# Risk Factors for Dyspepsia Incidence in Community Aged 15-64 Years in Oesao Village, Oeaso Community Health Center Work Area

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#### ABSTRACT

Dyspepsia is a non-communicable disease affecting the digestive system, characterized by symptoms such as heartburn, abdominal discomfort, nausea, vomiting, bloating, and feeling of fullness. As of June 2022, more than 376 cases of dyspepsia were reported in the village of Oesao, with the condition being most prevalent among individuals aged 15-64 years. This study aimed to identify the risk factors for dyspepsia in individuals aged 15-64 in the village of Oesao and its surrounding areas, served by Puskesmas Oesao. An analytic observational study with a case-control design was conducted at Puskesmas Oesao from May to June 2023. A total of 213 respondents were recruited using random sampling with a 1:2 ratio. Data was collected through interviews. The relationship between various factors and dyspepsia incidence was analyzed using pvalues with alpha <0.05 as the significance threshold. The results of the study showed that diet was significantly associated with dyspepsia (p < 0.05). Coffee consumption was significantly associated with dyspepsia (p < 0.05). Alcohol consumption was significantly associated with dyspepsia (p < 0.05). Sour and spicy foods were significantly associated with dyspepsia (p < 0.05). This study concludes that coffee, alcohol, sour, and spicy foods have a significant relationship with the incidence of dyspepsia.

## INTRODUCTION

Dyspepsia is one of the most common health problems experienced by the community. Dyspepsia is a syndrome or collection of symptoms where in this condition, the patient experiences complaints in the form of pain, discomfort, or pain in the upper abdomen that can be persistent or episodic and accompanied by a feeling of fullness when eating, satiety, heartburn, bloating, belching, anorexia, to nausea and vomiting (Octaviana Elsi, Anam Khairul, 2018).

In 2021, Oesao Health Center was included in the top 5 health centers with the highest number of dyspepsia syndrome cases, ranking fifth in the Kupang Regency Health Service work area. According to data obtained from Oesao Health Center, dyspepsia syndrome ranked second in the top ten diseases in the Oesao Health Center work area for the past two years, with the number of cases in 2020 reaching 1,974 cases and in 2021 reaching 1,728, while according to data as of June 2022, dyspepsia cases reached 987 with the incidence of cases in men totaling 346 and in women totaling 641, and is still ranked second in the category of the top ten diseases in mid-2022 and most often occurs in people of productive age, namely 15-64 years.

Oesao Village is included in the working area of the Oesao Health Center, which is a village with the highest incidence of dyspepsia syndrome in the working area of the health center; based on data obtained

from the Health Center over the past two years, it shows an increasing trend of dyspepsia cases in Oesao Village with the number of cases in 2020 amounting to 684 cases, in 2021 amounting to 831 cases, while in mid-2022 to June 2022, dyspepsia cases in Oesao Village reached 376 cases and were dominated by the 15-64 year age group.

Based on previous research by Fithriyana Rinda, 2018 in the Bangkinang City Health Center area, factors that can influence the incidence of dyspepsia syndrome are diet, habits of consuming drugs containing NSAIDs, and habits of consuming irritating foods and drinks that can stimulate HCL, such as coffee, alcohol, carbonated drinks, and sour and spicy foods. If the incidence of dyspepsia is not prevented properly, it will have an impact on the decline in the quality of life of the community in Oesao Village due to a decrease in the productivity of the community's daily activities such as trading, farming in the fields or in the fields, raising livestock, office activities and education in schools and universities, by knowing the risk factors that cause the incidence of dyspepsia syndrome in Oesao Village, it will help program makers to design forms of intervention that can prevent the occurrence of dyspepsia syndrome. Based on the description of the background above, researchers are interested in researching the Risk Factors for the Occurrence of Dyspepsia Syndrome in the Community Aged 15-64 Years in Oesao Village, Oesao Health Center Work Area.

