

Analysis of Provision of KIE on Food and Beverage Sanitation Hygiene on Knowledge and Attitudes of the Unemployed and Underemployed in Kediri Regency

Panca Radono*, Nurwijayanti, Ema Mayasari, Laily Nurhanifah

Institut Ilmu Kesehatan STRADA Indonesia, Kediri, Indonesia

*Corresponding author: fiverado@gmail.com

ARTICLE INFO

Article history:

Received: 5th October 2022

Revised: 20th November 2022

Accepted: 3rd December 2022

Keywords:

Attitude

KIE

Knowledge

Sanitation hygiene

ABSTRACT

Food and drink can be contaminated which has an impact on the emergence of a disease. Contamination can cause food and drink to become a medium for a disease. Food-borne disease is a disease caused by contaminated food and drink. The purpose of this study was to determine the effect of giving IEC on food and beverage hygiene and sanitation on the knowledge and attitudes of the unemployed and underemployed in Batuaji Village, Kediri Regency, as many as 30 respondents. The results of this research activity indicate that the knowledge of the respondents is good. The results of the Wilcoxon test because the distribution of the data is not normal shows that there is no significant effect on the knowledge and attitudes of the respondents. But it has an average rating increase of 0.2 points. From the pre-test average of 9.5 to 9.7 in the post-test. So it can be concluded that this research has no effect on changes in the knowledge and attitudes of respondents.

I. Introduction

One of the human needs is food and drink that is useful for fulfilling human nutrition. In food and drink besides containing nutrients that can support needs but can contain microbes and germs that can multiply in the food and drink. Hazardous materials can come from various chemicals, pesticide residues, and other sources such as dust, soil, human hair which of course have an impact on the health of humans who consume these foods and beverages (RI, 2010).

Food and drink can be contaminated which has an impact on the emergence of a disease. Contamination can cause food and drink to become a medium for disease. Food-borne disease or foodborne illness is a disease caused by contaminated food and drink (Nurmawati, Prodjosowoyo, Chairunnisa, Djauhari, & Alisjahbana, 2019).

Food security problems are experienced by all countries in the world. According to WHO, it is estimated that 70% of the approximately 1.5 billion diseases that are transmitted through food (foodborne disease). Food poisoning is a cause of diarrheal disease and annually causes around three million deaths of children under the age of 5 years. Case in point in the United States there are an estimated 48 million cases of food poisoning each year. Based on data for 1998, the incidence of food poisoning in the United States resulted in 128,000 people being hospitalized and around 3,000 people dying. In 2000, there was also a major case in Japan, namely poisoning of dairy products produced by the company Snow Brand Milk Products Co., Ltd., which was contaminated with *Staphylococcus aureus* and resulted in more than 14,000 people being poisoned. Meanwhile in Indonesia, based on BPOM data for the period 2009-2013 there were an estimated 10,700 cases of food poisoning extraordinary



events and during that period, there were 411,500 sick people and 2,500 people died (Surono, Sudityo, & Waspodo, 2016: 19). On the other hand, conditions that endanger the health and lives of consumers after consuming unsafe food as described above, show that the position of society as consumers is still weak. This is due to the lack of information and knowledge about food that is safe for consumption and the impact that can occur if consuming food that is not safe.

For this reason, people need to get guaranteed protection every time they buy food products. Guaranteed protection for the community as consumers is an integral part of every business activity. Every good business activity must have legal protection efforts for consumers and producers in a balanced way. If the legal protection efforts are not balanced, it will harm one of the parties (usually the consumer). This imbalance in legal protection is prone to occur in limited product types. Producers can abuse their monopolistic position and in the end it is the consumers who suffer the most. For this reason, it is necessary to increase efforts to protect consumers so that consumer rights can be upheld (Hura, Njatrijani, & Mahmudah, 2016: 3).

Based on this description, food security is important for the survival of a nation and is part of human rights. However, we are still faced with problems surrounding the distribution of food that is not safe for consumption in society, even though formal legal arrangements have been made. This condition is an indication of the need for more attention from all parties involved in the implementation of food safety so that people as consumers can be protected from unsafe food, considering that the resulting effects can affect the quality of Indonesia's human resources (HR) in the future (Haryadi & Andarwulan, 2018:18).

II. Methods

Research Approach

This study used a quantitative method with a pre-test post-test design experimental research design. By providing treatment in the form of KIE on Food and Beverage Sanitation Hygiene to respondents. Respondents received pre and post questionnaires.

