The Relationship Between Sanitation of Tableware and Germ Numbers at Indomie Food Stalls (Warmindo) Multatuli Area of Medan City

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ABSTRACT
Cleanliness of cutlery is a very important part and affects the quality of food and drinks. Poor hygiene of food equipment will have an important role in the growth and proliferation of germs, the spread of disease, and poisoning. Several things must be considered to maintain the condition of cutlery including requirements for cutlery, equipment washing and drying techniques, and sanitation for storing cutlery. The purpose of this study was to determine the relationship between tableware sanitation and germ rates at Indomie (Warmindo) food stalls in the Multatuli area of Medan City. This research method uses cross-sectional. The population in this study were 30 Indomie Food Stalls (Warmindo) and 10 Indomie Food Stalls (Warmindo) were taken which used 3 types of cutlery, namely bowls, spoons, and glasses with certain conditions. Statistical test using chi-square with the help of computer software. The research location was conducted at the Indomie (Warmindo) food stall located on Jln. Multatuli, Kec, Medan Maimun, Medan City, North Sumatra. This study produced a p-value (bowl, 0.197) (spoon, 0.053) and (glass, 0.197), for cutlery storage sanitation (bowl, 0.035) (spoon, 0.260) and (cup, 0.429). This study concludes that for the sanitation of cutlery, the result is that there is no relationship between the sanitation of cutlery and the number of germs. For the technique of washing cutlery, the result is that there is no relationship between the technique of washing cutlery and the number of germs. For the sanitation of storing cutlery in cutlery (bowls) there is a relationship between the sanitation of storing cutlery, and the number of germs, while for spoons and glasses, there is no relationship between storage sanitation and germ numbers. Suggestions are expected for Indomie Food Stall traders (Warmindo) to always maintain and improve the level of cleanliness in serving food.

Keywords: Germ Count, Sanitation Cutlery

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INTRODUCTION
One of the main and most basic needs for humans is food commonly referred to as primary needs. A healthy diet can guarantee good growth for individuals. Food is also a very important thing in human life because food serves to provide energy or heat energy to the body, build new body tissues, regulate and protect the body against disease, and as a source of replacement for old cells that have been damaged by age. Food has
a role to play in the spread of a wide variety of diseases. Diseases caused by contamination of food are known as foodborne diseases (Nurmawati et al. 2019).

According to data from the United Nations website, it is estimated that around 420,000 people die each year due to consuming contaminated food. According to the report of the Food and Drug Supervisory Agency (BPOM), poisoning cases that occur due to food in 2019 are as much as 474 cases. Cases of poisoning caused by food according to the BPOM report in 2019 were 474 cases. In Indonesia, based on the Annual Report of the Food and Drug Information Data Center in 2021, there have been 50 cases of outbreaks (Extraordinary Events) due to food poisoning, accumulatively 2,569 people were exposed, 1,783 people experienced symptoms of the disease and 10 people died of iceberg phenomena because many cases occurred with mainly cases with mild symptoms that occurred but were not reported.

Based on Permenkes No. 304 of 1989 concerning Health Requirements for Restaurants and Restaurants, equipment that is in direct contact with ready-to-serve food must not contain germ numbers that exceed the threshold, and must not contain E. Coli per cm² of water surface. The requirements for this tableware have also been set by Permenkes RI No.1096/Menkes/PER/VI/2011 that the limit of health requirements for the number of germs on tableware is 0 colonies/cm². The surface of the appliance should not contain E.coli. Therefore, it is important to supervise tableware considering the large influence of the cleanliness of tableware on the sanitation of the food we consume.

The Multatuli area is one of the interesting public places to visit in Medan City. Multatuli is favored by all ages, both teenagers and adults as a place used to gather or relax. One of the most crowded places in the Multatuli area is Warung Makan Indomie often shortened to Warmindo which is located on Jln. Multatuli, Kec, Medan Maimun, Kota Medan, Sumatera Utara.

RESEARCH OBJECTIVES

General Purpose :

The general purpose of this study is to determine the relationship between sanitary tableware and germ numbers in Indomie (Warmindo) food stalls in the Multatuli area of Medan City.

Special Purpose :

1. Identify Santas Warmindo tableware (Indomie food stall) in the Multatuli area of Medan City.
2. Identifying the washing technique of Warmindo tableware (Indomie food stalls) in the Multatuli area.
3. Identify sanitation storage of Warmindo tableware (Indomie food stall) in the Multatuli area.
4. Identifying the number of germs of Warmindo tableware (Indomie food stalls) in the Multatuli area.
5. Knowing the relationship between cutlery sanitation and the number of Warmindo tableware germs (Indomie food stalls) in the Multatuli area.
6. Knowing the relationship between tableware washing techniques and the number of Warmindo germs (Indomie food stalls) in the Multatuli area.
7. Knowing the relationship between sanitary storage of tableware with the number of germs of Warmindo tableware (Indomie food stalls) in the Multatuli area.

RESEARCH METHODS

This research is a quantitative research that is analytical observation, because this study leads to explain the causal relationship between two variables. The design of this study was cross-sectional.

The population is the entire research subject to be studied. The population in this study is all traders from Indomie Food Stalls (Warmindo), which is as many as 30 Indomie food stalls (Warmindo). The sampling technique used in this study is purposive sampling technique. The purposive sampling technique is a random sampling methodology in which the targeted sample group has certain attributes. The samples taken in this study were 10 Indomie food stalls (Warmindo) with 3 types of tableware, namely bowls, spoons, and glasses that had criteria.

