



The Correlation of Dietary Habit with Incidence of Gastritis

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ABSTRACT

Objective: The purpose of this study was to determine the relationship between diet and the incidence of gastritis in adolescents at Madrasah Aliyah Negeri 2 Ciamis (MAN 2 Ciamis), Ciamis Regency, West Java.

Method: The research desain used in this study is an analytical survey, to find the relationship between diet and the incidence of gastritis in adolescents, it is carried out with a cross sectional approach. The population used in this study were all teenagers consisting of class X students with a total population of 62 people. The total sample used is 56 people. The sampling technique used is purposive sampling, which is the sampling of data sources with the consideration of 56 respondents. To find the relationship between the two variables, the SPSS TEST was used to obtain the results of the chi-square test with a 95% confidence level and presented in the form of tables and narratives.

Result: In this study, as many as (67.9%) adolescents with poor dietary habits experienced more gastritis than those who did not experience gastritis (32.1%) and The results of the non-parametric chi square test showed a large number of values = $0.000 < 0.05$ which stated that there was a significant relationship between diet and the incidence of gastritis in adolescents.

Conclusion: There is relationship between dietary habits and the incidence of gastritis in adolescents at MAN 2 CIAMIS.

Keywords: adolescent, diet, gastritis, habit,

Introduction

Adolescence is a stage of transition from childhood to adulthood (Kapur, 2015). Youth is the hope of the nation, so it can be said that the future of the nation is determined by the current state of youth. The life of teenagers in modern times is very worrying because of an instant and unhealthy lifestyle. Teenagers prefer instant food, eat irregularly and don't even pay attention to

the cleanliness and nutritional value of these foods (Tanir, 2019). Wrong and irregular dietary habits in adolescents become a habit that can cause various diseases, one of which is gastritis (Wahyuni, Rumpiati, & LestaRiningsih, 2017).

Gastritis is an inflammation of the gastric mucosa caused by irritation, infection and atrophy of the gastric mucosa (Sandi et al., 2021). This inflammation can cause swelling of the gastric mucosa to release the epithelium which will interfere with the digestive tract. The inflammation is usually caused by a bacterial infection, namely *Helicobacter Pylory*, this bacterium is the only bacterium that lives in the stomach (Amri, 2020).

According to the World Health Organization (WHO), there are 1.8-2.1 million cases of gastritis worldwide from the total population each year, also in 22.0% England, 31.0%, China 14.5%, Japan, 35.0% Canada, and 29.5% in France. In fact, there are about 583,635 of the population each year in Southeast Asia. So that the incidence of gastritis in Indonesia according to WHO reaches a percentage of 40.8%. and The prevalence of gastritis in several regions in Indonesia reached 274,396 cases so that the cases were quite high (Sumangkut, Rompas, & Karundeng, 2014).

Based on the Ministry of Health of the Republic of Indonesia in several cities in Indonesia, there is the highest prevalence of gastritis incidence, namely in Medan, reaching 91.6%, followed by Surabaya at 31.2%, 46.0% by Denpasar, 50.0% by Jakarta, Bandung 32.5%, Palembang 35.0%. and Pontianak 31.2%. Meanwhile, data from the Ciamis Health Service, Cipaku Health Center, there are 726 (15%) the number of adolescents who experience the highest incidence of gastritis with the number of adolescents aged 16-19 years as many as 4798 people (Nurmaidini et al., 2020).

Maintaining a good and regular diet is one of the management of gastritis and a preventive measure in preventing gastritis recurrence. Based on the background and events that occur in adolescents today, the researchers are interested in conducting a study entitled "The relationship between dietary habits and the incidence of gastritis in adolescents".

Objective

The purpose of this study was to determine the relationship between diet and the incidence of gastritis in adolescents.

Method

The type of method used in this study is an analytical survey, to find the relationship between diet and the incidence of gastritis in adolescents, it is carried out with a cross sectional approach. The advantage of this cross sectional method is that it can provide convenience in carrying out research, and is economical in terms of time and the results obtained can be quickly. The variables in this study were gastritis as the independent variable and diet as the dependent variable. This research was conducted through the stage of distributing questionnaires in the form of a google form to the students of MAN 2 CIAMIS.

The population used in this study were all teenagers consisting of class X students with a total population of 62 people. The total sample used is 56 people. The sampling technique used is purposive sampling, which is the sampling of data sources with the consideration of 56 respondents. Inclusion criteria in this study included men and women aged 12-18 years, had gastritis, were willing to fill out informed consent. Exclusion criteria in this study included men and women <12 years, no history of gastritis.

