

The Relationship of Employee Characteristics towards Knowledge of the Evacuation Route Utilization

Karakteristik Pegawai dalam Hubungannya dengan Pengetahuan Mengenai Pemanfaatan Jalur Evakuasi

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ABSTRACT

Introduction: A hospital as a health service facility needs to provide safe infrastructures, especially during disasters. The evacuation route is a safety support facility that can be used by everyone. A previous study states that when disasters occurred, nurses in the hospital did not know how to evacuate due to the difficulty in accessing the evacuation route. This study aims to analyze the relationship between the employee characteristics and knowledge of the evacuation route utilization. **Methods:** The study used an inferential analytical quantitative method. The population in this study was 178 temporary employees. The stratified random sampling technique was used to gain a sample of 64 people. The variables analyzed in this study were age, work period, education level, training, and knowledge of the temporary employees. Moreover, questionnaires were filled by the temporary employees as a technique of data collection. The Chi-Square test was used as the technique of data analysis. **Results:** The results of the study show that in the highest number, 40.6% of the employees are 31-40 years old, 56.3% of the employees have 1-10 years of service, 39.1% of the employees have a diploma degree, and 65.6% of the employees have participated in the evacuation route training. In addition, based on the bivariable analysis, the authors find that there is a relationship between employees' age and knowledge (p value = 0.036), work period (p value = 0.039), education level (p value = 0.029), and training (p value = 0.029). **Conclusion:** There is a relationship between the employee characteristics and knowledge regarding the evacuation route utilization.

Keywords: disasters, employees, evacuation route, hospitals, knowledge

ABSTRAK

Pendahuluan: Rumah sakit sebagai fasilitas kesehatan perlu mempertimbangkan sarana prasarana yang aman, terutama pada situasi bencana dan keadaan darurat. Jalur evakuasi merupakan fasilitas penunjang keselamatan yang dapat dipergunakan oleh semua orang. Sebuah penelitian menyebutkan bahwa pada saat terjadi bencana, perawat di rumah sakit tidak mengetahui cara melakukan evakuasi dikarenakan sulitnya akses jalur evakuasi. Pengetahuan pegawai dapat mempengaruhi pemanfaatan penggunaan jalur evakuasi. Penelitian bertujuan untuk menganalisis hubungan karakteristik pegawai dengan pengetahuan mengenai pemanfaatan jalur evakuasi. **Metode:** Penelitian ini merupakan penelitian kuantitatif analitik inferensial dengan jenis penelitian observasional. Populasi ialah seluruh pegawai kontrak sebanyak 178 orang. Pengambilan sampel menggunakan teknik stratified random sampling dan didapatkan sampel sebanyak 64 orang. Variabel yang diteliti meliputi umur, masa kerja, tingkat pendidikan, pelatihan, dan pengetahuan. Teknik pengumpulan data menggunakan kuesioner yang diisi oleh pegawai kontrak. Metode analisis data menggunakan uji chi square. **Hasil:** Hasil penelitian didapatkan bahwa sebagian besar pegawai kontrak berumur antara 31-40 tahun sebesar 40.6%, masa kerja terbanyak 1-10 tahun sebesar 56.3%, tingkat pendidikan terbanyak D3 sebesar 39.1%, dan sebagian pegawai pernah mengikuti pelatihan jalur evakuasi yaitu sebesar 65.6%. Berdasarkan analisa bivariabel didapatkan hasil bahwa terdapat hubungan antara umur pegawai kontrak dengan pengetahuan (p value = 0,036), masa kerja dengan pengetahuan (p values = 0,039), tingkat pendidikan dengan pengetahuan (p value = 0,029), dan pelatihan dengan pengetahuan (p value = 0,029). **Simpulan:** Penelitian ini mendapatkan hasil bahwa terdapat hubungan antara umur, masa kerja, tingkat pendidikan, dan pelatihan dengan pengetahuan pegawai kontrak mengenai pemanfaatan jalur evakuasi.

