



Palm Oil Farmers' Perceptions on the Use of Personal Protective Equipment (PPE) in Rantau Rasau District, Tanjung Jabung District, Jambi Province

Willia Novita Eka Rini^{1*}, Budi Aswin², Randy Junaidi³

University of Jambi

Corresponding Author: Willia Novita Eka Rini willianovita95@gmail.com

ARTICLE INFO

Keywords: Interests, Attitudes, Experiences, Expectations, Use of PPE

Received : 08 November

Revised : 08 December

Accepted: 08 January

©2022 Rini, Aswin, Junaidi : This is an open-access article distributed under the terms of the [Creative Commons Attribution 4.0 International](https://creativecommons.org/licenses/by/4.0/).



ABSTRACT

Perception is an important psychological aspect, perception is a form of process in which individuals learn something through their five senses. This study uses a qualitative descriptive method. The attitude of oil palm farmers towards the use of PPE has a positive response, Oil palm farmers assume they have a good interest in using PPE. However, based on the results of observations that carried out by researchers it is known that oil palm smallholders still do not use PPE completely. The results of interviews show that the experience of oil palm smallholders can influence farmers' perceptions of the use of PPE. Oil palm farmers have hopes that there will be assistance from the government in the provision of tools and materials necessary assistance and also training or counseling so that farmers can manage their plantations well and efficiently. The attitude of oil palm farmers towards the use of PPE has a positive response, respondents only know a few types of PPE so that farmers think that they have a good interest in using PPE while working. It was found that some farmers had experienced accidents while working. The farmers hoped that there would be assistance from the local or central government.

INTRODUCTION

Occupational safety and health (K3) is a situation or condition where a worker is free from all hazards while doing work and which is a very important factor and must be carried out while working. Supporting elements of work safety include elements of security, elements of occupational health, thoroughness in work, willingness to maintain occupational safety and health, carrying out work procedures/rules by observing the safety and health of workers. Maintaining work safety is the duty of all workers. Occupational safety is created from, by, and for every worker and everyone and even the general public (Buntarto, 2020). Based on OHSAS 1801, the form of hazard control efforts is divided into five control techniques which include, Elimination, namely eliminating sources of danger, Substitution, namely replacing tools or machines or materials with those that have a lower hazard risk, Design, namely modifying or making tools or machines or workplaces. which is safer, Administration, namely making regulatory procedures, work duration, danger signs, signs, posters, and labels so that workers are safer and avoid hazards in the workplace, PPE, namely using personal protective equipment to avoid or reduce the impact of existing hazards at workplace (OHSAS, 2007).

In the results of a study, it can be seen that the behavior of using personal protective equipment (PPE) is low where only 1.7% of farmers use complete personal protective equipment (PPE), especially when spraying pesticides (Diana, 2017). Then, based on the results of previous research related to the use of PPE in a company, it was found that the availability of PPE in the company was very good, as evidenced by the results of interviews with several employees who stated that the company had provided PPE that was appropriate and sufficient for the needs of all employees, but the attitude of workers was still undisciplined. in the use of PPE while working. They underestimate PPE even though they know the importance of occupational safety and health. Several respondents stated that the company had provided training regarding the importance of using PPE (M Salah, 2015). Based on data from the Indonesian statistical center, oil palm is the largest plantation among other plantations, reaching 12 383.10 thousand hectares in 2017, then increasing to 14 326.30 thousand hectares in 2018, and 14 724.60 thousand hectares in 2017. 2019. Followed by coconut plantations with an area of 3413.30 thousand hectares in 2019 (BPS Indonesia, 2020).

