ANALYSIS OF DIETING WITH GASTRITIS IN THE STUDENTS OF
MUHAMMADIYAH UNIVERSITY JAKARTA, 2021

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ABSTRACT
Gastritis is an inflammatory process or health problem caused by irritation and infection of the gastric mucosa and submucosa. Gastritis can attack all levels of society from all levels of age and gender. Diet is to provide an overview of the way or behavior taken by a person or group of people in choosing and using the food consumed every day which includes the regularity of eating frequency, meal portions, and the type of food and drink consumed based on social and cultural factors in which they live. According to Riskesdas 2013, the incidence of gastritis in several regions of Indonesia is quite high with a prevalence of 274,369 cases from 238,452,952 inhabitants, it was found that in the city of Surabaya the incidence of gastritis was 31.2%, Denpasar 46% while in Central Java the incidence of gastritis is quite high at 79.6%. Gastritis usually occurs due to irregular eating frequency so that the stomach becomes sensitive when stomach acid increases. It is better for people who have a history of gastric disease not to eat acidic and spicy foods because they can cause gastritis to recur.

Keywords: Diet, Gastritis, Student
INTRODUCTION

Nowadays, with the modern era, there are also more and more diseases that arise due to human lifestyle and bacterial transmission. One of them is gastritis, which occurs due to inflammation that occurs in the stomach lining which causes frequent pain in the stomach. This disease can not be transmitted but usually, Helicobacter pylori bacteria enter the human body through food.

Based on research conducted by (Futriani, Tridiyawati, and Putri, 2020). Gastritis is an inflammatory process or health problem caused by irritation and infection of the gastric mucosa and submucosa. Gastritis can attack all levels of society from all levels of age and gender, but several surveys show that gastritis most often attacks productive age. At productive age, people are susceptible to gastritis symptoms because of the level of busyness, a lifestyle that does not pay attention to health, and stress that easily occurs. Gastritis can relapse where recurrences that occur in gastritis sufferers can be influenced by poor diet settings and are also influenced by stress factors.

According to Hudha 2007 in (Sumbara, 2020) Diet is to provide an overview of the way or behavior taken by a person or group of people in choosing and using the food consumed every day which includes regularity of eating frequency, meal portion, and type of food and drink consumed based on social and cultural factors in which they live.

According to Hudha 2007 in (Sumbara, 2020) eating patterns that trigger gastritis, namely the frequency of irregular meals with small portions, by consuming food and drinks that trigger an increase in stomach acid, besides that eating less varied is very influential because food that does not vary is unattractive and can cause boredom, saturation so that this can affect appetite and tend to prefer and choose fast food (fast food).

Based on research conducted by Dewi 2013 in (Sumbara, 2020) cases of gastritis usually occur due to irregular eating frequency so that the stomach becomes sensitive when stomach acid increases. Irregular eating patterns will make it difficult for the stomach to adapt, if this happens continuously there will be excess stomach acid so that which can cause irritated gastric mucosa and gastritis occur. In general, everyone eats the main meal 3 times a day, namely breakfast, lunch and dinner or dinner. Everyone needs lunch because since the morning the body feels tired from doing activities. In addition to the main meal which is usually done 3 times a day, snacks are also done once or twice between meals to cope with hunger, because of the long distance between meals.

Based on data from the World Health Organization (WHO) which conducted a review of several world countries and obtained the percentage results of the incidence of gastritis in the world, including England 22%, China 31%, Japan 14.5%, Canada 35% and France 29.5%. In the world,
incidence of gastritis is around 1.8-2.1 million of the total population each year. The incidence of gastritis in Southeast Asia is around 583,635 of the total population each year. The prevalence of endoscopically confirmed gastritis in the Shanghai population is around 17.2%, which is substantially higher than the Western population, which is 4.1% and is asymptomatic.

