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The Relationship between Diet and Gastritis Incidence at Setu I Health Center

Indah Agustiyani[1], Isnaeni[2]

[1]Student Registered,Department of Nursing,STIKes Abdi Nusantara,Indonesia
[2]Lecture,Department of Nursing,STIKes Abdi Nusantara,Indonesia

Introduction: Gastritis is inflammation of the gastric mucosa marked with heartburn, nausea, bloating and pain in the epigastrium. **Purpose of writing** : is to know the relationship between diet and gastritis in Setu I health center. **Research Methods** with cross sectional approach. . The sample in this study were all patients who came to the Setu Community Health Center with a population of 4400 patients and the sampling technique used was probability sampling as many as 98 respondents. Data collection by giving questions in the form of a questionnaire on the respondent to be filled. After the data is collected then the data is processed, edited and tabulated, then the data is analyzed using the SPSS 21.0 statistical test with significance level p <(α) = 0.05.**Results** showed that eating frequency has a relationship with the incidence of gastritis with a value of p = 0.04 <0.05 (α), the type of food has a significant relationship with the incidence of gastritis with a value of p = 0.015 <0.05 (α) and portability of eating have significant correlation with the incidence of gastritis with a value of p = 0.023 <(α). It can be concluded that the frequency of eating, type of food and portion of food has a relationship with the incidence of gastritis, and it is recommended to patients with gastritis to regulate the diet so that it does not trigger an increase in stomach acid. 05 (α) and food intake have a significant relationship with the incidence of gastritis with a value of p = 0.023 <(α). **Conclution:** It can be concluded that the frequency of eating, type of food and portion of food has a relationship with the incidence of gastritis, and it is recommended to patients with gastritis to regulate the diet so that it does not trigger an increase in stomach acid. 05 (α) and food intake have a significant relationship with the incidence of gastritis with a value of p = 0.023 <(α). It can be concluded that the frequency of eating, type of food and portion of food has a relationship with the incidence of gastritis, and it is recommended to patients with gastritis to regulate the diet so that it does not trigger an increase in stomach acid.
Key words: Phlebitis; Age; Liquid Type; Permata Bekasi Hospital

INTRODUCTION

Two problems faced in development are infectious diseases and the increase in non-communicable diseases (NCDs). Non-communicable diseases are diseases that can be caused by lifestyle, one of the diseases that can be caused by lifestyle is gastritis. WHO (2012) states that the incidence of gastritis in the world is around 1.8 – 2.1 million of the total population every year. Meanwhile, in Southeast Asia, around 583,635 of the population annually. Ministry of Health (2015) the incidence of gastritis in Indonesia, specifically in West Java, reached 31.2%.

Corresponding author: Indah Agustiyani https://orcid.org/0000-0000-xxxx-xxxx
address Husada VII Street Number 104 B
Tel: (62) 85xxxxx, E-mail: indahagustiyani@gmail.com
Department of Nursing, STIKES Abdi Nusantara Swadaya, Kubah Putih No.7 RT 001/014 Kelurahan Jatibening Kecamatan Pondok Gede Bekasi, Indonesia
Tel: +21-86901352, Fax: +21-86905637,, E-mail: novitaabnus@gmail.com
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Based on the results of research and observations carried out by the Indonesian Ministry of Health (2013), the highest incidence rate reached 91.6% in the city of Medan, and in several other cities such as Surabaya 31.2%. Denpasar 46%, Jakarta 50%, Bandung 32.5% Palembang 35.35% Aceh 31.7% and Pontianak 31.2%. In Setu I Community Health Center, in 2019, gastritis sufferers were fourth in the top ten most common diseases in Setu I Community Health Center.Diet is a person's way or habit of consuming food which is done repeatedly. Many factors influence a person's eating patterns, such as social culture, education, economics, religion, environment and habits.A bad diet can cause various diseases, one of which is gastritis.The aim of this research is to determine the relationship between diet and the incidence of gastritis at the Setu I Community Health Center

METHODS

The type of research used in this research is analytical with a cross sectional approach, where the dependent and independent variables are obtained from primary data collected at the same time using a questionnaire.The population in this study was 4,400 patients at the Setu I Community Health Center in January and February. The sampling technique was probability samling, namely sampling which provides an equal chance for each element or member of the population to be selected as a sample (Sugiyono, 2017). The sample size is calculated using a formula

N="N" /"1+N" (d^2)

