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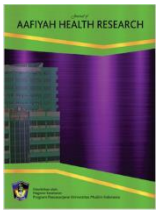

Original Article

Occupational Safety and Health Behaviors among Agricultural Workers in Rural Area Indonesia

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Abstract
Background: Data from the Ministry of Health of the Republic of Indonesia (2016) shows that the highest prevalence of musculoskeletal disease in Indonesia by occupation is farmers. One of the areas where the majority of the population works as farmers is the To Bentong Tribe in Bulo-bulo Village, Barru Regency, South Sulawesi. To Bentong tribal farmers still farm and cultivate crops in the traditional way.
Aim: In general, this study aims to determine how the behavior of Occupational Safety and Health (OSH) of To Bentong Tribe farmers in Bulo-Bulo Village, Barru Regency. In particular, this study aims to determine the use of PPE when farming, work postures and MSDs complaints experienced by farmers, as well as the pattern of seeking treatment by To Bentong Tribe farmers in Bulo-Bulo Village, Barru Regency.
Method: This research design used a qualitative approach, where the method applied was the ethnographic method, while the data collection techniques used were observation, in-depth interviews, and documentation. Sources of information from this study consisted of main informants (6 persons as Bentong Tribe farmers) and key informants was Bentong Tribe Head, Bulo-Bulo Village Head, Bulo-Bulo Hamlet Head, and Bulo-Bulo Health Center Head).
Result: Based on the results of research obtained through direct observation and in-depth interviews with all informants, it was found that the To Bentong Tribe farmers still lacked knowledge and understanding of Occupational Safety and Health (OSH). At the time of observation, the farmers preferred not to wear footwear. The farmers believe that the rituals performed can provide safety during work even if they do not use PPE (Personal Ptotection Equipment). In this study it was also found that the complaints most often felt by farmers related to work posture and feeling pain in the joints, hips, and back of the neck, as well as injuries caused by being hit by sharp objects such as iron from tractors, tools for cutting rice, and wood accidentally found in the rice fields. While the results of research related to the pattern of seeking treatment for the To Bentong Tribe farmers, farmers prefer traditional medicine to having to go to health services. This is because, traditional medicine is easier to obtain and can be processed quickly, the distance to health services is quite far, and the terrain that must be traveled can only be traversed by two-wheeled vehicles.
Conclusion: Socialization to farmers is very important to increase knowledge about behavior and the application of occupational safety and health (K3) in the agricultural sector.

INTRODUCTION

Work is one of the main activities for every person or society to maintain life and livelihood. In doing work, of course, there is a risk of health problems or diseases caused by the work, especially in the informal sector, both farmers, fishermen, street vendors, and even housemaids. Ignorance of informal sector workers has a higher risk in relation to health problems suffered as a result of work (International Labor Organization, 2018).

Global Estimates of Occupational Accidents and Work-related Illnesses 2017 data published by the Workplace Safety and Health Institute found that the number of workers who died from occupational diseases in 2015 was 2.4 million. Health problems in workers that need serious attention are musculoskeletal disorders or

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often referred to as MSDs (Musculoskeletal Disorders). Musculoskeletal Disorders (MSDs) are a global health problem because of their high prevalence in workers (Tarwaka, 2015).

The agricultural sector is considered one of the riskiest sectors for workers of all ages. Workers in the agricultural sector have a high rate of accidents and illnesses due to work intensity, because they are often faced with various risks, including working with various equipment and machines, the need to lift heavy loads and do repetitive work as well as work that requires non-ergonomic positions that can cause stress. lead to MSDs (International Labor Organization, 2018). Based on Burau Labor Statistics (BLS) reported, cases of Musculoskeletal Disorders (MSDs) caused by overworked work in the lifting process amounted to 356,910 cases or 31% of all cases of workplace accidents and occupational diseases. This disorder can affect muscles, ligaments, nerves, tendons, and joints. Cases of Musculoskeletal Disorders ranks second with an average prevalence of 469,000 cases or 34.54% over the last 3 years of all occupational diseases (BLS, 2016). Musculoskeletal Disorders (MSDs) are soft tissue injuries caused by sudden or sustained exposure to repetitive motion, force, vibration, and non-ergonomic positions (NIOSH, 2018).

According to data from the Ministry of Health of the Republic of Indonesia, health problems that often occur are skeletal muscle disorders or Musculoskeletal Disorders (MSDs). The prevalence of Musculoskeletal Disorders in Indonesia based on having been diagnosed by a doctor is 7.3% and the highest province in Aceh 13.3% while the lowest is West Sulawesi 3.2%. The highest prevalence of the musculoskeletal disease by occupation is farmer 9.9%, fisherman 7.40%, and labor/housemaid 6.10%. These data prove that the highest prevalence of MSDs disorders in Indonesia is farmers (Ministry of Health, 2016).

