



# MANAGEMENT OF EMERGENCY NURSING CARE WITH SERVICE EXCELLENCE IN MR. D WITH SECOND-DEGREE BURNS AT THE EMERGENCY DEPARTMENT OF H. ADAM MALIK CENTRAL GENERAL HOSPITAL MEDAN NORTH SUMATRA PROVINCE IN 2025

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## ABSTRACT

Burns are a type of severe burn that not only affects the skin, but can also damage deeper tissue and cause systemic disorders in a person's body. The goal is to maintain the safety of the victim, protect those who help, prevent infection, relieve pain and anxiety in a person, and maintain the victim's condition until medical personnel arrive to provide further treatment. The method used in my research is a descriptive method, which systematically describes the nursing process carried out starting from assessing the patient's condition, determining the diagnosis, formulating interventions, implementing actions, and evaluating the results of the implementation, as evidenced by documentation and using the Orem theory approach related to the problem of burns. According to WHO data in 2023, burns are a health problem that has recorded more than 265,000 people worldwide who have died. According to the Ministry of Health of the Republic of Indonesia (2020), the prevalence of burns in Indonesia in 2020 was recorded at 0.7%, a decrease of 1.5% compared to 2008 which reached 2.2%. According to Riskesdas, the number of burn patients in North Sumatra reached 1.0% of the total 5,401 people. Meanwhile, in Medan City, there were 89 people suffering from burns. Based on information obtained from the Medical Record book of the H. Adam Malik Medan General Hospital (RSUP), in 2021 there were 21 more patients, namely in 2022, becoming 43 people. continuing in 2023, increasing to 60 people. However, in 2024, there was a slight decrease, namely 52 patients were recorded, and burn data at the H. Adam Malik Medan Hospital on April 26-29, 2025 in the Surgical ICU Room there were 2 people. The selection of burn cases is the focus of discussion based on the contribution of nurses in holistic burn treatment, both in terms of physical, psychological, and educational, in order to accelerate the healing process related to SGDs No. 3 and 17. So, it makes me interested in taking the title of the final report with the title "Emergency Nursing Care Management with Grade II Burns on Mr. D. in the IGD Room of H. Adam Malik General Hospital, Medan, North Sumatra Province in 2025.

**Keywords:** Grade II burns, Nursing care, Orem's theory

## Introduction

Minister of National Development Planning/Head of Bappenas Decree No. 136/M. PPN/HK/12/2021 Implementing regulations concerning the Establishment

of the National Action Plan with Sustainable Development Goals (TPB/SDGs) in 2021-2024, the Government makes the TPB/SDGs the main guideline in the implementation of

national development (Ningrum *et al.*, 2024). This document serves as a reference in preparing plans, implementing programs, monitoring progress, as well as evaluating and controlling various development sectors, including in the health sector. In accordance with the decree, it is emphasized that all stakeholders, both government and non-government, are expected to use the SDGs as a reference in formulating policies to achieve national targets (Trowbridge *et al.*, 2022). In the health sector, two relevant SDGs are Goal 3, which emphasizes improving the quality of health and reducing morbidity, including burns, and Goal 17, which encourages cross-sector collaboration to support preventive, curative, and rehabilitative efforts in the health sector, specifically for burns (Harhaus *et al.*, 2025). Burns are a type of severe burn that not only affects the skin but can also damage deeper tissues, causing systemic disorders in a person's body. This injury can be triggered by direct exposure to various heat sources such as fire, liquids or objects that have very high temperatures (Xiang *et al.*, 2024).

According to the WHO (2023–2024), burns cause more than 265,000 deaths globally each year, with approximately 180,000 cases occurring in Southeast Asia. In Indonesia, approximately 195,000 deaths from burns are recorded annually. The Basic Health Research.

### Research Method

One of the objectives of applying this method is to provide a clearer picture regarding emergency problems with second-degree burns at the Haji Adam Malik General Hospital, Medan in 2025. The method used in my research is a descriptive method, which systematically describes the nursing process carried out

starting from the assessment of Mr. D condition, determining the diagnosis, formulating interventions, implementing actions, and evaluating the results of the implementation. Where the location for the research was at the Haji Adam Malik General Hospital, Medan, which started from April 26, 28-29, 2025, the sample I took was 1 person with a burn percentage of 54%, the method used was primary data obtained through interviews, secondary data obtained through reviewing medical record documents, tertiary data obtained from official sources. This study uses descriptive analysis to comprehensively describe Mr. D condition, encompassing the entire nursing process from assessment to documentation. Orem's theoretical approach is used from the planning to implementation stages, with a focus on self-care skills as the key to recovery and health improvement.

