



Investigation of Stomach Ulcer among Women of Reproductive Age: Studying the Causes and Appropriate Treatment Methods in the 21st Century

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Annotation: The study carefully investigated the causes and appropriate treatment methods of stomach ulcer among women of reproductive age in the 21st century. Descriptive survey design was used in carrying out the research. The study was conducted in Akwa Ibom State. The population of the study comprised all medical personnel in Akwa Ibom State. Eighty (80) medical personnel were selected using stratified random sampling. The instrument used for data collection was a structured questionnaire tagged “Stomach Ulcer and Women of Reproductive Age Questionnaire (SUWRAQ). A reliability test was carried out on the research instrument which produced the reliability coefficient of 0.92, considered to be substantially high enough to justify the use of the instrument. The study made use of descriptive statistics. The study revealed that there is need for an holistic treatment approach in treating stomach ulcers. Treatment options should include proton pump inhibitors and antibiotics, integrative therapies, dietary modifications, and pharmacotherapy for comprehensive treatment. The study concluded that there are very many cases of stomach ulcer common among women of reproductive age. The study also concluded that there are several precautions for women of reproductive age of the matter such as the need for a comprehensive understanding of the multifactorial nature of stomach ulcers. One of the recommendations was that women should prioritize stress management techniques, such as mindfulness meditation or yoga, to mitigate ulcer development and exacerbations associated with chronic stress.

Key words: Stomach Ulcers, Women, Reproductive Age, Causes, Treatment Methods, 21st Century.

Introduction

Stomach ulcers, characterized by open sores in the stomach lining, pose a significant health concern among women of reproductive age in the 21st century. Despite being associated with factors such as stress and spicy food consumption, recent studies indicate that the causes are multifactorial, involving complex interactions between genetic, environmental, and lifestyle factors. The increased prevalence of *Helicobacter pylori* infection, a bacterium known to play a crucial role in ulcer development, underscores the importance of understanding the microbial component in addressing stomach ulcers in women.

According to Lanasant Chan (2017), hormonal fluctuations during the reproductive years may contribute to the vulnerability of women to stomach ulcers. Estrogen, for example, has been



suggested to have a protective effect on the stomach lining, and its decline during menopause may increase susceptibility. Lifestyle choices, such as smoking and excessive alcohol consumption, also play a significant role. Additionally, the stress associated with the demands of the modern lifestyle can exacerbate ulcer development, emphasizing the need for a holistic approach to treatment.

In terms of treatment, advancements in medical science offer a range of options for managing stomach ulcers in women. Proton pump inhibitors (PPIs) and antibiotics are commonly prescribed to reduce stomach acid and eradicate *H. pylori*, respectively. However, personalized medicine approaches, considering an individual's genetic makeup and microbial profile, are emerging as potential avenues for more effective and targeted treatments. Integrative therapies, including stress management techniques and dietary modifications, complement pharmacological interventions, offering a comprehensive strategy to address (Fallone, Chiba, Van Zanten, Fischbach, Gisbert and Hunt, 2016)

It is crucial to emphasize the role of early detection and prevention in managing stomach ulcers in women. Regular screenings for *H. pylori* infection, especially in high-risk populations, can aid in timely intervention. Health education programs should focus on promoting a healthy lifestyle, including balanced diets, regular exercise, and stress reduction techniques. Empowering women with knowledge about risk factors and preventive measures can contribute significantly to reducing the incidence of stomach ulcers and improving overall digestive health.

Statement of Problem

In today's society, stomach ulcers have become a prevalent concern among women of reproductive age. It is commonly believed that stress, spicy foods, and excessive alcohol consumption are the primary culprits behind these ulcers. Consequently, many individuals resort to home remedies and traditional treatments such as consuming milk or avoiding certain foods to alleviate their symptoms. However, these beliefs and treatments lack substantial scientific backing and may not be the most effective or appropriate for managing stomach ulcers. This prevailing belief system and the utilization of traditional remedies have spurred a critical need for empirical investigation. The underlying question driving this research is whether these commonly held beliefs and treatments align with the actual causes and clinically effective treatments for stomach ulcers among women of reproductive age in the 21st century. Understanding the true causative factors and appropriate medical interventions is essential for improving the health outcomes and quality of life for this demographic. Based on these assumptions, this study aims to bridge the gap between popular perceptions and evidence-based medicine regarding stomach ulcers in young women. Ultimately, the findings from this study will contribute to advancing medical knowledge and optimizing the management strategies for stomach ulcers in the contemporary era.

