IOSR Journal of Nursing and Health Science (IOSR-JNHS)
e-ISSN: 2320–1959.p- ISSN: 2320–1940 Volume 9, Issue 1 Ser. X. (Jan - Feb. 2020), PP 20-27
www.iosrjournals.org

The Relationship between Unsafe Actions and Burning Incidents in Blacksmith Workers in Parlimbatan Village, Paluta Regency in 2019

Anita Rizqi[1], Gerry Silaban[2], Nurmaini[2]
[1]*Postgraduate Students Faculty of Public Health at Universitas Sumatera Utara, Indonesia*
[2]*Postgraduate Lecturer Faculty of Public Health at Universitas Sumatera Utara, Indonesia*

Abstract: *Burning incidents is one of the most common workplace accidents involving blacksmith workers in Parlimbatan Village, Paluta Regency. One of the causes of work accident injuries is workers taking unsafe actions. Unsafe actions such as workers not using personal protective equipment, joking while working, careless, smoking while working and others are the direct causes of occupational injuries due to burns. The impact of burns on blacksmith workers is to reduce work productivity. In addition, the impact of the burn incident is material and non-material losses. The purpose of this study was to analyze the relationship of unsafe actions with burning incidents to blacksmith workers in Parlimbatan Village, Paluta Regency in 2019. The research design used was cross sectional with a sample size of 30 people using a total population. Data obtained through interviews with questionnaires and examination of burns. Based on the analysis using a simple logistic regression test the results obtained are age (p = 0.821), where p > 0.05 which means there is no relationship between age and burning incidents, education level (p = 0.492), where p > 0, 05 which means there is no relationship between the level of education and burning incidents. Meanwhile, the working period (p = 0.029), where p < 0.05 which means there is a relationship between working period and burning incidents, knowledge (p = 0.036) where p < 0.05 which means there is a relationship of knowledge with burning incidents and unsafe actions with a value (p = 0.016) where p < 0.05 which means there is a relationship of unsafe actions with burning incidents. Suggestions for this research, blacksmith workers are expected to be more concerned in raising awareness to prevent work accidental burns, as well as avoiding unsafe acts.*

Keywords: ***Unsafe Actions, Burning Incidents, Age, Education, Working Period, Knowledge***

Date of Submission: 21-01-2020 Date of acceptance: 12-02-2020

I. Introduction

According to the International Labor Organization (ILO), work accidents in the world each year an average of 2.3 million cases, moreover, 1.2 million workers die from accidents and illness at work (Konradus, 2017).

The World Health Organization (WHO) in 2018 recorded as many as 180,000 deaths each year worldwide due to burns, on average in developing countries. In India, more than one million people experience moderate to severe burns annually. In Bangladesh, Colombia, Egypt and Pakistan, around 17% of children in the country suffer burns with temporary disabilities and 18% with permanent disabilities. Whereas in Nepal, burns are the second highest cause of injury, with 5% disability.

BPJS Employment (2018), noted the number of work accidents in Indonesia tends to continue to increase. A total of 123 thousand work accident cases were recorded throughout 2017. An increase in work accidents was around 20% compared to 2016 nationally. Total work accidents in 2017 were 123 thousand cases with a claim value of more than Rp971 billion. This figure increased from 2016 with a claim value of only Rp792 billion.

Employment Insurance Agency (BPJS) of the North Sumatra Regional Office paid work accident insurance claims of Rp. 17.05 billion in the first half of this year, a significant figure of around 4,092 work accident cases occurring in the Aceh and North Sumatra regions. From the North Sumatra BPJS Employment data it can be concluded that the level of awareness of workers, especially in terms of work safety is still very low.

Occupational accidents and occupational diseases not only cause material loss and loss of life as well as health problems for workers but can disrupt the overall production process and even damage the environment which ultimately impacts the wider community.

Basically, accidents do not happen by accident, but there is a reason. Therefore, the cause of an accident must be investigated and discovered, so that further corrective actions aimed at the cause as well as with further preventive efforts accidents can be prevented and similar accidents do not recur (Suma'mur, 2009).