### Result

Burn data at H. Adam Malik Regional Hospital, Medan, on April 26-29, 2025, in the Surgical ICU, there were 2 people and the researcher's focus was only on patient Mr. D, the percentage of burns was 54% with second-degree burns, supported by the book Comprehensive Review of Burns and Their Treatment (Hamdana *et al.*, 2023). Theoretically, the nursing diagnoses that the researcher obtained were High risk of ineffective airway clearance, High risk of fluid volume deficiency, Risk of infection (D.0142), Risk of impaired tissue perfusion, Disturbed body image, Damage to skin integrity (Hamdana *et al.*, 2023). Meanwhile, what the researcher got was in accordance with interviews, physical examinations and direct observations of the problem formulation: Impaired gas exchange, Hypovolemia, acute pain, skin integrity, impaired physical mobility.

Intervention is a plan related to actions to be taken related to problems formulated in accordance with nursing intervention standards (SIKI). Researchers carried out action planning that had a very important influence in handling burn problems at H. Adam Malik Medan General Hospital on Mr. D supported by research (Syaiful *et al.*, 2023) on the Effect of Giving Topical Medication on Burn Wound Healing. Implementation was carried out according to the planned plan for 3 days, evaluation was carried out in SOAPIER format for 3 days and the problem had not been resolved.

## Discussion

The assessment that the researcher obtained was Mr. D name, Age: 32 years, Gender: male, Address: Jl Tiga Baru Terminal Bawah, Source of information from Mr. D and family. there are 5 diagnoses is Gas exchange disorders related to ventilation perfusion imbalance, monoxide smoke poisoning is evidenced by Ds: The patient complains of shortness of breath Do: Mr. D looks restless, PCO<sub>2</sub> decreases to 23.5 mmhg, Ph increases to 7.554, Po<sub>2</sub> 173.3 mmhg, Saturation 99.7%, RR 26 X/M, Pale skin color. Hypovolemia related to active fluid loss is evidenced by Mr. D feeling weak and complaining of frequent thirst. HR 120X/m, cold extremities, urinary catheter is seen, Rl and NaCl infusion is installed. Frequent thirst decreases. Pulse rate improves, edema decreases, hematocrit improves, hemoglobin improves. Extremities improve, T: 380c. Acute pain related to chemical injury agents (burns) as evidenced by Mr. D complaining of pain, P: due to a gas cylinder leak when changing the gas cylinder, Q: stinging

pain, R: both lower legs, both lower arms, stomach, back, and face of the patient, S: pain scale 7, appears to be grimacing, RR 26x/m, BP 130/80 mmhg, HR 120 x/m, appears to have been injected with Fentanyl 200 mcg + 50 cc NaCl 0.9% (5 cc/hour). Skin integrity related to irritating chemicals is evidenced by Ds: The client complains that part of his body is burned. Damage to the skin tissue is visible, pain is visible, redness is visible, abnormal skin texture is visible, hair loss is visible in the burned area, abnormal pigmentation is visible, grade II burns are 54%. Impaired physical mobility is related to pain as evidenced by Ds: Mr. D complains of pain when moving. Physical weakness is visible, muscle strength is 3, movement is limited.

Implementation is carried out in accordance with the planned interventions. The following is the implementation according to the 5 diagnoses that researchers obtained For Dx1 Identifying the speed of oxygen flow where the oxygen speed when evaluated on Mr. D is sufficient, Identifying the position of the oxygen device where its position uses a nasal cannula attached behind Mr. D ear to the nose and makes a semi-fowler position the result is that Mr. D feels comfortable (Waheed *et al.*, 2025). Identifying the oxygen therapy given is using a nasal cannula 5 liters / minute. Identifying signs of ventilation (obtained SpO<sub>2</sub> saturation of 97% using NC 51 / min). Identifying signs of oxygen toxicity the result is that Mr. D has no toxicity in Mr. D. Identifying the level of anxiety due to oxygen therapy the result is that Mr. D is not anxious



regarding the installation of the oxygen given. Maintaining airway patency where there is no obstruction such as secretions in Mr. D airway. Prepare oxygen equipment with a nasal cannula attached. Teach the family how to use oxygen at home if Mr. D still experiences shortness of breath at home. This will help Mr. D understand how to use oxygen. Collaborate on the use of oxygen and monitoring the oxygen dose where the recommended dose is 5-10 lpm. For Dx2 Check for signs of fluid deficiency where Mr. D looks weak and often thirsty, Identify the temperature obtained results T: 380C and other lab tests, Provide oral intake, namely giving food and drink to Mr. D using a pipette, Recommend increasing oral fluids at least 2000-3000 ml a day, Recommend avoiding sudden changes in position because to prevent a more severe decrease in blood pressure, Collaborate on the administration of fluids, namely IVFD RL 24 drops / m, NaCl 0.9% 24 drops / m, ranitidine / 12 hours Collaborate on the administration of pyretic drugs Collaborate on the administration of pyretic drugs, namely Paracetamol Infusion - Paracetamol tablet 500 mg (Dong *et al.*, 2022). Dx3 Identifying the location on the head, stomach, back, both lower arms, both lower legs, duration for 15 minutes, frequency 10-25 x / m, quality and intensity of pain the skin is sore, Identifying the pain scale is 7, Identifying nonverbal responses where Mr. D face appears to grimace, Identifying aggravating factors if Mr. D moves and relieves pain by doing relaxation and rest

