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SOCIALIZATION OF SORT, STRAIGHTEN, SHINE, STANDARDIZE, SUSTAIN (5S) FOR UD. TIRTO AGUNG GRESIK

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A B S T R A C T

Occupational Health and Safety (OHS) is important in all industrial sectors. The purpose of Occupational Health and Safety (OHS) is to improve and maintain the highest degree of all workers, both physically and mentally, and to ensure workers' welfare to prevent occupational diseases. UD. Tirta Agung is an informal industry that produces various types of cotton. UD. Tirta Agung Worker has 13 employees consisting of 7 women and six men divided into two work shifts. The practitioner's survey observed various potential hazards, namely noise, dust, poor lighting, and bad air temperature. From this problem, practitioners provide education about 5S (Sort, Straighten, Shine, Standardize, Sustain). This socialization aims to provide insight and knowledge about the 5S program, dust hazards, and practitioners providing personal protective equipment (PPE). The socialization results are successful because knowledge of Occupational Health and Safety (OHS) has increased from 13 workers, 10 of whom understand the dangers in the work environment and can implement 5S socialization in the workplace. In comparison, three workers have yet to be able to implement 5S in the work environment due to the influence of age.

INTRODUCTION

An informal industry is an industry with a small scale that can provide more economy to the surrounding environment (McQuilken & Hilson, 2016). In addition, the informal industry provides more economic growth in Indonesia. From data published by the Ministry of Investment of the Republic of Indonesia (2020). Micro, small and medium enterprises (MSMEs) and other informal industries contributed 61.97% or 8,573.89 trillion rupiahs (Rasjid, 2022).

Most informal industries still need an organizational structure in their business. It can cause material losses as well, as, in terms of human resources (HR), this loss can become an obstacle to development in the industry. Of the several disadvantages, informal workers are the most vulnerable to exposure to various risks that cause work accidents and work-related illnesses, and even death (Adei et al., 2022). Meanwhile, Taruwona & Suzanna (2010) explains that this group is the most unprotected and the lack of information on Occupational Health and Safety so that workers do not understand accident prevention at work; this is because employers do not implement Occupational Health and Safety (OHS) and in addition, workers are not educated on understanding Occupational Health and Safety (OHS). Based on reports from the Employment Social Security Administration Agency (BPJS Ketenagakerjaan), from January to March 2022, the number of work accidents increased by 61,805. Workers of productive age dominated it.

Meanwhile, the International Labor Organization says that more than 2.78 million people die annually due to work accidents or work-related diseases (Hakro & Jinshan, 2019).

The implementation of Occupational Health and Safety (OHS) is not only carried out by formal companies but must be carried out by informal industries. The purpose of implementing Occupational Health and Safety (OHS) is to increase awareness and adherence to OHS norms. The implementation of Occupational Health and Safety (OHS) will not be realized if there is no participation from all parties in forming an OHS culture. The large number of work accidents that occur are caused by a lack of concern for safety (Wahyuni, 2020).

The informal industry is a cotton factory named UD. Tirta Agung. UD. Tirta Agung is located in Semambung Village, RT 03 RW 01, Driyorejo District, Gresik. UD. Tirta Agung, since 2000 had 15 workers divided into ten people on the morning shift and five on the night shift. UD. Tirta Agung is an informal industry engaged in services, especially in the manufacture of cotton. UD sends cotton to be managed by other business activities to be used as materials for making such pillows, bolsters, and floor mattresses. The production process in this industry includes sorting the patchwork sent by third parties and, after that, cutting the patchwork, from cutting the patchwork to the scratching/grinding machine for the stage of printing cotton. For the type of cotton produced by UD. Tirta Agung, namely printed cotton, white cotton, and holy cotton.

In survey activities at UD. Tirta Agung, the production room and warehouse condition is very dirty and lacks maintenance. In addition, the cable connection from the electrical panel is still very dangerous because the connection is connected with rudimentary insulation. In addition to cable connections, noise and dust from cotton also add to the potential hazard that workers will receive UD. Tirta Agung.

