



## Relationship Between Knowledge Level, Food Handlers' Attitude and Food Supervision on The Implementation of Food Hygiene Sanitation in Street Vendors at Purus Beach Padang, 2023

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### Abstract

As many as 55.8% of food processing places in Purus Beach Padang did not meet the requirements in 2021, in 2022 it increased by 61.3%. The study aims to determine the relationship between the level of knowledge, attitudes and food supervision on the application of food sanitation hygiene to street vendors at Purus Beach Padang. The research design was a cross sectional study with a population of all street vendors selling 177 foods, where sampling used simple random sampling technique with a total of 53 people. The research was conducted on June 10-28, 2023 at Purus Beach Padang. Data were collected using a questionnaire with interview and observation methods. Data analysis was univariate and bivariate. The results showed that 69.8% of vendors had an unqualified application of food hygiene sanitation, 64.2% of street vendors had a low level of knowledge, 60.4% of street vendors had a negative attitude and 86.8% of street vendors had poor food supervision. Based on the Chi-square test results, there is a significant relationship between knowledge level ( $p=0.000$ ), attitude ( $p=0.000$ ) with the application of food hygiene sanitation, and there is no significant relationship between food supervision and the application of food hygiene sanitation ( $p=0.179$ ). So it is hoped that the Health Office will provide counseling to street vendors on how to apply good hygiene sanitation when selling and conduct food supervision so that traders can maintain the quality of food to be sold.

Keywords: Sanitation Hygiene, Knowledge, Attitude, Supervision

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### INTRODUCTION

According to the World Health Organization (WHO, 2019) at the second Global meeting of the International Food Safety Authority Network (INFOSAN), foodborne diseases are a major cause of human morbidity and mortality. Unsafe foods containing harmful bacteria, viruses, parasites or chemicals cause more than 200 diseases ranging from diarrhea to cancer. An estimated 600 million - almost 1 in 10 people in the world fall ill after eating contaminated food and 420,000 die each year.

Children under 5 years of age carry 40% of the burden of foodborne illness, with 125,000 deaths each year (WHO, 2019). Berdasarkan data dari Direktorat Kesehatan Lingkungan dan *Public Health Emergency Operation Center* (PHEOC).

The Indonesian Ministry of Health (MOH) recorded food poisoning outbreaks totaling 163 cases, 7,132 cases with a Case Fatality Rate (CFR) of 0.1%. Food poisoning outbreaks are ranked 2nd among outbreak reports submitted to PHEOC. This shows that food poisoning outbreaks are still a public health

problem that must be prioritized (Kemenkes, 2018).

Research (Ismainar et al., 2022) with the title Hygiene and Sanitation in Elementary School Snack Food Traders in Pekanbaru City, Riau also explained that there was a significant relationship between personal hygiene, knowledge, equipment cleanliness, presentation methods and the environment with food hygiene and sanitation with a p-value  $\leq 0.05$  and a POR value  $> 1$ .

Factors that determine the prevalence of foodborne illness are lack of knowledge on the part of food handlers or consumers and indifference to safe food management. Food handling by many food sellers is not hygienic, which can cause street food to be contaminated by microbes. In addition, the level of knowledge of hawker food sellers that is still minimal can cause snacks not to be free from hazardous chemicals (Manalu et al., 2017).

The many sources of food contaminants indicate the threat of foodborne illness. People who work as food processors or food handlers are the main source that can transfer microorganisms to food through skin, nose, feces, clothing, and contaminated food that is handled (Alistina, 2019).

Based on data from the Padang Pasir Health Center which is near Purus Beach Padang, there are food processing places that have not met the requirements of 55.8% in 2021 and in 2022 there was an unqualified increase of 61.3% (Puskesmas Padang Pasir, 2022). This study aims to determine the relationship between the level of knowledge, attitudes of food handlers and food supervision on the application of food hygiene sanitation to street vendors at Purus Beach Padang.

## METHOD

This type of research is quantitative with a cross sectional study design. The research was conducted on June 10-28, 2023 at Purus Beach Padang. The population of this study were all street vendors selling food totaling 177 where

sampling used simple random sampling technique with a total of 53 people. Data were collected using a questionnaire with interview and observation methods. Univariate and bivariate data analysis using the Chi-square test.