Kata kunci: bencana, jalur evakuasi, pegawai, pengetahuan, rumah sakit

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INTRODUCTION

A hospital is a health service institution which provides complete individual health services including inpatient care, outpatient care, and emergency service (The House of Representatives of the Republic of Indonesia, 2009). It has a function to provide comprehensive, curative, and preventive services. Furthermore, a hospital has to consider giving safe and secure infrastructures, especially when disasters and emergencies occur. Thus, the hospital is still able to provide health services to the community (Hermanto, Widjasena, and Suroto, 2017).

A disaster is an event or a series of events that threaten and disrupt the life of people. It can be caused by natural and/ or non-natural factors as well as human factors, resulting in human casualties, environmental damages, property losses, and psychological impacts (National Agency for Disaster Management, 2007). This unfortunate condition also occurs at a work place. According to OSHA, an emergency at work is a situation which threatens employees, society, or company. It causes physical or environmental damages (Occupational Safety and Health Administration, 2004).

The disasters in the hospital are divided into two categories, namely external disasters and internal disasters. External disasters are disasters occur outside the hospital, which enables the hospital to become a health facility that handles victims and emergencies. Meanwhile, internal disasters are disasters that occur within the confines of the hospital, such as fire, building collapse, riot, and earthquake. Based on the data from the Human Resource Capacity Building Module in Hospital Planning in Disaster Health Crisis Management, there are only 10% out of 1,200 hospitals that have a good disaster management (Wartatmo, 2011). According to the National Hospital Accreditation Standards, the term "safe hospital" is defined as a hospital whose service facilities remain accessible and functioning at maximum capacity and operates with similar infrastructures, before, during, and immediately after the impact of disasters or emergencies (Hospital Accreditation Committee, 2017).

A previous study has revealed that when an earthquake hit Bengkulu Province (in 2000 and 2007), the disaster management team at Dr. M Yunus Bengkulu Hospital was formed. However, the hospital building was not equipped with signs of evacuation route and assembly point, so during the

evacuation process both patients and employees had difficulty to find the assembly point sign (Febriawati et al., 2017). Another study has indicated that the impact of Tsunami which hit Aceh Province in 2004 caused casualties and injuries, including in several hospitals. The nurses at the Regional Public Service Agency (BLUD) of Aceh Mental Hospital did not know how to evacuate during the disaster. Another problem found was the difficulty in directing patients to a safe place because of the narrow evacuation stairs, slippery floor, and the confusion to find an assembly point (Safrina, Hermansyah and Aulia, 2015).

The disaster can occur in every place, including in hospitals as one of the health service facilities. When the internal disasters occur, several procedures still have to be performed, especially those regarding the evacuation route. The evacuation route is an intended route that connects one/ the entire areas to a safe area as the assembly point (Wartatmo, 2011). The Ministry of Health of the Republic of Indonesia provides a guideline regarding the technical requirements of hospital building and infrastructure. The evacuation route in hospitals must include evacuation signs, an assembly point, guiding blocks, safety signs, emergency exits, emergency stairs, ramp, and fireman's elevators (Ministry of Health of the Republic of Indonesia, 2016).

Every hospital is required to have an evacuation route. This route is one of the safety facilities for employers, patients, and visitors at hospitals. The hospital evacuation route should be used by everyone at the hospitals, including employees, patients, and visitors. In addition, hospital employees are also expected to be aware of the use of the evacuation route. Furthermore, behavioral factors can influence the application of the evacuation route.

Behavior is a response or reaction of a person to stimuli from outside. According to Notoatmojo (2010), behavior is classified into three main domains, namely knowledge, attitude, and action. Knowledge is the result of sensing a particular object (Notoatmojo, 2010). It is a source that underlies someone in acting or doing something (Fakhrurrazi, Mulyadi and Ismail, 2015). A study from Riyadianto in 2019 conducted at PKU Muhammadiyah Gamping Yogyakarta Hospital obtains the result that 45.5% of respondents have a high understanding of the evacuation route, the remaining 30.7% have an average understanding, and 23.8% have a low understanding about the evacuation route at hospitals (Riyadianto, 2019).

