Implementation of Occupational Health and Safety Standards for Office Buildings in Universitas Airlangga Rectorate Building

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ABSTRACT

Introduction: Universitas Airlangga office building rectorate includes a high-rise building that must have occupational health and safety (OHS) facilities and also its application must be in accordance with office building standards which applies to prevent accidents and occupational diseases. This study aims to determine OHS office buildings rectorate facilities, and to analyze OHS standards application for office buildings rectorate with applicable OHS office building standards. **Methods:** This research is an observational study. Data analysis using descriptive method with a cross sectional study design. The variables studied were OHS office building facilities in Universitas Airlangga Rectorate, and OHS standard application for in Universitas Airlangga office buildings rectorate. Data collection techniques are derived from primary data in OHS observations form facilities in office buildings and secondary data in agency documents form. **Results:** Work safety facilities include fire extinguishers, hydrants, evacuation routes, evacuation plans, gathering points, first aid kits. emergency stairs, safety sign. Occupational health facilities include health promotion media, workforce health checks, and lactation rooms. Office work environment health facilities include toilets and hand washing facilities. Then office ergonomics facilities include cushions for employee work chairs. **Conclusion:** The facilities are in accordance with Republic of Indonesia Health Minister Regulation Number 48 of 2016 concerning Office OHS Standards which include occupational safety application, occupational health, and office environmental health standards and office ergonomics. The implementation of OHS standards for office buildings at in Universitas Airlangga Rectorate, such as occupational safety, occupational health, office work environment health, and office ergonomics standards have been implemented and carried out.

Keywords: occupational health and safety facilities, occupational health and safety office standards, universitas airlangga

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INTRODUCTION

Occupational safety and health is one of the important factors for the sustainability of an organization within a company or agency. If all workers are in optimal condition, it will be great opportunities to increase worker productivity and achieve company/organization goals (Afiani, Jayanti and Widjasena, 2016). Furthermore, the Government Regulation Number 50 of 2012 states that Safety and Health refers to all activities aimed at guaranteeing and protecting the safety and health of workers through efforts to prevent occupational accidents and occupational diseases (Government Regulation of the Republic of Indonesia, 2012).

The definition of a work place is all rooms where workers have a job or all rooms which are often traversed by workers to carry out a business which is related to the workplace in order to fulfill certain goals (Regulation of the Minister of Manpower, 1970). Based on this statement, an office building is included into one type of workplace. Few or many office buildings certainly have potential hazards which will affect the safety and health of workers. In preventing accidents and occupational diseases in office buildings, occupational safety and health standards in office buildings should be implemented. According to the Regulations of Occupational Health and Safety Standards in Office (2016), occupational safety and health standards in offices include occupational safety, occupational health, office work environment health, and office ergonomics. This requires companies to pay attention to the safety and health of their workers in order to

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improve the health status, productivity and worker welfare (Putri and Kusreni, 2017).

According to the latest estimates released by the International Labor Organization (ILO), 2.78 million workers die each year due to occupational accidents and occupational diseases. Each year, there are nearly a thousand times as many non-fatal occupational accidents as fatal occupational accidents. An estimated 374 million workers suffer from non-fatal accidents each year, and many of these accidents have serious consequences for workers' earning capacity. (International Labour Organization, 2018). Furthermore, based on data from the International Labor Organization (ILO) in 2013, it was stated that one worker in the world dies every 15 seconds due to work accidents, and 160 workers experience work-related illnesses (Amelita, 2019). According to the National Fire Protection Association (NFPA), firefighters in America during 2007-2011 handled approximately 3,340 fires on office property per year. Each year, these fires could cause an average of 4 civilian deaths, 44 civilian fire injuries, and 112 million dollars in direct property damage (Campbell, 2013). Furthermore, the number of work accidents in Indonesia, including in East Java, is also quite large. Nationally, the work accident rates in 2015 reached 105,182 cases with 2,275 people who died. Meanwhile, the East Java Population Transmigration Manpower Office recorded that the number of people suffering from work accidents in the first quarter of 2015was 2,180 people, in the second quarter was 3,099 people, and in the third quarter was 5,113 people (Christian, 2018).

According to the theory of the causes of accidents by the International of Loss Control Institute (ILCI) in 1972 which was pioneered by Frank Bird, it was stated that the factors that cause an accident come from five dominoes that are connected to each other. The five dominoes are a series of systems that result in accidents consisting of a lack of control, basic causes, immediate causes, accidents, and losses. One of the components of the lack of control is an inappropriate program. This non-conforming program component is one of the causes of inadequate supervision (Wicaksono, D T and Suwandi, 2014).

