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PREVENTION OF HEALTH PROBLEMS THROUGH TRAINING AND HEALTH SCREENING OF OIL PALM FARMERS AND FAMILIES IN THE AIR TERBIT VILLAGE, KAMPAR

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Abstract

Oil palm workers are a work group at high risk of experiencing health problems. Health problems experienced by oil palm farmers include being pricked by oil palm thorns, pain in the nape, shoulders, and hips, dizziness, headaches, and the risk of non-communicable diseases (NCDs). Oil palm farmers in Desa Air Terbit have never received training related to preventing health problems and rarely undergo health checks. The partners for this activity are the Tani Groups at Air Terbit Village. The solution to this problem is the provision of health education media using videos; Training in preventing health problems for oil palm farmers and their families; Health checks; and Involvement of stakeholders and partners in activities. Activities are carried out offline in Air Terbit Village. The results of the activity show an increase in understanding and skills of oil palm farmers in preventing health problems in oil palm farmers as well as data on health problems experienced. It is hoped that this activity can be useful in aspects of health, agriculture, economy and family welfare, as well as information system technology through health digitalization.

Keywords: Family, Health Digitalization, Oil Palm Farmers, Prevention, Screening

INTRODUCTION

Air Terbit Village is a village located in Tapung District, Kampar Regency, Riau Province. The area of oil palm plantations in Air Terbit Village is 1,250 Ha. Almost all of the community works as oil palm farmers (oil palm owners and farmers), namely 95%. Oil palm is a strategic main commodity because of its significant role in driving the people's economy. The data obtained states that oil palm plantations are a great opportunity for employment for the community (Dian et al., 2023). Data from Direktorat Jenderal Perkebunan shows that

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Riau Province is the largest manager with an area of 2.86 million hectares (Direktorat Jenderal Perkebunan, 2021). Palm oil plantations, especially in Air Terbit Village, are partly owned by individuals so that oil palm farmers are on their own land or on private land owned by others so that they are not under a plantation company. This is one of the potentials of Air Terbit Village.

Occupational health is an important thing in occupational safety. Cases of work accidents for small-scale oil palm farmers often occur. The risk of work accidents can occur if there is low awareness of oil palm farmers about the importance of using personal protective equipment and quick response when an injury occurs (Damanik & Pamardi, 2024). Health problems that often occur in oil palm farmers include being hit by oil palm fruit, being pricked by thorns, tingling, eyes being hit by debris from oil palm fruit, and slipping or falling during the oil palm harvesting process (Vioni et al., 2021). Work accidents that are often experienced by oil palm farmers are being stabbed by palm thorns, being hit by fronds or palms, insect bites, sprains, eye defects, or being injured by harvesting tools. This is caused by human negligence and unsafe conditions (Dian et al., 2023; Nirtha et al., 2019).

Occupational accidents in oil palm farmers often occur but have not received attention from related parties. The oil palm harvesting process is still carried out manually by relying on human power and simple tools. This is done repeatedly so that it has the potential to cause musculoskeletal disorders (MSDs) and spinal injuries. MSDs problems are caused by non-ergonomic work postures so that they are included in the category of heavy work because they require extra energy (Saputri et al., 2022). MSDs complaints that are not handled immediately and properly will cause complications and reduce work productivity (Ramadani & Sunaryo, 2022). ILO (International Labor Organization) shows that every year there are more than 250 million cases of work accidents that cause 160 workers to become ill. Even more tragically, around 1.2 million workers die due to work accidents and this data also increases every year (Hendri & Afrillah, 2023). Health problems reduce work productivity and will impact income and family welfare.

Based on the results of a survey conducted in Air Terbit Village in November-December 2023, it was found that health problems are often experienced by oil palm farmers, namely being pricked by oil palm thorns, pain in the nape, shoulders, and hips. Other complaints are dizziness, headaches, and the risk of non-communicable diseases (NCDs). Prevention of health problems is an important thing that must be considered to increase the work productivity of oil palm farmers. The farm work program has not focused on the health of oil palm farmers. The main caregivers for oil palm farmers at home are families. Oil palm farmers and their families have not had regular health checks at the nearest health service.

IMPLEMENTATION METHOD

This community service activity was carried out in Air Terbit Village on October 28, 2024. Participants in this activity included 28 palm oil farmers and families in Air Terbit Village. This activity was also attended by Stakeholders, namely the Air Terbit Village Apparatus and the Pantai Cermin Health Center. The activity was carried out offline in Air Terbit Village. The outputs that have been produced are audiovisual media for health problem prevention practices, video IPR, and online/print media publications. Health checks were

carried out before the activity began. To assess the success of the activity, the Community Service Team also compared understanding and skills through pre-test and post-test questionnaires to determine the increase in participants' understanding and skills in preventing occupational health problems.

