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THE EFFECT OF FASTING ON HEALTH OF DIGESTION SYSTEM

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ABSTRACT

The human body has important digestive organs such as the stomach. One of the gastric diseases, namely gastritis or ulcer, has started to be experienced due to a lack of knowledge about the factors that cause gastritis and the behavior to prevent gastritis. Gastritis, known as ulcer disease, is an inflammation or bleeding of the gastric mucosa caused by irritation, infection, and irregularity in eating patterns. The method used is a literature review article or literature review by examining 7 journals published from 2010-2020 regarding the effect of fasting on the health of the gastric digestive system which was carried out in April 2020. The results showed that there was a change in diet when fasting caused various changes in the body, especially in the digestive tract. Fasting gives the digestive system time to rest, which can reduce the risk or cure digestive health problems. The conclusion is that there is a relationship between diet, knowledge, and stress on the incidence of gastritis. Meanwhile, coffee consumption behavior and gender have no relationship with the incidence of gastritis.

Keywords: *fasting, health, digestion system*

Background

To be able to improve the degree of public health, many things need to be considered. Indonesia from adolescence to the elderly, one of the factors causing it is one of which is considered to have an important role is to maintain health. The human body has important digestive organs such as the stomach. One of the gastric diseases, namely gastritis or ulcers, has indeed begun to be experienced due to a lack of knowledge about the factors that cause gastritis and behaviors to prevent gastritis.¹ Gastritis, known as ulcer disease, is an inflammation or bleeding in the gastric mucosa caused by irritation, infection, and irregularity in eating patterns,² such as late eating, eating too much, eating fast, eating too much spicy and spicy food.³

According to the World Health Organization (WHO), the incidence of gastritis in the world is around 1.8-2.1 million of the total population each year, in England (22%), China (31%), Japan (14.5%), Canada (35%), and France (29.5%). In Southeast Asia, about 583,635 of the total population each year. The percentage of the incidence of gastritis in Indonesia according to the World Health Organization (WHO) is 40.8%. The incidence of gastritis in several regions in Indonesia is quite high with a prevalence of 274,396 cases.⁴

The incidence of gastritis in Indonesia is quite high,⁵ from research conducted by the Indonesian Ministry of Health in 2013, the incidence of gastritis in several cities in Indonesia is high, reaching 91.6%, namely in Medan City, then in several other cities such as Jakarta 50.0%, Denpasar 46.0%, Palembang 35.5%, Bandung 32.5%, Aceh 31.7%, Surabaya 31.2% and Pontianak 31.1%.⁶

Based on data on gastritis disease in Indonesia, the prevalence of this disease is still quite high, coupled with the majority of Indonesia's population being Muslim and the existence of the holy month of Ramadan, therefore researchers want to examine the effect of fasting on the digestive system of the stomach.⁷ According to research conducted by Istiqomah and Fadlil (2013) digestive diseases are all diseases that occur in the digestive tract. This disease is a large group of diseases of the esophageal organs, stomach, duodenum first, second and third, jejunum, ileum, colon, sigmoid colon, and rectum. The digestive system in humans is one of the vital organs for the body, so the health of the digestive system is very important to be maintained.⁸ Given the function of the digestive system as a place or tool to digest every food and drink that enters the human body.⁹

Based on the background, it can be seen that in Indonesia there is still a lot of prevalence of gastritis disease, so researchers were interested in examining the effect of fasting on the health of the gastric digestive system because when fasting the human digestive system works less than usual.

Methods

This article is a literature review article by examining journals published from 2010-2020 regarding the effect of fasting on the health of the gastrointestinal system which was conducted in April 2020. The journals were downloaded through the google scholar search engine by keywords fasting, digestion system, and health.

Result and Discussion

According to research conducted by Wahyuni, Rumpiati, and Lestariningsih (2017) showed that of the 43 respondents who have a good diet, 31 respondents (32.6%) do not have

gastritis and 12 respondents (12.7%) have gastritis. Meanwhile, of the 52 respondents who had a poor diet, 2 respondents (2.1%) did not experience gastritis and 50 respondents (52.6%) had gastritis. The results of the Spearman Rank test showed that the p-value = 0.000 means <0.05 , so there is a significant relationship between diet and the incidence of gastritis. From the results of the Correlation Coefficient, the value is also obtained - 0.713. or negative correlation.⁴

According to research conducted by Huzaifah (2017) shows that knowledge with good categories and positive categories of gastritis prevention behavior are 124 respondents or equal (44.8%) and knowledge in good categories and negative behavior are 22 respondents or equal to (7.9 %). The description of knowledge is sufficient with positive preventive behavior as many as 56 respondents or equal to (20.2%), and negative behavior by 50 respondents or equal to (18.1%). The description of the lack of knowledge with positive behavior was 3 respondents or equal to (1.1%), and negative behavior was 22 respondents or equal to (7.9%). Based on the Spearman Rank correlation test with a value of $r = 0.465$ and p-value = 0.000. P-value $<\alpha = 0.05$, and H_a was accepted, which means that there is a relationship between knowledge of the causes of gastritis and gastritis prevention behavior.³

