

**THE CORRELATION OF STRESS TOWARD EXAMINATION WITH GASTRITIS
SYMPTOMS IN XI CLASS STUDENTS OF SENIOR HIGH SCHOOL WACHID
HASYIM 2 TAMAN SIDOARJO**

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Abstract

Stress can happen to anyone, many students of XI class Wachid Hashim 2Taman Sidoarjo. The one who gained a lot of stress on the exam is the digestive system disorders. The purpose of this study is to determine the connection of stress toward exam with gastritis symptoms in XI class of senior high school Wachid Hashim 2 Taman Sidoarjo. The design of this study is Analytic, Adopted approach is a cross sectional. The population is all students in XI class WachidHayim 2 Taman Sidoarjo are 120 students. Larger sample of 92 were taken by simple random sampling technique. The independent variable was the stress before the exam, the dependent variable is a symptom of gastritis. Collecting questionnaires. Data through the data analysis used Mann Whitney test. The results of the stress level of the categories of the data Showed that 39 respondents (42.4%) experienced moderate stress, whereas symptoms of gastritis category 52 (56.5%) had symptoms of gastritis. Mann Whitney test result is obtained value $p = 0,008$ and $\alpha = 0,05$, means $p (0,008) < \alpha (0,05)$ that as result result to rejected. The conclusion is the lower the level of stress in students the less risk student is experiencing symptoms of gastritis. Therefore, students should be Able to set the time in making the learning plan, and do not delay the time to learn that when an exam The students prepared and do not stress.

Keywords: Stress before the exam, symptoms of gastritis

INTRODUCTION

Many gastritis disease meet in the community because lifestyles in modern times. Gastritis is a inflammation or gastric mucosal bleeding that can be acute or chronic (Prince, 2005). Symptoms of gastritis usually illustrated with epigastric

discomfort are usually flushed with burning or pain, abdominal pain, nausea (Black, Joycem, 2014). Health problems are often underestimated by the community, especially students. The disease is caused by drugs, alcohol, radiation therapy and chemotherapy, diet and stress.

But in reality many students have gastritis. Stress experienced by students can be caused because in everyday they life are often preoccupied by school work

and home work, this is something that can trigger stress.

Stress will cause sensory nerves send Signals to Hypophyse as an alarm, then send the signal to

adrenal glands to release cortisol and adrenaline , Adrenal glands will produce and secrete other hormones one of them that causes increased stomach acid. The gastric mucosal layer normally protects from stomach acid. When hydrochloric acid (gastric acid) is excessive and affects the gastric mucosa, stomach ulcers (Black, Joycem, 2014). Students are very susceptible to stress, one factor is many tasks to be completed, such as house assignment, field assignment, conflict with peers, this is a source of stress for students, especially students of class XI.

When the stress occurs continuously and excessive, it will be able to cause various diseases one of them is gastritis.

According to data from the Ministry of Health of the Republic of Indonesia in 2011. Gastritis included into the top ten disease with first position inpatient and outpatient fifth position in the hospital. The average patient who came to the health care unit experienced complaints related to pain in the solar plexus. Based on data from Surabaya Health Department, in 2012 the number of people experiencing gastritis is 86,137 people with the percentage of 5.87%, while in 2013 with the number of patients 54.899% of the population. Based on the results of interviews conducted on 26 February 2015 at grade XI SMA Wachid Hasyim 2 Taman Sidoarjo found 6 out of 12 respondents experienced symptoms of gastritis such as pain in the pit of the stomach, nausea, and discomfort in the stomach. The data from Wachid Hayim High School 2 Taman Sidoarjo shows that in November 2014-February 2015 students checked with gastritis symptoms are 60 students, and the result from interview at 28 March 2015 to Students in XI class of senior high school in Wachid Hasyim 2 Taman Sidoarjo are 3 from 8 students have gastritis symptoms as epigastric pain, nausea, and decreased appetite.