Accidents are not only caused by work tools but are also caused by workers' tendency to get hurt. It is very clear how important human factors are in the occurrence of accidents due to work, such as workers who are careless, careless, and daydreaming, so that they have a tendency to be harmed (Anizar, 2010).

Research conducted by Silaban (2016) found that the variables that showed the most significant influence were attitude variables. Meanwhile, research conducted by Pratama (2015), unsafe action is a factor related to human behavior in doing work in industry. Unsafe actions are influenced by internal factors of the workers themselves, namely the characteristics of the workers.

Characteristics of workers have a role in the basis for someone to make decisions and behave, one of which is to do unsafe actions in doing work. Unsafe actions from workers become very important in determining safety in the scope of work (Pratama, 2015).

The informal sector business is one that has a very high health risk. The workforce in 2000 numbered 95,650,691 people, of which 70–80% were in the informal business sector. Blacksmith is one of the jobs in the informal sector which is engaged in making sharp objects (Pratama, 2017).

In Parlimbatan Village there are 13 family heads who are blacksmith craftsmen, usually if a husband is a blacksmith then the wife indirectly also works to help the husband. The blacksmith's business is a home industry that produces agricultural equipment such as hoes, sickles, machetes, and others.

Based on the results of a preliminary survey, of the 15 blacksmiths interviewed, on average they have worked as blacksmiths for more than 5 years with uncertain duration of work. This work is a legacy or hereditary work that has been done by the family of the predecessors where the village is already known as a blacksmith village. As for the results of the most frequent accident interviews are sprinkling in the fire around the eye and eye area, as many as 15 blacksmith workers have suffered minor burns due to heat exposure. When working, many unsafe actions taken by workers such as workers do not wear complete personal protective equipment (glasses, earmuffs, aprons, shoes) even including not wearing clothes when working because the temperature of the work environment feels hot, joking while working, careless or not careful when burning iron/steel, and smoking while working.

II. Research Methods

This type of research is a survey research with cross sectional design that aims to determine the relationship of unsafe actions with burning incidents in blacksmith workers in the village of Parlimbatan, Gunung Tua District, Padang Lawas Utara Regency in 2019.

The location of this research is in Parlimbatan Village, Gunung Tua District, North Padang Lawas Regency and this research will be conducted from October 2019 to December 2019.

The population in this study were all people living in the village of Parlimbatan, Paluta Regency, both male and female who worked as blacksmiths, as many as 30 people. The sample of this research is the entire population who work as blacksmiths in the village of Parlimbatan as many as 30 people.

Primary data obtained from interviews with respondents using a questionnaire to obtain data from respondents namely the characteristics of workers such as, age, sex, education, years of service, knowledge and unsafe actions. Secondary data was obtained from the village head of Parlimbatan of Paluta Regency to get data from residents who work as blacksmiths.

In this study data processing and data analysis were carried out on the data obtained from each variable. The data obtained is processed and analyzed. Analysis of the data used is to use univariate analysis and bivariate analysis. Univariate analysis is an analysis conducted to obtain an overview of the data that has been obtained from each variable. Bivariate analysis was performed to determine the relationship between two variables, namely the independent variable and the dependent variable using the statistical test, which is a simple logistic regression test.

III. Results and Discussion

Overview of Research Location

This research was conducted in Parlimbatan Village, Padang Bolak Subdistrict, North Padang Lawas District, Parlimbatan Village is a working area of Gunungtua Puskesmas with the criteria of an ordinary village. The means of public transportation commonly used by the community are public transportation and 2-wheeled vehicles. Geographically, the village of Parlimbatan has an area of 4.1 ha, while the northern boundaries are bordered by Sitahul Tahul village, the south borders with Bukit Raya Serdang village, next to the east borders Portibi District, and the west borders Simanosor village. The topography of the village area of Parlimbatan is hilly plains. Demographic data such as the population of 190 people, the number of family cards 43 households, the number of poor people 90 people, and the number of poor families 18 households. The tribes who settled and lived in the village were Batak and Javanese.

The livelihoods of people in the village of Parlimbatan are blacksmiths, farmers, and civil servants. Blacksmiths are hereditary work of parents with irregular work duration, usually blacksmiths work every two days starting at 10:00 WIB until 12.00 WIB and continued at 15.00 WIB until 17.00 WIB.

