

Factors Related To The Event Of Gastritis Disease In Kelurahan Tanjung Pinang, Jambi City In 2018

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ABSTRACT

Non-communicable diseases are a major health problem in developing countries that are experiencing a demographic transition and a decline in lifestyle in their communities. The WHO 2013 World Health Research Agency, conducted a review of several countries in the world, obtained a percentage of gastritis in the world, including Britain 22%, China 31%, Japan 14.5%, Canada 35%, and France 29.5%. Based on data from the Jambi City Health Office from 20 puskesmas the number of gastritis cases was 83.21% and the highest number of gastritis events was at Tanjung Pinang health center, which was 5.91%. This study was conducted to determine the factors associated with the incidence of gastritis in Tanjung Pinang Village, Jambi City. The research design used was quantitative with a cross sectional approach. The population in this study was the productive age community in the area of Tanjung Pinang which numbered 9,489 people. The sampling technique uses Random Sampling techniques with a total sample of 95 respondents. This research was conducted on September 28, October 16, 2018. Data obtained were analyzed by univariate and bivariate using the Chi-Square test. The results showed that there was a relationship between eating patterns with the incidence of gastritis p-value 0,000 (P-Value <0.05), coffee consumption with the incidence of gastritis p-value 0.027 (P-Value <0.05) and the relationship of stress levels with Gastritis incidence p-value 0,000 (P-Value <0.05). It is expected that respondents and the community will always maintain a regular diet, reduce or limit coffee consumption in a day, and exercise for one hour and relax regularly, recreation/refreshing, share or manage work time properly

INTRODUCTION

Non-communicable diseases are a major health problem in developing countries that are experiencing a demographic transition and a decline in lifestyle in their communities. Many in developing countries, non-communicable diseases have become a more common cause of death compared to infectious diseases¹.

Gastritis occurs when the protective mechanism in the stomach begins to decrease resulting in damage to the stomach wall. Risk factors for gastritis include eating patterns that irritate the stomach such as eating too acidic, spicy, spicy, difficult to digest, or eating contaminated with bacteria. If it is left too long, it will trigger gastritis².

World Health Organization (WHO) incidence of gastritis in the world is around 1.8-2.1 million of the population each year, in the UK 22%, China 31%, Japan 14.5%, Canada 35%, and France 29.5% . In the

world, the incidence of gastritis is around 1,821 of the population every year. The incidence of gastritis in Southeast Asia is around 583,635 of the total population each year. Gastritis is usually regarded as a trivial thing, but gastritis is the beginning of a disease that can make a person difficult³.

Symptoms of gastritis include heartburn, nausea, vomiting, bloating, diarrhea, and dizziness. Gastritis that is not treated properly can cause various complications including peptic ulcers, disorders of vitamin B12 absorption and gastric cancer⁴.

In 2013 gastritis was ranked 4th out of 50 major ranking diseases in hospitals throughout Indonesia with a total of 218,500 cases. (Indonesian Ministry of Health, 2013). In the field the incidence of infection is quite high at 91.6%, and based on research on the average number of cases of gastric pain in Cipto Mangunkusumo Hospital (RSCM)⁵.

The percentage of gastritis in Indonesia is 40.8%. The incidence of gastritis in several regions in Indonesia is quite high with the prevalence of 274,396 cases from 238,452,952 inhabitants. In getting the data that in the city of Surabaya the incidence of gastritis was 31.2%, Denpasar was 46%, while in Medan the incidence of infection was quite high at 91.6%⁶. The incidence of gastritis in Jambi province in 2012 ranked 6th with a percentage of 8.74%, in 2013 ranked 4th with a percentage of 10.30%, in 2014 the third place with Presentase 11.37%, from that incident we could see that every year gastritis sufferers experience an increase⁷.

Gastritis in many developing countries concerning early age, young age and adulthood is included in the productive age category, where the productive age is more at risk of developing gastritis. Based on the sex of gastritis patients between men and women, women are more often affected by gastritis. This is because women often diet too tight, eating irregularly, besides that women are more emotional than men⁸.