One of the areas where the majority of the population works as farmers is Bulo-bulo Village in Barru Regency, South Sulawesi. In Bulo-Bulo Village itself, the To Bentong Tribe community lives and cultivates crops in the traditional way, this can be seen from the habits of the To Bentong Tribe farmers. With all the limitations, both in terms of infrastructure and the use of PPE in farming, the To Bentong Tribe farmers are more at risk of experiencing MSDs and other health problems. Based on the results of initial interviews with key informants in September 2020 that there were three farmers from the “To Bentong” Tribe in Bulo-Bulo Village who received health services at the local health center related to work posture complaints that farmers often complained about when farming. In addition, the “To Bentong” tribe has a habit of seeking treatment at Sandro Kampong (shaman) if they experience injuries or work accidents at work. In this treatment, Sandro Kampong uses herbs or leaves (vanilla/kariango, garden banana/unti dare, ginger, tobacco, tiro-tiro ere leaves, candlenut, betel, and lemongrass), bark, fruits (guava) accompanied by mantras. In farming, the "To Bentong" Tribe farmers have habits that are still influenced by traditions that are inherent from generation to generation, that is, before starting farming, the “To Bentong” community in Barru performs an “assulu rigalung” ceremony to determine a good day or the right day to start farming guided by traditional elders known as "Kapala Toa". After the ceremony, it was followed by the ritual of "A'doja bine akkape and a'mmua" as a form of hope for better agricultural products in the future. “To Bentong” tribal farmers believe that these rituals will provide safety, health and strength in farming. then continued with the ritual "A'doja bine akkape and a'mmua" as a form of hope for better agricultural products in the future. “To Bentong” tribal farmers believe that these rituals will provide safety, health and strength in farming. then continued with the ritual "A'doja bine akkape and a'mmua" as a form of hope for better agricultural products in the future. “To Bentong” tribal farmers believe that these rituals will provide safety, health and strength in farming.

Based on the above, the researchers are interested in conducting research with the title "Occupational Safety and Health Behavior (OSH) on To Bentong Tribe Farmers in Bulo-Bulo Village, Barru Regency".

METHOD

This study uses a qualitative approach, where the method applied is an ethnographic method which is considered capable of describing the behavior of Occupational Safety and Health (OSH) on To Bentong tribal farmers in Barru Regency. The techniques used are observation and in-depth interviews, and documentation during the research process. This research was conducted in the area of Bulo-Bulo Village, Pujananting District, Barru Regency in the To Bentong tribe. Data collection in this study was carried out from September to November 2020.

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Research Instruments

The research instrument is the researcher himself who acts as a collector of informants and interview guides when conducting in-depth interviews to support the success and validity of the research results. The other instruments used by the researcher were a recording device to record the in-depth interview process from the informant, a camera to take pictures of the observations and during the research process, observation sheets and interview guidelines for data collection, small notebooks, and stationery.

Source of Data

Primary data in this study is data obtained directly by researchers from informants through data collection techniques of observation, in-depth interviews, and documentation related to the research focus using observation sheets, interview guide sheets, and documentation results regarding the concept of occupational safety and health for farmers. in the Pujananting sub-district, Barru district, Bulo-Bulo village in the To Bentong tribe.

Secondary data in this study is data that supports primary data obtained from several references such as journals, books, rules and documents that support the accuracy of the data.

Respondents or Informants

Research informants are parties who understand the information on the object of research as actors and other people who understand it. The function of the informants in this study is as a source to find information about occupational safety and health for farmers in the Pujananting sub-district, Barru district, Bulo-Bulo village in the To Bentong tribe.

The key information in this study is the tribal head, village head, hamlet head, and head of the puskesmas in implementing occupational safety and health for farmers in the Pujananting sub-district, Barru district, Bulo-Bulo village in the To Bentong tribe. And, the main informants in this study were farmers totaling 6 people, namely all informants came from the To Bentong tribe.

Data Collection Procedure

There are three types of data collection process in this research, namely; The observation method is an activity carried out through direct observation of an object or phenomenon related to the research topic that is selective and systematic, either with or without an observation sheet. In this study, the observation technique was carried out by looking directly at the data on the number of farmers in the To Bentong tribe. In addition, what the researchers did during the observation was how to farm in the To Bentong tribe by observing three stages, namely, before farming, during farming, and after farming.