An effective Occupational Health and Safety inspection program is a very important preventive program that can be carried out to ensure that the work environment is always safe and healthy. Inspection is also a way to find problems in the field and to determine the risks before work-related losses or accidents and diseases actually occur. It is hoped that by implementing inspection activities, conditions in the workplace that are not in accordance with occupational safety and health standards will immediately receive attention and be adjusted to the applicable standards so as to prevent accidents and occupational diseases (Putra, 2017).

Universitas Airlangga is a public university which has many workers and has various types of buildings including the Rectorate office building and lecture buildings. Universitas Airlangga has a type of building that has many floors. In addition, the types of activities carried out by workers in the building also vary. The inspection program regarding Occupational Health and Safety facilities has also been implemented in the Rectorate Building of Universitas Airlangga. The inspection program was carried out by safety officers who were trained and experienced in their field. Inspections on Occupational Health and Safety (OHS) facilities in the Rectorate Building were carried out every six months. The results were mostly in accordance with the applicable standards. However, the checklists used in the inspection activities have not been classified according to the safety and health standards for office buildings.

According to the Regulation of the Minister of Health of the Republic of Indonesia Number 48 of 2016 concerning Work Health and Safety Standards in Office, it is explained that the Occupational Health and Safety (OHS) standards for offices are classified into occupational safety standards, occupational health standards, office work environment health standards and office ergonomics standards. Regulation of the Minister of Health of the Republic of Indonesia Number 48 of 2016 also states that some office workers are active for 8 (eight) hours or more every day, and t high-rise buildings (office buildings) are very vulnerable to safety aspects during earthquakes and fires. If these conditions are not anticipated, they can cause work-related accidents that can cause casualties. Based on this explanation, it is necessary to have an Occupational Health and Safety (OHS) inspection which aims to determine the Occupational Health and Safety (OHS) facilities of office buildings in the Rectorate Building and analyze the application of Occupational Health and Safety (OHS) standards for office buildings in the Rectorate Building with the applicable OHS office building standards. Thus,

it is hoped that there will be an increase in the work safety and health of labor.

METHOD

This study used a descriptive observational research method, which means that this research was conducted on a set of objects with the aim to see a description of the phenomena that occur. Furthermore, this observational descriptive research method used a cross sectional approach because the research was carried out at a certain time (Notoatmodjo, 2012).

This research was conducted in the Rectorate Building of Universitas Airlangga on 27 July-15 September 2020. The variables used in this study were Occupational Health and Safety (OHS) facilities for office buildings in the Rectorate Building of Universitas Airlangga, and the application of Occupational Health and Safety standards for office buildings in the Rectorate Building of Universitas Airlangga .

Furthermore, the data used in this study were primary data and secondary data. Primary data were data obtained directly from the results of field observations by conducting an inspection to the Occupational Health and Safety facilities of office buildings in the Rectorate Building of Universitas Airlangga. The instruments used in the primary data collection were the Occupational Health and Safety (OHS) facility inspection checklist and the observation sheet. The checklist used was the result of a modification between the existing checklist and the one made by the researchers which was guided by Law No. 1 of 1970 concerning Work Safety and Regulation of the Minister of Health of the Republic of Indonesia Number 48 of 2016 concerning Work Health and Safety Standards in Office. Meanwhile, secondary data were obtained from agency documents and supporting references that have relevance to the object under study. Secondary data in this study included documents from related agencies and several public journals that are relevant to the research title.

RESULTS

One of the work programs in the Sub-directorate of Occupational Safety and Health, Directorate of Environmental Infrastructure and Facilities, Universitas Airlangga is an inspection of Occupational Health and Safety (OHS). The program can be used as a tool to see the suitability of the implementation of OHS standard facilities for office buildings in the Rectorate Building of Universitas Airlangga with the applicable standards.

In the process of carrying out Occupational Safety and Health (OHS) inspection activities, the tools and materials used were checklists, notebooks, stationery, meters, lux meters, and cameras. The objects of the Occupational Health and Safety (OHS) inspection for office buildings at the Rectorate Building of Universitas Airlangga included the management building, hallway, and Kahuripan Building. The following are the results of the inspection of Occupational Health and Safety (OHS) facilities/infrastructure for office buildings in the Rectorate Building of Universitas Airlangga.

Work Safety

The following are some of the work safety facilities in the Rectorate Building of of Universitas Airlangga which consists of the management building, the hall building, and Kahuripan Building. The availability of work safety facilities is very important in multi-storey office buildings which have many employees. In addition, the availability of work safety facilities in office buildings is also an effort to prevent and overcome accidentsor even disasters in the workplace.

Light Fire Extinguishers

Light fire extinguishers are a building protection system tool that functions to extinguish fires, and they are easily served by one person to extinguish the fire at the start of the fire. When inspecting the light fire extinguishers, the most frequently encountered fire extinguishers were the type of dry flour (powder) and the type of gas (halogenated hydrocarbons and so on).