The incidence of gastritis in several areas of Indonesia is quite high with a prevalence of 274,369 cases from 238,452,952 inhabitants. It was found that in the city of Surabaya the incidence of gastritis was 31.2% Denpasar 46%. While in Central Java the incidence rate is quite high at 79.6% (Riskesdes, 2013). Dr. Ari Fahrial Syam, a specialist in internal medicine, consultant for gastric and digestive diseases, said the incidence of stomach ulcers in the community, especially Jakarta residents, was quite high, reaching 58.1%. The study was conducted on 1,645 respondents from Jakarta residents who came from 5 areas of the city of Jakarta (Fahrial Syam, 2014) (Irianty, Hayati and Suryanto, 2020).

Based on the above exposure, the cause of gastritis usually occurs due to irregular eating frequency so that the stomach becomes sensitive when stomach acid increases. Therefore, we are interested in analyzing eating patterns with the incidence of gastritis in students at Muhammadiyah University, Jakarta.

**METHODS**

The type of research used is qualitative with a phenomenological approach to describe the Analysis of Eating Patterns with Gastritis Incidence in Muhammadiyah University Students, Jakarta. The subjects in the study were students of the Muhammadiyah University of Jakarta. The time of the study was carried out in May 2021. The data collection techniques used in the study were in-depth interviews and observation.
### DATA ANALYSIS

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<th>No.</th>
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| 1.  | How did you first know you had gastritis?       | *Knowing that you have gastritis is quite surprising because all this time you have always eaten on time, the first time you found out because you were sick and checked with the doctor and it turned out to be gastritis*  
  *Every time after eating spicy food, drinking sour drinks, and sometimes if you eat it late, your stomach hurts, hurts, sometimes you feel nauseous and dizzy,*  
  *The first time I knew it was because at first, my stomach felt bloated, and then I felt nauseous.*  
  *At first I was a child who rarely eats and often eats* | *The feeling is quite shocked, knowing that you have gastritis because you go to the doctor because you are sick*  
  *My stomach hurts, sometimes I feel sick and dizzy*  
  *Symptoms felt flatulence and nausea*  
  *The initial symptoms are abdominal pain in the pit of the stomach and cold sweat.* | *Surprised then checked the doctor*  
  *Stomach ache*  
  *Bloating and nausea in the stomach*  
  *Pain in the pit of the heart* | *shocked*  
  *Stomach and heart ache* |
late, then I like spicy food. Then in the morning, I had a stomach ache in the solar plexus until I had a cold sweat so I was immediately taken to the hospital and diagnosed by my doctor as having gastritis.

| 2. | Do you have pain/pain/discomfort in the pit of the stomach/upper stomach? | ● Yes, I feel pain in the upper abdomen if I eat too much spicy and sour food at the same time  
   ● It hurts like it's being stabbed  
   ● For now, I don't feel pain anymore.  
   ● Sometimes I still have pain in my stomach, but I always take medicine. | ● Yes, I feel pain in the upper abdomen  
   ● yes it hurts  
   ● Now don't feel pain anymore  
   ● Sometimes feel pain/pain. | ● Yes, I feel stomach pain | ● Stomach pain |

| 3. | What do you do to prevent gastritis from recurring? | ● The way I do so that gastritis does not recur, is to avoid or reduce spicy and sour foods  
   ● Take medicine half an hour before eating | ● The way I do so that gastritis does not recur, is to avoid or reduce spicy and sour foods  
   ● taking medication  
   ● Avoid spicy, acidic foods, don't drink fizzy drinks, regulate | ● Reduce spicy and sour foods so they don't relapse  
   ● Taking medication  
   ● Regulate diet | ● Spicy and sour food  
   ● taking medication  
   ● dietary habit |
| 4. | What types of foods are recommended and not recommended for people with gastritis? | • In an effort to prevent gastritis I have avoided spicy foods, foods that are too acidic, I no longer drink fizzy drinks, I now have to maintain my diet properly, and as much as possible to get regular rest.  
• The effort that I usually do is to adjust my diet to be even better and reduce spicy food even though it is difficult. | your diet and rest patterns  
• Regulate diet and reduce spicy food. |