The results obtained were 98 respondents. Data collection was carried out using a questionnaire. Data analysis in this study was carried out using the SPSS 21.0 statistical test, consisting of univariate and bivariate analysis. Univariate analysis is done by making a frequency distribution table for each variable. Bivariate analysis was performed by examining the relationship between the dependent and independent variables

RESULTS

Univariate Analysis

Table 1.Distribution of Respondents Based on Respondent Characteristics

Respondent characteristics Frequency of eat	**n**	**%**
irregular	**60**	**61,2**
regular	**38**	**38,8**

Based on table 1, it is known that of the 98 respondents who had an irregular eating frequency, 60 respondents (61.2%) were greater than the 38 respondents who had a regular eating frequency (38.8)

Table 2.Distribution of Respondents Based on Respondent Characteristics

Respondent characteristics	**n**	**%**
Type Of Food		
Stimulate	50	50
Without Stimulate	48	50

Table 2 illustrates that 50 respondents (51%) consumed stimulating foods. While consuming food that does not stimulate 48 respondents (49%).

Table 3.Distribution of Respondents Based on Respondent Characteristics

Respondent characteristics	n	%
Meal portion		
Wrong	**49**	**50**
Correct	**49**	**50**

Characteristics of respondents based on food portions, the number of respondents whose food portions are correct with respondents whose food portions are still wrong is 49 respondents.

Bivariate Analysis

Table 4.Relationship between eating frequency and the incidence of gastritis

Frequency of Eat	Gastritis incident				Total		P Value
	Sufferer		No				
	N	%	N	%	N	%	
Tidak teratur	42	70	18	47,4	60	61,2	0,043
Teratur	18	30	20	52,6	38	38,8	

Table 4 shows that of the 98 respondents, gastritis sufferers whose eating frequency was irregular were 42 respondents (70%) more than the number of gastritis sufferers whose eating patterns were regular, 18 respondents (30%). Meanwhile, 18 respondents (47.4%) did not have gastritis who had an irregular eating pattern, and 20 respondents (52.6%) did not have gastritis who ate more regularly. Of the 98 respondents whose eating frequency was irregular, 60 respondents (61.2%) while those who ate regularly were 38 respondents (38.8%). From the results of the statistical test, the Pvalue (0.043) < α (0.05) means that H0 is rejected, meaning that there is a relationship between eating frequency and the incidence of gastritis.

Table. 5.Relationship of Food Types with Gastritis Incidence

Type of food	Gastritis incident				Total		P Value
	Sufferer		No				
	N	%	N	%	N	%	
Stimulate	37	61,7	13	34,2	50	51	0,015
Without Stimulate	23	38,8	25	65,8	48	49	

From table 5, the results show that the number of gastritis sufferers who often consume types of food that stimulate stomach acid is 37 respondents (61.7%) and those who do not consume food that stimulate stomach acid are 23 respondents (38.8%). There were 13 respondents (34.2%) who were not gastritis sufferers who often consumed foods that stimulated stomach acid, less than 25 respondents (65.8%) who did not consume foods that stimulated stomach acid. Of the 98 respondents, 50 respondents (51%) often consumed foods that stimulated stomach acid, while 48 respondents (49%) did not consume foods that

stimulated stomach acid. The statistical test results showed that the Pvalue was 0.015< α (0.05), which means that H0 was rejected, namely that there was a significant relationship between the type of food that stimulates stomach acid and the incidence of gastritis.

Table 6.Relationship between meal portions and the incidence of gastritis

Meal Portions	Gastritis incident				Total		P Value
	Sufferer		No				
	N	%	N	%	N	%	
False	46	60	13	34,2	49	50	0,023
True	24	40	25	65,8	49	50	

From table 6, the number of gastritis sufferers who eat the wrong portion is 46 respondents (60%) more than gastritis sufferers whose diet is correct, 24 respondents (40%). There were 13 respondents (34.2%) less people with gastritis whose diet was wrong than those who ate the right portion, 25 respondents (65.8%). So, of the 98 respondents who ate the wrong portion, there were 49 respondents (50%), the same as 49 respondents (50%) who ate the right portion. The results of the statistical test were P-value 0.023 <α (0.05), which means that there is a relationship between food portions and the incidence of gastritis at the Setu I Health Center.

