

# The Relationship of Knowledge and Attitudes of Traders with Traditional Market Sanitation Hygiene

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## Abstract

Sanitary hygiene in the traditional market environment with conditions of lack of awareness of market traders must be clean from garbage and dirt in trading facilities and around the market and do not use; various public health problems can occur if the traders are unaware and are not aware of maintaining the cleanliness of market environment sanitation. This study aimed to determine the relationship between the knowledge and attitudes of traders toward sanitary hygiene, environment, and traditional markets in Kota Fajar Village, North Kluert District, South Aceh Regency—type of quantitative research with Cross-Sectional Design. The study was conducted on June 5-18, 2022, with a sample of 74 out of 279 traders using a simple random sampling technique. Data collection using questionnaires. Univariate and bivariate statistical analyses with chi-square test. The level of knowledge of market traders in maintaining the sanitary hygiene of the market environment was partly obtained by the results that 11 out of 17 respondents (64,7%) needed better knowledge of poor clean hygiene. Negative attitudes of 13 out of 74 respondents (17,6%) with poor clean hygiene. Based on statistical tests using chi-square, there is a relationship between the knowledge and attitude P-value of less than 0,05 or statistically significant at the 5% level of market traders by maintaining the sanitary hygiene of the traditional market environment. Market traders are expected to know and be aware that maintaining the cleanliness of facilities can be clarified, including personal protective equipment.

**Keywords:** Epidemiology; Hygiene; Sanitation; Environmental; Surveillance

## Introduction

Traditional markets are always visited by constantly one who will shop for daily necessities. Therefore, the market must be clean from all diseases caused by garbage and dirt around the market. The market is a public place and causes various consequences or disease disorders if environmental conditions are not considered. Monitoring efforts must be carried out continuously to anticipate this problem so buyers, sellers, market employees, and residential communities can avoid infectious disease disorders (Kemenkes, 2018). Environmental sanitation hygiene must be applied in public places, including markets. There are still many environmental sanitation hygiene problems in the market, including many sanitation problems that are not as good as other supporting facilities (Fika, et., al., 2021).

Traditional markets are constantly visited by everyone who shops for daily necessities. Supervision

efforts must be carried out continuously to anticipate this problem so buyers, sellers, market employees, and residential communities can avoid infectious disease disorders (Kemenkes, 2018). Many environmental sanitation hygiene problems are found in the market, including many sanitation problems that are not as good as other supporting facilities (Fika, et., al., 2021).

Markets in Indonesia are known for their poor sanitation facilities and the behavior of market residents and market traders, says the behavior of market traders letting garbage splatter, cleanliness of tools and food processing methods that lack cleanliness of market environment sanitation, lack of public concern, especially market residents, including traders to implement proper sanitary hygiene. Ignorance about the benefits of sanitation among the community, mainly traders and market residents, results in people underestimating clean and healthy living efforts. Finally, it produces a market environment that has a shabby, disgusting, and garbage market image that can cause disease (Masyhuda,

2017). According to the Decree of the Minister of Health of the Republic of Indonesia Number 519/MENKES/ SK/VI/2008 concerning guidelines for the implementation of healthy markets states that to anticipate the spread and transmission of potentially epidemic diseases, including Avian Influenza, it is necessary to develop healthy market programs to realize clean, safe, comfortable, and healthy markets, mainly traditional markets. In addition, the market has a very important position in providing safe food, so it must meet the criteria of a healthy market, namely clean, safe, comfortable, and healthy market conditions through the cooperation of all relevant stakeholders, namely the central and local governments, market managers, suppliers, traders, market workers, and also consumers in providing and choosing safe and nutritious food for the community (Kemenkes,2008).