| | The recommended foods for people with gastritis are vegetables, fruits that are ripe and not acidic and eat regularly on time.  
• Avoid spicy food and acidic drinks, Consume fibrous food or fruit, drink tea, and consume probiotics  
• Suggested foods that are allowed are fruits that have a | The recommended foods for people with gastritis are vegetables, fruits that are ripe and not acidic and eat regularly on time. Foods that are not recommended for people with gastritis are spicy, acidic foods, caffeine such as coffee, soft drinks  
• Consume fiber foods, drink tea and consume probiotics  
• Avoid spicy, acidic | Vegetables, fruits, regular meals  
• Fibrous food  
• Avoid spicy and sour food  
• Keep the diet |

| |  |  | Fibrous food  
• Regulate diet |
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| 5. | **Does your diet (breakfast, lunch, dinner) run regularly? if not, give the reason** | **Low acidity level, and eat green vegetables. What is not recommended is spicy food, food or fruit that has an acid level, soft drinks, and foods that have gas levels.**
|   |   | **The recommended foods are fruits and green vegetables. Foods that are not recommended are spicy, sour, etc. foods.**
|   |   | **Regulate diet and reduce spicy food.**
|   | **Regulate diet and reduce spicy food.**
|   | **It doesn't run regularly, the reason is that you like to forget, especially if you have activities outside the house.**
|   |   | **Irregular, because you often eat snacks, your stomach feels full, so you don’t need to eat rice anymore.**
|   |   | **Irregular, because I usually forget to eat lunch because.**
|   | **Not running regularly, the reason is that you like to forget.**
|   |   | **Irregular, because I like to eat snacks.**
|   |   | **Not regular at lunch due to a lot of activities during the day.**
|   |   | **Irregular, often forget to eat or not.**
|   |   | **Irregular.**
|   |   | **Irregular.**
|   |   | during the day I have a lot of activities so I forget to eat.  
|   |   | My diet is very irregular, sometimes I forget myself today whether I have eaten or not.  
| 6. | Do you like sour food? How many times do you eat acidic foods in a week? | I like and often consume acidic foods, such as salad. But I rarely eat rujak because I like to have gastritis  
|   |   | Yes, I often consume sour drinks, but when it comes to food, I like to use lime juice to keep it fresh  
|   |   | I don't like sour food.  
|   |   | I don't like sour food.  
|   |   | I like and often consume sour food  
|   |   | I prefer sour drinks if I like to use lime juice for the food  
|   |   | Don't like sour food  
|   |   | Doesn't like sour food  
|   | 7. | Almost every day I eat spicy food  
|   |   | Yes, I like spicy food, because if it's not spicy, the food doesn't taste good  
|   |   | For now I don't eat  
|   |   | Daily consumption of spicy food  
|   |   | Yes often, every day eat spicily  
|   |   | Now I don't eat spicy food because it's forbidden by the  
|   |   | Like sour food  
|   |   | Don't like sour food  
|   |   | Like  
|   |   | Do not like  
|   |   | Often eat spicy food  
|   |   | Don't eat spicy food often  
|   |   | Often  
|   |   | Not often  


