



Article

HOW STRESS AND GASTRITIS OCCURS IN TEENAGERS

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ABSTRACT

Gastritis, also known as stomach ulcers, is inflammation (swelling) of the gastric mucosa caused by irritation and infection, one of the causes of which is psychological factors or stress. In fact, people, especially teenagers, think that gastritis is only caused. The aim of this research is to determine the relationship between stress and the incidence of gastritis in teenagers at Bustanus Shibyan Islamic High School, Bulmatet Village, Karang Penang Sampang District in 2023. Method: This research design uses quantitative research methods using a cross sectional approach. The population in this study was all students at Bustanus Shibyan Islamic High School, Bulmatet Village, Karang Penang Sampang District, totaling 52 students and the sample was all students at Bustanus Shibyan Islamic High School, Bulmatet Village, Karang Penang Sampang District. The technique used is total sampling. Data was collected using a questionnaire sheet and analyzed descriptively and presented in table and narrative form. Based on the research results, it was found that the majority of respondents experienced gastritis due to moderate stress, 18 people (64%). The role of health workers, especially nurses, is needed to provide education in dealing with this problem, namely as educators who can provide information to the public about the importance of controlling stress in gastritis sufferers.

I. INTRODUCTION

Gastritis, also known as stomach ulcers, is inflammation (swelling) of the gastric mucosa caused by irritation and infection (Rahma, et al, 2017). Various studies have concluded that complaints of pain in gastritis are most commonly found as a result of functional gastritis, reaching 70-80% of all cases. Functional gastritis is a disease that is not caused by disorders of the stomach organs but is more often triggered by inappropriate eating patterns, psychological factors and anxiety (Saydam, 2018). Gastritis can attack people of all ages and genders. Several surveys show that gastritis most often attacks those of reproductive age. People of productive age are susceptible to gastritis symptoms due to their level of busyness and lifestyle that pays little attention to health and stress which easily occurs due to the influence of environmental factors (Hartati, et al, 2014)

Based on Riskesdas 2018, gastritis is one of the ten most common diseases in hospital inpatients in Indonesia with a total of 30,154 cases (4.9%) (Gustin, 2018). Data from the East Java Health Office in 2019, in East Java the incidence of gastritis was 31.2% among all age groups. From a preliminary study conducted on 10 students who experienced gastritis at Bustanus Shibyan Islamic High School, Bulmatet Village, Karang Penang Sampang District, 9 of them were experiencing stress either due to subjects or personal problems.

Stress is a physiological, psychological and behavioral response from humans who try to adapt and regulate both internal and external pressures. Stress can also cause gastritis. Stress will have a negative impact on the digestive system. When hit by severe stress, stress can reduce appetite, make the stomach empty, increase stomach acid which can cause pain in the stomach (Mustika et al., 2021).

The role of health workers, especially nurses, in dealing with this problem is as educators who can provide information to the public about the importance of controlling stress in gastritis sufferers. In this research, it is hoped that people who suffer from gastritis, including those at risk of developing gastritis, can take preventive measures to prevent the occurrence of gastritis and the complications it causes. Based on the background description above, the researcher feels interested in taking a research topic about the influence of stress on the occurrence of stress at Bustanus Shibyan Islamic High School, Bulmatet Village, Karang Penang Sampang District in 2023.

II. METHODS

This research is quantitative research, with an approach model *cross sectional* (Suhron, 2024). The sample was all students at Bustanus Shibyan Islamic High School, Bulmatet Village, Karang Penang Sampang District, totaling 52 students. The independent variables in this study are adolescent stress and the incidence of gastritis in adolescents as the dependent variable. Meanwhile, the analysis used in this research uses correlation *Spearman rho*.

III. RESULT

1. General Data Results

Umur Responden

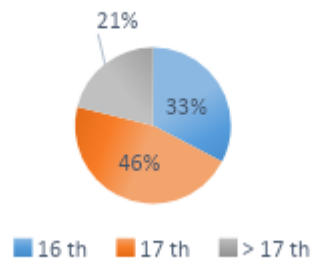


Figure 1 Age Characteristics of Respondents

Based on Figure 1, it shows that almost half of the respondents are 17 years old, 24 respondents (46%)

Jenis Kelamin Responden

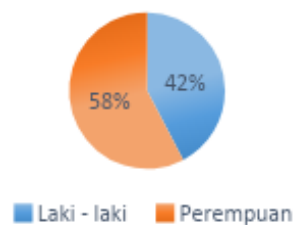


Figure 2 Gender Distribution of Respondents

Based on Figure 2, it shows that the majority of respondents' gender is female, 30 respondents (58%)

