The relationship between cadre's capacity and assessing to the fast food seller's performance in food hygiene and sanitation in Mokoau Primary Health Care, Kendari City

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Abstract
Kendari city had serious issues related to emerging a hundred of fast food sellers in 2017, including in Mokoau Health Centre area. However, there were only two health environmental staffs in that health care centre. Therefore, involving cadres in the fast food control become necessary. This study aimed to analyse the relationship between cadre’s capacity and assessing to the food seller’s performance in food hygiene and sanitation management in Mokoau Health Centre in Kendari City since March 2019. There were 15 active cadres who controlled 35 fast food sellers. This study used the One-Group Pretest-Posttest Design. Data analysis used Paired T-test, Mann-Whitney test and Chi-Square test. This study found that 93.3% cadres had a Bachelor degree. There were majority of cadres have got training about food has been understood clearly. Besides that, there are only two health environmental workers in Mokoau Health care centre who have responsibility to supervise and control food traders. Therefore, involving volunteers from the community became important. However, the mechanism to involve them must be formulated, especially the capacity of the volunteers. This is because person who can control food must understand about food hygiene and sanitation management. Hence, the volunteer from communities shall have skill and knowledge related to that criteria. Therefore, the relationship between the capacity and ability to assess the fast food traders performance become this study question.

Based on that question, the aim of this study is to analyse the relationship between cadre’s capacity and assessing to the fast food seller’s performance in food hygiene and sanitation management in Mokoau Health Centre in Kendari City.

Materials and Methods
This study was conducted in Mokoau Health Care Centre for seven months, from March to September 2019. There were 15 active cadres who controlled 35 fast food sellers. This Quasy experimental study used One-Group Pretest-Posttest Design. The sampling technique used the purposive sample with the inclusive criteria of sample were active cadre available in the village and there were many fast food traders surrounding their houses. The researcher...
excluded the communities who were no active in the social activity and there was no or limited the fast food traders surrounding their houses. The cadres were informally trained for two days about the principles of food hygiene and sanitation management, assessing method, and health promotion. They were also supervised and were given informal training for 3 months to increase knowledge and skill regarding to assessing and health promotion to sellers.

Independent variable of cadre’s capacity was represented with educational level, duration of being social health workers, and the number of trainings. Dependent variable was assessing for fast food seller’s performance in hygiene and sanitation management. There were category of scoring of the food seller’s performance in Hygiene and Sanitation Management. The food seller’s performance was categorized “Good”, if the total score was more than 667 (≥667). The medium category of the seller’s performance, if the total score was between 334-666. The seller’s performance was categorized “Less”, if the total score was under than 333 (<333). Data was collected through scores which were collected by the 15 women volunteers with Observational sheets.

Data analysis used descriptive and inferential analyses. Descriptive analysis was to understanding percentage and distribution of the cadre’s educational level, duration being social health workers and the number of trainings. Also, the distribution of fast food trader’s performance related to their food hygiene and sanitation management. The inferential analysis was to understand the relationship between the cadre’s capacity and assessing of the fast food trader’s performance regarding food hygiene and sanitation management. The statistical analysis used Paired T-test, Mann-Whitney test and Chi-Square test.

### Results and Discussions

This study recruited 35 fast food traders in Mokoau Health Care Centre area. Since March 2019, the 35s fast food traders were supervised by 15 health cadres in that area. Each cadre supervised about 1-3 fast food traders based on the availability of the fast food traders and the distance between cadre’s house and the location of fast food traders. There are many kind of fast food which are sold, such as: cake, fried banana, side of fish, meat, chicken, meat ball, yellow rice, saute vegetables, fried noodle and fried eggs.

The 15s cadres have various capacity related to educational level, duration being social health workers and the number of trainings received. Detail of the cadre’s capacity is presented in Table 1 below:

| Educational Level | n | %  | Mean  | Standard Deviation |
|-------------------|---|----|-------|--------------------|
| Senior High School | 14| 93.3| 576.80| 107.281            |
| Bachelor          | 1 | 6.7 | 417.77| 83.892             |

### Table 1. Distribution of characteristic of cadre’s capacity who involves in fast food control in Mokoau Health Care Centre Area in 2019.

### Table 2. The difference of the seller’s performance in food hygiene and sanitation management between the first and the second assessing by cadres in Mokoau Health Care Centre in 2019.

| Seller’s Performance | n  | Mean  | Standard Deviation | Confidence 95% interval Lower | Confidence 95% interval Upper | P value* |
|----------------------|----|-------|--------------------|-------------------------------|-------------------------------|---------|
| The 1st Assessing    | 35 | 576.80| 107.281            | -69.203                       | -12.740                       | 0.006   |
| The 2nd Assessing    | 35 | 617.77| 83.892             |                               |                               |         |

*Paired t-test.
better means to evaluate fast food traders in terms of personal communication.