The research results of Wahyu (2015)⁹ with the title "the relationship of daily eating patterns with the incidence of gastritis in high school 11 Central Java." The results showed that more than half of the diets in gastritis sufferers are included in the poor category. Based on statistical tests obtained P-value $0.001 < 0.05$, which means that there is a significant relationship between daily eating patterns with the incidence of gastritis in high school 11 Central Java and the results of research megawati (2014)¹⁰ about several factors associated with gastritis in patients who treated at Labuang Baji Makassar Hospital showed that there was an influence between stress on the incidence of gastritis with p-value $0.008 < 0.05$. Gustin (2011)¹¹ study also showed a significant relationship between stress levels ($p = 0,000$) with gastritis in patients.

Based on data from the Jambi City Health Office from 20 puskesmas the number of gastritis cases was 83.21% and the highest number of gastritis events was at tanjung pinang health center, which was 5.91%.

METHOD

This research is a quantitative study with a cross sectional approach. This study was conducted to determine the factors associated with the incidence of gastritis in Tanjung Pinang Village. The population in this study is the people of productive age, which are 26-44 years old, in the area of Tanjung Pinang, which numbered 9,489 people. The sampling technique uses Random Sampling techniques with a total sample of 95 respondents. This research will be conducted on September 28 - October 16 2018. Data obtained were analyzed by univariate and bivariate using the Chi-Square test.

RESULTS AND DISCUSSION

Univariate results

The results of the univariate analysis of each variable are as follows:

Table 1 Diet Frequency Distribution in Tanjung Pinang Village

No	Dietary Habit	Frequency	%
1	Regular	48	50,5
2	Irregular	47	49,5
Jumlah		95	100

Source : 2018 Primary Data

Based on the above table from 95 respondents, it can be seen that the respondents with a regular diet are as many as 48 respondents (50.5%), and respondents with irregular eating patterns as many as 47 respondents (49.5%).

Table 2 Frequency Distribution of Coffee Consumption in Tanjung Pinang Village

No	Coffe Consumption	Frequency	%
1	Consume	42	44,2
2	Not Consume	53	55,8
Jumlah		95	100

Source: 2018 primary data

Based on the table above it is known that from 95 respondents as many as 53 respondents (55.8%) consumed coffee.

Table 3 Frequency Distribution of Stress Levels in Tanjung Pinang Village

No	Stress Level	Frequency	%
1	Normal	21	22,1
2	Mild Stress	17	17,9
3	Moderate Stress	39	41,1
4	Severe Stress	15	15,8
5	Stress very heavy	3	3,2
Jumlah		95	100

Source: 2018 primary data

Based on the table above it is known that from 95 respondents as many as 39 respondents (41.1%) with moderate stress.

Bivariate results

The results of bivariate analysis are as follows :

Table 4 Relationship between Diet and Gastritis in Tanjung Pinang Village

No	Dietary Habit	incidence Gastritis				Total		p-value
		Yes		No		Jml	%	
		Jml	%	Jml	%			
1.	Irregular	45	95,7	2	4,3	47	100	0,000
2.	Regular	17	35,4	31	64,6	48	100	
Total		62	65,3	33	34,7	95	100	

Source: 2018 primary data

Based on the table above, it is known from 95 respondents, as many as 47 respondents who had irregular eating patterns as many as 45 (95.7%) respondents had gastritis, and as many as 2 (4.3%) respondents did not experience gastritis. And as many as 48 respondents who had a regular diet as many as 17 (35.4%) respondents had gastritis, and as many as 31 (64.6%) respondents did not experience gastritis. From the results of the statistical test obtained p-value 0,000 (P-Value <0.05) The results of this statistical test indicate that there is a relationship of eating patterns with the incidence of gastritis in the village of Tanjung Pinang, Jambi City.

Table 5 Relationship between Kopercid Consumption and the incidence of gastritis in Tanjung Pinang Village

No	Coffe Consumption	incidence Gastritis				Total		P-value
		Yes		No		Jml	%	
		Jml	%	Jml	%			
1.	Consume	33	78,6	9	21,4	42	100	0,027
2.	Not Consume	29	54,7	24	45,3	53	100	
Total		62	65,3	33	34,7	95	100	

Source: 2018 primary data

Based on the table above, it is known from 95 respondents, 42 respondents who consumed coffee as many as 33 (78.6%) respondents experienced gastritis, and as many as 9 (21.4%) respondents did not experience gastritis. And as many as 53 respondents who did not consume coffee as many as 29 (54.7%) respondents experienced gastritis, and as many as 24 (45.3%) respondents did not experience gastritis. From the statistical test results obtained p-value 0.027 (P-Value <0 , 05) The results of this statistical test show that there is a relationship between coffee consumption and the incidence of gastritis in Tanjung Pinang Village, Jambi City.

