

Case Report

Holistic and Comprehensive Management of Dyspepsia through a Family Medicine Approach: A Case Report from Minasa Upa Primary Health Center, Makassar

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Abstract:

A 68-year-old woman presented with two weeks of burning epigastric pain radiating to the back, worsened after meals, accompanied by bloating and nausea. She habitually consumed spicy and acidic foods and rarely ate fruit. Physical examination revealed mild epigastric tenderness with stable vital signs and no alarm features. She lived with her son, daughter-in-law, and granddaughter in an extended family setting. The patient was treated with omeprazole, hyoscine butylbromide, antacids, and vitamin B complex. Non-pharmacological interventions included dietary modification, stress management, and family involvement. Family assessment showed APGAR score = 7 (no dysfunction), while SCREEM analysis revealed strong social, economic, and medical resources, but cultural eating habits and limited health literacy remained barriers. After two weeks, the patient reported reduced symptoms, improved dietary compliance, increased fruit intake, and more consistent family support. Prognosis was favorable (bonam). This case illustrates the importance of holistic dyspepsia management. Integrating biomedical treatment with lifestyle modification, psychosocial support, and family participation improves adherence, prevents recurrence, and enhances quality of life in primary care.

Keywords: Dyspepsia; Family Medicine; Holistic Care; Primary Care.

1. Introduction

Dyspepsia is a common functional gastrointestinal disorder that significantly impacts quality of life and healthcare costs. The global prevalence of dyspepsia is estimated between 20–40%, with higher rates in Asia compared to Western populations (1). In Indonesia, the prevalence is reported at around 11–15% of the population, with regional data showing more than 280,000 cases in South Sulawesi alone in 2019. In Makassar, dyspepsia ranks among the top ten causes of morbidity, reflecting its dual burden as both a clinical and public health issue.

Functional dyspepsia is diagnosed based on the Rome IV criteria, which require the persistence of symptoms such as postprandial fullness, early satiety, epigastric pain, or burning for at least three months, with onset at least six months before diagnosis, and without structural abnormalities on endoscopy (2). Pharmacological therapies, especially proton pump inhibitors, are considered first-line management (3). However, studies have shown that lifestyle modification, dietary counseling, and psychosocial support are equally important in reducing recurrence and improving adherence (4).

Holistic approaches are particularly relevant in primary care, where family dynamics, cultural eating habits, and health literacy play important roles in shaping outcomes (5). This case highlights how family medicine principles can guide comprehensive dyspepsia management that integrates biomedical, psychosocial, and cultural dimensions.

2. Case Presentation

A 68-year-old woman, a housewife, presented to Minasa Upa Primary Health Center in Makassar with a two-week history of burning epigastric pain radiating to the back, worse after meals, and associated with nausea and bloating. She denied hematemesis, melena, weight loss, or fever. Past medical history included hemorrhoids. She had no history of hypertension, diabetes, or allergies.

The patient reported long-standing dietary habits, including frequent consumption of mango chili sauce and fried foods, but rarely fruit. She drank tea daily but no coffee or alcohol. She lived with her son, daughter-in-law, and granddaughter in an extended family with moderate socioeconomic status.

On examination, her general condition was good. Vital signs were stable: blood pressure 104/60 mmHg, heart rate 70 bpm, respiratory rate 20/min, temperature 36.5 °C, oxygen saturation 99%, and BMI 21.2. Abdominal examination revealed mild epigastric tenderness with no organomegaly. Other systems were normal.

No laboratory or imaging tests were performed due to the absence of alarm symptoms. Based on clinical findings, she was diagnosed with functional dyspepsia. Psychosocial evaluation revealed anxiety related to illness progression and difficulty changing her dietary habits. Family involvement was inconsistent, with relatives continuing to provide food triggers.

Family assessment revealed an APGAR score of 7 (indicating no dysfunction). SCREEM analysis showed good social, economic, religious, and medical support, but highlighted cultural dietary practices and low health literacy as barriers to recovery.

The management plan included pharmacological therapy (omeprazole 20 mg once daily, hyoscine butylbromide 10 mg three times daily, antacid suspension three times daily, and vitamin B complex once daily) and non-pharmacological strategies such as dietary counseling, small frequent meals, avoidance of recumbency after meals, increased fruit intake, and stress management. Family members were engaged in monitoring food preparation and treatment adherence.

After two weeks, the patient reported reduced epigastric pain, improved dietary compliance, and greater family support. Prognosis was favorable (bonam).

