

EFFORTS TO PREVENT GASTRITIS THROUGH HEALTH PROMOTION: HEALTHY EATING PATTERNS AMONG COASTAL COMMUNITIES ALONG RIVERSIDE IN BANJARMASIN

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Abstract

Background: Gastritis is one of the most common digestive disorders, often caused by irregular eating patterns, consumption of irritating foods, and unhealthy lifestyles. Globally, it is estimated that more than 1.8 billion people suffer from gastritis, making it one of the most prevalent non-communicable digestive diseases. In Indonesia, the prevalence reaches 40.8% of the population, with 274,396 cases recorded nationally in health service systems. In the coastal areas along the riverside in Banjarmasin, the incidence of gastritis is also relatively high, influenced by socio-economic conditions and poor nutritional awareness. **Purpose:** This community service activity aimed to increase residents' knowledge of gastritis prevention through education on healthy eating habits. **Method:** The education was delivered using a participatory approach through interactive lectures, group discussions, and leaflet distribution to 50 participants. **Results:** Evaluation results showed a significant increase in participants' knowledge scores, from an average pre-test score of 52.4 to a post-test score of 78.2 ($p < 0.05$). This health education proved effective due to its locally contextual approach, the support of community leaders, and the use of easily understood educational media. **Discussion:** These findings suggest that community-based health promotion strategies can serve as a sustainable preventive solution to reduce the incidence of gastritis. This activity also serves as a replicable model for other regions with similar characteristics to enhance community awareness of the importance of healthy eating and better lifestyle choices.

Keywords: Coastal Communities, Gastritis, Health Promotion

Background

Gastritis is one of the digestive system disorders characterized by inflammation of the gastric mucosa. This condition can be either acute or chronic and is often triggered by various factors such as irregular eating patterns, consumption of irritating foods (spicy, acidic, and fatty), stress, smoking, and unhealthy lifestyle habits (Arianto, R. & Aminah, S., 2024). Gastritis not only affects physical health but also decreases quality of life, productivity, and individual well-being, especially when it occurs repeatedly or becomes chronic. Common symptoms of gastritis include epigastric pain, nausea, vomiting, loss of appetite, and bloating (Mukhaira I et al, 2024). If left untreated, gastritis may progress to peptic ulcers or other more serious complications.

According to data from the World Health Organization (WHO), gastritis is one of the non-communicable diseases with a high number of

sufferers worldwide. In 2020, it was estimated that more than 1.8 billion people globally suffered from gastritis, making it one of the most prevalent digestive disorders (Rugge M et al, 2024). In Indonesia, the reported prevalence of gastritis reached 40.8% of the total population. Data from the Ministry of Health shows that approximately 274,396 cases of gastritis were recorded in the national health service system, making it one of the ten most commonly treated diseases in hospitals and community health centers (puskesmas) (Waworuntu Et et al, 2024).

At the local level, the increasing trend of gastritis cases is also evident in South Kalimantan Province. The Health Department noted that gastritis is one of the most frequently encountered diseases in primary health care facilities, especially in urban areas where modern lifestyles often neglect health considerations. In Banjarmasin City, particularly among

communities living along the riverside in Banjarmasin, gastritis is a prominent issue. The busy lifestyle, irregular eating habits, and limited access to health information among coastal residents exacerbate this condition.

The riverbank coastal environment in Banjarmasin has distinctive social and economic characteristics. Most residents work as fishermen, daily laborers, or small traders who have high mobility and irregular meal times. In addition, their daily diet tends to be low in fiber, high in salt, and prepared in unhealthy ways. Many rely on fast food or instant meals due to limited time and financial resources. These conditions significantly increase the risk of gastric disorders, including gastritis.

Various efforts have been made by the government and local health workers to address the problem of gastritis, such as providing treatment services at community health centers and conducting healthy lifestyle campaigns through the media. However, these approaches are still general and have not specifically addressed in-depth education on healthy eating patterns as a preventive measure for gastritis. Direct education to the community about the importance of maintaining good eating habits, introducing healthy foods, and having regular mealtimes is still minimal, especially among coastal communities.