## **METHOD**

This study is an analytical observational study using a case-control study design. Case-control study. This study was conducted in Oesao Village, East Kupang District, Kupang Regency in 2023. The study was conducted in May-June 2023. The population in this study consisted of a case population and a control population. The case population in this study were all dyspepsia patients aged 15-64 years who visited and were registered in Oesao Village, East Kupang District, totaling 376 people. The control population in this study were those of aged 15-64 years who did not experience dyspepsia, totaling 1,874. The sample in this study was divided into two, namely the case group and the control group, with a ratio of 1: 2 calculated using the Lemeshow formula; the number of samples was 213. The case sample in the study was people aged 15-64 years who experienced dyspepsia in Oesao Village, East Kupang District, with a total of 71 people, while the control sample in this study was people aged 15-64 years who did not suffer from dyspepsia with a total of 142 people. Data collection techniques were carried out by interviewing and using a research instrument in the form of a questionnaire. Data analysis was carried out descriptively and analytically. Univariate analysis to determine the frequency distribution of each dependent and independent variable, which aims to describe the risk factors for dyspepsia, dietary patterns, coffee consumption, alcoholic beverage consumption, and spicy or sour food consumption, are displayed in the form of a frequency distribution table. Analytical analysis used bivariate analysis, namely, to test the

relationship between dietary patterns, coffee consumption habits, alcohol consumption habits, and habits of consuming sour or spicy foods with the incidence of dyspepsia using the Chi-Square test.

## **RESULT**

# 1. Univariate Analysis

Table 1 Frequency Distribution of Dyspepsia Incidents Based on Gender in Oesao Village, East Kupang District, Oesao Health Center Working Area

1 6							
Gender		Dyspepsi	Total				
	Case	;	Cont	rol	- Total		
	n	%	n	%	N	%	
Man	30	42	60	42.3	90	42.3	
Woman	41	57.7	82	57.7	123	57.7	
Total	71	100	142	100	213	100	

Based on table 1 shows that the highest gender is female, with a total of 123, with a percentage of 57.7% consisting of 41 cases and 82 controls, while the male gender is 90 people with a percentage of 42.3% consisting of 30 cases and 60 controls.

Table 2 Frequency Distribution of Dyspepsia Incidents Based on Age in Oesao Village, East Kupang District, Oesao Health Center Working Area

Age —		Total				
	C	ase	Control			
	n	%	n	%	N	%
15-30	47	64.8	94	64.8	141	66.1
31-45	17	23.9	34	23.9	51	23.9
46-60	6	9.9	12	9.9	18	8.4
61-64	1	1.4	2	1.4	3	1.4
Total	71	100	141	100	213	100

Based on Table 4.2, the highest age group is in the 15-30-year age group, with a total of 141 people (66.1%) consisting of 47 cases and 94 controls, while the lowest age was in the 61-64 age group with a total of 3 people (1.4%) consisting of 1 case and 2 controls.

Table 3 Frequency Distribution of Dyspepsia Incidents Based on Occupation in Oesao Village, East Kupang District, Oesao Health Center Working Area

Work		Total				
WOIK	(	Co	ntrol	1 Otal		
	n	%	n	%	N	%
Students/Students	31	43.7	61	43.0	92	43.2
civil servant	14	19.7	8	5.6	22	10.3
Housewife	5	7.0	24	16.9	29	13.6
Private employees	13	18.3	15	10.6	28	13.1
Businessman	1	1.4	8	5.6	9	4.2
Honorary	0	0	4	2.8	4	1.9
Farmer	3	4.2	19	13.4	22	10.3
Doesn't work	4	5.6	3	2.1	7	3.3
Total	71	100	142	100	213	100

Based on table 3, the respondents, according to the type of work, the largest number is the Student/Pupil group with a total of 92 people with a percentage of 43%, while the group of respondents according to the least number of jobs is honorary with a total of 4 people in the control group.

