Knowledge Level in Cleaning Services regarding Government Regulations and the Dangers of Smoking

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ABSTRACT

Cigarette consumption is one of the main risk factors that can cause various non-communicable diseases, such as coronary heart disease, stroke, lung cancer, and even death. In a cigarette, there are around 70 substances that can cause cancer and contain more than 5,000 chemicals that can have a negative impact on health. In Indonesia, cigarette consumption is regulated by the Republic of Indonesia Government Regulation Number 109 of 2012 concerning the Safeguarding of Materials Containing Addictive Substances in the Form of Tobacco Products for Health. In chapter IV, the fifth section, Articles 49-52 regulate non-smoking areas where someone cannot consume cigarettes in non-smoking areas. This research is descriptive research with survey methods and sample collection using purposive sampling from Tarumanagara University cleaning service with a sample size of 108 respondents. As many as 67.6% of respondents were male and 71.3% were active smokers. Conclusion: most respondents (78.8%) had good knowledge about the dangers of smoking and as many as 89.8% were aware of government regulations governing cigarette consumption.

Keywords: Dangers of Smoking, Government Regulation, Active Smoker, Passive Smoker.

INTRODUCTION

Cigarette consumption is one of the main risk factors that can cause various non-communicable diseases, such as coronary heart disease, stroke, lung cancer, and even death (Direktorat Jenderal Pencegahan dan Pengendalian Penyakit Tidak Menular Kementerian Kesehatan, 2023) Cigarettes themselves are a type of tobacco product that can use additional materials such as paper or can be pure tobacco without additional ingredients (Direktorat Jenderal Pencegahan dan Pengendalian Penyakit Tidak Menular Kementerian Kesehatan, 2018). In a cigarette, there are around 70 substances that can cause cancer and contain more than 5,000 chemicals that can have a negative impact on health. Various dangerous ingredients in tobacco smoke include carbon monoxide,

nicotine, nitric oxide, tar, hydrogen cyanide, benzo(a)pyrene, acrolein, and N-nitrosamine (Cancer Research UK, 2023; Nusa & Widyastiti, 2016).

According to the World Health Organization (WHO), in 2020, there were around 991 million smokers aged 15 years and over throughout the world and in the same year, around 33.5% of Indonesia's population were active smokers (World Health Organization, 2020, 2021). Badan Pusat Statistik (BPS) reports that 24.44% of residents of the Special Region of Jakarta aged over 15 years consume cigarettes, on average consuming around 10 cigarettes every day. This causes around 225 people to die every year due to smoking and various other tobacco-related diseases. Based on the Ministry of Health's report in 2022, there will be an increase in the number of smokers in Indonesia, from 60.3 million people in 2011 and in 2021 to around 69.1 million active smokers, where the number of active smokers has increased by 8.8 million people (Badan Pusat Statistik, 2021a, 2021b).

In Indonesia, cigarette consumption is regulated by the Republic of Indonesia Government Regulation Number 109 of 2012 concerning the Safeguarding of Materials Containing Addictive Substances in the Form of Tobacco Products for Health. In Chapter IV, part five, Articles 49-52 regulate non-smoking areas where a person cannot consume cigarettes in non-smoking areas, including health service facilities, places for teaching and learning processes, places for children to play, public transportation, workplaces, public places, places otherwise determined and can only consume cigarettes in a special place that has been provided which must be an open space that is in direct contact with outside air (Peraturan Pemerintah Republik Indonesia Nomor 109 Tahun 2012.).

This Government Regulation is supported by the Governor of the Special Region of Jakarta (DKJ) Regulation Number 40 of 2020 concerning Amendments to Governor Regulation Number 50 of 2012 concerning Guidelines for the Implementation of Development, Supervision, and Law Enforcement of No-Smoking Areas which defines a no-smoking area as a room or area that is declared as a place or area where smoking is prohibited. To realize the enforcement of no-smoking area laws and regulations, supervision of the arrangement of no-smoking areas is carried out, which is a series of activities that include ensuring standard performance, checking and comparing actual performance, as well as reviewing whether there have been deviations from meeting

standard performance (Peraturan Gubernur Daerah Khusus Jakarta Nomor 40 Tahun 2020).