UD. Tirta Agung is an industry that has many risks and hazards for its workers, such as manual handling, which can cause musculoskeletal system disorders, exposure to noise and vibration, exposure to chemicals (cotton dust, dyes), biological exposure, and psychosocial problems in workers, so that workers have susceptibility to occupational diseases. Of most of the hazards and risks at UD. Tirta Agung, the dust produced by rags is the biggest danger. In line with our survey, Christiani DC stated that exposure to cotton dust in the textile industry could cause obstructive pulmonary disease, which is characterized by asthma and COPD.

Apart from dust, a big problem occurs at UD. Tirta Agung is noise. The noise generated by the patchwork machine exceeds the threshold value set by the government. The threshold value (NAV) set by the government is regulated in the Regulation of the Minister of Manpower and Transmigration Number 13 Year 2011 concerning the threshold value of physical and chemical factors in the workplace. The regulation stipulates a noise threshold value in the workplace of 85 dB for workers who work 8 hours per day or 40 hours per week.

Occupational Health and Safety (OHS) risk management is an effort to prevent unwanted accidents in a comprehensive, planned, and structured manner in a planned system. Occupational Health and Safety (OHS) risk management relates to hazards and risks that must be managed in the workplace, which can cause losses to the company (Suharni, 2020). On the other hand, risk in the company's activities encourages safety efforts and controls all existing risks. Thus Occupational Health and Safety (OHS) management is likened to a coin with two sides. In implementing OHS, risk management starts with good planning, which includes Hazard Identification, Risk Assessment, and Risk Control Determination (Bartram, 2009).

The findings above impact the health conditions of the community and workers, starting from dust and noise caused by machines. Due to this impact, practitioners run the program, namely providing sort, straighten, shine, standardize, and sustain (5S) education, safety signs in areas with potential hazards, masks for the surrounding community, and health checks for workers through questionnaires (Haogen, 2020). This socialization aims to reduce the risk of harm received by workers and the impact on the work environment UD. Tirto Agung.

METHOD

In carrying out socialization regarding 5S to workers at UD. Tirto Agung is in Semambung Village, RT 03 RW 01, Driyorejo District, Gresik, East Java. Thirteen workers the main target of socialization. The socialization stage is divided into three parts of the work process: the cutting machine, the scratching machine, and the driver.

When socializing, the method is to sort, straighten, shine, standardize, and sustain (5S). Before socializing with the workers, the practitioner observes the workers about the sort, straighten, shine, standardize, and sustain (5S) knowledge, and after that, the practitioner conducts the 5S socialization with the workers. This socialization aims to increase knowledge and insight about the importance of 5S in the work environment.

RESULT AND DISCUSSION

The results of socialization activities at UD. Tirto Agung involves 13 workers, which are about sort, straight, shine, standardize, and sustain (5S) for UD workers. Tirto Agung as follows

Characteristic respondent

General description of socialization participants regarding 5S (Sort, Straighten, Shine, Standardize, Sustain) for UD workers. Tirto Agung, all participants were male and female. The distribution of participants based on age is presented in the following table.

Table 1. characteristic respondents

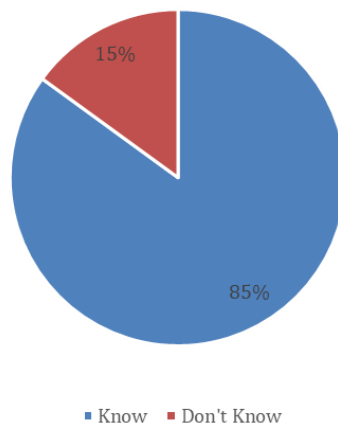
Variable	Number	Percentage
Age		
– 35 years	4	30%
36–40 years	1	5%
41–45 years	2	10%
46–50 years	5	50%
51–55 years	1	5%
Total	13	100%
Gender		
Male	6	46%
Female	7	54%
Total	13	100%
Education		
SD	1	8%
SMP	2	15%
SMA	10	77%
Total	13	100%