# 2. Bivariate Analysis

Table 4 Relationship between Diet Patterns and the Incidence of Dyspepsia in the Community Aged 15-64 Years in Oesao Village, Oesao Health Center Working Area

Dietary habit		Dyspepsia	a events					
Dietary Habit		Case		Control			OR 95% Cl	p-value
	n	%	n	%	N	%		
Not good	53	74.6	28	19.1	81	37.7	12,432	0.00
Good	18	25.4	114	80.9	132	62.3	(6,301-24,530)	0.00
Total	71	100	142	100	213	100		

Based on Table 4, 53 (74.6%) respondents who experienced dyspepsia had poor eating habits, which is in contrast to the control group, where 114 (80.9%) respondents who did not experience dyspepsia tended to have good eating habits. The results of the analysis of the relationship between eating habits and the incidence of dyspepsia using the chi-square test obtained a p-value of 0.00 (p-value <0.05), meaning that there is a significant relationship between eating habits and the incidence of dyspepsia in people aged 15-64 years in Oesao Village, Oesao Health Center working area. According to the analysis results, an Odds Ratio value of 12.432 (OR value> 1) was obtained, meaning that people with poor eating habits are 12.432 times more at risk of experiencing dyspepsia compared to people who have good eating habits.

Table 5 Relationship between Coffee Consumption and the Incidence of Dyspepsia in People Aged 15-64 Years in Oesao Village, Oesao Health Center Working Area

Coffee Consumption		Dyspepsia						
Coffee Consumption	Case		Control		Total		OR 95% Cl	p-value
	n	%	n	%	N	%	-	
Yes	56	78.9	76	53.5	132	62.0	3,242	0.00
No	15	21.1	66	165		20.0	(1,678-	
	15	21.1	66	46.5	66	38.0	(1,678- 6,263)	
Total	71	100	142	100	213	100		

Based on Table 5, 56 (78.9%) respondents who experienced dyspepsia had a habit of drinking coffee, in contrast to the control group, where 66 (46.5%) respondents who did not experience dyspepsia tended to have no habit of consuming coffee. The results of the analysis of the relationship between diet and the incidence of dyspepsia with the Chi Square test obtained a p-value of 0.00 (p-value <0.05), meaning that there is a significant relationship between coffee consumption habits and the incidence of dyspepsia in people aged 15-64 years in Oesao Village, Oesao Health Center work area. According to the results of the analysis, an Odds Ratio value of 3.242 was obtained (OR value> 1), which means that people with a habit

of drinking coffee are 3.242 times more at risk of experiencing dyspepsia compared to people who do not have a habit of drinking coffee.

Table 6. Relationship between Alcohol Consumption and the Incidence of Dyspepsia in the Community Aged 15-64 Years in Oesao Village, Oesao Health Center Working Area

Alcohol Consumption		Dyspep	sia events					
Consumption	Ca	ase	Co	ntrol	То	tal	OR 95% Cl	p-value
	n	%	n	%	N	%		
Yes	35	49.3	22	15.5	57	26.8	5,303	0.00
No	36	50.7	120	84.5	156	73.2	(2,767-10,163)	0.00
Total	71	100	142	100	213	100		

Based on table 6, 35 (49.3%) respondents who experienced dyspepsia had a habit of drinking alcohol; this contrasts with the control group, where 120 (84.5%) respondents who did not experience dyspepsia tended to have no habit of consuming alcohol. The results of the analysis of the relationship between diet and the incidence of dyspepsia with the Chi Square test obtained a p-value of 0.00 (p-value <0.05), meaning that there is a significant relationship between alcohol consumption habits and the incidence of dyspepsia in people aged 15-64 years in Oesao Village, Oesao Health Center work area. According to the results of the analysis, an Odds Ratio value of 5.303 was obtained (OR value> 1), which means that people with a habit of drinking alcohol are 5.303 times more at risk of experiencing dyspepsia compared to people who do not have a habit of drinking alcohol.