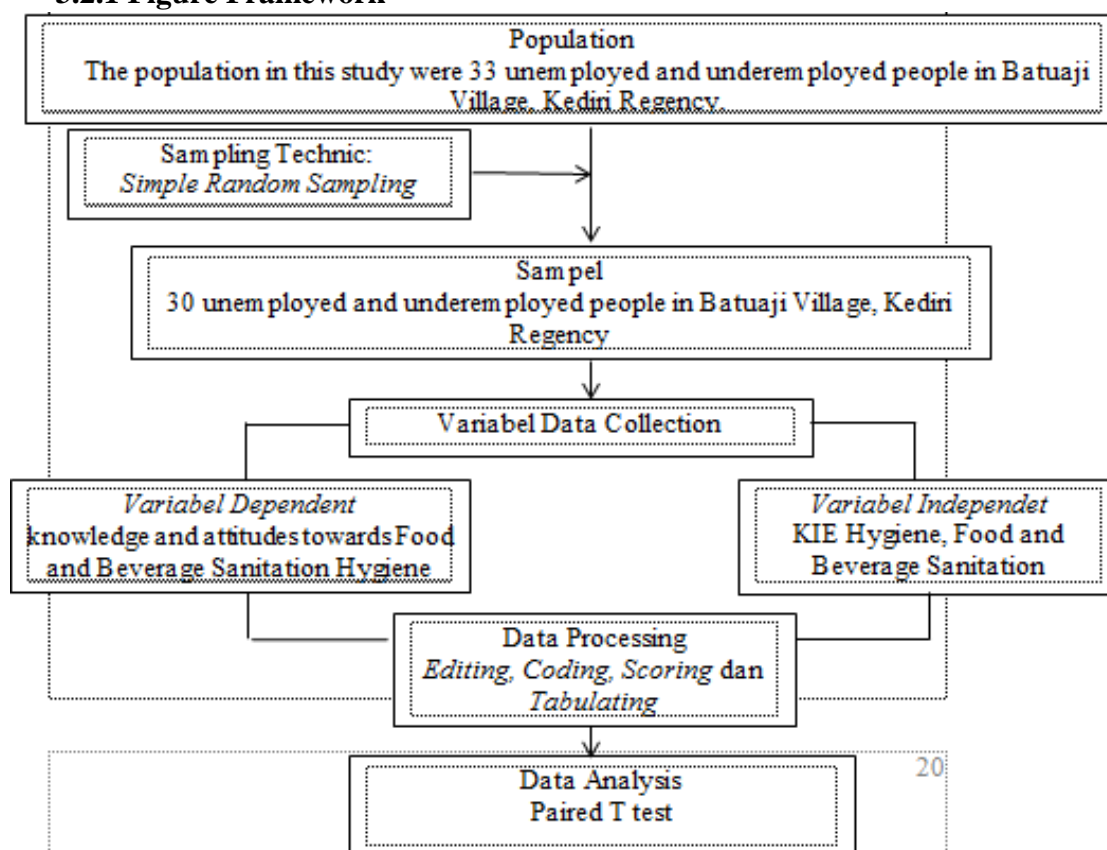
The Following is a research design table that will be used in this study

Table 3.1 Research Design

	Pre-Test	Perlakuan	Post-Test
Group	O1	X	O2
Description :			
O1	: Pre test		
O2	: Post test		
X	: Treatment given (KIE Hygiene, Food and Beverage Sanitation)		

3.2 Framework

3.2.1 Figure Framework



3.3.1 Population

The population in this study were 33 unemployed and underemployed people in Batujaji Village, Kediri Regency.

3.3.2 Sample

The sample in this study were 30 unemployed and underemployed people in Batujaji Village, Kediri Regency. Which was obtained using the slovin formula and the results obtained were 30 respondents.

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{33}{1 + 33 (0,05)^2} = 30$$

3.4 Research Design

This study used a quantitative method with an experimental research design (Pre test Post test Group Design).

The research design used in this study was that there was one group that was given a pre and post test questionnaire. After receiving the pre test, the respondents were given KIE food and beverage hygiene sanitation.

3.5 Research Variables

3.5.1 Independent Variables

The independent variable is the independent variable that affects the dependent variable. In this study, the independent variable was KIE Hygiene, Food and Beverage Sanitation (X).

3.5.2 Dependent Variables

The dependent variable is the dependent variable which is influenced by the independent variable. The dependent variable in this study is knowledge and attitudes towards Food and Beverage Sanitation Hygiene (Y).

3.6 Data Collection and Management**3.6.1 Research Materials and Instruments**

In this study using a research instrument in the form of a questionnaire regarding the hygiene and sanitation of food and beverages. Questionnaires were distributed offline to respondents.

To find out the validity of the instrument, it must be tested for validity. Validity test is a test used to measure the accuracy and validity of the instrument. Reliability testing begins with testing the validity first.

3.7.2 Time and Location of Research

This research was carried out in Batujaji Village in August 2022.

3.7.3 Data Collection and Test Procedures**Methods of Data Collection**

The method of collecting data in this study is to use a questionnaire given to respondents.

Data Type

The type of data in this study is in the form of primary data, namely those obtained from the results of a survey to Batujaji Village.