and collaboration in giving pain medication, Providing non-pharmacological techniques to reduce pain, namely teaching deep breathing techniques, Controlling the environment that aggravates pain in Mr. D, namely by reducing noise, adequate ventilation in Mr. D environment. Facilitating Mr. D rest and sleep, namely by providing blankets and pillows to Mr. D, Explaining the cause of pain due to the condition of burns on Mr. D body, and pain triggers due to movements made by Mr. D, Explaining strategies to relieve pain, namely by relaxation techniques, Collaboration in giving analgesic drugs to Mr. D Inj. Ketorolac 1 amp/8 hours, Fentanyl 200 mcg injection + 50 cc NaCl 0.9% (5cc/hour). Dx 4 Identifying the characteristics of wounds where there is visible damage to the integrity of the skin on the part of Mr. D body that is burned, red and there is an abnormal color on the skin affected by the burn, Identifying signs of infection such as if there are red marks, warm skin, swelling, pain, and loss of function on the part of Mr. D body that is affected by the burn, the result is red, painful and swollen so that there is a risk of infection if the treatment is not carried out properly, Removing the dressing slowly, Giving NaCL fluid, Cleaning the necrotic tissue on Mr. D wound, Giving ointment to Mr. D, Applying a dressing according to the type of wound, Maintaining sterile techniques by using different hanscoons, Changing Mr. D position every 2 hours, Explaining the signs and symptoms of infection where if Mr. D has a fever and there are signs of

infection such as red, warm, swollen, painful, and loss of function, immediately report the results to the officer on duty Mr. Mr. D and his family understand, Recommend consuming foods high in protein and calories such as meat, fish, milk, etc (Rigoberto *et al.*, 2025). Recommend independent wound care if Mr. D and his family still have wounds when they go home, where the result is that Mr. D is willing to do wound care at home by being taught first by the nurse, Collaborate on giving cefotaxime/12-hour antibiotics and debridement procedures. Dx5 Identifying the presence of pain and other physical complaints where Mr. D complained of pain and physical weakness, Identifying tolerance in carrying out movements where Mr. D could only move in bed with the help of nurses and family, Identifying blood pressure before mobilization where HR 130/80 mmhg, Identifying KU during mobilization where KU Mr. D Compomentis, Involving the family in carrying out mobilization namely by holding Mr. D shoulders and hands, Explaining the purpose and procedure of mobilization where the purpose of mobilization is to prevent decubitus ulcers in Mr. D and make Mr. D body more relaxed and prevent joint stiffness in Mr. D. Recommending simple mobilization namely by leaning slightly to the right and left assisted by family and nurses according to Mr. D ability.

Here the researcher only draws conclusions from the evaluation of the results from the last day, namely the third day Dx1 S: Mr. D complained that shortness of breath has begun to decrease O: sp02 99%, appears to be attached to 31

oxygen, BP: 130/90 Mmhg, HR 110x/m, RR 25 x/m, ph 7.50, po2 164 mmhg, pCO2 28 mmhg. A: gas exchange disorders. P: the intervention is continued by the employee. I: Observation of Mr. D vital signs, Saturation observation, Collaboration to continue monitoring oxygen therapy given through nasal cannula and semi-Fowler position. E: the problem has not been resolved. R: continue to monitor oxygen therapy so that Mr. D shortness of breath decreases and breathing patterns return to normal. Dx 2 S: Mr. D complains of still feeling thirsty. O: IVFD RL 24 drops/m infusion fluid, Mr. D still looks weak, catheter is attached, T: 37.40C, BP: 130/90 Mmhg, HR 110 x/m, hematocrit: 32.6%, HBG: 14.8 g/dl, 1010 ml/12 hours. A: Nursing problems related to hypovolemia are still not resolved and thermoregulation problems have been resolved. P: The intervention is continued by the employee. I: Perform hypovolemia management intervention with 0.9% NhCl infusion 24 drops/m and urine output and feeding, oral drinking of at least 2000-3000 ml via pipette, Ranitidine injection 1 amp/12 hours, and monitoring Mr. D vital signs. E: Fluid deficiency is still not resolved. S: Mr. D complained of still feeling thirsty. O: IVFD RL 24 drops/m infusion fluid, Mr. D still looked weak, catheter was attached, T: 37.40C, BP: 130/90 Mmhg, HR 110 x/m, hematocrit: 32.6%, HBG: 14.8 g/dl, 1010 ml/12 hours. A: Nursing problems related to hypovolemia are still not resolved and thermoregulation problems have been resolved, P: the intervention is continued by the employee. I: perform hypovolemia management intervention with 0.9% NhCl infusion 24 drops/m and urine output and feeding, oral drinking of at least 2000-3000 ml via pipette, inj. Ranitidine 1 amp/12 hours, and monitoring Mr. D vital signs. E: fluid deficiency is still not