Health education, as part of health promotion (Promkes), is one of the most effective preventive strategies for increasing knowledge and changing public attitudes toward the importance of healthy living (Jamko MN et al, 2024). Education provides the community with the opportunity to directly understand the risk factors of gastritis and how to avoid them through dietary and lifestyle improvements. Educational activities conducted in a participatory manner also have the potential to encourage more permanent and sustainable behavior change.

Based on this background, this community service activity aims to provide health education to the coastal communities along the riverbanks of Banjarmasin City regarding the importance of healthy eating in preventing gastritis. The health education was conducted interactively using visual media and leaflets that were easy for the public to understand. It is expected that through this activity, the community will gain better understanding of gastritis and be able to apply healthy lifestyles in their daily lives as a

preventive step.

Method

This community service activity was conducted in the coastal area along riverside in Banjarmasin, specifically in Mantuil Sub-district, South Banjarmasin District, Banjarmasin City. This location was chosen due to the high number of reported digestive disorders, particularly gastritis, and the low level of public awareness regarding the importance of healthy eating as a preventive measure. The activity was carried out in March 2025 and involved 50 adult residents from several neighborhood units (RT) in the area as participants.

The implementation method used a participatory educational approach that actively involved the community in the learning process. The activity stages began with the preparation phase, which included coordination with local government officials and neighborhood leaders to obtain permission and support, the development of health education materials tailored to the local context, and the design and printing of educational leaflets. Additionally, supporting equipment such as laptops, LCD projectors, and sound systems was prepared to enhance the effectiveness of the material delivery.

During the implementation phase, the activity began with an opening by the organizing team, followed by the delivery of material on gastritis, its causes and symptoms, and the importance of prevention through healthy eating. The education was presented through interactive lectures and small group discussions, allowing participants to ask questions and engage actively. Each participant was also provided with a leaflet containing concise but comprehensive information as a self-learning resource.

Evaluation was conducted using pre-test and post-test questionnaires to measure changes in participants' knowledge. The responses were analyzed descriptively to assess the effectiveness of the activity. Success criteria were based on increased post-test scores and active participation in discussions. Support from local officials and community leaders played a crucial role in the smooth implementation of this activity, particularly in encouraging resident attendance and creating a conducive environment.

Results and Discussion

This community service activity was attended by 50 participants from the coastal area along riverside in Banjarmasin. The characteristics of the participants, including gender, age, and educational level, are presented in Table 1.

No	Characteristic	Frequency	Percentage
1	Gender		
	Male	18	36%
	Female	32	64%
2	Age (years)		
	25-30	10	20%
	31-45	28	56%
	>45	12	24%
3	Educational Level		
	Elementary School	14	28%
	Junior High School	20	40%
	Senior High School	16	32%
	Total	50	100%

As shown in the table, the majority of participants were female, totaling 32 individuals (64%), while male participants numbered 18 (36%). The age range of the participants varied from 25 to 60 years, with most falling within the 31–45 year age group. In general, the educational level of the participants ranged from elementary to secondary education, indicating the need for an educational approach using easily understandable media.

To measure the effectiveness of the health education session, a pre-test and post-test were conducted using a questionnaire with a maximum knowledge score of 100, as presented in Table 2.

Table 2. Distribution of Knowledge Scores Before and After the Health Education Session (n = 50)

No	Score Category	Pre-test (n/%)	Post-test (n/%)
1	High (≥ 76)	6 (12%)	30 (60%)
2	Moderate (51-75)	18 (36%)	17 (34%)
3	Low (≤ 50)	26 (52%)	3 (6%)
	Total	50	100%

Based on Table 2, the analysis results showed a significant increase in knowledge scores after the intervention. The average pre-test score was 52.4 (categorized as low), while the average post-test score increased to 78.2 (categorized as high).