Markets in Indonesia are known for their poor sanitation facilities and behavior, say the behavior of market traders letting garbage scatter, cleanliness of tools and food processing methods that lack cleanliness of market environment sanitation, lack of public concern, especially market traders to implement proper sanitary hygiene. Ignorance of the benefits of sanitation among the community, especially market traders, results in people underestimating clean and healthy living efforts. It can produce a market environment with a shabby, disgusting market image, and garbage has an impact on causing disease (Masyhuda,2017). According to the Decree of the Minister of Health of the Republic of Indonesia Number 519 / MENKES / SK / VI / 2008 concerning guidelines for the implementation of healthy markets states that to anticipate the spread and transmission of potentially epidemic diseases including, g Avian Influenza, it is necessary to develop healthy market programs to realize clean, safe, comfortable, and healthy markets, mainly traditional markets. In addition, the market has a va criticalsition in providing safe food, so it must meet the criteria of a healthy market, namely clean, safe, comfortable, and healthy market conditions through the cooperation of all relevant stakeholders of the central and local governments, market traders, and consumers can support and implement healthy market programs that can maintain public health (Kemenkes,2008).

Regarding a large number of national populations, the role of traditional market communities, and the possibility of the market becoming a container for infectious diseases, it is importanessentialattention to the health aspects of the market itself. Many traditional markets in Indonesia of them still look dirty and shabby, and the sanitary hygiene of the market environment is inadequate and provides unsafe and unhealthy food to the community, so some diseases have the pool to arise from the market are diseases

associated with poor sanitary hygiene, such as diarrhea and cholera (Rejeki, 2015).

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Based on a preliminary survey of environmental sanitation hygiene problems, Fajar City, North Kluet District, South Aceh Regency The problem is that 30 out of 50 market traders do not know about sanitary hygiene, such as the use of sound and correct PPE and safe and healthy food processing. The cleanliness of market sanitation hygiene facilities and the attitude of market traders are less towards cleanliness around the market environment in terms of waste disposal at organic and inorganic waste dumps, but not used according to their uses, inorganic waste is thrown into organic waste bins because market traders do not know inorganic and organic waste. No temporary trash cans are available, so the garbage is only thrown in plastic. Many vegetable waste and leftover plastics are scattered in the market aisle.

Based on a preliminary survey of environmental sanitation hygiene problems of traditional markets in Fajar City, North Kluet District, South Aceh Regency, interviews with market traders found that 30 out of 50 market traders did not know about sanitary hygiene such as the use of excellent and correct PPE for traders who use PPE, as well as safe and healthy food processing. Market sanitation hygiene facilities and the attitude of market traders are lacking towards cleanliness around the market environment in terms of waste disposal at organic and inorganic waste dumps. However, it is not used according to its use. There are no temporary trash cans installed, so that waste is only thrown in plastic, and there is also a lot of vegetable waste and leftover plastics scattered in the market aisle.

## Methods

This research is quantitative research using a crossectional design, which is research conducted by emphasizing the measurement time or observation of independent and dependent variable data only once at a time. This research was conducted in the traditional market of Kota Fajar, North Kluet District, South Aceh Regency. This research was conducted on June 5-18,

2022. The population in this study was all traders in the traditional market of Kota Fajar, North Kluet District, South Aceh Regency, as many as 279 traders; samples were taken based on the Slovin formula as many as 74 traders. The sampling technique uses simple random sampling—data collection using questionnaires, data analysis using univariate and bivariate analysis with chi-square test.

## Results

Respondents in this study amounted to 74 respondents. The data taken in this study are traders' knowledge of traditional market sanitation hygiene and traders' attitudes toward traditional market sanitation hygiene. Knowledge and attitudes of traders (independent variable) and sanitary hygiene of traditional markets in Fajar City, North Kluet District, South Aceh Regency (dependent variable), for more details, can be seen in the form of the following bivariate analysis:

### Knowledge of Traditional Market Traders

**Table 1.** Relationship between Trader Knowledge and Sanitation Hygiene of Traditional Markets

	Traditional Market Sanitation Hygiene				Total n %	P-Value	PR	
	Poor		Good					
	n	%	n	%				
Poor knowledge	11	64,7	6	35,3	17	100	0,000	0,
Good knowledge	22	38,6	35	61,4	57	100		59