## RESULT AND DISCUSSION

**Table 1. Frequency Distribution of Respondent Characteristics at Purus Beach Padang**

No	Characteristics	f	%
1	Gender		
	Male	19	35,8%
	Female	34	64,2%
2	Education		
	SD	8	15,1%
	SMP	14	2,4%
	SMA	30	56,65%
	PT	1	1,9%
<b>Total</b>		<b>53</b>	<b>100%</b>

Based on table 1 of 53 street vendors at Purus Beach Padang, the characteristics of respondents based on gender are mostly female, namely 34 people (64.2%). Based on education, the most respondents are high school education, namely 30 people (56.65%).

**Table 2 Frequency Distribution of Food Hygiene Sanitation Implementation in Street Vendors at Purus Beach Padang**

Implementation of Food Sanitation Hygiene	f	%
Not Eligible	37	69,8%
Eligible	16	30,2%
<b>Total</b>	<b>53</b>	<b>100%</b>

Based on table 2 of 53 street vendors at Purus Beach Padang, it can be seen that 69.8% of respondents did not meet the requirements in the application of food sanitation hygiene. The results of the study are in line with research (Nuzil Akbar et al., 2023) showing that 59% of respondents did not meet the requirements in applying food sanitation hygiene when selling.

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**Table 3 Frequency Distribution of Knowledge Level of Food Handlers at Street Vendors at Purus Beach Padang**

Knowledge Level	<i>f</i>	%
Low	34	64,2%
High	19	35,8%
<b>Total</b>	<b>53</b>	<b>100%</b>

Based on table 3 of 53 street vendors at Purus Beach Padang, it can be seen that 64.2% of respondents have a low level of knowledge. The results of this study are almost the same as research conducted by (Sary et al., 2020) showing that there are 52.2% of street vendors with low knowledge.

**Table 4 Frequency Distribution of Food Handlers' Attitudes at Street Food Vendors in Purus Beach Padang**

Attitude	<i>f</i>	%
Negative	32	60,4%
Positive	21	39,6%
<b>Total</b>	<b>53</b>	<b>100%</b>

Based on table 4 of 53 street vendors on Purus Beach Padang, it can be seen that 60.4% of respondents have a negative attitude. The results of this study are in line with research (Sary et al., 2020) which found that 60.9% of street vendors had a negative attitude and 39.1% had a positive attitude.

**Table 5 Frequency Distribution of Food Supervision in Street Vendors at Purus Beach Padang**

Food Supervision	<i>f</i>	%
Not good	46	86,8%
Good	7	13,2%
<b>Total</b>	<b>53</b>	<b>100%</b>

Based on table 5 of 53 street vendors at Purus Beach Padang, the highest food supervision in street vendors was poor food supervision as many as 46 people (86.8%). The results of this study are in line with research (Cahyaningsih et al., 2018) showing 18.6% had poor supervision.

Based on table 6, it was found that the proportion of respondents whose application of food sanitation hygiene did not meet the requirements was found more in respondents who had a low level of knowledge of 88.2% compared to a high level of knowledge of 36.8%. The results of the chi-square test obtained a p value of 0.000 ( $p \leq 0.05$ ) means that there is a significant relationship between the level of knowledge and the application of food sanitation hygiene to street vendors at Purus Beach Padang in 2023. This is in line with research conducted by (Nuzil Akbar et al., 2023) which states that there is a significant relationship between knowledge and the application of sanitary hygiene in elementary school canteens within the scope of Sungai Penuh City with a p-value = 0.000.

Handler knowledge is very important in the food management process so that the food produced has good quality. Improper application of food sanitation hygiene and lack of knowledge from food handlers are factors that play a role in the spread of disease. If food is processed without hygiene, it will have an impact on the health of humans who consume it (Herniwanti, 2020).

Media can be electronic media and social media that are heard, seen and then applied. Information obtained can increase knowledge and influence respondents' behavior in applying food sanitation hygiene when trading.