In-depth Interview Method is a data collection technique used to obtain more in-depth information from informants about an object or phenomenon through direct conversations by researchers and informants, without interview guidelines. In this study in-depth interviews were conducted between researchers and informants to obtain information about occupational safety and health when farming by looking at three stages, namely: before farming, during farming, and after farming in the Pujananting sub-district, Barru district, Bulo-Bulo village in the To tribe. Large splotch. Interviews were conducted according to the time and place that had been agreed upon between the researcher and the informants, and were carried out continuously until the informants were saturated. In-depth interviews were conducted in this study using an interview guide that outlines the main issues, namely the concept of Occupational Safety and Health (OSH) on To Bentong tribal farmers in the Pujananting sub-district, Barru district, Bulo-Bulo village. '

Documentation is a method used to obtain additional data or supporting data by recording data, images, videos, and recordings related to research problems as material for analyzing problems.

Data Analysis

Triangulation of sources and methods was carried out in this data analysis.

Research Ethics

Research must be carried out by applying ethics so that research does not violate the human rights of the subjects or informants in this research. The ethics applied by researchers in this study are as follows:

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All informants were given as a form of agreement between the researcher and the informant, in the form of a consent form signed by the informant. If the informant refuses, the researcher must not force and must respect their rights. Confidentiality of the informant's identity is guaranteed by not stating the true identity and using initials. The data collection process carried out by means of observation, in-depth interviews, and documentation should not violate moral norms, cultural values, as well as religious values and beliefs.

RESULTS

Informant Overview

Table 1. Characteristics of Informants

Informant's Initials	Age	Gender	Educational status	Length of working	Status
R	38 years old	Man	S1	8 years	Key Informants
AT	52 years old	Man	SD	36 years old	Key Informants
M	39 years old	Man	TS	25 years	Key Informants
N	46 years old	Man	TS	35 years old	Key Informants
A	42 years old	Man	SD	29 years	Key Informants
RR	46 years old	Man	middle school	33 years old	Key Informants
U	55 years old	Man	TS	45 years old	Key Informants
S	40 Years	Man	SD	26 years	Key Informants

Source: Primary Data 2020

Based on table 1 in terms of age, most of the informants are old adults from the age of 38-55. And for the gender characteristics, all are male because the researcher determines the informant who is the head of the family. In terms of education, some are informants who are not in school, some are elementary school graduates and a small number are junior high school and undergraduate graduates. And for the characteristics of the length of work, most of them started routine farming activities since their teens or young ages.

During the data collection process, researchers tried to adjust the data that had been collected and developed strategies to get new data of better quality, after which the researchers made corrections to unclear information related to Occupational Safety and Health (OSH).

This research was conducted in the Pujananting District, Barru District, Bulo-Bulo Village in the To Bentong tribe. The people there who work as farmers, especially research informants, do not yet know the importance of Occupational Safety and Health (OSH), this is evidenced by the fact that there are still many accidents at work, especially for farmers, and when this research was conducted it was found that all farmers in this study complained of illness. on the joints, back, hips, heels, and neck. This has often been experienced by farmers and they have felt it for a long time. For this reason, researchers conducted this research with the hope that farmers, especially research informants in the Pujananting District, Barru District, Bulo-Bulo Village in the To Bentong Tribe could apply Occupational Safety and Health (OSH) behavior, The use of PPE in farming, can apply the correct work posture and express MSDs complaints, as well as reveal treatment patterns if they experience MSDs complaints. The data obtained from the main informants will be cross-checked with the results of in-depth interviews with key informants.

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Farmer's behavior in the application of Occupational Safety and Health (OSH) and the use of PPE when farming

According to Suma'mur in Lelly (2016)Occupational Safety and Health (OHS) in the agricultural sector is highly dependent on the type, form, and environment in which the work is carried out. The supporting elements of work safety are as follows: The existence of elements of occupational safety and health, awareness in maintaining occupational safety and health and being careful at work.

M informant

Lack of behavioral awareness in implementing Occupational Safety and Health (OSH) greatly affects the safety of these farmers. This was revealed during an in-depth interview with the main informant, informant M who works as a farmer in the To Bentong tribe. The following is an excerpt from an interview with informant M regarding the understanding of OSH and the use of PPE when the informant is farming:

"Usually I only wear a hat, long sleeved shirt, short pants, and sandals, sometimes I don't wear sandals. When I get to the fields, I usually clean the rice fields immediately, using my hands, using a hoe, and a dompeng to prepare to plant rice. I don't wear sandals, when I go down to the fields, I usually keep sandals in the fields or beds." (M, 39 years old, October 8, 2020, 13.25 WITA)

The statement from the informant above shows that the farming habits carried out are very far from OSH standards, where the informant does not use footwear at all when going down to the fields so that there is a high risk of being stabbed by dangerous objects such as thorns, wood, and iron. Lack of knowledge about OSH causes Informant M to work without using PPE and trust the safety rituals that are carried out more.

