

Education On The Use Of Herbal Turmeric Extract In Chronic Gastritis Patients In Tutung Bungkok Village, Kerinci Regency

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ABSTRACT

This research uses a type of pre-experimental research. The sample in this research was the Tutung Bungkok Village community aged 20-44 years, totaling 119 people. The sample used in this research was a total sampling technique. The results of research on 119 respondents, most of the respondents were women, amounting to 66 respondents (55.5%), the age most were teenagers (12-25 years) amounting to 55 respondents (46.2%), the highest education was high school, amounting to 71 respondents (59.7%), the most common occupation is students, amounting to 31 respondents (25.1%). Most of the respondents' knowledge before being given health education was in the poor category, amounting to 80 respondents (67.2%). Most of the respondents' knowledge before being given health education was in the good category, amounting to 119 respondents (91.6%). The test results using the Wilcoxon test obtained p value = 0.000 < 0.05, so H_0 was rejected using a confidence level of 95%, meaning that there was an educational effect on the use of herbal turmeric extract on chronic gastritis sufferers in Tutung Bungkok Village, Kerinci Regency.

Keywords : *Turmeric extract, chronic gastritis, herbal*

INTRODUCTION

Based on the world profile, the incidence of gastritis is around 1.8 - 2.1 million of the population each year. According to the World Health Organization (WHO), the highest incidence of gastritis is in the United States with a percentage of 47%, followed by India at in second place with a percentage of 43%. (WHO, 2020).

According to data from riskesdas, the percentage of gastritis cases in Indonesia is 40.8%. The incidence of gastritis in several regions in Indonesia itself is quite high with a prevalence percentage of 274,396 cases from 238,452,952 residents. Gastritis is included in one of the 10 diseases the most inpatients in hospitals in Indonesia as many as (4.9%) or 30,154 cases (National Basic Health Research, 2018).

Based on the 2020 Jambi Province profile, gastritis is the 4th most common disease after hypertension, acute nasopharyngitis, and upper respiratory tract infections with the number of cases being 12.93% of all Health Centers in Jambi Province (Jambi Province Health Profile, 2021). From the Kerinci Regency Health Office, the number of patients with gastritis in 2019 ranked second out of the 10 most common diseases in Kerinci Regency with a total of 5,496 people, and in 2020 gastritis ranked 4th out of the 10 most common diseases in Kerinci Regency with a total of 3,823 people and in 2021 it was 4,690 people (Kerinci Regency Health Office, 2021).

The impact of gastritis can disrupt a person's nutritional status. Nutritional status can be

deficient, good, or normal or more. Deficiency of one nutrient can cause deficiency disease. Deficiency within marginal limits can cause disorders that are milder in nature or decrease functional ability in the body. Vitamin B1 deficiency can make the body easily tired, as well as decrease the body's immune system against infection, resulting in the body being susceptible to disease. (Shalahuddin, 2018)

Gastritis management can be handled with conventional or traditional medicine. In this case, traditional medicine treatment uses herbal therapy. Turmeric plant in Latin is called *Curcuma domestica* or *Curcuma longa*, while in English it is called turmeric, has long been used as a traditional herbal medicine for example for inflammation, diarrhea, stomach ache, jaundice, gastritis, gastric ulcers. From the results of the study, turmeric extract showed inflammatory, antibacterial, antioxidant, antiulcer, and gastroprotective effects (Bidayatul Hidayah, 2017)

Turmeric is a type of spice that is very easy to get. Turmeric is commonly used as a cooking ingredient. Turmeric or also called kunir is a plant native to Southeast Asia. Turmeric has fibrous roots. In addition, turmeric also has yellow rhizomes and turmeric mpu. Rhizomes are often used for cooking spices. If the rhizome is cut or split, the rhizome will look yellow which can stick to the hands. In addition to cooking, turmeric also has properties for herbal remedies (Nurman et al., 2020)

In a study conducted by Hikmah (2019) it was proven that the use of turmeric in gastritis sufferers to increase appetite from gastritis disease with the method used was an experiment and direct catalytic activity test on turmeric plants. The first stage was carried out by making an extract from the turmeric plant. Direct activity tests were carried out with the same variations for a period of one month, turmeric extract was made by grating turmeric with a prepared grater of five turmeric rhizomes weighing 250mg and adding 60ml of water. The turmeric water extract was consumed every morning and evening. The results obtained in the first week were gradual but not too significant. The second and third weeks the person had shown changes, namely those who initially had difficulty eating now began to eat heartily. In the fourth week the gastritis sufferer was very healthy, his appetite increased and he never felt pain in the epigastrium and stomach (stomach) again and was able to return to his normal activities.

