KNOWLEDGE RELATED TO HYGIENE FOOD MANAGEMENT SITES

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ABSTRACT

Hygiene and food sanitation issues at the Port of Tanjung Perak Surabaya are essential issues. At Tanjung Perak Port, Surabaya, there is a place where food management is not feasible. This study aimed to determine the relationship between knowledge with food management hygiene in the Port of Tanjung Perak, Surabaya. The type of research used in this study is an analytic survey with a cross-sectional approach. This study's population was all food handlers in the buffer area, and in the perimeter area of Tanjung Perak Surabaya, there were 216 people. The research sample was taken by random cluster sampling with a sample size of 141 people. The data analysis used is a chi-square analysis. The results showed that almost all (89.4%) knowledge of food handlers was lacking, and the food management area's hygiene was almost entirely (92.9%) not feasible. Experience related to food hygiene management with a significance of 0.001 (<0.05). Knowledge related to hygiene in food management in Tanjung Perak Port, Surabaya. Suggestions that can be given are conducting training and increased supervision/inspection of food management sites.

Keywords: hygiene food; knowledge; management sites food

INTRODUCTION

Hygiene and sanitation problems in Indonesia are essential issues. Food is one of the basic human needs that play a role in improving human health and well-being. Hygiene and sanitation from food management can cause foodborne disease. Tanjung Perak Port Surabaya is the second busiest port in Indonesia and is the main port in Indonesia's eastern part. Based on the annual report obtained from the Surabaya Port Health Office, as many as 95 food processing places located in the Tanjung Perak Port of Surabaya, 2016 was included as a feasible category based on Minister of Health Number 1098 of 2003 concerning restaurant and restaurant hygiene and sanitation requirements. Food management sites included in the possible category in 2017 declined by 78 food processing places, including the ineligible sort of 95 food processing places at Tanjung Perak Port (Kemenkes RI, 2003).

Tanjung Perak is a port where trade and sea transportation make this port the second busiest port in Indonesia, after Jakarta's Tanjung Priok port. The port of Tanjung Perak is the gateway to support the economy in East Java. Therefore, due to the rapid trade in the port area, many people who are active in port areas need to be protected by their health. One of them is maintaining and improving food and beverage quality in the port area to avoid food contamination that can harm health.

Several factors that affect hygiene and sanitation in food management are individual and environmental. Personal factors include knowledge. Knowledge of food handlers has a close relationship with hygiene in canteen sanitation facilities. Consistent with another research there is a relationship between food handlers' experience and hygiene and food sanitation by
the statement of behavior or practice is based on knowledge, awareness, and positive attitudes then the action will be right (Chusna, 2014). Conversely, if the behavior is not based on experience and understanding, it will not last long (Chusna, 2014). This study aimed to determine the relationship between knowledge with food management hygiene in the Port of Tanjung Perak, Surabaya. The type of research used in this study is an analytic survey with a cross-sectional approach. The type of research uses an analytical survey with an approach cross-sectional.

**METHOD**

The type of research uses an analytical survey with an approach cross-sectional. Variables studied included knowledge, environment, and hygiene of food management sites. Samples method with probability random sampling. The population in this study were all food handlers at the Port of Tanjung Perak Surabaya. The people in this study were 216 people and a total sample of 141 respondents. The research was carried out from February to March 2019.

Primary data obtained from the research instruments used a questionnaire that included knowledge, location and building, facilities and sanitation, kitchen, dining room, food storage, and food and food storage. In comparison, secondary data was obtained from the annual Port Health Office (KKP). The data analysis used is a chi-square analysis. This research has passed the ethical test with letter number 033/ EC/KEPK/UNUSA/2019.

**RESULTS**

Table 1, it was informed that almost all (89.4%) respondents have poor knowledge in the area buffer or the port perimeter area. The study results show that nearly all respondents have a poor experience in the buffer area or the port perimeter area because they have a basic education level. It can be interpreted that respondents at the primary education level lack mindset and ignorance about food management's hygiene to affect respondents' knowledge.

Table 2 was informed that the food management site at Tanjung Perak Port Surabaya is almost entirely (92.9%), including non-feasible categories in the area buffer and the perimeter region. Food management sites in the Tanjung Perak Port of Surabaya are almost entirely ineligible both in the buffer zone and in the perimeter region.

Table 3 can be informed that the less knowledge the respondents have, the food management site's hygiene is less feasible. Conversely, the better the respondent's experience, the food management site's hygiene will be better. The results of statistical tests using the chi-square test with a significance level of $\alpha = 0.05$ obtained the significance of fisher's exact test 0.001 <0.05, which means a significant relationship between knowledge and hygiene in food management at the Port of Tanjung Perak Surabaya.

**DISCUSSIONS**

Knowledge

The study results show that almost all respondents have poor knowledge in the buffer area or the port perimeter area because they have a basic education level. It can be interpreted that respondents at the primary education level lack mindset and ignorance about food management's hygiene to affect respondents' knowledge. The higher the level of education of a person, the easier it will be to receive and capture the information needed by a person and increase his knowledge (Notoatmodjo, 2012). The higher the education that is owned, the better the compliance behavior. Conversely, the lower the education they have, the greater the tendency for negative behavior (Swamilaksita & Pakpahan, 2016).
Respondents who have insufficient knowledge are caused by mistakes in answering questions about storing food ingredients, storing food equipment, and personal protective equipment (masks, headgear) when processing food. This is because of the ignorance and mindset of respondents about the hygiene of food management sites. The factors that influence respondents' knowledge in the Port of Tanjung Perak Surabaya are education levels.

