

Food Handler's Perception on Food Handling Course

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Abstract: The main purpose of this study was to examine the perception level of awareness on food handling courses among food handlers and the factors that prevent them from attending the food handling course at Pasir Mas, Kelantan. A total of 59 food handlers who did not take the Food Handling Course were involved in this survey. The data obtained were analyzed using IBM Statistical SPSS software version 26. Preliminary studies were conducted showing that Cronbach's alpha obtained was greater than 0.80. In general, the mean values of the two question items, the level of knowledge of the food handler and the factors that prevent the operator from attending the course of food handling, are at a moderate level. The analysis showed that there was a strong correlation between the level of awareness and the factors that prevented the food handler from attending a food handling course with $p = 0.873 > 0.005$. In conclusion, food handlers must attend the food handling course by the government as a knowledge enhancement towards good hygiene and practices and prevention tools for food poisoning among customers.

Keywords: Perception, Food Handler, Knowledge, Awareness

1. Introduction

Food is one of the necessities. Food also can cause a lot of harm if we are not careful and careful about how to handle food properly. The Ministry of Health has revealed cases of food poisoning show a 23.69 percent increase from 401 to 496 compared to the previous year (Akhbar Metro, 2020). Food handlers should take proper food handling processes to avoid harming their customers.

Therefore, food handlers should be aware of food safety and hygiene as they are at high risk for foodborne illnesses. Food handlers include aspects of food preparation, presentation and sale (Bhat & Gomez-Lopez, 2014). The National Food Act 1983 requires that every food operator be required to take a Food Control Training Course to ensure that they are exposed to these safety and hygiene practices. The Government of Malaysia has announced all food operators directly or indirectly complying with

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the guidelines set out in the Food Act 1983, Food Regulations 1985, Infectious Disease Prevention and Control Act 1988. Every food handler must attend a 3-hour Food Handling Course and take anti-typhoid vaccination

According to Mohd Zain (2016), in his study, every employer should attend to special handling of food and get typhoid injections to comply with the Food Act 1983. If the employer does not take the typhoid injection seriously, the government will be able to impose fines or imprisonment on the employer. Therefore, this study aims to explore the perception of food handlers on food handling courses and the factors that prevent them from attending the course.

1.1 Problem Statement

Food poisoning is caused by the consumption of contaminated food and drinks. According to the Ministry of Health Malaysia, a total of 60 episodes of food poisoning cases were reported in schools nationwide involving 2325 cases. As a result, in 2018 there were 61 reported cases and two people died from food poisoning. According to Berita Harian (2020), if the level of hygiene is not taken into account, various health problems can threaten the surrounding population.

Food handling courses and typhoid injections are an important concern for any food operator opening business premises involving food and beverages. Training and education are very important for food handlers as they are those who are directly involved in the preparation of food while also complementary to the need for food safety awareness and hygiene (Bessa, Hogg & Gestal, 2012). Stated by Lek (2014), food handling courses are mandatory for all workers involved in the food preparation process.

In a recent study, it was reported that 49.3% of food handlers did not have a food handling certificate, accounting for almost half the total number of respondents (Sino et al., 2013). Zurina Mahadi (2017), in her study, there is the fact that foodborne illness is a serious issue in developing and developing countries. The latest case involved a food court in Kelantan which was ordered closed after it failed to comply with regulations in the “Ops Premis Makanan Bersih” (Berita Harian, 2017). In addition, 16 food premises were ordered closed due to a misdemeanor lack of a Certificate in Food Control and Typhoid Injection Course. It was also detected by premises workers who failed to supply clean premises, did not wear an apron and did not cover their heads.

