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Horizontality Patients' Knowledge About the Use of Omeprazole Medication for the Treatment of Gastritis Disease at the Same Health Center Manufahi Timor-Leste, 2025

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Abstract

Introduction: *The drug omeprazole is a proton pump inhibitor (PPI) commonly used to treat various stomach conditions, such as gastritis. Gastritis occurs due to inflammation of the stomach lining, resulting in abdominal pain.*

Research Objectives: *To determine patients' knowledge about the use of omeprazole for gastritis in the same health center.*

Research Methodology: *A descriptive quantitative method was used, using a cross-sectional study approach using a questionnaire. The sampling technique for this study was accidental sampling. Use with the cross-sectional study.*

Results Discussion: *It showed that most patients apply it well to their daily lives, especially because they followed the instructions of their doctors who prescribed omeprazole for gastritis, based on their knowledge and understanding. Based on the survey results, the majority were in the true category, with a percentage of 83%, and the fewest were in the non-true category, with a percentage of 17%.*

Conclusion: *The " knowledge " aspect, the process of counting the distribution of respondents, obtained the highest value, 93%, in the true category, and the lowest value, 7%, in the non-true category. The " understanding " aspect and the process of counting the distribution of respondents obtained the highest value, 83%, in the true category, and the lowest value, 17%, in the non-true category cited by (Tilman CB., et al, 2025).*

Keyword: Knowledge of drug use and Omeprazole.

Introduction

The drug omeprazole is a proton pump inhibitor or PPI (Proton Pump Inhibitor) commonly used to treat various stomach conditions, such as gastritis. Gastritis occurs due to inflammation of the stomach lining, resulting in abdominal pain, according to Faridabad, A. (2020). This drug is used to treat the excessive secretion of gastric juice that occurs in some conditions, such as gastric ulcers in the stomach or duodenal ulcers and gastroesophageal reflux disease in the lower intestine. It is also used to treat ulcers associated with Helicobacter pylori infections in combination with antibiotics. Omeprazole can also be used in patients with Zollinger-Ellison disease, when there is hyperacidity.

Gastritis, often called an ulcer, is an inflammatory process or health problem caused by irritation and infection in the gastric mucosa and submucosa. Gastric disorders can occur due to an imbalance between aggressive factors such as HCl and pepsin, as well as the presence of Helicobacter pylori infection, and are influenced by the side effects of NSAID (nonsteroidal anti-inflammatory drug) use. In fact, gastritis is experienced and felt by all age groups, but it strikes in the working age, according to Hamdani et al (2022). Gastritis is an infection caused by Mycobacterium and Helicobacter pylori, causing inflammation of the stomach mucosa, characterized by epigastric discomfort, nausea, vomiting, anorexia, and headaches. This disease attacks many organs, especially those with irregular eating patterns, particularly those who drink alcohol and smoke tobacco, and also suffer from individual stress.

Gastritis is characterized by inflammatory reactions in the stomach wall. When this mucosal barrier is damaged, it allows the gastric juice produced by the stomach to cause erosions or infections in the stomach's protective lining (AGUIAR et al., 2012). The World Health Organization conducted a review of several countries and obtained percentage results on the incidence of gastritis worldwide, including England (22%), China (31%), Japan (14.5%), Canada (35%), and France (29.5%). Globally, the incidence of gastritis is around 1.8–2.1% of the world's population each year (WHO, 2023). The incidence of gastritis in Indonesia is one of the 10 highest-ranking diseases, with 30,154 cases.

From research conducted by the Basic Health Survey in (2013), the incidence of gastritis in various regions of Indonesia is quite high, with a prevalence of 274,396 cases in 238,452,952 residents. The data below are that in the city of Surabaya the incidence of gastritis is 31.2%, of which it is 46%, while in Central Java the incidence of infection is quite due to the unhealthy eating pattern, and less vitamins according to the research carried out by work according to (Julian, KD, 2021; Tilman CB., 2025).