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|   | spicy food because the doctor has forbidden me not to eat spicy food anymore.  
- I still often eat spicy food, I can't count how many times it's because it's too often. | doctor  
- Frequent consumption of spicy food. |
|   | Yes, I always try to be regular about the time to eat  
- No, because I like snacks so my diet is irregular  
- Lately, I've been keeping a regular diet.  
- I'm trying even though it's hard. | Yes, I always try to be regular about the time to eat  
- not maintaining/working on a regular diet  
- Yes, maintain a regular diet  
- Yes, maintain a regular diet  
- Keep the diet  
- Not maintaining diet |
| 8. Do you always keep/try to keep your diet regular? | Yes, I usually take promag drugs, if it's too sick I usually take medicine from the doctor  
- Milanta is liquid because it is easier to swallow  
- I forgot the name of the medicine.  
- I always provide Mylanta because it's the only medicine | Promag  
- Mylanta  
- Keep  
- Not taking care |
| 9. What drugs do you usually take? | Yes, I usually take promag drugs, if it's too sick I usually take medicine from the doctor  
- liquid milanta  
- forgot the medicine  
- Mylanta | Promag  
- Mylanta  
- Keep  
- Not taking care |
| 10. | How do you think Islam teaches the perfect diet? | ● Islam teaches humans to eat halal and good food, and don’t overeat. Because if we eat something in excess it also has an impact on the health of the body. And for eating patterns, eat before you are hungry and stop before you are full, meaning that we have to keep eating 3 times a day regularly so that the body becomes healthy. ● In my opinion, eating is according to the portion, meaning to maintain a healthy body and eating patterns must be regulated, such as eating not excessively, balancing it with healthy side dishes such as vegetables, | ● Islam teaches to eat moderately enough 3 times a day regularly so that the body becomes healthy ● Just eat according to the portion, don’t be too much ● Eat halal and good food, eat before you are hungry and stop before you are full, eat calmly, and don’t be in a hurry. ● Eat halal and nutritious food and follow Islamic law. | ● Don’t eat too much ● Halal food | ● Don’t eat too much ● Halal food |
balancing it with exercise, if you can eat home-cooked food (not instant)

- I think we should eat food that meets the requirements of halal and thayyib (good), eat before you are hungry and stop eating before you are full, eat calmly, not in a hurry.
- I think we should eat halal and nutritious food. And follow Islamic law.
RESULTS AND DISCUSSIONS

1. How do you know when you first got gastritis?

Based on the results of interviews conducted with 4 adolescent respondents regarding the first time they found out they had gastritis, they felt stomach pain and heartburn.

Gastritis usually occurs in people who have an irregular diet and eat foods that stimulate the production of stomach acid. Complaints associated with gastritis are heat and pain in the pit of the stomach accompanied by nausea, sometimes even vomiting, decreased body balance as if wanting to faint. These symptoms can be acute, recurrent, and chronic if the symptoms last for more than one month or are continuous. Most gastritis is asymptomatic.

Based on research conducted by (Shalahuddin, 2018). One of the gastritis diseases that occurs due to inflammation that occurs in the lining of the stomach which makes you often feel pain in the stomach and heartburn.

2. Do you feel pain/pain/discomfort in the pit of the stomach / upper abdomen?

Based on the results of interviews conducted with 4 respondents, that adolescents who already have a history of gastritis if the gastritis is relapsing feel bad in the solar plexus and stomach.

One of the symptoms of gastritis is feeling bad in the solar plexus and stomach. According to research conducted by (Khanza, 2019). Symptoms that commonly occur in people with gastritis are abdominal discomfort, flatulence, headache, and nausea that can interfere with daily activities, discomfort in the epigastrium, nausea, vomiting, burning or burning pain in the upper abdomen that can cause constipation. Getting better or worse when eating, loss of appetite, belching and bloating. May also be accompanied by fever, chills (chills), hiccups (hiccups). While the research conducted by (Dice, 2020). One of the symptoms of gastritis is pain in the pit of the stomach, besides that, nausea, vomiting, weakness, decreased appetite, pale face, cold sweat, frequent belching, and in severe conditions can vomit blood.

3. What do you do to prevent gastritis from recurring?

Based on interviews conducted with 4 informants regarding the prevention of gastritis so as not to relapse, it was found that by reducing eating spicy and sour foods, taking medication, and managing a better diet.

a. Given the magnitude of the adverse effects of gastritis, it is necessary to have serious prevention or treatment of the dangers of gastritis complications (Dwi Meilani, 2016)
b. Regulating the diet is highly recommended for gastritis sufferers to experience gastritis recurrence to prevent complications of gastritis.

The results of the study (Suryono, Ratna Dwi Melani, 2016) efforts to minimize the danger of complications of gastritis can be done through increasing public awareness about things that can cause gastritis, for example, eating spicy and sour foods, stress, consuming excessive alcohol and coffee, smoking, taking painkillers in the long term. Although recurrence can be prevented with medication, reducing the causative factor can reduce the possibility of recurrence (Dwi Meilani, 2016).