Table 1. Summary of Patient's Clinical Profile and Management

Parameter	Findings / Interventions
Age/Sex	68 years / Female
Chief Complaint	Epigastric pain radiating to the back, burning sensation after meals, bloating, nausea
Past Medical History	Hemorrhoids; no hypertension, diabetes, or allergies
Social History	Non-smoker, no alcohol; lives with extended family; sufficient socioeconomic status
Vital Signs	BP: 104/60 mmHg, HR: 70 bpm, RR: 20 breaths/min, Temp: 36.5 °C, SpO ₂ : 99%, BMI: 21.2 kg/m ²
Physical Examination	Mild epigastric tenderness, normal bowel sounds, no organomegaly
Investigations	Not performed (no alarm symptoms, limited resources)
Pharmacological Treatment	Omeprazole 20 mg once daily before meals; Hyoscine butylbromide 10 mg three times daily; Antacid suspension three times daily; Vitamin B complex once daily
Non-Pharmacological Treatment	Dietary modification (avoid spicy, acidic, fatty foods; small frequent meals); avoid lying down after meals; increase fruit/vegetable intake; stress management; family involvement in care
Expected Outcomes	Symptom relief, improved digestion, prevention of recurrence, better quality of life
Actual Outcomes	Decreased epigastric pain, improved dietary compliance, increased fruit intake, family support enhanced, reduced anxiety
Prognosis	Favorable (bonam)

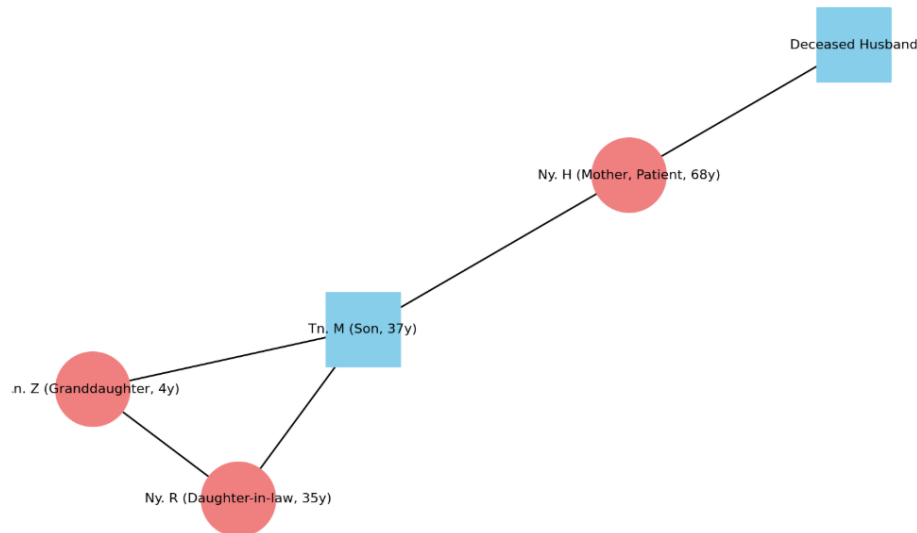


Figure 1. Family Genogram of the Patient

● = Female, ■ = Male. The patient (Ny. H, 68 years old) lives with her son (Tn. M), daughter-in-law (Ny. R), and granddaughter (An. Z). Her husband is deceased.

The genogram illustrates the patient's extended family structure. The patient (Ny. H, 68 years old, female) lives with her son (Tn. M, 37 years old), daughter-in-law (Ny. R, 35 years old), and granddaughter (An. Z, 4 years old). The patient's husband is deceased. The extended family system plays an important role in supporting the patient's treatment adherence, particularly in dietary modifications and emotional support, although cultural eating habits remain a barrier to optimal dyspepsia management.

3. Discussion

Functional dyspepsia represents a major clinical challenge due to its multifactorial etiology and chronic relapsing nature. While PPIs remain the first-line pharmacological therapy, up to 40% of patients continue to experience symptoms despite adequate treatment (6). Lifestyle modification and dietary management are therefore central to long-term outcomes.

In this case, the patient's habitual consumption of spicy and acidic foods acted as a significant trigger, consistent with findings by Black et al. (7) and Mahadeva & Goh (8). Limited health literacy further compounded the challenge, as highlighted in recent Indonesian studies linking poor knowledge and irregular eating patterns with higher rates of dyspepsia (9,10).

Family medicine provides a valuable framework for managing such complex cases. The APGAR tool helps identify family functionality, while SCREEM analysis evaluates social, cultural, religious, educational, economic, and medical dimensions (11). In this case, although social and economic resources were adequate, cultural dietary practices and low educational levels remained major barriers. Addressing these factors through counseling, continuous follow-up, and family participation was crucial to improving adherence and outcomes.

Holistic care also includes preventive strategies: primary prevention through diet and lifestyle, secondary prevention with timely treatment and adherence, and tertiary prevention focusing on complication avoidance and alarm symptom recognition (12,13). Such layered interventions are consistent with current international guidelines that advocate patient-centered and family-oriented care (14,15).

4. Conclusion

This case demonstrates that dyspepsia management in primary care requires integration of pharmacological therapy with lifestyle modification, psychosocial support, and family engagement. Family-based assessment using APGAR and SCREEM provided insights into barriers and resources within the household. By addressing cultural

eating habits, enhancing health literacy, and involving family members in care, outcomes were significantly improved. Holistic family medicine approaches ensure not only symptom relief but also prevention of recurrence and improved quality of life.

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