Univariate Analysis

Univariate analysis was performed to see a description of the frequency distribution of individual characteristics (age, level of education, length of work), knowledge, unsafe actions, and burns.

Characteristics of Blacksmith Workers

The number of respondents in the village of Parlimbatan in the Regency of Paluta in this study amounted to 30 people. Characteristics of respondents (age, level of education, length of work), are presented in the following table:

Table 1. Frequency Distribution of Characteristics of Respondents (Age, Level of Education, Length of Work) Blacksmith in Parlimbatan Village, Paluta Regency 2019

Characteristics of Respondents	n	%
Age		
15-45 Years	22	73,3
>45 Years	8	26,7
Level of Education	30	100,0
Elementary School and Junior High School	13	43,3
High School - College	17	56,7
Length of Work	30	100,0
<10 Years	13	43,3
>10 Years	17	56,7
Total	30	100,0

The table above shows the number of respondents in this study were 30 people. Respondents aged between 15-45 years were 22 people (73.3%) and those aged > 45 years were 8 people (26.7%). The education level of elementary-junior high school is 13 people (43.3%) and high school-PT is 17 people (56.7%). Tenure of < 10 years as many as 13 people (43.3%) and > 10 years as many as 17 people (56.7%).

Blacksmith Worker Knowledge

The most knowledge is less good as many as 17 people (56.7%) and good knowledge as many as 13 people (43.3%). The details are in the table below.

Table 2. Distribution of Knowledge Frequency of Blacksmith Workers in Parlimbatan Village, Paluta Regency 2019

Knowledge	n	%
Less Good	17	56,7
Good	13	43,3
Total	30	100,0

Unsafe Actions of Blacksmith Workers

Unsafe actions carried out by blacksmith workers in Parlimbatan Village were 18 people (60%) and those who did not do as many as 12 people (40%). The details can be seen in the table below.

Table 3. Frequency Distribution of Unsafe Action of Blacksmith Workers in Parlimbatan Village, Paluta Regency 2019

Unsafe Actions	n	%
Do	18	60,0
No Do	12	40,0
Total	30	100,0

Burning Incidents for Blacksmith Workers

Burning incidents to blacksmith workers in Parlimbatan Village was 16 people (53.3%) and 14 people (46.7%) were not burnt. This data can be seen in the table below.

Table 4. Frequency Distribution of Burning Incidents of Blacksmith Workers in Parlimbatan Village, Paluta Regency 2019

Burning Incidents	n	%
Affected by Burns	16	53,3
Not Burned	14	46,7
Total	30	100,0

Bivariate Analysis

Bivariate analysis is used to determine the relationship between the dependent and independent variables studied. The results of this bivariate analysis will show whether there is a relationship between age, level of education, years of service, knowledge, unsafe actions, and burning incidents to blacksmith workers in Parlimbatan Village in Paluta Regency in 2019.

Relationship between Characteristics (Age, Education Level, Working Period) and Burns Incidence in Blacksmith Workers in Parlimbatan Village, Paluta Regency 2019

Relationship between Characteristics (age, education level, working period) and Burns Incidence in Blacksmith Workers in Parlimbatan Village, Paluta Regency 2019

For the age variable, education level, years of service a simple logistic regression test analysis was used. The results of the simple logistic regression analysis can be seen as follows:

Data obtained as many as 16 workers suffered burns, where as many as 12 respondents (54.5%) aged between 15-45 years, 4 respondents (50%) who did not experience respondents burns. While workers who were not affected by burns were 14 workers, of which 10 respondents (45.5%) were aged between 15-45 years and 4 respondents (50%) were > 45 years old. The results of the analysis of the relationship of age with burning incidents by using a simple logistic regression test obtained p value = 0.821 (p > 0.05) so that it can be concluded that there is no age relationship with burning incidents in blacksmith workers in Parlimbatan Village, Paluta Regency in 2019. Data is presented in the following Table 5:

Table 5. Relationship between Characteristics (Age, Education Level, Working Period) and Burning Incidents in Blacksmith Workers in Parlimbatan Village, Paluta Regency in 2019