Objectives of the study

1. To determine the risk factors of stomach ulcer among women of reproductive age.
2. To find out the treatments for stomach ulcer among women of reproductive age.

Research questions

1. What are the risk factors of stomach ulcer among women of reproductive age?
2. What are the treatments for stomach ulcer among women of reproductive age?

LITERATURE REVIEW

Concept of stomach ulcer

Stomach ulcer is also known as gastric ulcers are painful sores in the stomach lining which occur when digestive acids damage your stomach lining. Stomach ulcers occur when the thick layer of mucus that protects your stomach from digestive juices is reduced. This allows the digestive acids to eat away at the tissues that line the stomach, causing an ulcer. Stomach ulcers may be easily cured, but they can become severe without proper treatment. The pain may stop for a little while if you take an antacid, but it may return.



Sheikh (2024) mentioned that stomach ulcers, also known as peptic ulcers, are open sores in the lining of your stomach or the upper part of your small intestine. The ulcer forms when stomach acid eats away at the mucus that protects the lining of your digestive tract. It can be usually notice on an empty stomach, such as between meals or at night. The pain can last a few minutes or a few hours and may come and go for many days or weeks.

Macgill (2023) described Stomach ulcers as sores in the lining of the stomach or small intestine. They cause pain and indigestion, but over-the-counter and prescription medications can bring relief. Dietary and lifestyle changes may also be necessary. The stomach produces a strong acid to help digest food and protect against microbes. To protect the bodily tissues from this acid, the stomach also secretes a thick layer of mucus. If the mucus layer is worn away and stops functioning effectively, the acid can damage the stomach tissue, causing ulcers.

Woolf (2023) stated that stomach ulcers are a break in the mucosa of the stomach lining that penetrates through the muscularis mucosa and extends more than 5 mm in diameter. When alterations occur to the defense mechanisms of the stomach, it can cause changes in the gastric mucosa which will eventually result in erosion and then ulceration.

A stomach ulcer, also called a gastric ulcer, is an open sore that develops in your stomach lining. A stomach ulcer occurs when gastric acid eats away at your protective stomach lining. The acid produces open sores that can bleed and cause stomach pain. Stomach ulcers are one kind of peptic ulcer disease. They are common and treatable, but they should be taken seriously (Cleveland Clinic, 2022).

Stomach ulcers, also known as gastric ulcers, are sores that develop on the lining of the stomach. A person can get stomach ulcers in part of the intestine just beyond the stomach, which are called duodenal ulcers. Stomach ulcers and duodenal ulcers (sometimes called peptic ulcers) cause the same symptoms and treatment for both is the same. The most common symptom of a stomach ulcer is a burning or gnawing pain in the center of the abdomen (NHS, 2022).

Stomach or gastric ulcer is a break in the tissue lining of the stomach. It was once commonly thought that stress, smoking and diet were the principal causes of stomach ulcers. However, the *Helicobacter pylori* (*H. pylori*) bacterium is now known to be responsible for most duodenal ulcers and 60% of stomach ulcers. The *H. pylori* bacterium also prompts many symptoms of indigestion (dyspepsia). Most stomach ulcers are caused by infection with the *Helicobacter pylori* bacterium or anti-inflammatory medication, not stress or poor diet as once thought (Victoria State Government, 2023).

Effect of stomach ulcer

Stomach ulcers, also known as gastric ulcers, are open sores that develop on the inner lining of the stomach. These ulcers can cause various symptoms, including abdominal pain, bloating, nausea, and indigestion.