The results of the light fire extinguisher inspection at the Rectorate Building showed that the light fire extinguishers were in good condition and were suitable for use. When an inspection was conducted, the results showed that the height of the installation marking was 125 cm from the base of the floor, the installation and placement were in accordance with the type and classification of the fire, the distance between one light fire extinguisher and another was about 15-16 meters, and the color of the light fire extinguisher at the time of inspection was all red. Furthermore, during an inspection of the light fire extinguishers, the results

regarding the position of the placement of the light fire extinguishers showed that on average they were easy to reach. However, it was also found that there were some fire extinguishers whose positions were a bit difficult to reach and pick up because they were blocked by other objects, such as being blocked by a sofa.

Figure 1. A light fire extinguisher in the Rectorate Building of Universitas Airlangga in 2020

(a)

(b)

Figure 2. Fire Prevention Training in 2018 (a) and Fire Fighting Training in the Faculty in 2019 (b)

Based on the inspection history document in the agency, it was found that the fire extinguisher inspection has been carried out visually every three months concerning the physical condition of the tube, the expiration date, the hose, the handle and the pressure gauge for the safety lock seal. In addition, the contents of each light fire extinguisher tube have corresponded to the type of fire class in each room of the Rectorate Building of Universitas Airlangga. For example, in the Directorate System Information (DSI) room, where most of the rooms contain computer devices, in the event of a short circuit a class C fire can occur as the contents of a light fire extinguisher, namely dry chemical powder, are installed in the room.

Based on the data reports, it was found that workers in the Rectorate Building and the workforce in Universitas Airlangga campus have received training on how to conduct fire prevention and how to use light fire extinguishers correctly according to standards and instructions for use. The following is a picture of fire prevention training for workers in the Rectorate Building and Universitas Airlangga campus.

Hydrants

A hydrant is a device equipped with a hose and a nozzle to drain pressurized water, which is used for firefighting purposes. A hydrant is a fire protection system tool in buildings and their surrounding. In several office buildings in the Rectorate Building of Universitas Airlangga, there were several hydrants provided. The results of the Hydrant inspection at the Rectorate building showed that the hydrants were in good condition.

In order to realize the safety of building occupants from fire is by striving for the readiness of fire protection installations so that their performance is always good. One of its supporters is the

Figure 3. A Hydrant in the Rectorate Building and a Hydrant Outside the Rectorate Building in 2020

availability of a hydrant outside the building. When an inspection was carried out on hydrant facilities, for hydrants both inside the building and outside the building, it was found that the hydrant box was easy to see, writing was clearly written, and the hydrant was easy to open. In addition, the hydrants inside the building and outside the building were easy to reach, and the hydrant boxes were not obstructed by other objects.

Evacuation Routes

An evacuation route is a continuous route of travel including exits, public corridors/ passageways and the like from any section of the buildings belonging to a single residential unit, leading to a safe open place. Accessibility of the evacuation route in an emergency must be available in the building as a support for a hazard warning system for users in the event of a fire or other disasters. The size of the evacuation route has a minimum width of 71.1 cm and a minimum ceiling height of 230 cm. The evacuation route must be accompanied by an evacuation route sign. When an inspection was carried out, the evacuation route sign in this building indicated the access for workers and building visitors to an open and safer space. The following is an evacuation route sign in several rooms in the Rectorate Building of Universitas Airlangga.

Figure 4. Evacuation Route Signs of the Rectorate Building in 2020

Evacuation route signs must be made clearly and easily understood by labors and visitors of the building. The results of the inspection on the evacuation route showed that the evacuation route could be seen clearly, was easy to reach, and was not obstructed by other objects. During the inspection, it was found that the evacuation route signs were available and installed in all rooms of department units. Moreover, in several rooms the installation was too low so that it was quite difficult to see the signs at all times. However, in general, all of the evacuation route signs were in good condition.

During the inspection, evacuation route maps were was also found in the Rectorate Building of Universitas Airlangga. These evacuation route maps are very important because they serve as a support for knowing the evacuation route in detail. With the complete evacuation route maps, it is easier for workers and visitors of this building to find out the evacuation route. The condition of the evacuation route maps was in good condition, even they were protected with frames so that they were not easily exposed to dust and could be read by workers and visitors of the building.

These evacuation route maps were available in the management building, hallway, and Kahuripan Building of the Rectorate Building of Universitas Airlangga. These evacuation route maps were placed on a strategic wall where workers and visitors of the building often pass through. Thus, all workers from various departments could easily read the evacuation route maps.

Assembly Points

An assembly point is an evacuation sign that shows where workers gather in case of an emergency and are ordered to evacuate. Based on

Figure 5. Maps of the evacuation routes of the Rectorate Building of Universitas Airlangga in 2020

the observations, it was found that the management building, hallway, and Kahuripan gathering points became one, and there were a total of three gathering points in the Rectorate Building of Universitas Airlangga. The location of the gathering points was safe from falls and other hazards. In addition, the location had access to a safer place and did not obstruct the emergency vehicle response.