Variable	Burning Incidents				Total		Sig-p
	Affected by Burns		Not Burned				
	F	%	f	%	f	%	
Age							
15-45	12	54,5	10	45,5	22	100	0,821
> 45	4	50,0	4	50,0	8	100	
Level of Education							
Elementary School and Junior High School	6	46,2	7	53,8	13	100	0,492
High School - College	10	58,8	7	51,2	17	100	
Length of Work							
<10 Years	12	70,6	5	29,4	17	100	0,029
>10 Years	4	30,8	9	69,2	13	100	

Based on the results of the bivariate analysis using a simple logistic regression statistical test for the age variable obtained p value 0.825 where the value of p > 0.05 indicates that the relationship between age and burning incidents is not significant, meaning that there is no relationship between age and burning incidents in blacksmith workers in the village of Parlimbatan. Age 15-45 or age > 45 years cannot be used as a benchmark as a cause of work accident injuries due to the many other causes of work accidents.

The age of most burns is 15-45 years, that is 12 workers, age has an important influence on workplace accidents. The older age group has a higher tendency to experience work-related accidents compared to the younger age group because young age has a higher reaction and agility. But even young people often experience cases of accidents due to work, this may be due to carelessness and attitude that likes to rush.

The highest level of education that suffered burns is the level of high school education - PT as many as 10 workers, the higher education level which suffered more burns, this is because the level of formal education was never taught about blacksmith jobs, but the level of higher education should make someone has a character or thoughts that are better than a low level of education, this could have happened because even though educated through high school and know the use of electronic media to gain knowledge, but due to many factors that constrain, one of them such as financial conditions that are unable to buy goods electronics such as android

mobiles to increase their knowledge so that the level of higher education is the same as the low level of education, which does not get information on the importance of occupational health safety.

The results of this study are in line with previous research conducted by Kusuma (2013) that there is no relationship between the level of education with workplace accidents contained in the body and welding component section of the mini bus production department of PT. X, but the results of this study differ from research conducted by Al Faris (2014) with the title Effect of Worker Behavior and Work Environment Moderated by Work Experience Factors and Education Level Against Construction Work Accidents In Surabaya, found the results of the study, the level of education affects significantly for work accidents.

The results of this study indicate that the workers who suffered the most burns were those who worked < 10 years, namely 12 people (70.6%), this is because new workers or tenure < 10 years are usually not familiar with and understand the ins and outs of their work, new workers are also usually happy if they can do their jobs quickly so as to put aside work safety. While workers whose working period is > 10 years are already very familiar with the workings, work environment and work safety in the workplace.

The longer the working period of a person will increasingly influence his alertness to accidents in his workplace, and also the longer the working period, the work experience will increase so that the higher the knowledge and skills

This study is in line with research conducted by Diputra (2011) with the title Relationship Between Working Period and Workers' Perceptions About Occupational Safety and Health Procedures and Occupational Accidents in the Fleet Section at PT. Coca-Cola Amatil Indonesia Central Java In 2011, the results showed that what was associated with workplace accidents was working period (p value = 0.047, OR = 5.333), but the results of this study were not in accordance with research conducted by Hikmawan (2013) with title of factors related to the incidence of work accidents in the car painting workshop in Makassar, found the results there was no relationship between the working period variable and the incidence of work accidents with a value of p = 0.215 where p > α (0.05).

Relationship between Knowledge and Burns in Blacksmith Workers in Parlimbatan Village, Paluta Regency 2019

For the knowledge variable used simple logistic regression analysis analysis. The results of the simple logistic regression analysis can be seen as follows:

Table 6. Relationship between Knowledge and Burns in Blacksmith Workers in Parlimbatan Village, Paluta Regency 2019

Knowledge	Burning Incidents				Total		Sig-p
	Affected by Burns		Not Burned				
	f	%	F	%	f	%	
Less Good	12	70,6	5	29,4	17	100	**0,036**
Good	4	30,8	9	69,2	13	100	

Based on the results of bivariate analysis using a simple logistic regression statistical test for knowledge obtained p value 0.036 where the value of p < 0.05 which indicates that the relationship between knowledge and burning incidents is meaningful, meaning that there is a relationship between knowledge with burning incidents on blacksmith workers in the Village Parlimbatan.

