Knowledge and Attitudes Regarding Dyspepsia in an Effort to Prevent Gastritis: Literature Review

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Abstract

Dyspepsia and gastritis are two health problems that are often faced by people throughout the world. Although dyspepsia is often taken for granted, lack of knowledge and appropriate attitudes can increase the risk of gastritis and more serious complications. This literature review aims to understand the relationship between knowledge and attitudes towards dyspepsia in an effort to prevent gastritis. Previous research results show that public knowledge about dyspepsia and gastritis is still inadequate, with demographic factors such as gender, age and ethnicity influencing the risk of developing dyspepsia. Dyspepsia is often an early sign of the development of gastritis, with risk factors such as Helicobacter pylori infection, alcohol consumption, certain medications, and an unhealthy diet contributing to both conditions. Therefore, a holistic approach in the prevention, diagnosis, and management of dyspepsia and gastritis is necessary, with increased public education, recognition of risk factors, and implementation of appropriate interventions key to improving overall digestive tract health.

Keywords: Dyspepsia, gastritis, risk factors, prevention.

1. Introduction

Dyspepsia and gastritis are two health problems that are often faced by people throughout the world. Dyspepsia, which is often known as indigestion, is a condition that causes discomfort in the upper stomach. Symptoms can vary, including abdominal bloating, feeling full, nausea, vomiting, or burning in the chest. Meanwhile, gastritis is inflammation of the stomach wall which can be caused by various factors such as Helicobacter pylori bacterial infection, alcohol consumption, or use of certain drugs (Takahashi et al., 2022).

The difference between dyspepsia and gastritis may be blurry to many people, and often these conditions are considered trivial. However, it is important to realize that a lack of knowledge and appropriate attitudes towards dyspepsia can have a serious impact on an individual's health, by increasing the risk of developing gastritis and more serious complications (Chitapanarux et al., 2021). Therefore, it is important to conduct a comprehensive literature review on knowledge and attitudes towards dyspepsia as a first step in efforts to prevent gastritis.

Dyspepsia, also known as indigestion, is a fairly common health problem in society. This condition is characterized by symptoms such as discomfort, pain, or burning in the upper abdominal area. Even though dyspepsia is not a serious disease, if it is not treated properly, it can trigger more severe complications, one of which is gastritis. Dyspepsia is a series of symptoms related to the gastroduodenal digestive tract, such as pain or a burning sensation in the upper stomach area (epigastrium), feeling full after eating, or feeling full quickly. About 80% of dyspepsia sufferers have no structural abnormalities that can explain their symptoms, so they are diagnosed with functional dyspepsia. Functional dyspepsia can affect approximately 16% of healthy individuals in the general population (Ford et al., 2020).

According to WHO (World Health Organization), the world's dyspepsia population reaches 15-30% in the world every year. Indonesia is ranked third after the United States and England in terms of the highest number of dyspepsia sufferers. The prevalence of dyspepsia in Indonesia reaches 40-50%, where dyspepsia itself is included in the top 10 diseases in Indonesia (Putri et al., 2022). Globally, there are around 15-40% of dyspepsia sufferers. Every year this complaint affects 25% of the world's population. In Asia, the prevalence of dyspepsia ranges from 8-30%. In Indonesia, it is estimated that almost 30% of dyspepsia patients who come to general practice are patients whose complaints are related to dyspepsia cases (Abdeljawad et al., 2017).
Public knowledge and attitudes about dyspepsia and its relationship to gastritis play an important role in efforts to prevent and manage this condition. Lack of knowledge and inappropriate attitudes can cause individuals to ignore the symptoms of dyspepsia or not realize the importance of proper treatment. This can increase the risk of further complications, such as gastritis or even more severe conditions. A number of factors may influence an individual's knowledge and attitudes toward dyspepsia, including education, culture, and accessibility of medical information. Therefore, it is important to take a holistic approach in evaluating these factors in the context of gastritis prevention. By understanding the diversity of factors that influence knowledge and attitudes towards dyspepsia, we can design educational programs that are more effective and relevant for various population groups.

Through this literature review, we hope to provide a deeper understanding of how knowledge and attitudes towards dyspepsia can influence efforts to prevent gastritis. It is hoped that our findings will be the basis for developing new strategies to increase public awareness and understanding of the importance of early detection and appropriate treatment of dyspepsia symptoms. Thus, we hope that this literature review can make a meaningful contribution to improving public health.

### 2. Literature Search Strategy

search for literature review studies via the Google Scholar database using the keywords "Dyspepsia" and "gastritis". Journals that meet the inclusion criteria are collected into one and summarized including the name of the researcher, year of publication, title and research results. The literature review used is grouped with similar data according to the results assessed to answer the objectives using the narrative method. The complete list of journal search results is explained in table 1.