DISCUSSION

Meal frequency is several meals a day including breakfast, lunch, dinner and snacks (Ministry of Health, 2013). From the results of collecting questionnaires, it was found that the number of respondents whose eating frequency was irregular was greater than the respondents whose eating frequency was regular. This could be because many respondents did not have time to have breakfast before their activities because they did not have time, and there were also those who did not have lunch because they were too busy with their work.There were more respondents who often consumed types of food that stimulate stomach acid. Many male respondents smoke while many female respondents like spicy and sour foods such as chili sauce and rujak.

The meal portions of the respondents in this study had a balanced number of respondents whose food portions were already correct and those whose eating patterns were still not correct.Irregular eating frequency is easy to get gastritis. Naturally, the stomach will continue to produce stomach acid every time in small amounts after 4-6 hours after eating, usually a lot of blood glucose has been absorbed and used so that the body will feel hungry and at that time the amount of stomach acid stimulated. If someone eats up to 2-3 hours late, more and more stomach acid is produced so that it can irritate the gastric mucosa, causing pain around the epigastrium (Burnner and Suddarth, 2010).

Irregular eating frequency can be caused by several things, one of which is work, work demands that are awaited by deadlines make people forget to meet their nutritional needs, especially in maintaining diet. Super busy work patterns can cause stress because high work pressure makes office workers very susceptible to gastritis. According to medical experts, increased stomach acid can be caused by stress or mental tension. Even though work is not a factor causing gastritis, stress caused by work can cause gastritis.

In Table 6 it is described that the type of food has a role in the occurrence of gastritis, with a 3x chance of occurrence for people who often consume foods that stimulate stomach acid such as alcohol, cigarettes, coffee, sour, spicy foods, foods that contain gas and fat. In research conducted by Berta Yolanda S (2015) it was explained that 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. Caffeine contained in coffee can accelerate the formation of stomach acid, excessive stomach acid can cause excess gas production in the stomach, causing bloating. several studies show that caffeine relaxes the esophagus or esophagus.

In a study conducted by Rosalia et al (2017) it was explained that consumption of alcohol at low and moderate doses can cause changes in stomach acid production, and injury to the gastric mucosa, and affect stomach and intestinal movements. Meanwhile, at high doses of alcohol can cause stomach ulcers and bleeding. Alcohol contains ethanol which can damage the gastric mucosa, interfere with the defense of the gastric mucosa and allow gastric acid and pepsin to diffuse back into the gastric tissue, this causes inflammation.

Lailatul Muniro (2017) in his research said that most of the respondents who had a history of consuming 3 teaspoons of chili sauce or more experienced gastritis, the spicy taste of chili sauce is a food ingredient that can increase stomach acid production so that stomach acid can become even higher. if you add to that there is an injury to the gastric mucosa, it creates a burning sensation in the pit of the stomach. Fatty foods also have an effect on gastritis sufferers, because fatty foods take longer to digest. The fat content must be broken down into smaller particles so that it can be absorbed by the small intestine. The longer it stays in the stomach, the stomach will produce more stomach acid to help digest.Apart from food and drink, cigarettes can also cause gastritis. The chemicals contained in cigarettes are substances that are very detrimental to health. Not only is cigarettes bad for the respiratory system, it can also trigger diseases in the digestive system. There are more than 300 chemicals contained in it, one of the chemicals in cigarettes is nicotine. This nicotine can eliminate hunger, this is what causes people who smoke to resist eating when they have smoked.

Research conducted by Maria Novianty (2017) entitled The Relationship between Smoking Behavior and the Incident of Gastritis in Civil Engineering Students at Tribhuwana Tunggadewi University, Malang, stated that there is a very strong relationship between smoking behavior and the incidence of gastritis with a Pvalue (0.00) < α (0, 05) . It also explains that the toxic substances in cigarettes can cause damage or injury to the stomach. Apart from that, smoking also reduces bicarbonate secretion from the pancreas to the duodenum, resulting in higher duodenal acidity in smokers.

From table 5.2.3, the research results show that there is a relationship between food portions and the incidence of gastritis. Eating large portions can cause reflux of stomach contents which ultimately reduces the strength of the stomach walls, besides that if the number of calories consumed is excessive it can result in being overweight.Gastritis sufferers are advised to eat small portions. Frequently eating small portions will prevent our digestion from being disturbed and the body will function efficiently. Several studies conducted at universities in California and New Mexico show that those who eat multiple small portions have healthier glucose, insulin and cholesterol levels.

CONCLUSION

The conclusion drawn from the results of this study is that there is a significant relationship between diet and the incidence of gastritis at the Setu I Health Center.

With this research, it is hoped that the agency will provide counseling to the public about healthy eating patterns to prevent gastritis.

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