Researchers in the process of conducting an inspection found that the condition of the campus had a lot of development activities, especially on the campus lake which is located close to the Rectorate Building. Thus, tthe image of the building assembly points could not be taken at that time. Based on the data report, it was found that the three assembly points of the Rectorate Building were on the front side of the campus lake, one on the east side of the Airlangga Caffe front building, and the other one on the west side of the building in front of the student center volleyball court. The assembly points were in good condition and in a safe open space.

Safety Signs

A safety sign is a form of administrative control. The goal is to keep employees safe, comfortable, healthy, and productive at work. During the inspection, it was found that there were many safety signs in office buildings in the Rectorate Building of Universitas Airlangga, and the location was also easy to reach. Most of the safety signs were located on the walls of the room, tables, lift, glass rooms, stairs, and so on. When the inspection was carried out, it was found that the color of the safety signs available in this building was indeed attractive, aiming to make workers or building guides interested in always reading them. The following are some of the safety signs found during the inspection of the Occupational Health and Safety facilities in the Rectorate Building of Universitas Airlangga.

Figure 6. Several Safety Signs in the Rectorate Building in 2020

In the process of checking the safety signs, it was found that the available symbols or pictograms were in accordance with the standards, which were easily recognized and understood by workers and other people in the Rectorate building of Universitas Airlangga. Moreover, it was also found that the words in the safety sign were simple so that it minimizes confusion when they are read by workers or building visitors. The safety signs were installed in a strategic location, which is a location where workers and building visitors usually pass for sufficient time to read the signs. The safety signs were in good condition.

Provision of First Aid Box Facilities for Accidents

During the process of the Occupational Safety and Health checks, it was found that there were first aid kits in the Rectorate building of Universitas Airlangga rectorate to minimize the impact that might arise from an unwanted incident on the workforce. When the inspection was carried out, it was found that there was a first aid kit with a white base and some brown wood. This first aid kit is placed in a place that is easy to see and reach. Furthermore, the mark on the first aid kit was clearly marked, and the kit got enough light and was easy to lift when it will be used. Each work unit had a first aid kit. The following is a picture of the first aid kit available in the Rectorate building of Universitas Airlangga.

During the inspection, it was found that the first aid kit was in good condition, and nothing was damaged. The contents in the first aid kit were also in good condition. The first aid kit is specially filled with items specifically used in first aid, such as plaster, antiseptic drugs, and so on. Based on he

Figure 7. First aid kit in the Rectorate Building of Universitas Airlangga in 2020

inspection, the arrangement of the contents of the first aid kit was also neat, making it easier to retrieve the items when needed immediately.

Lifts

Universitas Airlangga office building is a building that has many floors which are supported by lift facilities with the aim of facilitating the accessibility and increasing workforce safety. However, lift facilities must also pay attention to standards in order to create work safety and avoid accidents and occupational diseases. The lift facilities available in the Rectorate Building are automatic types of lifts that can be controlled from inside the train and from each floor of the stop or remotely with a control device. During the COVID-19 pandemic like this, the lifts in the Rectorate Building were modified by adding a foot pedal for the designated floor number selection feature. It is hoped that it can increase the safety of elevator users by minimizing exposure to the virus in the hands of elevator users.

During an inspection of the inner lift, it was also found that the lift button was modified with a pedal like the outer lift. This aims to minimize the transmission of the Covid-19 virus during a current pandemic. The condition of the elevator in this building was also in good condition.

Figure 8. Modification pedal on the lift in the Rectorate Building of Universitas Airlangga in 2020

Occupational Health

During the inspection, it was found that there were posters of Health knowledge in several roomsand walls in the Rectorate Building of Universitas Airlangga. The available posters as a means of health promotion had attractive colors and writings, makingworkers and visitors interested in reading them. The available posters also included knowledge of the prevention of the Covid-19 virus because this is the time of the Covid-19 pandemic. Then, based on data from agency documents, the results showed that routine medical checkup on workers have been carried out. Based on data reports, it was found that during the Covid-19 pandemic, a rapid test of the workforce has also been held as a preventive measure to prevent the spread of the coronavirus. With routine health checks in accordance with applicable regulations, it is hoped that workers will have optimal health and be able to carry out work activities properly.

Based on the regulations of the Rectorate Building of Universitas Airlangga, it was found that all workers and visitors when entering the building are required to wear masks, have their body checked, and wash their hands in 6 steps with soap and running water. This is implemented to maintain the health of workers from exposure to the coronavirus and other infectious diseases. The picture above shows that workers and visitors are obedient to implement applicable regulations in order to maintain health. During the inspection, the researchers did not give any treatment to workers or visitors to the building. Researchers only looked at workers' compliance in using personal protective equipment. During the inspection in the outside lobby, an automatic temperature measuring device was found. This tool serves to measure body temperature automatically without any contact.

