

# THE DESCRIPTION OF EATING PATTERNS AND RISK FOR GASTRITIS IN STUDENTS AT A PRIVATE UNIVERSITY IN WESTERN INDONESIA

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## ABSTRACT

*Gastritis is an acute or chronic inflammation that occurs in the gastric mucosa. According to WHO (2012), gastritis was ranked sixth of the top ten diseases that cause morbidity in the world. This study aims to identify an overview of eating patterns and the risk of gastritis occurrence in students at the Teacher College of Private University in the Western Indonesia. This research used descriptive quantitative with a cross-sectional approach. A sample of 165 students was taken using a purposive sampling technique. The research instrument used online questionnaires with univariate analysis. Result showed that there were 92 (55%) respondents who had irregular eating frequency, 94 (57%) respondents who had irregular meal times, 100 (60.6%) respondents who had irregular food types, and 101 respondents (61.2%) who were at risk of developing gastritis. Recommendations: The results of the study are expected to be used to provide education to respondents, families, and the community.*

**Keywords:** *College student, Eating patterns, Gastritis Risk*

## INTRODUCTION

One of the digestive tract disorders that is often felt by wide community is gastritis (Oktaviani, 2012). Gastritis is inflammation or bleeding of gastric mucosa which can be acute, chronic, diffuse, or local (Nurarif, A. H., & Kusuma, 2016). The World Health Organization (WHO, 2012) stated that gastritis is ranked sixth in the list of the top ten diseases that cause morbidity in the world. The number of gastritis in the world ranges from 1.8 million to 2.1 million of the total population each year (WHO, 2012). In Southeast Asia, the prevalence of gastritis is recorded in 583,635 cases from

the population every year (Uwa et al., 2019).

In 2013, gastritis was in fourth place out of 50 main diseases in hospitals throughout Indonesia with data received by 218,500 cases (Kemenkes RI, 2014). Furthermore, in 2014 gastritis was included in the top ten diseases suffered by inpatients in Indonesian hospitals with 30,154 cases (4.9%) (Anggoro et al., 2019). According to Gustin, (2011) a gastritis disease in Indonesia is experienced by many young people, one of which is students. The causes of gastritis in students from research conducted by Rika (2016) are irregular eating patterns, unhealthy

lifestyles, dense lecture activities, poor time-sharing in college assignments. It all makes students forget to eat and lazy to eat food. Furthermore, according to the research done by Kakerissa et al. (2019) for students of the Faculty of Nursing at one of the Western Indonesian Private Universities, another thing that can cause gastritis is an irregular diet and bad eating habits.

Based on data health clinic at Private University in West Indonesia from October 2019 until February 28, 2020, 83 students were diagnosed with gastritis. From the results of interviews conducted with ten students at Private University in West Indonesia, it was found that eight out of ten students had a history of gastritis, with complaints such as heartburn after eating large portions, abdominal bloating, feeling full quickly, nausea, vomiting, and burps frequently.

Seven out of ten students do not eat regularly, such as eating only when their stomach is empty and they tend to be late to eat. Moreover, six out of ten students said they often eat fast food, fried foods, seasoned (spicy, sour), drink soft drinks and caffeinated. Based on this phenomenon, the researcher is interested in

conducting a research regarding "The description of eating patterns and the incidence of gastritis risk in students Private Universities in West Indonesia".

## **METHODS**

The research design used in this research is descriptive quantitative with a cross sectional approach. This study aims to determine the description of eating patterns and the incidence of gastritis risk to student class 2019 of the Teaching Faculties at Private University in West Indonesian. The sample in this study was 165 students of class 2019 in a Teaching Faculties of Private University in West Indonesia. Data obtained by purposive sampling technique. The inclusion criteria include active students in 2019 and those who are willing to be respondents in the research. The exclusion criteria in this study include students who have become respondents for the validity and reliability test, students who are not willing to participate in the research.

The instrument used in this study was an online questionnaire with a Likert scale, which consisted of a questionnaire on diet and the risk of gastritis events and had been tested on 30 respondents, where it was declared valid and reliable if the

Pearson correlation value was greater than r table ( $r = 0.349$ ) and Cronbach alpha  $\geq 0.6$  (Sugiyono, 2019; Sujarweni, 2015). The dietary questionnaire was modified from Kakerissa et al. (2019), with a total of 25 statements consisting of positive and negative statements. The value of the questionnaire is always = four, often = three, rarely = two and never = one for positive statements, while negative statements have the opposite value of positive statements. The questionnaire for the risk of gastritis events has been modified from Pratiwi (2013) totaling 20 statements with a value of always = four, often = three, rarely = two and never = one. After the data were collected, the researcher, processed the data using the univariate analysis method. This study has received ethical approval from the Research Community Service and Training Committee.

## RESULTS

The results of this study are in the form of descriptions, which are the description of diet and the risk of gastritis incidence in students at a Private University on West Indonesia. Then it is reviewed based on demographic characteristic, for example gender. The diet includes the frequency of eating, meal time, type of food.

**Table 1.** Frequency Distribution of Respondent Characteristic Based on Gender

Gender	F (n)	M (%)
Male	42	26,1
Female	122	73,9
Total	165	100

Based on table 1, it can be seen that of the 165 respondents, most of them were female, as many as 122 (73.9%) respondents.

