Implementation of Occupational Safety and Health (K3) Inspection as a Work Accident Prevention Effort in Palm Oil Factory, Kampar Regency, Riau Province

Putri Hidayah¹, Herniwantri², M. Kamali Zaman³

Program in Public Health, STIKes Hang Tuah Pekanbaru, Indonesia.

ARTICLE INFO

Keywords:
Inspection, Occupational Safety and Health, Palm Oil Factory.

ABSTRACT

Work safety issues are closely related to work accidents. Indonesia's work accident rate is still high and tends to increase yearly. The implementation of a practical occupational safety and health (K3) inspection is a preventive measure that can be taken to ensure that the work environment is always safe, healthy, and safe. Inspection is the best way to find problems and assess risks before accidents occur. This study aims to determine the implementation of Occupational Safety And Health (K3) Inspection as an Effort to Prevent Work Accidents in Palm Oil Mills in Kampar-Riau Regency in 2021. The study was from August-September, with the subjects being two workers, two factory supervisors, and 1 HES/Safety Officer of Palm Oil Mill in Kampar-Riau Regency. This research is descriptive with a qualitative case study method by conducting field observations with the help of checklist sheets and in-depth interviews with document searches. The study results found that the company had carried out occupational safety and health (K3) inspections, which were the manager's responsibility. The company has provided facilities and infrastructure such as providing a budget for carrying out occupational safety and health (K3) program activities such as providing complete protective equipment, fire extinguishers, and first aid kits. The company already has a policy regarding Occupational Safety And Health (K3) and company policy towards workers. The OHS management system at the oil palm factory in Kampar Regency has been implemented and refers to government regulation no 50 of 2012. For companies, it is necessary to form a unique organization that oversees the implementation of the OHS program and divides tasks according to the plan with the expertise they have and is listed in the organizational structure with their respective portion.

E-mail: putrihidayah06@gmail.com

Copyright © 2022 Science Midwifery.

1. Introduction

Indonesia's work accident rate is still high and tends to increase yearly. The Social Security Administration for Manpower (BPJS) recorded that the number of work accidents in 2014 reached 129,911 cases, with an average growth rate of 6.8 percent per year between 2007 and 2014. Figure 1 shows the number of employee accidents in Indonesia between 2007 and 2014 [1] [2]. The Ministry of Manpower and Transmigration stated that in 2013 nine people died every day due to work accidents. That number increased 50 percent compared to the previous year, in which only recorded six people died every day due to work accidents. The International Labor Organization (ILO) has data that in Indonesia, there are an
average of 99,000 cases of work accidents per year. Of that total, about 70 percent resulted in death and disability [3][4]. If calculated, the amount of losses due to work accidents reaches 283 trillion per year. This equals 4 percent of Indonesia’s gross domestic product [5],[6]. In addition to impacting loss of life, the high number of work accidents decreases company performance and productivity. The most dominant factor as the cause of work accidents in high-risk industries is unsafe work behavior [7]. The results of the analysis of accidents in the workplace showed that 73 percent of them were caused by unsafe work behavior factors [8]. The facts show that industrial workplace conditions generally have a risk of accidents and health problems due to the influence of the work, worker characteristics, and work safety culture, as well as the use of dangerous machines and poor workspace layout [8]. Workers are always exposed to wood dust particles and noise from operational machines [9],[10].

