen, I., & Fishbein, M. (2000). Attitudes and the attitude-behavior relation: Reasoned and automatic processes. *European Review of Social Psychology*, 11, 1–33.
3. Asgedom, A. A., Bråtveit, M. and Moen, B. E. (2019). Knowledge , attitude and practice related to chemical hazards and personal protective equipment among particleboard workers in Ethiopia : a cross-sectional study. *BMC Public Health*, pp. 1–10.
4. Bagheri, A. *et al.*, (2019) ‘Farmers’ knowledge, attitudes, and perceptions of pesticide use in apple farms of northern Iran: impact on safety behavior’, *Environmental Science and Pollution Research*. Environmental Science and Pollution Research.
5. Burke, M. J., & Signal, S. M. (2010). Workplace safety: A multilevel, interdisciplinary perspective. *In Research in personnel and human resources management* (pp. 1–47). Emerald Group Publishing Limited.
6. Burke, M. J., Sarpy, S. A., Tesluk, P. E., & Smith-Crowe, K. (2002). General safety performance: A test of a grounded theoretical model. *Personnel Psychology*, 55, 429–457.
7. Christian, M. S., Bradley, J. C., Wallace, J. C., & Burke, M. J. (2009). Workplace safety: A meta-analysis of the roles of person and situation factors. *Journal of Applied Psychology*, 94, 1103–1127.
8. Clarke, S. (2012). The effect of challenge and hindrance stressors on safety behavior and safety outcomes: A meta-analysis. *Journal of Occupational Health Psychology*, 17, 387–397.
9. Eka, D., 2015. *Perilaku Pemakaian Alat Pelindung Diri (APD)*. Universitas Jember, Fakultas Kesehatan Masyarakat.
10. Harrison, D. A., Newman, D. A., & Roth, P. L. (2006). How important are job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences. *Academy of Management Journal*, 49, 305–325.
11. Junita, M. (2005). Presepsi Tenaga Kerja tentang Sistem Manajemen Kesehatan dan Keselamatan Kerja (SMK3) dan Pedoman Penerapan SMK3 di PT. Inalum Kuala Tanjung Tahun 2005. Medan: Universitas Sumatera Utara.
12. Kalalo, S. Y. (2016). Hubungan Antara Pengetahuan Dan Sikap Tentang K3 Dengan Kejadian Kecelakaan Kerja Pada Kelompok Nelayan Di Desa Belang Kecamatan Belang Kabupaten Minahasa Tenggara. *Journal Pharmacoon*. 5(1), pp. 244–251.
13. Nasution, B. B., Raharjo, ; Widi and Fitriangga, ; Agus (2015) ‘Hubungan Tingkat Pengetahuan dan Persepsi Keselamatan dan Kesehatan Kerja terhadap Perilaku tidak Aman Pada Pekerja Bagian Produksi PT X Pontianak’, pp. 1–15.
14. Neal, A., & Griffin, M. A. (2006). A Study of the Lagged Relationships Among Safety Climate , Safety Motivation , Safety Behavior , and Accidents at the Individual and Group Levels, 91(4), 946–953.
15. Notoatmojo, S. (2003). Pendidikan dan Perilaku Kesehatan. Jakarta: PT. Rineka Cipta.

16. Nwokocha, A. C., & Nwakoby, B. N. (2002). Knowledge, attitude, and behavior of secondary (high) school students concerning HIV/AIDS in Enugu, Nigeria, in the year 2000. *Journal of Pediatric and Adolescent Gynecology*, 15,93–96.
17. Prakoso, G. D. and Fatah, M. Z. (2017). Norma subjektif terhadap perilaku safety analysis of effect attitude , perceived , and subjective norm on safety behavior', *Promkes*, 5 No.2, 193–204.
18. Riketta, M. (2008). The causal relation between job attitudes and performance: A meta-analysis of panel studies. *Journal of Applied Psychology*, 93,472–481.
19. Schrader, P. G., & Lawless, K. A. (2004). The knowledge, attitudes, & behaviors approach: How to evaluate performance and learning in complex environments. *Performance Improvement*, 43,8–15.
20. Singhal, T. *et al.*,. (2010). Interventions to reduce needle stick injuries at a tertiary care centre, *Indian Journal of Medical Microbiology*. 28 pp.17-20
21. Shiddiq. (2014). Hubungan Persepsi K3 Karyawan Dengan Perilaku Tidak Aman Di Bagian Produksi Unit Iv Pt. Semen Tonasa. *Jurnal MKMI*. pp 110-116.