### The Analysis of Clean and Healthy Living Behavior Factors on Wood Furniture Informal Workers

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#### ABSTRACT

**Introduction:** Clean and Healthy Living Behavior (CHLB) is essential to be applied by the community, especially workers who work in the fields of construction, furniture, and others. Workers sometimes do not pay attention to CHLB, so many diseases and even deaths occur due to a lack of awareness of the importance of CHLB. This study analyzes the factors influencing CHLB in the workplaceon informal wood furniture workers at the Occupational Health Effort (OHE) posts. **Methods:** This type of research is quantitative with an analytical observational approach. The population was all members of the OHE posts in the Kendit Health Center working area in the Situbondo Regency, totaling 40 people. **Results:** The results that significantly affected workers' attitudes towards CHLB at work on informal wooden furniture workers were knowledge, attitude, infrastructure, workforce and funding. The attitudes about CHLB can also be the basis (foundation) of changes in CHLB behavior in the workplace on informal workers. The results of the observations showed that there were still many workers who smoked and did not wear PPE at work even though these workers had already known that cigarettes contain chemicals that are harmful to health. The adequate facilities and infrastructure at the OHE posts could improve the behavior of CHLB in the workplace. The findings at OHE posts at the Kendit's working area related to funding showed that all members of OHE posts have agreed on a monthly health fund contribution, but this is still not going well. **Conclusion:** Therewas an influence of attitude and adequate infrastructure at OHE posts on CHLB in the workplace.

Keywords: clean and healthy living behavior, workplace, wood furniture informal workers, occupational health effort post

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### **INTRODUCTION**

The Occupational Health Effort (OHE) post is a form of community empowerment in informal worker groups, mainly in promotive and preventive efforts to protect workers so that they live healthy lives and are free from health problems and bad influences coming from workers (Kemenkes RI, 2015). Workers in the informal sector have potential for complex risks in their activities, causing many health problems on workers (Ko Ko *et al.*, 2020), one of which is low Clean and Healthy Living Behavior (CHLB). CHLB is essential to improve public health (Rahmawati and Kristantini, 2021). Behavioral factors affect 30% (Pakpahan *et al.*, 2021).

Based on the results of the 2018 Basic Health Research, as many as 33.5% of the population lacked physical activity, 24.3% of the population aged > 15 years old smoked, and 49.8% of the population washed hands properly with soap (Ministry of Health, 2018). Based on the International Labor Organization (ILO), 2.3 million people worldwide die annually from accidents or occupational

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diseases, and about 340 million work accidents occur yearly (ILO, 2015). In Indonesia, in 2018, there were 173,415 work accident cases, and in 2019 the number of work accident cases was 182,835 cases, which means an increase from the previous year (BPJS Ketenagakerjaan RI, 2020). Research in 2018 in the areas of Java, Sumatra, Sulawesi and Kalimantan obtained an overview of health problems experienced by informal sector workers, including headaches (22.35%), aches (26.05%), low back pain (12.6%), gout (2.6%), and stomach pain (16.7%). Other problems are health problems related to unhealthy culture and lifestyle in workers, such as smoking, drinking alcoholic beverages, and low CHLB (Ministry of Health, 2020). Low CHLB in the workplace can increase the potential for health problems on workers, namely occupational diseases, infectious and non-communicable diseases, and work-related accidents, which will have an impact on decreasing worker productivity (Tulchinsky and Varavikova, 2014).

The CHLB program in the workplace aims to empower workers to know and practice clean and healthy living behaviors and show an active role in appreciating a healthy workplace (Siregar, Harahap and Aidha, 2020). Predisposing factors become the basis or motivation for behavior, including knowledge, attitudes, beliefs, values, and demographics (Cho *et al.*, 2018). Knowledge is essential in shaping one's behavior because behavior based on knowledge will last longer than behavior not based on knowledge (Clark *et al.*, 2016). The results of research by Rahayu (2015) show the relationship between knowledge and healthy behavior of workers in implementing OHS culture.

Enabling factors are supporting factors that can facilitate the healthy behavior of a person or society to be carried out. Research by Julianingsih, Karjoso and Harahap (2020) on factors related to CHLB in Pekanbaru showed that there was a relationship between the role of health workers who provided health services, especially counseling about CHLB, and CHLB in the community households in Pekanbaru, Indonesia. The influence of behavioral supporting factors on CHLB in the workplace is also supported by research by Restiyani, Kusyogo and Laksmono (2017), suggesting that there was a relationship between facilities and infrastructure with the health support on workers to have clean and healthy living behaviors. This relationship happens because more fulfilled facilities in the workplace can facilitate or make it easier for workers to live a clean and healthy life.