Helicobacter pylori Infection

One of the major contributors to stomach ulcers is the presence of *Helicobacter pylori* (*H. pylori*) bacteria. This bacterium can weaken the protective mucus layer of the stomach, allowing stomach acid to damage the lining and form ulcers. Research studies have consistently linked *Helicobacter pylori* infection to the development of stomach ulcers. The stomach is protected by a mucosal barrier that includes a layer of mucus, bicarbonate, and other factors. *H. pylori* disrupts this protective barrier by penetrating the mucous layer, allowing direct contact between the bacteria and the underlying gastric epithelial cells. This disruption makes the stomach more susceptible to the corrosive effects of gastric acid, leading to inflammation and ulcer formation (Malfertheiner, et-al 2017).

Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)

Another significant factor leading to stomach ulcers is the prolonged use of non-steroidal anti-inflammatory drugs (NSAIDs) such as aspirin and ibuprofen. These medications can disrupt the



stomach's protective barrier, making it more susceptible to ulcer formation. NSAIDs work by inhibiting an enzyme called cyclooxygenase (COX), which is involved in the synthesis of prostaglandins. Prostaglandins play a protective role in the stomach lining by promoting mucus production, maintaining blood flow, and regulating the secretion of gastric acid. Inhibition of prostaglandin synthesis reduces these protective effects, making the stomach more susceptible to damage (Lanas, et-al 2016).

Acid Production and Stomach Lining Integrity

The stomach continuously produces gastric acid to aid in digestion. An imbalance in the production of acid and the integrity of the stomach lining can result in ulceration. Proton pump inhibitors (PPIs) and H2 blockers are commonly prescribed to reduce acid production and promote ulcer healing. The stomach produces gastric acid to aid in the digestion of food, particularly proteins. This acid is primarily composed of hydrochloric acid and plays a key role in breaking down food particles and activating digestive enzymes. Normally, the stomach has protective mechanisms, including a layer of mucus, to prevent the acid from damaging the stomach lining. (Wright, et-al 2014).

Lifestyle Factors

Lifestyle choices, such as smoking and excessive alcohol consumption, have been associated with an increased risk of developing stomach ulcers. These factors can exacerbate the effects of *H. pylori* infection or NSAID use, further compromising the stomach's protective mechanisms. Heavy alcohol consumption is known to irritate the stomach lining and increase stomach acid production. This can contribute to the development of ulcers and hinder the healing process. Alcohol abuse is also associated with an elevated risk of complications, including gastrointestinal bleeding and perforation. (Ford, et-al 2015).

Psychological Stress

Stress has been associated with changes in the gastrointestinal barrier function. Chronic stress may compromise the protective mucosal lining of the stomach, making it more susceptible to damage from stomach acid and other harmful factors. This impaired mucosal integrity can contribute to the formation and persistence of ulcers. While stress alone may not directly cause stomach ulcers, it can exacerbate existing conditions. Chronic stress may influence the body's ability to repair and maintain the integrity of the stomach lining, potentially contributing to the development of ulcers (Konturek, et-al, 2011).

Control of stomach ulcer

Stomach ulcer also known as gastric ulcers, are open sores that develop on the lining of the stomach. These ulcers result from a breakdown in the protective mucosal layer that lines the stomach and protects it from the corrosive effects of stomach acid and digestive enzymes. The primary cause of stomach ulcers is infection with the bacterium *Helicobacter pylori* (*H. pylori*) or the chronic use of nonsteroidal anti-inflammatory drugs (NSAIDs) such as aspirin and ibuprofen. Other factors like excessive alcohol consumption, smoking, and stress may exacerbate ulcer formation.

Laine and Jensen (2017), mentioned that symptoms of stomach ulcers vary but commonly include burning pain in the abdomen, bloating, nausea, vomiting, and a feeling of fullness. Some individuals may experience more severe symptoms like bloody or black stools, which can indicate internal bleeding. However, many people with stomach ulcers may not experience any symptoms at all until complications arise.

Diagnosing stomach ulcers typically involves a combination of medical history assessment, physical examination, and diagnostic tests. Endoscopic procedures like gastroscopy allow direct visualization of the stomach lining, enabling healthcare professionals to identify ulcers and obtain biopsy samples for *H. pylori* testing. Additionally, imaging tests such as X-rays or CT scans may be used to detect complications or assess the extent of ulceration.



