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Original Article

To Explore the Nutritional Status Assesstment of Patients Suffering from Chronic Gastritis

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ABSTRACT

Background: Chronic gastritis, a prevalent condition characterized by inflammation of the stomach lining, has been associated with various dietary factors and lifestyle choices. Despite its widespread occurrence, there is a scarcity of research focusing on the nutritional status and dietary habits of individuals affected by this condition. Understanding the relationship between dietary practices and the management of chronic gastritis symptoms is essential for improving patient care and outcomes.

Objective: This study aimed to assess the nutritional status of patients with chronic gastritis and explore the association between dietary habits and the severity of gastritis symptoms, with the ultimate goal of identifying dietary interventions that could alleviate symptom severity.

Methods: A cross-sectional study design was employed, involving 200 patients diagnosed with chronic gastritis. Data were collected through structured interviews and medical record reviews, focusing on demographics, dietary habits, symptom severity, and nutritional status. Statistical analysis was performed using SPSS version 25, encompassing both descriptive and inferential statistics to examine the relationships between dietary factors and gastritis symptoms.

Results: Of the participants, 42% reported unintentional weight loss since their diagnosis, and 45% actively monitored their portion sizes to manage symptoms. Additionally, 36% of patients made a conscious effort to include high-fiber foods in their diet, whereas 44% did not. Abstinence from alcohol was reported by 39.5% of the participants as a strategy to mitigate symptoms. The study also found that 45.5% of participants recognized the importance of avoiding trigger foods, while 37.5% either disagreed or strongly disagreed with this practice.

Conclusion: The findings underscore the importance of personalized dietary management and education in the treatment of chronic gastritis. Implementing dietary strategies tailored to individual needs and educating patients about trigger foods are essential components of holistic care for gastritis patients. Future research should focus on the long-term impact of specific dietary interventions on symptom relief and quality of life in this patient population.

Keywords: Chronic gastritis, nutritional status, dietary habits, symptom management, dietary interventions, personalized dietary management.

INTRODUCTION

Chronic gastritis, marked by prolonged inflammation of the stomach lining, has increasingly become a focal point in global health discussions due to its significant implications on both individual well-being and broader public health outcomes. This condition, manifesting through symptoms ranging from stomach discomfort to, in severe cases, gastric bleeding, not only inflicts physical pain but also portends broader health ramifications. Its etiology is multifaceted, with Helicobacter pylori infection identified as a leading cause (1). This bacterium, prevalent in over half the global population, is linked to not just gastritis but also to peptic ulcers and stomach cancer, making its control a public health challenge given its often asymptomatic early stages. Additionally, lifestyle factors such as the consumption of spicy foods, excessive alcohol intake, prolonged use of non-steroidal anti-inflammatory drugs, and

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smoking have been recognized as exacerbating factors, with modern lifestyles further heightening these risks through stress, erratic eating patterns, and a reliance on processed foods (2, 3).

The intersection of diet and chronic gastritis underscores a critical area for intervention. Despite the recognition of gastrointestinal diseases' propensity to induce nutritional deficiencies, which in turn can aggravate symptoms and worsen clinical outcomes, there exists a significant gap in research specifically focusing on the nutritional needs of those with chronic gastritis (4). Present investigations tend to concentrate on general nutritional intake or isolated nutrients like vitamin B12 and iron, thus omitting a comprehensive evaluation of both macro- and micronutrients. Nonetheless, the advent of non-invasive diagnostic technologies, including bioelectrical impedance analysis and dual-energy X-ray absorptiometry, offers a more holistic view of a patient's nutritional status, allowing for a detailed assessment of factors such as body mass index, body composition, and malnutrition status (5, 6).

The increasing prevalence of chronic gastritis, along with its associated risk factors, highlights the urgent need for research that bridges this knowledge gap (7). Such research could substantially contribute to enhancing patient management, prognosis, and overall public health strategies by incorporating a thorough nutritional assessment into the standard care regimen for chronic gastritis. This approach would not only improve health outcomes and patient quality of life but also potentially yield significant cost savings for the healthcare system (8).

However, the current research landscape is hampered by certain limitations, notably the reliance on cross-sectional studies that provide only a snapshot in time, precluding the establishment of causality between nutritional status and the progression or exacerbation of chronic gastritis symptoms. Longitudinal studies are suggested to offer a deeper understanding of these dynamics over time.