Source: Primary Data (2022)

Based on Table 1. The above information is obtained from the data of 5S socialization participants in socialization aged 46-50 years, dominating 5S socialization with a total of 5 people and number two with a vulnerable age of 30-35 years. Education level of workers at UD. Tirto Agung average high school. Before socializing, the practitioner observes the process and workflow at UD. Tirto Agung. Workers need to understand workplace Occupational Health and Safety (OHS). Even though the potential danger at UD. Tirto Agung is very big, starting from noise, dust hazard, and mechanical hazards. Therefore, practitioners socialize 5S (Concise, Neat, Clean, Care, Diligent). 5S socialization is carried out in every part of the work, from scratching machines and cutting cloth to drivers (Utomo et al., 2022). The purpose of this socialization is to add insight and knowledge to workers.

Description of Knowledge about OSH

Knowledge of Workers regarding OHS



Source: Primary Data (2022)

Based on Table 2. The level of knowledge about Occupational Health and Safety (OHS) after socialization increases. Of the 13 respondents, ten knew and understood OHS, while three others needed to understand OHS.

CONCLUSION

In this fieldwork practice report, it can be concluded that the application of OSH is not only carried out in the formal sector but must also be implemented in the informal sector. UD Tirto Agung, located in Semambung Village, RT 03 RW 01, Driyorejo District, Gresik, is a textile recycling waste processing industry turned into cotton, with a potential hazard of work accidents and occupational diseases. In addition, workers also need to understand the importance of OSH at work. The 5S socialization program, implementing 5S, placing safety signs, and using PPE are programs implemented by students to educate workers about the importance of OSH.

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REFERENCE

Adei, D., Agyemang-Duah, W., & Mensah, A. A. (2022). Demographic and socio-economic factors associated with exposure to occupational injuries and diseases among informal sector workers in

- Kumasi metropolis, Ghana. *Journal of Public Health*, 30(9), 2191–2199.
- Bartram, J. (2009). *Water safety plan manual: step-by-step risk management for drinking-water suppliers*. World Health Organization.
- Hakro, S., & Jinshan, L. (2019). Workplace employees' annual physical checkup and during hire on the job to increase health-care awareness perception to prevent disease risk: a work for policy-implementable option globally. *Safety and Health at Work*, 10(2), 132–140.
- Haogen, H. (2020). *5S MANAGEMENT IMPLEMENTATION IN THE PT INTI KARYA INDONESIA WAREHOUSE*. President University.
- McQuilken, J., & Hilson, G. (2016). Artisanal and small-scale gold mining in Ghana. *Evidence to Inform an 'Action Dialogue'*. IIED, London.
- Rasjid, H. (2022). EFFECTIVENESS OF HOME INDUSTRY ACTIVITIES IN BUILDING THE ECONOMY OF THE COMMUNITY IN INDONESIA. *ARTIKEL*, 1(8804).
- Suharni, S. (2020). *Identification of Hazards and Factors Related to Risk Management Implementation to Workers at Makassar Tene*.
- Taruwona, M., & Suzanna, M. (2010). Impact of occupational health and safety on worker productivity: A case of Zimbabwe food industry. *African Journal of Business Management*, 4(13), 2644–2651.
- Utomo, A. I., Gusniar, I., & Yulianty, E. (2022). Evaluation of the 5S+ Safety culture Policy in the Production Division at PT. RST. *Jurnal Ilmiah Wahana Pendidikan*, 8(10), 89–96.
- Wahyuni, N. F. Q. (2020). Program Upaya Kesehatan Kerja pada Sektor Informal. *HIGEIA (Journal of Public Health Research and Development)*, 4(Special 1), 101–111.