In addition, using machine tools related to handling, storing, lifting, and transporting loads is dangerous to the safety and health of workers [11]. Work safety motivation is a medium that connects the work safety climate and works safety behavior. Safety motivation can be influenced by safety leadership [12] and employee job satisfaction [13]. At the same time, the work safety climate can be influenced by safety leadership [14]. In addition, employee safety behavior can also be directly influenced by safety leadership [14] and job burnout [15]. Based on data on work accidents that occurred in the palm oil mill of PT. Sewangi Sawit Sejahtera, it was found that work accident cases were more common in workers who worked in the production and processing division. Based on the accident data obtained, as many as three workers suffered minor injuries, namely injuries to the face, left hand, and right hand, in 2018. A similar thing happened in 2019. Two workers suffered injuries to the left and right leg, while in 2020, four workers suffered lacerations to the temples, and minor burns on the body, 2 of the work accidents occurred in 2020 after the COVID-19 pandemic. Work accidents that occurred at PT. Sewangi Sawit Sejahtera is a work accident in the light category. activities of palm oil processing factory PT. Sewangi Sawit Sejahtera is the total concession area of the Palm Oil Mill. The results of initial observations of field conditions at the palm oil mill of PT. Sewangi Sawit Sejahtera has a total of 82 employees. For the person in charge as HES/occupational safety and health (K3) Expert 1 person. Sources of danger that could occur in the palm oil processing process that endanger the safety of workers, namely; (1) workers may fall due to the slippery work floor, be pierced by thorns, and crushed by palm fruit while sorting. (2) In boiling, the worker or operator may fall because the workplace position is 2 meters high if the floor is slippery. (3) In separating the fruit from fruit bunches, workers in this process have a high potential to experience a rope crash if it is cut off and hit by a hosting crane when the lorry containing fruit is lifted. The number of work accidents is quite high and even tends to increase yearly, a phenomenon that concerns the portrait of the world of work. The low work safety behavior is the main cause of the high accident rate. The most dominant factor in the occupational safety and health (K3) Policy affecting employee performance is the work environment; a bad work environment that is not conducive to the implementation of the OHS program can result in a decrease in employee work results because workers feel that work accidents may occur. Moreover, we feel anxious while doing work. How is occupational safety and health (K3) Inspection as Accident Prevention Effort at PT? Prosperous Palm Oil?

2. Methods

The type and design of this research are descriptive with qualitative methods. The sampling technique in this study used purposive sampling by describing the implementation of occupational safety and health (K3) inspections as an effort to prevent work accidents for workers in the processing section of the palm oil mill by conducting field observations with the help of checklist sheets, in-depth interviews, and searching documents to analyze the implementation of occupational safety and health (K3) inspections as an effort to prevent work accidents at the palm oil processing factory in the Palm Oil Mill Kampar regency - Riau 2021. The location of this research is in the palm oil processing factory in the Palm Oil Mill Kampar regency - Riau, which was held in July-August 2021. The selection of informants in this study used a purposive sampling method. There are 2 Supporting Informants consisting of workers in palm oil mills. Key informants consist of 1 person, namely the HES/Safety officer responsible for PT’s palm oil mill. Prosperous Palm Oil. The primary informants consisted of 2 people, namely the field foreman at the PT. Prosperous Palm Oil?
The types of data in this study are divided into two, namely primary and secondary data. Primary data is collected in the form of primary data obtained directly from informants regarding implementing OHS inspections at the palm oil mill of PT. Sewangi Sawit Sejahtera through in-depth interviews with factory workers and HES/Safety Officers. Secondary data was obtained from searching documents from the research location, such as documents from companies regarding the company profile of palm oil mills and the number of workers. They were collecting data through in-depth interviews with informants and reviewing documents by collecting and analyzing written graphic or electronic documents. Data analysis techniques with data reduction, data presentation (data display), coding category, and conclusion drawing (data verification).

3. Results

3.1 Characteristics of Informants

This research was conducted at the palm oil mill of PT. Sewangi Sawit Sejahtera by collecting data through interviews and document searches. The following are the characteristics of informants in this study consisting of 5 people who were interviewed in-depth, which can be seen in the table below;

| No | Informant Code | Position                  | Age        | Gender | Education |
|----|----------------|---------------------------|------------|--------|-----------|
| 1  | Key Informants (IK) | HES/Safety Officer         | 50 years   | Man    | D3        |
| 2  | Main Informant (IU1) | Workshop Foreman          | 49 years old | Man    | SMK       |
| 3  | Main Informant (IU2) | Process Foreman           | 47 years old | Man    | SMK       |
| 4  | Supporting Informants (IP1) | Boiler Part Worker       | 50 years   | Man    | STM       |
| 5  | Supporting Informants (IP2) | Clarification Section Workers | 49 years old | Man    | SMK       |

3.2 Results of in-depth interviews with informants

The results of this study were obtained based on in-depth interviews and a document review of research variables in the form of occupational safety and health (K3) inspections, human resources, facilities, infrastructure, policies, and OHS management systems; the following results were found:

1. OHS Inspection

Based on interviews with one key informant, two supporting, and two primary informants. It is known that the implementation of occupational safety and health (K3) Inspection at PT. Sewangi Sawit Sejahtera obtained the results of all the interview answers from informants as follows:

"... Yes, here. At pt S3, we have what is called p2occupational safety and health (K3), including an inspection team there. The inspection team is chaired by Mr. Legito, whom we interviewed earlier, the process assistant. The one in charge is still the manager. Yes, company manager. For the occupational safety and health (K3) inspection schedule, we will program an annual work plan. In 2021 this was four times per 3 months. .. (IK)"

Meanwhile, the results of interviews with two primary informants and two supporting informants revealed that all of the informants answered that they did not understand the occupational safety and health (K3) inspections in the company. This can be seen from the following interview results:
“... Inspection, that is what Inspection means. Yes, it is like a work accident. They each have their team. My part of the process is usually done here once a year. (IU1)

“... What Inspection are we here for? If I am not mistaken, it is a lot. Yes, one of them is and. Yes, it is done but not routinely in a year; yes, once a year. The obstacle is the same as the workers themselves. Because there are undisciplined workers (IU2)

“... occupational safety and health (K3) inspection. What is that, huh? Yes, for health and work discipline and worker welfare. Once every three months, if I’m not mistaken … (IP1)

“... occupational safety and health (K3) Inspection is like checking, right? That, if I’m not mistaken, there is … (IP2)

Based on observations and document review, it is known that the company PT. Sewangi Sawit has carried out occupational safety and health (K3) inspections with the following company documents attached:

| TABLE 3 | RESULTS OF OHS INSPECTION OBSERVATIONS AT PALM OIL MILLS |
|---------|---------------------------------------------------------|
| NO | Observed aspects | Conducted | Information |
| 1. | Periodic OCCUPATIONAL SAFETY AND HEALTH (K3) inspections are carried out. | Yes | In 2021 this inspection will only be carried out for a year. Includes: PYE Inspection, APAR Inspection, OHS Sign Inspection, B3 Waste Inspection, Hazard Communication Inspection, Mechanical, and Electrical Equipment Inspection. |

| TABLE 4 | PT. PALM OIL MILL INSPECTION TEAM PROSPEROUS PALM OIL |
|---------|--------------------------------------------------------|
| No | Inspection Team | Position | Age | Gender | Education |
| 1 | Jaini Dahlan | Ka. Warehouse | 41 years old | Man | SMK |
| 2 | Wijiono | Acting. Ass Process | 41 Years | Man | STM |
| 3 | Kasimmun | Electrical Parts | 41 years old | Man | STM |
| 4 | Nurrochim | Workshop Workers | 43 years old | Man | SMK |
| 5 | Ade Frinova | Ka Labor | 42 years old | Man | SMK |

2. Human Resources

Based on interviews with one key informant, two supporting and two primary informants. It is known that human resources at PT. Sewangi Sawit Sejahtera obtained the results of all the interview answers from informants as follows:

“... We take part in training for occupational safety and health (K3) experts, education training. Yes, there is already a occupational safety and health (K3) expert certificate. .. (IK)

Meanwhile, interviews with two primary and two supporting informants are known to all informants who answered that they had received training on occupational safety and health (K3) in the company. This can be seen from the following interview results:

“... Health is already, and there is training. There is no certificate yet … (IU1)

“... Some of it has been done gradually ...(IU2)

“... Regarding our health and safety here, what will happen if an accident occurs? It has been done before ... (IP1)

“... It is possible, but when the training is given, not all workers can attend … (IP2)

Based on observations and document review, it is known that the company PT. Sewangi Sawit has conducted occupational safety and health (K3) socialization and OHS training programs for workers with the company documents attached as follows:
### TABLE 4
**OBSERVATION RESULTS OF HUMAN RESOURCES**

| NO | Observed aspects | Conducted | Information |
|----|------------------|-----------|-------------|
| 1  | Everyone is supervised according to the level of ability and task risk. | Yes | There is no supervision from the company; this is because those who are responsible for supervising also work in the same field. |
| 2  | Competent personnel has identified hazards and assessed and controlled risks arising from a work process. | Yes | The officer in identifying has never received training on risk assessment and does not have a occupational safety and health (K3) expert certificate. |