The issues that will be addressed in this study will be on food handlers who do not take food handler courses and do not take Typhoid Injection. Food poisoning can occur at any time if the handler is not well educated and does not follow the basic guidelines contained in the course of the food handling. Haron (2013) stated that almost half of food handlers have never attended basic food handler courses. Research needs to be done to identify the level of awareness and factors that prevent food operators from attending the course of food management. At the same time, this was supported by a preliminary survey of researchers who found that a large number of food handlers around Pasir Mas, Kelantan still did not attend the Food Handling Course. The objectives of this study are to:

- i. Determine the level of awareness of the operators on the importance of food handling courses at food premises around Pasir Mas, Kelantan.
- ii. Identify factors that prevent food operators from attending food handling courses.
- iii. Examine the relationship between food operator awareness of food handling courses and factors that prevent the operator from attending the course.

2. Methodology

Methodology is an important element of the study as it becomes more systematic and the research journey towards achieving the objective. Without a well-planned method, the results of the study will not be available (Cresswell, 2008). This study uses quantitative research with a descriptive study design and survey method. The design of the study can assist the researcher in obtaining information and data related to the purpose of the study (Zulzana, 2011).

Therefore, the instrument used was questionnaire form containing items for each objective. In this study, the researcher will distribute the form to the respondents consisting of food handlers who have not taken the Food Handler Training Course at food premises around Pasir Mas, Kelantan. A total of 59 food handlers were recruited for this survey.

The questionnaire was divided into three categories. Section A is the demographic profile of respondents. Parts B and C include two main items, namely the level of awareness of food handling courses and the factors that make it difficult for the operator to not attend food handling courses. A likert scale is a measure used to measure the reliability of items. There were five levels of agreement that ranged from a low score to high, namely strongly disagree=1, disagree=2, don't really agree=3, agree=4 and strongly agree=5.

Chua (2014), trust in the importance of a pilot study is to determine whether a study is feasible or not. The reliability of the questionnaire was determined by a pilot test of 30 food handlers. These respondents were not included in the final review. Using the *Cronbach Alpha* test, the value of each question item was 0.80 which is a good reliability level.

3. Result and Discussion

Data obtained using the questionnaire were distributed to 59 respondents consisting of food handlers who had not yet taken the Food Handling Course. Data were analyzed using IBM Statistical Software (SPSS) version 26 to obtain mean information, standard deviation, percentages and frequency to test the confidence interval of an item. Table 1 shows the demographic distribution of respondents in Section A.

Table 1: Distribution of Respondents by Demographics

Demographic Features		Frequency (F)	Percentage (%)
Gender	Male	43	72.9
	Female	16	27.1
Age	20 years old and above	3	5.1%
	21-25 years old	6	10.2
	26-30 years old	14	23.7
	31-35 years old	21	35.6
	36-40 years old	7	11.9
	41 years old and above	8	13.6
Race	Malay	57	96.9
	Chinese	0	0
	India	0	0
	Other	2	3.4
Experience working as a food handler	1 year and above	5	8.5
	2-5 years	36	61
	6-10 years	18	30.5
	11 and over	0	0
Training course	Yes	0	0
	No	59	100
Injection typhoid	Yes	43	72.9
	No	16	27.1

Table 1 shows the demographic of respondents in the study of the perception of food handlers around Kampung Lemal, Pasir Mas Kelantan on food handling courses. Out of the 59 respondents involved in this research, 72.9% respondents are the male, and 27.1% respondents are female. Majority (96.6%) respondents are Malay and others are only 3.4%. 81.4% of the respondents were 21 to 40 years old and 18.7% respondents are below 20 and above 41 years old. 8.5% of the respondents had less than one year of working experience, 61.0% respondents have been in this sector for about 2-5 years, 30.5% respondents for 6-10 years and no one have experience more than 11years.

72.9% respondents accepted injection of Typhoid before being hired and some respondents still do not have the awareness to take this injection. This anti-Typhoid injection is a mandatory requirement for a food operator to work in the food industry. They need to get a valid anti-Typhoid injection and that is usually 3 years (Ministry of Health Malaysia, 2016). Meanwhile, for the training course, all of the respondents did not take the training course.