Table 7 Relationship between the Consumption of Sour or Spicy Foods and the Incidence of Dyspepsia in People Aged 15-64 Years in Oesao Subdistrict, Oesao Health Center Working Area

			<u> </u>					
Consumption of Sour or Spicy		Dyspep	sia events					
Foods	Case		Control		Total		OR 95% Cl	p-value
	n	%	n	%	N	%	•	
Yes	61	85.9	79	55.6	140	65.7	4,865	0.00
No	10	14.1	63	44.4	73	34.3	(2,307-10,259)	
Total	71	100	142	100	213	100		

Based on Table 4.7, 61 (85.9%) respondents who experienced dyspepsia had a habit of consuming sour or spicy foods. This is inversely proportional to the control group, where 63 (44.4%) respondents who did not experience dyspepsia tended not to have a habit of consuming sour or spicy foods. The results of the analysis of the relationship between the consumption of sour and spicy foods and the incidence of dyspepsia with the chi square test obtained a p-value of 0.00 (p-value <0.05), meaning that there is a significant relationship between the habit of consuming sour or spicy foods and the incidence of dyspepsia in people aged 15-64 years in Oesao Village, Oesao Health Center work area. According to the results of the analysis, an Odds Ratio value of 4.865 (OR value> 1) was obtained, which means that people with a habit of consuming sour or spicy foods are 4.865 times more at risk of experiencing dyspepsia compared to people who do not have a habit of consuming sour or spicy foods.

## **DISCUSSION**

 The Relationship Between Diet Patterns and the Incidence of Dyspepsia in the Community Aged 15-64 Years in Oesao Village, Oesao Health Center Working Area

Poor eating patterns, such as irregular and poorly controlled, can trigger dyspepsia. The meaning of irregular eating is the calculation of daily food consumption patterns measured based on the frequency of eating while the frequency of eating remains 3 times a day with snacks in between. The ideal eating schedule for a good eating pattern is 5 to 6 times a day, namely breakfast, snacks, lunch, afternoon snacks, dinner, and, if necessary, can be added with evening snacks (Annisa, 2009). The eating patterns that are the focus of this study are the regularity and frequency of eating which researchers measure by using a questionnaire and scoring each question where a score of 1-7 is in the irregular category while a score of 8-10 is in the regular category.

The results of the study conducted in Oesao Village showed a relationship between diet and the incidence of dyspepsia in people aged 15-64 years in Oesao Village, the working area of Oesao Health Center, where respondents with irregular diets were 12.432 times more at risk of experiencing dyspepsia. Based on findings in the field by researchers that as many as 18 people with regular diets also experienced dyspepsia, based on the results of interviews with respondents, it was found that this was because even though they had a fairly regular diet, the discipline of eating according to meal times was not routinely and consistently carried out by the respondents so that even though the diet was carried out 3 times a day, it was not by the proper meal times, which triggered gastric acid secretion which resulted in increased production of gastric acid which had an impact on the incidence of dyspepsia, in addition, the habit of delaying breakfast was also often done by respondents even though the body needed a lot of energy in the morning for activities, breakfast was needed to meet calories in the morning after the stomach was empty at night because it was used for rest or sleep. The consequences of not having breakfast can cause an imbalance in the central nervous system, followed by tremors, dizziness, and fatigue. This can also trigger dyspepsia because, during sleep, the body fasts all night and, in the morning, is in the first stage of feeling hungry, so the stomach, which is still in a state of hunger, can result in the production of stomach acid. This is also due to stomach activity, which tends to increase in the morning so that stomach acid production increases, which results in dyspepsia. In addition, it was also found that as many as 18 respondents from the case group who had a good diet but experienced dyspepsia were caused by other habits that can also increase the risk of dyspepsia, including coffee consumption, alcohol consumption habits and habits of consuming sour or spicy foods which are also variables studied in this study.