**Table 2.** Frequency Distribution Is Based on The Frequency of Eating of Respondents

Frequency of eating	F (n)	M (%)
Regular	73	44,2
Irregular	92	55,8
Total	165	100

Based on table 2, it can be seen that most respondents have a frequency of eating irregularly, namely as many as 92 respondents (55%).

**Table 3.** Frequency Distribution Based on Meals Times of Respondents

Meals time	F (n)	M (%)
Regular	71	43,0
Irregular	94	57,0
Total	165	100

Table 3 shows that most respondents have irregular mealtimes, as many as 94 respondents (57%).

**Table 4.** Frequency Distribution Based on The Type of Food of Respondents

Type of food	F (n)	M (%)
Regular	65	39,4
Irregular	100	60,6
Total	165	100

Based on table 4, it is clearly reflected that most of the respondents, namely 100

respondents (60.6%), have irregular types of food.

**Table 5.** Frequency Distribution Based on The Risk of Gastritis Incidence of Respondents

Risk of gastritis	F (n)	P (%)
At risk	101	61,2
Not at risky	64	38,8
Total	165	100

Based on table 5, it can be inferred that most of the respondents were at risk for gastritis, namely 101 respondents (61.2%).

## DISCUSSION

Based on table 1, it is found that there are more female students rather than male students. This is because the number of student population at the Faculty of Teacher Training is dominated by the female gender. In addition, respondents also often do diet programs to lose weight by changing their diet. The results of this study are also in line with research conducted by Monica (2019) which shows that the predominant gastritis patient is female. Research conducted by Anggoro et al. (2019) also states that this happens because women tend to be anxious about their body shape, so women tend to do diet more often because they feel less confident about being overweight.

From the table 2, it was found that most of the respondents had a frequency of eating

irregularly. From the results of the questionnaire analysis, it was found that out of 165 respondents, most of the respondents, as many as 88 respondents (53%) take a breakfast. In fact, morning is a very good time to eat because it can provide energy needed in carrying out activities and if a person does not eat or eat less than three times a day, it can cause gastritis, because the meal schedule must adjust to an empty stomach (Restiana, 2019). This study is in line with research conducted by Fitri (2013) that 38.5% of respondents rarely eat regularly, 33.3% of respondents rarely eat breakfast, 46.1% are always late to eat. This is because respondents are lazy to eat and have many activities at the same time as mealtime.

The results of the study in table 3 show that most respondents have irregular meal times. The results of the questionnaire analysis of 165 respondents showed that 82 respondents (50%) often ate after 19.00, 66 respondents (40%) often did diet programs to lose weight by changing their diet, and as many as 89 respondents (54%) state that their daily activities affect the timing of meals. This is in line with research conducted by Yatmi (2017) that there are as many as 40 respondents (88.9%) who have irregular meal times due to the large

number of respondents' activities leading to chaotic mealtime. The results of the study are not in line with research conducted by Saputra & Tamzil (2011) that as many as 32 respondents (61.5%) have a regular diet.

Based on the research results in table 4, it was found that most respondents had irregular types of food. From the results of the questionnaire analysis, there were 91 respondents (55%) who often ate spicy food. Furthermore, as many as 103 respondents (62%) said they ate fatty foods such as fried foods or coconut milk. These results are in line with research conducted by Uwa et al (2019) that respondents who have an irregular diet are more dominant, namely 25 (83.3%) of 30 respondents, because they tend to have the habit of consuming spicy fatty foods, and sour.

Abata (2014) also states that consumption of vegetables and fruits can increase gas and stomach acid production, so people with gastritis must reduce their consumption of these foods. The results of this study are not in line with research conducted by Yatmi (2017) that most respondents, as many as 29 respondents (64.4%), ate non-irritating or regular types of food. This is because the respondent's low level of awareness of gastritis.

Based on the research that has been conducted by researchers in table 5, it is found that most respondents are at risk of gastritis. This is in accordance with the questionnaire analysis that 64 respondents (39%) stated that they often experience heartburn, and 71 respondents (43%) stated that they often experience pain in the stomach when consuming spicy food. These results indicate that almost half of them often experience pain when eating spicy food.

This study is in line with research conducted by Hartati et al. (2014) that found 62 respondents (53.9%) were at risk of gastritis, because they often consume spicy food, eat when hungry, eat fast food, sour foods, drinks, fizzy, and caffeinated. The results of this study are also in accordance with the theory of Black and Hawks (2014) that the clinical manifestations of gastritis are discomfort in the epigastrium, nausea, vomiting, pain in the stomach, belching. However, the results of the study are not in line with research conducted by Saputra & Tamzil (2011) that there are 30 respondents (57.7%) who are not at risk of gastritis.

## CONCLUSION

Based on the results of the univariate analysis of eating patterns, it was concluded that most of the respondents, as many as 92 (55%) of respondents, had an irregular eating habit and those who had irregular eating times were 94 (57%) respondents. Furthermore, the results of the univariate analysis of the risk of gastritis incidence showed that most respondents were at risk of experiencing gastritis incidence of 101 (61.2%) of respondents.

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