### 3. Facilities and infrastructure

Based on interviews with one key informant, two supporting and two primary informants. It is known that the existing facilities and infrastructure at PT. Sewangi Sawit Sejahtera obtained the results of all the interview answers from informants as follows:

"... The support is financial, the management supports the Inspection, and we have costs for replacement, repair, and maintenance; yes, the management supports whatever the cost. Yes, it is provided. Yes, some have been used, but some have not been used even though they have been given. (KJ)

Meanwhile, the results of interviews with two primary informants and two supporting informants are known to all informants answered that they have obtained the facilities and infrastructure in the company. This can be seen from the following interview results:

"... Everything is complete. Yes, it is sometimes used like shoes, gloves, masks, and helmets. All that has been done because all PPE is equipped, the first aid kit is there, and Everything is equipped... (IUI1)

"... Yes, given medication, for example. It, Completely available and... (IUI2)

"... For the work tools, it is sufficient. Yes, if the app is enough, but if other work tools need to be repaired, it will be replaced with a new one if something is damaged .. (IP1)

"... Yes, the infrastructure is also included in the PPE, right, if the company has entirely given the PPE... (IP2)

Based on observations and document review, it is known that the company PT. Sewangi Sawit has facilities and infrastructure provided by the company with company documents attached as follows:

### TABLE 5
**RESULTS OF OBSERVATION OF FACILITIES AND INFRASTRUCTURE**

| NO | Observed aspects | Conducted | Information |
|----|------------------|-----------|-------------|
| 1  | There are danger signs/safety signs in every work environment. | Yes | The Occupational Safety And Health (K3) signs already exist, but some of the signs are not suitable for installation and are not legible because they are dirty and the writing is twisted. |
| 2  | Is PPE available? | Yes | The company has provided protective equipment for workers, such as hats, helmets, shoes, eye protection, face shields, welding guards, and gloves. |

### 4. Policy

Based on interviews with one key informant, two supporting informants, and two main informants. It is known that the existing policies at PT. Sewangi Sawit Sejahtera obtained the results of all the interview answers from informants as follows:
"... Yes, there were several inspection policies that we carried out yesterday, including a policy issued by the manager not to burn the area of PKS One. The second is that it is mandatory to use PPE when entering the work area. It is also an obligation.. (IK)

Meanwhile, interviews with two primary and two supporting informants found similar answers regarding existing company policies. This can be seen from the following interview results: "... If there is a policy, there must be. rebuke... (IU1) "... The use of PPE is mandatory when working; yes, that is one of the policies that are most often carried out here. ..(IU2)

"... If it is about Policy, maybe Pak Sariadi is the one who knows, right? If I do not understand that ... (IP1)

"... Policy exists. However, I do not know about the Policy regarding occupational safety and health (K3) Inspection. I do not know anything about this. But there is indeed a team in charge of this occupational safety and health (K3) inspection problem here...(IP2)

Based on observations and document review, it is known that the company PT. Sewangi Sawit has facilities and infrastructure provided by the company with company documents attached as follows:

| NO | Observed aspects | Conducted | Information |
|----|------------------|-----------|-------------|
| 1. | An OHS policy written, dated, and signed by the entrepreneur or management clearly states the OHS goals and objectives and a commitment to improving OSH. | Yes | The Policy has been written, signed by management, and posted on the company announcement wall. |
| 2. | The company communicates policies, and OHS to all workers, guests, contractors, customers, and suppliers in the proper manner. | Yes |

5. OHS Management System

Based on interviews with one key informant, two supporting, and two primary informants. It is known that the existing policies at PT. Sewangi Sawit Sejahtera obtained the results of all interviews with informants as follows: Meanwhile, interviews with two primary informants and two supporting informants found similarities in answers regarding the occupational safety and health (K3) management system in the company. This can be seen from the following interview results:

"... The management system is a lot. For example, we enter work through fingerprints, obeying PPE, yes masks, helmets... (IU1) "...SM occupational safety and health (K3) that knows more is the management like the manager. I do not know how. The implementation depends on the employee. For example, workers wear PPE. So what is done by the company must be used by all... (IU2) "...In that case, I do not know about the management who knows a lot; it is Pak Sariadi who knows a lot...(IP1)

