

THESIS

**ANALYSIS OF RISK FACTORS FOR DYSPEPSIA SYNDROME AMONG
NURSING STUDENTS OF THE MINISTRY OF HEALTH'S
POLTEKKES BENGKULU CITY IN 2026**



Written by

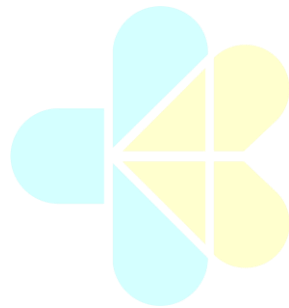
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HEALTH POLYTECHNIC MINISTRY OF HEALTH DEPARTEMENT OF
NURSING BACHELOROF APPLIED NURSING STUDY PROGRAM
ACADEMIC YEAR 2025/2026**

THESIS TITLE PAGE

**ANALYSIS OF RISK FACTORS FOR DYSPEPSIA SYNDROME AMONG
NURSING STUDENTS OF THE MINISTRY OF HEALTH'S
POLTEKKES BENGKULU CITY IN 2026**

Submitted as one of the requirements for obtaining a Bachelor of Applied Nursing
(S.Tr) degree in the Bachelor of Applied Nursing programme, Department of Nursing,
Bengkulu Ministry of Health Polytechnic of Health Sciences



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ANALYSIS OF RISK FACTORS FOR DYSPEPSIA SYNDROME IN NURSING STUDENTS OF THE MINISTRY OF HEALTH POLYTECHNIC BENGKULU CITY BENGKULU YEAR 2026

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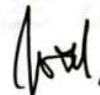
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I hereby declare that this thesis is my own original work. The content of this thesis has not been submitted, either in whole or in part, by any other person for the purpose of obtaining an academic degree or qualification at any higher education institution. To the best of my knowledge and belief, this thesis contains no material previously written or published by another person without proper acknowledgment. Where the ideas, findings, or words of others have been used, they have been appropriately cited and referenced in accordance with accepted academic standards.

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Bengkulu, July 01, 2026

Yang menyatakan,



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MOTTO AND DEDICATION

MOTTO

"It may be that you hate something, yet it is very good for you..." View the success of others not as a reason to feel small, but as proof that the path exists. If they could do it, I, too, can certainly break through my own limitations. "Man jadda wajada." Barangsiapa yang bersungguh-sungguh, maka ia akan berhasil.

Jangan pernah berkata 'aku tidak bisa' sebelum mencoba. Jika orang lain bisa berdiri di titik itu karena kerja keras mereka, maka tidak ada alasan bagiku untuk tidak mencoba meraih hal yang sama.

"Allah does not burden a soul beyond its capacity." If others are able to get through it, then I certainly can too. Limitations exist only in the mind, whereas Allah's help is real for those willing to try and persevere.

DEDICATION

Praise be to Allah SWT for all His blessings and the ease He granted, enabling the completion of this thesis. I dedicate this humble work to:

- ❖ Allah SWT, for all the grace, compassion, strength, and assistance that have constantly accompanied my every step. Thank You for always providing a way through every difficulty and for strengthening me to complete this thesis.
- ❖ To my beloved parents, thank you for all the love, prayers, and ceaseless sacrifices. Thank you for the prayers offered unfailingly in the quiet hours of the night, the boundless affection, the extraordinary sacrifices, and the blessings that have accompanied every step of my journey, enabling me to complete this thesis.
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Thank you for being the place where I learn, grow, fall, rise, and find many valuable lessons about life

FOREWORD

The author offers praise and gratitude to God Almighty for His grace and guidance, enabling the completion of this thesis titled "Analysis of Risk Factors for Dyspepsia Syndrome among Nursing Students at Poltekkes Kemenkes Bengkulu in 2026." This thesis serves as a guide for conducting the research and compiling the final document. In completing this thesis, the author received significant material and moral support from various parties; therefore, the author extends sincere thanks to:

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The researcher acknowledges the imperfections in this thesis; therefore, the researcher welcomes criticism and suggestions from all parties to enable better and more optimal work in the future. The researcher hopes that this thesis will prove beneficial to everyone, particularly the researcher, nursing students, and other interested parties.