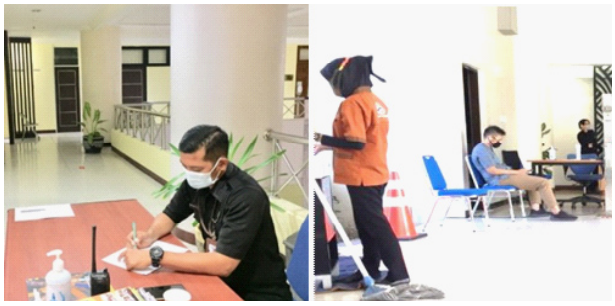

Figure 9. Workers of the Rectorate Building of Universitas Airlangga in 2020

This aims to minimize and prevent exposure to the coronavirus in workers so that workers' health is maintained.

Office Environmental Health

At the time of the Occupational Health and Safety inspection of office buildings, it was found that most of the toilets were in accordance with the applicable standards. In addition, the hand washing facilities in the Rectorate Building of Universitas Airlanggawere in a very good condition because every hand washing place has running water, hand washing soaps, and tissues or clothes to dry hands after washing hands. The position of the facility was also easily accessible so that it was easy for workers and visitors of the Rectorate Building of Universitas Airlangga to access these facilities. In addition, when the inspection was carried out, it was found that the toilets in the Rectorate Building were separated between men and women. . The toilets were also clean and odorless, had available drainage that drained well, provided clean water, had sufficient lighting, was cleaned regularly, and could be used during working hours.

Furthermore, when the measurement of lighting was carried out in several work stations in the Rectorate Building, it was found that some work environment lighting was not in accordance with the standards for accounting, bookkeeping, shorthand, typing or long and meticulous office work. In student rooms at several work stations, the results showed that the light level intensity was 340 lux for the middle tables and 230 lux for the side tables (side table). In the DSI room, 255 lux was obtained for the side tables next to the wall. In addition, in the hallway in front of the DSI room the result of the light level intensity was 62 lux. Such measurement was carried out in a condition that parts of the window blinds were not fully open and the weather was a bit cloudy.

Figure 10. Bearing seats in the Rectorate Building of Universitas Airlangga in 2020

Office Ergonomics

During the inspection of occupational safety and health facilities in the management office buildings, hallways, and Kahuripan Building of Universitas Airlangga, it was found that the on average the employees' seat pads had been covered with cloth so that they were comfortable to use while the employees were working. The following is a picture of most of the work chairs in the Rectorate office Building of Universitas Airlangga.

Furthermore, when researchers carried out the process of Occupational Safety and Health inspections at several departments in the Rectorate Building of Universitas Airlangga, it was found that the chairs used by workers were already equipped with pads so they were comfortable when used. Furthermore, it can be seen that in addition to the work chairs equipped with seat cushions, the work chairs were also equipped with backrests and armrests. Workers also looked comfortable when using their work chairs.

DISCUSSION

The Occupational Health and Safety inspection program for office buildings at Universitas Airlangga helps to see the suitability of the work safety and health facilities in the Rectorate Building with the safety and health standards of the applicable office buildings. The purpose of conducting Occupational Health and Safety inspections for office buildings is to create a healthy, comfortable and safe office workplace for employees. If employees feel healthy and safe, it will have an impact on the work productivity of the employees. The following are the results of the analysis of the implementation of occupational safety and health standards in the Rectorate Building of Universitas Airlangga.

Work Safety

Work safety standard as the first standard has been met in the Rectorate Building of Universitas Airlangga, such as through the existence of light fire extinguishers as a support for the office fire and safety management system. When conducting an inspection of the management office building

of Universitas Airlangga, it was found that most of the installation of light fire extinguishers was in accordance with the Minister of Manpower Regulation No. PER.04 / MEN / 1980 (Regulation of the Minister of Manpower, 1980). Installation and availability of light fire extinguisher facilities must be in accordance with applicable standards. This is because the light fire extinguisher facility is one of the facilities that can be used as a prevention against the occurrence of fire hazards that can occur in the workplace (Hamid, 2019). According to research of Susilo (2020), light fire protective equipment must comply with existing standards. Susilo (2020) also explained that light fire extinguishers are a supporting facility during an early stage of fire.