Knowledge is influenced by internal and external factors. Internal factors include education, job, experience, and age (Wawan, 2011). Meanwhile, the external factors include environment and social influences (Deliana and Megatsari, 2014). These factors known as individual characteristics can influence the results of good or poor knowledge of health employees (Cahyono, 2015). Another study states that health employees with an education level of bachelor/master/doctoral degree have a higher level of knowledge compared to employees who only graduated from high school (Yava et al., 2013).

Bhayangkara H.S Samsoeri Mertojoso Surabaya Hospital is a Level II hospital that has 20 buildings, with the highest building of 3 floors. This hospital experienced a fire disaster in November 2018. The disaster occurred on the third floor of the Emergency Room (ER). Fires could be handled well by officers and did not cause casualties. Trainings of disaster management and evacuation process for hospital employees is done at the time of admission and during hospital accreditation. This study aims to analyze the relationship of employee characteristics, including age, work period, education, and training of the evacuation process, toward knowledge of the use of the evacuation route.

METHODS

This present study is an observational study. This study used a quantitative method with a cross-sectional type of research design based on the time of the study. Based on the characteristic of the data analysis, this study is known as an inferential analytical study that analyzes the relationship between employee characteristics and knowledge of the use of the evacuation route. The study took place at Bhayangkara H.S Samsoeri Mertojoso Surabaya Hospital from February 2019 to Oktober 2019. The population used in this study was 162 people of temporary employees at 28 hospital rooms. In collecting samples, the inclusion and exclusion criteria were obtained. The inclusion criteria consisted of (1) Temporary employees at Bhayangkara H.S Samsoeri Mertojoso Surabaya Hospital, (2) 20-55 year old temporary employees, (3) Temporary employees with work period of 1-29 years, (4) Temporary employees with the education level of high school to diploma/bachelor, and (5) Temporary employees who were willing to be respondents in the study. Meanwhile, the exclusion criteria consisted of (1) Employees

who had the inclusion criteria but did not come to work when the measurement was held, and (2) Temporary employees who did not consent to be respondents. The sampling technique was done by stratified random sampling due to the heterogeneous population of the employees (based on age, work period, and education level), dispersion, and sampling structure. Therefore, there were 64 people of a sample in 22 rooms.

The variables used in this study were age, work period, education level, training, and knowledge. The data collection was obtained from primary and secondary data. The primary data were from the questionnaire filled by the respondents. The secondary data were obtained from various literature studies and data from the hospital. Moreover, the instrument in this study used a questionnaire sheet that had been tested for its validity and reliability. The result of the study was then presented in the form of the frequency distribution tables and description to illustrate the relationship between employee characteristics and knowledge about the use of the evacuation route. Afterwards, the data obtained in this study were analyzed using the Chi-Square test. This present study passed the ethical test conducted in June 2019. The test was conducted by the ethical committee of the Faculty of Dentistry of Airlangga University. The test had obtained an ethical certificate No. 337/HRECC. FODM/VI/2019.

RESULTS

Employee Characteristics

The study was conducted on 64 temporary employees at Bhayangkara H.S Samsoeri Mertojoso Hospital. The illustration of the employees' characteristics can be seen in Table 1.

Age

The age groups of the respondents in this study are divided into three categories. The first category consists of respondents with an age range of 20-30 years old. The second category consists of respondents with an age range of 31-40 years old, and the third category consists of respondents aged between 41-55 years old. Table 1 shows that there are 19 respondents (29.7%) aged 20-30 years old, 26 respondents (40.6%) aged 31-49 years old, and 19 respondents (28.7%) aged 41-55 years old. The results of the age variable distribution are shown in Table 1.

Work Period

Work period is the length of time for a person to work and pursue a job. Work period in this study is divided into three categories. The first category is employees with 1-10 years of service, the second category is employees with 11-20 years of service, and the third category is employees with 21-29 years of service. There are 36 respondents (56.3%) who have worked for 1-10 years, 23 respondents (35.9%) who have worked for 11-20 years, 5 respondents (7.8% who have worked for 21-29 years). The distribution results of work period can be seen in Table 1.