The data that has been obtained is then analyzed using univariate analysis which has the aim of assessing the proportion of each variable studied such as the characteristics of the respondents including age, gender, diet and incidence of gastritis. Also bivariate analysis has the aim of assessing the relationship between the independent variable and the dependent variable, in the form of a frequency distribution. To find the relationship between the two variables, the SPSS TEST was used to obtain the results of the chi-square test with a 95% confidence level and presented in the form of tables and narratives.

Results

Table 1. Frequency Distribution by Gender

Gender	Frequency	Presentation (%)
Male	16	28.6
Female	40	71.4
Total	56	100.0

Table 1 it can be seen that the distribution of respondents based on gender is mostly female as many as 40 respondents (71.4%) and male respondents as many as 16 respondents (28.6%)

Table 2. Frequency Distribution of Respondents by Age

Age	Frequency	Presentation (%)
≤ 16	42	75.0
> 16	14	25.0
Total	56	100.00

Table 2 it can be seen that the distribution of respondents based on age is mostly 16 years old as many as 42 respondents (75.0%), compared to age > 16 years as many as 14 respondents (25.0%).

Table 3. Frequency Distribution Based on Diet

Dietary Habit	Frequency	Presentation (%)
Bad	38	67.9
Good	18	32.1
Total	56	100.0

Table 3 it can be seen that the distribution of respondents based on the category of dietary habits the most, namely bad dietary habits as 38 people (67.9%) and good dietary habits as 18 people (32.1%).

Table 4. Frequency Distribution Based on Gastritis

Gastritis	Frequency	Presentase (%)
Has not	15	26.8
Gastritis	41	73.2
Total	56	100.0

Table 4 it can be seen that the distribution of respondents based on the incidence of gastritis is the most that 41 people (73.2%) have gastritis and 15 people (26.8%) do not.

Table 5. Relationship Between Diet And The Incidence of Gastritis In Adolescents in MAN 2 CIAMIS

Dietary Habbit	Incidence of Gastritis						P value
	No. Gastritis		Gastritis		Total		
	f	%	f	%	f	%	
Not Good	0	7.3	38	92.7	38	100	0.000
Good	15	83.3	3	16.7	18	100	

Table 5 it can be seen that some respondents with a good diet do not have gastritis as much as 16.7% and this number is quite large compared to experiencing gastritis. Respondents with a bad diet experienced gastritis as much as 92.7% more than those who did not experience gastritis with a bad diet as much as 7.3%. Chi square test obtained p value = 0.000 (<0.05) which indicates there is a significant relationship between diet and gastritis in adolescents.

Discussion

Based on the results of the study, there were 40 female respondents (71.4%) and 16 male respondents (28.6%). In this study, the number of female students was more than that of male students, namely 56 respondents from the results of the calculation of the sample in class X students at MAN 2 CIAMIS. From the results of the study, it was found that women are more susceptible to gastritis than men, because men are more tolerant of the pain and symptoms of gastritis than women (Li et al., 2020).

The results showed that the age of respondents was dominated by age 16 years as many as 42 respondents (75.0%), compared to age > 16 years as many as 14 respondents (25.0%). At this age, adolescents experience psychological changes, previously they were very dependent on their parents, but at the age that they were starting to grow up, they had to learn to be independent of themselves such as sorting food and managing portions and frequency of eating. Researchers stated that teenagers at that age are prone to gastritis, this is because teenagers are required to live independently so as not to depend on their parents in choosing food, teenagers also often leave breakfast (Penafiel et al., 2016).

The results of the study from 56 respondents who had a good dietary habit were 18 people (32.1%) and respondents who had a bad dietary habit were 38 people (67.9%) who had a regular eating frequency as many as 15 people (26.8%) and respondents who had an unhealthy eating frequency. regularly as many as 41 people (73.2%).

Diet is information that can provide an overview of the types and models of foodstuffs that can be consumed every day, which consists of eating frequency, type of food and meal portion (Keshteli et al., 2014). The results showed that some respondents who have irregular

eating frequency can cause gastritis. This states that the frequency of eating is said to be good if the frequency of eating is regular and is considered not good if the frequency of eating is irregular (Sogari et al., 2018).