Bengkulu, July 01, 2026

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ABSTRACT

Dyspepsia syndrome is a gastrointestinal disorder frequently experienced by nursing students due to high academic and practicum workloads. This condition not only causes physical discomfort but also has the potential to reduce learning concentration, increase absenteeism, and even disrupt performance during clinical practice in hospitals. Various risk factors such as stress levels, poor diet, consumption of irritating foods, NSAID use, and poor sleep quality are strongly suspected to trigger this condition. This study aims to analyze the relationship between these five risk factors and the incidence of dyspepsia syndrome in nursing students at the Bengkulu Ministry of Health Polytechnic. An observational analytical study with a case-control design was conducted in June 2026. A total of 196 nursing students (98 cases, 98 controls) were recruited using a quota sampling technique. Data were collected through the Rome IV questionnaire (dyspepsia screening), DASS-42 (stress), Dietary Habits (dietary patterns), PSQI (sleep quality), and an NSAID history questionnaire. Data analysis was performed using the Chi-Square test ($\alpha=0.05$). The five independent variables were significantly associated with dyspepsia syndrome ($p<0.05$). Consumption of irritating foods/drinks showed the strongest association (OR=15.778; 95% CI:7.690-32.372), followed by poor sleep quality (OR=12.879; 95% CI:6.278-26.418), stress level (OR=4.769; 95% CI:2.596-8.761), NSAID use (OR=4.665; 95% CI:2.527-8.609), and poor diet (OR=2.077; 95% CI:1.139-3.788). There was a significant association between stress level, diet, consumption of irritating foods/drinks, history of NSAID use, and sleep quality with the incidence of dyspepsia syndrome in nursing students of Poltekkes Kemenkes Bengkulu.

Keywords: Dyspepsia syndrome, Nursing students, Risk factors, Sleep quality, Stress

ANALISIS FAKTOR RISIKO TERHADAP SINDROM DISPEPSIA PADA MAHASISWA KEPERAWATAN POLTEKKES KEMENKES BENGKULU TAHUN 2026

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ABSTRAK

Sindrom dispepsia merupakan gangguan gastrointestinal yang kerap dialami mahasiswa keperawatan akibat tingginya beban akademik dan praktikum. Kondisi ini tidak hanya menimbulkan ketidaknyamanan fisik, tetapi juga berpotensi menurunkan konsentrasi belajar, meningkatkan angka ketidakhadiran, hingga mengganggu performa saat praktik klinik di rumah sakit. Berbagai faktor risiko seperti tingkat stres, pola makan buruk, konsumsi makanan iritatif, penggunaan NSAID, dan kualitas tidur rendah diduga kuat memicu kondisi ini. Penelitian ini bertujuan untuk menganalisis hubungan antara kelima faktor risiko tersebut dengan kejadian sindrom dispepsia pada mahasiswa keperawatan Poltekkes Kemenkes Bengkulu. Studi analitik observasional dengan desain *case-control* dilakukan pada Juni 2026. Sebanyak 196 mahasiswa keperawatan (98 kasus, 98 kontrol) direkrut menggunakan teknik *quota sampling*. Data dikumpulkan melalui kuesioner Rome IV (skrining dyspepsia), DASS-42 (stres), Dietary Habits (pola makan), PSQI (kualitas tidur), dan kuesioner riwayat NSAID. Analisis data dilakukan menggunakan uji *Chi-Square* ($\alpha = 0,05$). Kelima variabel independen secara signifikan berhubungan dengan sindrom dispepsia ($p < 0,05$). Konsumsi makanan/minuman iritatif menunjukkan hubungan terkuat ($OR = 15,778$; 95% CI : 7,690 – 32,372), diikuti kualitas tidur buruk ($OR = 12,879$; 95% CI : 6,278 – 26,418), tingkat stres ($OR = 4,769$; 95% CI : 2,596 – 8,761), penggunaan NSAID ($OR = 4,665$; 95% CI : 2,527 – 8,609), dan pola makan buruk ($OR = 2,077$; 95% CI : 1,139 – 3,788). Terdapat hubungan yang signifikan antara tingkat stres, pola makan, konsumsi makanan/minuman iritatif, riwayat penggunaan NSAID, dan kualitas tidur dengan kejadian sindrom dispepsia pada mahasiswa keperawatan Poltekkes Kemenkes Bengkulu.

Kata Kunci: Kualitas tidur, Mahasiswa keperawatan, Pola makan, Sindrom dyspepsia, Stres.

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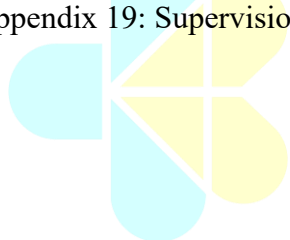
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Kemenkes
Poltekkes Bengkulu

LIST OF ABBREVIATIONS

BAA	: Bagian Administrasi Akademik
BSG	: British Society of Gastroenterology
CI	: Confidence Interval
COX	: Cyclooxygenase
DASS-42	: Depression Anxiety Stress Scales-42
DGBI	: Disorders of Gut-Brain Interaction
EPS	: Epigastric Pain Syndrome
FFQ	: Food Frequency Questionnaire
GERD	: Gastroesophageal Reflux Disease
GI	: Gastrointestinal
HCL	: Hidrogen klorida
HPA	: Hypothalamus-Pituitary-Adrenal
NICE	: National Institute for Health and Care Excellent
NSAID	: Nonsteroidal Anti-Inflammatory Drugs
OAINS	: Obat Anti-Inflamasi Non-Steroid
OR	: Odds Ratio
PDS	: Postprandial
PPI	: Proton Pump Inhibitor
PR	: Prevalence Ratio
PSQI	: Pittsburgh Sleep Quality Index
WHO	: World Health Organization