Meanwhile, judging from the latest data from the Central Statistics Agency, in 2018, the number of farmers relying on oil palm cultivation reached 2.67 million households (families). The top 3 numbers by province are: Riau Province 580,902 (KK), South Sumatra 273,063 (KK), and Jambi 262,056 (KK). Meanwhile, based on the land area, Riau ranks first with an area of oil palm plantations reaching 2.7 million hectares, South Sumatra ranks 6th with a land area of 1.1 million hectares and Jambi ranks 7th with an area of oil palm plantations reaching 1. 03 million hectares (BPS Indonesia, 2020). Taken from data from the Jambi provincial statistical center for 2018, one of the largest oil palm plantations in Jambi province is Tanjung Jabung Timur district with an

area of oil palm plantations reaching 96,384 hectares and followed by Merangin which has an area of oil palm plantations reaching around 70,000 hectares (BPS Jambi, 2018). Within the East Tanjung Jabung regency area, which occupies the top 3 with the largest area of oil palm plantations, the first is Mendahara Ulu sub-district with a plantation area of 12,553 hectares with a number of farmers of 2,373 families, then followed by Rantau Rasau sub-district with an area of 7,762 hectares with a number of farmers 1,899 families and in 3rd position, namely Geragai sub-district with an area of oil palm plantations reaching 6,263 hectares with a total of 1,504 farmers (BPS Tanjabtim, 2018).

Based on the results of the description, it can be concluded that PPE is the only form of hazard control that is required in its application and is a form of hazard control that can be applied to informal sector workers. Moreover, farmers in the informal sector have no technical or administrative controls because the informal sector farmers operate independently or are not under the auspices of any company. Therefore the researcher is interested in conducting research so that he can find out the perceptions of oil palm farmers who are in the Rantau Rasau sub-district, Tanjung Jabung Timur district, Jambi province regarding the use of PPE. Where this area is one of the districts with the largest oil palm plantations in the East Tanjung Jabung district which is in the informal sector or self-managed oil palm plantations.

Based on the regulation of the minister of health concerning labor and Immigration of the Republic of Indonesia regarding Personal Protective Equipment (Permen.08/VII/2010), "employees/workers and all persons who will enter the workplace are required to wear attributes in the form of protective equipment. personal protective equipment in accordance with the potential hazards and risks that exist there" (Kemennakertrans, 2010). Personal Protective Equipment is equipment worn by workers in order to protect part or all of the worker's body from various possible hazards in the workplace or work accidents (edigan, 2019). From this description it can be seen that personal protective equipment (PPE) is equipment that must be used by workers while working, both workers who work in companies and informal sector workers according to the potential hazards and risks that exist to minimize the impact of existing risks.

THEORETICAL REVIEW

Perception is a shared process that allows us to explain and understand our environment and identify objects in one of the processes regarding the object's main function. There is also a definition of perception such as the process of understanding or giving meaning to relevant or meaningful information about stimuli. Obtaining a stimulus from the process of understanding objects, events, or relationships and personal decisions, and then the symptoms are processed by the brain. Responses that are felt in various forms can be taken by each individual. Land clearing is the first activity that must be carried out in the implementation of oil palm cultivation activities by oil palm farmers, where previously farmers had to prepare land to be used as oil palm plantations. Planting is an activity in which farmers make planting

holes that have been adjusted to the distance between one hole and another and put seeds or seeds into the holes provided and close them.

Maintenance is a farmer's activity in caring for the land and the oil palm itself in order to get maximum results. There are many activities involved in maintaining either before producing or when the oil palm has started to produce fruit. After that there are fertilization activities to provide nutrient needs so that the plants will grow well and be able to reach their maximum potential. In addition, maintenance activities also aim to control pests and diseases. Oil palm plants usually start to flower at the age of 10-12 months and the economically profitable harvest period is when the plants are 2.5 years (30 months) old. At this stage the farmer will take down the oil palm fruit from the tree using *dodos* or *egrek* and collect it in one place and then sell it to collectors. Priority should be given to protecting worker locations, equipment and work environment through technical measures to protect workers, but sometimes it may not be possible to fully control hazardous situations. Therefore, management will adopt policies to protect workers in various ways, namely reducing hazards or using personal protective equipment.

METHODOLOGY

The type and design used in conducting research is a type of qualitative descriptive research. The research was carried out in the Rantau Rasau sub-district from the beginning of January to March 2021. The researchers used 5 informants. The technique for determining the respondents used in this study was accidental sampling.