Apart from existing laws and regulations, smoking behavior can also be influenced by a person's level of knowledge regarding the dangers of consuming cigarettes. In Ali's (2019) research, it was found that 95 respondents (72%) had poor knowledge and 37 respondents (28%) had good knowledge (Ali, 2014). Research conducted by Kurniawan and Ayu (2023) stated that there was a relationship between knowledge and smoking behavior in adolescents with a p-value = 0.027 and OR value = 4.688 (Kurniawan & Ayu, 2023).

This research aims to provide an overview of the level of knowledge regarding laws and regulations and the dangers of smoking, as well as smokers' behavior in cleaning services at Tarumanagara University. It is hoped that the results of this research can be used by the public and academics to help create smoke-free areas accompanied by human resources who have good knowledge about the dangers of smoking.

METHOD

The research was carried out in December 2023 with a sample size of 108 respondents. This research is a descriptive research with survey methods and sample collection using purposive sampling from Tarumanagara University cleaning service who meet the predetermined inclusion and exclusion criteria. The inclusion criteria for this study were that respondents were cleaning service at Tarumanagara University, present at the time of the research, and were active and passive smokers. Exclusion criteria include respondents who were not willing to answer and fill in indecisively. This research procedure includes making research proposals, socialization with research targets who were cleaning services, data collection, and data analysis to make the research article.

Data collection regarding respondents' knowledge was carried out using a questionnaire whose validity and reliability had been tested by Ilyati Syarfa (2015) with the permission of the person concerned. The Cronbach alpha reliability test result was 0.864 and the result was 0.788 using the KR20 formula (Ilyati Syarfa, 2015). The respondent's level of knowledge will be classified into 3, namely good if the questionnaire

percentage results are 76 - 100%, the level of knowledge is classified as sufficient if the questionnaire percentage results are 56 - 75% and the knowledge level is poor if the questionnaire percentage results are less than 56%. The research data obtained will then be presented in a table of characteristics of demographic distribution and distribution of respondents' answers, as well as a description of the overall level of knowledge of respondents.

RESULT AND DISCUSSION

In this study, the results obtained were that the majority of respondents (67.6%) were male with the average age of all respondents being 31.19 years. The majority of respondents (71.3%) are active smokers and as many as 89.8% are aware of the existence of government regulations governing cigarette consumption, especially regarding no-smoking areas which are presented in Table 1. This research found that as many as 85 respondents were cleaning services at Tarumanagara University had a good level of knowledge (78.8%), followed by a sufficient level of knowledge of 20 respondents (18.5%) and a poor level of knowledge of 3 respondents (2.8%) as in Figure 1.

Table 1 Characteristics of Research Results

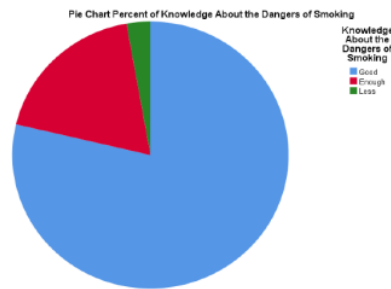| Parameter	N (%)	Mean (SD)	Med (Min-Max)
Age		31.19 (7.67)	30 (19 – 49)
Gender			
Men	73 (67.6%)		
Women	35 (32.4%)		
Know about Smoking Regulations			
Yes	97 (89.8%)		
No	11 (10.2%)		
Smoking Behavior			
Active Smoker	77 (71.3%)		
Passive Smoker	31 (28.7%)		

Figure 1 Knowledge About the Dangers of Smoking

There are many dangerous ingredients in cigarette smoke, which means that both active smokers and passive smokers can experience negative impacts. Cigarette smoke can harm almost all organs in the body, cause various diseases, and reduce the general health of smokers in both men and women. About 90% of all deaths from lung cancer are due to smoking and 8 out of 10 people who die from chronic obstructive pulmonary disease (COPD) are also due to smoking. Someone who consumes cigarettes also has an approximately 12 to 13 times higher risk of being diagnosed with COPD than someone who does not smoke. Cigarette consumption can affect the heart and blood vessels by increasing the risk 2 – 4 times of developing coronary heart disease and stroke due to clots that block blood flow to the brain or bursting blood vessels around the brain (Centers for Disease Control and Prevention, 2021).

Not only does it affect the respiratory and cardiovascular system, but smoking can also increase the risk of a decrease in the body's immune system, inflammation, and type 2 diabetes mellitus by 30 – 40% and make blood glucose levels more difficult to control. Cigarette consumption can also affect sperm quality in men and reduce fertility, this also applies to women where smoking will make it more difficult for a woman to get pregnant and can increase the risk of low birth weight babies, ectopic pregnancy, premature birth, and crib death syndrome (Center for Disease Control and Prevention, 2021).