Tingkat Stres Responden

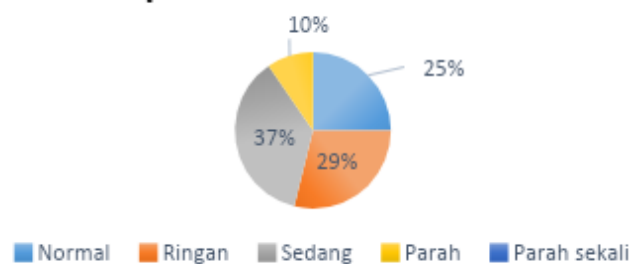


Figure 3 Distribution of Respondents' Stress Levels

Based on Figure 3, it shows that almost half of the stress experienced by respondents was moderate stress, 19 respondents (36%)

2. Custom Data

Table 1
Cross Tabulation between stress levels and the incidence of juvenile gastritis

Stress level	The occurrence of gastritis				Amount	
	No gastritis		Having gastritis			
	Σ	%	Σ	%	Σ	%
Normal	13	54	0	0	13	25
Light	10	42	5	18	15	29
currently	1	4	18	64	19	36
Critical	0	0	5	18	5	10
Total	24	100	28	100	52	100

Uji statistic $\alpha = 0.05$

rvalue = 0,000

Tingkat Stres Responden

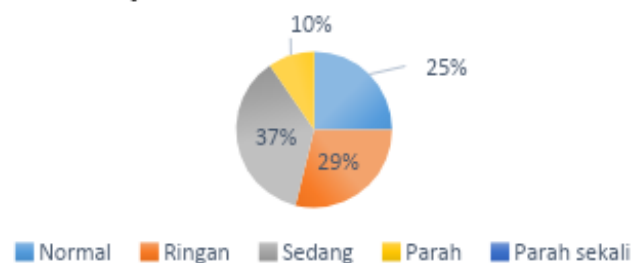


Figure 3 Distribution of Respondents' Stress Levels

Based on Figure 3, it shows that almost half of the stress experienced by respondents was moderate stress, 19 respondents (36%)

Kejadian Gastritis Responden

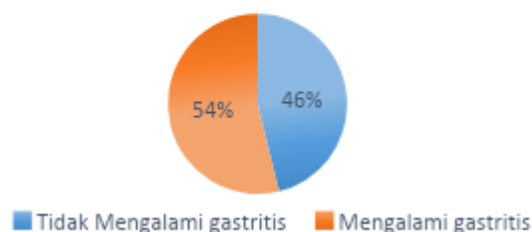


Figure 4 Distribution of Respondents' Gastritis Incidents

Based on Figure 4, it shows that the majority of teenagers experience gastritis, namely 28 respondents (54%).

From the cross tabulation results shown in table 1, it is known that the majority of respondents experienced gastritis due to moderate stress, 18 people (64%). Based on statistical tests, the results of the analysis using SPSS (Statistical Product Service Solution) software version 18.0, the Spearman rho test results were obtained, showing that the p value was significant at 0.000, which was smaller than the α value of 0.05. The p value $< \alpha$ ($0.000 < 0.05$) means that there is a relationship between stress and the incidence of gastritis in adolescents.

IV. DISCUSSION

1. Description of the stress level of respondents at Bustanus Shibyan Islamic High School, Bulmatet Village, Karang Penang Sampang District

Based on the research results, it shows that almost half of the stress experienced by respondents was moderate stress, 19 respondents (36%). Stress can be influenced by several factors, including age and gender. Gender plays a role in stress. There are differences in responses between men and women when facing conflict. The female brain has a negative awareness of conflict and stress. In women, conflict triggers negative hormones that cause stress, anxiety and fear. Meanwhile, men generally enjoy conflict and competition, and even think that conflict can provide positive encouragement. In other words, when women are under pressure, they generally experience stress more easily (Brizendine, 2015).

Differences in responses to stress between women and men are closely related to the activity of the HPA axis which is related to the regulation of the hormone cortisol, and the sympathetic nervous system which is related to heart rate and blood pressure. Autonomic and HPA responses were found to be higher in adult men than in adult women, thus affecting a person's performance in dealing with psychosocial stressors. In addition, sex hormones in women will reduce the HPA and sympathoadrenal response which causes a decrease in negative cortisol feedback to the brain, making women easily stressed (Wang, 2016).

Women have softer and more sensitive feelings than men, so this is what makes women more stressed than the opposite sex, such as when women experience problems or pressure on themselves, both in the family and society, for example at school, women will tend to keep the problem itself. This makes it seem like she is living alone without anyone to help her because women think that other people are busy with their own lives, so they feel that other people's burdens will increase if she tells them about her problems.