Treatment strategies for stomach ulcers aim to relieve symptoms, promote healing, and prevent complications. This often involves a combination of medications and lifestyle modifications. Proton pump inhibitors (PPIs) and H₂-receptor antagonists are commonly prescribed to reduce stomach acid production and alleviate pain. Antibiotics are used to eradicate *H. pylori* infection when present. Patients are also advised to avoid NSAIDs, alcohol, and smoking, as these can worsen ulcer symptoms and delay healing. In severe cases or when complications like perforation or bleeding occur, surgical intervention may be necessary.

Surgical procedures may involve removing the ulcerated tissue, repairing perforations, or controlling bleeding. However, surgery is typically reserved for cases that do not respond to conservative treatment or in emergencies where immediate intervention is required to prevent life-threatening complications. Overall, while stomach ulcers can cause significant discomfort and complications, timely diagnosis and appropriate treatment can lead to successful resolution in most cases (Søreide, Thorsen, Harrison, Bingener, Møller, Ohene-Yeboah and Søreide, 2015)

Stomach ulcers, also known as peptic ulcers, are open sores that develop on the lining of the stomach. Understanding the causes of stomach ulcers is crucial for effective prevention and management of this condition. As stated by MacGill (2023) the two main causes of ulcers of the stomach and the small intestine are *Helicobacter pylori* (*H. pylori*) bacteria. This bacterium weakens the protective mucous coating of the stomach and duodenum, allowing stomach acid to damage the lining and form ulcers (Malfertheiner et al., 2017).

Another notable cause of stomach ulcer is a class of pain relievers called nonsteroidal anti-inflammatory drugs (NSAIDs). Regular use of nonsteroidal anti-inflammatory drugs (NSAIDs) such as aspirin, ibuprofen, and naproxen can increase the risk of stomach ulcers by irritating the stomach lining and reducing its ability to protect itself from acid (Lanza et al., 2017). Excessive alcohol consumption similarly can ignite stomach ulcer as it irritates the stomach lining, leading to inflammation and increased susceptibility to ulcers.

Chronic alcohol consumption also weakens the stomach's protective mechanisms, making it more vulnerable to damage (Bujanda, 2000). It has also been noted that smoking cigarettes can increase the risk of stomach ulcers, as smoking interferes with the production of prostaglandins, which help protect the stomach lining, and it also reduces blood flow to the stomach, impairing its ability to heal ulcers (Lanas et al., 2016). NHS (2023) mentioned that there also is little evidence that certain foods can cause stomach ulcers. Foods such as fatty foods, spicy foods, citrus fruits, chocolates, and carbonated beverages when taken in high proportion have the capability to increase stomach ulcers.

Another subtle cause of stomach ulcer is stress. As explained by Konturek et al. (2011), chronic stress may increase stomach acid production and decrease blood flow to the stomach, contributing to ulcer formation. In the same vein as other causes of diseases, stomach ulcer can be transferred genetically. As posited by McColl et al. (2017), some individuals may have a genetic predisposition to developing stomach ulcers. Certain genetic factors may influence the body's response to *H. pylori* infection or its ability to tolerate NSAIDs, increasing the likelihood of ulcer development.

PREVALENCE OF STOMACH ULCERS

The incidence of gastric ulcers, also referred to as peptic ulcers, is highly variable and is influenced by various factors such as lifestyle choices, socioeconomic status, geographic location, and the existence of risk factors including *Helicobacter pylori* infection or medication use (NSAIDs). An annual millions of people worldwide suffer from stomach ulcers, a common gastrointestinal condition. A comprehensive study and meta-analysis that was published in the journal *Gut* in 2015 estimated that between 4% and 5% of the general population worldwide has peptic ulcer disease (Gut, 2015). There are regional and national variations in the prevalence of stomach ulcers. For example, peptic ulcer disease seems to be more common in areas like sections of Asia, Africa, and South America where *H. pylori* infection is common. On the other hand, areas where *H. pylori*



prevalence has decreased as a result of better hygiene and medical procedures might have lower prevalence.