As a support in the event of office fire and a part of safety management system in this building, apart from light fire extinguishers, hydrant rooms and yards were also provided, according to the Regulation of the Minister of Health of the Republic of Indonesia Number 48 of 2016 concerning Work Health and Safety Standards in Office (Regulations of the Minister of Health of the Republic of Indonesia, 2016). Research by Agusri and Kimi (2018) explained that an important aspect of building is protection against fire hazards. Hydrant is one of the important facilities and must be in the building because it involves the security and safety of the occupants of the building. This is in accordance with research by Achmad, Setiawan and Sidi (2017) which explained that hydrants are needed in every plant, which aims to be a medium for extinguishing a fire occurring. Achmad, Setiawan and Sidi (2017) further explained that the location of the hydrant should be inside the building and outside the building. In research of Abidin and Putranto (2017), it was stated that building safety facilities should include not only hydrants in the building but also yards.

In buildings equipped with light fire extinguishers and hydrants, there must be personnel who are trained to deal with fires that can occur at any time in the building. According to Wardana (2018), the development of technology used in the work process and the higher risk of hazards that ariseshould be accompanied by increased protection for workers and all company assets. One of the safeguards is by providing emergency response training for workers. The existence of emergency response training at agencies or companies such as fire prevention training and the provision of light fire extinguishers can make workers' awareness develop. In addition, the workforce should also be educated and trained regarding emergency response (Sufa, Lestantyo and Kurniawan, 2020).

The training is not only given to workers in the Rectorate Building but also to the entire Universitas Airlangga campus environment. Training can increase workforce knowledge. This is in line with research of Husen and Lestari (2016) which stated that there is a relation between fire training provided to workers and the use of fire extinguishers in the workplace. Based on research of Margatama and Umar (2019), workers who have good knowledge tend to also have good behavior in using fire extinguishers. Besides,, based on research of Zurimi (2017) workers who have received fire prevention training have the ability to identify locations that have a potential fire hazard in the workplace. This means that the Occupational Health and Safety team should conduct emergency response training regularly and continuously.

The Rectorate Building is also equipped with evacuation procedures including evacuation route signs and evacuation route maps in accordance with Law Number 28 of 2002 concerning Buildings and Regulation of the Minister of Health of the Republic of Indonesia Number 48 of 2016 concerning Occupational Health and Safety Standards in Office (Regulations of the Minister of Health of the Republic of Indonesia, 2016). According to research of Mawardi, Ramadhan and Samsunan (2018), evacuation route facilities must be available because they are useful to evacuate residents to a safe place when a disaster occurs. Supporting facilities such as evacuation route signs are also very important according to research by Hidayat, Widjasena and Wahyuni (2011) in which they explained that the evacuation time after the evacuation route signs is faster than the time before the installation of evacuation route signs. Moreover, the evacuation route map facility must also be available in the workplace building according to the research Widowati *et al*. (2017) which stated that the component of the emergency evacuation map of a new building in Universitas Negeri Semarang was in accordance with the applicable standard. In addition, the procedure information for fire or emergency events is very important to be installed in strategic places. Installation of important phone numbers both internally and externally in an emergency can also simplify the communication process.

Another supporter of safety standards is the presence of safety signs on walls, doors, windows,

elevators, and other easily accessible places, which aims to improve employee safety and comfort. According to research of Sulaiman, Adam and Alim (2019), it was stated that safety signs can provide attractive attention, and can provide an alert attitude of dangers that are not visible to the eyes. Installation of a safety sign has a relation with the risk of work accidents. The safety sign is also one of the factors forming a work safety culture (Alfidyani, Lestantyo and Wahyuni, 2020). Furthermore, based on documents from related agencies, it was found that there were three gathering points in this building. Based on research of Widowati *et al*. (2017), in the standard of the gathering point, there should be at least two gathering points so that if one of the points cannot be used for safety reasons, the residents can still use the alternative gathering point. Based on the data report, it can be concluded that the number of gathering points in the Universitas Airlangga rectorate building is appropriate because it has three gathering points. In addition, it was discovered that the location of the gathering point in the rectorate building was in a safe open space. This is in accordance with research of Lubis, Soemirat and Permadi (2019) which explained that the condition of the assembly point area at the research site was also relatively safe because it was only in the form of empty land. Access to the location of the assembly point was also easily accessible by each worker.

Furthermore, in the Rectorate building of Universitas Airlangga, there is already a first aid box for accidents in the employee's work space in accordance with the Regulation of the Minister of Health of the Republic of Indonesia Number 48 of 2016 concerning Occupational Health and Safety Standards (Regulations of the Minister of Health of the Republic of Indonesia, 2016). The availability of first aid kits at workplaces in accordance with the standards is very important. In research of Chairunnisa, Widjasena and Suroto (2016), it was explained that in providing protection for workers who experienced workplace accidents first aid needs to be done promptly and properly. With the first aid kit in each workspace unit, it is hoped that it can provide assistance quickly and precisely in the event of an accident that occurs to workers in the workplace. Research of Pamungkas, Santoso and Ninghardjanti (2018), also showed that in their research location, the first aid kit was provided if a employee had an accident or if the employee was sick while working. First aid kits at research locations, in general, have been provided in several work spaces.