RESULTS

Rantau Rasau District is one of the areas in East Tanjung Jabung district, Jambi province and has an area of 6.54%. from the area of East Tanjung Jabung district. Rantau Rasau District has a short history which is quite unique where this sub-district became one of the sub-districts which is the oldest transmigration area in the province Jambi, the detail is the village of Rantau Rasau 1 which at that time consisted of 50 kk in 1976 and currently in 2020 only remaining 5 heads of household with an average age of 80 years and over.

Interest

From the results of the inter views it can be seen that farmers have very little knowledge about PPE, farmers only know a few types of PPE, farmers also never get information from anywhere about PPE so farmers define it themselves when asked to explain what they know about PPE. Where this is evidenced by the results of the interview as follows.

"...To protect if there is an accident, yes define yourself" (informant 2)

Then the informants also explained the types of PPE that they knew were as follows.

"...hand shirts, boots, masks to be safe" (informant 3)

From the results of the interviews it was also found that farmers still did not use PPE completely and in accordance with existing SOPs during the processing of oil palm plantations, even the *egrek sarongs* used by farmers

were only in the form of used cloth which was then wrapped around which of course could be released at any time. Farmers' knowledge of the hazards in their work area is also very minimal, where the dangers that are known to informants are limited to being hit by thorns, falling branches and animals.

"...if you don't wear shoes, you can get thorns and get an infection, while wearing shoes still has the possibility of penetration" (informant 5)

Attitude

From the results of the interviews it was found that the farmers had an attitude that was indifferent or did not care about other farmers as evidenced by the farmer's answer where only one person gave an answer giving advice and reprimanding other farmers if they did not use PPE while the other four farmers did not seem to care. Among the answers given by the farmer are:

"...give advice and reprimand but return to yourself" (informant 5)

Meanwhile, four other farmers stated something similar, among others.

"...depends on each individual person, if they don't use it, it's their risk" (informant 2)

Farmers feel comfortable with the PPE that they normally use and currently have, where the PPE they have is still incomplete, as was obtained from an interview with one of the farmers.

"...for what is currently used it is comfortable" (informant 3)

However, not all farmers gave answers that they felt comfortable, there were still farmers who gave answers that they were not comfortable using PPE. This is evidenced by the results of the interviews as follows.

"...feel slippery when wearing gloves and uncomfortable wearing a helmet because it doesn't protect from the heat of the sun either" (informant 1)

From the interview results it was also found that three out of five informants said that they always use the PPE they have when working or when entering their plantation areas or work areas. Meanwhile, the two other informants who always use PPE are shoes and gloves. In fact, one of them did not use anything during land monitoring, which during the interview the informant said as below.

"... only during harvesting or work time" (informant 4)

Experience

It is known that two informants had an accident while working where the accident involved being hit by a thorn on the palm fruit and being hit by a gancu to lift the fruit, while the other three informants said that they had never had an accident while working. In addition, it is known that what can be done by informants to avoid future dangers is to be more careful when working, only one informant gives a different answer, namely using PPE and of course continuing with caution when working. Four of the five informants stated that they had no other memorable events related to PPE, while one other admitted that he had received information that someone else had been exposed to oil palm thorns which later became infected and resulted in death. This made the informants even more aware that PPE is very important. This is evidenced by the results of the interviews obtained by Ahwa.

"... how many people are exposed to palm thorns and until an infection occurs and eventually dies" (informant 4)

Hope

It is known that informants or farmers have high expectations regarding PPE. The farmers have hope that the PPE currently available has even better resistance so that it becomes more durable and can be used in the long term. Based on the results of PPE interviews in terms of type, it was found that three informants felt sufficient while the other two informants hoped that in the future PPE would become cheaper and easier to find in the area because only a few types of PPE could be found at this time. This is evidenced from the results of interviews where one of the respondents said.

"Yes, the hope is that it will be easy to find on the market because for now only a few PPE are easy to find on the market" (informant 5)

It is also known that informants have hopes that all PPE will be more comfortable when used without exception. Apart from the above, farmers have hopes for the government that there will be assistance in the form of funds, goods, as well as the availability of complete equipment in the area so that it is easier to obtain and also farmers hope that the government will hold training or outreach as well as field surveys or monitoring from the administration.