N informant

Awareness in implementing Occupational Safety and Health (OSH) behavior is very important. This was revealed during an in-depth interview with the main informant, namely informant N who works as a farmer in the To Bentong tribe. The following are excerpts from interviews with informant N:

"I go to the rice fields starting at 06.00 in the morning, usually I wear short sleeves, short pants, and don't wear shoes. Arriving at my rice field, clean the rice field area with a hoe or tractor. I don't wear the shoes and clothes that I usually wear for farming. I have long and got used to when farming with my habits." (N, 46 years old, October 8, 2020, at 14.05 WITA)

Almost the same as informant M, informant N is also less aware of the importance of OSH when farming, this can be seen from the lack of use of PPE when going down to the fields. From the results of in-depth interviews, it was also found that the lack of awareness of the importance of OSH and the use of PPE when farming has become a habit for the informants, plus Informant N believes that the rituals carried out are able to maintain their safety when farming as in the quote below:

"... These rituals are rituals that we believe will bring us safety and bring success in our farming results." (N, 46 years old, October 8, 2020, at 14.05 WITA)

A informant

Almost the same as Informants M and N in implementing Occupational Safety and Health (OSH) behavior. Informant A also has almost the same understanding, this was revealed during an in-depth interview with the main informant, namely informant A who works as a farmer in the To Bentong tribe. The following are excerpts from interviews with informant A:

"I usually go to the fields at 05.00 in the morning. The clothes I wear are usually long sleeves, long pants and a hat and swalow sandals. Arriving at the rice fields, I usually take off my sandals, and go down to the fields barefoot. For a long time I have not worn footwear, because I am used to it, but once in a while I have worn boots, but I took them off, because they are heavy and I am not used to it."

"... all the rituals we perform are for the purpose of our safety at work. Also for our farming success. We believe that by performing these rituals we are given salvation by God and our farming results will be successful." (A, 42 years old, October 8, 2020, at 14:35 WITA)

Furthermore, based on the results of an in-depth interview with informant A, it was found that the informant was slightly aware of the importance of using PPE, this was evidenced by the use of Plastic Boots,

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but due to the inconvenience, the informant finally rarely used it, which of course would put his safety and health at risk. In addition, the informants still believe that the rituals they perform will provide safety when farming.

R informant

Then the researchers triangulated the source to the key informants. Based on the results of interviews with key informants as the head of the Bulo-Bulo village, the To Bentong tribe confirmed that the behavior of farmers in the To Bentong tribe did not yet know farming behavior in Occupational Safety and Health (OSH). The following is an excerpt from an in-depth interview with informant R:

"It is true that no one in the To Bentong tribe knows about farming behavior in Occupational Safety and Health (OSH). I also saw firsthand their daily activities in farming, cleaning the rice fields without wearing footwear and the clothes they wear are mostly thin, when they are farming, they don't wear gloves. I've asked this question to farmers, but their answer is the same, namely they are used to it and have been working for a long time without using footwear and gloves."

"They are only used to performing rituals that they believe can provide safety during work and success in their farming results." (R, 38 years old, October 8, 2020, at 17.00 WITA)

Based on the narrative of the key informants above, it can be said that the To Bentong Tribe farmers in Bulo-Bulo Village still lack knowledge about the importance of Occupational Health and Safety (OSH) in farming, and awareness of the use of PPE is still lacking, this is caused by habitual factors and the existence of trust. local people to rituals that can provide safety during work (farming).

Work posture and expressing MSDs complaints

According to the National Institute of Occupational Safety and Health (NIOSH, 2018) Work posture is a body position that deviates significantly from the normal position when doing work can cause local mechanical stress on muscles, ligaments, and joints. This results in injuries to the neck, spine, shoulders, wrists, and others. Unnatural work posture causes body parts to move away from their natural position. The farther the position of the body part from the center of gravity, the higher the skeletal muscle complaints. Disorders of musculoskeletal complaints are disorders of the skeletal muscles that are felt by a person ranging from very mild complaints to very painful. If the muscles receive static loads repeatedly and over a long period of time, it can cause complaints in the joints, ligaments and tendons.

U informant

The most common complaints experienced by farmers in the To Bentong tribe are pain in the joints, hips, pelvis, heels, calves, frequent dizziness and cuts from sharp objects. This was revealed by informant U during an in-depth interview with informant U who works as a farmer in the To Bentong tribe. The following are excerpts from interviews with informants:

"I often have headaches because I have been in the fields for a long time, it is hot. If I get dizzy, I usually just rest at home or stop first and it will go away. If it's good, I go back to the fields, because if I don't come back no one cleans the fields, the rice will be eaten by pests. So every day I have to go to the fields to clean up. Apart from cleaning, I also have to use a tractor, I often have pain in my calf to heel, because the tractor runs on its own and vibrates."(U, 55 years old, October 9, 2020 at 10.00 WITA)

The results of the interview above show that the informants often ignore the health problems experienced at work by only resting without taking the initiative to visit health facilities, besides that the informants also often experience muscle complaints in the calves to the heels which can be indicated as MSDs complaints.