Factors can cause gastritis are: drugs, alcohol, radiation therapy, diet, bacterial infections, and stress. Stress is the body's reaction to various non-specific guidelines or charges. The effect of stress and continuously can increased stomach acid production and gastric acid excessive can caused gastritis symptoms. Gastritis symptoms if not resolved can give effects as stomach cancer can even cause death.

Based on the above problems to overcome the gastritis that arise due to excessive stress then the students must be able to manage stress well, do not forget also to adjust the diet, and than the students can Utilizing existing technologies like the internet and read book to prevent gastritis symptoms.

METHODE

The research design used in this study is an observational analytics that aims to connect between two variables of stress before the exam with variable symptoms of gastritis. This research is cross-sectional which the independent variable (stress) and dependent (gastritis symptoms) were observed only once. The population in this study were all students XI class of senior high school in Wachid Hasyim 2 Taman Sidoarjo are 120 students in February 2015 and the sample in this research is 92 students.

The samples in this study is the use probability sampling stratified random sampling technique is simple random sampling. The location of this research was conducted at Wachid Hasyim 2 Taman Sidoarjo. The study was conducted in June 2015

RESULT

1. Stress Data

Distribution of respondents based on stress level before the exam on XI class students of senior high school in Wachid Hasyim 2 Taman Sidoarjo obtained from data collection conducted by researchers, as follows

Table 1 Distribution frequency of respondents based on stress level in XI class students of senior high school at Wachid Hasyim High School 2 Taman Sidoarjo June 2015

No	Persentase Stres	Frekuensi
1.	Normal 29,3	27
2.	Light 20,7	19
3.	Moderate 42,4	39
4.	Heavy 4,3	4
5.	Very heavy 3,3	3
Jumlah		92
		100

Primary data source: June 2015

From 92 respondents, almost half (42.4%) have moderate stress

2.Data symptoms of gastritis respondents based on symptoms of gastritis in grade XI students Wachid Hasyim 2 Taman Sidoarjo obtained from data collection conducted by researchers, as follows

Table 2 Distribution of frequency of respondents based on symptoms of gastritis and no symptoms of gastritis in XI class students of senior high school at Wachid Hasyim High School 2 Taman Sidoarjo June 2015

No symptoms of gastritis frequency Percentage	
1. No symptoms of gastritis	40 43,5
2. Have symptoms of gastritis	52 56,5
Total	92 100

Primary data source: June 2015

From 92 respondents, most (56.5%) have gastritis

3.Data of connection Stress toward exam With Symptoms of Gastritis

The following data describes the relationship between the variables measured and presented in the form of cross tabulation, the data include the relationship of stress before the exam with symptoms of gastritis in XI class students of senior high school at Wachid Hasyim High School 2 Taman Sidoarjo June 2015

Table 3 Cross-tabulation of stress before exam with gastritis symptoms in grade XI students of senior high school Wachid Hasyim 2 Taman Sidoarjo

Stress towards the exam	Symptoms of gastritis				Total	
	n	%	n	%	N	%
Normal	18	66,7	9	33,3	27	100
lightweight	8	42,1	11	57,9	19	100
Medium	11	28,2	28	71,8	39	100
Weight	2	50,0	2	50,0	4	100
Very Heavy	1	33,3	2	66,7	3	100
Total	40	43,5	52	56,5	92	100

Primary data source: June 2015

From 92 respondents, there were 39 respondents who experienced stress while most respondents (71.8%) had gastritis.

The results of data analysis using statistical test of Mann Whitney. Calculations with SPSS 16.00 for windows found that $p = 0,008$ and $\alpha = 0,05$ means that $p < \alpha$ than H_0 is rerejected, which states that there is a relationship between stress before the exam with symptoms of gastritis in XI class of senior high school Wachid Hasyim 2 Taman Sidoarjo

DISCUSSION

1.Stress toward exam

Based on table 1 shows that of 92 respondents, nearly half of 39 (42.4%) of respondents experiencing moderate stress. According to Joseph (2011) Stress is the response or reaction of the body against various guidelines or charges that are non-specific. However, besides that stress is also a trigger, the cause as well as the result of a disorder or disease. Many students had had stress, this is proven still many students who often experience feel easily anxious, irritable mood, difficult to calm or relax, and easily feel upset.