The results of research conducted by Tussakinah, Masrul, and Burhan (2018) showed that the majority of gastritis incidents occur in respondents who work as housewives 34.4%. The majority of gastritis occurrences in housewives can be caused by stress experienced. A large number of job demands and responsibilities as a housewife with jobs that tend to be heavy can cause stress. The stress that occurs will affect the behavior of the housewife, including loss of appetite, changes in sleep patterns, decreased productivity and this will also affect the psyche in the form of excessive anxiety, decreased endurance in making decisions. If this stress occurs continuously it will have an impact on that person.¹⁰

The results of research conducted by Novitasary, Sabilu, and Ismail (2017), showed that out of 9 respondents (100%) who consumed high-risk coffee and experienced clinical gastritis, 4 respondents (44.4%) and 5 respondents (55.6%) who consume high-risk coffee and do not experience clinical gastritis. Meanwhile, from 233 respondents (100%) who consumed low-risk coffee and experienced clinical gastritis, 145 respondents (62.2%) and 88 respondents (37.8%) consumed low-risk coffee and did not experience clinical gastritis. By using Fisher's Exact Test, the value of $p = 0.311$ was obtained, this value was greater than $\alpha (0.05)$. This shows that coffee consumption is not a determinant of clinical gastritis in students at the Faculty of Public Health, University of Halu Oleo Kendari.⁶

The results of research conducted by Sunarmi (2018) show that of the 35 respondents 20 female respondents experienced gastritis as many as 9 respondents (45%), and of the 15 male

respondents who experienced gastritis as many as 8 respondents (53.3%). Chi-square statistical test obtained $p\text{-value} = 0.884 > \alpha = 0.05$, then the decision meaning that there was no significant relationship between gender and the incidence of gastritis.¹¹

Changes in eating patterns during fasting cause various changes in the body, especially in the digestive tract. Fasting gives the digestive system time to rest, which can reduce the risk or cure digestive health problems. During fasting, the stomach is also not filled with food for several hours. At this time, stomach acid production will decrease to prevent acid erosion of the stomach wall. Therefore fasting can affect the health of the gastric digestive system.

Fiqh Worship Perspective

Understanding Shiyam (Fasting) Shiyam according to language means refraining from something. Shiyam according to the term means refraining from eating, drinking, sexual relations between husband and wife, and anything that cancels from dawn to dusk with the intention of Allah. The basis for the intention of fasting because of Allah:

1. The Word of Allah SWT reads "Whereas they were not ordered to except to worship Allah by purifying their obedience to Him in (practicing) religion in a straight manner ..." [QS. Al-Bayyinah (98): 5]

وَمَا أُمِرُوا إِلَّا لِيَعْبُدُوا اللَّهَ مُخْلِصِينَ لَهُ الدِّينَ حُنَفَاءَ وَيُقِيمُوا الصَّلَاةَ وَيُؤْتُوا الزَّكَاةَ وَذَلِكَ دِينُ الْقَيِّمَةِ

2. The hadith of the Prophet Muhammad: "From Umar r.a. (It is narrated) that the Messenger of Allah said: In fact, all acts of worship must be with the intention, and each person depends on his intention ... "[Ended by AlBukhari, Kitab al-Iman].
3. Hadith of the Prophet Muhammad: "From Hafshah Ummul Mu'minin r.a. (It is narrated that) The Holy Prophet said: Whoever does not intend to fast at night before dawn, his fast is not valid. " [Ended by AlKhamseh, see Ash-Shan'aniy, II, 153]. (Muhammadiyah, 2013)

For Muslims, the essence of fasting is to restrain all members of the body and five senses from what is prohibited and forbidden by religion and to keep away from reprehensible attitudes.¹² During fasting, the digestive organs (digestive tract along with enzymes & hormones) can rest for 14 hours,¹³ while when not fasting the vital organs of digestion will work to digest food continuously for approximately 18 hours,¹⁴ when fasting the organs in our bodies take a break from hard work grind food.¹⁵ When fasting, the stomach is empty, the food will be more easily absorbed and the bad germs cannot survive, thus we can avoid various kinds of diseases. So fasting can affect the health of the digestive system of the stomach.

Conclusion

Based on the results of the above, it can be concluded that there is a relationship between diet, knowledge, and stress on the incidence of gastritis. Meanwhile, coffee consumption behavior and gender have no relationship with the incidence of gastritis. The suggestion is that one good way to avoid gastritis when fasting is starting from a healthy way of life and always paying attention to the consumption of food and drinks that we drink every day from opening to dawn and it is no less important to always pay attention to psychological conditions so that we don't think too much (stress).

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