

Factors Related to Food Sanitation Hygiene at Angkringan Merchants in Serpong and North Serpong Districts, South Tangerang City in 2022

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Abstract: Sanitary hygiene is an effort to control the factors of food, people, places and equipment that can or may cause disease or disturbance. The purpose of this study was to determine the factors related to food sanitation hygiene at angkringan traders in Serpong and North Serpong Districts, South Tangerang City in 2022. This study uses a quantitative method with a cross sectional design. The sampling technique used is total sampling where the number of samples taken is the entire population found by researchers, namely 85 samples. Collecting data by interview using a questionnaire and direct observation with an observation checklist sheet. Data analysis using chi square test. This research was conducted in January-July 2022. The results showed that 57 traders (67.1%) had poor food sanitation hygiene, 71 traders (83.5%) were male, 80 traders (94.1%) had a high level of education, as many as 80 traders (94.1%) new sales <5 years, as many as 55 traders (64.7%) have less knowledge, as many as 48 traders (56.5%) have a negative attitude, as many as 47 traders (55.3%) availability of facilities good infrastructure, and as many as 84 traders (98.8%) never attended hygiene sanitation training. The conclusion of this study shows that knowledge ($p = 0.007$) and attitude ($p = 0.045$) have a relationship with food sanitation hygiene, as well as on gender ($p = 1,000$), education level ($p = 0.166$), duration of selling ($p = 1,000$), availability of infrastructure ($p = 0.103$), and sanitation hygiene training had no relationship with food sanitation hygiene. It is hoped that traders will increase their knowledge about food sanitation hygiene, one of which is by looking for information on the internet so that when touching food they can apply it better.

1 INTRODUCTION

The human body requires food intake to become a source of energy when carrying out daily activities. In Indonesia, food is divided into two categories, namely heavy food and light food. Heavy food is usually the main menu in the morning, afternoon, and evening, so that it can make the stomach full. Meanwhile, snacks are small meals or snacks whose function is to temporarily delay hunger.

According to WHO in 2020 said that consumption of contaminated food or drink is estimated to be the cause of disease in 1 in 10 people worldwide and the death of 420,000 people every year. The highest incidence and mortality rates are seen in the continents of Africa and Southeast Asia. According to statistics from various developed countries, 60 percent of the incidence of foodborne illness is caused

by inadequate food processing and handling methods, which lead to contamination when serving food in TPM or Food Management Places (Suryani & Jannah, 2021).

According to Badan POM (2019) that there were 474 cases of food poisoning and 819 cases of beverage poisoning, which together led to the high prevalence of national poisoning. With this incident, it is necessary to apply food sanitation hygiene to anticipate or prevent the occurrence of cases of food and beverage poisoning.

Food sanitation hygiene at traders has an influence on food safety so that food ingredients are not contaminated and sanitation is applied at the point of sale to control environmental conditions from processing raw materials to the stage of food distribution (Hariyadi in Suryani & Astuti, 2019).

Public places have a high enough risk for the occurrence of places of disease transmission caused

by food, the environment and other health problems. Some of the symptoms that will arise if food and drink have been contaminated with pathogenic bacteria are fever, abdominal pain, and vomiting. Types of pathogenic bacteria that cause food poisoning, including staphylococcus, escherichia coli, and salmonella (Zakuan & Suryani, 2018).

Based on the statistical data of the National Poisoning Case Report (2019) there are 5 provinces with the highest number of poisoning cases, namely West Java, East Java, DKI Jakarta, Bali, and Banten. There were 214 cases of poisoning and 20 cases of food poisoning reported in Banten Province (BPOM, 2019).

According to data from the South Tangerang City Health Office in 2018, there were cases of food poisoning in a school, namely SD Taruna Bangsa Ciputat Serua with a total of 23 cases, the complaints felt were nausea and dizziness.

According to information from the South Tangerang City Health Office, there were 95 incidents of food poisoning among employees of Ace Hardware Living World Alam Sutera in North Serpong District in 2014.