Section B consists of 13 items related to the operator's awareness of the course of food handling. Meanwhile Section C has 10 items for identifying factors that prevent food operators from attending food handling courses. The five scales are strongly disagree=1, disagree=2, don't really agree=3, agree=4 and strongly agree=5. Table 2 shows the min score for section B.

3.1 The Level of Awareness of the Operators on the Importance of Food Handling Courses at Food Premises

Based on Table 2, Awareness Levels on the Importance of Food Handling Courses are at a middle level based on the total mean score obtained (M=3.62). The highest percentage of strongly agreeable items (64.4%) was in question number 6, which food handler courses can enhance the knowledge and awareness. But unfortunately, the strongly disagree is a question no 4 there was (72.9%), there is I know where the location of food handling course. Most food handlers' answer strongly disagrees, which means that many do not know the location of this course of food handling.

The conclusion here is that the level of awareness of food handlers in Pasir Mas, Kelantan is at a moderate level as most of them are aware of this Food Handling Course, but they have no awareness of the course as well as there are various obstacles and problems that make them unable to attend the course.

Table 2: The min score for section B

Item	Item statement	Score					Mean	SD	Interpretation of mean	
		1	2	3	4	5				
B1	I know that the food handling course is required by the MOH	F	13	7	10	12	17	3.2	1.5	High
		%	22.0	10.9	16.9	20.3	28.8			
B2	I am aware of the importance of the food handling course	F	33	0	12	0	14	2.6	1.8	High
		%	55.9	0	20.3	0	23.7			
B3	I am aware of the existence of the food handling course	F	20	0	5	16	18	3.2	1.7	High
		%	33.9	0	8.5	27.1	30.5			
B4	I know where this food handling course is taking place	F	43	1	1	1	7	1.9	1.5	Low
		%	72.9	1.7	1.7	1.7	11.9			

B5	I am ready to take this food handling course	F	2	0	10	33	14	4.0	0.9	High
		%	3.4	0	16.9	55.9	23.7			
B6	Food handler courses can enhance the knowledge and awareness of operators on food hygiene and safety	F	2	2	7	10	38	4.4	1.1	High
		%	3.4	3.4	11.9	16.9	64.4			
B7	Food handling courses can provide useful knowledge	F	2	0	5	26	26	4.3	0.9	High
		%	3.4	0	8.5	44.1	44.1			
B8	Food operators undergoing formal training can increase their knowledge of personal hygiene practice	F	1	1	7	18	32	4.3	0.9	High
		%	1.7	1.7	11.9	30.5	54.2			
B9	Wearing a head covering is important when handling food	F	1	0	3	18	37	4.5	0.8	High
		%	1.7	0	5.1	30.5	62.7			
B10	I use gloves when handling food	F	1	11	14	14	19	3.7	1.2	Middle
		%	1.7	18.6	23.7	23.7	32.2			
B11	I wear headgear when handling food	F	1	2	4	21	32	4.4	0.8	High
		%	0.7	3.4	6.8	35.6	32			
B12	I use mouth and nose when not feeling well	F	13	1	5	15	25	3.6	1.6	Middle
		%	22	1.7	8.5	25.4	42.4			
B13	I use different cutters according to the type of food to prevent cross contamination	F	10	15	6	15	13	3.1	1.5	Middle
		%	16.9	25.4	10.2	25.4	22			
AVERAGE								3.6	1.2	Middle

3.2 Factors that Prevent Food Operators from Attending Food Handling Courses

Table 3 shows the factors that prevent the food handler from attending the food handling course are at a moderate level based on the overall mean score obtained ($M=3.47$). The highest percentage of strongly agreeable items (54.2%) was in question number 10, which I feel that the food handling courses are not important because there is no regular inspection by the authorities. This is because many of these food handlers feel they are safe because there is no inspection by the parties involved. However, if a raid is made, and it is found that the food handler does not have a Food Control Course Certificate and Typhoid injection, they can be sentenced to a maximum of 2 years and a fine not exceeding RM10 thousand. Most of them give reasons for not knowing about food handling courses, no vehicles, no support from employers and people around, no transportation to go to the food courses, no money and so on.