The results of this study showed 12 respondents (70.6%) lacking knowledge who had the most burns, blacksmith workers in Parlimbatan village were still found to be lacking knowledge, workers with good knowledge were usually able to do the job competently, workers who were having good knowledge will also be more mature thinking and acting in their work while workers who have poor knowledge on the contrary, are expected to blacksmith workers in order to increase knowledge about occupational health safety in order to reduce the occurrence of work accident burns.

The results of this study are in accordance with previous studies conducted by Aswar (2016) there is a relationship between OSH knowledge and occupational accidents where the P value < α with the value of the relationship between the two variables is strong (phi = 0.655). Likewise, research conducted by Rudyarti (2017) where there is a significant correlation together knowledge of occupational safety and health and the attitude of the use of personal protective equipment against work accidents of batik knife craftsmen PT. X.

Relationship between Unsafe Action and Burning Incidents in Blacksmith Workers in Parlimbatan Village, Paluta Regency 2019

For the unsafe action variable used logistic regression test analysis. The results of the logistic regression analysis can be seen as follows:

Table 7. Relationship of Unsafe Actions with Burning Incidents for Blacksmith Workers in Parlimbatan Village, Paluta Regency 2019

Unsafe Action	Luka bakar				Total		Sig-p
	Affected by Burns		Not Burned				
	F	%	f	%	f	%	
Unsafe Action	13	72,2	5	27,8	18	100	0,016
Not Doing Unsafe Action	3	25,0	9	75,0	12	100	

Unsafe actions is a direct cause of workplace accidents. Almost all theories of work injury argue that work accidents occur due to unsafe actions, one of which is Henry's theory that wants to eliminate one of the dominoes, namely unsafe action which is believed to be the cause of most accidents, namely by improving behavior human beings themselves (Ramli, 2010).

on the results of bivariate analysis using a simple logistic regression statistical test for unsafe actions obtained p value 0.016, where p > 0.05 which indicates that the relationship between unsafe actions with burning incidents is meaningful, meaning there are the relationship between unsafe actions with burning incidents to blacksmith workers in Parlimbatan Village.

The results showed as many as 13 people (72.2%) workers took unsafe actions and were exposed to burns. Unsafe actions are the direct cause of work accidents, by doing unsafe actions, workers have the potential to experience burns, this study found that there are still many blacksmith workers who take unsafe actions, it is expected for workers not to take unsafe actions because it is very risky to have a work accident.

This study is in accordance with research conducted by Harpeni (2015) there is a significant relationship between unsafe action and work accident, but the results of this study are not in line with research conducted by Bagas (2018) where the relationship between variables is determined using the statistical test exact fisher test with a = 0.05 and CI = 90%. The results of the probability of unsafe actions with work accidents with a value of p = 1,000. Unsafe actions (26%) and occupational accidents (19%). The results showed that there was no relationship between unsafe actions and workplace accidents on loading and unloading labor at PT. Pelabuhan Indonesia IV (Persero) Bitung Branch.

Research Implications

The results of this study indicate that there is a relationship of knowledge to the occurrence of burns on blacksmith workers, where with the results of this study it is expected that the relevant Governments, being the basis for reducing work accidents can be given information or workshops to increase workers' knowledge so as to reduce the number of accidents work.

This study also shows the relationship of unsafe action with burning incidents to workers, it is expected that with this information so that blacksmith workers avoid doing unsafe actions that cause burns workplace accidents.

Research Limitations

In conducting this research, there are limitations of the study, including:

1.Based on the theory in this study that is Multiple Causation Theory (Petersen, 1971), states that for an occupational accident, there is the possibility of more than one factor causing occupational accidents, where in this study, the variables studied were age, level of education, working period, knowledge and focus on the unsafe action variable so that there are still many variables that have not been studied.

2.In the data collection process, researchers can only conduct interviews when the respondent is resting, because while working, blacksmiths must focus on their work because the work environment is full of hazards and can result in work accidents. Researchers conducted interviews during the daytime, namely during workers' rest periods until then the respondents returned to work.

3.This research also uses a questionnaire as a research instrument, where sometimes the answers given by the sample do not indicate the actual situation in the field.