The results of this study are in accordance with the research conducted by Safitri & Nurman (2020) which showed that the pain scale in gastritis patients before being given turmeric juice was 4.85 with a standard deviation of 0.671 and the pain scale in gastritis patients after being given turmeric juice was 2.20 with a standard deviation of 0.768. Based on the statistical test, it was found that the p-value was 0.000 (<0.05), which means that there is an effect of consuming turmeric juice on reducing the pain scale in gastritis patients in Kampung Pinang Village, the Perhentian Raja Health Center working area in 2020.

Based on a preliminary study conducted by researchers through interviews with five people who suffered from gastritis, it was found that out of the five people, four of the sufferers experienced heartburn and had insufficient knowledge about herbal turmeric extract for relieving gastritis pain, and one person said they only experienced nausea.

Based on the above phenomenon, the author is interested in conducting research entitled "Education on the Use of Herbal Turmeric Extract in Chronic Gastritis Patients in Tutung Bungkok Village, Kerinci Regency".

Understanding Turmeric Herbal Extract

Turmeric has been used as a herbal or traditional medicine since ancient times. Turmeric is very influential in the healing process of diseases, especially stomach ulcers. Turmeric is very easy to find in everyday life. Turmeric has a yellow color with a soft texture so it is very easy to slice. In addition to curing stomach ulcers, turmeric can also be applied for facial care in curing acne (Chofizah Nuruh Hikmah, 2019).

Turmeric (*Curcuma domestica*) is a plant that is included in the ginger group with a distinctive yellow color. This plant has a wet stem with a green or purplish stem, a stem height of up to 0.75 m, 4 to 8 leaves and oval in shape, compound flowers are red or pink. Turmeric flowers are brown and reddish and yellow in the middle. Turmeric produces a main tuber in the form of a dark yellow or bright orange rhizome. The entire rhizome forms a dense clump, orange in color and its young shoots are white. The fibrous roots of turmeric are light brown. The part of the plant used is the rhizome or root (Herbie, 2015).

Turmeric Extract Herbal Therapy

Turmeric is very influential in the healing process of diseases, especially stomach ulcers, for chronic gastritis sufferers, turmeric extract is given as much as 250 mg twice a day. The uses of this yellow turmeric extract are very numerous, especially in the fields of health and beauty. As in the health sector, it is used as a medicine to cure stomach ulcers (Chofizah Nuruh Hikmah, 2019).

Understanding Gastritis

Gastritis is an inflammation of the gastric mucosa. This inflammation causes leukocytes to move to the stomach wall in response to abnormalities in that area. Based on endoscopic examination, mucosal erythema was found, while the photo results showed irregularities in the shape of the mucosa (Waluyo et al., 2019)

Definition of Health Education

According to Notoatmodjo (2018) Health education is an effort or activity to create community behavior that is conducive to health. This means that health education seeks to make the community aware of or know how to maintain their health, how to avoid or prevent things that are detrimental to their health and the health of others, where to seek treatment when sick and so on.

METHODS

This study is a pre-experimental study with a one-group pre-post test design, namely to determine the Education of the Use of Turmeric Extract Herbal in Chronic Gastritis Patients in Tutung Bungkok Village, Kerinci Regency with samples in this study were the people of Tutung Bungkok Village aged 20-44 years as many as 119 people. The sampling technique was by total sampling. Data collection using a questionnaire. The study was conducted in Tutung Bungkok Village, Kerinci Regency. The quantitative data analysis technique was carried out by Wilcoxon analysis.