National data agreement of the Ministry of Health of Timor-Leste of the disease control service directorate on gastric disease in the territory of Timor-Leste based on data that the researcher collected with a total of 6,437 patients suffering from gastric disease in the territory of Timor-Leste in the year 2023 from the beginning of January to the month of December 2023. Data on the use of the drug omeprazole used by asthmatics that the researcher collected within the Ministry of Health Timor-Leste, from the National Directorate of Pharmacy and Medicine (DNFM) with a total of 12,15,302 people who use the drug omeprazole for the treatment of gastritis in the territory of Timor-Leste, these data are from the year 2023.

Research Objective: To determine the level of patient knowledge about the use of the drug omeprazole in the treatment of gastritis disease in Community Health Center Same Administrative Post Same City, in the Municipality of Manufahi, 2025.

Theoretical Framework

Gastritis, commonly known as stomach ulcers, is inflammation of the stomach walls, especially the mucous membranes. Gastritis is the most common disorder seen in clinics because diagnosis is based solely on clinical symptoms. This disease often recurs, typically characterized by nausea and vomiting, pain with bleeding, weakness, decreased appetite, or headache. Gastritis is a local or generalized inflammation of the gastric mucosa that develops when the mucosa's protective mechanisms are overwhelmed by bacteria or other irritants, ingested too quickly or by very spicy foods, or infected by other causes, such as alcohol, reflux, gallbladder disease, or radiation therapy, according to a study by Kunti & Briganti (2021).

The causes of these diseases are divided into two types: external and internal substances. External substances are substances that can cause stomach corrosion or irritation. Internal substances produce excessive and irregular stomach acid. People with irregular eating patterns are susceptible to gastritis. When the stomach needs to be filled but becomes empty or full, stomach acid digests the stomach's mucous lining. When the stomach is empty, there are more intense gastric peristaltic movements that stimulate increased stomach acid production, leading to stomach pain, primarily (Kunti et al, 2021).

Drugs, alcohol, bile salts, and other irritants can damage the gastric mucosa (erosive gastritis). The gastric mucosa plays an important role in protecting the stomach or in its autodigestion by HCl and pepsin. If the gastric mucosa is damaged, the presence of HCl in the gastric mucosa stimulates the conversion of pepsinogen to pepsin. Pepsin stimulates the release of histamine from cells. Histamine causes an increase in capillary permeability, resulting in a fluid shift from extracellular fluid and capillary damage, resulting in gastric bleeding, a valuable study in applied clinical pathology (Kunti & Briganti, 2021; cited by Tilman CB., 2024).

Pharmacological treatment of gastritis involves the use of medications, such as omeprazole. Omeprazole is a medication used to treat excess stomach acid and its associated complaints. Omeprazole is commonly used to treat gastroesophageal reflux disease (GERD), stomach ulcers (gastritis), or gastric ulcers. Omeprazole can aid in the healing process of damaged stomach or esophageal tissue due to irritation caused by excess stomach acid. This medication can also increase the effectiveness of antibiotics in combating Helicobacter pylori infection, which causes stomach ulcers, according to Allomother (2024).

Non-pharmacological treatment for gastritis patients involves eliminating or reducing psychological stress and reducing the use of NSAIDs (including aspirin). Patients should also avoid, as much as possible, spicy foods, caffeinated beverages, and alcohol, which can worsen gastritis symptoms. To normalize stomach acid production, efforts can be made to increase the frequency of consumption of small, starchy foods, such as rice, corn, and bread, as well as avoiding foods that may irritate the stomach, especially acidic, spicy, fried, or fatty foods. According to the scientific work Eridian N.S. (2023), gastritis can be prevented by:

1. Eat small amounts frequently and limit foods

that can irritate your stomach, such as very spicy, fried, or fatty foods.

