

Analysis of Hygiene and Sanitation in Junior High School Canteens in Banda Aceh

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Abstract

This study aims to see the effect of coaching, supervision and actions given by Banda Aceh junior high school canteen managers on the hygiene and sanitation of the school canteen. A canteen with a low hygiene standard in its physical condition, its raw material for food, food processing and food presentation, can give negative impacts on a child's health, growth, cognitive development, and nutritional status, which will eventually affect their academic achievement. This research, conducted from 2 to 5th of August 2017, is an analytical survey research with a cross-sectional design. Based on the results of statistical tests using chi-square technique, a positive and significant correlation was found between the canteen manager's coaching and the canteen's hygiene and sanitation (p -value = $0.001 < 0.05$), particularly between the supervision, hygiene and sanitation variables (p -value = $0.001 < 0.05$). There is also a strong and significant relationship between the level of canteen maintenance and the canteen's hygiene and sanitation (p -value = $0.002 < 0.05$). The canteen staff are reported to have complied with the applicable regulations and applied the knowledge they have about the standard hygiene and sanitation. They reported that they regularly maintain personal hygiene when processing the food by washing their hands and keep their work equipment clean. Besides, they maintain the cleanliness of the canteens by throwing waste into the dumping area when the bin is full, and by keeping food and kitchen wares clean.

Keywords: Hygiene, Sanitation, Canteen

1. Introduction

Public places are often used as places to sell food. Ones that located inside a school, of which the maintenance of the quality, hygiene and sanitation guided or carried out by the school, are called school canteens (Dian, 2014). Every school generally has a canteen as a place for providing food for school students. The canteen is obliged to carry out basic sanitation to prevent disease transmission to school children. Thus, the cleanliness should be regularly controlled to prevent disease vectors, such as flies. The results of the supervision of school children's snacks by BPOM in 2015 showed that as many as 40% of snacks for school children did not meet the standards. Meanwhile, of 60% of schools with a canteen, 84.30% of which has not met the health standard yet (Rikesdas, 2013).

Foodborne illness is one of the most common public health problems today. The foodborne diseases are usually infectious, caused by disease agents that incubate the body through the consumption of contaminated food. This disease generally causes a large number of health issues, especially among infants, children, the elderly, and those with weak

immunity (Farjana, 2012). A canteen with a poor physical condition, that sells raw or uncooked processed food, and has a poor food processing and presentation can cause health problems and affect a child's growth, cognitive development and nutritional status, and ultimately affects their academic achievement (Erna, 2012).

In industrialized countries, every year, as much as 30% of the population is affected by foodborne diseases. Around 2.1 million people die annually from diarrheal diseases, especially children in less developed countries. A canteen is a room in a public building where visitors can eat food, either that brought by themselves or bought from the canteen. There is almost a canteen in every school in Indonesia. Usually, the canteen is a gathering place for students. Based on a preliminary survey conducted by researchers regarding the hygiene of food handlers and the school canteen sanitation which was conducted at several canteens in junior high schools, it showed that the canteen conditions were far from the standard of healthy and clean. Most canteens were reported less hygienic in processing and serving food. It was exacerbated with the canteens were found to wash the cutleries improperly, thus providing unclean eating tools.

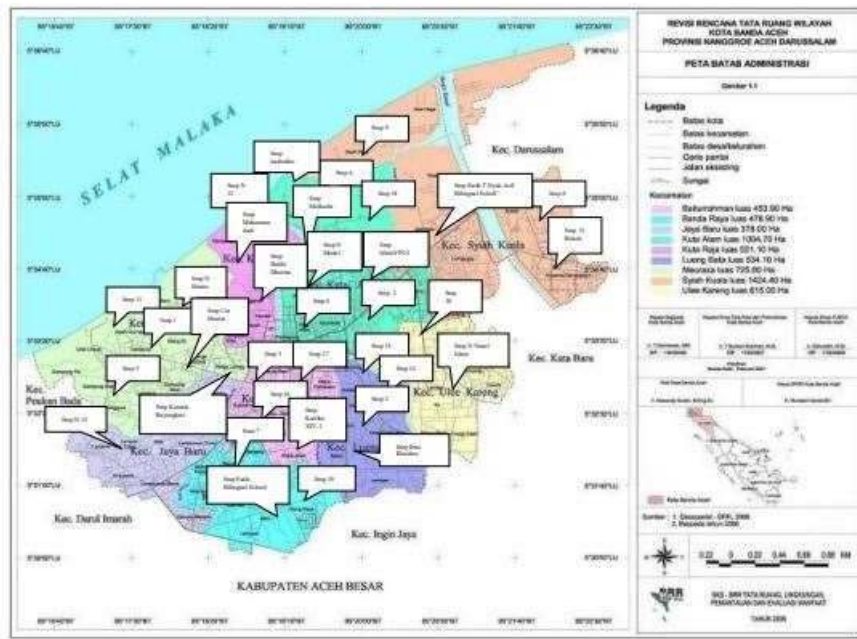
Banda Aceh City is one of the cities in Aceh and is the capital of Aceh Province, Indonesia. As the centre of Acehnese government, Banda Aceh is the centre of economic, political, social and cultural activities. Based on the data from the Education and Culture Office of Banda Aceh, there are around 35 State and Private Junior High Schools in the city. Each school generally has a canteen which is managed directly by the school, while some are not directly managed by the school. Therefore, it is necessary to observe the factors related to the hygiene and sanitation of junior high school canteens in Banda Aceh in 2017. Therefore, the researchers were interested in analyzing factors related to Hygiene and Sanitation of the Junior High School Canteens in Banda Aceh in 2017.