Table 1. The Distribution of the Bhayangkara Hospital Employee's Characteristics in 2019

Characteristics	Range	Frequency	Percentage (%)
Age (Years)	20-30	19	29.7%
	31-40	26	40.6%
	41-55	19	28.7%
Work Period (Years)	1-10	36	56.3%
	11-20	23	35.9%
	21-29	5	7.8%
Education Level	High School	21	32.8%
	Diploma	25	39.1%
	Bachelor	18	28.1%
Training	Ever	42	65.6%
	Never	22	34.4%

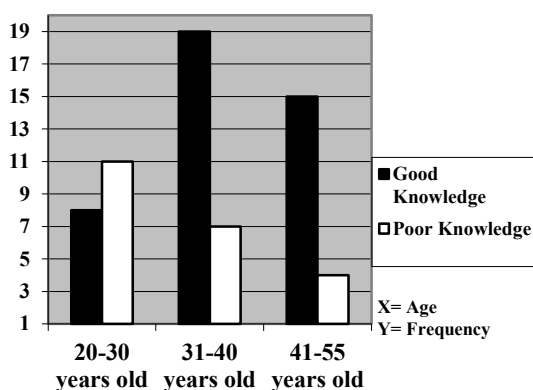


Diagram 1. The Frequency Distribution of Knowledge Level Based on the Temporary Employees' Age at Bhayangkara Hospital in 2019

Education Level

Education is an attempt to develop abilities in a conscious and systematic way. The education levels in this study are divided into three categories, namely Senior High School, Diploma 3 (D3), and Diploma 4 (DIV)/ Bachelor Degree. The frequency distribution of education level in Table 1 shows that TTK employees who have Senior High School level degree are as many as 21 respondents (32.8%), Diploma 3 are 25 respondents (39.1%), and Diploma 4 or Bachelor Degree are 18 respondents (28.1%).

Training

Training in this study refers to an experience of the hospital employees in participating in the hospital evacuation process and route training. The results obtained in Table 1 shows that as many as 42 respondents (65.6%) attend the training, while 22 respondents (34.4%) never participate in the evacuation route training.

Knowledge

The results of temporary employees' knowledge level are obtained by filling out a questionnaire that consists of 10 multiple choice questions. The education level categories are divided into two, namely good, if the score is ≥ 66.67 , and poor, if the score is < 66.67 . The frequency distribution of knowledge level shows that 42 respondents (65.6%) have a good level of knowledge, while 22 respondents (34.4%) have a poor level of knowledge. The results of frequency distribution of education level in presented in Table 2.

The Relationship between Temporary Employee's Age and Knowledge about the Utilization of Evacuation Route

The results of the study show that the respondents with a good level of knowledge are in the age range of 31-40 years old, accounting for 19 employees. The frequency distribution of knowledge level based on the employees' age is shown in Diagram 1.

Table 2. Frequency Distribution of Bhayangkara Hospital Employee's Knowledge in 2019

Knowledge	Frequency	Percentage (%)
Good	42	65.6%
Poor	22	34.4%
Total	64	100 %

Respondents who have a good level of knowledge are mainly in the age of >30 years old. Meanwhile, respondents who have poor level of knowledge are mostly in the age range of 20-30 years old. Specifically, the analysis of the relationship between temporary employees' age and knowledge and the utilization of the evacuation route can be seen in Table 3. In Table 3, the p-value of 0.036 is obtained through a chi-square test. This shows that the $p\text{-value} < \alpha 0.05$. It means that there is a significant relationship between temporary employees' age and knowledge and the utilization of the evacuation route.

The Relationship of Temporary Employees' Work Period and Knowledge about the Utilization of Evacuation Route

This study shows that 20 respondents with work period between 1 to 10 years have a good level of knowledge. The frequency distribution of knowledge level based on the temporary employees' work period is shown in Diagram 2.