Based on observations and document review, it is known that the company PT. Sewangi Sawit implements an OHS management system in the company, as evidenced by the establishment of a Committee for Occupational Safety and Health in the company with the following company documents attached:

| NO | Observed aspects | Conducted | Information |
|----|------------------|-----------|-------------|
| 1. | The company has established Committee for Occupational Safety and Health following the laws | Yes | |

| TABLE 6 | POLICY OBSERVATION RESULTS |
|---------|-----------------------------|
| NO | Observed aspects | Conducted | Information |
| 1. | An OHS policy written, dated, and signed by the entrepreneur or management clearly states the OHS goals and objectives and a commitment to improving OSH. | Yes | The Policy has been written, signed by management, and posted on the company announcement wall. |
| 2. | The company communicates policies, and OHS to all workers, guests, contractors, customers, and suppliers in the proper manner. | Yes |
and regulations.

2 The Committee for Occupational Safety and Health secretary is a occupational safety and health (K3) expert following the laws and regulations.

3 The composition of the Committee for Occupational Safety and Health management is documented and informed to the workforce.

4 Competent and authorized personnel must conduct Inspection, maintenance, repair, and any changes.

3.3 Discussion

The researchers conducted in-depth interviews with one key informant (IK), two primary informants (IU1 and IU2), and two supporting informants (IP1 and IP2) and made observations and reviewed company documents regarding the implementation of occupational safety and health (K3) inspections to prevent workplace accidents in palm oil mills Kampar District in 2021. It is related to the first variable occupational safety and health (K3) Inspection, the second aspect of human resources, third, facilities, and infrastructure; fourth, the Policy and chemical, OHS management system first occupational safety and health (K3) Inspection. From the results of the interview above, it can be concluded that the implementation of occupational safety and health (K3) inspections has been carried out at the oil palm mill in Kampar Regency, but the informants stated that they did not understand the inspections in the company because they were not involved in the implementation of the Inspection. Meanwhile, based on the observations and document review results, it is known that the company has indeed carried out periodic inspections, which are carried out once a year, but the Inspection has been carried out since August 1, 2020. The company's OHS inspection team is carried out according to the Occupational Safety And Health (K3) structure, carried out by five people of Warehouse, Acting. Process Assistants, workshop workers, electrical workers, and Head of Laboratories. This team of 5 people in the company has never received certification or special training on OHS inspections; they carry out inspections based on being in charge of each work station in the palm oil mill. Based on the researcher's analysis, it was found that there are still some workstations that have not been carried out this Inspection. This means that the implementation of the Inspection in the company has not been carried out following the occupational safety and health (K3) program plan. The implementation of this occupational safety and health (K3) Inspection has decreased, ut interview results have benefits as a review. The review is also intended to update and review the conformity of the inspection list with regulations and organizational needs. Suppose substandard conditions or actions are found that are not following the rules and regulations as well as the needs of the organization. In that case, it will be corrected immediately by communicating the findings with the worker foreman, or if it is not possible to correct it at that time, it will be discussed in the HSE meeting to determine the action repair as soon as possible. The HSE meeting determines the target time for repairs, and the repairs will be checked on Inspection and reported at the next HSE meeting. Improvement of the potential hazards that exist in the workplace and reduce the number of work accidents [16]. The review results in implementing occupational safety and health (K3) inspections can be used to determine steps in improving occupational safety and health ((K3)) aspects and performance in the following year. The corrective measures used must be consistent with the results of OSH performance, the hazards of the risks in the workplace, OHS policies, the availability of human resources, and the desired priorities. Second, in the aspect of Human Resources in the palm oil mill in Kampar Regency, they have received training and socialization regarding Occupational Safety And Health (Occupational Safety And Health (K3)) in order to increase workers' knowledge, but this is not going well because the informant said that not all training and socialization had been received due to differences in work shifts. Meanwhile, based on the results of observations and a review of the socialization document, it has been carried out. However, for 2021 it has not been carried out due to the covid-19 pandemic. The socialization training carried out by the company is first aid training, fire training, evacuation procedures when fires and disasters occur, and socialization regarding Occupational Safety And Health (Occupational Safety And Health (K3)) promotion in the form of safety morning. Competence and knowledge of human resources positively affect the quality of audit results, so it is found that the better the level of competence possessed by workers, the better
the quality of the audit results [17].