DISCUSSIONS

Interest

Interest is a high tendency or desire for something, interest makes someone to try and pursue something and in the end a deeper knowledge is obtained. From the results of the study it was found that the informants' interest in the use of personal protective equipment still had a less interested response, as evidenced by the results of the interviews in which it described the interest of the respondents where there was still a lack of deeper knowledge about PPE and other respondents also mentioned the types of PPE they know only a few types. In addition, it was also supported by the results of interviews where it was found that respondents only used PPE when harvesting or working and only used several types of PPE. In addition, the informant's knowledge of the hazards in the workplace was minimal where the only hazards known to the informants were thorns, falling trees and dangers coming from animals. This is in line with other research which says that only 3 workers use personal protective equipment, and 7 people do not use PPE, which means that more than half of the workers do not use PPE due to the low interest of workers in using personal protective equipment. (Oktavia, 2014)

However, this is not in line with other research in which it was found that the results showed that respondents had high interest (76.7%), and respondents who had low interest were (23.3%). (Djuarsah, 2018) Interest is a tendency for someone who is characterized by a feeling of pleasure or interest in a particular object accompanied by a focus on that object and a desire to be involved in certain object activities. One of the internal factors that influence interest is curiosity-driven attention. (Marleni, 2016) Based on the discussion

above, the researchers assume that oil palm smallholders still have less interest in using PPE so that farmers do not find out more about PPE in full, this is because farmers are only comfortable using some protective equipment which are tools they only know. This can be seen from the farmers' lack of curiosity about PPE.

Attitude

Attitude is a person's reaction or response to a stimulus or object. Attitudes in everyday life are emotional reactions to social stimuli. Attitude is also said to be an evaluative response. Evaluative response means that the form of reaction expressed as an attitude arises based on an evaluation process within the individual which gives conclusions about the stimulus in the form of good-bad, positive-negative, pleasant-unpleasant values, which then crystallizes as a potential reaction to the attitude object (Rorum, 2021). From the results of the study it was found that oil palm farmers had a positive response to the use of PPE, as evidenced by the results of an interview in which one of the respondents said that the informant felt comfortable using the PPE they had because in the workplace there are many factors that can cause work accidents such as palm thorns scattered in oil palm plantations.

This is supported by the answers given by other informants who stated that they always use the PPE they normally use when entering plantation areas or work locations. Even the informants also bought all the tools themselves. In addition, all respondents said that the use of PPE when working is very important which strengthens the positive attitude of respondents towards the use of PPE. This is in line with Dwi N's research (20015) that the attitudes of workers are all in the good category, meaning that the informants have a good attitude towards the use of PPE (Lagata, 2015). However, seen from the results of observations made by researchers, it was found that farmers still did not use PPE completely and of course this contradicted the results of in-depth interviews conducted by researchers and this was in line with the results of previous studies which stated that respondents who had more negative attitudes (62.5%) compared to respondents who behaved positively (37.5%) inversely proportional to the results of the interviews which found that the respondents' answers showed a positive attitude (Apriluana, 2016).

Meanwhile, based on previous research it is known that 50% have good actions and 50% have less actions. Where the results of the research by conducting short interviews after collecting data through questionnaires on the use of PPE are still low because there are workers who lack awareness to use PPE, the provision of PPE in every workshop is still lacking and even there are workers who are uncomfortable using PPE. The results of the study showed that many respondents answered that sometimes they never even used PPE (Rorimpendey, 2014). Based on the results of the discussion, the researchers assume that farmers have a positive response to PPE, but in their actions farmers have not implemented it optimally. this is due to the absence of supervision, moreover there is no special training and education related to the use and care of PPE for oil palm farmers in the Rantau Rasau sub-district so that the knowledge possessed by workers can be said to be still relatively minimal.

Attitudes themselves can be influenced by several things including personal experience, the influence of other people who are considered important, the influence of culture, mass media, educational and religious institutions, and emotional factors (Mahmudah, 2016).