#### Table 1. list of journal search results is explained

<table>
<thead>
<tr>
<th>Author and year of publication</th>
<th>Title</th>
<th>Contents</th>
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<tbody>
<tr>
<td>Khairunnisa, Wahyudi, Kamaruzzaman and Nita, (2021)</td>
<td>Pengetahuan Mahasiswa Universitas Airlangga Mengenai Dispepsia, Gastritis, dan Gerd beserta Antasida sebagai Pengobatannya.</td>
<td>The results of the study showed that the level of knowledge of all people regarding dyspepsia, gastritis and GERD was good for 12 (11.8%) people, sufficient for 40 (39.2%) people, and less for 50 (49%) people. The level of knowledge of all people regarding aspects of good treatment was 8 (7.8%) people, 35 (34.3%) people were sufficient, and 59 (57.8%) people were poor.</td>
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<tr>
<td>Simajuntak, S. H. (2020)</td>
<td>Karya Tulis Ilmiah Literatur Review: Pengetahuan Dan Sikap Tentang Dispepsia Dalam Upaya Mencegah Gastritis Di Sman 17 Medan.</td>
<td>Based on literature sources, there are 5 journals that have a significant relationship between the level of knowledge about DISPEPSIA in an effort to prevent gastritis and there are also 2 journals that have a significant relationship between the level of attitudes about dyspepsia in an effort to prevent gastritis, good knowledge about dyspepsia so that a good attitude is formed in an effort to prevent gastritis.</td>
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<tr>
<td>Mapel, Roberts, Overhiser and Mason, (2013)</td>
<td>The Epidemiology, Diagnosis, and Cost of Dyspepsia and Helicobacter pylori Gastritis: A Case–Control Analysis in the Southwestern United States</td>
<td>A total of 6989 cases met all inclusion and exclusion criteria. Women had a substantially higher risk of dyspepsia than men (14 per 1000 per year vs 10 per 1000; ( p &lt; .001 )), and the incidence of dyspepsia increased with age such that persons in their seventh decade had almost twice the risk of those aged 18–29. Hispanic persons had a significantly higher risk of dyspepsia and positive H. pylori testing. Dyspepsia cases had a higher prevalence of other chronic comorbidities than their matched controls. Dyspepsia patients had healthcare costs 54% higher than controls even before the diagnosis was made, and costs in the initial diagnostic period were $483 greater per person, but subsequent costs were not greatly affected. Among those aged 55 and younger, the “test and treat” approach was used in 53% and another 18% had an initial esophagogastroduodenoscopy, as compared to 47 and 27%, respectively, among those over the age of 55.</td>
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<tr>
<td>Vakil, Talley, Stolte, Sundin, Junghard, and Bolling-Sternevald,</td>
<td>Patterns of gastritis and the effect of eradicating Helicobacter pylori on gastro-oesophageal reflux disease in Western patients with non-ulcer dyspepsia</td>
<td>Patients without predominant heartburn, oesophagitis or ulcers at endoscopy were randomized to active (n ¼ 297, omeprazole, amoxicillin and clarithromycin) treatment or to placebo/omeprazole (n ¼ 306) for 1 week. The eradication rate was 82% in the active treatment group.</td>
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Antrum-predominant gastritis (55%) was more frequently found than corpus-predominant gastritis (6%). In patients with antrum-predominant gastritis, heartburn and regurgitation scores improved significantly 12 months after eradication. Erosive oesophagitis developed in 15/232 patients in the eradication group (7%) compared with 2/227 (2%) in the control group, but there was no significant difference when adjusted for oesophagitis present at baseline.

Sharma, Suri, Venigalla, Garg, Mohammad, Das, and Ahuja, (2015) Atrophic gastritis with high prevalence of Helicobacter pylori is a predominant feature in patients with dyspepsia in a high altitude area The mean age was 38.4 years with 42% being males. Indigenous foods with high-salt content were consumed by 75% of patients. Epigastric pain was the most frequent symptom (in 96%) and pain radiating to the back was another peculiar symptom seen in 49% of patients. The predominant finding on endoscopy was antral gastritis in 71% of patients. Nodular gastritis was seen in 18% of patients. H. pylori was documented in 93% and histopathology revealed mild-to-moderate inflammation in 93% and mild-to-moderate atrophy in 90% of patients. Colonization with Gram-negative bacilli was observed in gastric/duodenal aspirate cultures.

Based on a summary of previous research, it can be concluded that several important things related to dyspepsia, gastritis and GERD are as follows:

a). The level of public knowledge about dyspepsia, gastritis, GERD, and the use of antacids is still inadequate. Good knowledge about dyspepsia is related to efforts to prevent gastritis.

b). Demographic factors such as gender, age, and ethnicity influence the risk of developing dyspepsia, with women, the elderly, and those of Hispanic ethnicity being at higher risk.

c). Antrum-predominant gastritis is more common than corpus-predominant gastritis in non-ulcer dyspepsia patients. Eradication of H. pylori may improve GERD symptoms in patients with antrum-predominant gastritis.

d). In highland areas, atrophic gastritis with a high prevalence of H. pylori is a typical finding in dyspepsia patients, exacerbated by consumption of traditional foods with high salt content.

e). Dyspepsia patients have higher health care costs than the general population, even before a diagnosis is made.

