



EXCELLENT MEDICAL-SURGICAL NURSING CARE MANAGEMENT FOR MRS. H WITH PULMONARY TB IN THE PULMONARY INPATIENT WARD, H. ADAM MALIK GENERAL HOSPITAL, MEDAN CITY

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ABSTRACT

Pulmonary tuberculosis (TB) remains a major infectious disease and a serious public health problem in both Indonesia and globally. According to WHO data in 2024, Indonesia ranks second after India among countries with the highest tuberculosis burden. Globally, it is estimated that in 2023 there were 10.6 million new TB cases, with approximately 1.3 million deaths among HIV-negative individuals. Indonesia contributed around 10% of the global burden, with an estimated 1,060,000 cases and an incidence rate of 385 per 100,000 population. Pulmonary tuberculosis is an infectious disease that attacks the lungs, typically characterized by persistent cough, shortness of breath, and significant weight loss. This final report aims to describe the management of medical-surgical nursing care focused on "service excellent" principles for a patient with tuberculosis, identified as Mrs. H, who was hospitalized in the pulmonary ward of H. Adam Malik General Hospital, Medan, in 2025. The method used is a case study with a descriptive approach. Data were collected through interviews, direct observations, and review of medical records. The assessment revealed that Mrs. H complained of a persistent productive cough for two months, shortness of breath, decreased appetite, and severe weight loss from 45 kg to 33 kg. The established nursing diagnoses included ineffective airway clearance, impaired gas exchange, and nutritional deficits. Nursing interventions focused on airway management, oxygen therapy, and nutritional management. The implementation of care was carried out over three days, with ongoing evaluation using the SOAP method. The evaluations showed gradual improvements, although not yet fully resolved, thus requiring continued intervention by the ward nursing staff. The implementation of medical-surgical nursing care with a service excellent approach emphasizes patient-centered care, effective communication, comprehensive education, and multidisciplinary collaboration to achieve optimal outcomes. Nurses are expected to support patient recovery, prevent further complications, and improve quality of life through professional, empathetic, and humanistic services. This report is expected to contribute to the development of nursing science, particularly in infectious pulmonary disease management. Furthermore, it can serve as a reference for hospitals to improve the quality of nursing care according to standards and strengthen the role of nurses as the frontline in tuberculosis prevention and management.

Keywords: Pulmonary Tuberculosis, Nursing Care, Service Excellent

Introduction

According to the Decree of the Minister of National Development Planning and Head of the National Integrated Development Planning Agency Number KEP.136/M.PPN/HK/12/2021, the designation of disasters as part of the National Action Plan for Sustainable Development Goals (SDGs) has been established for 2021–2024. The fifth section of this decree serves as a guideline for ministries, local governments, and related stakeholders to implement, monitor, evaluate, and control efforts to achieve the national SDGs targets. In particular, SDG Goal 3.3 focuses on ensuring healthy lives and promoting well-being by reducing the transmission of communicable diseases, including tuberculosis (TB), which remains a significant public health challenge in Indonesia.

Pulmonary tuberculosis is an infectious disease that primarily attacks the respiratory system, especially the lungs, and presents with various clinical symptoms such as persistent cough, production of sputum, and general weakness. This disease remains a leading cause of mortality globally each year. According to (Manurung, 2016), TB is spread through droplets containing *Mycobacterium tuberculosis* bacteria expelled during coughing or sneezing, making it highly contagious within communities (Sembiring, 2025).

The tuberculosis infection prevention and control (IPC) program in Indonesia was formally integrated into healthcare services in 2012. The implementation of IPC for pulmonary TB is regulated by the Minister of Health Regulation No. 76 of 2016 concerning tuberculosis control. This program aims to reduce the risk of transmission to healthcare workers, visitors, and patients, and is based

on four pillars: managerial control, administrative control, environmental control, and the use of personal protective equipment (PPE) (Pitaloka, 2020).

Furthermore, the National Guidelines for Tuberculosis Management (PNPK Tuberculosis) provide clinical decision-making references for healthcare facilities, educational institutions, and relevant professional organizations, as stipulated in the Decree of the Minister of Health of the Republic of Indonesia No.HK.01.07/MENKES/755/2019.