A substantial percentage of peptic ulcers in developed nations, especially in older persons, are caused by the common use of NSAIDs for ailments including arthritis. The main causes of stomach ulcers are *H. pylori* infection, NSAID use, alcohol intake, smoking, stress, and a family history of ulcers. People who suffer from long-term conditions such as chronic obstructive pulmonary disease (COPD) or liver cirrhosis may also be more susceptible. Although they can happen to anyone at any age, older persons are more likely to experience peptic ulcers. In the past, stomach ulcers were more common in men than in women, but new research indicates that this has changed and that the prevalence is now comparable for both genders.

The frequency of stomach ulcers has fluctuated throughout time as a result of modifications to risk factors, healthcare procedures, and socioeconomic circumstances. In some populations, ulcer prevalence patterns have probably been impacted by efforts to lower *H. pylori* infection rates through public health initiatives and the creation of more potent treatment plans. Planning for healthcare, allocating resources, and creating focused preventive and treatment plans that lessen the impact of stomach ulcers on patients and healthcare systems all depend on having a thorough understanding of the condition's prevalence.

RISK FACTORS OF STOMACH ULCER

Stomach ulcers, also known as gastric ulcers, are painful sores that develop in the lining of the stomach. Several risk factors contribute to the development of stomach ulcers, ranging from lifestyle choices to underlying medical conditions like the use of NSAIDs is a risk factor for symptomatic peptic ulcer diseases. Understanding these risk factors is crucial for prevention and management (Lee, 2017). Here is an exploration of some key risk factors:

Helicobacter pylori Infection: This bacterium is one of the primary causes of stomach ulcers. It weakens the protective mucous layer of the stomach, allowing stomach acid to cause damage to the lining. *H. pylori* infection is common and can be transmitted through contaminated food, water, or close contact with an infected individual.

Nonsteroidal Anti-Inflammatory Drugs (NSAIDs): Regular use of NSAIDs such as aspirin, ibuprofen, and naproxen can irritate the stomach lining and increase the risk of developing ulcers. These medications inhibit the production of prostaglandins, which help protect the stomach lining from acid. Long-term or high-dose NSAID use is particularly concerning.

Smoking: Cigarette smoking is associated with an increased risk of developing stomach ulcers. Smoking weakens the stomach's protective lining, interferes with its ability to heal, and may increase stomach acid production, making the stomach more susceptible to damage.

Alcohol Consumption: Excessive alcohol consumption can irritate the stomach lining and increase acid production, making it more vulnerable to ulcer formation. Alcohol also affects the secretion of protective substances in the stomach, further exacerbating the risk.

Stress: While stress alone may not directly cause stomach ulcers, it can worsen existing ulcers and delay healing. Chronic stress can lead to changes in stomach acid secretion and blood flow to the stomach lining, making it more susceptible to damage from factors like *H. pylori* infection or NSAID use.

Age and Gender: Stomach ulcers can occur at any age but are more common in older adults. Additionally, men are more likely than women to develop stomach ulcers, although the reasons for this difference are not entirely understood.

Family History: There may be a genetic predisposition to developing stomach ulcers. If you have a family history of ulcers, you may be at a higher risk yourself.



Dietary Factors: While certain spicy foods or stressors used to be thought to cause ulcers, current research suggests that diet plays a smaller role. However, a diet high in spicy foods or heavily processed foods may exacerbate symptoms in individuals already suffering from ulcers. Understanding these risk factors empowers individuals to make informed lifestyle choices and seek appropriate medical care to prevent and manage stomach ulcers effectively. If you suspect you have a stomach ulcer or are at risk due to any of these factors, it's essential to consult with a healthcare professional for proper diagnosis and treatment.

TREATMENT OF STOMACH ULCER

A multifaceted strategy is usually used to treat stomach ulcers with the goals of reducing symptoms, encouraging healing, changing lifestyle choices, and avoiding complications. The main objectives of treatment are to reduce pain, encourage ulcer healing, safeguard the duodenum and stomach lining, get rid of any *Helicobacter pylori* infection that may be present, and stop complications or recurrence. Some of the techniques for treating stomach ulcers are as follows:

Proton Pump Inhibitors (PPIs):

Since these medications limit the formation of stomach acid, they are the cornerstone or backbone of ulcer treatment. In addition to relieving ulcer-related symptoms, these drugs are essential for encouraging ulcer healing. PPIs such as omeprazole, lansoprazole, esomeprazole, pantoprazole, and rabeprazole are frequently prescribed.