Based on the results of the study, it showed that some respondents liked the type of food that could be at risk of causing gastritis. This is in accordance with the theory that there are many factors that can cause gastritis including irregular dietary habits, irregular eating frequency, stress factors, alcohol, age and also the types of foods that can increase stomach acid such as spicy, sour, instant foods. fast food) and occasionally consuming soft drinks (Lim et al., 2013)

Based on the results of the cross table analysis of the relationship between diet and the incidence of gastritis in adolescents at Madrasah Aliyah Negeri 2 Ciamis, Ciamis Regency, it shows that 56 respondents who have a good diet are 18 people (32.1%) and 38 respondents who have a bad dietary habit (67.9%), while from 56 respondents there were 41 people (73.2%) had gastritis and 15 people (26.8%) didn't have gastritis. From the results of the Chi Square statistical test using the SPSS 25 application with a level of $\alpha = 0.05$, it was found that $p \text{ value} = 0.000 < \alpha$ so that H_0 was rejected, which means that there is a relationship between diet and the incidence of gastritis in adolescents at MAN 2 CIAMIS

Conclusion

The results showed that there was a significant relationship between diet and the incidence of gastritis in adolescents as evidenced by the results of the Chi Square statistical test that $p \text{ value} < \alpha$ or $0.000 < 0.05$, meaning that there was a relationship between diet and the incidence of gastritis in adolescents. The frequency of eating is said to be good if the frequency of eating is regular and is considered bad if the frequency of eating is irregular. It can be interpreted that the more regular dietary habits, the smaller the incidence of gastritis. This research is expected to be useful as a reference as a source of scientific studies, especially regarding the relationship between diet and the incidence of gastritis.

References

1. Amri, S. W. (2020). Hubungan Pola Makan Dengan Gastritis Pada Remaja Di SMK Kesehatan Napsi'ah Stabat Kabupaten Langkat. *Malahayati Nursing Journal*, 2(4), 659–666. <https://doi.org/10.33024/manuju.v2i4.2966>
2. Kapur, S. (2015). Adolescence: the stage of transition. *Horizons of Holistic Education*, 2, 233–250.
3. Nurmaidini, B., Rohita, T., Milah, A. S., & Kunci, K. (2020). Manajemen Gastritis. *Jurnal kesehatan*, 2(9), 89-94
4. Keshteli, A. H., Esmailzadeh, A., Rajaie, S., Askari, G., Feinle-Bisset, C., & Adibi, P. (2014). A dish-based semi-quantitative food frequency questionnaire for assessment of dietary intakes in epidemiologic studies in Iran: design and development. *International Journal of Preventive Medicine*, 5(1), 29.
5. Li, Y., Su, Z., Li, P., Li, Y., Johnson, N., Zhang, Q., ... Zhang, C. (2020). Association of Symptoms with Eating Habits and Food Preferences in Chronic Gastritis Patients: A Cross-Sectional Study. *Evidence-Based Complementary and Alternative Medicine*, 2020.
6. Lim, S.-L., Canavarro, C., Zaw, M.-H., Zhu, F., Loke, W.-C., Chan, Y.-H., & Yeoh, K.-G. (2013). Irregular meal timing is associated with helicobacter pylori infection and gastritis. *International Scholarly Research Notices*, 2013.
7. Penafiel, D., Termote, C., Lachat, C., Espinel, R., Kolsteren, P., & Van Damme, P. (2016).

Barriers to eating traditional foods vary by age group in Ecuador with biodiversity loss as a key issue. *Journal of Nutrition Education and Behavior*, 48(4), 258–268.

8. Sandi, Y. D. L., Fitriani, A., Lismayanti, L., Srinayanti, Y., & Widiyanti, W. (2021). Prevalence and Correlation of Knowledge Level, Stress, Diet Compliance and Quality of Life in Gastritis Patients. *Genius Journal*, 2(1), 22–29.
9. Sogari, G., Velez-Argumedo, C., Gómez, M. I., & Mora, C. (2018). College students and eating habits: A study using an ecological model for healthy behavior. *Nutrients*, 10(12), 1823.
10. Sumangkut, M. S., Rompas, S., & Karundeng, M. (2014). Pengaruh Penyuluhan Kesehatan Tentang Gastritis Terhadap Pengetahuan Dan Perilaku Pencegahan Gastritis Pada Remaja Di Sma Negeri 7 Manado. *Jurnal Keperawatan*, 2(2).
11. Tanir, H. (2019). Determination of Healthy Life Style Behaviours of the Students in Middle-Adolescence. *World Journal of Education*, 9(1), 70–78.
12. Wahyuni, S. D., Rumpiati, & LestaRiningsih, R. E. M. (2017). Hubungan Pola Makan Dengan Kejadian Gastritis Pada Remaja. *Global Health Science*, 2(2), 149–154.