Tabel 3. The Relationship between Temporary Employees' Age and Knowledge about the Utilization of Evacuation Route at Bhayangkara Hospital in 2019

Age (years)	Level of Knowledge				Total		P value
	Poor		Good		N	%	
	n	%	n	%			
20-30	11	17.2	8	12.5	19	29.7	0.036
31-40	7	10.9	19	29.7	26	40.6	
41-55	4	6.3	15	23.4	19	29.7	

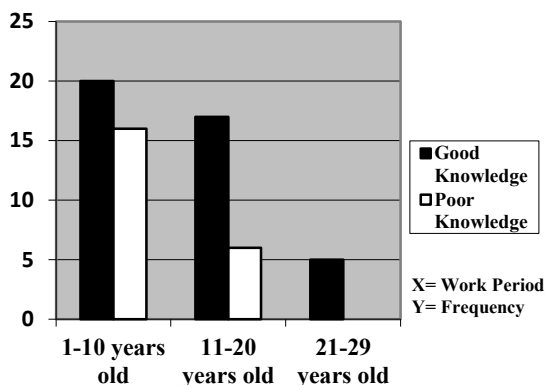


Diagram 2. The Frequency Distribution of Knowledge Level based on the Temporary Employees' Work Period at Bhayangkara Hospital in 2019

Diagram 2 shows that the longer employees work in the hospital, the fewer number of employees have a poor level of knowledge. The results of the analysis of the relationship between temporary employees' work period and knowledge and the utilization of the evacuation route can be seen in Table 4. In table 4, the p-value of 0.039 was obtained with the chi-square test. This shows that the $p\text{-value} < \alpha 0.05$. It means that there is a significant relationship between work period and knowledge about the utilization of the evacuation route.

The Relationship between Temporary Employees' Education Level and Knowledge about The Utilization of the Evacuation Route

The study shows that 19 respondents with Diploma 3 education level have good knowledge. The frequency distribution of knowledge level based on the education level is shown in Diagram 3.

Diagram 3 shows that employees with D3/D4/ Bachelor education level have good knowledge compared to the employees with Senior High School

Table 4. The Relationship between Temporary Employees' Work Period and Knowledge about the Utilization of Evacuation Route in Bhayangkara Hospital in 2019

Work Period (years)	Knowledge				Total		P value
	Poor		Good		N	%	
	n	%	n	%			
1-10	16	25.0	20	31.3	36	56.3	0.039
11-20	6	9.4	17	26.6	23	35.9	
21-29	0	0.0	5	7.8	5	7.8	

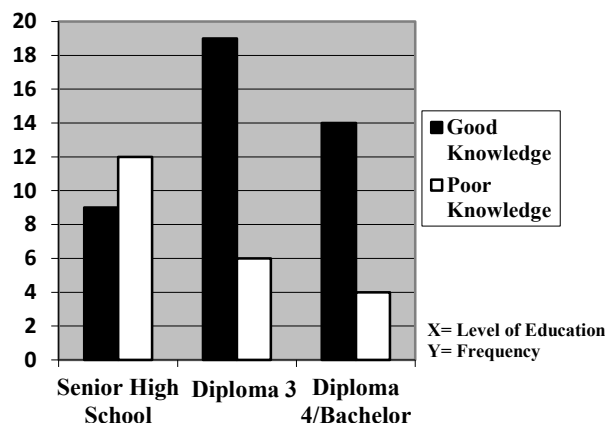


Diagram 3. The Frequency Distribution of Knowledge Level Based on the Education Level in Bhayangkara Hospital in 2019

Tabel 5. The Relationship between Temporary Employees' Education Level and Knowledge about the Utilization of Evacuation Route in Bhayangkara Hospital in 2019

Education Level	Knowledge				Total		P value
	Poor		Good		N	%	
	n	%	n	%			
SHS	12	18.8	9	14.1	21	32.8	0.029
D3	6	9.4	19	29.7	25	39.1	
D4/ Bachelor	4	6.3	15	23.4	19	29.7	