Experience

Based on the results of the interviews obtained from the respondents, it was found that three informants had experienced accidents while working, one of which was being crushed by a palm frond and hit by a palm thorn where this influenced the perception of the informant so that the informant took the initiative to use PPE while working. Informants said that at the beginning of managing oil palm plantations they were often exposed to thorns because they did not wear shoes while working. Then the informant gave answers to the efforts made to avoid hazards in the workplace, namely wearing shoes while working. While 2 other informants claimed to have never had an accident while working.

This is in line with previous research which says that knowledge is a factor that has a very important role in the use of PPE equipment to avoid losses and work accidents. Knowledge is information obtained from, experience (Sakit R, 2021). Other research is not in line with this, because in the study it was found that there was no relationship between experience and the use of personal protective equipment for workers, in the study it was stated that this could occur because there was no impact felt by workers when using PPE so that it was considered just a hassle (Oktavia, 2014). In another study, the results showed that all respondents who behaved poorly in using PPE actually had good knowledge about PPE. This is related to work experience. This is of course also in line with the results obtained by researchers (Sudarmo, 2017).

Experience can be interpreted as something that has been experienced, lived or felt, both long ago and recently. Experience can also be interpreted as episodic memory, namely memory that receives and stores events that occur or are experienced by individuals at a certain time and place, which serves as an autobiographical reference. It can be concluded that experience is something that has been experienced, lived or felt which is then stored in memory (Oktorina, 2019). Based on the discussion above, the researchers assume that past events or experiences that have occurred are an important role that can influence farmers' assumptions about the importance of using PPE, but in practice farmers only take countermeasures for what has happened to them. Farmers still ignore other things that still might happen. Farmers should also be aware of other things where there are many other dangers apart from being exposed to thorns which can also cause harm to the farmers themselves which can also impact the business they manage.

Hope

From the results of interviews conducted by researchers with respondents, it was found that 4 respondents hoped that PPE would be further improved in terms of comfort so that farmers would be happy to use PPE while working. This is evidenced by the answers of respondents who said that there is

the best quality in order to protect themselves while working and there is no problem with the price. Respondents also hoped that PPE would be made softer on the inside so it would not injure workers' skin when used while working. In addition, other respondents also hoped that PPE at this time, in terms of quality, would be further improved, especially in the glue on shoes.

This answer is related to the results of interviews with the same respondents who said that they hoped there would be support in the form of funds or goods and training on safer ways of working. Other research results show that the expectations of the informants and key informants for the implementation of the prevention policy can be achieved which also includes the obligation to use PPE for workers while doing work (Hasugian, 2017). The results of other studies show that the need for safety refers to the expectation of adequate Personal Protective Equipment (PPE) and the emotional stability of workers and their families. The need for relatedness is primarily manifested as the need for interpersonal relationships, the need for community attention, and the need for affection (Muhyidin, 2020).

Victor H. Vroom, in his book entitled "Work And Motivation" says that if someone wants something and the hope of getting something is high enough, the person concerned will be very motivated to get the thing he wants. Conversely, if the hope of getting what he wants is slim, his motivation to try will be low (Zamfir, 2016). In the theory of expectations (Gudono, 2016), motivation is considered a function of three elements, namely (1) expectations regarding the relationship between effort and performance, namely adding effort will increase performance, then known as the element of hope. (2) the perception of the relationship between performance and results, namely good performance will bring up results or awards which are then known as the element of instrumentality. And (3) the value of the attractiveness of results or awards for someone (Nilawati, 2019).

Based on the discussion above, the researchers assume that farmers have high expectations for the quality of PPE and the comfort provided by the PPE. This can have a major effect on the behavior of using PPE if this is realized, especially if farmers receive training that can increase farmers' knowledge which can also provide awareness and to farmers that all PPE plays an important role in preventing or minimizing unwanted things.