Tuberculosis is a preventable and generally curable infectious disease if treated properly. Types of TB include active and latent TB, pulmonary TB, bone TB, miliary TB, hepatic TB, and gastrointestinal TB.

In 2023, tuberculosis once again became the leading cause of death from a single infectious pathogen globally, overtaking COVID-19 after three years. TB-related deaths were almost twice as high as those caused by HIV/AIDS (WHO, 2024). The global burden remains concerning; according to (3) 30 countries with a high TB burden accounted for 87% of the 10.6 million new cases worldwide in 2023. The top five contributors were India (26%), Indonesia (10%), China (6.8%), and Pakistan (6.3%).

In Indonesia, TB remains a major threat to public health. According to the Ministry of Health (2022), the estimated number of TB cases in 2022 was 1,060,000, with an incidence rate of 385 per 100,000 population. Moreover, many cases remain undiagnosed or unreported, indicating a need for strengthened detection and appropriate treatment through both active and passive approaches in the community to improve health service outcomes (Kemenkes, 2022).

North Sumatra ranks sixth among Indonesian provinces with the highest number of TB cases, following Central Java, East Java, Jakarta, and Banten. In 2020, the province reported 22,169 cases, showing a significant increase that highlights the urgency for effective prevention and control strategies. In Medan, Deli Serdang, and Simalungun, the number of positive TB cases continues to be among the highest, with Medan alone reporting about 10% of the targeted 1,000 new cases in 2021 (Hsb, 2024).

Data from H. Adam Malik General Hospital revealed 288 diagnosed TB cases in 2023, decreasing slightly to 277 in 2024. From January to February 2025, 43 inpatient cases were reported, and on May 8, 2025, there were 22 patients admitted to the pulmonary ward. This data underscores the importance of continuous monitoring to prevent future surges and ensure optimal patient care.

In Indonesia, guidelines for functional nurse positions have been developed to support career growth, enhance professionalism, ensure objectivity and transparency, and maintain administrative order. According to the Minister of Health Regulation No. 4 of 2022, nursing services are an integral part of the healthcare system, grounded in scientific knowledge and skills, and dedicated to individuals, families, and communities across health and illness spectrums (SDKI, 2017).

The vocational nursing program aligns with the vision of STIKes Mitra Husada Medan to develop excellent, innovative, and competitive health science and technology services at the national level by 2030. This program emphasizes chronic gerontological nursing through research and practical field experience. It supports SDG Goal 3.3 to reduce mortality

from communicable diseases such as TB and ensure effective intervention strategies for patient recovery and successful treatment outcomes.

Based on preliminary surveys conducted in the pulmonary inpatient ward of H. Adam Malik Hospital, several problems were identified among 22 patients diagnosed with pulmonary TB. The researcher selected Mrs. H as the case subject due to her more severe general condition compared to other patients. Consequently, the author decided to focus this final report on "Excellent Service Nursing Care Management for Mrs. H with Tuberculosis in the Pulmonary Inpatient Ward at H. Adam Malik General Hospital, Medan, in 2025."

Research Method

The main objective of this method is to provide a detailed overview of a medical-surgical nursing problem at the Haji Adam Malik General Hospital Center in 2025. The case study approach applied in this research uses a descriptive method. The data collection steps for implementing nursing care start from the assessment phase, followed by diagnosis, planning of interventions, implementation, and finally, evaluation.

This case study was conducted in the pulmonary inpatient ward at RSUP Haji Adam Malik, a class A accredited hospital that serves as the primary healthcare center for North Sumatra, Riau, Aceh, and North Sumatra regions. The hospital is equipped with high-quality medical facilities and professional healthcare personnel who are prepared to handle various specialized medical cases.

RSUP Haji Adam Malik is located on Bunga Lau Street No. 17, Medan Tuntungan. It focuses on cardiac and oncology services and is recognized as a

leading healthcare center that provides effective treatment for patients with diverse medical conditions. The hospital not only treats heart disease and cancer but also handles a wide range of other medical issues.