This is in line with research conducted by Juliha Fitri et al in 2020 on risk factors for dyspepsia at the Blangkejeren Health Center, Gayo Lues Regency, that there is a significant relationship between consumption patterns and the incidence of Dyspepsia at the Blangkejeren Health Center, Gayo Lues

Regency. Research conducted by Lestari Linda et al, on factors related to the incidence of dyspepsia in productive age (15-64) in the work area of the Lhoong Health Center, Lhoong District, Aceh Besar Regency in 2022 also showed the same results that there is a significant relationship between diet and the incidence of Dyspepsia in productive age (15-64) in the work area of the Lhoong Health Center, Lhoong District, Aceh Besar Regency. Research also conducted by Wibawani Evilia et al. on factors related to the incidence of dyspepsia in outpatients of the internal medicine polyclinic at the Koja Regional Hospital found that there is a significant relationship between diet and the incidence of dyspepsia that occurs in outpatients in the internal medicine polyclinic at the Koja Regional Hospital. This is supported by Djojodiningrat (2009), who states that diet plays a role in the occurrence of dyspepsia. Irregular eating, hasty eating habits, and irregular schedules can cause dyspepsia.

Based on the results obtained from the research conducted in the Oesao sub-district, researchers argue that, in fact, the community only knows that the ideal eating pattern is only about the frequency of eating 3 times a day. However, the community does not yet understand that, more than that, a good eating pattern is not only about the frequency of eating 3 times a day but also about the regularity of eating and consistency of meal times, which is also important to balance the work of organs such as the stomach so as not to experience dyspepsia.

2. The Relationship Between Coffee Consumption and the Incidence of Dyspepsia in the Community Aged 15-64 Years in Oesao Village, Oesao Health Center Working Area

The habit of drinking excessive coffee every day can contribute to stomach disorders (Khotimah, 2012). Caffeinated drinks such as tea, coffee, soda, or energy drinks can trigger dyspepsia. This is because caffeine can trigger increased gastrin secretion, thereby increasing stomach acid production. Caffeine is a bitter-tasting compound that can activate several type 2 bitter taste receptors (TAS2Rs) and is usually known as a trigger for stomach acid production (Liszt et al., 2017). The coffee drinking habits measured in this study were how often and how much coffee was consumed by respondents every day.

The results of the study conducted in Oesao Village showed a relationship between coffee consumption habits and the incidence of dyspepsia in people aged 15-64 years in Oesao Village, the working area of Oesao Health Center where respondents with coffee consumption habits were 3.242 times more at risk of experiencing dyspepsia. Based on the findings in the field by the researcher, as many as 76 respondents from the control group also consumed coffee but did not experience dyspepsia, based on the results of interviews with respondents, it was found that the habit of consuming coffee that they did was usually not routine every day or it can be said that coffee is not a drink that is routinely drunk every day. Based on the results of interviews with respondents, it was found that the habit of consuming coffee that they did was usually in amounts that were not too much; most of them only consumed 1 cup of coffee a day with coffee that was not too strong or commonly known in the community as light coffee. In addition, it was

also found that as many as 15 respondents from the case group who did not consume coffee but experienced dyspepsia this was due to other habits that could also increase the risk of dyspepsia, including consumption patterns, alcohol consumption habits, and habits of consuming sour or spicy foods, which were also variables studied in this study.

This is in line with research from Levaniet al. On coffee consumption patterns with the incidence of dyspepsia syndrome in students of the Faculty of Medicine in 2022, which showed that there was a significant relationship between coffee consumption habits and the incidence of dyspepsia in students of the Faculty of Medicine, Muhammadyah University of Surabaya in 2022. The same results were also shown by a study conducted by Hidayat et al. on the effect of dietary patterns on the incidence of dyspepsia at the Tidore Islands City Hospital that there was a significant relationship between coffee consumption and the incidence of dyspepsia in patients at the Tidore Islands City Hospital. The results of a study by Nugroho (2018) on the characteristics of patients with dyspepsia at the Rumbai Health Center showed a relationship between coffee consumption and the incidence of dyspepsia. The results of a study by Palar and Waleng (2013) on the relationship between dietary patterns and dyspepsia in adolescents at the Manado Model State Islamic High School showed a relationship between people who consumed coffee and the incidence of dyspepsia.