Histamine H2-Receptor Antagonists:

H2 blockers, also referred to as histamine H2-receptor antagonists, are another class of drugs that are often prescribed to treat stomach ulcers. By specifically blocking histamine H2 receptors in the stomach, these medications lessen gastric acid output and encourage the repair of ulcers. Usually, it is advised to include Medications that decrease stomach acid production and encourage ulcer healing include ranitidine, famotidine, and cimetidine.

Antacids:

By neutralising stomach acid, antacids are a class of drugs that are frequently used to treat stomach ulcers and offer quick symptom relief. Antacids are helpful in treating discomfort associated with ulcers, even though they don't directly aid in ulcer healing like other drugs like proton pump inhibitors (PPIs) or histamine H2-receptor antagonists do. Aluminium hydroxide, magnesium hydroxide, and calcium carbonate are a few examples.

Antibiotics:

Antibiotics are essential for treating stomach ulcers, especially those brought on by *Helicobacter pylori* (*H. pylori*) infections, which are known to be a primary cause of peptic ulcers. A common strategy for eliminating *H. pylori* infection and promoting ulcer healing is to combine antibiotics with acid-suppressing drugs. Antibiotics like amoxicillin, clarithromycin, metronidazole, and tetracycline are recommended in combination to treat *H. pylori* infections.

H. pylori Eradication:

Treatment of stomach ulcers, particularly those brought on by *Helicobacter pylori* (*H. pylori*) infection, must include its eradication. A successful *H. pylori* eradication is linked to ulcer healing, symptom relief, and the prevention of recurrence. *H. pylori* is a key risk factor for the formation of peptic ulcers. Acid-suppressing drugs and antibiotics are used together to treat ulcers brought on by *H. pylori* infection. This usually entails taking a PPI, or bismuth subsalicylate, in addition to an antibiotic course lasting two weeks (Malfertheiner et al., 2017).

Cytoprotective Agents:

A variety of drugs called cytoprotective medicines is used to treat stomach ulcers in an effort to preserve and accelerate healing of the stomach lining. Cytoprotective drugs create a barrier over the



ulcerated area, preventing additional damage and speeding up the healing process, even though they do not directly lower stomach acid production like proton pump inhibitors (PPIs) or histamine H2-receptor antagonists do.

Lifestyle and Dietary Changes:

Dietary and lifestyle modifications are essential parts of the all-encompassing approach to treating stomach ulcers. Adopting healthy lifestyle habits and dietary alterations can assist optimise ulcer healing, prevent recurrence, and enhance overall gastrointestinal health, while drugs target the underlying causes and symptoms of ulcers (Kondo et al., 2019).

METHODOLOGY

In carrying out the study, a descriptive survey design was adopted for this study. The study was carried out in Akwa Ibom State. The targeted population for the study comprised all medical personnel in Akwa Ibom State. A stratified random sampling technique was used to select 80 medical personnel which was used for the study. The instrument used for data collection was a structured questionnaire titled “Stomach Ulcer and Women of Reproductive Age Questionnaire” (SUWRAQ)”. Face and content validation of the instrument was carried out by an expert in test, measurement, and evaluation in order to ensure that the instrument has the accuracy, appropriateness, and completeness for the study under consideration. A reliability test was carried out on the research instrument which produced the reliability coefficient of 0.92, considered to be substantially high enough to justify the use of the instrument. The researcher subjected the data generated for this study to appropriate statistical technique such percentage analysis to answer research questions.

RESULTS AND DISCUSSIONS

Research Questions 1: The research question sought to determine the risk factors of stomach ulcer among women of reproductive age. To answer the research question percentage analysis was performed on the data, (see table 1).

Table 1: Percentage analysis of the risk factors of stomach ulcer among women of reproductive age in Akwa Ibom State.