CONCLUSIONS AND RECOMMENDATIONS

The attitude of oil palm farmers towards the use of PPE has a positive response, but in practice the oil palm smallholders still do not use PPE completely. Farmers only know a few types of PPE, thus showing that farmers have less interest in personal protective equipment (PPE). Accidents while working are one of the basics that shape farmers' perceptions that using PPE while working is very important. The farmers hope that there will be assistance from the local or central government regarding the procurement of quality materials for their plantations, tools that can support their activities in managing plantations which includes PPE, as well as training/education.

Farmers must increase their knowledge about managing plantations properly and efficiently, especially knowledge about how to work safely which includes the rules for using PPE in accordance with the SOP. This is intended so that oil palm farmers can further minimize the incidence of work-related accidents and obtain a degree of health. Meanwhile, the government should provide a form of concern for the community. In addition, the government should play an active role as a motivator and supervisor of developments that occur in society so that existing policies can provide benefits to people's lives.

FURTHER STUDY

The results of this study can be used as comparison material and research references as well as material for consideration to further deepen further research related to perceptions and also Personal Protective Equipment (PPE). Apart from that, future researchers are expected to be more prepared in the research process and everything so that research can be carried out better.

ACKNOWLEDGMENT

Research authors are inseparable from guidance and support so that research can be completed, thanks to all the party conducting the research.

REFERENCES

- Apriluana, G., khairuyati, lally, & Setyaningrum, R. (2016). HUBUNGAN ANTARA USIA, JENIS KELAMIN, LAMA KERJA, PENGETAHUAN, SIKAP DAN KETERSEDIAAN ALAT PELINDUNG DIRI (APD) DENGAN PERILAKU PENGGUNAAN APD PADA TENAGA KESEHATAN. 3(3), 82-87.
- Badan pusat statistik jambi. (2018). luas tanaman perkebunan menurut jenis.
- Badan pusat statistik tanjabtim. (2018). luas perkebunan kelapa sawit.
- Buntarto. (2020). panduan praktis kesehatan & keselamatan kerja untuk industri. pustakabarupress.
- Di, P., Sakit, R., & Review, S. (2021). 117 hubungan pengetahuan dengan kepatuhan penggunaan apd pada pekerja di rumah sakit: systematic review. 10(2), 117-122.
- Dirjenbun. (2014). Pedoman Budidaya Kelapa Sawit (*Elais guineensis*) yang Baik.
- Djuarsah, B. N. A., & Herlina. (2018). Jurnal Persada Husada Indonesia Pengaruh Kondisi Kerja Tidak Ergonomi Terhadap Keluhan Musculoskeletal Disorders Pada Pekerja Finishing Di PT Wika Gedung Depok Abstrak The Effects of Non-Ergonomic Work Conditions On Musculoskeletal Disorders Interference. 5(19), 51-60.
- Edigan, F., Purnama Sari, L. R., & Amalia, R. (2019). Hubungan Antara Perilaku Keselamatan Kerja Terhadap Penggunaan Alat Pelindung Diri (APD) Pada Karyawan PT Surya Agrolika Reksa Di Sei. Basau. Jurnal Saintis, 19(02), 61. [https://doi.org/10.25299/saintis.2019.vol19\(02\).3741](https://doi.org/10.25299/saintis.2019.vol19(02).3741)
- Faturochman. (1999). Keadilan Sosial Suatu Tinjauan Psikologi. Buletin Psikologi, 7(1), 13-27.