From the results of research conducted on people aged 15-64 years in Oesao Village, researchers argue that people do not understand that the habit of drinking coffee is related to the occurrence of dyspepsia, so the habit of consuming coffee is not regular or exceeds the limits that should be, most people consume coffee to increase enthusiasm for work and also delaying drowsiness but with the wrong consumption pattern so that it has an impact on the occurrence of dyspepsia. However, there is nothing wrong with consuming coffee as long as it is in a good pattern and not excessive.

3. The Relationship Between Alcohol Consumption and the Incidence of Dyspepsia in the Community Aged 15-64 Years in Oesao Village, Oesao Health Center Working Area

Alcoholic beverages, beer, liquor, and wine consumption can affect the increase in stomach acid. Several types of alcoholic beverages are not very acidic. However, experts say that alcohol can relax the tract in the lower part of the esophagus (which is connected to the stomach area), and this can cause stomach acid to increase (Susanti, 2011). Alcoholic beverages are included in the category of irritant drinks that can increase stomach acid production and can cause dyspepsia. Consuming alcohol can cause increased stomach acid production, nausea, and decreased appetite, even when eating small amounts, and will result in damage to the gastric mucosa if consumed in large amounts. Alcohol can also cause a decrease in the ability to digest and absorb food because pancreatic enzymes are insufficient (Purbaningsih, 2020). The habit of consuming alcoholic beverages measured in this study was the amount, frequency, and duration

of alcohol consumption carried out by people aged 15-64 years in Oesao Village, the working area of the Oesao Health Center

The results of the study conducted in Oesao Village showed a relationship between alcohol consumption habits and the incidence of dyspepsia in people aged 15-64 years in Oesao Village, the working area of Oesao Health Center, where respondents with alcohol consumption habits were 5.303 times more at risk of experiencing dyspepsia. The habit of people who consume alcohol to the point of getting drunk and the habit of consuming alcoholic beverages has been going on for more than a year. Based on the findings in the field by the researcher, as many as 22 respondents from the control group had a habit of consuming alcoholic beverages but did not experience dyspepsia; based on the results of interviews conducted with respondents, it was found that the habit of consuming alcohol that they did was usually not routine every day or it can be said that alcohol is not a drink that is routinely drunk every day and based on the results of interviews with respondents it was found that the consumption habits they did were usually in amounts that were not too much or > 250ml, most of them only consumed 1 shot a day. In addition, it was also found that as many as 36 respondents from the case group who did not consume alcohol but experienced dyspepsia, this could be caused by other habits that could also increase the risk of dyspepsia, including consumption patterns, coffee consumption habits and habits of consuming sour or spicy foods, which were also variables studied in this study.

The results of this study are in line with research conducted by Wijaya et al. (2020) regarding the relationship between lifestyle and diet and the incidence of dyspepsia at the Bhayangkara Hospital in Makassar City, which found that there was a significant relationship between alcohol consumption habits and the incidence of dyspepsia at the Bhayangkara Hospital in Makassar City.

Based on the results of research conducted on people aged 15-64 years in Oesao Village, the working area of Oesao Health Center, researchers can opine that the habit of consuming alcohol in the community occurs because most people assume that the human body also needs alcohol so that the pattern of alcohol consumption in the community continues. This is also supported by the lack of public understanding that the body also has a dose of alcohol needs, so most people consume alcohol excessively, which of course, can increase the risk of dyspepsia.