Primary data, 2022

### The Attitude of Traditional Market Traders

**Table 2.** The Relationship between Traders' Attitudes and Sanitary Hygiene Traditional Market

	Traditional Market Sanitation Hygiene				Total n %	P-Value	PR	
	Poor		Good					
	n	%	n	%				
Negative attitude	13	76,5	4	23,5	17	100	0,000	1,
Positive attitude	0	0,0	57	100	57	100		08

Primary data, 2022

## Discussion

### The Relationship of Traders' Knowledge with Traditional Market Sanitation Hygiene

Based on the results of research conducted by researchers on the relationship between trader knowledge and traditional market sanitation hygiene in Fajar City, North Kluet District, South Aceh Regency, after the distribution of questionnaires, the data was

analyzed bivariate, the following results were obtained: the results of the study were known to the level of knowledge of with traditional market sanitation hygiene in Fajar City, North Kluet District, South Aceh Regency, the results were obtained that knowledge which was not good from 17 Respondents with good sanitary hygiene came out 6 Respondents (35.3%), and vice versa from 17 Respondents whose knowledge of was not good with poor sanitary hygiene came out 11 Respondents (64.7%). Judging from personal protective equipment (PPE) facilities, food processing methods and how to maintain sanitation for traditional markets have not met the sanitary hygiene requirements of the market environment.

Based on the results of the chi-square test between the knowledge of the market and the hygiene practices of market environmental sanitation, where the P value is 0.000 with a significant degree of less than 0.05, it shows a meaningful relationship between the knowledge of market traders and the hygiene practices of traditional market environment sanitation in Fajar City, North Kluet District, South Aceh Regency.

From the description above, there is a relationship between the knowledge of the market and the sanitary hygiene of traditional markets in Fajar City, North Kluet District, South Aceh Regency. This also shows that the knowledge is not good in the market because of the lack of socialization and education processes by the health office and market managers about hygiene, sanitation, market environment. According to Nursalam (2015), knowledge results from "knowing," which occurs after people sense a particular object. In addition, knowledge is also obtained through formal and informal education; through education, there is a learning process that will produce good results if supported by adequate facilities; one of the essential things that become a means of learning is information sources and media.

The results of research by Bhaskar et., al (2022) show that those who are less knowledgeable about waste containers (80.5%) have good knowledge about waste containers (40.5%), and traders who have a negative attitude towards waste containers (62.5%), have a positive attitude towards waste containers (40.5%). As many as 45% of respondents have a suitable waste container category. The results of the chi-square analysis obtained a relationship between knowledge and waste container practices with a P value of 0.000; there is a relationship between attitudes and waste container practices with a P value of 0.001. Society significantly changes its behavior by increasing knowledge and attitudes because behavior based on knowledge will be more eternal.





## The Relationship between Traders' Attitudes and Traditional Market Sanitation Hygiene

The research results on the attitude of traders with market sanitation hygiene in Fajar City, North Kluet District, South Aceh Regency obtained the negative trader attitudes of 17 Respondents with good sanitary hygiene as many as 4 Respondents (23.5%). Judging from the attitude of agreeing to maintain the cleanliness of complete equipment, desserts, and food processing safely and healthily and maintain clothing sanitation for traditional market traders have not met the hygiene requirements of market environmental sanitation. Based on the results of the chi-square test between the attitude of market traders and the practice of sanitary hygiene in the market environment where the P value is 0.000 with a significant degree less than 0.05, it shows a meaningful relationship between the attitude of market traders and the hygiene practices of traditional market environment sanitation in Fajar City, North Kluet District, South Aceh Regency.

This also shows that the negative attitude in market traders is due to the lack of confidence of traders to apply those related to market environmental sanitation hygiene because traders are not sure that the impact of diseases and work accidents occurs. After all, there are still traders who are harmful to the sanitary hygiene of the market environment, so the achievement of sanitary hygiene indicators is low. According to Entjang (2012), attitude is an organization of opinions, a person's beliefs about a relative object or situation accompanied by certain feelings. It provides a basis for the person to respond or behave in a certain way of his choosing; attitude is a hidden behavior that occurs consciously or unconsciously.