Angkringan is a food that is located on the side of the road that offers a variety of snacks. Angkringan are generally found on the side of the highway or on the corner, which is actually a very dangerous place with a lot of traffic pollution. In addition, the food in the angkringan is rarely covered, so dust and fumes from passing vehicles can contaminate the food. The food and drinks offered may become contaminated as a result of this activity (Suryani & Astuti, 2019).

Based on observations that have been carried out by researchers by 10 angkringan traders in Serpong and North Serpong Districts, it was found that there are still food sellers who have not implemented food sanitation hygiene, namely where people who are directly in contact with or in contact with food such as food handlers have not performed food sanitation hygiene behavior, such as not washing hands before handling food ingredients that will be processed by 9 traders, not wearing gloves when handling food 8 traders, leave food open for 6 people, talking while processing food 6 people, unavailability of trash cans as many as 8 traders, the unavailability of a place to wash hands and adequate equipment such as water taps and the absence of clean running water as many as 8 traders.

Based on the description of the background, the researchers are interested in conducting research related to "Factors Relating to Food Sanitation Hygiene at Angkringan Merchants in Serpong and

North Serpong Districts, South Tangerang City in 2022".

2 METHOD

This study uses quantitative research methods and cross sectional design. Based on the results of observations made by researchers in Serpong and North Serpong sub-districts, there are 85 angkringan traders. The population of this study were all angkringan traders in Serpong, South Tangerang City. The sampling technique used is the total sample, where the number of samples taken is the entire population found by researchers 85 samples. Researchers collected data using questionnaire-based interviews and direct observation with checklist sheets. The analysis used by the researcher is univariate and bivariate.

The variables studied were food sanitation hygiene, gender, education level, length of sale, knowledge, attitude, availability of infrastructure, and sanitation hygiene training. This research was conducted from January to July 2022.

3 RESULT

Research Overview

This research was conducted in the districts of Serpong and North Serpong. Serpong sub-district with an area of 24.04 km² with a population of 191,968 people consisting of 9 sub-districts, namely Lengkong Wetan Buaran, Ciater, Rawa Buntu, Rawa Mekar Jaya, Serpong, Lengkong Gudang, Cilenggang, Lengkong Gudang Timur, and Buaran. Meanwhile, North Serpong District has an area of 17.84 km² with a population of 188,476 people consisting of 7 sub-districts, namely Jelupang Village, Pondok Jagung, Lengkong Karya, East Corn Cottage, Paku Jaya, Paku Alam, and Pakulonan (BPS Tangerang Selatan, 2019).

Univariate Analysis

Table 1: Recapitulation of Distribution of Respondents Based on Univariate Analysis Results on Angkringan Traders in Serpong and North Serpong Districts, South Tangerang City in 2022.

Variable	Category	n	%
Food Sanitation Hygiene	Not Good	57	67,1
	Good	28	32,9
Gender	Man	71	83,5
	Woman	14	16,5
Level of Education	Low	5	5,9
	High	80	94,1
Long Selling	New (<5 Years)	80	94,1
	Old (≥5 Years)	5	5,9
Knowledge	Not Good	55	64,7
	Good	30	35,3
Attitude	Negative	48	56,5
	Positive	37	43,5

Availability of Infrastructure	Not Good	38	44,7
	Good	47	55,3
Sanitation Hygiene Training	Never	84	98,8
	Ever	1	1,2

Table 1 distribution of respondents based on the results of univariate analysis on angkringan traders showed that more traders had less food hygiene and sanitation, amounting to 57 people (67.1%), traders with male sex amounted to 71 people (83.5%), higher education level as many as 80 people (94.1%), old selling new <5 years as many as 80 people (94.1%), lack of knowledge as many as 55 people (64.7%), negative attitude as many as 48 people (56.5%), availability of good infrastructure as many as 47 people (55.3%), never attended hygiene sanitation training as many as 84 traders (98.8%).