3. Results and Discussion

3.1. Definition and classification of dyspepsia

3.1.1. Definition

The word ‘dyspepsia’ comes from the Greek, namely ‘dys’ (poor) and ‘pepse’ (digestion) which means digestive disorders. Initially this disorder was considered to be part of anxiety disorders, hypochondria and hysteria.5 British Society of Gastroenterology (BSG) states that the term ‘dyspepsia’ is not a diagnosis, but rather a collection of symptoms that lead to disease/disorders of the upper digestive tract.6 The definition of dyspepsia is a collection of symptoms of the upper digestive tract including pain or discomfort in the gastro-duodenal area (epigastrium/ulu heart), feeling burning, fullness, feeling full quickly, nausea or vomiting (Purnamasari, 2017). Dyspepsia is a disease that is not contagious in the digestive tract but is common among people around the world. Dyspepsia syndrome is a collection of symptoms or syndromes of pain or discomfort in the stomach, nausea, vomiting, bloating, feeling full easily, feeling of a full stomach, repeated or chronic belching. The complaints that arise are usually different for each individual sufferer.

3.1.2. Classification

Dyspepsia is divided into two groups, namely organic dyspepsia or what is often called structural dyspepsia and non-organic dyspepsia or what is often called functional dyspepsia. Organic dyspepsia occurs due to organic disorders. In organic dyspepsia, there are obvious abnormalities visible on endoscopy of the digestive tract organs such as peptic ulcers or what is known as peptic ulcers, gastritis, stomach cancer, gastro esophageal reflux disease (GERD), hyperacidity. Non-organic dyspepsia does not reveal any abnormalities during physical examination and endoscopy, it is only characterized by chronic or recurrent upper abdominal pain or discomfort. Initially, functional dyspepsia was divided into 3 groups, namely ‘ulcer-like’, ‘refluxlike’, and ‘dysmotility-like’ (Zaktyah et al., 2021).
3.2. The relationship between dyspepsia and gastritis

The relationship between dyspepsia and gastritis is an important aspect in understanding digestive disorders involving the stomach. Dyspepsia, as a symptom that is often non-specific, can be an early indication of the development of more serious gastritis. Although not all cases of dyspepsia develop into gastritis, some of the same risk factors can contribute to both conditions. Inflammation of the stomach wall that occurs in gastritis can be the main cause of dyspepsia symptoms. For example, infection with Helicobacter pylori bacteria is one of the common causes of gastritis, and this infection can also cause dyspeptic symptoms such as a feeling of fullness, nausea, or flatulence.

Apart from that, unhealthy eating habits and lifestyle patterns, such as consuming spicy or fatty foods, as well as stress, can also trigger the emergence of both dyspepsia and gastritis. Therefore, understanding the relationship between dyspepsia and gastritis is important in the context of preventing and treating digestive disorders. By identifying and understanding the factors that can cause gastric inflammation as well as dyspeptic symptoms, we can take appropriate steps to prevent further development of these two conditions. In addition, knowledge of this relationship also helps guide a more effective diagnosis and medical treatment process for individuals experiencing digestive disorders.

3.3. Risk factors for dyspepsia and gastritis

Gastric acid disease or gastritis can be caused by various risk factors. First, irregular eating patterns, consuming spicy food, and eating large portions can increase the risk of gastritis. Second, the habit of frequently drinking coffee and tea can also trigger gastritis. Third, bacterial or parasitic infections such as Helicobacter pylori can cause inflammation of the stomach wall. Fourth, long-term use of certain drugs such as analgesics, steroids and anticoagulants can increase the risk of gastritis.

Apart from that, the age factor also plays an important role. Gastritis often occurs at the age of 20-40 years, but can also occur in old age. Alcoholism and stress are also considered risk factors that can trigger gastritis. Critically ill patients who are hospitalized also have a higher risk of developing gastritis. Finally, other diseases such as biliary reflux disease, autoimmune diseases, HIV/AIDS, and Crohn's disease can also increase the risk of gastritis.

4. Conclusion

Based on the literature review carried out, it can be concluded that dyspepsia and gastritis are two digestive health problems that are often faced by the public. Although dyspepsia is often considered trivial, a lack of knowledge and proper attitude towards this condition can increase the risk of gastritis and more serious complications. The results of the literature review show that public knowledge about dyspepsia and gastritis is still inadequate, with demographic factors such as gender, age and ethnicity influencing the risk of developing dyspepsia. The interrelation between dyspepsia and gastritis is also an important concern, where dyspepsia is often an early sign of the development of gastritis. Therefore, a holistic approach in the prevention, diagnosis, and management of these two conditions is necessary, with increased public education, recognition of risk factors, and implementation of appropriate interventions key to improving overall digestive tract health.

References