Furthermore, RSUP Haji Adam Malik is committed to addressing both communicable and non-communicable diseases. This dedication reflects the hospital's mission to offer comprehensive and effective healthcare services, ensuring that each patient receives optimal care tailored to their individual needs.

Result

Mrs. H is a 52-year-old woman who arrived at the hospital at the age of 52 years, 9 months, and 20 days. She resides in Medan, practices Islam, belongs to the Javanese ethnic group, and is married. In her daily life, Mrs. H performs her role as a housewife. Her last completed education was senior high school. According to her medical record, Mrs. H is registered under number RM 00961037 and started receiving healthcare services on May 2, 2025.

The person responsible for Mrs. H during her treatment is her son, Mr. S. He is 23 years old, lives in Medan, and completed his education at the senior high school level. He works as a private employee. The information provided by Mr. S has been essential as a reference in the data collection process, supporting the assessment and the preparation of a comprehensive and accurate nursing care plan.

Mrs. H reported experiencing shortness of breath for the past two months, accompanied by a persistent white cough and a noticeable decrease in appetite. The reasons for her hospital admission included reduced appetite, significant weight loss,

night sweats, and worsening vision. According to her family history, no other family members have experienced illnesses similar to those suffered by Mrs. H.

A family genogram was constructed to understand her family health history, although no hereditary diseases were identified that could be directly related to Mrs. H's current condition. The genogram also helps nurses visualize family relationships and identify potential support systems that may assist in the care process.

Regarding her daily activity patterns, Mrs. H used to consume meals regularly three times a day in stable portions before falling ill. After her admission to the hospital, she reported a decrease in appetite, eating only twice a day and consuming only a quarter of her usual portion. This significant change contributed to her noticeable weight loss.

In terms of her sleep and rest patterns, Mrs. H was previously able to fulfill her sleep needs adequately, despite sometimes experiencing night sweats. However, since becoming ill and being hospitalized, she has reported a reduction in her rest and sleep quality, impacting her overall energy levels and daily functioning.

Concerning personal hygiene, Mrs. H used to maintain her cleanliness by bathing twice daily before hospitalization. After being admitted to the hospital, she reported reducing this to once per day, reflecting the impact of her illness on her physical condition and daily routines (Nursalam, 2023).

When it comes to communication and social roles, Mrs. H can speak fluently and uses the Indonesian language effectively. She maintains her role as a housewife within her family, demonstrating her continued involvement and responsibility in household matters despite her illness.

Mrs. H holds strong religious beliefs, being a devoted Muslim. She adheres firmly to the teachings of her religion and finds comfort and strength in her faith, which plays a vital role in her coping mechanisms and emotional resilience during illness.

A physical examination revealed that she was conscious and alert (*compos mentis*). Her vital signs included blood pressure at 120/80 mmHg, temperature at 36.5°C, respiratory rate at 26 breaths per minute, and heart rate at 100 beats per minute. Her weight had decreased significantly from 45 kg before illness to 33 kg after. A head-to-toe examination indicated that her head was clean and symmetrical with tan skin and a mixture of black and white hair. Her eyes were

symmetrical with normal vision, and her nose appeared normal without swelling. Her lips were dark and cracked, but her teeth were clean and white. The ears and neck were normal with no lesions, and swallowing reflexes were intact. Examination of her chest showed symmetrical lung expansion and normal chest movement during palpation, with wheezing heard on auscultation. Heart examination revealed no swelling, and heart sounds were normal. Her abdomen was uniformly tan with no tenderness or edema, and bowel sounds were normal. Skin and nails were clean and dry, with no lesions observed. The back was symmetrical with no scars or wounds. Genitalia were not assessed to maintain privacy (Bina, 2025).