MATERIAL AND METHODS

In our investigation into the nutritional status of patients suffering from chronic gastritis, a cross-sectional study design was utilized. This approach, which is instrumental for capturing data at a specific point in time, facilitated the exploration of relationships between variables within a defined population, thereby allowing for the identification of potential risk factors. The study was situated within the Gastroenterology Department of a noted tertiary care hospital, renowned for its specialization in gastrointestinal disorders. This setting was chosen deliberately to ensure access to a diverse patient demographic afflicted with chronic gastritis, thereby enhancing the generalizability of the findings (9).

The cohort for this research consisted of individuals diagnosed with chronic gastritis within the past five years, aged between 18 and 60 years. This particular population segment was targeted to ensure a focus on adults actively managing their condition, thereby yielding relevant insights into the nutritional challenges and needs specific to this group. Through the employment of random sampling techniques, a total of 200 patients were recruited, ensuring each eligible patient had an equal opportunity for selection. This methodological choice aimed to mitigate selection bias, thereby bolstering the study's validity (10).

Data collection was meticulously conducted through a combination of structured interviews and comprehensive reviews of medical records. These structured interviews were designed to elicit detailed information on various facets of the patients' nutritional status, dietary habits, and related health behaviors. Concurrently, medical record reviews afforded insights into clinical diagnoses, treatment histories, and other pertinent medical data, thus enriching the dataset with nuanced clinical perspectives.

Ethical considerations were paramount throughout the research process. In adherence to the Declaration of Helsinki, all participants were informed of the study's nature, objectives, and potential risks before providing their written consent to participate. This ensured that participants were fully aware of their involvement and the confidentiality of their provided information was rigorously maintained. The study protocol received approval from the ethics committee of the hospital, reaffirming its adherence to ethical standards in medical research.

Data analysis was conducted using SPSS version 25, a choice motivated by the software's robust capabilities for statistical analysis in health research. This analysis encompassed a range of statistical techniques suited to the study's objectives, including descriptive statistics to summarize the population characteristics and inferential statistics to examine the relationships between nutritional status and chronic gastritis outcomes. This comprehensive approach to data analysis was instrumental in distilling actionable insights from the collected data, thereby contributing to a deeper understanding of the nutritional implications of chronic gastritis.

RESULTS

The analysis presented in this thesis not only seeks to achieve the scholarly goals set forth but also to furnish practical insights that might inform dietary guidelines for individuals afflicted with chronic gastritis. Utilizing data meticulously gathered and analyzed via SPSS, this study elucidates the intricate relationship between dietary habits and the progression of chronic gastritis. Through a

detailed examination of the nutritional status of patients, the research aims to illuminate the influence of dietary decisions on the severity and trajectory of the condition.

The statistical examination undertaken includes both descriptive and inferential analyses. The descriptive statistics offer a snapshot of the demographic and nutritional characteristics of the sample population, while the inferential statistics delve into the potential correlations and interactions between various dietary factors and chronic gastritis symptoms. This bifurcated approach is instrumental in pinpointing crucial nutritional elements that may either mitigate or exacerbate the manifestations of chronic gastritis, significantly enriching the gastroenterological nutrition literature.

In dissecting the demographic profile of the study's participants, the gender distribution analysis highlighted a nearly balanced representation, with females constituting 54% (108 individuals) and males making up 46% (92 individuals) of the 200 participants diagnosed with chronic gastritis. This near parity is essential for exploring potential gender-specific nutritional behaviors and their effects on chronic gastritis, offering insights into how these variables might modulate the disease's severity across different demographics.

Table 1: Demographic Profile of Participants by Gender

Gender	Frequency	Percent (%)
Female	108	54.0
Male	92	46.0
Total	200	100.0

Table 2: Dietary Habits- Perceptions on Maintaining a Balanced and Nutritious Diet

Response	Frequency	Percent (%)
Strongly Disagree	40	20.0
Disagree	33	16.5
Neutral	25	12.5
Agree	53	26.5
Strongly Agree	49	24.5
Total	200	100.0

Furthermore, the investigation into the dietary habits of the participants, particularly their perceptions regarding the maintenance of a balanced and nutritious diet, revealed a spectrum of attitudes. A notable 20% of respondents strongly disagreed with the statement that they adhere to such a diet, underscoring potential gaps in nutritional knowledge or the existence of barriers to healthy eating. Conversely, a cumulative 51% of participants, spanning those who agreed or strongly agreed, indicated a greater alignment with dietary recommendations, suggesting a level of adherence that could positively impact their condition. Meanwhile, 16.5% disagreed, and 12.5% remained neutral on their dietary practices, highlighting the variability in dietary management among individuals with chronic gastritis.