Gambar 1. Health Problem Prevention Practices of Oil Palm Farmers and Their Families (Source: Personal Document, 2024)

Gambar 2. Health Screening Through Digitalization (Source: Personal Document, 2024)

RESULTS AND DISCUSSION

Table 1. Length of Service as an Oil Palm Farmers (Years)

	Minimum	Maximum	Mean	Standar Deviasi
Length of Service as an Oil Palm Farmers	2	32	23,40	12,239

Table 1 shows that the average length of time worked by oil palm farmers is 23.40 years. This is supported by the results of other studies which state that the length of time causes the skills of oil palm farmers to increase (Astuti et al., 2023). Participants acknowledged that working as palm oil farmers really helps the family economy, so it often becomes a permanent job for a long period of time.

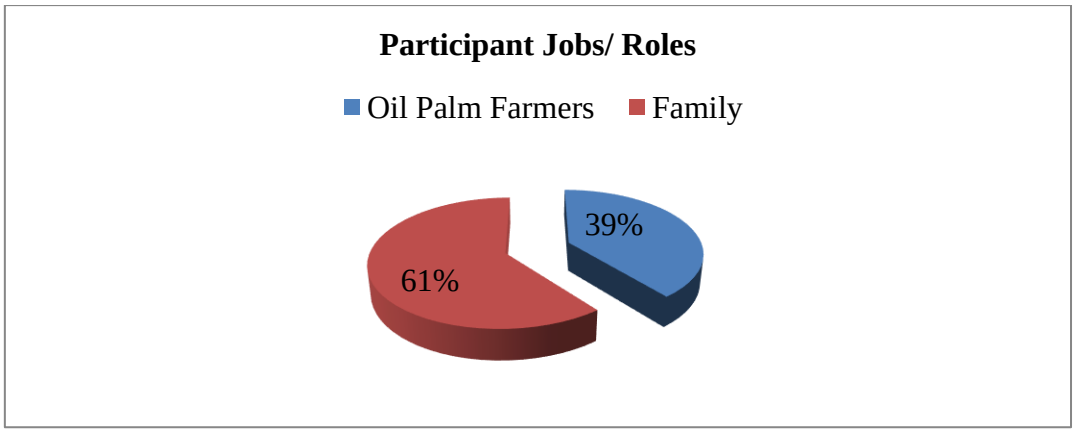

Figure 1. Participant Jobs/Roles

Figure 1 shows that most of the participants who participated were families who had family members as oil palm farmers (61%), while oil palm farmers were 39%. This community service program was attended by 28 participants. The target of this activity was oil palm farmers and their families.

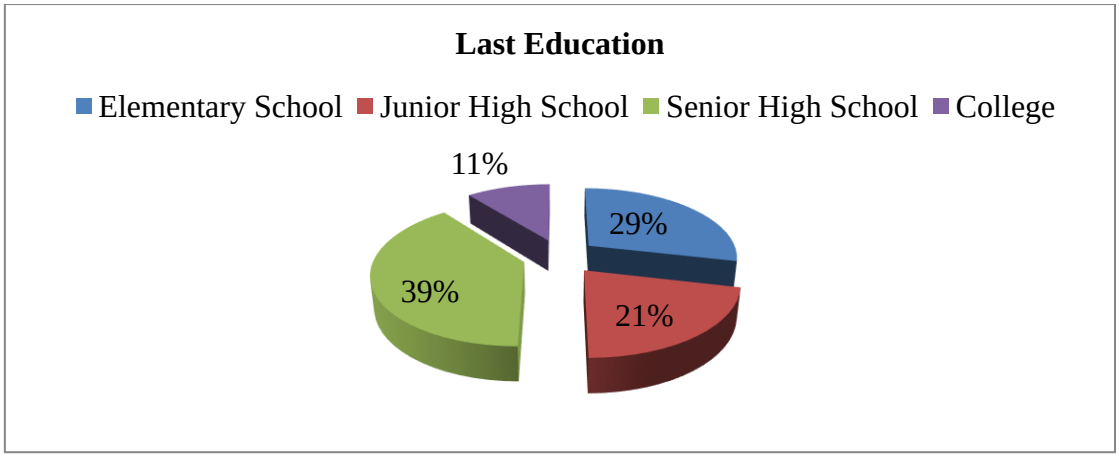

Figure 2. Last Education

Figure 2 shows that the highest level of education for participants was high school graduates or equivalent (39%). The level of education affects the participants' understanding and skills in receiving the information provided. Other study results found that the level of education affects the individual's self-care ability (Putri et al., 2021). High education and high health literacy are risk factors that influence awareness, willingness, health management, and the ability to implement the recommended healthy lifestyle.