IV. Conclusion and Suggestion

Conclusion

Based on the results of research and discussion, the conclusions in this study are as follows:

1.There is no influence of age with burning incidents on blacksmith workers in Parlimbatan Village, Paluta Regency in 2019.

2.There is no influence of the level of education with burning incidents on blacksmith workers in Parlimbatan Village, Paluta Regency in 2019.

3.There is an influence of working period with burning incidents on blacksmith workers in Parlimbatan Village, Paluta Regency in 2019.

4.There is an influence of knowledge with burning incidents on blacksmith workers in Parlimbatan Village, Paluta Regency in 2019.
5.There is an effect of unsafe action with burning incidents on blacksmith workers in Parlimbatan Village, Paluta Regency in 2019.

V. Suggestion

Suggestions in this study are as follows:
1.The relevant Government Service is expected to give attention and increase the promotion of occupational health safety to increase workers' knowledge about the dangers of unsafe behavior (unsafe action) to workplace accidents, especially burns to blacksmith workers. Attention and improvement of occupational health safety can be done by providing training or information about occupational safety health, giving signs or signs at risk places and providing personal protective equipment (PPE) for workers. In addition, it is hoped that there will be supervision of unsafe actions of workers when carrying out their work.
2.Workers are expected to pay more attention to occupational safety health while doing work, because many factors cause the occurrence of accidents in the workplace, the use of personal protective equipment can avoid accidents, increase knowledge about occupational health safety so as to reduce the impact of burns, and reduce all forms of unsafe actions that are the main cause of accidents to reduce the risk of work accidents.
3.For further research to add other variables that are closely related to the occurrence of workplace injuries to blacksmith workers such as working time, training, work environment, food intake, rest periods, and eating patterns. And it is expected in future studies to try to use the type of experimental or observational research as research instruments so that the data is better because it shows the real situation in the workplace.