RESULTS

Table 1. Respondent Characteristics

No	Variables	Amount	Percentage
I Gender			
1.	Man	53	44.5
2.	Woman	66	55.5
II Age			
1.	Teenagers (12-25 years)	55	46.2
2.	Adults (26-59 years)	26	21.8
3.	Elderly (>60 years)	38	31.9
III Education			
1.	No school/didn't graduate	7	5.9
2.	SD	20	16.8
IV Work			
1.	Doesn't work	25	21.0
2.	housewife	20	16.8
3	ASN	2	1.7
4.	Trader/entrepreneur	23	19.3
5.	Private sector employee	18	15.1
6.	Students	31	26.1
3.	JUNIOR HIGH SCHOOL	19	16.0
4.	SENIOR HIGH SCHOOL	71	59.7
5.	Academic/College	2	1.7

Table 2. Univariate Analysis

No	<i>Pretest Knowledge</i>	Number (n)	Percent (%)
1.	Good	39	32.8
2.	Not good	80	67.2
Amount		119	100

Table 3. Univariate Analysis

No	<i>Posttest Knowledge</i>	Number (n)	Percent (%)
1.	Good	109	91.6
2.	Not good	10	67.2
Amount		119	100

Table 4. Bivariate Analysis

Knowledge	Before	After	<i>p-value</i>
<i>Pretest</i>	35	90	0,000
<i>Posttest</i>	45	100	

DISCUSSION

The test results using the Wilcoxon test obtained a p value = 0.000 <0.05, so Ho was rejected using a 95% confidence level, meaning there was an influence of education on the use of herbal turmeric extract on chronic gastritis sufferers in Tutung Bungkok Village, Kerinci Regency.

In general, the causes of gastritis are divided into internal factors, namely the presence of conditions that trigger excessive gastric acid secretion, and external substances that cause irritation and infection (Handayani & Thomy, 2018). Based on the risk factors for gastritis, namely using aspirin or non-steroidal anti-inflammatory drugs, helicobacter pylori infection, having a habit of drinking alcoholic beverages, having a habit of smoking, often experiencing stress, eating habits, namely irregular meal times, and eating too much spicy and sour food (Eka Fitri Nuryanti, 2021).

Non-compliance with diet, drugs, alcohol, bile salts, other irritants can damage the gastric mucosa. The gastric mucosa plays an important role in protecting the stomach from autodigestion by hydrochloric acid and pepsin. If the gastric mucosa is damaged, there is diffusion of hydrochloric acid into the gastric mucosa and hydrochloric acid will damage the mucosa. The presence of hydrochloric acid in the gastric mucosa stimulates the change of pepsinogen to pepsin. Pepsin stimulates the release of histamine from mast cells. Histamine will cause increased capillary permeability so that fluid shifts from intracellular to extracellular and causes edema and capillary damage so that bleeding occurs in the stomach. Usually the stomach can regenerate the mucosa, therefore the disorder disappears on its own, but if the stomach is often exposed to irritants, inflammation will continue to occur. The

inflamed tissue will be filled with fibrin tissue so that the gastric mucosal layer can disappear (Umasugi, 2021)

Efforts to prevent recurrence that can be done for gastritis include modifying diet, eliminating alcohol consumption habits, increasing exercise, stress management (Harefa, 2021). Eating small amounts but often and increasing the consumption of foods containing flour, such as rice, corn, and bread will normalize stomach acid production, and avoiding foods that can irritate, especially spicy, sour, fried or fatty foods (Nofriadikal Putra, 2018).

High alcohol consumption can irritate and erode the mucosal lining of the stomach and can cause inflammation and bleeding. The dangers of gastritis if left untreated will damage stomach function and can increase the risk of developing stomach cancer and even death. The impact of gastritis usually experiences complications such as upper gastrointestinal bleeding, hematemesis and melena (anemia), perforated peptic ulcers (Hernanto, 2018).