Asfiya, Prabamurti and Kusumawati (2021) stated that factors related to the practice of CHLB prevention of pulmonary TB in Islamic boarding schools (Pondok) include enabling or supporting factors that influence the availability of infrastructure, the availability of information media, and access to health services in Pondok. This statement is also in line with research by Sa'adah (2018) on CHLB in students at Manado State Primary School 126, which stated that there was a relationship between the enabling factor, namely the existence of adequate infrastructure, and CHLB actions at school. The results of Riskesdas (2018) obtained a description of community's behavior related to CHLB in the workplace and various risk factors for Non-Communicable Disease (NCDs) in Indonesia, in which 33.5% of the population were not physically active, 24.3% of the population aged > 15 years old smoked, and 49.8% of people wash their hands properly with soap. The low level of CHLB in the workplace can cause occupational diseases, communicable and non-communicable diseases, and work accidents, which will eventually impact worker productivity.

Data from the Directorate of Occupational Health and Sports of the Ministry of Health of the Republic of Indonesia until 2020 showed that there were as many as 8.553 OHE posts spreading across 34 provinces and 434 regencies/cities in Indonesia (Kemenkes RI, 2020). Data from the Situbondo Regency Health Office in 2020 showed that there were as many as 69 OHE Posts fostered by 20 Public Health Centers (Puskesmas) in Situbondo (Dinkes Situbondo, 2021).

One of the industries that are proliferating is the wood processing industry. This industry is related to the consumption of forest products, which reaches 33 million m3 per year (Chaeruddin, Abbas and Gafur, 2021). OHE posts in the wood processing sector are the largest among other sectors, reaching 7 OHE posts. 3 OHE posts are located in the Kendit Health Center area. The wood processing OHE posts in Kendit District are Akar Dewa Jati OHE Post, Putri Emas OHE Post, and Ajeng Mandiri OHE Post with an intermediate level of development, including the fulfillment of 2 or more criteria for the counseling frequency of 4 - 6 times/year, the number of cadres comprising <10% of the total workers, intervention workshops held 2-3 times/year, and the

use of personal protective equipment comprising 30% - 60% of the total number of workers. This study aims to analyze the factors that influence CHLB in the workplace among informal workers.

### **METHODS**

This type of research is quantitative research with an analytical observational approach. The research design used a cross-sectional approach where data collection was carried out at once and the data were further analyzed into information (Salkind, 2013). The location of this research was at the OHE posts for wood furniture workers in the working area of the Kendit Health Center, Situbondo Regency, namely the Akar Dewa Jati OHE Post, the Putri Emas OHE Post, and the Ajeng Mandiri OHE Post.. The sampling technique in this research was total sampling. Total sampling is a sampling technique where the number of samples is equal to the population. The population in this study was all members of the OHE posts in the Kendit Health Center working area in Situbondo Regency, totaling 40 people. The study was conducted in May 2022. The independent variables in this study were behavioral predisposing factors (knowledge and attitudes) and supporting factors (infrastructure, workforce, and funding at the OHE posts). The dependent variable of this study was CHLB at work. Data collection was conducted using questionnaires, and the data were further tested for their validity and reliability. The data analysis method used IBM SPSS Statistics 25 software, namely univariate analysis, to explain the characteristics of each research variable descriptively by making a frequency distribution table and testing the effect of the independent variables on the dependent variable using a multiple linear regression statistical test. This study has carried out an ethical test from the Faculty of Dentistry, Universitas Jember No.1525/UN25.8/ KEPK/DL/2022.

### RESULTS

The results of the characteristics of respondents provide an overview of a total of 40 respondents. Data collection was carried out in May 2022 for 40 respondents who werea group of informal wooden furniture workers in the Kendit Health Center area, namely Akar Dewa Jati, Ajeng Mandiri and Putri Emas. Most of the respondents wereadults (65%), had the latest education level of Junior High School (47.5%), had good knowledge of CHLB in the workplace (85%), had good attitudes toward CHLB in the workplace (67.5%), got good facilities and infrastructure provided for operational activities at the OHE posts (60%), got good workforce at the OHE posts (62.5%), and good operational funding for the OHE posts (62.5%), as shown in Table 1.

The results of the multiple linear regression between the independent variables, namely knowledge, attitudes, workforce, infrastructure, and

Table 1. Univariate Frequency and PercentageDistribution in the Kendit Health Centerin 2022

Variable	Total (n)	Percentage (%)		
Age				
Teenager	1	2.5		
Mature	26	65.0		
Pre Elderly	11	27.5		
Elder	2	5.0		
Level of Education				
Elementary School	5	12.5		
Junior High School	19	47.5		
Senior High School	16	40.0		
Knowledge				
Not Enough	3	7.5		
Enough	3	7.5		
Good	34	85.0		
Attitude				
Not Enough	6	15.0		
Enough	7	17.5		
Good	27	67.5		
Infrastructure				
Not Enough	4	10.0		
Enough	12	30.0		
Good	24	60.0		
Workforce				
Not Enough	3	7.5		
Enough	25	62.5		
Good	12	30.0		
Funding				
Not Enough	6	15.0		
Enough	9	22.5		
Good	25	62.5		
CHLB				
Not Enough	4	10.0		
Enough	6	15.0		
Good	30	75.0		

funding at the OHE Postand the dependent variable, CHLB in the workplace for informal workers, are shown in Table 2.