Test**Table 3.7 Validity Test**

Number	Pearson Correlation	R Table	Description
P1	0,494	0,51	Valid
P2	0,580	0,37	Valid
P3	0,555	0,006	Valid
P4	0,542	0,000	Valid
P5	0,450	0,000	Valid
P6	0,479	0,28	Valid
P7	0,471	0,34	Valid
P8	0,289	0,000	Valid
P9	0,339	0,000	Valid
P10	0,455	0,000	Valid

Source: SPSS Primary Data

Based on the results of the questionnaire instrument validity data above, it can be seen that there are 10 valid questionnaires that can be used for measurement in this study.

a. Ways of Data Analysis

To analyze the effect of KIE hygiene sanitation food and drink on the knowledge and attitudes of respondents using paired t test using the Statistical Program for Social Science (SPSS).

Univariate analysis

Univariate analysis is an analysis carried out on one variable that has no relationship with other variables. The purpose of this analysis is to describe the characteristics of each variable studied. (Notoatmodjo, 2012a)

In this study, univariate analysis was carried out to explain the characteristics of the respondents and each variable studied descriptively. These characteristics include age, education and occupation.

Bivariate Analysis

Bivariate analysis is an analysis used to compare similarities or differences between two variables. (Notoatmodjo, 2012a). In this study, bivariate analysis was conducted to test the effect of KIE on food and beverage sanitation hygiene.

Normality test

The normality test is a test used to find out whether data in a population is normally distributed or not. Normal data will minimize bias. It is said to be normal if the data has a sig value > 0.05 and it is said to be abnormal if the data has a sig value < 0.05 . In this study, a normality test was carried out showing a sig value of < 0.05 , which is equal to 0.000. It can be said that this research is not normal.

Table 3.8 Normality Test

Tests of Normality						
Kolmogorov-Smirnov ^a				Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PRE	,360	30	,000	,700	30	,000
POST	,429	30	,000	,623	30	,000

a. Lilliefors Significance Correction

Source: SPSS Primary Data

Wilcoxon test

The Wilcoxon test is used because after the normality test is carried out, the data is not normal. The Wilcoxon test is a test used to determine the difference between two groups of paired data on an ordinal scale or intervals that have non-normally distributed data.

III. Results and Discussion

4.1 Land General Description



Boundaries of Batujaji Village, Ringinrejo District

North	: Duwet Village, Wates District
South	: Deyeng Village, Ringinrejo District and Gembongan Village, District Ponggok, Blitar Regency
West	: Dawung Village, Ringinrejo District, Kediri Regency
East	: Gembongan Village, Ponggok District, Blitar Regency and Bedali Village Ngankar district

4.2 Characteristics of Respondents

Respondents in community service activities are community groups that will prepare businesses in the form of food businesses.

The characteristics of respondents based on education can be seen in the following table

Table 4.1 Characteristics of Respondents by Education

Education	SD	SMP	SMA	D3	Strata 1
Total	1	5	21	1	2
Prosentase	3%	15%	73%	3%	6%

Source: SPSS Primary Data

Respondents in this study were dominated by people with high school education. And there is one community that has the last elementary education.

4.3 Characteristics of Variables Variable characteristics

Tabel 4.2 Variabel characteristics by Education

Education	SD	SMP	SMA	D3	Strata 1
Total	1	5	21	1	2
Prosentase	3%	15%	73%	3%	6%

Source: SPSS Primary Data

From the field data obtained, it was shown that 21 respondents had an education dominated by high school education.

4.4 Knowledge of Respondents

Table 4.3 Knowledge of Respondents

Education	Median	Modus	Mean	Minimum	Maximum
Pre test	10	10	9,5	8	10
Post test	10	10	9,7	8	10

Source: SPSS Primary Data

Based on the results of the study, prior to conducting knowledge education, knowledge already had a good level of knowledge. After the implementation of education, the increase in knowledge increases, which can be seen from the average post-test results.

4.5 Research Instruments

4.5.1 Normality

The normality test is a test used to test whether the residual values have a normal distribution or not. A good model is a model that provides a residual value that meets the assumption of normality, namely $\text{sig} > \alpha$ (significant level = 0.05). The following is the normality test in this study using the Kolmogorov Smirnov.

Table 4.3 Normality Test

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PRE	,360	30	,000	,700	30	,000
POST	,429	30	,000	,623	30	,000

a. Lilliefors Significance Correction

Source: SPSS Primary Data

Based on the normality test that has been carried out, it shows that the research data has an abnormal distribution with a significant value of $0.000 < 0.005$. Therefore it is continued to use the Wilcoxon test.