Table 3: The min score for section C

Item	Item statement		Score					Mean	SD	Interpretation of mean
			1	2	3	4	5			
C1	I do not have the money to attend a food handling course	F	19	3	3	20	14	3.1	1.6	Middle
		%	32.2	5.1	5.1	33.9	23.7			
C2	I have no information about attending a food handling course	F	4	6	6	24	19	3.8	1.2	High
		%	6.8	10.2	10.2	40.7	32.2			
C3	I am a part-time worker	F	51	0	0	0	8	1.5	1.4	Middle
		%	86.4	0	0	0	13.6			
C4	I didn't get any encouragement from my employer to attend a course on food handling	F	3	4	12	20	20	3.9	1.1	High
		%	5.1	6.8	20.3	33.9	33.9			
C5	I have no motivation from anyone around to attend the course	F	7	1	6	13	13	3.7	1.2	High
		%	11.9	1.7	10.2	22	22			
C6	I consider this course to be unimportant	F	9	3	15	29	13	3.4	1.3	Middle
		%	15.3	5.1	25.4	49.2	22			
C7	I have no free time	F	5	1	7	17	29	4.1	1.2	High
		%	8.5	1.7	11.9	18.8	49.2			
C8	I feel that food handling courses are not a requirement for food vendors	F	6	4	6	26	17	3.8	1.2	High
		%	10.2	6.8	10.2	44.1	28.8			
C9	I had trouble transporting to a food handling course	F	9	4	20	16	10	3.2	1.2	Middle
		%	15.3	6.8	33.9	27.1	16.9			
C10	I feel that the food control course is not important because there is no regular inspection by the authorities	F	0	8	7	12	32	4.2	1.1	High
		%	0	13.8	11.9	20.3	54.2			
AVERAGE							3.5	1.2	High	

3.3 Relationship between Food Operator Awareness of Food Handling Courses and Factors that Prevent the Operator from Attending the Course

- i. Ho¹: Is there no significant relationship between food handler awareness of food handling courses and factors that prevent handlers from attending food handling courses among food handlers?
- ii. Ha¹: Is there a significant relationship between food handler awareness of food handling courses and factors that prevent handlers from attending food handling courses among food handlers?

Table 4: Relationship Strength by Correlation Value.

Correlation Index Value	Interpretation of Relationships
0.00 – 0.20	Very weak
0.21 – 0.40	Weak
0.41 – 0.70	Not too much strong
0.71 – 0.90	Strong
0.91 -1.00	Very strong

Table 5: The Relationship Between Food Control Awareness to Food Handling Courses and Factors that Prevent Operators to Attend the Handling Course.

		Awareness	Factors
Awareness	Pearson Correlation	1	.021
	Sig. (2-tailed)		.873
	N	59	59
Factors	Pearson Correlation	.021	1
	Sig. (2-tailed)	.873	
	N	59	59

Table 5 shows the relationship between the level of food operator awareness of the course of food handling and the factors that prevent the operator from attending the course. $0.873 > 0.005$, there was no significant relationship between the level of consciousness and inhibitory factors. Therefore, H_0 was rejected.

3.4 Implication

In the future, it is advisable to extend the scope of the study to a larger number of samples. This study focuses only on the food handlers at Kg Lemal Pasir Mas. Researchers recommend that future studies use interview and observation methods to collect data. Interviews are carefully made for restaurant managers only. Future research is also can Interviews be made to the government such as the District Council office.

4. Conclusion

The findings and the results of these discussions can be concluded here that food handlers in Pasir Mas, Kelantan appeared in a middle awareness of the Food Handling Course. All of this modest awareness gives the impression that food operators in this area should improve their knowledge and practice on food safety, which is presented to the average local customer.

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