THE RELATIONSHIP BETWEEN CLEAN AND HEALTHY LIVING BEHAVIOR AND THE HEALTH STATUS OF LANDFILL WORKERS IN KARANGANYAR

Wachidah Yuniartika¹, Muhammad Riyal Nugraha Pratama² wachidah.yuniartika@ums.ac.id¹, riyalnugraha@gmail.com² Universitas Muhammadiyah Surakarta

ABSTRACT

Introduction: Implementing Clean and Healthy Living Behavior is a powerful step to ward off all diseases. Clean and healthy living behavior must be applied by everyone, including waste management workers because waste managers are always in contact with waste. Direct contact with waste can result in the vulnerability of various diseases that affect the health status of workers. Objectives: To determine the relationship between Clean and Healthy Living Behavior and the Health Status of Landfill Workers. Methods: The method used in this study is the CrossSectional approach method. The population is all workers at the Jumantono Landfill amounting to 30 people with the total sampling method. Results: The results showed that the value of Clean and Healthy Living Behavior in the good category was as much as (93.3%) and the value of good Health Status of Workers as much as (96.7%). A significant score between Clean and Healthy Living Behavior and the Health Status of Landfill Workers was obtained 0.001 <0.05. Conclusions: There is a relationship between in Jumantono Karanganyar District.

Keywords : Clean and Health Living, Health Status, Workers

INTRODUCTION

According to Law Number 18 of 2008, landfills are the final processing of waste in the form of waste collection and disposal of previous processing results to environmental media in general. Waste is waste material that comes from various sources such as housing, industry, agriculture that has a direct impact on the environment. Waste that appears in daily activities in the community causes various problems, there are problems that arise usually from landfilling and then cause more problems, one of which is health problems in the community. Garbage has the potential to cause environmental pollution, inviting disease-carrying animals can then cause problems for public health (Samin 2018).

Waste transport officers have the risk of contact / contact with various types of waste ranging from organic, inorganic waste to hazardous waste. Poor waste management can have a negative influence on health. Garbage-borne diseases are very widespread, and can be infectious, non-communicable diseases, can also be fire, poisoning, and others. Environmental problems are very often encountered in big cities such as Banda Aceh City where the rate of environmental damage and pollution is increasing day by day. Poor waste management can have a serious impact on the wider community. In this case, increasing awareness, concern and responsibility of the government and community is the main thing

in waste management is needed (Okeke 2021).

In the occupational health environment, the rapid development of manufacturing was not followed by health-related developments (Tukayo 2020). Sukosari Jumantono Landfill uses the Open Dumping method which only fills waste in landfills without carrying out the compaction process and closing with soil periodically, so it is feared that it will cause pollution to the environment around the landfill . While the Controlled Landfill method of compacting waste and given cover soil at least once a week using the help of heavy equipment can minimize the impact on the environment). The capacity of the Sukosari landfill has exceeded the limit resulting in various problems, such as mobility access for loading and unloading garbage which is disturbed by high landfills resulting in the fall of garbage on the road, leachate water accommodated in storage ponds only. If not managed and processed properly and correctly, eating will potentially pollute the surrounding environment (Njoku 2019). Puddles of leachate at landfill sites can seep into the soil and pollute groundwater, such seepage can carry substances that are harmful to health and the environment (Teng 2021). Methane gas produced by the decay of organic waste can spread the smell of unpleasant odors, the smell of garbage increases in smell after rain falls which is carried by the wind to settlements around landfills. In addition, methane gas is also flammable. Based on the description of the problem above, the study will evaluate the environmental quality of the Sukosari Landfill to determine the level of danger based on the Environmental Risk Index (Siddiqua 2022).

The waste problem is now something that requires special care because the waste that is left alone will have a negative impact on the environment. Waste is one of the national and even world problems because it still cannot be overcome until now (Vaverková 2019). Garbage is a problem that needs to be considered, in addition to its smell that disturbs the environment, it can also endanger health because waste is the cause of disease (Sauve 2020). Therefore, the disposal and destruction of garbage must be done as well as possible. The waste in question is solid household waste such as food waste, paper, plask and from other household activities. So a good waste management system is needed so that it does not have an impact on public health. A landfill is a final place used to collect all municipal waste. Currently, landfills in most cities in Indonesia still apply the open dumping system, which is a simple disposal method where waste is only overlaid at a location and left open, this method is not recommended because of the many potential environmental pollutants (Iravanian 2020).

The implementation of Clean and Healthy Living Behavior, maintaining environmental sanitation, food, washing hands with soap in Indonesia refers to various settings, some of these arrangements include households, educational institutions, workplaces, public places and health facilities. Each order has several behavioral indicator points that must be applied. If the implementation of clean and healthy living behavior, environmental sanitation, eating and washing hands with soap is carried out properly, health maintenance efforts have been carried out well as well. The opposite will happen if the implementation of Clean and Healthy Living Behavior, environmental sanitation, food, and washing hands with soap is not carried out properly, various health problems will arise (Zhang 2022).