Cadre’s experiences in social activities, especially in health program gave significant effect on the fast food trader’s performance assessing (P=0.003) (Table 4). Cadres with social experiences inferior to 4 years gave trader’s performance assessing higher score on average (24.29) than cadres with more than 5 years in the social experience. People with more experience in the communities may have high expectation of fast food trader’s performance in term of food hygiene and sanitation management. As we know that the role of the cadre is providing health education and connecting people with health care services. Therefore, they had rigid justification of assessing for fast food trader’s performance. This will give beneficiary to the quality of sold fast food. This is because the cadres will have high motivation to give intensively health education to the fast food traders. Eventually, the condition will prevent the food borne diseases, including diarrhoea, typhus or hypertension of the chronic diseases. Furthermore, this study found that the number of training which was gotten cadres had significant association with assessing cadres to the fast food seller’s performance in Mokoau Health Care Centre Area in 2019.

Table 3. The relationship between cadre’s education and assessing the seller’s performance in Mokoau Health Care Centre Area in 2019.

| No | Cadre’ Education       | n   | %     | Mean Rank | Sum of Ranks | Z*   | P value* |
|----|------------------------|-----|-------|-----------|--------------|------|----------|
| 1  | Senior High school     | 32  | 91.4  | 16.53     | 529.0        | -2.770| 0.006    |
| 2  | Bachelor               | 3   | 8.6   | 33.67     | 101.0        |      |          |
|    | Total                  | 35  | 100.0 |           |              |      |          |

*Mann-Whitney U test.

Table 4. The relationship between duration of cadre in social activities and assessing the seller’s performance in Mokoau Health Care Centre Area in 2019.

| No | Duration of Cadre in Social Activities | n   | %     | Mean Rank | Sum of Ranks | Z*   | P value* |
|----|----------------------------------------|-----|-------|-----------|--------------|------|----------|
| 1  | <4 years                               | 14  | 40.0  | 24.29     | 340.0        | -2.964| 0.003    |
| 2  | >5 years                               | 21  | 60.0  | 13.81     | 290.0        |      |          |
|    | Total                                  | 35  | 100.0 |           |              |      |          |

*Mann-Whitney U test.

Table 5. The relationship between the number of training and assessing the seller’s performance in Mokoau Health Care Centre Area in 2019.

| Number of Training | The Difference of Trader’s performance | Fisher’s Exact Test* |
|--------------------|----------------------------------------|----------------------|
|                    | Reduce | %     | Increase | %     | Total | %     |        |
| <15 times          | 3      | 10.0  | 27       | 90.0  | 30    | 100.0 | 0.026  |
| >16 times          | 3      | 60.0  | 2        | 40.0  | 5     | 100.0 |        |
| Total              | 6      | 17.1  | 29       | 82.9  | 35    | 100.0 |        |

*Chi square test.

Conclusions

The capacity of cadre who involved becomes important to make the right assessing for performance of the fast food sellers. Higher educational status of cadres who involve in the fast food control will give beneficiary to increasing the quality of fast food and seller’s performance. The cadres who will be involved in this program are not necessary they must be active in social activity more than 4 years. They can be trained further to understand how they can assess rightly in term of fast food seller’s performance of hygiene and sanitation management. The right assessing becomes very important to achieve the goal in this program. This program is expected to increase the quality of fast food hygiene and sanitation management. Eventually, this condition will reduce the food borne diseases, such as diarrhoea and typhus. Finally, the high quality of fast food consumed by communities will increase public health status in Mokoau Health Care Centre Area, especially.

This study was supported by other previous which argued that the food seller’s behaviour became so important to their sold clean and healthy food. Health promotion which was conducted by the Cadres to increase the food seller’s knowledge about food hygiene and sanitation management become significant aspect to increase the quality of food. Increasing the seller’s knowledge affected to their practices relating to food management. Good management of the food sellers affect significantly to reduce bacterium of *Escherichia coli*. Increase the quality of food brings significantly to the seller’s income because it increases customer’s satisfaction.

Based on this finding, the health government, especially primary health care centres have responsibility to provide trainings to community volunteers or cadres. The special training of cadres can include the principle of food hygiene and sanitation management and technique of assessing the fast food trader’s performance. Supervision of health environmental staff in Primary Health Care to cadres should be conducted to empower the cadres as a fast food controller.

Implication for Public Health Policy and Programs

This program should be included in the health program planning to solve the food

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borne diseases and chronic diseases related to food quality at the provincial level of Southeast Sulawesi especially. The program can be training for the cadres about the principle of food hygiene and sanitation management. A guide book for cadre about the principle of food hygiene and sanitation management must be provided. Furthermore, health promotion in the various types of media should also be implemented by health departments.

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