RR informant

Not much different from the other main informants, Informant RR also complained about the most frequent pain in the joints, hips, pelvis, heels, neck, frequent dizziness and scratches from sharp objects. The work posture factor is also the cause of these complaints. This was revealed by an RR informant during an in-

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depth interview with an RR informant who works as a farmer in the To Bentong tribe. The following are excerpts from interviews with informants:

"The complaints I feel when farming, I often have headaches because of fatigue from working or being in the fields for too long, I also usually experience back muscle pain due to the working position of hoeing which can cause muscle cramps over time, and also complains of pain in the lower back. the back of the neck that often lifts piles of rice seeds. In addition to headaches, and pain in the wrists, I also often suffer injuries to the legs due to scratches from sharp stones or plastic glass shards and sharp pieces of wood." (RR, 46 years old, October 9, 2020, at 13.30 WITA)

S informant

In informant S, the complaints that are often complained of are not as many as the previous informants. However, the areas most frequently complained of were the same as the previous informants, such as the joints and heels, and were often scratched by sharp objects. This was revealed by informant S during an in-depth interview with informant S who works as a farmer in the To Bentong tribe. The following are excerpts from interviews with informants:

"I often feel pain in my knees and elbows. But what I often complain about is the heel. That complaint that I felt when I was farming because I was tired of working or being in the fields for too long, but because of my daily work, so I was used to the pain. If I don't go to the fields, the rice that I plant will be attacked by pests and surely many wild plants will grow. So I have to go to the fields every day, with sore knees or heels." (S, 40 years old, October 9, 2020, at 15.00 WITA)

AT informant

Then the researcher triangulated the source to the key informants. Based on the results of interviews with key informants as the head of the Bulo-Bulo hamlet, the To Bentong tribe confirmed that the complaints often complained by farmers in the To Bentong tribe were in the supply area, legs, dizziness and scratches. The following is an excerpt from an in-depth interview with an AT informant:

"I have been the head of Bulo-Bulo hamlet for 12 years. I often hear directly from farmers who complain that they feel sick in the supply area and that is the most common complaint among others. The farmers here are really happy with their work, because even though they feel sick, they still go to the fields even if they just look at their fields. But if there are pests, surely they will immediately go down to the fields, so they forget that they are sick."(AT, 52 years old, October 9, 2020, at 16.30 WITA)

From the information of the AT Informant (Key Informant) as the Head of the Hamlet, it was found that the lack of knowledge of the To Bentong Tribe farmers about proper posture when farming caused them to be prone to complaints due to being accustomed to non-ergonomic positions while working, this greatly affected the the emergence of MSDs problems for To Bentong Tribe farmers.

The pattern of seeking treatment by "To Bentong" Tribal Farmers

According to the Indonesian dictionary in (Zulkarnain AS, 2016), treatment seeking behavior is a follow-up action taken by a person or society when they feel signs and symptoms of an illness, or when they feel that they are sick. Health complaints experienced by each individual will be followed up with efforts to overcome them. These efforts can be in the form of self-medication or with the help of treatment from health services. Treatment for sick people generally involves three main questions, namely what source of treatment is considered capable of treating the illness, what criteria are used in choosing one of several available sources of treatment, and what is the decision-making process when choosing the source of the treatment.

N informant

Informant N said that when he suddenly felt pain in the joint area, informant N usually stopped to rest. However, if the pain did not go away immediately, informant N went home. The following is an excerpt from an interview with informant N:

"I often get sick, because I work in the fields which are exposed to direct sunlight and most of the time I stand and bend over. Most often the pain in the joint and hip area. I rarely take medicine, and I also don't like

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going to the health center, because it's quite far. So I prefer massage." (N, 46 years old, October 8, 2020, at 14.05 WITA)

RR informant

During an interview with Informant RR, he said that if he feels pain at work, it is better for him to rest first and if possible he will continue his work. If the pain doesn't go away, he goes home and chooses traditional treatment, either calling a massage therapist or using traditional ingredients prepared by the wife of the informant RR. The following is an excerpt from an interview with an RR informant:

"So I often feel pain in the joints and back area. I almost never take medicine, the health center is also far from here, and the roads are impassable during the rainy season. So usually I prefer to just rest at home and call people who usually massage. Because the pain goes away faster, than drugs. There is also a potion made by my wife, from boiling water of turmeric, ginger, pepper, onion, lime, I usually drink this mixture while it's warm, and the taste is quickly felt. Then I rested, the next day when I woke up, my body felt light and the pain lessened." (RR, 46 years old, October 8, 2020, at 14.05 WITA)

U informant

During an interview with informant U, informant U said that if he felt pain caused by his work, the main action taken was resting, but it all depends on the pain he feels, for example headaches, usually go away when he rests. Unlike the case with the supply area, the alternative treatment is usually in the "massage" or consuming traditional ingredients. The following is an excerpt from an interview with informant U:

"I have worked as a farmer for a long time, of course there are illnesses that I feel most often. I also often feel a headache, usually it goes away when I rest, when I get really sick I go home to sleep, and usually after I wake up the headache goes away. Apart from headaches, the most common pain I feel is in the joint area to the heel. When I'm very sick, I usually don't go to the fields first, then I tell my wife to call someone who usually does massage. Usually also disappear after the massage, but there are also only temporarily lost. I usually smeared with rubbing oil, often also made a concoction in which there was a mixture of ginger, turmeric, lime, pepper, and boiled water that is what I drink." (U, 55 years old, October 9, 2020 at 10.00 WITA)

S informant

Not much different from other informants, informant S said that the pain most often experienced was in the joint area. Informant S said that to treat it, his wife usually massaged him and also went to the health center to get medicine. The following is an excerpt from an interview with informant S:

"If you ask me if I have been sick at work, yes, of course. Because working in the fields requires energy, and all day in the fields, you must feel tired. Almost every day I go to the fields. While working continuously I suddenly felt pain in my feet, especially in my heels, I stopped working. If the pain doesn't go away for 2-3 days, I usually go to the health center for treatment. But sometimes it also heals when my wife massages it." (S, 40 years old, October 9, 2020, at 15.00 WITA)

R informant

Then the researchers triangulated the source to the key informants. Based on the results of interviews with key informants as the head of Bulo-Bulo Village. The following is an excerpt from an interview with informant R:

"Basically, the people of the "To Bentong Tribe", especially the farmers, do prefer traditional medicine to health facilities for treatment. This is because the people of the "To Bentong Tribe" believe that with traditional medicine the benefits are felt more quickly, especially if the complaints that are most often complained of are pain in the joints, heels, hips, and back areas. The distance to health facilities is also quite far and can only be reached by two wheels. Sometimes, if I have leg pain or fatigue, I usually get massaged or I usually go to the farmers to ask about the traditional medicine they use to treat it." (R, 38 years old, October 9, 2020, at 17.00 WITA)

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From the in-depth interview, he confirmed that people rarely go to health facilities for treatment because they believe in traditional medicine more than medical, besides that the distance is quite far, and the road used can only be passed by two-wheeled vehicles.

DISCUSSION

Based on previous theories and research, Occupational Safety and Health (OSH) in the agricultural sector is very important to increase the awareness and vigilance of farmers in terms of safety when working/farming, by paying attention to related matters, including:

Farmer behavior in the application of OSH and the use of PPE in farming

Occupational Safety and Health (OSH) in the agricultural sector is highly dependent on the type, form, and environment in which the work is carried out. The supporting elements of work safety include elements of occupational safety and health, awareness in maintaining occupational safety and health and being careful at work. The use of machines and heavy equipment such as tractors, permanent machines, planting tools and so on in the agricultural sector is a source of risk that can result in injury and fatal work accidents. In addition, the use of pesticides can cause poisoning or serious illness, as well as animal and plant dust which can cause allergies and respiratory diseases (Lelly, 2016).

Based on the research results obtained through direct observation and in-depth interviews with key informants and key informants as farmers in the Pujananting sub-district, Barru district, Bulo-Bulo village in the "To Bentong" tribe, it was found that the farmers still lacked knowledge and understanding of occupational safety and health (OSH) such as when farmers go down to their fields, only wearing makeshift clothes, some are wearing hats, some are not, and most often wear sandals. At the time of observation, the farmers preferred not to wear footwear. When doing work using tractors, none of the farmers used personal protective equipment. This greatly affects the safety of the farmer (Lelly, 2016).

This research is in line with research that has been researched by (Akbar, 2019) with the title "OSH Risk Analysis of Pest Eradication of Citrus Farming Work in Banyuwangi Regency" with a descriptive type of research that uses qualitative methods, research techniques with direct observation, interviews and documentation. The results show that one of the OSH risks that can be encountered when spraying pesticides using a sprayer tank is when the farmer's shoulders carry the tank load for too long, as experienced by 1 farmer, causing pain in the shoulders. OHS risks are very common in this pest eradication phase, ranging from the risk of exposure to pesticide mist and even other occupational health and safety risks. Like when spraying pesticides, If the farmer does not pay attention to the direction of the wind when spraying, the pesticide mist can return to the farmer and attack the farmer's body parts, such as the farmer's respiratory tract which was experienced by as many as 9 farmers, then the eyes as experienced by 3 farmers, and the skin which was also experienced by farmers. by 3 farmers. The OSH risk can occur if every time they spray pesticides, the farmers do not use PPE (Personal Protective Equipment) and do not pay attention to the direction of the wind. Occupational health and safety risks that occur at the pest eradication stage are breathing mist when spraying pesticides with a value of 6 (acceptable), eyes exposed to pesticide mist with a value of 6 (acceptable), skin exposed to pesticide mist with a value of 6 (acceptable), slipped when spraying pesticide with a value of 6 (acceptable), and took too long to carry the burden of the tank on his shoulders when spraying pesticides with a value of 5 (acceptable). So that it is necessary to take action to reduce the intensity of pesticide spraying activities at the pest eradication stage so that risks can occur to a minimum. In eradicating pests there are several OHS risks, including the risk of inhalation of pesticide mist causing poisoning, exposure of the eyes and skin to pesticide mist which causes irritation, slips that can cause irritation. can cause bruises and sprains and the risk of experiencing low back pain due to carrying the tank load on the shoulders for too long (Akbar, 2019).