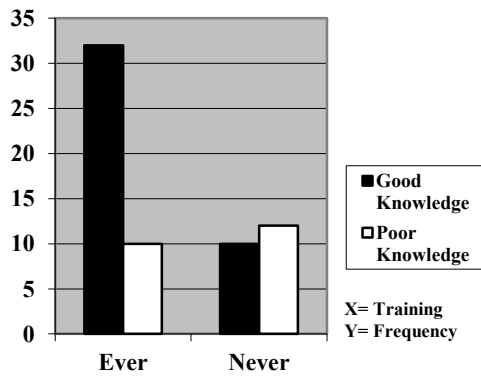


Diagram 4. Frequency Distribution of Knowledge Level Based on Training of Bhayangkara Hospital Employees in 2019

(SHS) education level only. Then, the analysis of the relationship between employees' education level and knowledge and the utilization of the evacuation route was conducted, and the results can be seen in Table 5. Table 5 shows that the result of the chi-square test is a p-value of 0.029. It means that the $p\text{-value} < \alpha 0.05$. This result indicates that there is a significant relationship between temporary employees' education level and knowledge and the utilization of evacuation route.

The Relationship between the Evacuation Route Training to the Employees and Knowledge about the Utilization of the Evacuation Route

This study shows that 31 respondents who have participated in the training have good knowledge. The frequency distribution of knowledge level based on training participation can be seen in Diagram 4.

Table 6 presents that the result of the chi-square is a p-value of 0.029. This shows the $p\text{-value} < \alpha 0.05$. It implies there is a significant relationship between employees' training and knowledge about the utilization of the evacuation route.

Tabel 6 The Relationship between the Evacuation Route Training and the Employees' Knowledge about the Utilization of the Evacuation Route in Bhayangkara Hospital in 2019

Training	Knowledge				Total		P value
	Poor		Good		N	%	
	n	%	n	%			
Ever	12	18.8	10	15.6	22	34.4	0.029
Never	10	15.6	32	50.0	42	65.6	

In Diagram 4, the results show that temporary employees who have participated in the evacuation route training mostly have good knowledge compared to the employees who have never involved in the evacuation route training.

DISCUSSION

Employee Characteristics

Age

This study shows that most of the respondents are in the age range of 31-40 years old. Age is the length of time that a person has lived since they were born. According to Aini and Agustin (2019), one of the factors that affect someone's knowledge is age. The older someone is, the more knowledge they have and the more mature they are to process given information. As people get older, they will have more knowledge, which eventually can develop a person's mental and intellectual maturity. Furthermore, they will be able to make a wise decision in doing a particular act (Ariwibowo, 2013).

Work period

Job is an activity that people should do to support their life. A job can make people gain knowledge and experience. According to Indonesian Statistical Center, work is economic activities which are conducted to gather or help earn income (Indonesian Statistical Center, 2019). Work period is the length of time an employee has been working for an employer. In this study, there are 36 respondents who have the work period ranging from 1-10 years. The longer a person works, the more knowledge they gain (Dharmawati and Wirata, 2016). According to Sesrianty (2018) in her study, work period of nurses in hospital highly determines the quality of nurses in that room. For nurses who have a new

work period, their experience is still compared to nurses who have long work period. Nurses who have worked for many years possess an increased skills and experience to deal with problems in their work.

Education level

Education has an essential role in behavior changes. The higher the education level, the higher the knowledge level expected from someone, which will make them easier to accept the information (Wardani and Prianggajati, 2013). In this study, most of the respondents, as many as 25 respondents, have Diploma 3. Most of the respondents were also used to working as nurses, midwives, medical analysts, and environmental health experts. This is in line with research conducted by Devi Darliana in the hospital, stating that most nurses tend to have D3 nursing education (Darliana, 2016).