Based on table 5.1, it can be seen that almost half of the respondents' age was 17 years compared to 24 respondents (46%). The group most vulnerable to stress is young people. This is because teenagers are considered not to have much experience and therefore do not have many references (Nabila, 2019). Age is related to a person's tolerance for stress. At this age, teenagers are often vulnerable to stress and their emotions are very strong. The older they are, the better their ability to handle stress, so stress levels as they age will decrease. According to Soetjiningsih (2007) in Dewi et al., (2015). Early adolescents will experience changes in their bodies, begin to develop things they never thought possible, will be easily attracted by the opposite sex, and will quickly become sexually aroused, which will make it difficult for early adolescents to understand and be understood. Stress can occur due to balance disorders and a combination of other factors, namely: biological, psychological and social. The lifestyle that teenagers choose, the friendships they build, and the coping skills that teenagers have can influence stress (Priyoto, 2019). This stress arises because there is no

balance between the demands and resources that teenagers have, the greater the gap that is presented, the greater the level of stress experienced by teenagers (Yosep & Sutini, 2014). Apart from that, stress in teenagers also occurs due to various things such as pressure in the academic field, bullying, family factors, and economic problems (Alfina, 2020).

2. Description of the respondent's gastritis incidence

Based on research, it shows that almost half of the respondents are 17 years old, 24 respondents (46%). According to Soetjningsih (2010) age is a risk factor for gastritis, especially during adolescence, which is a transition period from being very dependent on parents to a period of total responsibility and having to live independently and at that age people tend to pay less. pay attention to their health, for work reasons and teenagers have very busy activities. According to existing theory Hurlock (2013). Adolescence is a very important period in human life, a period of transition or transition from childhood to adulthood, a period of searching for identity, the desire to be accepted by peers and starting to be interested in other people. . of the opposite sex and makes teenagers very careful and follow the wrong diet. Teenagers often understand that the ideal body is a slim body, so to maintain slimness teenagers make the wrong food arrangements and teenagers are an age that is easily attracted to new things, including advertised food products, even though the food does not necessarily have the right nutritional content. tall. Good content.

Those aged 17 years and over who are in the early teens category may experience ulcers caused by unhealthy eating patterns regularity, type of diet and anxiety. This incident of ulcers occurs because of the desire of teenagers to have an ideal body which according to teenagers is ideal, namely a slim body shape which makes their eating patterns become irregular, and teenagers try to be accepted by their peers and they start to be attracted to the opposite sex which can make teenagers really take care of their appearance. , all these factors greatly influence teenagers' eating patterns, including food selection and meal frequency. Teenagers are so afraid of fat that they avoid breakfast and lunch or only eat once a day.

3. The relationship between stress and the incidence of juvenile gastritis

Based on statistical tests, the results of the analysis using Spearman Rho show that the p value is significant at 0.000, which is smaller than α 0.05. The p value $< \alpha$ (0.000 $<$ 0.05) means that there is a relationship between stress and the incidence of gastritis in adolescents with a correlation coefficient $r = 0.800$ at Bustanus Shibyan Islamic High School, Bulmatet Village, Karang Penang Sampang District

Based on table 5.3, it shows that almost half of the stress experienced by respondents is moderate stress, 19 respondents (36%) and most teenagers experience gastritis, namely 28 respondents (54%).

Gastritis is usually experienced by teenagers and people who are stressed because stress can trigger increased stomach acid production. One of the consequences is that it can interfere with activities because it causes pain and discomfort in the stomach (Sihombing, 2018). When the body experiences stress, psychological changes will occur in the body as a response to stress. From the research results, it is known that the majority of respondents diagnosed with gastritis had previously experienced stress. Stress is more caused by the respondent's inability to cope with the heavy workload and the many life pressures experienced, the system in the body responds through the autonomic nervous system which will then affect the

function of the body's organs, one of which is digestion. organ. (Hasnah, 2017). Sukarti (2016) explains that stomach acid production will increase in stressful situations, for example with a heavy workload, panic and rush. Increased levels of stomach acid can irritate the gastric mucosa and if left for a long time can cause gastritis. For some people, stressful situations are generally unavoidable.

These irregular eating habits will make it difficult for the stomach to adapt. If it lasts for a long time, stomach acid production will be excessive, which can irritate the mucosal lining of the stomach and can progress to gastric ulcers. This can cause pain and nausea. These symptoms can rise into the esophagus, causing a burning sensation (Sukarti, 2016).

V. CONCLUSION

From the results of the collection and processing, it can be concluded that almost half of the stress experienced by teenagers is moderate stress. Apart from that, the majority of teenagers experience gastritis, and there is a relationship between stress and the incidence of gastritis in teenagers at Bustanus Shibyan Islamic High School, Bulmatet Village, Karang Penang Sampang District.

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