Bivariate Analysis

Table 2: Recapitulation of the Distribution of Respondents Based on the Results of Bivariate Analysis on Angkringan Traders in Serpong and North Serpong Districts, South Tangerang City in 2022.

Variable	Food Sanitation Hygiene				Total		PR (95% CI)	Pvalue	Description
	Not Good		Good		n	%			
	n	%	n	%					
Gender									
Man	48	67,6	23	32,4	71	100	1,159 (0,349-3,853)	1,000	Unrelated
Woman	9	64,3	5	35,7	14	100			
Level of Education									
Low	5	100	0	0	5	100	1,538 (1,310-1,807)	0,166	Unrelated
High	52	65	28	35	80	100			
Long Selling									
New <5 year	54	67,5	26	32,5	80	100	1,385 (0,218-8,800)	1,000	Unrelated
Old ≥5 year	3	60	2	40	5	100			
Knowledge									
Not Good	43	78,2	12	21,8	55	100	4,095 (1,566-10,709)	0,007	Related
Good	14	46,7	16	53,3	30	100			
Attitude									
Negative	37	77,1	11	22,9	48	100	2,859 (1,124-7,270)	0,045	Related
Positive	20	54,1	17	45,9	37	100			
Availability of Infrastructure									
Not Good	29	76,3	9	23,7	38	100	2,187 (0,847-5,642)	0,161	Unrelated
Good	28	59,6	19	40,4	47	100			
Sanitation Hygiene Training									
Never	57	67,9	27	32,1	84	100	0,321 (0,236-0,439)	0,329	Unrelated
Ever	0	0	1	100	1	100			

Based on table 2 The distribution of respondents from the results of bivariate analysis on angkringan traders explained that there was a relationship with food sanitation hygiene on the knowledge variable (p-value 0.007) and attitude (p-value 0.045). While the gender variable (p-value 1,000), education level (p-value 0.166), long selling (p-value 1,000), availability of infrastructure (p-value 0.161), and sanitation hygiene training (p-value 0.329) explained that there was no relationship with food sanitation hygiene. The results of the calculation of the prevalence ratio of the knowledge variable show that poor knowledge has a risk of 4,095 times having poor hygiene and sanitation behaviour. and the results of the calculation of the prevalence ratio on attitudes show that a negative attitude has a 2.859-fold risk of having poor hygiene and sanitation behaviour.

4 DISCUSSION

Research conducted on angkringan traders in Serpong and North Serpong Districts showed that as many as 57 traders (67.1%) had poor food sanitation hygiene, but traders who had good food sanitation hygiene were 28 respondents (32.9). Traders who do not use head coverings when processing food mostly perform less food hygiene behavior, as many as 70 traders (82.4%). This behavior can cause contamination of food due to physical or biological objects that fall on food, for example, dirt in hair. Traders who behave in food sanitation hygiene are less good than those with good behavior. This is due to the lack of knowledge and information about food sanitation hygiene by traders, the attitude of traders who do not pay too much attention to things that need to be done such as washing hands before and after handling food. But if traders have a high initiative regarding hygiene and sanitation by seeking information, then have the opportunity to have good hygiene and sanitation behaviour.

Based on the findings of research conducted on angkringan traders in Serpong and North Serpong sub-districts, it was found that 71 traders (83.5%) were male, while only 14 traders (16.5%) were female. The findings of the bivariate analysis carried out with the chi-square test revealed that there was no statistically significant correlation (p-value 1,000). Based on the findings of the research conducted, male traders have a lower level of food sanitation hygiene compared to women. This is because women are more concerned about maintaining a clean environment than men. It is common for men to neglect their individual hygiene practices such as rarely cutting

their nails or not washing their hands before or after handling food.

Based on the results of univariate analysis, respondents who have a higher education level are 80 traders (94.1%), but respondents who have a low level of education are 5 traders (5.9%). The results of the bivariate analysis obtained a p-value of 0.166 which means that there is no significant relationship. The high and low level of education will affect the mindset of individual behaviour, but it will still lose to the habit factor that has been done for a long time and is believed to not have a bad impact on anyone (Astuti in Humayroh, 2016).