Reference

[1]. Al Faris I, E. (2014). Pengaruh Perilaku Tenaga Kerja dan Lingkungan Kerja yang Dimoderas iFaktor Pengalaman Kerja dan Tingkat Pendidikan terhadap Kecelakaan Kerja Konstruksi di Surabaya. (jurnal). Diakses dari jurnal.itats.ac.id.
[2]. Anizar. (2010). Teknik Keselamatan dan Kesehatan Kerja di Industri. GrahaIlmu. Yogyakarta.
[3]. Aswar, E. (2016). Faktor-Faktor yang Berhubungan dengan Kecelakaan Kerja pada Pekerja Bengkel Mobil Kota Kendari Tahun 2016. (Jurnal). Diakses dari http://ojs.uho.ac.id/index.php/JIMKESMAS Vol 1, No 3 (2016).
[4]. Bagas, U. H. (2018). Hubungan antara Tindakan Tidak Aman dengan Kecelakaan Kerja pada Tenaga Kerja Bongka Muat di PT Pelabuhan Indonesia IV (PERSERO) Cabang Bitung. ejournal.unsrat.ac.id/. Vol 7, No 4 (2018).
[5]. BPS RI. (2018). Tingkat Pengangguran Terbuka (TPT) sebesar 5,34 persen. Di akseshttps://www.bps.go.id/pressrelease/2018/11/05/1485/agustus-2018.
[6]. Buntarto. (2015). Panduan Praktis Keselamatandan Kesehatan Kerja Untuk Industri. Pustaka Baru. Yogyakarta.
[7]. Daryanto. (2010). Keselamatan Kerja Peralatan Bengkel dan Perawatan Mesin. Alfabeta. Bandung.
[8]. Diputra, G. Y. M. (2011). Hubungan antara Masa Kerja dan Persepsi Tenaga Kerja tentang Prosedur Keselamatan dan Kesehatan Kerja dengan Kejadian Kecelakaan Kerja pada Bagian Fleet di PT. Coca Cola Amatil Indonesia Central Java. (jurnal). Diakses dari https://lib.unnes.ac.id/12657/.
[9]. Djunaid, D. (2014). Faktor yang Mempengaruhi Kecelakaan Kerja di Lokasi Kerja Pandai Besi (Podupa) Kelurahan Ipilo Kecamatan Kota Timur Kota Gorontalo.Skripsi.
[10]. Dunham, S.A. (2008). Pendekar-Pendekar Besi Nusantara (Kajian Antropologi Tentang Pandai Besi Tradisional di Indonesia). Mizan. Bandung.
[11]. Fauzi, A. (2017). Hubungan Karakteristik Pekerja dengan Perilaku Berbahaya pada Pekerja Las Listrik di Kelurahan Padang Bulan Selayang II Kecamatan Medan Selayang. (Skripsi). Diaksesdarihttp://repositori.usu.ac.id.
[12]. Hadinoto, S., Djoko. R. (2006). Micro credit challege. Elex Media Komputindo. Jakarta.
[13]. Halajur, U. (2018). Promosi Kesehatan Di tempat Kerja.Wineka Media. Jakarta.
[14]. Handayani, E. E, Wibowo, T.A., Suryani D. (2010). Hubungan Antara Penggunaan Alat Pelindung Diri, Umur dan Masa Kerja dengan Kecelakaan Kerja pada Pekerja Bagian Rustic di PT Borneo Melintang Buana Eksport Yogyakarta. (Journal). Diakses dari http://journal.uad.ac.id/index.php/KesMas.
[15]. Harpeni, S. (2015). Hubungan Unsafe Action, Unsafe Condition, dan Pengawasan dengan KecelakaanKerja pada Pekerja Bagian Produksi PT. Lutvindo Wiajaya Perkasa Pekanbaru. (Tesis). Diakses dari scholar.unand.ac.id.
[16]. Hikmawan, M. (2013). Faktor yang Berhubungan dengan Kejadian Kecelakaan Kerja pada Pekerja Bengkel Pengecatan Mobil di Kota Makassar. (Tesis). Diakses dari http://repository.unhas.ac.id/.
[17]. Hossein, S. S., Torghabeh, Z. J. (2012). Major Theories Of Construction Accident Causation Models: A Literature Review. International Journal Of Advances In Engineering & Technology (IJAET). Vol. 4, Issue 2, pp. 53-56.
[18]. Irzal. (2016). Dasar-Dasar Kesehatan dan Keselamatan Kerja. Kencana. Jakarta.
[19]. Konradus, D. (2017). K3 Membangun SDM Pekerja yang Sehat, Produktif, dan Kompetitif. Bangka AdinataMulia. Jakarta.
[20]. Kusuma, K. I. (2013). Hubungan Tingkat Pendidikan dan Masa Kerjadengan Kejadian Kecelakaan Kerja di Section Component Body anda Welding Departemen Produksi Mini Bus di PT. X. (Skripsi). Diakseshttps://eprints.uns.ac.id/.
[21]. Neolaka, Amos and Neolaka, Grace Amelia A. Landasan Pendidikan Dasar Pengenalan Diri Sendiri Menuju Perubahan Hidup. Penerbit Kencana, 2017, Depok.
[22]. Oktayani, E. (2016). Analisis Risiko Keselamatan dan Kesehatan Kerja pada Pekerja Pandai Besi di Nagari Tapi Selo Tanah Datar. (Tesis). Diaksesdari scholar.unand.ac.id.
[23]. Peraturan Menteri Tenaga Kerja Republik Indonesia Nomor 03/MEN/1998 Tahun 1998 tentang Tata Cara Pelaporan Dan Pemeriksaan Kecelakaan.
[24]. Peraturan Menteri Tenaga Kerja Dan Transmigrasi Republik Indonesia NOMOR PER.08/MEN/VII/2010 tentang Tentang Alat Pelindung Diri.
[25]. Pratama, D. N. (2017). Identifikasi Risiko Musculoskeletal Disorders (MSDS) pada Pekerja Pandai Besi. The Indonesian Journal Of Occupational Safety And Health, Vol. 6, No. 1 Jan-April 2017: 78–87. Diaksesdarihttps://e-journal.unair.ac.id/IJOSH/.
[26]. Rajab, W., Yudhia, F., Fauziah. (2018). Konsep Dasar Keterampilan Bidan,Winneka Media. Malang.