Third Facilities and Infrastructure. From the results of the interviews above, it can be concluded that the company has provided facilities and infrastructure such as providing a budget for carrying out Occupational Safety And Health (Occupational Safety And Health (K3)) program activities such as providing complete protective equipment, fire extinguishers, evacuation routes, and providing first aid kits. While the results of field observations indicate that the provision of PPE already exists, the provision of APAR is incomplete because there is APAR that has been damaged, expired, and no longer contains its contents, but the scope of work is still placed. Based on the researcher's analysis, the provision of facilities and infrastructure for the palm oil mill of PT. Sejahtera palm oil has been done well. This is evidenced by the company's availability of complete personal protective equipment for workers and provided free of charge. As this follows the Regulation of the Minister of Manpower and Transmigration No. 08 of 2010 concerning personal protective equipment, Article 2 paragraph 1 states that employers are required to provide personal protective equipment as referred to in paragraph (1) must be provided by employers to workers free of charge. So, the researcher suggests providing suitable facilities and infrastructure in the company to facilitate and benefit the organization in realizing a good work program. Facilities and infrastructure have a significant impact on the implementation of the OHS program. Fourth is the policy aspect. From the results of the interviews above, it can be concluded that the company already has a policy regarding Occupational Safety And Health (Occupational Safety And Health (K3)) and company policy towards workers, but it was found that workers still do not understand the Policy itself.

Meanwhile, the field observations and document review results show that the company already has a written and documented Policy and is affixed to the information wall at the palm oil mill office. In implementing the Policy, it is necessary to have exceptional funding support, facilities and infrastructure, and work procedures (SOP) to support implementing the occupational safety and health (occupational safety and health (K3)) program in the company. Determining Policy can not be separated from the name of communication. Communication is the most critical aspect of the Policy in which the Policy must be disseminated to workers in writing and orally. Policies must be written and signed by the company's highest leadership and disseminated to workers. The OSH policy must also be communicated to employees and visitors (guests) through safety induction, including the OHS policy[]. The company must carry out the socialization of the OHS policy. This follows Government Regulation 50 of 2012, which states that companies are required to disseminate the OSH policies that the company has set to all workers and people other than workers in the company. Fifth Management system. The OSH management system at the oil palm factory in Kampar Regency has been implemented and refers to government regulation no. 50 of 2012. However, the interviews show that workers do not know what the OHS management system in the company is. The results of observations and document reviews show that the company already has a written and documented OHS management system. Based on the researcher's analysis of the OHS management system at the PT. Sejahtera Palm Sejahtera has been well done. This follows Government Regulation No. 50 of 2012, which states that implementing the OHS management system in the company requires resources that can support the running of each company’s activity program—starting with the availability of human resources who already have particular expertise in their field of work, the availability of adequate facilities and infrastructure, the availability of budget funds to support the ongoing Occupational Safety And Health (Occupational Safety And Health (K3)) program.

4. Conclusion

The company has carried out Occupational Safety And Health (Occupational Safety And Health (K3)) inspections, which are responsible to the manager. However, regarding inspections in the company, some workers do not know what an OHS inspection is because they are not involved in carrying out the Inspection. The company has carried out regular inspections, which are done yearly. Human resources/workers in palm oil mills do not fully understand Occupational Safety And Health (Occupational Safety And Health (K3)). The socialization training carried out by the company is first aid training, fire training, evacuation procedures in the event of a fire and disaster, and socialization on Occupational Safety And Health (Occupational Safety And Health (K3))
promotion in the form of safety morning. The facilities and infrastructure in the oil palm mills have not been appropriately implemented, such as the provision of incomplete protective equipment and the provision of incomplete fire extinguishers because there are fire extinguishers that are damaged, expired, and no longer contain. The company already has a written and documented policy posted on the information wall at the palm oil mill office. The Occupational Safety And Health (Occupational Safety And Health (K3)) management system in the oil palm factory in Kampar Regency has been implemented and refers to government regulation no. 50 of 2012.