The lift facility is a facility needed to travel within the building quickly and efficiently. In addition, it can be used to shorten travel time and distance. The lift facility in an office building that has many floors is certainly very helpful for workers in maintaining their stamina (Adelia and Johan, 2018). Moreover, every workplace always has a variety of potential hazards, including in the lift facilities that can trigger work-related accidents. Potential hazards that occur can be due to system failure or human negligence related to work systems. In order to avoid accidents, before using the lift, safety equipment must be checked and tested regularly once a year to provide a sense of comfort and safety to elevator users in buildings that have many floors or multi-storey buildings (Septian and Anwar, 2019). Furthermore, based on the documents and the results of the feasibility inspection of the elevator facilities used by workers, goods, and visitors to the Rectorate building, it was found that visually the lift facilities were in accordance with Occupational Health and Safety (OHS) standards. In addition, the lift facilities have also been regularly checked and maintained according to standards (Regulation, 1999).

Occupational Health

The second standard in the application of Occupational Health and Safety in offices is occupational health (Regulations of the Minister of Health of the Republic of Indonesia, 2016). Furthermore, there is also a means of increasing workers' health knowledge with the existence of several health promotion posters, especially posters regarding how to prevent Covid-19, considering in the current condition of the Covid-19 pandemic period. With the health promotion facilities, employees are expected to be able to adopt a clean and healthy lifestyle, which can reduce the potential for occupational diseases. This is in line with research of Harbin (2016) which states that an agency must have a health promotion program in accordance with the needs of employees to improve employee's health knowledge, which eventually leads to the employee's lifestyle. Mantiri, Pinontoan and Mandey (2020) further supported this by stating that if the workforce has good knowledge of occupational health, it will affect their behavior to implement occupational safety and health.

Another facility provided is a periodic health check. Based on the Minister of Manpower and

Transmigration Regulation No. 02/1980 concerning Workers' Health Examination in Implementing Work Safety, to ensure the physical ability and health of workers, an appropriate medical examination must be held. Human resources are important assets for companies or agencies. If workers are in optimal health, this will certainly affect their work productivity. Furthermore, Salawati (2015) also explained that periodic health checks are one of the preventive measures against occupational diseases. On research by Ridwan and Kamariah (2019), it is stated s that in carrying out medical checkup, there are several kinds of actions, including pre-employment medical checkup, periodic medical checkup, special medical checkup, and pre-retirement medical checkup. Moreover, when data were collected through from agency documents, it was found that medical checkup has been carried out routinely on workers in the Rectorate Building of Universitas Airlangga.

Furthermore, workers in the Recorate Building of Universitas Airlangga adhere to health protocols while working in the new normal, one of which is by wearing masks. It is in accordance to research of Ferial (2020) which explained that workers must comply with health protocols in order to maintain their health so as not to be exposed to coronavirus and other diseases. In research of Suhadi *et al* (2020), it was explained that during the Covid-19 pandemic, it is important to conduct various efforts to prevent the spread of the Covid-19 virus to workers. One of these efforts is through the creation and socialization of health protocols during the new normal. The lobby of the Rectorate Building was also equipped with automatic body temperature detection facilities. Based on research of Wulandari (2020). during the Covid-19 pandemic, the measurement of the human body temperature becomes an important thing as an action to detect early symptoms of Covid-19. Furthermore Dianty (2020) also explained that in the current Covid-19 pandemic, a temperature measuring device should be fast and accurate and most importantly does not come into contact with the person whose body temperature is being measured. Thus, it is hoped that this action can reduce or minimize the transmission of the coronavirus.

Health Office Environment

The third standard in the Rectorate Building of Universitas Airlangga has been fulfilled, including the provision of building facilities in accordance with the standards of the Regulation of the Minister of Health of the Republic of Indonesia Number 48 of 2016 concerning Office Occupational Health and Safety Standards.

Based on the results of the inspection of the building facilities, the toilet facilities in the Rectorate building have also met the standards based on the Regulation of the Minister of Manpower of the Republic of Indonesia Number 5 of 2018 concerning Occupational Health and Safety at the Work Environment (Minister of Manpower Regulation, 2018), which states that toilets are sanitary facilities for defecating, urinating, and washing hands and/or faces. When the inspection was conducted, the results showed that the toilets were separated between men and women. The toilers were clean and odorless, provided drainage that drained well, provided clean water, had sufficient lighting, was cleaned regularly, and could be used during working hours. In research of Yuasadam (2018), it was explained the toilet facilities at the research site have met the required aspects of toilet facilities. These aspects such as the number of toilets were in accordance with the needs, and sufficient clean water was also provided. In research of Kusumawardani and Pudiarto (2020), it was found that the condition of the toilet facilities in their research place was good as the condition of the toilet was clean and odorless, and there was a drainage that drained . Moreover, the toilets were equipped with a door, had sufficient lighting, had good air circulation, was cleaned every day, and could be used during business hours. In addition, the complete toilet facilities, such as a sink, clean water, and a toilet were available properly.