Table 2. Health Screening Results

Health Screening Results	F	%
Blood Cholesterol		
Normal	6	21,4
Hypercholesterol	22	78,6
Total	28	100,0
Gout		
Normal	26	92,86
Hyperuricemia	2	7,14
Total	28	100,0
Blood sugar		
Normal	25	89,2
Hyperglycemia	3	10,8
Total	28	100,0
Blood Pressure		
Normal	24	85,8
Hypertension	4	14,2
Total	28	100,0

Table 2 shows the results of the participants' health checks, namely that 78.6% had hypercholesterole, 7.14% had hyperuricemia, 10.8% had hyperglycemia, and 14.2% had hypertension. Based on data from the Indonesian Health Survey (2023), hypertension and DM are one of the types of chronic diseases that cause the greatest death and/or the greatest health costs in Indonesia (Kemenkes RI, 2023). Hypercholesterole is a condition of increased cholesterol levels in the blood. Hypercholesterole increases the occurrence of coronary heart disease, stroke, high blood pressure, obesity, or other health problems (Alfitha et al., 2023). Hypertension is a condition where blood pressure rises above 140/90 mmHg (Fauziah et al., 2021). Hyperglycemia is a medical condition characterized by an increase in blood glucose levels above normal limits (Tiurma & Syahrizal, 2021). PTM can be prevented through the implementation of a healthy lifestyle. This community service program provides training to participants regarding the implementation of a healthy lifestyle to prevent health problems, namely non-communicable diseases through balanced nutrition, avoiding excessive sugar and salt consumption, exercising regularly, managing stress, and monitoring health at the nearest health service.

Table 3. Difference in Average Understanding Before and After Training

Understanding	Mean	Standard Deviation	95% CI
Pretest	7,86	1,008	7,47 – 8,25
Posttest	9,46	0,744	9,18-9,75

Table 3 shows that there was an increase in the average knowledge of participants before and after the training, namely 1.8. Other study results show that Clean and Healthy Living Behavior improves health and reduces the risk of disease (Karuniawati & Putrianti, 2020). Clean and healthy living behavior in the scope of occupational health aims to reduce morbidity, increase work productivity, and ensure worker safety (Rani et al., 2023). Prevention of health problems provided includes the importance of health checks, clean and

healthy living behavior, use of personal protective equipment (masks, shoes, head protection helmets, thick gloves, and others), consuming healthy food and drinks, correct body position during the palm oil harvesting process, washing hands with clean water and soap, avoiding lifting weights beyond the body's ability, and doing physical activity and stretching.

Table 4. Difference in Average Skills Before and After Training

Skills	Mean	Standard Deviation	95% CI
Pretest	44,75	3,855	43,26 – 46,24
Posttest	47,93	2,193	47,08 – 48,78

Table 4 shows that there was an increase in the average knowledge of participants before and after the training, namely 3.18. This is supported by the results of other studies which state that palm oil farmers are at risk of experiencing musculoskeletal problems because they often force unnatural postures or work positions to lower oil palms from oil palm trees (Saputri et al., 2022). Occupational health and safety management as an effort to improve the health and economy of oil palm farmers (Hamzah & Sari, 2019). Oil palm farmers need training in musculoskeletal prevention to maintain a comfortable and safe working posture or position for the body. The practices provided are skills in performing movements to improve blood circulation so as not to tingle, prevent stiffness through simple ROM movements, and tighten the muscles of the day and wrist.

Oil palm farmers who work on private land or work on land owned by individuals do not have an industry where they work that has its own health management system. This is the task of community nurses who work in health centers or health offices to provide health education and training to oil palm farmers, as well as to empower families in providing health care. Allender, Rector and Warner (2010) stated that one of the roles of community nurses is as a care provider, educator, manager, advocate and collaborator (Putri, Yarnita, et al., 2023). The realization of this program is expected to be integrated into the Pos Unit Kesehatan Kerja (UKK) managed by the Health Center, increase economic growth, support the Program Indonesia Sehat dengan Pendekatan Keluarga (PISPK) (Putri, et al., 2023). Nurses assist oil palm farmers and their families to increase their knowledge, awareness, and skills in preventing health problems so that families can do so voluntarily.

CONCLUSION

The conclusion of this community service program is that the community service activities through the pre-test and post-test questionnaire methods given before and after the socialization activities can be said to be successful. This is supported by an increase in the percentage of knowledge and attitudes of respondents towards health care for oil palm farmers and their families. Oil palm farmers and their families must be able to understand and improve their skills to improve health through practical skills in preventing health problems. Family involvement is important because the family is the main caregiver in the health of family members. Through this community service activity, media is available in the form of practical videos for preventing health problems for oil palm farmers. Oil palm farmers also know the health problems experienced from the results of health checks. Increasing the

understanding and skills of oil palm farmers and their families regarding the prevention of health problems. This activity is an integrated work program between the Village, Farmer Groups, and the Health Center. There were no work accidents among oil palm farmers during the activities carried out in October - December 2024. It is hoped that this program can be beneficial in terms of health, agriculture, economy and family welfare, as well as information system technology through health digitalization.

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