This research was conducted at the Indomie food stall (Warmindo) located on Jln. Multatuli, Kec, Medan Maimun, Medan City, North Sumatra. This research will be conducted in January - July 2023.
RESULTS AND DISCUSSION

Variable Univariate Result Data

1. Results of Sanitary Assessment of Tableware
   - Table 4.1 shows that all bowl cutlery (100%) have appropriate sanitary conditions of the bowl. Table 4.2 shows that spoon cutlery entirely (100%) has appropriate sanitary conditions of cutlery (spoons). Table 4.3. Indicates that all bowl tableware (100%) has appropriate sanitary conditions of tableware (glass).

2. Assessment Results of Tableware Washing Techniques
   - Table 4.4. This shows that the washing technique of bowl tableware is still poor because judging from the table only 1 (10%) with the appropriate washing technique. Table 4.5. Demonstrate that the technique washing of cutlery (spoon) belongs to the good category as much (80%) with an appropriate washing technique. Table 4.6. Shows that the technique of washing cutlery (glassware) with suitable conditions is as much as (50%) and with inappropriate conditions (50%).

3. Results of Sanitary Assessment of Tableware Storage
   - Table 4.7. Show that sanitation storage equipment eat bowls with as many as the category does not fit as much as. Table 4.8 shows that the nation of tableware storage with the appropriate category as much as (60%) and has sanitary conditions for storing cutlery (spoons) in the inappropriate category (30%). Table 4.9 shows that sanitization of cutlery storage (glass) with the appropriate category as many (60%) and sanitary conditions of storage of cutlery (spoons) in the non-conforming category (40%).

4. Result Valuation Angka Tableware germs
   - Table 4.10 shows that in tableware (Bowl) there is the highest number of germs as much as 37cm2. Table 4.11 shows that the results of laboratory testing show that the number of germs in cutlery (bowls) with categories matches as much (40%) and with categories do not match as much (60%). Table 4.12 shows that in Tableware (Spoon) there is the highest Number of Germs as much as 32cm2. Table 4.13 Shows the Result from testing in the laboratory that numbers germs on cutlery (spoons) with appropriate categories as many as (60%) and with inappropriate categories as many as (40%). Table 4.14 shows that on Tableware (Spoon) there is the highest number of germs as much as 32cm2. Table 4.15 shows the results of laboratory tests that the number of germs in cutlery (glass) with the corresponding category as much as (40%) and with the category does not match as much (60%).

Bivariate Data of Research Variables

1. The relationship between the sanitation of tableware and the number of cutlery germs.
   - Judging from table 4.16 shows that there is no relationship between the sanitation of eating utensils (Mangkuk) and the Germ Number because the overall results are in the appropriate category. The results from Table 4.17 show that there is no relationship between sanitary ware, tableware (spoons), and germ numbers because all of the results are in the appropriate category. The results from Table 4.18 show that there is no relationship between the sanitation of cutlery (glass) and the germ number because all of the results are in the appropriate category.

2. The relationship between sanitation of tableware washing techniques with the number of cutlery germs.
   - Judging from table 4.19 shows that there is no relationship between the technique of washing tableware (Mangkuk) and the Germ Number because the p-value> 0.05. Judging from table 4.20 shows that there is no relationship between the technique of washing tableware (spoon) and the Germ Number because the p-value> 0.05. Judging from table 4.21 shows that there is no relationship between the technique of washing tableware (glass) and the Germ Number because the p-value> 0.05.

3. The Relationship of Sanitary Tableware Storage with the Number of Germs on Tableware
   - Judging from table 4.22 shows that there is a relationship between sanitary storage of tableware (Mangkuk) and the Germ Number because the p-value < 0.05. Judging from table 4.23 shows that there is no relationship between the technique of washing tableware (spoon) and the germ number because the p-value> 0.05. Judging from table 4.24 shows that there is no relationship between the technique of washing tableware (glass) and the germ number because the p-value > 0.05.
CONCLUSION

The results of research conducted with 10 Indomie Food Stalls (Warmindo) with 3 types of tableware, namely spoons, bowls, and glasses about the relationship between sanitary tableware and germ numbers at Indomie Food Stalls (Warmindo) Multatuli Area Medan City show that:

1. The results of the study showed that all of the tableware namely bowls, spoons, and glasses had 100% good sanitary condition of tableware.

2. The results of the study showed that the washing technique of eating utensils (bowls) was still poor because only 1 (10%) with the appropriate washing technique. Tableware (spoons) is included in the good category because there are (80%) have appropriate washing technique conditions. Glass tableware is included in the good category because there are 5 (50%) have appropriate washing technique conditions.

3. The results of the study showed that the sanitation of tableware storage, namely bowls, was included in the good category because there were 6 (60%) had appropriate sanitary conditions for eating utensil storage. Spoon tableware is included in the good category because there are 7 (70%) have appropriate sanitary conditions for tableware storage. Glass cutlery is included in the good category because there are 6 (60%) have sanitary conditions suitable storage of tableware.

4. The results of the study showed that of the 3 types of tableware, namely (bowls, spoons, and glasses) there was no relationship between the sanitation of tableware and the number of germs.

5. The results of the study showed that for 3 types of tableware, namely (bowls, spoons, and glasses) there was no relationship between the technique of washing tableware with germ numbers.

6. The results of the study showed that for 3 types of tableware, namely (bowls, spoons, and glasses), on tableware (bowls) there was a relationship between sanitary storage of tableware with germ numbers, while for spoons and glasses, there was no relationship between sanitized storage with germ numbers.

REFERENCES