2. Eliminate the habit of drinking alcohol. High levels of alcohol consumption can irritate or stimulate the stomach, even causing the lining of the stomach to peel away, leading to inflammation and stomach bleeding.
3. Do not use pain relievers such as aspirin, ibuprofen, and naproxen because these medications can irritate the stomach.
4. Choose your ideal body weight. Gastrointestinal problems, such as heartburn, bloating, and constipation, are more common in obese people. Therefore, maintaining an ideal body weight can prevent the causes of ulcers.
5. Exercise regularly
6. Stress level management.
7. Reduce foods that may contain gas that can cause stomach bloating, GINTING FF (2021).

Some of the symptoms commonly experienced by those suffering from gastritis is the following:

- Burning sensation and pain in the pit of the stomach
- Nausea and vomiting
- Swollen
- Vomiting blood
- Loss of appetite
- Black stools
- Experiencing digestive disorders

Before making a diagnosis, the doctor will ask questions about the patient's symptoms and health history. This is followed by a physical examination. Afterward, doctors often recommend additional tests to confirm the diagnosis, such as:

- Blood tests, stool sample tests, and urea breath tests to detect the presence or absence of H. pylori bacteria.
- Gastroscopy (gastric endoscopy) to determine stomach inflammation. This procedure involves inserting a tube with a camera through the mouth.
- X-ray, to monitor the condition of the upper digestive tract.

Gastritis Disease Classification

Acute gastritis

Acute gastritis is an acute clinical disorder with a clear cause, with characteristic signs and symptoms, usually found in acute inflammation. Acute gastritis is an acute inflammation of the stomach, usually limited to the mucosa. Broadly speaking, acute gastritis can be divided into two categories: acute exogenous gastritis and acute endogenous gastritis. Chemical, thermal, mechanical, and bacterial irritation are the causative factors that usually occur in exogenous gastritis, while irritation due to normal bodily conditions is the cause of acute endogenous gastritis. Not long ago, it became surprising to learn that gastritis or stomach ulcers are usually not caused solely by stress factors or the use of nonsteroidal anti-inflammatory drugs (NSAIDs) such as aspirin.

Chronic Gastritis

Chronic gastritis is a gastritis whose cause is unclear, often multifactorial, and whose clinical course is closely related to Heliobacter pylori infection. Chronic gastritis is a chronic inflammation of the gastric mucosal surface that is usually multifactorial and has a variable clinical course. Most cases of chronic gastritis have two types, namely type A, which is autoimmune gastritis. Histological changes occur mainly in the body and fundus of the stomach. The second type frequently found in cases of chronic gastritis is type B. Chronic gastritis type B is the most common and is closely related to the

bacterium Heliobacter pylori, according to Kunti et al. (2021).

Research Methodology

To use the descriptive quantitative method and approximate cross-sectional study to determine the level of patient knowledge about the use of omeprazole for the treatment of gastritis at the Same Health Center. A total sample of 30 patients, male and female, began in January and continued through May 2025. The sample collection technique used by the researcher was non-probability sampling, approximated with purposive sampling (Tilman CB. et al., 2025). The technician collects data, and the researcher uses a questionnaire, which the researcher provides to patients who consult with the doctor and patients who use omeprazole. Univariate analysis is used to distribute frequencies and percentages for each variable related to the patient's level of knowledge regarding the use of omeprazole.

Result Discussion

The data that the researcher has already collected at the research site based on general data about the respondent's characteristics and shares based on sex, age and profession.

Table 1. Respondent distribution by gender group.

Sex	Frequency (n)	Percentage (%)
Masculine	11	37
Feminine	19	63
Total	30	100

Table 2. Respondent distribution based on age group.

Age	Frequency (n)	Percentage (%)
17-25	18	27
26-45	16	53
46-65	6	20
Total	30	100

Table 3. Respondent distribution based on profession group.