A person's smoking behavior can be influenced by many things, including internal factors, such as addiction to nicotine, reactions to emotional decline, social reasons, and a person's knowledge about the dangers of smoking. Then there are also external factors, such as peer influence, parental influence, and the social environment (Heru Nur Susilo,

2020). The Government of the Republic of Indonesia has also issued several regulations that regulate cigarette consumption so that it does not disturb and endanger the health of individuals, families, communities, and the environment, including government regulations that regulate cigarette consumption such as Government Regulation of the Republic of Indonesia Number 109 of 2012 concerning Safeguarding of Used Materials. Contains addictive substances in the form of tobacco products for health. (Peraturan Pemerintah Republik Indonesia Nomor 109 Tahun 2012)

Research conducted by Tamimi and NA (2022) at Madrasah Aliyah Saadahtuddarain Mampang South Jakarta found that there was a significant relationship between the level of knowledge of teenage smokers and smoking behavior with p-value = 0.009. It was found that the majority of respondents with a good level of knowledge smoked lightly and the majority of respondents with a poor level of knowledge belonged to the heavy smoker category (Tamimi & NA, 2022). Having similar results, research by Alfianto et al., in 2020, obtained results: There is a correlation between knowledge and smoking cessation effort with p-value = 0.036 and r-value = 0.199. It was found that 67 respondents (60.4%) had good knowledge about the dangers of smoking and the majority of respondents (79.3%) were light smokers. Based on the results of the analysis, it was found that as many as 47.8% had good knowledge of Attempted > 30 Days of smoking cessation (Alfianto et al., 2020).

Table 2 contains the distribution of respondents' answers to the questionnaire given, showing that most of the questions can be answered correctly by respondents who are cleaning services at Tarumanagara University. Included in the questionnaire is a question regarding whether the respondent knows that there are regulations that stipulate that there are several areas where smoking is prohibited, such as in health facilities, public transportation, teaching and learning places, etc.

Table 2 Distribution of Knowledge Questionnaire Answers

Number	Question	Answer	
		Agree (%)	Disagree (%)
1	Cigarettes are not dangerous to health.	25	75
2	Cigarettes are dangerous for smokers themselves.	43.5	56.5
3	When you smoke, the cigarette smoke you exhale is air pollution for the people around you.	97.2	2.8
4	If someone near you is not a smoker, but he inhales the cigarette smoke that you exhale, then that person is called a passive smoker.	83.3	16.7
5	Cigarettes contain dangerous substances.	94.4	5.6
6	One of the ingredients in cigarettes is carbon monoxide, which can bind to red blood cells and cause blood vessels to narrow.	94.4	5.6
7	The ingredients in cigarettes, such as tar, nicotine, etc. are not harmful to health.	43.5	56.5
8	Nicotine in cigarettes does not cause addiction in smokers.	28.7	71.3
9	Cigarettes contain many ingredients that are dangerous to health.	95.4	4.6
10	Diseases that arise from smoking include lung cancer.	98.1	1.9
11	Cigarettes can cause heart disease and lung cancer.	99.1	0.9
12	There is no significant relationship between smoking and the smoker's health.	35.2	64.8
13	Cigarettes can affect the narrowing of blood vessels which can cause blood circulation problems.	90.7	9.3
14	There are no diseases caused by smoking.	19.4	80.6
15	One of the dangers of smoking to health is the effect of smoking on dental and oral health.	92.6	7.4
16	Smoking can cause impotence, decreased individual immunity, and cancer.	85.2	7.4
17	Cigarettes do not affect dental and oral health.	18.5	81.5
18	There are legal regulations that prohibit smoking in public places, health facilities, workplaces, teaching and learning places, and public transportation.	89.8	10.2
19	There are few positive impacts caused by smoking	48.1	51.9

CONCLUSION

Most respondents (78.8%) had good knowledge about the dangers of smoking and as many as 89.8% were aware of government regulations governing cigarette consumption. However, there are still around 18.5% who have sufficient knowledge and 2.8% who have insufficient knowledge, so there is still a need for further outreach regarding the dangers of smoking so that active smokers can be more motivated to quit and create a smoke-free campus environment.

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