4. What types of foods are recommended and not recommended for people with gastritis?

Based on interviews conducted with 4 informants regarding the types of foods that are recommended and not recommended for gastritis sufferers, namely by eating fibrous foods and regulating diet.

a. Diet is the most important behavior that can affect nutritional status. Good nutritional status can improve individual and community health. People who have irregular eating patterns are prone to gastritis (Ministry of Health RI, 2014)

b. According to Rahma, et al, 2012 based on the results of previous research regarding the risk factors for gastritis and the percentage. Diet 58.7%, alcohol consumption habits 42.0%, coffee consumption habits 5.1%, and smoking habits 32.6% (Purwodadi and Grobogan, 2018).

Based on research results (Barkah, Agustiyani, and Abdi, 2021) illustrates 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, acidic, spicy foods, foods containing gas and fat. It is recommended for people with gastritis to consume fiber-rich foods such as vegetables and fruits to help smooth digestion. Eating small amounts helps neutralize stomach acid. With these efforts, it is hoped that the percentage of gastritis will decrease (Dwi Meilani, 2016).

5. Does your diet (breakfast, lunch, dinner) run regularly?

Based on interviews conducted with 4 informants regarding eating patterns that run regularly, it was found that the eating patterns of the informants were irregular.

a. Diet is a way or behavior taken by a person or group of people in choosing, using food ingredients in food consumption every day which includes eating frequency, meal portions, and types of food based on social factors, the culture in which they live (Hudha in Bagas, 2007) 2016).
b. In the daily eating pattern, the habit of eating regularly is often irregular, such as eating late or delaying eating, or not even eating can make the stomach feel empty for a long time. An irregular eating schedule will certainly attack the stomach. The dinner schedule should not be too close to bedtime. A person who goes to bed immediately after dinner is prone to gastric acid reflux. This condition causes stomach acid to rise into the esophagus and trigger discomfort (Kinanti 2014).

Based on Syamsu's research (2017) on the incidence of gastritis caused by diet, it was found that of the 95 respondents studied, the number of respondents who had a good diet was 43 students (45.3%) and 52 respondents who had a poor diet, santri (54.7%). It is thus explained that gastritis is mostly caused by irregular eating patterns such as most students only eat 1-2 times a day and there are even students who eat only 1 time a day with large portions. In addition, the amount of carbohydrate, protein, vitamin, and mineral content in the food consumed is not balanced.

6. Do you like sour food? How many times do you eat acidic foods in a week?

Based on the results of interviews with 4 informants, regarding consuming acidic foods, out of the 4 informants, they do not like acidic foods. Almatsier (2005:112) in (Ririn Fitri, 2013) states that: Types of food that are not recommended are fruits that are gassy and high in fiber (kedondong, guava, durian, jackfruit, and sour fruits), spicy foods, gaseous and high-fat foods (tapai, chocolate, fried foods, offal) and gaseous drinks.

Baliwati, 2011 in Desty Eka restiana, 2019 The results show that diet greatly influences the incidence of gastritis. The results show that 36 respondents have a bad diet and gastritis. The response to the poor eating pattern of the teenager tends to cause symptoms such as heartburn, flatulence, nausea, and flatulence, this is due to the preferences of adolescents who consume varied foods such as consuming foods with a spicy or sour taste.

7. Do you often eat spicy food? How many times a week do you eat spicy food?

Based on interviews conducted with 4 adolescent informants regarding the relationship between diet and the incidence of gastritis, it was found that the informants often and did not often consume spicy food.

a. Frequent consumption of spicy food can trigger gastritis. This is because spicy food stimulates the digestive organs and can cause irritation to the gastric mucosal layer. This excessive production of stomach acid can lead to gastritis due to inflammation of the stomach wall.
b. Spicy taste in spicy food is a combination of several acids, besides that, it is also one of the food ingredients that can increase the production of stomach acid so that the acidic atmosphere in the stomach can become higher. This high acid content can be an aggressive factor that can attack the stomach wall and cause injury to the gastric mucosa (Arikah and Muniroh, 2015).