[27]. Ramli, S. (2014). Sistem Manajemen Keselamatan dan Kesehatan Kerja OHSAS 18001. Dian Rakyat. Jakarta.
[28]. Ridley, J. (2018). Kesehatan Dan Keselamatan Kerja Edisi Ketiga. Erlangga. Jakarta.
[29]. Rudyarti, E. (2017). Hubungan Pengetahuan Kesehatan dan Keselamatan Kerja dan Sikap Pengguna Alat Pelindung Diri dengan Kejadian Kecelakaan Kerja pada Pengrajin Pisau Batik di PT. X. Diakses dari Journal of Industrial Hygiene and Occupational Health Vol. 2, No. 1, Oktober 2017 http://ejournal.unida.gontor.ac.id/index.php/JIHOH No.ISSN online: 2541-5727 DOI: http://dx.doi.org/10.21111/jihoh.v2i1.1227 No. ISSN cetak : 2527-4686.
[30]. Salami, I. R.S. (2016). Kesehatan dan Keselamatan Lingkungan Kerja. Gajah Mada University Press. Bandung.
[31]. Saraswati, M., Ida, W. (2008). Be smart Ilmu Pengetahuan Sosial .Grafindo Media Pratama. Bandung.
[32]. Silaban, G. (2017). Keselamatan dan Kesehatan Kerja. Medan.
[33]. Silaban, B. H. (2016). Faktor-Faktor Yang Mempengaruhi Alat Pelindung Diri (APD) Pada Pekerja Pandai Besi di Desa Sitampurung Kecamatan Siborong-borong Kabupaten Tapanuli Utara. Di akseshttp://repository.usu.ac.id/handle/123456789/59417.
[34]. Suardi, R. (2017). Sistem Manajemen Keselamatan dan Kesehatan Kerja. PPM. Jakarta.
[35]. Stranks, J. W. (2007). Human Factors and Behavioural Safety. Butterworth-Heinemann. Elsevier.
[36]. Sucipto, C.D. (2017). Keselamatan dan Kesehatan Kerja. Gosyen Publishing. Yogyakarta.
[37]. Suma'mur, P. K. (2009). Higiene Perusahaan dan Kesehatan Kerja. Gunung Agung. Jakarta.
[38]. Suma'mur, P. K.(2010). Keselamatan KesehatanKerja dan Pencegahan Kecelakaan. Gunung Agung. Jakarta.
[39]. Sugiyono. (2014). Metode Penelitian Kombinasi (Mixed Methods).Alfabeta. Bandung.
[40]. Tasrials, D.S. (2015). Prinsip-prinsip K3LH. Gunung Samudra. Malang
[41]. Undang-undang No 1 Tahun 1970 tentang Keselamatan Kerja di akseshttps://jdih.kemnaker.go.id/data_puu/peraturan_file_32.pdf
[42]. WHO (World Health Organization). (2017). BURNS di akses https://www.who.int/news-room/fact-sheets/detail/burns.
[43]. WHO (World Health Organizaton). (2017). Tingkatkan Pengetahuan dan Penanganan Luka Bakar di akseshttp://koran-sindo.com/page/news/2018-05-15/4/7/ (PDF) Kepedulian Aktif untuk K3 Sektor Informal.

Available from:

[44]. https://www.researchgate.net/publication/317040340_Kepedulian_Aktif_untuk_K3_Sektor_Informal [accessed Jul 17 2018].
[45]. https://www.cnnindonesia.com/ekonomi/20170505134241-92-212545/geliat-sektor-informal-dongkrak-angkatan-kerja.
[46]. https://alisadikinwear.wordpress.com/2012/05/17/peran-sektor-informal-dalam-perekonomian-masyarakat/.
[47]. http://www.e-jurnal.com/2014/11/pengertian-kecelakaan-kerja.html.
[48]. http://qhsecorner.blogspot.com/2012/11/tindakan-tidak-aman-kondisi-tidak-aman.html.

Anita Rizqi, etal. "The Relationship between Unsafe Actions and Burning Incidents in Blacksmith Workers in Parlimbatan Village, Paluta Regency in 2019". *IOSR Journal of Nursing and Health Science (IOSR-JNHS)*, 9(01), 2020, pp. 20-27.