- Hasugian, A. R. (2017). Perilaku Pencegahan Penyakit Akibat Kerja Tenaga Kerja Indonesia di Kansashi, Zambia: Analisis Kualitatif. *Media Penelitian Dan Pengembangan Kesehatan*, 27(2), 111-124. <https://doi.org/10.22435/mpk.v27i2.5805.111-124>
- Kelas, S., Smp, V., Bangkinang, N., & Marleni, L. (2016). FAKTOR-FAKTOR YANG MEMPENGARUHI MINAT BELAJAR. 1(1), 149-159.
- Kemennakertrans. (2010). Peraturan Menteri Tenaga Kerja dan Transmigrasi Republik Indonesia. *Peraturan Menteri Tenaga Kerja Dan Transmigrasi*, VII(8), 1-69.
- Lagata, Fauziah S. (2015). GAMBARAN PERILAKU PENGGUNAAN ALAT PELINDUNG DIRI (APD) PADA PEKERJA DI DEPERTEMEN PRODUKSI PT. MARUKI INTERNASIONAL INDONESIA MAKASSAR TAHUN 2015.
- Mahmudah, N. (2016). sikap santri terhadap kesehatan reproduksi remaja di pondok pesantren almunaarmuhammadiyah 1 pemaalang. *JURNAL KESEHATAN MASYARAKAT*, 3.
- Mayasari, D. (2017). Gambaran Perilaku Kerja Aman pada Petani Hortikultura Pengguna Pestisida Di Desa Gisting Atas sebagai Faktor Risiko Intoksikasi Pestisida. 1.
- Menteri Tenaga Kerja dan Transmigrasi. (2010). Peraturan Menteri Tenaga Kerja dan Transmigrasi Republik Indonesia. *Peraturan Menteri Tenaga Kerja Dan Transmigrasi*, VII(8), 1-69.
- Muhyidin, A., Rosyad, R., Rahman, M. T., & Huriani, Y. (2020). Urgensi Penjelasan Keagamaan terhadap Keluarga Suspek Pasien Dalam Pengawasan (PDP) Covid-19 di RSUD Pakuwon, Sumedang. *Hanifiya: Jurnal Studi Agama-Agama*, 3(1), 35-42. <https://doi.org/10.15575/hanifiya.v3i1.8356>
- Nilawati, L. (2019). Kontribusi Teori Harapan "Vroom" dalam Penelitian Keperilakuan. *E-Jurnal Ukrim Universtiy*, 53(9), 1689-1699.
- Oktavia, M., Studi, P., Keperawatan, I., Tinggi, S., Kesehatan, I., & Barat, S. (2014). Faktor-faktor yang Berhubungan dengan Motivasi Pekerja Dalam Penggunaan Alat Pelindung Diri di Bengkel Mekanik Mandiangin Koto Selayan Tahun 2014. 1-129.
- Oktorina, R., Wahyuni, A., & Yanti Harahap, E. (2019). Faktor Yang Berhubungan Dengan Perilaku Pencegahan Ulkus Diabetikum Pada Penderita Diabetes Mellitus. 2(3), 108-117.
- Purnamasari, D., & Herawati, E. (2013). Pengaruh Etika Auditor, Pengalaman, Pengetahuan Dan Perilaku Disfungsional Terhadap Kualitas Audit. *Jurnal NeO-Bis*, 7(2), 1-17.
- Rorimpandey, M., Kawatu, P., & Wongkar, D. (2014). Hubungan antara pengetahuan dan sikap dengan tindakan penggunaan alat pelindung diri pada pekerja pengelasan bengkel las kota Manado. *Jurnal Kesehatan Masyarakat Universitas Sam Ratulangi*, 6-10, 1-8.
- Rorum, M. (2021). HUBUNGAN ANTARA PENGETAHUAN DAN SIKAP DENGAN TINDAKAN PENGGUNAAN ALAT PELINDUNG DIRI PADA PEKERJA PENGELASAN DI BENGKEL LAS KOTA MANADO.

3.

Salah, M., & Syarat, S. (2015). pengetahuan kariawan akan pentingnya penggunaan alat pelindung diri (apd) dalam upaya menjaga kesehatan dan keselamatan kerja.

Sudarmo, S. (2017). FAKTOR YANG MEMPENGARUHI PRILAKU TERHADAP KEPATUHAN PENGGUNAAN ALAT PELINDUNG DIRI (APD) UNTUK PENCEGAHAN PENYAKIT AKIBAT KERJA. *Jurnal Berkala Kesehatan*, 1(2), 88-95.

Training, F. O. R., Only, P., & Hal, J. M. (2007). OHSAS 18001 : 2007 Sistem manajemen keselamatan dan kesehatan kerja - Persyaratan Occupational health and safety management systems - Requirements. 1-19.

Zamfir, K. (2016). Teori-Teori Motivasi. *Teori Teori Motivasi*, 5, 497.