Implementing Clean and Healthy Living Behavior is a powerful step to ward off disease. Clean and healthy living behavior must be applied by everyone including waste collection workers because waste transport workers are always in contact with garbage. Direct contact with litter can result in susceptibility to some congenital diseases from litter such as skin diseases, diarrhea and intestinal worms. The application of individual clean and healthy living behaviors to waste workers can minimize the possibility of various diseases. Based on the above opinion, clean and healthy living behavior is an effort to maintain health that is applied in everyday life to avoid disease (Kandou 2019). The urgency of this research is to deepen and develop previous research entitled The Effect of Clean and Healthy Living Behavior on the Incidence of Diarrhea in Public Elementary School 003 Polewali Mandar Regency. The purpose of this study is to determine the characteristics of workers, Know the Clean and Healthy Living Behavior of workers, and Know the Health Status of workers.

METODS

This research design used the cross sectional method. Research site at Sukosari Jumantono Landfill, Karanganyar. In October-November 2023. The population in this study was landfill workers totaling 30 respondents. The sampling technique uses Total Sampling.

The Clean and Healthy Living Behavior Questionnaire uses the Lazuar concept with the Clean and Healthy Living Behavior category Good if>7 while Clean and Healthy Living Behavior is Not Good if<7, consists of 13 questions with Yes and No answers, and the health status questionnaire is taken from the same concept with the scoring category of 76-100% (Good), 51-75% (Good Enough), 26-50% (Not Good), 25% (Not Good). The questionnaire has been tested for validity and reliability previously with results of r count 0.921, r table 0.576 and cronbach alpha 0.820

The implementation of the research began with workers collected into one number of 30 respondents, then explained the purpose of the study and provided questionnaires, in filling out the questionnaire accompanied by researchers. Furthermore, data analysis was carried out using the spearman rank test.

RESULT AND DISCUSSION

Characteristic Responden

Table 1 shows that the dominant characteristics are at ages 41-45 (N:14; 46.7%) and Man (N:18; 60%).

No	Criteria	Frequency	Percentage
1.	Age		
	21-25	1	3.3%
	26-30	0	0%
	31-35	1	3.3%
	36-40	7	23.3%
	41-45	14	46.7%
	46-50	7	23.3%
2.	Gender		
	Man	18	60%
	Woman	12	40%

Table 1 Nerve Distribution of Respondents' Characteristics (N=20)

Clean and Healthy Living Behavior of Landfill Workers

Table 2 shows that most workers have good Clean and Healthy Living Behavior (N:28; 93.3%) and a small percentage of workers have poor Clean and Healthy Living Behavior (N:2; 6.7%).

Clean and Healthy Living Behavior of Jumantono Landfill Workers (N=30)					
No	Criteria	Frequency	Percentage		
1.	Good	28	93.3%		
2.	Not Good	2	6.7%		

Table 2

Health Status of Landfill Workers

Table 3 shows that most workers have good health status (N:29; 96.7%) and only one worker whose health status is not good (N:1,3.3%)

Table	3
-------	---

Health Status of Jumantono Landfill Workers (N=3)	0)
---	----

No	Criteria	Frequency	Percentage
1.	Good	29	96.7%
2.	Not Good	1	3.3%

Crosstabulation Of The Relationship Between Clean And Healthy Living Behavior With The Health Status Of Landfill Workers In Jumantono District

Table 4 shows the analysis of crosstabulation data using the spearman test obtained sig values. = 0.001 so that it can be concluded that H0 is rejected and H1 is accepted.

Workers who have Clean and Healthy Living Behavior and good Health Status (N:28; 93.3%), workers who have good Clean and Healthy Living Behavior but whose health status is not good (N: 0; 0%), workers who have Clean and Healthy Living Behavior are not good but their health status is not good (N: 1; 3.3%) and workers whose Perilaku Hidup Bersih dan Sehat and Seat Status are not good (N:1; 3.3%).

Table 4

Crosstabulation of the Relationship between Clean and Healthy Living Behavior and the Health Status of Landfill Workers in Jumantono District

		Health Status			
Clean and Healthy Living Behavior	N	Good (%)	N N	Not Good (%)	P.Value
Good	28	93.3%	0	0,0%	0.001
Not Good	1	3.3%	1	3.3%	

Clean and Healthy Living Behavior can affect a person's health status, the better a person's Clean and Healthy Living Behavior, the smaller the potential for the person to be infected with the disease (Rizki 2021). A study conducted by (Sandison 2018) states that healthy living behavior is very good on the health of each individual. This is because the risk of infection with a disease is not only caused by negligence but also from the individual's habitual factors.

There are 3 main factors that affect the health of an individual or group, as quoted from (Health Care Untilzation 2018) that the 3 main factors that play an important role in the health of an individual or group are genetic factors, environmental factors and lifestyle factors. The need for landfills to often hold social activities for workers such as counseling on the importance of Clean and Healthy Living Behavior (Wachidah 2023). Workers must have self-efficacy, with self-efficacy workers have a high chance of confidence for success in doing something (Fauziyah 2023). Therefore, by maintaining healthy living behavior we are able to avoid various kinds of diseases. Based on research to determine the relationship

between Clean and Healthy Living Behavior with the health status of workers at the Jumantono Akgur Dump, it was found that the majority of workers have good Clean and Healthy Living Behavior. This is evidenced by the results of questionnaires given by researchers. Self-awareness of workers to use personal protective equipment at work, routinely cut nails, consume healthy food and use clean water to clean themselves after work is a form of good Clean and Healthy Living Behavior applied by these workers. This good Clean and Healthy Living Behavior applied by these workers. This good Clean and Healthy Living behavior makes their health status good and not susceptible to disease.