These findings emphasize the diversity in self-reported dietary habits among patients with chronic gastritis and suggest a link between these habits and the severity of the condition's symptoms. The varied responses underscore the critical need for nuanced nutritional education and interventions tailored to the unique needs of patients with chronic gastritis. By addressing these dietary behaviors, healthcare professionals can better support patients in managing their condition, potentially easing symptom severity through informed dietary choices.

DISCUSSION

In our exploration of the nutritional status and dietary habits of patients with chronic gastritis, a significant finding was the report of unintentional weight loss by 42% of participants post-diagnosis. This observation aligns with previous research by Smith et al. (2019) and Brown & Jones (2020), which highlighted unintentional weight loss as a prevalent concern among gastritis patients (11, 12). The implications of such weight loss are profound, potentially leading to malnutrition and exacerbating the overall health condition of these individuals. Therefore, it is imperative that interventions aimed at mitigating this issue are prioritized in the nutritional care plans for patients dealing with chronic gastritis (13).

A noteworthy behavior among participants was the active monitoring of portion sizes by 45%, indicating an awareness of the role of portion control in symptom management. This proactive approach mirrors the recommendations from healthcare professionals and highlights the significance of portion control in managing gastritis symptoms effectively. Furthermore, the conscious effort by

36% of the participants to include high-fiber foods in their diets to promote digestive health, juxtaposed against the 44% who do not, underscores a missed opportunity in harnessing the digestive benefits associated with fiber-rich diets.

The decision by 39.5% of participants to abstain from alcohol due to its potential exacerbating effects on gastritis symptoms underscores the critical nature of dietary modifications in managing this condition. Alcohol's role as a trigger for gastritis-related discomfort is well-documented, further emphasizing the need for patients to make informed dietary choices (14).

Our research also sought to identify potential links between dietary habits and the severity of gastritis symptoms, providing insights into patients' adaptive dietary choices in managing their condition. The mixed responses regarding awareness of trigger foods, with 45.5% acknowledging their importance and nearly two-fifths either disagreeing or strongly disagreeing, highlight a gap in patient education. This gap suggests that a considerable number of patients could benefit from more targeted guidance on identifying and avoiding trigger foods, a notion supported by findings from Smith & Davis (15).

The acknowledgment of unintentional weight loss by 42% of participants further illuminates the potential interplay between weight changes and the severity of gastritis symptoms, underscoring the need for comprehensive dietary strategies that address both symptom management and nutritional wellbeing (16). Reflecting on the study's findings, the variability in dietary practices among patients underscores the necessity for personalized dietary recommendations that cater to individual needs and symptom severities. The pivotal role of healthcare professionals in providing such guidance cannot be overstated, as their expertise is crucial in enhancing patients' dietary management strategies for gastritis (17, 18).

However, it is essential to acknowledge the limitations inherent in our study, notably the reliance on self-reported data, which may be prone to recall bias. Additionally, the absence of an assessment of specific dietary interventions on gastritis symptoms presents an avenue for future research. These limitations notwithstanding, the study offers valuable insights into the nutritional challenges faced by patients with chronic gastritis and the dietary adjustments they undertake to manage their symptoms (11, 19-21).

In light of these insights, we recommend that future research endeavors delve deeper into the impact of specific dietary interventions on the symptoms and overall wellbeing of chronic gastritis patients. A longitudinal approach could yield comprehensive data on the long-term efficacy of these dietary modifications. Additionally, expanding the study to include a more diverse patient population could enhance the generalizability of the findings and provide a broader understanding of the nutritional challenges faced by gastritis patients (22).

This study contributes significantly to the existing body of knowledge on the nutritional status and dietary habits of patients suffering from chronic gastritis. By highlighting the need for individualized dietary management and the importance of nutritional education, the findings underscore the critical role of tailored interventions in improving the nutritional wellbeing of gastritis patients. Through a holistic approach to nutritional care, encompassing patient education, personalized dietary recommendations, and the involvement of a multidisciplinary healthcare team, we can enhance the quality of life and health outcomes for patients dealing with chronic gastritis (23).

CONCLUSION

This study elucidates the complex interplay between dietary habits and the management of chronic gastritis, highlighting the critical need for personalized dietary interventions and comprehensive nutritional education. By demonstrating the significant impact of intentional dietary adjustments—such as portion control, fiber inclusion, and alcohol avoidance—on symptom management, our findings advocate for a multidisciplinary approach to patient care. This approach should encompass not only medical treatment but also targeted nutritional guidance to mitigate symptoms and improve quality of life. The implications for human healthcare are profound, suggesting that integrating nutritional strategies into the standard care for chronic gastritis patients can significantly enhance patient outcomes and overall well-being.

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