According to the results of univariate research conducted, it shows that as many as 80 traders (94.1%) who have been selling angkringan <5 years and as many as ≥5 traders (5.9%) who have been selling 5 years. The results of the bivariate analysis show that the p-value obtained is 1,000, which means that there is no relationship between the length of time selling and food sanitation hygiene. Traders who have been selling for more than 5 years have poor food sanitation hygiene, this is due to the lack of knowledge possessed by traders, so that the implementation of good food hygiene and sanitation is not realized. Traders who have been selling for a long time or are new in order to be able to carry out good food sanitation hygiene need to get support in finding information.

Based on research conducted on angkringan traders in Serpong and North Serpong sub-districts showed that as many as 55 traders (64.7%) had less knowledge and as many as 30 traders (35.3%) had good knowledge. The results of the bivariate analysis showed a p-value of 0.007 which means that it has a relationship between knowledge and food sanitation hygiene behavior. Angkringan traders have less knowledge because according to them, the most common sources of transmission of non-food digestive diseases have poor hygiene and sanitation behavior. This is due to lack of knowledge due to lack of information and education for angkringan traders.

Based on the results of univariate analysis, as many as 48 traders (56.5%) had a negative attitude, while 37 traders (43.5%) had a positive attitude. The P value of 0.045 based on bivariate data analysis explains that there is a relationship between attitudes and sanitation hygiene in food traders. The negative attitude of angkringan traders can be influenced by practices in work or selling, as well as the environment that encourages these attitudes. Changing the habits of food handlers is one way that can be done to have a good attitude towards food management. A positive attitude results from the

formation of habits and awareness of the importance of food sanitation hygiene. So that food safety can be free from contamination.

Based on the results of univariate analysis showed that as many as 47 traders (55.3%) who had the availability of good infrastructure were more than those who had the availability of poor infrastructure as many as 38 traders (44.7%). the results of the bivariate analysis showed a P value of 0.161. This shows that there is no relationship. Facilities available for anything can have a beneficial or negative impact on the behavior of people who use these facilities (Notoatmodjo, 2018). Based on the results of observations using the observation checklist sheet on the availability of infrastructure that most of the angkringan traders' infrastructure still does not meet the requirements, namely some angkringan traders who do not have a place to wash their hands, do not provide soap or hand sanitizer. In landfills, there are still many traders whose trash cans are not closed, nor are they made of strong and water-resistant materials.

The results of the research carried out explained that as many as 84 traders (98.8%) had never attended hygiene sanitation training and as many as 1 trader (1.2%) had attended hygiene sanitation training. Based on the data from the bivariate analysis, a P-value of 0.329 was obtained, which means that there is no relationship between sanitation hygiene training and food sanitation hygiene. Based on the research results that have been described previously, angkringan traders who have received food sanitation hygiene training are more likely to maintain high food sanitation hygiene standards. This is because the training that has been followed makes business owners more aware, helps them understand it, and enables them to operate it effectively.

5 CONCLUSIONS

Based on the results of the study it can be concluded that: The results of the study on the variables of gender, education level, duration of selling, availability of infrastructure, and sanitation hygiene training showed that there was no relationship with food sanitation hygiene. while the results on the knowledge and attitude variables show that there is a relationship with food sanitation hygiene, with the p-value of knowledge (0.007) and attitude (0.045).

It is hoped that the Health Office can help traders to increase their knowledge about sanitation hygiene: provide education in the form of direct counseling to angkringan traders, indirect counseling such as using social media where the Health Office makes

interesting videos or broadcast messages, and distribute posters containing information on food hygiene and sanitation and training.

It is recommended to angkringan traders to pay attention to the condition of inadequate infrastructure such as water used when washing equipment, pay attention to how to store food so that it is not contaminated by dust, and improve the quality of food sanitation hygiene, such as providing a place to wash hands.

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