Training

Experience is an event that occurs to someone in his interaction with society (Dharmawati and Wirata, 2016). In this study, employees' training about the evacuation route is an experience to escalate the knowledge level towards the utilization of the evacuation route. As many as 42 respondents have participated in the evacuation route training. In accordance with Roffey Park Management's study (year?), the increase in knowledge is affected by someone's experience in the form of flexibility, creativity, ability to change, and a desire to learn continuously (Dharmawati and Wirata, 2016). The evacuation route training in Bhayangkara Hospital is held during the hospital's employee admission time. According to Hospital Accreditation National Standard guidelines on the facility and safety management, all hospital employees must be given education or training on how to use the facility, how to reduce risks, and how to monitor and report a risky situation and injury incident. A hospital is also required to conduct a comprehensive annual simulation at the hospital's internal level. The participants of this simulation are all of the the hospital employees, both permanent and contract workers (Hospital Accreditation Committee, 2017). However, the results of the study show that only 65.6% of the employees have participated in the training.

Knowledge

This study shows that as many as 42 respondents get an answer score ≥ 66.67 and have

good knowledge. According to Nasrullah (2014), knowledge is the result of someone's knowing that happens after sensing an object. According to Deliana and Megatsari (2014), several factors can affect a person's knowledge, namely age, education, job, and experience.. In general, knowledge can come from experience and also information conveyed by others (Nasrullah, 2014). A study s done by Ridwan (2019) in PKU Muhammadiyah Gamping Yogyakarta Hospital with 101 respondents who were the hospital non-medical staff show that 45.5% respondents have very good knowledge, 30.7% have good knowledge, and 23.8% have poor knowledge of the evacuation route (Riyadianto, 2019).

Knowledge is an important domain in shaping one's behavior. According to Bloom, knowledge is divided into six levels, namely (1) knowledge , memory recall on objects that have previously been observed, (2) comprehension, the understanding of the object and correct interpretation about the known object, (3) application, the ability to use the gained understanding in other situations, (4) analysis, one's ability to describe or separate a materials, and then look for relationships between the components contained in the known object, (5) synthesis, the ability of a person to encapsulate a logical relationship of components, and (6) evaluation, one's ability to make judgments on self-determined criteria or norms that exist in a society (Nasrullah, 2014). Hospital employees' sufficient knowledge of the use of evacuation route will make employees become more responsive in events of a disaster or emergency, thereby further improving work safety.

The Relationship between Employees' Age and the Knowledge about the Utilization of the Evacuation Route

According to the research analysis, it is discovered that the highest percentage of employees who have poor knowledge are employees with an age range of 20-30 years, while employees who have good knowledge are employees with an age range of 31-40 years. In accordance with a research conducted by Cahyono (2015), it is stated that people with older ages have a broader understanding than the younger ones. The older the age, the higher the maturity level and strength of a person will be more broadened in terms of thinking and working (Cahyono, 2015). According to research conducted by Pangesti(2012), it is stated that the productive age is the age where an individual has the most important role, various activities and good cognitive

abilities. Thus, it can be concluded that employees' age influences their level of knowledge.

The chi square test obtains a significant value of 0.036. This shows that there is a relationship between employees' age and the knowledge about the utilization of the evacuation route. research conducted by Suwaryo (2017) using a contingency correlation test also shows that there is a relationship between age and knowledge with strong correlation strengths. This is in line with a theory from Aini (2019), suggesting that age has an influence on one's knowledge. In terms of public trust, someone who is more mature will be more trusted. According to Aini's research (2019), it can be assumed that people who live a normal, longer life gain more experiences, and therefore their knowledge and expertise will be more extensive. They would also be wiser in making decisions (Aini and Agustin, 2019). Someone who has a mature age will stay healthy and safe. Moreover, older employees have received a lot of information, so their knowledge about the utilization of the evacuation route is more extensive, and they have known a lot about it.

The Relationship between Employees' Work Period and the Knowledge of the Utilization of the Evacuation Route

Working is an activity that must be done primarily to support life. According to the Indonesian Statistical Center (2019), working is an economic activity carried out to obtain or help earn income. Work period is the period of time someone has worked and pursued the job. This study found that there is a relationship between the employees' work period and their knowledge about the utilization of the evacuation route with a significant value of 0.039. The work period of employees is related to the experience they have gained while working in a hospital. In this study, it is found that employees with 11-20 years of work period have a better knowledge. research conducted by Sesrianty (2018) also have the same finding, stating that there is a relationship between the work period of nurses and their knowledge.