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**Table 6 Relationship between Knowledge Level and Application of Food Hygiene Sanitation in Street Vendors at Purus Beach Padang Year 2023**

Knowledge Level	Implementation of Food Sanitation Hygiene				Total	P Value
	Not Eligible		Eligible			
	<i>f</i>	%	<i>f</i>	%		
<b>Low</b>	30	88,2	4	11,8	34	0,000
<b>High</b>	7	36,8	12	63,2	19	
<b>Total</b>	37	69,8	16	30,2	53	

**Table 7 Relationship between Attitude and Implementation of Food Hygiene Sanitation in Street Vendors at Purus Beach Padang Year 2023**

Attitude	Implementation of Food Sanitation Hygiene				Total	P Value
	Not Eligible		Eligible			
	<i>f</i>	%	<i>f</i>	%		
<b>Negative</b>	31	96,9	1	3,1	32	0,000
<b>Positive</b>	6	28,6	15	71,4	21	
<b>Total</b>	37	69,8	16	30,2	53	

**Tabel 8 Relationship between Food Supervision and the Implementation of Food Hygiene Sanitation in Street Vendors at Purus Beach Padang Year 2023**

Food Supervision	Implementation of Food Sanitation Hygiene				Total	P Value
	Not Eligible		Eligible			
	<i>f</i>	%	<i>f</i>	%		
<b>Not good</b>	34	73,9	12	26,1	46	0,179
<b>Good</b>	3	42,9	4	57,1	7	
<b>Total</b>	37	69,8	16	30,2	53	

Based on table 7, it was found that the proportion of respondents whose application of food sanitation hygiene did not meet the requirements was found more in respondents who had a negative attitude of 96.9% than respondents who had a positive attitude of 28.6%. The results of the chi-square test obtained a p value of 0.000 ( $p < 0.05$ ) means that there is a significant relationship between attitude and the application of food sanitation hygiene to street vendors at Purus Beach

Padang in 2023. This is in line with research conducted by (Sary et al., 2020) which states that there is a significant relationship between attitudes and food hygiene actions at SD Kartika and SD Negeri 08 Padang in 2019.

Attitude is a syndrome or collection of symptoms that respond to a stimulus or object, so that attitudes involve thoughts, feelings, attention, and other psychological symptoms. One very important aspect of understanding human attitudes and behavior is the problem of

disclosure and measurement of attitudes (Azwar, 2017). The attitude of food handlers is the attitude possessed by food handlers who already know how to apply good and correct sanitation hygiene and implement sanitation hygiene (Hartini Supri, 2022).

Efforts can be made to change respondents' attitudes by educating respondents with the aim of raising awareness of the importance of implementing food sanitation hygiene when selling.

Based on table 8, it was found that the proportion of respondents whose application of food sanitation hygiene did not meet the requirements was more prevalent among respondents who had poor food supervision at 73.9% compared to respondents who had good food supervision at 42.9%. The results of the chi-square test obtained a p value of 0.179 ( $p > 0.05$ ) means that there is no significant relationship between food supervision and the application of food sanitation hygiene in street vendors at Purus Beach Padang in 2023. This study is not in line with research conducted by (Cahyaningsih et al., 2018) which states that there is a significant relationship between food supervision and workers' practices in implementing food management sanitary hygiene with a p-value = 0.01.

Efforts that can be made are health workers supervising respondents related to food hygiene sanitation and conducting socialization by briefing the purpose of food supervision in order to increase the awareness of respondents, especially those who do not meet hygiene sanitation requirements in food management in order to avoid hazards caused by food.

Food and beverage supervision is an important part of all public health activities, given the possibility of food- and beverage-related diseases. Food and beverage supervision includes sample testing, food collection requirements that comply with requirements, and environmental inspections by health offices. The supervision of hawker food is carried out by periodic sanitary inspections in stages by the local District / City

Health Office, Sanitary inspections can be carried out by testing food samples in the laboratory (Kepmenkes no 942, 2003)

## CONCLUSIONS

A total of 69.8% of traders have an unqualified application of food sanitation hygiene, as many as 64.2% of street vendors have a low level of knowledge, as many as 60.4% of street vendors have a negative attitude and as many as 86.8% of street vendors have poor food supervision. Based on the Chi-square test results, there is a significant relationship between knowledge level ( $p=0.000$ ), attitude ( $p=0.000$ ) with the application of food hygiene sanitation, and there is no significant relationship between food supervision and the application of food hygiene sanitation ( $p=0.179$ ).

Knowledge, attitudes and food supervision are factors associated with the application of food sanitation hygiene. It is hoped that the Health Office will provide counseling to street vendors on how to apply good sanitary hygiene when selling and conduct food supervision so that traders can maintain the quality of food to be sold.

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