The results of Rahmayani's research (2018) showed that of the 40 Respondents with a positive attitude, 65.0% had good sanitary hygiene, while of the 14 pessimistic Respondents, 28.6% had good sanitary hygiene. The p-value of  $< 0.05$  is 0.041, which can be interpreted as a relationship between the attitude of traders and the sanitary hygiene of roadside snack food in Elementary Schools 20 and 24 Banda Aceh. Respondents said it is okay to have long nails when selling as long as the nails are clean, even when touching food, but they must still use tools such as spoons, food clippers, and gloves when processing and taking food. The Respondent seemed to have long nails, and it was also found that there were Respondents who stated that it was okay to sneeze and cough when processing food because it was considered unable to contaminate food; this is undoubtedly contrary to sanitary hygiene because the mouth, nose, and skin contain many germs that can cause disease (Andayasari, 2011).

The results of research by John et., al (2021) regarding the relationship between sanitary hygiene attitudes at points of sale with the number of germs in chicken meat with the population of all chicken meat sellers in the market show the results of a relationship between attitudes and sanitary hygiene in the number of germs. If the sanitary hygiene of the merchant's place of sale is good, the number of germs is less, and if the sanitary hygiene of the merchant's place of sale is not good, the number of germs increases.

## Conclusion

Research suggestions, changes in models on food processing, using PPE, personal hygiene according to health standards, and still paying attention to market environmental sanitation hygiene will improve the degree of public health in South Aceh Regency.

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## Author Contribution and Competing Interest

The author's contribution to this study is to design research instruments and collect respondent data by observation and interviews, analyze results, and compile manuscripts.

## References

- Andayasari, L. (2011). Kajian Epidemiologi Penyakit Infeksi Saluran Pencernaan yang Disebabkan oleh Amoeba di Indonesia. *Media Penelitian dan Pengembangan Kesehatan*. 21(1), 1-9.
- Bhaskar, A. Kihyun, K. Christian, S & Neha, B. (2022). Advanced Sanitation Products Infused With Silver Nanoparticles For Viral Protection And Their Ecological And Environmental Consequences. *ELSEVIER*. 28, 1-15. <https://doi.org/10.1016/j.eti.2022.102924>
- Entjang. (2012). Ilmu Kesehatan Masyarakat, Cetakan Ketiga Belas. PT Citra Aditya Bakti. Bandung.
- Fika, A. Ade, D.P & Zurrahmi. (2021). Faktor-Faktor yang Berhubungan dengan Hygiene Sanitasi Lingkungan Pasar Tradisional pada Petugas Kebersihan Pasar di Kabupaten Kampar. *Jurnal Kesehatan Tembusai*. 2(3), 252-261.
- John, K.O. et al. (2021). Detection of Vaccine Derived Poliovirus Circulation by Environmental Surveillance in the Absence of Clinical Cases. *HUMAN VACCINES & IMMUNOTHERAPEUTICS*. 17(7), 2117-2124.



<https://doi.org/10.1080/21645515.2020.1852009>  
KEMENKES. (2018). Pedoman Penyelenggaraan Pasar Sehat. Keputusan Menteri Kesehatan No519 2008. Jakarta.

Masyhuda, R.H. (2017). Survei Kepadatan Lalat di Tempat Pembuangan Akhir (TPA) Sampah Jatibarang 2017. *Jurnal Kesehatan Masyarakat*. 5(4), 1-5.

Nursalam. (2015). Metodologi Penelitian Ilmu Keperawatan Edisi 3. Salemba Medika. Jakarta.

Rahmayani. (2018). Hubungan Pengetahuan Sikap dan Tindakan Hygiene Sanitasi Pedagang Makanan Jajanan di Pinggir Jalan. *Jurnal AcTion*. 3(2), 172-178.

Rezeki. (2015). Sanitasi Hygiene dan K3 (Kesehatan dan Keselamatan Kerja). Rekayasa Sains. Bandung.

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