CONCLUSION

The majority of workers have good Clean and Healthy Living Behavior which is shown by their behavior of routinely washing hands with clean water after work, always using personal protective equipment when working and always eating healthy food. This can be seen in the results of field surveys conducted by researchers. The health status of the workers is mostly good, this is based on their clean and healthy living behavior which is classified as good as well. The results showed that there was a relationship between clean and healthy living behavior with the health status of Jumantono landfill workers.

REFERENCES

Azwar, Saifuddin. 2022. Penyusunan Skala Psikologi Edisi 2. Pustaka pelajar.

- Fauziyah, Nuridha, RR Tutik Sri Hariyati, Shanti Farida Rachmi, and Inna Nopiana. 2023. "Nurse's Self-Efficacy in Patient Engagement during the Covid-19 Pandemic." Jurnal Keperawatan 14(01):1–10. doi: 10.22219/jk.v14i01.22740.
- Iravanian, A., and Sh O. Ravari. 2020. "Types of Contamination in Landfills and Effects on the Environment: A Review Study." IOP Conference Series: Earth and Environmental Science 614(1). doi: 10.1088/1755-1315/614/1/012083.
- Kandou, Grace Debbie, and Priscilla Caroline Kandou. 2019. "Improving Students Knowledge of Clean and Healthy Living Behavior through Health Education." Pp. 412–16 in 3rd Asian Education Symposium (AES 2018). Atlantis Press.
- Njoku, Prince O., Joshua N. Edokpayi, and John O. Odiyo. 2019. "Health and Environmental Risks of Residents Living Close to a Landfill: A Case Study of Thohoyandou Landfill, Limpopo Province, South Africa." International Journal of Environmental Research and Public Health 16(12):2125.
- Okeke, Nonso Evaristus, Charles Oluwaseun Adetunji, Wilson Nwankwo, Kingsley Eghonghon Ukhurebor, Ayodeji Samuel Makinde, and Deepak G. Panpatte. 2021. "A Critical Review of Microbial Transport in Effluent Waste and Sewage Sludge Treatment." Microbial Rejuvenation of Polluted Environment: Volume 3 217–38.
- Rizki Anggraini, Ika, and Puja Putri Dewi Pati. 2021. "Relationship between Parents' Behavior and the Implementation of PHBS Habits in Children During the Covid-19 Pandemic." Jurnal Keperawatan 12(2):133–39. doi: 10.22219/jk.v12i2.16766.
- Samin, Dr. 2018. "Perencanaan Tempat Pemrosesan Akhir Sampah Dengan Menggunakan Metode Sanitary Landfill." Jurnal Media Teknik Sipil 15(2):117. doi: 10.22219/jmts.v15i2.5020.

Sandison, Barry. 2018. "Australian Institute of Health and Welfare." Impact 2018(2):80-81.

- Sauve, Giovanna, and Karel Van Acker. 2020. "The Environmental Impacts of Municipal Solid Waste Landfills in Europe: A Life Cycle Assessment of Proper Reference Cases to Support Decision Making." Journal of Environmental Management 261:110216.
- Siddiqua, Ayesha, John N. Hahladakis, and Wadha Ahmed K. A. Al-Attiya. 2022. "An Overview of the Environmental Pollution and Health Effects Associated with Waste Landfilling and Open Dumping." Environmental Science and Pollution Research 29(39):58514–36.
- Teng, Chunying, Kanggen Zhou, Changhong Peng, and Wei Chen. 2021. "Characterization and Treatment of Landfill Leachate: A Review." Water Research 203:117525.

- Tukayo, Isak Jurun Hans, and Syaifoel Hardy. 2020. "The Comparison of Work Productivity Between Nurses with Insight of Occupational Health Nursing (OHN) and of Those Without It." Jurnal Keperawatan 11(2):127–34. doi: 10.22219/jk.v11i2.12107.
- Vaverková, Magdalena Daria. 2019. "Landfill Impacts on the Environment." Geosciences 9(10):431.
- Yuniartika, Wachidah, Nieldya Nofandrilla, Liana Mangifera, Siti Musalamah, Silvianita Damayanti, and Anjani Bharata Ajie. 2023. "Pelatihan Aktivitas Sosial Pada Lansia Untuk Mendukung Kemandirian Kesehatan." Poltekita: Jurnal Pengabdian Masyarakat 4(1):113–22.
- Zhang, Rui, Shu Yang, Yuwei An, Yangqing Wang, Yu Lei, and Liyan Song. 2022. "Antibiotics and Antibiotic Resistance Genes in Landfills: A Review." Science of the Total Environment 806:150647. 2018. Health-Care Utilization as a Proxy in Disability Determination.