Table 6 Relationship between Stress Levels and Gastritis in Tanjung Pinang Village

No	Stress Level	incidence Gastritis				Total		p-value
		Yes		No		Jml	%	
		Jml	%	Jml	%			
1.	Stress very heavy	2	66,7	1	33,3	3	100	0,000
2.	Severe Stress	10	62,5	6	37,5	16	100	
3.	Moderate Stress	36	92,3	3	7,7	39	100	
4.	Mild Stress	10	58,8	7	41,2	17	100	
5.	Normal	4	20	16	80	20	100	
Total		62	65,3	33	34,7	95	100	

Source: 2018 primary data

Based on table 4.8 it is known from 95 respondents, the most with mild stress as many as 39 respondents with stress stress as many as 36 (92.3%) respondents experienced gastritis, and as many as 3 respondents did not experience gastritis. From the statistical test results obtained p-value 0,000 (P -Value <0.05) The results of this statistical test show that there is a correlation between stress levels and the incidence of gastritis in Tanjung Pinang Village, Jambi City.

DISCUSSION

Relationship between Diet and Gastritis in Tanjung Pinang Village

It is known from 95 respondents, as many as 47 respondents who have irregular eating patterns as many as 95.7% of respondents experienced gastritis, and as many as 4.3% of respondents did not experience gastritis. And as many as 48 respondents who had a regular diet as many as 35.4% of respondents experienced gastritis, and as many as 64.6% of respondents did not experience gastritis. From the results of the statistical test obtained p-value 0,000 (P-Value <0.05) The results of this statistical test indicate that there is a relationship of eating patterns with the incidence of gastritis in the village of Tanjung Pinang, Jambi City.

From the results of the above research shows that a person's diet can cause gastritis. Because the diet itself includes, meal time, type of food and frequency of eating. Activities and busyness of the respondents that cause their eating patterns disturbed. If this is allowed it will have an adverse effect on the respondent himself.

The results of this study are in line with the research of Wahyu (2015)⁹ in Central Java 11 Central High School with P-value 0.001 <0.05, which means that there is a significant relationship between daily eating patterns and gastritis in Central Java. And based on research conducted by Jumaini (2014)¹² on students who underwent the Kbk system obtained p-value = 0.004 where P-value <0.05. This means that Ho is rejected, meaning there is a relationship between diet and the risk of gastritis in students who undergo the CBC system. From the results of the analysis also obtained an OR value of 3.383, meaning that students who have regular eating patterns have a chance of 3,383 times for not at risk of gastritis compared to students who have irregular eating patterns. Furthermore, the research conducted by Pia (2013)¹³ in the S1 Nursing students in Stikes Surabaya semester VI from the results of the Fisher Exact Test correlation test, dietary pattern and gastritic events obtained P = 0.01, then P <α = 0.05, Ho was rejected meaning there is a relationship between diet and gastritic events.

causes of gastritis include eating and environmental factors, gastric acid secretion, gastric motor function, gastric visceral perception, psychology and Helicobacter pylori infection. According to Susanti

(2011), eating and drinking habits, such as eating spicy, sour, drinking tea coffee and carbonated drinks can increase the risk of symptoms of gastritis. A very acidic atmosphere in the stomach can kill pathogenic organisms that are ingested with food. However, if the stomach barrier has been damaged, the very acidic atmosphere in the stomach will aggravate the irritation of the stomach wall¹⁴.

Based on the research process conducted by researchers in the field for several days when visiting home homes many researchers found respondents who were consuming food that could cause gastritis, so when asked why they often consumed spicy food respondents only answered that they were used to eating spicy food for increase appetite. So that causes a lot of gastritis based on diet.

In addition, the results encountered in the field that the diet of respondents is irregular because they are busy taking care of homework so they do not have appetite, forget to eat or late to eat where respondents only eat 2 times a day and even one time a day, on the other hand respondents often consume foods that trigger gastritis such as rujak, ready-to-eat / instant food. therefore it can cause gastritis.