Discussion

During the assessment stage, Mrs. H was able to respond well, which allowed the writer to perform the assessment smoothly without any significant obstacles. The assessment was conducted on Thursday, May 8, 2025. Mrs. H was identified as a 52-year-old married woman, of Javanese ethnicity, and worked as a housewife. According to her family, she had been experiencing a productive cough with phlegm and shortness of breath for two months. She also complained of night sweats and a decreased appetite. The results of her vital signs examination showed a blood pressure of 120/80 mmHg, respiratory rate of 26 times per minute, and body temperature of 36°C (Simanjuntak, 2024).

Based on theoretical review, several nursing diagnoses were identified for Mrs. H. These included: ineffective airway clearance, impaired gas exchange, nutritional deficit, and risk of infection. Specifically, ineffective airway clearance

was related to retained secretions as evidenced by her complaint of a productive cough for two months and wheezing breath sounds. Impaired gas exchange was associated with ventilation-perfusion imbalance, supported by symptoms of weakness, dizziness, and laboratory findings of metabolic alkalosis (pH 7.534), high PaO₂ (193.8), and respiratory acidosis (37.5). The nutritional deficit was related to her decreased appetite and weight loss, as indicated by her current body weight of 33 kg.

Nursing interventions were developed as a continuation of the diagnosis process. These actions aimed to address the problems identified based on clinical judgment, in accordance with the Indonesian Nursing Intervention Standards. For airway management, interventions included monitoring respiratory rate and breath sounds, positioning the patient in semi-Fowler's position, teaching effective coughing techniques, and collaborating in administering nebulization therapy and

fluids such as Ringer Lactate and NaCl. For impaired gas exchange, interventions involved monitoring oxygen flow, maintaining airway patency, and collaborating in oxygen dosage adjustments. For the nutritional deficit, interventions included assessing nutritional status, providing high-calorie and high-protein meals, and encouraging the patient to sit upright during meals (Nanda, 2018).

The implementation stage involved the direct execution of planned nursing interventions over three days or more. All actions were carried out using the Indonesian nursing care framework, aiming to assist Mrs. H in overcoming respiratory problems due to pulmonary tuberculosis. The focus was on optimizing airway clearance, improving oxygenation, and enhancing nutritional intake to support recovery and overall strength (Juliana, 2024).

The final stage of nursing care is evaluation. The results from the interventions and implementations performed were reviewed to assess the effectiveness of the care provided. According to the SOAP documentation completed over the three days, it was found that the identified problems had not been fully resolved. Therefore, nursing care was continued by the ward staff to further address Mrs. H's needs and support her recovery process (Isyos, 2024).

Conclusion and Suggestion

The researcher provided direct nursing care services to the patient in the pulmonary ward at H. Adam Malik Hospital in 2025. Based on the study, the researcher was able to draw conclusions and offer suggestions to improve nursing services, particularly in the care of tuberculosis patients. The assessment conducted on May 8, 2025, revealed that

Mrs. H was diagnosed with pulmonary tuberculosis, as confirmed through interviews and information obtained from her family. She reported experiencing a cough for two months, with white sputum and noticeable weight loss. The established nursing diagnoses included ineffective airway clearance related to retained secretions, impaired gas exchange associated with ventilation-perfusion imbalance, and nutritional deficit related to the inability to digest food properly. The planned interventions for Mrs. H involved teaching her effective coughing techniques, positioning her in semi-Fowler or Fowler positions, instructing her in relaxation techniques, and encouraging her to eat small frequent meals. Implementation began on May 8, 2025, following the interventions developed in the medical-surgical nursing care plan. Evaluation of the first diagnosis was carried out three times consecutively from May 8 to May 10, 2025, using the SOAP method. The results indicated that Mrs. H's complaints had gradually decreased, and she continued to perform the techniques that had been taught to her during the nursing care process.

For future writers, it is expected that they can expand their knowledge through relevant insights and additional references to provide excellent nursing care to patients. For educational institutions, it is hoped that they will provide up-to-date reference books and other supporting materials to enhance the implementation of medical-surgical nursing care, particularly concerning respiratory system problems such as pulmonary tuberculosis. For hospitals, it is encouraged that they continuously improve and maintain the quality and standards of medical-surgical nursing services in accordance with established operational procedures,

ensuring the delivery of high-quality care to patients.

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