In this study, the researcher assumes that farmers in the Pujananting sub-district, Barru district, Bulo-Bulo village in the "To Bentong" tribe are still very lacking in knowledge about occupational safety and health (OSH) because all key informants rarely even almost never wear personal protective equipment. while working in the fields. So the risk of accidents in the agricultural sector is still very high. Therefore, socialization related

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to occupational safety and health is carried out as often as possible, as well as the need for notification of risks or dangers that can injure farmers.

Work posture and MSDs complaints

According to the National Institute of Occupational Safety and Health (NIOSH, 2018)Work posture is a body position that deviates significantly from the normal position when doing work can cause local mechanical stress on muscles, ligaments, and joints. This results in injuries to the neck, spine, shoulders, wrists, and others. Unergonomic working attitude causes body parts to move away from their natural position. The farther the position of the body part from the center of gravity, the higher the skeletal muscle complaints. Disorders of musculoskeletal complaints are disorders of the skeletal muscles that are felt by a person ranging from very mild complaints to very painful. If the muscles receive static loads repeatedly and over a long period of time, it can cause complaints in the joints, ligaments and tendons (NIOSH, 2018).

Based on the research results obtained through direct observation and in-depth interviews with key informants and key informants as farmers in the Pujananting sub-district, Barru district, Bulo-Bulo village in the "To Bentong" tribe it was found that the complaints most often felt by farmers were pain in the joints, hips, and back of the neck, and there were also torn wounds caused by sharp objects. such as iron from tractors, tools for cutting rice, and wood accidentally found in rice fields. It is not uncommon for farmers to complain of frequent headaches due to frequent exposure to direct sunlight.

This research is in line with a study with research title "Factors Affecting Complaints of Musculoskeletal Disorder in Rice Mill Workers in North Penajam Paser Regency" with the type of quantitative research with a cross sectional research design. Sampling using purposive sampling method, amounting to 35 people. Data analysis used Spearman rank test with a significance level of 0.05 (5%). The results showed that there was a significant relationship between work posture ($p = 0.000$) and the risk of manual material handling (MMH) ($p = 0.005$) with complaints of musculoskeletal disorders (MSDs). While the physical workload, there is no relationship with complaints of musculoskeletal disorders (MSDs) ($p = 0.095$). It is recommended for workers to carry out manual material handling (MMH) with the correct procedures (Wiranto, 2019).

This research is in line with research that has been researched by (Puspitasari, 2019) with the research title "Analysis of Work Postures Against Complaints of Musculoskeletal Disorders (MSDs) in Mechanical Workers of Motorcycle Workshop X Semarang" where the design of this research is descriptive with a qualitative analysis approach. The results showed that all workers were men aged 30 years and over. The service period of all mechanical workers in the motorcycle repair shop X is 5 years. The results of in-depth interviews found that the complaints felt by mechanical workers varied, namely aches, pains, and pain. The most complaints are on the backs of workers. Observations and assessments using the Baseline Risk Identification of Ergonomics (BRIEF) method. The survey conducted there were five different activities carried out by motorcycle mechanic workers, namely checking/adjusting the carburetor, replacement of shock seals, checking/replacing battery water, installing motorcycle cables, and replacing brake linings with 45 working postures. Of the 45 work postures, there are 22 work postures with high risk (49%), 9 work postures with moderate risk (51%), and 4 work postures with light risk (9%) (Puspitasari, 2019).

In this study, researchers found that farmers in the Pujananting sub-district, Barru district, Bulo-Bulo village in the "To Bentong" tribe experienced the most frequent complaints, namely pain in the extremities, hips, shoulders and neck areas. This makes the farmers feel very disturbed, because their work requires energy and a healthy body condition. The complaints of these farmers are none other than because of their continuous work in a bent position, very long standing, and heavy lifting loads. Therefore, researchers provide education to farmers on how to relax the body parts that often hurt, even though it does not completely relieve pain.