Relationship between Coffee Consumption and Gastritis Disease in Tanjung Pinang Village

It is known from 95 respondents, as many as 53 respondents who did not consume coffee as much as 54.7% of respondents experienced gastritis, and as many as 45.3% of respondents did not experience gastritis. And as many as 42 respondents who consumed coffee as much as 78.6% of respondents experienced gastritis, and as many as 21.4% of respondents did not experience gastritis. From the results of statistical tests obtained p-value 0.027 (P-Value <0.05) The results of this statistical test indicate that there is a relationship between coffee consumption and the incidence of gastritis in the health center Tanjung Pinang Jambi City.

Based on the research conducted by Gleddis (2015) 15, in the Timura Timur Community Health Center, Sangihe Islands Regency, it was found that there was a relationship between coffee consumption and gastritic events in patients at the Tahuna Timur Puskesmas.

According to Warianto (2011)¹⁶, coffee is a drink consisting of various types of ingredients and chemical compounds; including fats, carbohydrates, amino acids, vegetable acids called phenols, vitamins and minerals. Coffee is known to stimulate the stomach to produce stomach acid, creating a more acidic environment and can irritate the stomach.

Caffeine can cause stimulation of the central nervous system (brain), respiratory system, and blood vessel and heart system. Therefore do not be surprised if you drink a reasonable amount of coffee (1-3 cups), your body feels fresh, passionate, faster thinking power, not easily tired or sleepy. Caffeine can cause stimulation of the central nervous system so that it can increase gastric activity and the secretion of the gastrin hormone in the stomach and pepsin. The gastrin hormone released by the stomach has the effect of secreting very acidic gastric juice from the part of the stomach fundus. Increased secretion of acid can cause irritation and inflammation of the gastric mucosa¹⁷.

The results found in the field that respondents who consumed coffee were 3 times a day, some respondents said that if they did not consume coffee the respondents felt dizzy, and could not if they did not consume coffee in a day. Where coffee contains caffeine which can trigger high stomach acid so that it can cause gastritis.

Researchers suggested that respondents and the public consume excessive amounts of coffee which could certainly harm a person's health, especially for respondents who have health problems in the form of gastritis, therefore it should reduce the consumption of coffee with excessive frequency and adopt a healthy lifestyle.

Stress Relationship with Gastritis Disease in Tanjung Pinang Village

It is known from 95 respondents, most of them with mild stress as many as 39 respondents with mild stress as much as 92.3% of respondents experienced gastritis, and as many as 7.7% of respondents did not experience gastritis. From the results of statistical tests obtained p-value 0,000 (P-Value <0.05) The results of this statistical test show that there is a correlation between stress levels and the incidence of gastritis in Tanjung Pinang Village, Jambi City.

The results of this study are in accordance with the research conducted by Megawati (2014)¹⁰ in Labuang Baji Makassar Hospital with p-value = 0.008. Gustin 2011's study also showed a significant association between stress levels P = 0,000 and gastritic events in patients.

Stress factor is one of the factors causing recurrence of gastritis (Misnadiarly, 2009)¹⁸. The stress experienced by an individual causes a person's physical defenses to become weak. Lifestyle becomes unhealthy when individuals experience stressful conditions.

The results encountered in the field that caused respondents to be stressed with family conditions, such as the stress of caring for naughty children, there were also respondents who thought stress because of late husband payday, talk of offending neighbors so that it became the mind's burden of the respondents that triggered stress.

From the data and theories that exist, the researchers concluded that the results of this study are in accordance with the theory that has been put forward, namely there is a relationship between stress and the incidence of gastritis. As with adults, stress can have a negative effect on that person, except for the difference in the source and how to respond to the disease. The reaction is determined by the atmosphere and conditions of life they are experiencing. In this case the role of nurses is needed to provide counseling, to see the lives of today's people who do not know about the consequences that are caused by stress. Counseling is a nursing process that requires a short period of time, the time taken is long enough that it must be done gradually and requires several meetings.

CONCLUSION

As many as 50.5% of respondents have an irregular diet, 55.8% of respondents consume coffee, 41.1% of respondents experience moderate stress, and 65.3% suffer from gastritis. There is a correlation between diet and the incidence of gastritis in Tanjung Pinang Village, Jambi City with a p-value of 0,000 (P-Value <0.05). There is a relationship between coffee consumption and the incidence of Gastritis in Tanjung Pinang Village, Jambi City with a p-value of 0.027 (P-Value <0.05). d. There is a correlation between stress levels and the incidence of Gastritis in Tanjung Pinang Village, Jambi City with a p-value of 0,000 (P-Value <0.05).

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