RISK FACTORS	FREQUENCY	PERCENTAGE
Helicobacter pylori Infection	24	21.81**
Nonsteroidal Anti-Inflammatory Drugs (NSAIDs)	22	20
Smoking	15	13.63
Alcohol Consumption	13	11.81
Stress	12	10.90
Age and Gender	10	9.09
Family History	8	7.27
Dietary Factors	6	5.45*
TOTAL	110	100%

** The highest percentage frequency

* The least percentage frequency

SOURCE: Field survey

The above table 1 presents the percentage analysis of the risk factors of stomach ulcer among women of reproductive age in Akwa Ibom State. From the result of the data analysis, it was observed that the highest percentage (21.81%) of the respondents affirmed that “Helicobacter pylori Infection” is the



highest risk factor of stomach ulcer among women of reproductive age in Akwa Ibom State, while the least percentage (5.45%) of the respondents affirmed that “Dietary Factors” are the major risk factors of stomach ulcer among women of reproductive age in Akwa Ibom State. The result of the data analysis proves that “Helicobacter pylori Infection” is the highest risk factor of stomach ulcer among women of reproductive age in Akwa Ibom State. This finding agrees with the findings of Lee. (2017) who mentioned that Helicobacter pylori infection is one of the primary causes of stomach ulcers, as it weakens the protective mucous layer of the stomach, allowing stomach acid to cause damage to the lining.

Research Questions 2: The research question sought to find out the treatment for stomach ulcer among women of reproductive age in Akwa Ibom State. To answer the research question percentage analysis was performed on the data (see table 2).

Table 2: Percentage analysis of the treatment for stomach ulcer among women of reproductive age in Akwa Ibom State.

TREATMENT	FREQUENCY	PERCENTAGE
Proton Pump Inhibitors (PPIs)	22	20**
Histamine H2-Receptor Antagonists	20	18.18
Antacids	17	15.45
Antibiotics	15	13.63
H. pylori Eradication	14	12.72
Cytoprotective Agents	12	10.90
Lifestyle and Dietary Changes	10	9.09*
TOTAL	110	100%

** The highest percentage frequency

* The least percentage frequency

SOURCE: Field survey

The above table 2 presents the percentage analysis of the treatment for stomach ulcer among women of reproductive age in Akwa Ibom State. From the result of the data analysis, it was observed that the highest percentage (20%) of the respondents affirmed that “Proton Pump Inhibitors (PPIs)” is the most effective treatment for stomach ulcer among women of reproductive age. While the least percentage (9.09%) of the respondents affirmed that “Lifestyle and Dietary Changes” is the least effective treatment for stomach ulcer among women of reproductive age in Akwa Ibom State. The result of the data analysis proves that “Proton Pump Inhibitors (PPIs)” is the most used treatment for stomach ulcer among women of reproductive age. This finding agrees with opinions of many experts in the discipline.

CONCLUSION

Stomach ulcers present a significant health concern for women of reproductive age in the 21st century, there are very many cases of stomach ulcer common among women of reproductive age, with multifactorial causes involving genetic, environmental, and lifestyle factors. The prevalence of Helicobacter pylori infection underscores the importance of addressing the microbial component in ulcer management. Hormonal fluctuations, lifestyle choices, and stress further contribute to vulnerability, necessitating a holistic treatment approach. Advancements in medical science offer diverse options, including proton pump inhibitors and antibiotics, while personalized medicine approaches and integrative therapies show promise for more targeted and effective treatments. Early detection through regular screenings and preventive measures, coupled with health education



promoting healthy lifestyles, are vital in reducing the incidence of stomach ulcers and enhancing overall digestive health among women. There is also need to embrace a holistic perspective in optimising outcomes and enhancing the quality of life for women combating stomach ulcers.

RECOMMENDATIONS

1. Women of reproductive age should prioritize stress management techniques such as mindfulness meditation or yoga, as chronic stress is often linked to the development and exacerbation of stomach ulcers.
2. Healthcare providers should conduct thorough evaluations for underlying *Helicobacter pylori* infection in women presenting with stomach ulcer symptoms, as this bacterium is a primary cause and requires appropriate antibiotic treatment.

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