Based on Arikah and Muniroh's research (2015) on the variable amount of spicy food consumption (sambal), the researchers determined the size of the amount of consumption in respondents based on URT, namely one teaspoon of chili sauce equals 5 grams. The results showed that research respondents who had a history of consuming chili sauce 3 teaspoons or more per consumption mostly experienced gastritis. The results of the statistical test showed a significant value ($p = 0.037$, OR = 11.667), thus the risk of gastritis occurrence in respondents who had a history of consuming chili sauce with a consumption of 3 teaspoons or more per consumption was 11.667 times greater than respondents who had a history of the habit of consuming chili sauce with a consumption amount of fewer than 3 teaspoons per consumption.

8. Do you always keep/try to keep your diet regular?

Based on interviews conducted with 4 adolescent informants regarding the relationship between diet and the incidence of gastritis, it was found that the informants tried to keep their diet regular. If a person eats up to 2-3 hours late, the stomach acid produced is more and more and more so that it can irritate the gastric mucosa and cause pain around the epigastrium. This irregular eating habit will make it difficult for the stomach to adapt. If it lasts a long time, the production of gastric acid will be excessive so that it can irritate the mucous walls of the stomach and can progress to peptic ulcers. This can cause stinging and nausea (Hidayat, 2017).

Based on research conducted by Aldelina (2019), it was found that gastritis sufferers who have a regular eating schedule and frequency are 7 people, while the remaining 5 people have an irregular eating schedule and frequency. More than half of the respondents suffer from gastritis despite having a regular schedule and eating frequency. They eat on a regular schedule, namely morning, afternoon, and evening and have a frequency of eating 3 times a day. Meanwhile, the other 5 respondents eat on a less regular schedule with a frequency of eating < 3x a day. So from this study, it is known that the schedule and frequency of eating do not have a significant effect on the incidence of gastritis. This is because there are other factors such as poor food quality, infection by bacteria, or direct exposure to stress that can trigger gastritis if it occurs continuously (Pasaribu et al., 2014). Meanwhile, the schedule and frequency of eating patterns are indirect factors for the emergence of gastritis (Aldelina, 2019).
9. What drugs do you usually take?

Based on the results of interviews from the 4 informants regarding the drugs commonly consumed, it was found that the drugs most often consumed were Promag and Mylanta.

a. Self-medication or what is called self-medication is the most common effort to treat symptoms of the disease before seeking help from health workers (Ministry of Health of the Republic of Indonesia, 2008).

b. Promag is an ulcer drug that belongs to the antacid class. Antacids are weak bases that react with hydrochloric acid, forming salt and water to reduce stomach acidity. (Widyaanti, 2018)

c. Mylanta contains the active ingredients aluminum hydroxide, magnesium hydroxide, and simethicone. This drug works by neutralizing stomach acid so that the pain in the pit of the stomach (heartburn) due to stomach acid irritation is reduced.

10. How do you think Islam teaches the perfect diet?

Based on the results of interviews with 4 informants about how Islam teaches the perfect diet, it was found that respondents answered halal food and not excessive eating.

a. The meal portion is the amount of food consumed at each meal. The frequency of eating is good if the frequency of eating a person every day is 3 times the main meal or 2 times the main meal with 1 snack. The frequency of eating is considered less if the frequency of eating every day is 2 main meals or less. (Irmayustini, 2019).

b. The categories of halal and tayyib food in Islam are:

1) Halal in substance
2) Halal by obtaining it
3) Halal in processing
4) Halal in presentation
5) Halal in the process. (Chapter et al., 2020)

CONCLUSIONS AND SUGGESTIONS

Gastritis is an inflammatory process or health problem caused by irritation and infection of the gastric mucosa and submucosa. Gastritis usually occurs due to irregular eating frequency so that the stomach becomes sensitive when stomach acid increases. It is better for people who have a history of gastric disease not to eat sour and spicy foods because they can cause gastritis to recur.

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