To determine the significance of the changes in scores before and after the health education session, the Wilcoxon Signed Rank Test was conducted. The test result showed a p-value of 0.000 ($p < 0.05$), indicating a significant difference between

participants' pre-test and post-test scores. This demonstrates that the provided health education was effective in increasing participants' knowledge regarding gastritis prevention through healthy eating habits.

Discussion

The results of this community service activity indicate that health education on healthy eating as a preventive measure for gastritis was effective in increasing the knowledge of the coastal communities riverside in Banjarmasin. This is evidenced by the notable increase in participants' knowledge scores, shifting significantly from low to moderate and high categories. These findings suggest that community-based health promotion approaches have strong potential for implementation in populations with limited educational backgrounds and access to health information.



Figure 1. Health Education Session

One of the contributing factors to the success of this activity was the interactive and participatory method of material delivery. The health education was not only conducted in a one-way lecture format but also included group discussions and question-and-answer sessions. This approach allowed participants to understand the material more deeply and relate the information to their everyday personal experiences (Hartanti YKK et al, 2025). Some participants even shared their irregular eating habits and admitted to frequently skipping breakfast or consuming spicy and instant foods in excessive amounts.

These conditions indicate that the coastal community tends to have dietary patterns that increase the risk of gastric disorders. This is supported by findings from Waruwu & Siregar (2023), who stated that gastritis is closely linked to poor eating habits, such as high-fat food consumption, irregular mealtimes, and stress.

Therefore, health promotion activities that directly target behavior change are especially crucial.

The leaflets provided during the activity also had a positive impact. These printed materials contained concise yet comprehensive information, complete with illustrations that aided participant understanding. The use of simple language and visually appealing design made the leaflets accessible to all groups, including those with only basic education. The leaflets also served as learning reminders that could be reread at home or shared with other family members (Maharani TA et al, 2024). This aligns with findings by Borude et al. (2022), who found that visual media can enhance information retention and support the sustainability of health education impacts.

In terms of participation, the activity also showed high levels of enthusiasm. Attendance exceeded expectations, and during the discussion sessions, participants were actively engaged in asking questions and sharing their digestive health experiences. Such active involvement is an indicator that the community was not only physically present but also emotionally and cognitively engaged. This is an important first step in fostering the long-term behavioral changes needed to prevent gastritis and other non-communicable diseases.



Figure 2. Discussion Session

This discussion also highlights the importance of cross-sectoral support, particularly from local authorities and community leaders. The involvement of local figures helped build trust and encouraged community participation, facilitating smoother participant mobilization (Ramadini I & Nidia WH, 2024). This activity also serves as an example of a collaborative community empowerment model in the health sector, where success depends not only on the organizers but also on the support of various local stakeholders.

Moreover, the use of pre-test and post-test evaluations proved valuable in objectively measuring the effectiveness of the education session. This quantitative data revealed a significant increase in participants' understanding, supporting the findings of Listiansyah et al. (2023), who stated that quantitative evaluation in health education can empirically demonstrate improvements in attitudes and knowledge about gastritis prevention.

However, this activity also had limitations. One such limitation was the short duration of the education session, which was conducted over a single day, limiting the depth in which material could be explored. Additionally, not all participants had sufficient educational backgrounds to immediately grasp medical terms, even though they had been simplified. Therefore, the continuity of health education programs and long-term mentoring is important to enhance the lasting impact of the intervention.

Overall, this health education activity successfully achieved its objectives by increasing public knowledge and awareness of the importance of healthy eating in preventing gastritis. The direct community-based approach proved effective and could be replicated in other areas facing similar issues.

Conclusion

The community service activity in the form of health education on the importance of healthy eating in preventing gastritis, conducted in the coastal area along riverside in Banjarmasin, proved effective in increasing public knowledge. This was evidenced by a significant improvement in participants' knowledge scores from pre-test to post-test, along with a high level of active participation in discussions. The interactive education method, the use of easily understood leaflet media, and support from community leaders were key factors contributing to the success of this activity. Although there were limitations in terms of duration and depth of the material, the health education successfully achieved its objectives and can serve as a model for similar health education initiatives in other communities with comparable characteristics.

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