Gender factors can affect the accuracy and tidiness of doing a job (Yulia, 2016). Sanitation hygiene in the storage and processing of foodstuffs is still in the poor category. This is due to the low level of education and lack of learning or special knowledge about hygiene, sanitation, storage, and foodstuff processing. Age factors can affect a person's level of expertise. Increasing a person's age can affect increasing their knowledge, but at a certain age or before old age, the level of knowledge decreases (Assidiq et al., 2019).

**Food Management Hygiene**

Food management sites in the Tanjung Perak Port of Surabaya are almost entirely ineligible both in the buffer zone and in the perimeter region. Food management is not feasible because it does not meet Kepmenkes requirements Number 1098 of 2003 concerning restaurant and restaurant sanitation hygiene requirements. This is based on the food processing location in the wind's direction from sources of pollution (dust, smoke, and odor). Other variables that do not meet the requirements are no division of space (warehouse of equipment and food ingredients), lack of lighting, slippery floors, and hollow ceilings (Kemenkes RI, 2003).

Also, in terms of personal hygiene variables, employees generally do not use PPE like masks. So that unconsciously, bacteria can spread to food by mouth. Because the mouth is one of the nesting places for bacteria, it is better to use a mask and not talk much when processing food (Fatmawati et al., 2013). Facilities that have not been fulfilled are the unavailability of handwashing places, which can cause food handlers to seldom wash their hands before or after processing food. Because washing hands can minimize the transmission of bacteria from the hand of food handlers to food and prevent contamination of food.

| Table 1. Distribution of Respondents Based on Knowledge with Food Handlers (n=141) |
|----------------|----------------|----------------|----------------|
| Food Handlers | Knowledge      |                |                |
|               | Total          | Less           | Well           |
|               |               | f %            | f %            | f %            |
| Buffer region | 38            | 80,9           | 9              | 19,1           | 47            | 100           |
| Perimeter region | 88        | 936,           | 6              | 6,4            | 94            | 100           |

| Table 2. Distribution of Hygiene Food Management Sites with TPM Areas (n=141) |
|-------------------------------|----------------|----------------|----------------|
| Food Management Site          | Hygiene TPM    |                |                |
|                               | Not feasible   | Feasible       | Total          |
|                               | f %            | f %            | f %            |
| Buffer region                 | 39            | 83,0           | 8              | 17,0           | 47            | 100           |
| Perimeter region              | 92            | 97,9           | 2              | 2,1            | 94            | 100           |
Table 3.
Distribution of Knowledge Relations with Hygiene Food Management Sites (n=141)

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Hygiene TPM</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not feasible</td>
<td>Feasible</td>
</tr>
<tr>
<td>Less</td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td>126</td>
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<td>Well</td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>33,9</td>
</tr>
</tbody>
</table>

Significance: 0,001 (<0,05)

**Phi** : 0,801

**Relationship between Knowledge with Hygiene in Food Management Sites**

This study's results are consistent with the research, which states that there is a relationship between the knowledge of food handlers and the quality of canteen sanitation facilities at Semarang State University (Chusna, 2014). The better understanding from respondents about the importance of maintaining the quality of canteen sanitation facilities, the less likely food contamination occurs in the canteen (Chusna, 2014). This study also showed similar results with the other research, which stated that there was a significant relationship between knowledge with street food hygiene sanitation conditions in the work area of Aur Duri Kota Jambi Health Center in 2014 with a significance of 0.02 (<0.05).

The low respondent's knowledge, among others, was that the respondents did not know that there should be enough trash. The respondents also did not realize that food handlers were an essential component in processing and serving food. Furthermore, respondents did not see those food handlers should wear headgear and an apron, not chatting, and not smoking when handling and serving food (Marinawati, 2015).

Based on the presence or absence of a relationship, this study's results are the same as other studies showing an association between attitude variables and food handlers' behavior (Mulyani, 2014). The factors that influence the formation of attitudes are personal experience, the influence of other people who are considered critical, culture, mass media, educational institutions and religious institutions, and emotional factors (Azwar, 2013).

The correlation between the two variables is quite strong. This shows that one of the factors that can influence food handlers' hygiene behavior is knowledge. In line with the research results stating that knowledge affects the hygiene behavior of food handlers (Avriliana, 2016). Likewise, other studies state that there is a positive correlation between knowledge and behavior (Miranti & Adi, 2018). The knowledge of good food handlers supports a positive attitude to apply hygiene and sanitation principles in proper and correct food management. There is a strong correlation between knowledge of food safety and food handler behavior (r = 0.406. P <0.01) (Sanlier & Konaklioglu, 2012).

**CONCLUSION**

The respondents' knowledge in the Tanjung Perak Port of Surabaya almost entirely (89.4%) had less experience. Nearly all food hygiene management places (92.9%) including not feasible. Knowledge relates strongly to food management's hygiene in the Port of Tanjung Perak Surabaya with a significance value of 0.001.

**REFERENCES**