4.5.2 Wilcoxon Test

Tabel 4.4 Wilcoxon Test

Ranks				
		N	Mean Rank	Sum of Ranks
POST - PRE	Negative Ranks	1 ^a	5,50	5,50
	Positive Ranks	5 ^b	3,10	15,50
	Ties	24 ^c		
	Total	30		
		a. POST < PRE		
		b. POST > PRE		
		c. POST = PRE		

Based on the results of these tests indicate that the value of the positive ranks is worth 5 which means the post test value is greater than the pre test value.

Test Statistics ^a	
	POST - PRE
Z	-1,081 ^b
Asymp. Sig. (2-tailed)	,279
a. Wilcoxon Signed Ranks Test	
b. Based on negative ranks.	

From the table of statistical test results for the Wilcoxon test, it was found that the asymp.Sig (2-tailed) value showed a result of 0.279. Which shows a value greater than 0.005. So with that it can be interpreted that there is no significant average difference.

In this study the aim was to determine the effect of giving KIE on food and beverage hygiene and sanitation on the knowledge and attitudes of the unemployed and underemployed in Kediri Regency. From the results of the research that has been done, it shows that the average education of the respondents is SMA/equivalent. Education can affect one's knowledge.

Education provided to increase respondents' knowledge through counseling using power point media. Which is done after the deployment of the pre test.

The results of the research based on the pre-test values are known to have good values. That is, the minimum value is 8 and the maximum is 10. While the average value is 9.5. This shows that knowledge is good and respondents have received information about hygiene and sanitation, both food and drink, from various sources. Such as from the internet or brochures distributed by related agencies.

With the pre-test results that were good enough, this research was not significant in influencing the attitudes and knowledge of the respondents.

According to the results of research that has been carried out on the readiness of the respondents in preparing hygienic food and beverage businesses. The Wilcoxon statistical test shows that there is no significant effect with a significant value of 0.000. But it has an average rating increase of 0.2 points. From the pre-test average of 9.5 to 9.7 in the post-test.

Increasing one's knowledge of sanitary hygiene is needed to support respondents in preparing businesses in the fields of light, heavy or beverage food.

With an increase in knowledge, it is hoped that the attitude of the respondents will also change for the better in the management of food and beverages that are more hygienic. With increased knowledge and attitudes, public health will also improve.

Contamination that can occur in food and beverages is biological, physical and chemical contamination. Contamination that often occurs in snack food traders is chemical and biological contamination. Chemical contamination that often occurs in rogue traders who deviate from using preservatives that are not allowed. Meanwhile, biological contaminants are less hygienic in protecting food and drink, so there are biological contaminants such as the presence of flies and bacteria that can cause disease in consumers.

Therefore it is important to provide education in order to improve attitudes towards food and beverage hygiene for business actors.

IV. Conclusion

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V. References

- Cholid Narbuko, A. A. (2009). *Metodologi Penelitian*. Jakarta: PT Bumi Aksara.
- Haryadi, P. & Andarwulan, N. (2018). Peningkatan Penjaminan Keamanan dan Mutu Pangan untuk Pencegahan Stunting dan Peningkatan Mutu SDM Bangsa dalam Rangka Mencapai Tujuan Pembangunan Berkelanjutan, Makalah Utama Kelompok Kerja 3 Widyakarya Nasional Pangan dan Gizi XI 2018, Jakarta, July 3–4, 2018.
- Hura, D. L., Njatrijani, R., & Mahmudah, S. (2016). Perlindungan Bagi Konsumen Terhadap Makanan Olahan Mengandung Bahan Berbahaya Di Jawa Tengah. *Diponegoro Law Journal*, 5(4), 1–18.
- Kesehatan, D. B. (2011). *Keputusan*. Jakarta: Menteri Kesehatan.
- Notoatmodjo, S. (2012b). *Promosi Kesehatan Dan Perilaku Kesehatan* (1st ed.). Jakarta: Rineka Cipta.
- Nurmawati, S., Prodjosoewojo, S., Chairunnisa, N. H., Djauhari, H., & Alisjahbana, B. (2019). Faktor Risiko Penyebab Foodborne Disease pada Siswa SD. *JSK*, 180-184.
- RI, D. (2010). *Modul Kursus Higiene Dan Sanitasi Makanan dan Minuman*. Jakarta: Dirjen PPM dan PL.
- Surono, S., Sudibyo, A., & Waspodo, P. (2018). *Pengantar Keamanan Pangan Untuk Industri Pangan*. Yogyakarta: Deepublish.
- Yuliana, E. (2017). Analisis Pengetahuan Siswa Tentang Makanan yang Sehat dan Bergizi Terhadap Pemilihan Jajanan di Sekolah. Retrieved from http://repository.ump.ac.id/4114/3/Erlin_Yuliana_BAB_II.pdf.
- Yulianto, Hadi, W., & Nurcahyo, J. R. (2020). *Hygiene, Sanitasi dan K3*. Yogyakarta: Graha Ilmu.