Based on the results of questionnaires on symptoms of stress first that appears most

frequently is the question no.14, amounting to (55.4%) 51 respondents often have easily agitated. The second most common symptom of stress is question no. 1, by (53.2%) 49 respondents often become angry because small problem According to Amin (2007) marks a stressed are worried, anxious, nervous, scared, feel sad, feel unable to cope with problems, irritable mood because of little problem According to researchers because many students don't learning and do not attention when the teacher is teaching, so that when the test comes they became restless and irritable mood because of a little problem

The third stress symptoms in question no. 7, at (52.1%) 48 respondents often experience irritability. According to Andy (2006) who are stressed will exhibit behaviors that vary among people irritability, withdrawal from activities they normally enjoy, appetite increases or decreases, it is difficult to sleep, the child complained of gastrointestinal symptoms such as nausea, vomiting and abdominal pain without being followed by The presence of a clear illness. According to researchers this could be due to busyness in schools that drain the mind such as preparation for the exam because it is not confident with its ability so that it can indirectly affect one's feelings.

The fourth stress symptoms Frequently the question no. 3, by (46.7%) 43 respondents often difficult to relax. According to Amin (2007) signs and symptoms of the behavior of a stressed include: when talking stutter or nervous, difficulty speaking, difficulty working together, unable to relax or chill out, smoke rising, the use of drugs and alcohol increases, loss of appetite.

Fifth stress symptoms that often appear in the question no. 9 of (42.3%) 39 respondents often experience irritability mood. According to Rasmun (2004) manifestations of stress among the first irritable, a subjective emotional reaction, or aggravation, and individual dissatisfaction with unfulfilled demands. Second: anxious, an unpleasant feeling of uncertain individuals

where the cause is uncertain or no real object. According to the researchers this is because every individual in accepting the reality is different, many students have difficulty in learning so that they feel anxious and irritable or irritated.

Symptoms of stress to six frequently appears in question no. 4 at (41.3%) 38 respondents often easy to feel annoyed. According to Amin (2007) marks s ice eorang experiencing stress are worried, anxious, nervous, scared, feel sad, feel unable to cope with the problem, easy to feel annoyed. According to researchers the state of easily annoyed students usually confused, feeling less ready for the exam, regret why not prepare well before the exam, so that students feel upset.

Symptoms of stress to the seven that often appear at no.12 question of (32.6%) of 30 respondents often experience impatience. According to Shandy (2005) signs a person experiencing stress one of them is impatient, where a person is eager to deal with the cause of the stressor so he will behave quickly. According to researchers h al is because they want to quickly finish the exam so careless, but they are not sure they can do it correctly.

Ramun (2004) stating the factors that cause stress include: Biological stressors that include: biology can be microbes; Bacteria, viruses and other microorganisms, animals, animals, various plants and other living things that may affect health for example; Growing acne (acne). Physical Stressor: Physical stressors can be; Climate change, nature, temperature, weather, gography; Which includes the location of residence, domicile, nutrition, radiation, population density, immigration, noise, and others. Chemical Stressor: Chemical stressors from the body can be blood serum and glucose, while from outside the body dapt in the form of nicotine, caffeine, air population, and others. Social Stressor: dissatisfaction with self, cruelty .

2.Symptoms of gastritis in XI class students of senior high school in Wachid Hasyim 2 Taman Sidoarjo.

The results showed that out of 92 respondents, the majority (56.5%) 53 respondents experienced symptoms of gastritis.