resolved. R: continue to monitor Mr. D fluids to meet Mr. D fluid needs. Dx3 S: Mr. D complains that the pain has begun to decrease. O: Pain scale 6, Mr. D appears to complain that the grimace has decreased from before. A: Acute pain. P: The intervention is continued by the employee. I: Continue relaxation techniques and semi-Fowler's position, Continue administering analgesic drugs, Inj. Ketorolac 1 amp/8 hours, Sp injection of Fentanyl 200 mcg + 50 cc NaCl 0.9% (5 cc/hour). E: The pain has not been resolved. R: Continue pain management to reduce pain in Mr. D. Dx4 S: Mr. D complained that there were still wounds on his body. O: The degree of burns was 54%, and burns on the face, both arms and both legs were wrapped in elastic bandages, the bandages looked clean, there was still damage to the integrity of the skin, edema appeared to have started to decrease, Mr. D and his family seemed enthusiastic to listen about wound care and the importance of independent self-care. A: impaired skin integrity. P: the intervention was continued by the employee. I: continue to treat the burns, and give ialusel PLUS ointment, administer cefotaxime injection analgesics /12 hours, continue to change Mr. D position every 2 hours, continue to control signs of infection, and provide education on the importance of his own abilities in care and the importance of collaboration in care, accompanied by a demonstration of how to care for wounds to Mr. D to increase the knowledge of Mr. D and his family and emotional support to Mr. D and his family. E: skin integrity has not been resolved. R: continue to carry out wound care to improve skin integrity so that the wound is not at risk of infection. Dx5 S: Mr. D complains that he is still physically weak. O: Upper and lower extremity muscle strength is 3. There are no pressure sores, Mr. D looks more

relaxed, A: physical mobility impairment. P: intervention is continued by the employee's older sibling. I: continue to perform simple mobilization. E: mobility impairment is still not resolved. R: continue to perform mobilization to prevent joint stiffness, Avoid pressure sores, Keep the body relaxed according to Mr. D ability (Lee *et al.*, 2025).

### Conclusion and Suggestion

Conclusion The researcher actively participated in emergency services at H. Adam Malik General Hospital, Medan in 2025. From these activities, the researcher compiled a number of findings in order to improve the quality of emergency care, especially for burns. The main focus was directed at all stages of the nursing process starting from the initial assessment, determination of the diagnosis, preparation of interventions, implementation of actions, to the evaluation stage. When conducting an emergency nursing care assessment related to burns, Mr. D was found to have a burn with a burn percentage of 54%, his consciousness was comatosed and Mr. D and his family said that the burn was due to changing the contents of the gas cylinder. In making a nursing diagnosis, it was established based on complaints and physical examination from Mr. D, and there were five diagnoses, namely impaired gas exchange, hypovolemia, acute pain, impaired skin integrity, and impaired physical mobility. Nursing interventions were carried out in accordance with the planning that had been carried out at H. Adam Malik General Hospital, Medan City with burns based on the Indonesian Nursing Intervention Standards (SIKI) and action planning had been included in the case review in accordance with the problem formulation. The implementation of appropriate nursing care has been carried out in accordance with the planning that has been made related to Mr. D problem with burns.

The evaluation was carried out for 3 days starting from April 26-28, 2025, and the results obtained were that the problem was still unresolved in the five diagnoses that had been formulated according to the Indonesian Nursing Diagnosis Standards (SDKI).

**Suggestions for Research Institution:** This research aims to gain practical experience in implementing excellent nursing care and provide strong guidance on effective and efficient care according to emergency burn care SOPs. For education, the results of this research can increase knowledge and insight into implementing better nursing processes for patients with burns and can serve as a reference for advancing burn science. At H. Adam Malik General Hospital, this research aims to improve and build the quality of emergency nursing care for burn patients.

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