Profession	Frequency (n)	Percentage (%)
Student	9	30
Employee	16	53
Unemployment	2	7
Farmer	3	10
Total	30	100

The research data that the researcher collected at the research site from 30 respondents with a total of 15 questions based on three (3) aspects with percentage values of each aspect as follows: knowledge of the aspect at 93%, understanding at 83% and application at 83% of the total is a result of the respondents to the questions that the researcher designed in the questionnaire with the correct category. Aspect of "knowledge" characteristics of the respondents based on the aspect of patients' knowledge for pharmaceutical care which focuses on the aspect of patients' knowledge.

Table .4. Frequency distribution based on the respondent's characteristics in the "knowledge" aspect.

No	Category Answers	Frequency	Percentage %
Questions 1	TRUE	21	70
	No	9	30
	Total	**30**	**100**
Questions 2	TRUE	28	93
	No	2	7
	Total	**30**	**100**
Questions 3	TRUE	24	80
	No	6	20
	Total	**30**	**100**
Questions 4	TRUE	20	67
	No	10	33
	Total	**30**	**100**
Questions 5	**Yes**	25	83
	No	5	17
	Total	**30**	**100**

Based on the data results in table 4, looking more closely at the knowledge aspect, which, through the counting process in the distribution of respondents, received the highest value of 93%, falling into the "true" category, and the "no" category at 7%. Therefore, the research results for the knowledge aspect involve obtaining responses from patients or responding to them regarding the " understanding " aspect of the respondent's characteristics based on the patient's pharmaceutical care or the respondent's understanding of medication use.

Table 5. Frequency distribution according to the characteristics of the respondent or patient based on aspects of "understanding".

No	Category Answers	Frequency	Percentage %
Questions 6	TRUE	25	83
	No	5	17
	Total	**30**	**100**
Questions 7	TRUE	16	53
	No	14	47
	Total	**30**	**100**
Questions 8	TRUE	25	17
	No	5	83
	Total	**30**	**100**
Questions 9	TRUE	10	33
	No	20	67
	Total	**30**	**100**
Questions 10	TRUE	21	70
	No	9	30
	Total	**30**	**100**

Based on the results of the data in table 2.4.7. looking at the aspect of understanding that with the process of counting the distribution of the respondents or patients you received the highest value of 83% in the category of true aspect, and in the aspect of not with its percentage which is small is 17%, then the results of the researcher's research from the point of view of understanding the patient or respondent in this aspect.

Characteristics of the "application" aspect of the respondents based on the patient level patient aspect of pharmacy services that focus on the patient application aspects of using omeprazole in the community according to the patients' knowledge, understanding and application of how to consume omeprazole.

Table 6. Frequency distribution by patient or respondent characteristics based on the "application" aspect.

No	Category Answers	Frequency	Percentage %
Questions 11	TRUE	25	
	No	5	
	Total	**30**	**100**
Questions 12	TRUE	23	
	No	7	
	Total	**30**	**100**
Questions 13	TRUE	24	
	No	6	
	Total	**30**	**100**
Questions 14	TRUE	23	
	No	7	
	Total	**30**	**100**
Questions 15	TRUE	14	
	No	16	
	Total	**30**	**100**

Based on the data results in table 4.2.8. looking at the application aspect with the counting process in the distribution of respondents or patients in the application of how to use omeprazole for gastritis, the highest value is the true category with a percentage of 83%, and the non-percentage category is the lowest 17%, this is the result of respondents or patients for the application aspect.

Conclusion

Related to the results of the collected research data, to conclude the important points are the following:

- "Knowledge" aspect

That with the process of counting the distribution of respondents obtained the highest value of 93%, falls into the category of true and the lowest value is 7%, falls into the category of not.

- Aspect "Understanding"

That with the process of counting the distribution of respondents obtained the highest value of 83%, falls into the category of true and the lowest value is 17%, falls into the category of not.

- "Application" aspect

That with the process of counting the distribution of respondents obtained the highest value of 83%, falls into the category of true and the lowest value is 17%, falls into the category of not (Tilman CB., et al, 2025).

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