Furthermore, hand washing facilities were widely available in various corners of the Rectorate Building of Universitas Airlangga. These hand washing facilities were available not only in toilets, but also in various rooms, corners, and even the yard of the Rectorate Building of Universitas Airlangga. These hand washing facilities were equipped with water flow, liquid soap, and tissues to dry hands. During the Covid-19 pandemic like today, agencies oblige all workers and visitors of the Rectorate Building of Universitas Airlangga to wash their hands in 6 steps. This is supported by research of Ferial (2020) which stated that a company is obliged to provide hand washing facilities to implement one of the health protocols in the new normal, namely washing hands in 6 steps. This is also in line with research of Pattisinai *et al*. (2020) stating that the

implementation of hand washing facilities must be provided and carried out. Furthermore, the hand washing facilities at the entrance and bathroom of the Rectorate Building of Universitas Airlangga have automatic hand washing facilities using sensors. Thus, users do not need to hold the hand wash faucet directly. During the current COVID-19 pandemic, the availability of automatic hand washing facilities is very important to reduce direct contact with objects' surfaces to avoid and minimize transmission of the COVID-19 virus (Asrul, Sahidin and Alam, 2021).

In addition, the Rectorate building has also been equipped with antiseptic liquid in all rooms as an effort to prevent the spread of COVID-19. This is in accordance with research of Larasati and and Haribowo (2020) which stated that one way to prevent the spread of COVID-19 is by maintaining cleanliness. In addition, one of the ways to keep clean is by using an antiseptic. Antiseptic is a substance that can inhibit the growth and development of microorganisms without having to kill them in living tissue. Based on research of Meilina and Sardanto (2020), the impact of changes in the non-physical work environment during the Covid-19 pandemic for employees include the fact that the workforce is more focused on their work, more concerned with the health of themselves and others, and more accustomed to living clean and healthy. Furthermore, when lighting measurements were carried out at several work station places in the Rectorate Building, it was found that some work environment lighting was not in accordance with the standards of the Regulation of the Minister of Manpower of the Republic of Indonesia Number 5 of 2018 concerning Occupational Health and Safety in the Work Environment (Regulation of the Minister of Manpower, 2018) which states that for accounting, bookkeeping, shorthand, typing or lengthy and meticulous office work should have a power of lighting between 500 to 1000 lux. The above measurements were carried out in a condition that some of the window blinds were not fully open and the weather was a little cloudy.

Office Ergonomics

Based on the results of inspections in several employee rooms in the Rectorate Building of Universitas Airlangga, it was found that the workers' chairs were equipped with seat cushions made of comfortable materials. In accordance with the Regulation of the Minister of Health of the Republic of Indonesia Number 48 of 2016 concerning Office Occupational Health and Safety Standards, employee chairs must be covered with pads to create comfort while working, which greatly affects the productivity of the employees themselves.

Furthermore, the seats for employees were also equipped with chair backs. Based on research from Amri, Fatimah and Yusnidar (2015), the back support is very important to hold back load towards the back (lumber spine). Kautsar and Dewi (2020) also explained that the backrest is better if the back support can support the whole back, specifically up to the neck bone. The work chair is one of the facilities that greatly determines the comfort and safety of workers' activities. In addition to a work chair that is equipped with a backrest, the work chair should also have an armrest because workers will spend about 8-10 hours of time working, especially when their work is always in front of the computer (Safenla, Agustin and Novelin, 2017). It is hoped that a chair equipped with an ergonomic backrest will create comfort while the workers are working and increase work productivity.

Furthermore, Ruslani and Nurfajriah (2015) describes the theory of ergonomic balance in which task demands and work capacity must have a balance in order to achieve good work performance. If the workforce has a good performance, it will certainly affect the productivity of these workers. Moreover, a work chair is a component of task demands. In task demands, one of the factors is task and material characteristics which are determined by the characteristics of work equipment, machine characteristics, and so on. In this study, the work chair facilities in the Rectorate Building of Universitas Airlangga have met the standards, which will certainly reduce the risk of musculoskeletal disorders in the workforce.

CONCLUSION

Based on the results of observations and analysis that have been carried out regarding the Application of Occupational Health and Safety Standards in the Rectorate Building of Universitas Airlangga Rectorate, it can be concluded that the Occupational Health and Safety (OHS) office standards which include occupational safety, occupational health, office work environment health and ergonomics have been implemented.

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