Efforts to prevent recurrence that can be done for gastritis include modifying diet, eliminating alcohol consumption habits, increasing exercise, stress management (Harefa, 2021). Health education is an educational activity carried out by disseminating messages, instilling beliefs so that people are not only aware, know, and understand but also want and can carry out recommendations related to health. Health education can also be interpreted as increasing a person's knowledge and abilities through learning practice techniques or instructions. The general goal of health education is to change the behavior of individuals or communities in the health sector, but behavior covers a wide range of things so that it needs to be categorized fundamentally. In addition, the goal of health education is to provide information to individuals or communities, thereby changing the health status of a person or community (Akbar Asfar & Wa Ode Sri Asnaniar, 2018).

Turmeric is one type of spice that is very easy to get. Turmeric is commonly used as a cooking ingredient. Turmeric or also called kunir is a plant native to Southeast Asia. Turmeric has fibrous roots. In addition, turmeric also has yellow rhizomes and turmeric mpu. Rhizomes are often used for cooking spices. If the rhizome is cut or split, the rhizome will look yellow which can stick to the hands. In addition to cooking, turmeric also has properties for herbal remedies (Nurman et al., 2020).

Turmeric is one of the most well-known natural medicines for treating stomach ulcers. Curcumin and curcuminoids (active ingredients of turmeric) and essential oils have been proven to have antioxidant, antibacterial, anti-inflammatory, and anticancer effects, making it good for consumption as a stomach ulcer medicine and for other health benefits. How to use it: take 2 pieces of turmeric, peel, clean and grate the turmeric, add boiled water and squeeze to extract the juice. Drink twice a day, in the morning before eating and at night before going to bed. Turmeric has been used as a herbal or traditional medicine for a long time. Turmeric is very influential in the healing process of diseases, especially stomach ulcers. Turmeric is very easy to find in everyday life. Turmeric is characterized by its yellow color with a soft texture so it is very easy to slice. The process of healing stomach ulcers using turmeric extract lasts for 1 month. Where within a month a person is required to drink extract from the turmeric plant 2 times a day, morning and evening after eating. During the healing process, significant changes have been seen in the person's body. This is proven by within 1 week. The use of turmeric plant extract has made ulcers that were initially very acute gradually become healthy, but the changes in ulcer sufferers are not very visible or significant.

In a study conducted by Hikmah (2019) it was proven that the use of turmeric in gastritis sufferers to increase appetite from gastritis disease with the method used was an experiment and direct catalytic activity test on turmeric plants. The first stage was carried out by making an extract from the turmeric plant. Direct activity tests were carried out with the same

variations for a period of one month, turmeric extract was made by grating turmeric with a prepared grater of five turmeric rhizomes weighing 250mg and adding 60ml of water. The turmeric water extract was consumed every morning and evening. The results obtained in the first week were gradual but not too significant. The second and third weeks the person had shown changes, namely those who initially had difficulty eating now began to eat heartily. In the fourth week the gastritis sufferer was very healthy, his appetite increased and he never felt pain in the epigastrium and stomach (stomach) again and was able to return to his normal activities (Dewi, et al., 2023).

The results of this study are in accordance with the research conducted by Safitri & Nurman (2020) which showed that the pain scale in gastritis patients before being given turmeric juice was 4.85 with a standard deviation of 0.671 and the pain scale in gastritis patients after being given turmeric juice was 2.20 with a standard deviation of 0.768. Based on the statistical test, it was found that the p-value was 0.000 (<0.05), which means that there is an effect of consuming turmeric juice on reducing the pain scale in gastritis patients in Kampung Pinang Village, the Perhentian Raja Health Center working area in 2020.

CONCLUSION

1. The majority of respondents' knowledge before being given health education was in the poor category, totaling 80 respondents (67.2%).
2. The majority of respondents' knowledge before being given health education was in the good category, totaling 119 respondents (91.6%).
3. The test results using the Wilcoxon test obtained a p Value = 0.000 <0.05 , so H_0 was rejected using a 95% confidence level, meaning that there was an influence of education on the use of herbal turmeric extract on chronic gastritis sufferers in Tutung Bungkok Village, Kerinci Regency.

ACKNOWLEDGEMENT

Respondents are expected to routinely use herbs independently in order to reduce recurrence in chronic gastritis sufferers and can increase respondents' insight into the benefits of turmeric herbal extract as a non-pharmacological treatment.

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