4. The Relationship Between Consumption of Sour or Spicy Foods and the Incidence of Dyspepsia in the Community Aged 15-64 Years in Oesao Village, Oesao Health Center Work Area

Juliana Fitri et al. (2020) stated that the type of food is also a triggering factor for dyspepsia syndrome; the habit of consuming spicy food in large quantities can trigger the digestive system, especially the stomach, and intestines, to contract. In addition to spicy food, other types of food that can trigger dyspepsia are acidic and contain gas.

According to Julaiha Fitri et al. (2020) stated that consuming types of food such as spicy foods and sour foods can stimulate the stomach wall to produce stomach acid so that in the end, there is a decrease in the strength of the stomach wall which is not uncommon for conditions like this to cause ulcers in the stomach wall which can cause dyspepsia. The habit of consuming sour or spicy foods in this study is the habit of consuming, the frequency of consuming sour or spicy foods, and the duration of consuming sour or spicy foods.

The results of the study conducted in Oesao Village showed a relationship between the habit of consuming sour or spicy foods and the incidence of dyspepsia in people aged 15-64 years in Oesao Village, the working area of the Oesao Health Center where respondents with the habit of consuming sour or spicy foods were 4.865 times more at risk of experiencing dyspepsia. Based on the findings in the field by the researcher as many as 79 respondents from the control group who had the habit of consuming sour or spicy foods but did not experience dyspepsia, based on the results of interviews with respondents, it was found that in this group although they had the habit of consuming sour and spicy foods but their consumption patterns or habits were not carried out at every meal or in other words their consumption frequency tended to be lower than those in the case group where the habit of consuming sour or spicy foods in the case group tended to have a higher frequency where sour or spicy foods were consumed at every meal every day. Another finding of this study is that there were 10 respondents from the case group or those who experienced dyspepsia but did not have a habit of consuming sour or spicy foods; this could be caused by other habits that can also increase the risk of dyspepsia, including consumption patterns, coffee consumption habits, and alcoholic beverage consumption habits which are also variables studied in this study.

According to information obtained from interviews with respondents, most respondents who experience dyspepsia tend to have a habit of consuming sour and spicy foods such as processed chili sauce dishes with high use of chili and vinegar, and it has been consumed for more than a year or in other words this habit has been going on for years. According to information obtained by researchers during the research period by conducting interviews with respondents, most respondents consume sour or spicy foods at every meal to increase appetite.

The results of this test are in line with research from Sumarni and Andriani (2019) on the relationship between diet and the incidence of Dyspepsia and that there is a relationship between consumption of sour or spicy foods and the incidence of Dyspepsia. The results of research conducted by Putri, et al. (2014) on the description of the incidence of dyspepsia also showed the same results, namely the influence of consumption of irritating foods including sour or spicy foods with the incidence of Dyspepsia, as evidenced by the fact that most respondents who experienced dyspepsia tended to have a habit of consuming sour or spicy foods.

Based on the description of the research results above, the researcher opines that many respondents know that consuming these types of food can cause pain in the pit of the stomach which is one of the clinical signs of dyspepsia, but the habit of consuming sour or spicy foods continues to be done or in other words there is a gap between the respondents' knowledge and the respondents' attitudes or behavior towards dyspepsia. However, there is actually nothing wrong with consuming sour or spicy foods, but there needs to be a good and controlled diet so that it does not have a negative impact on health such as dyspepsia.

# **CONCLUSION**

The conclusion of the study on risk factors for dyspepsia in the 15-64-year-old community in Oesao Village, the working area of the Oesao Health Center, is: There is a relationship between dietary patterns and the incidence of dyspepsia in people aged 15-64 in Oesao Village, Oesao Health Center Working Area. There is a relationship between alcohol consumption habits and the incidence of dyspepsia in people aged 15-64 in Oesao Village, the working area of Oesao Health Center. There is a relationship between coffee consumption habits and the incidence of dyspepsia in people aged 15-64 in Oesao Village, the working area of Oesao Health Center. There is a relationship between the habit of consuming sour or spicy foods and the incidence of dyspepsia in people aged 15-64 in Oesao Village, the working area of Oesao Health Center.

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