2. Method

This research is an analytical survey research with a cross-sectional design which aims to explain the relationship between the school guidance, supervision and actions of the canteen managers and the canteen sanitation of public junior high schools in Banda Aceh. Respondents in this study were canteen managers in every junior high school in the city of Banda Aceh with the following criteria: 1. Working at a school canteen, and 2. Willing to be a respondent at the research location. The number of respondents in this study was 35 people.

3. Results and Discussions

The data collection was carried out at several junior high schools in Banda Aceh. The city is located at the northern border of the Malacca Strait, in the south of Aceh Besar District, in the west by the Indonesian Ocean, and in the east by Aceh Besar District. The total area of Banda Aceh is 61.36 km².



Gambar 1.1 Peta Kota Banda Aceh

3.1 The Relationship between School Canteen Development and School Canteen Hygiene and Sanitation.

Table 3.1 The Relationship between School Canteen Development and School Canteen Hygiene and Sanitation.

Coaching	Hygiene and canteen sanitation				Total		α	P value
	Qualify		Not Qualify					
	n	%	n	%	n	%		
Good	15	62,5	9	37,5	24	100	0,05	0,001
Not good	0	0	11	100	11	100		
Total	15	42,9	20	57,1	35	100		

(Source: Primary data (processed in 2017))

Table 3.1 shows that, out of the 24 hygiene and sanitation respondents, 62.5% have good guidance or met the standard, while 37.5% do not meet the standard. As for the 11 respondents with hygiene and sanitation, it turned out that 100% do not meet the standard.

Based on the table above, it can be seen that the Chi-Square test result have a significant value (p-value) = 0.001 <0.05. So the decision taken is to reject Ho. This means that there is a significant relationship between good/poor supervision and hygiene and sanitation, whether they meet or do not meet the standards.

This result is in line with the research conducted by Anjani (2014) in Bekasi in terms of the data from the cross-sectional design. As Anjani (2014), the present study also found a significant correlation between the canteen manager’s supervision and their canteen hygiene and sanitation with a value of p = 0.0012 (p <0.05).

3.2 The Relationship of School Canteen Supervision with Hygiene and Sanitation of Junior High School Canteen.

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Supervisions	Hygiene and canteen sanitation				Total		α	P value
	Qualify		Not Qualify					
	n	%	n	%	n	%		
Good	13	68,4	6	31,6	19	100	0,05	0,002
Not good	2	12,5	14	87,5	16	100		
Total	15	42,9	20	57,1	35	100		

(Source: Primary data (processed in 2017))

Table 3.2 shows that, in terms of the hygiene and sanitation, it turns out that 68.4% of 19 respondents are properly supervised and 31.6% do not meet the standard. Whilst, based on the 16 respondents observing for the hygiene and sanitation, it turns out that 87.5% are found with poor supervision and 12.5% of do not meet the standard.

Based on the table above, it can be seen that the Chi-Square test result has a significant value (p-value) = 0.002 <0.05, thus the decision taken is to reject Ho. This means that there is a significant relationship in terms of canteen supervision, and the hygiene and sanitation standard of the canteen. Good supervision performed high hygiene and sanitation standards, while bad supervision correlates with low hygiene and sanitation standards.

This research is in line with the research conducted by Farjana (2012) at Tangerang. That is, there is a significant relationship between the two variables. It is known that, out of the 25 schools that carry out good supervision, 23 canteens met the standard, and 2 did not meet the standard. Meanwhile, out of the 31 schools that carried out poor supervision, only 1 canteen met the standard while 30 other canteens did not meet the standard.

3.3 The Relationship between Canteen Manager Actions and Hygiene and Sanitation

Tabel 3.3 The Relationship between Canteen Manager Actions and Hygiene and Sanitation

Canteen manager action	Hygiene and canteen sanitation				Total		α	P value
	Qualify		Not Qualify					
	n	%	n	%	n	%		
Good	11	78,6	3	21,4	14	100	0,05	0,002
medium	3	25,0	9	75,0	12	100		
Not good	1	11,1	8	88,9	9	100		
Total	15	42,9	20	57,1	35	100		

(Source: Primary data (processed in 2017))

Table 3.3 shows that out of the 14 respondents in hygiene and sanitation, 78.6% canteen managers' actions are good, while 21.4% do not meet the standard. Meanwhile, out of 12 respondents in the hygiene and sanitation, it turns out that 75.0% of the canteen managers' actions are medium, and the 25.0% meet the standard. As many as 9 respondents in hygiene and sanitation, 88.9% of the canteen managers' actions were insufficient, and 11.1% fulfilled the standard.

Based on the table above, it can be seen that the Chi-Square test result has a significant value (p -value) = 0.002 < 0.05; thus, the decision taken is to reject H_0 . This means that there is a significant relationship between good, medium and poor canteen managers' actions and hygiene and sanitation that meet the standard and do not meet the standard. This study is in line with the research conducted by Taufan (2011) in Semarang, it was found that there was a relationship between the actions of the canteen manager and canteen hygiene and sanitation with a value of $p = 0.001$ ($p < 0.05$).

4 Conclusion.

There is a relationship between School Canteen Development and Hygiene and Sanitation for junior high school canteens in Banda Aceh in 2017, with (p -value = 0.001 < 0.05). There is a relationship between Supervision of School Canteen and Hygiene and Sanitation of SMP school canteens in Banda Aceh in 2017, with (p -value = 0.002 < 0.05). There is a relationship between Canteen Manager Actions with Hygiene and Sanitation of junior high school canteens in Banda Aceh in 2017, with (p -value = 0.002 < 0.05).

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