According to Black Joycem (2014) factors causing the symptoms of gastritis include: drugs, alcohol, radiation therapy, stress, diet. Symptoms of gastritis are often suffered by someone with a bad diet. Usually characterized by heartburn and nausea when feeding late. According Baliwati (2014) naturally hull will continue to produce stomach acid each time in small quantities. After 4-6 hours after eating normally glucose levels in the blood has been absorbed and used so much that the body will feel hungry and at that time the amount of stomach acid is stimulated. If someone is late to eat up to 2-3 hours, then the stomach acid being produced is increasing and the excess so that it can irritate the gastric mucosa and cause pain in epigastric

This is evidenced by the results of research conducted by researchers that the students as many as 53 who complained of heartburn. This is supported by the theory Black Joycem (2014) which states that signs and symptoms of gastritis include pain or gnawing pain or burning in the epigastrium, nausea, vomiting, loss of appetite, belching. According to researchers this is also supported by the canteen sells foods that can trigger stomach acid as most students like to consume a lot of meatballs with sauce, but it is much canteen that sells a fast food

3. Stress relationship before the exam with symptoms of gastritis in students of grade XI

Based on the Mann Whitney test calculations with SPSS 16.00 for windows didaparkan that $p = 0.008$ and $\alpha = 0.05$ means that $p < \alpha$ then H_0 is rejected, which states that there is a relationship between stress before the exam with symptoms of gastritis in XI class of senior high school Wachid Hayim 2 Taman Sidoarjo.

Symptoms of gastritis can occur because students have stress continuously. Stress can caused because many home work must to do

and Xi students must exam and the value must be in accordance with the provisions of the school. This is can caused students have stress This is supported by the theory of Black, Joycem (2014) which states that stress will cause sensory nerves send Signals to Hypophyse as an alarm, then send signyalnya to the adrenal glands to release cortisol and adrenaline , Adrenal glands will produce and secrete other hormones one of them that causes increased stomach acid. If excessive amounts of stomach acid occur continuously will result in injury to the stomach wall.

Based on Table 5.3 shows that of the 27 respondents who experienced a normal stress level most respondents (66.7%) did not experience gastritis, from 19 respondents who experienced mild stress most respondents (57.9%) had gastritis, from 39 respondents who experienced Moderate stress most of respondents (71,8%) had gastritis, from 4 respondents who experienced severe stress (50,0%) respondents did not experience gastritis symptoms, from 3 respondents who experienced very heavy stress mostly (66,7%) Respondents had symptoms of gastritis

Okviani (2011) said consuming spicy foods excessively will stimulate the digestive system, especially the stomach and intestines to contract, this will lead to heartburn and pain in the pit of the stomach accompanied by nausea and vomiting. These symptoms make the patient less and less appetite. This is supported by the results of studies that found respondents who did not experience stres but still got students who experience symptoms of gastritis. According to researchers this could be due to dietary factors that students like to consume foods that trigger increased stomach acid such as foods that are too spicy and sour.

Seeing the results of research that students who experience stress but do not have symptoms of gastritis, according researchers can be caused student clever in dealing with the preparation for the exam. This is supported by the theory of Asfia (2006) which states how or tips on facing

exams for success that is making learning plans, finding the ideal learning place, do not delay in learning, and do not forget to rest enough

CONCLUSION AND SUGGESTION

1. Conclusion

Based on the results of research conducted by researchers, the researchers concluded several things as follows:

- a. The students in XI class of senior high school Wachid Hasyim 2 Taman Sidoarjo almost half have medium stress.
- b. The students in XI class of senior high school Wachid Hasyim 2 Taman Sidoarjo mostly experience gastritis symptoms
- c. There is a connection between stress before the exam with symptoms of gastritis in XI class students of senior high school Wachid Hasyim 2 Taman Sidoarjo.

2. Suggestion

It should be necessary to do the same research with a larger sample size in the hope of knowing and proving other factors that can cause gastritis symptoms.

Respondents should learn and prepare well before the exam is held so that when the exam arrives they are ready and not stressed

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