Based on Table 2, the regression model equation based on the results of the above analysis is as follows: Y = 8.838 + 0.138X1 + 0.351X2 + 0.203X3+ 0.063X4 + 0.093X5 + e. The constant of 8.838 indicates that if the variables of knowledge (X1), attitude (X2), infrastructure (X3), workforce (X4), and funding (X5) at the OHE posts were constant or equal to zero, the CHLB of informal workers was 8.838. The knowledge regression coefficient (X1) was 0.138 (positive) with a p-value of 0.457 or p-value>0.05 (not significant). Thus, Hawas rejected, and H0 was accepted, so there was no significant effect of knowledge (X1) with CHLB in the workplace among informal workers.

Attitude (X2) of workers had a positive effect on CHLB in the workplace with a regression coefficient value of 0.351 (positive) and a p-value of 0.004 or p-value <0.05 (significant). Thus, Ha was accepted, and H0 was rejected. Infrastructure facilities at the OHE posts had a positive effect on CHLB of informal workers in the workplace with a regression coefficient value of 0.203 (positive) and a p-value of 0.035 or p-value <0.05 (significant). Thus, Ha was accepted, and H0 was rejected.

Workforce at the OHE posts had no effect on the CHLB of informal workers with a value of a regression coefficient of 0.063 and a p-value of 0.697 or p-value>0.05 (not significant. Thus, Ha was rejected, and H<sub>0</sub> was accepted. Funding at the OHE posts had no effect on the CHLB of informal workers with a value of a regression coefficient of 0.093 and a p-value of 0.625 or p-value>0.05 (not significant). Thus Ha was rejected, and H<sub>0</sub> was accepted.

### DISCUSSION

The results of the tests showed that there were differences in CHLB at work amonginformal wooden furniture workers in the working area of the Kendit Health Center before and after health promotion. This is because after carrying out health promotion in the form of PHBS counseling at work, workers have been able to perceive something based on the values they adhere to, namely which values will be applied to behavior. This is in line with the theory of the Health Belief Model, suggesting that the possibility of an individual taking preventive action depends on the beliefs they have (Boskey, 2022). The results of this study support the findings of Warseno and Suwarno (2018), stating that there are differences between behavior before and after health education.

The test results for the N-gain percent value were 62.5%, which means that the effectiveness of health promotion on PHBS in the workplace was quite effective in increasing workers' PHBS. These results indicate that the implementation of health promotion regarding PHBS in the workplace has been carried out well. The implementation of PHBS in the workplace depends on the understanding and attitude of workers. These results are are closely related to workers' good knowledge about PHBS in the workplace (85%) and their good attitudes towards PHBS in the workplace (67.5%).

Support for facilities and infrastructure, funding, and the presence of cadres as executors of activities at the OHE posts guided by health workers also affected PHBS of workers. The results of this study show that the facilities and infrastructure provided for operational activities at the OHE posts were in a good category (60%), the workforce at the OHE posts werein the adequate category (62.5%), and

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	<b>Collinearity Statistics</b>	
	В	Std. Error	Beta			Tolerance	VIF
(Constant)	8.838	2.744		3.221	0.003		
Knowledge	0.138	0.183	0.107	0.753	0.457	0.471	2.123
Attitude	0.351	0.113	0.474	3.103	0.004	0.41	2.437
Infrastructure	0.203	0.093	0.292	2.195	0.035	0.542	1.847
Workforce	0.063	0.162	0.049	0.392	0.697	0.621	1.61
Funding	0.093	0.188	0.071	0.493	0.625	0.467	2.14

Table 2. Results of Multiple Linear Regression Analysis

the operational funding for the OHE posts was good (62.5%). According to Suwarto, Aini and Sukismanto (2020), the task of OHE postal cadres is to carry out health activities in the work environment through health promotion and first aid. The success of the OHE post programs will increase work productivity in the informal sector, which accounts for 56.8% of the total number of workers in Indonesia.

### The Effect of Workers' Knowledge at OHE Posts on CHLB in the Workplace on Informal Workers

The results of this study show that knowledge of workers did not significantly affect the CHLB of informal workers at the OHE posts in the Kendit Health Center Work Area, Situbondo Regency. Knowledge is a behavioral predisposing factor that can be the basis or foundation for changes in CHLB in the workplace among informal workers. Knowledge is essential in shaping a person's actions (Australian Commission on Safety and Quality in Health Care, 2014). Attitudes about CHLB can also be the basis (foundation) for changes in CHLB behavior in the workplace among informal workers.