The pattern of seeking treatment for the "To Bentong Tribe"

According to the Indonesian dictionary in (Zulkarnain AS, 2016), treatment seeking behavior is a follow-up action taken by a person or society when they feel signs and symptoms of an illness, or when they feel that they are sick. Health complaints experienced by each individual will be followed up with efforts to overcome them. These efforts can be in the form of self-medication or with the help of treatment from health

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services. Treatment for sick people generally involves three main questions, namely what source of treatment is considered capable of treating the illness, what criteria are used in choosing one of several available sources of treatment, and what is the decision-making process when choosing the source of the treatment (Zulkarnain AS, 2016).

Based on the research results obtained through direct observation and in-depth interviews with key informants and key informants as farmers in the Pujananting sub-district, Barru district, Bulo-Bulo village in the "To Bentong" tribe, it was found that farmers prefer traditional medicine to health services. This is because, traditional medicine is easier to obtain and can be processed quickly, the distance to health services is quite far, and the terrain that must be traveled can only be traversed by two-wheeled vehicles.

This research is in line with the research conducted by Sartika (Sartika, 2020) with the title "Ethnobotany of the Bentong Tribe Community in Barru Regency, South Sulawesi" which uses qualitative research methods with an ethnographic approach. The results of the study found that the Bentong Tribe community utilizes the diversity of plant species found in the vicinity for various purposes such as food, medicine, buildings, and household appliances. Data were collected in seven hamlets in Bulo-Bulo Village, namely Lappatemmu Hamlet, Maroanging Hamlet, Rumpiae Hamlet, Panggalungan Hamlet, and Palampang Hamlet. The number of informants in the study amounted to 90 people consisting of 10 local experts and 80 people from the general public. Ethnobotanical data collected in the form of public knowledge about plant natural resources which include plants as traditional medicine, food, beverage-producing materials, producer of firewood, and producer of fodder, as well as materials to complement traditional events. The Bentong Tribe community has lived independently by using 221 types of spices consisting of 70 types as food ingredients, 30 types as medicinal ingredients, 20 types of building materials, 11 types of firewood materials, 30 types of ritual complement materials, 4 types of materials. wrapping, 13 types as equipment, 36 types of ornamental plants and 1 type of fish poison (Sartika, 2020).

In this study the researchers found that farmers in the Pujananting sub-district, Barru district, Bulo-Bulo village in the “To Bentong tribe prefer traditional medicine because the ingredients used are very easy to obtain and quickly feel the benefits, this factor is the main reason the farmers almost never go to health services for treatment. In addition, treatment with the "massage" is an alternative that is most often sought by farmers if the complaint of pain that is felt reappears. There is someone who is believed to be able to heal only by "massage". No wonder farmers prefer treatment that is easy and quickly feels the benefits. However, there are also farmers who choose to go to health services, if it is very urgent. Through informants,

CONCLUSION

Based on the results and changes in this study, conclusions can be drawn, including the following: (1) The behavior of farmers in the application of Occupational Safety and Health (OSH) as well as awareness in the use of PPE when farming in the Pujananting sub-district, Barru district, Bulo-Bulo village in the "To Bentong" tribe is still very lacking because all key informants rarely even almost never use personal protective equipment while working in the fields. So the risk of accidents in the agricultural sector is still very high. Therefore, socialization related to occupational safety and health is carried out as often as possible, as well as the need for notification of risks or dangers that can injure farmers. (2). Work posture and MSDs complaints of farmers in the Pujananting sub-district, Barru district, Bulo-Bulo village in the "To Bentong" tribe found that the most frequent complaints were pain in the extremities, hips, shoulders and neck areas. This makes the farmers feel very disturbed, because their work requires energy and a healthy body condition. The complaints of these farmers are none other than because of their continuous work with bent positions, very long standing, and heavy lifting loads. Therefore, researchers provide education to farmers on how to relax the body parts that often hurt, even though it does not completely relieve pain. (3) The pattern of seeking treatment for the "To Bentong Tribe" in the Pujananting sub-district, Barru district, Bulo-Bulo village in the "To Bentong" tribe, that farmers prefer traditional medicine because the ingredients used are very easy to obtain and quickly feel the benefits, this is the main reason for farmers almost never go to health services for treatment. In addition, treatment with "sorted" becomes the alternative most often sought by farmers if complaints of pain are felt to reappear.

For farmers "Tribe To Bentong" to increase knowledge about the behavior and application of occupational safety and health (OSH) in the agricultural sector, so that they can be careful at work, and can protect

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themselves from the threat of work accidents. *For Institutions ;* It is hoped that it can add references for research development. *For Further Research;* In order to be able to continue research that has not been researched thoroughly in this study in order to improve the learning process and application more comprehensively.

Declaration of Conflicting Interest

The author(s) declared no potential conflict of interest with respect to the research, authorship, and/or publication of this article.

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