In accordance with the theory from Wawan (2011), the job carried out causes a person to gain knowledge and experience. The longer work period of employees makes them have better knowledge and attitude compared to new employees. In this study, it is found that employees with 11-29 years of service tend to have good knowledge. Employees with a long work period are well acquainted with the

conditions, infrastructure, and facilities available at the hospital where they work. So, it is possible that the knowledge they have is better. Longer working period makes employees gain a lot of experience, both in the field of work and outside of work that is still related to where they work. Knowledge about the utilization of evacuation route has also become more understandable because employees have been in the hospital for a long time and know more about the evacuation routes in the hospital.

The Relationship between Employees' Level of Education and the Knowledge about the Utilization of the Evacuation Route

The results of the study state that there is a relationship between levels of education of employees and their knowledge about the utilization of the evacuation route with a p value of 0.029. According to research conducted by Dharmawati (2016), the relationship between education level and knowledge can be linked to the fact that the higher level of education had by the employees, the more information and the more extensive knowledge is obtained. This result is in accordance with the theory from Notoatmojo (2010), stating that education is the process of a person in developing abilities, attitudes, and other forms of behavior. A person's education will influence his behavior. The higher the level of education, the higher the level of one's knowledge. People may also produce healthy and safe behavior. research conducted by Ariwibowo (2013) found that there is a relationship between the level of education and knowledge of workers (Ariwibowo, 2013). Another study conducted by Yava in 2013 states that health workers with a D3/ DIV/ S1/ S2 degree have a significantly higher statistical knowledge value than health workers graduating from high school (Yava et al., 2013).

An evacuation route is a path intended to connect between one point and another one that is safe to use as a gathering point. Good knowledge is needed in utilizing the evacuation routes, and the knowledge itself is based on a good mindset. Although the level of education is not the only factor that can influence knowledge about the evacuation routes, it is easier for people with higher level of education to accept good changes. Higher education for health workers is important so as to produce skills, knowledge, and good attitudes to behave accordingly. This is in line with research conducted by Fakhurrrazi (2015), which states that disaster or emergency preparation requires health workers

who have extensive knowledge. Higher education results in extensive knowledge of the workers about disasters so that they are more alert in utilizing the evacuation routes.

The Relationship between Employees' Evacuation Training and the Knowledge about the Utilization of the Evacuation Route

The evacuation training for employees is an experience that can shape a person's behavior, including his knowledge. The results of the study show that there is a relationship between the evacuation route training taken by hospital employees and their knowledge about the utilization of the evacuation route. 32 employees who have attended the evacuation training have good knowledge. According to Notoatmojo (2010), experience is a way to obtain truth. This is done by repeating the knowledge gained in solving problems encountered in the past. According to research conducted by Fakhurrhazi (2015), an experience significantly influences knowledge. Training conducted by hospital staff is an experience that can increase knowledge (Fakhurrhazi, Mulyadi and Ismail, 2015).

The Evacuation route training at Bhayangkara Hospital was carried out in the period of employee recruitment and hospital accreditation. In accordance with the provisions of the National Hospital Accreditation Standards (SNARS), in improving the health and safety of work, hospital employees are required to be given education or a training regarding how to use facilities, how to reduce risk, as well as how to monitor and report risky situations and injury incidents (Hospital Accreditation Committee, 2017). However, it was found in this study that the number of hospital employees who have attended training accounts for 65.6% while the rest has never attended the training. The evacuation route training in hospitals is intended to make employees responsive to disasters or other emergencies. It is also an attempt to accelerate the evacuation process for themselves and patients. Thus, when a disaster or emergency occurs, it will minimize the risk of work accidents.

CONCLUSION

This study found that there is a relationship between age, work period, level of education, and training with temporary employees' knowledge regarding the use of the evacuation route. By having sufficient knowledge regarding the use of

the evacuation route, work accidents in events of a disaster or other emergency can be avoided, so hospital employees can stay healthy and safe.

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