References
[1] Employment, BPJS (2015). Employee Accident Rates in Indonesia in 2007–2014.
[2] Ekasari, LE (2017). Analysis of Factors Affecting Work Accidents in Operation of Container Cranes at Pt X Surabaya in 2013–2015. The Indonesian Journal of Occupational Safety and Health, 6 (1), 124-133.
[3] Siregar, KN, Wahyuini, W., & Nasution, RM (2019). Determination of OSH Policy, OSH Planning and Its Implications for Work Accident Events at PKS Kebun Rambutan PTPN-III Tebing Tinggi. Journal of Global Health, 2 (1), 1-7.
[4] Ginting, P. (2013). Changes in safety culture in Indonesia. Jakarta: Thousand Pass Persada.
[5] Kusumasari, WH, Tarwaka, PS, & Erg, M. (2014). Occupational Risk Assessment With Job Safety Analysis (JSA) Against Work Accident Rates for Employees of PT. Indo Acidatama Tbk. Kemiri, Kebakkramat, Karanganyar (Doctoral dissertation, University of Muhammadiyah Surakarta).
[6] Martiwi, R., Koesyanto, H., & Patangan, ET (2017). Work Accident Risk Factors in Building Construction. HIGEIA (Journal of Public Health Research and Development), 1 (4), 61-71.
[7] Ghazali, ZB, & Isha, ASNB (2014). The role of leadership and leaders’ behavioral characteristics on employees’ safety behavior in plant turnaround maintenance of PETRONAS petrochemical companies in Malaysia. Global Business and Management Research, 6 (3), 256.
[8] Huda, UF, Sukmawati, A., & Sumertajaya, IM (2016). Model of employee safety behavior in high-risk industries. The Asian Journal of Technology Management, 15 (1), 51.
[9] Hamdy, MI, & Tanjung, LS (2016). Analysis of potential hazards and efforts to control work accidents in PT’s adesite stone mining process. Dempo Build Partners. Journal. Industrial Engineering, Faculty of Science and Technology, UIN Sultan Syarif Kasim Riau.
[10] Sebastianius, BH (2015). Occupational Health and Safety Management as a Role of Work Accident Prevention in the Construction Sector.
[11] Hedaputri, DS, Indradi, R., & Ilalahika, AP (2021). Literature review: the relationship between the level of knowledge of occupational health and safety (OCCUPATIONAL SAFETY AND HEALTH (K3)) with the incidence of work accidents. ComPHI Journal: Community Medicine and Public Health of Indonesia Journal, 1 (3), 185-193.
[12] Rahayu, Winda Agustin. "Factors related to musculoskeletal complaints in workers in the crushing stone industry in Karangnongko sub-district, Klaten district." Journal of Public Health Diponegoro University 1.2 (2012): 18728.
[13] Bayram, M., & nğan, MC (2020). The relationships between OHS prevention costs, OHMSMS practices, employee satisfaction, OHS performance, and accident costs. Total Quality Management & Business Excellence, 31 (11-12), 1325-1344.
[14] Rispler, C, & Luria, G. (2020). Employee perseverance in a “no phone use while driving” organizational road-safety intervention. Accident Analysis & Prevention, 144, 105689.
[15] Suyono, J., Elyiana, A., & Ratmawati, D. (2020). The nightmare of turnover intention for companies in Indonesia. Opción: Revista de Ciencias Humanas y Sociales, (91), 871-888.
[16] Jannati, LF (2020). Occupational Safety and Health Inspection in the Production Department. HIGEIA (Journal of Public Health Research and Development), 4 (Special 1), 124-135.
[17] Niciejewska, M., & Obrecht, M. (2020). Behavioral safety (behavioral-based safety–BBS) impacts the modification of dangerous behaviors in enterprises. System Safety: Human-Technical Facility-Environment, 2 (1).
[18] Savio, G., Pujiarti, P., Tholok, FW, & Janamarta, S. (2020). Influence of work health safety and work environment on employee satisfaction at PT. Indonesia Toray Synthetics. *Primanomics: Journal of Economics & Business, 18*(1), 66-73.