The results of this study are in line with the findings of Repi, Josephus and Rattu (2016), which stated that attitudes have a solid relationship with behavior, which increases worker safety. This condition is achieved because the workforce have a good attitude at work, which eventually becomes a behavior or a habit to always pay attention to health and safety in the workplace. However, these findings are different from research by Restiyani, Kusyogo and Laksmono(2017), suggestingthat there is no relationship between respondents' attitudes and the clean and healthy living behavior of workers.

. The higher a person's knowledge, the better his behavior will be (Wulandari *et al.*, 2021). This research is also supported by Notoatmodjo (2014) theory, stating that health education is an individual activity or effort to convey health messages to the public, groups, or individuals, which can increase health knowledge. This knowledge is expected to influence their behavior. This statement is in line with research of Rahayu (2015), noting the relationship between knowledge and the healthy behavior of workers in implementing OHS culture. Research of Sekar *et al.* (2018) further shows a relationship between knowledge and CHLB.

# The Effect of Attitude at OHE posts on CHLB in the Workplace on Informal Workers

Indicators of CHLB in the workplace on informal workers that are not good are smoking at work and not wearing PPE (Thanapop and Thanapop, 2021). The results of observations show that there were still many workers who smoke and did not wear PPE at workeven though they had already known that cigarettes contain chemicals that are harmful to health and the importance of PPE to prevent occupational diseases or work accidents (Sehsah, El-Gilany and Ibrahim, 2020). Most workers stated that they were used to smoking and did not use PPE because it was uncomfortable.

# The Effect of Infrastructure at OHE Posts on CHLB in the Workplaceon Informal Workers

The results showed that there was an effect of infrastructure on CHLB in the workplace among informal wood furniture workers at the OHE posts in the Kendit Health Center Work Area, Situbondo Regency. These results explain that adequate facilities and infrastructure at the OHE Post can improve the behavior of CHLB in the workplace. This condition is in line with research by Restivani, Kusyogo and Laksmono (2017), suggesting that there is a relationship between facilities and infrastructure and workers' clean and healthy living behavior. This situation happens because more and more facilities are available in the workplace, facilitating or making it easier for workers to have clean and healthy behaviours (Office of Industrial Relations, 2018).

# The Effect of Workforce at OHE Posts on CHLB in the Workplace on Informal Workers

Based on the results of this study, the workforce at the OHE posts did not have a significant effect on the CHLB of informal workers. This situation happens because the cadres in the OHE posts often change. After all, in the informal sector, there is no employment relationship that binds workers. In addition, because there is no training for OHE posts, cadres have not been able to provide optimal services to OHE post members. The role of cadres at the OHE Post is to carry out daily health services to their members, such as providing first aid services, motivating workers to carry out CHLB, recording service activities, and giving counseling. Cadres at the OHE posts are very important because the selected cadres are those who work locally or are owners of the furniture industry, so they understand the conditions of the workplace directly and the situation of workers. According to Suwarto, Aini and Sukismanto (2020), the task of OHE postal cadres is to carry out health activities in the work environment through health promotion and first aid. The success of OHE post programs will increase work productivity in the informal sector, which accounts for 56.8% of the active community in Indonesia.

### The Effect of Funding at OHE Posts on CHLB in the Workplace on Informal Workers

The results of the study showed no significant effect of funding at OHE posts on CHLB at work on informal workers. The findings at OHE posts in Kendit's working area related to funding show that all members of OHE Post have agreed on a monthly health fund contribution, but this is still not going well. This study's results are in line with research of Andrian, Utami and Rifai (2021), stating that the implementation of the occupational health program of OHE posts on fishermen at the Sukakarya Sabang Health Center has not run optimally because of the inhibiting factors, namely the lack of budget support and facilities (Nilsson, 2004). Moreover, training for cadres and officers have not been carried out. Funding at the OHE posts does not only come from workers' contributions but can also be obtained from donors, funds from the village government and related cross-sectors, and others.

### CONCLUSION

Based on the results of the study, it is explained that most of the respondents were adults, had the last education level of junior high school, had a good level of knowledge about CHLB in the workplace, had a good attitude towards CHLB in the workplace, and got the facilities and infrastructure provided for operational activities at the posts. OHE was in the good category, the staff at OHE posts was in the excellent category, funding for the operation of OHE posts was in the good category, and behavior in practicing CHLB was also in the good category. The attitude of workers and infrastruture had a significant effect on CHLB in the workplace on informal workers. However, knowledge of workers, workforce, and funding at OHE posts did not significantly affect the CHLB on informal workers.

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