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EXCELLENT EMERGENCY NURSING CARE MANAGEMENT FOR MR. P WITH CHRONIC KIDNEY DISEASE IN ROOM RA 6, H. ADAM MALIK GENERAL HOSPITAL, NORTH SUMATERA PROVINCE, 2025

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ABSTRACT

Chronic Kidney Disease (CKD) is a medical condition characterized by a gradual decline in kidney function over a period of at least three monts. This disorder causes the kidneys to become ineffective at filtering blood, leading to the accumulation of metabolic waste prodycts in the body. CKD is progressive and can lead to multisystem complications, especially in the end stages, which require renal replacement therapy such as hemodialysis. Some of the main risk factors for CKD include diabetes mellitus, hypertension, heart disease, and a family history of kidney disease. Globally, CKD is a non-communicable disease with high morbidity and mortality rates. In Indonesia, the prevalence of CKD increases annually, including at H. Adam Malik General Hospital, Medan. Based on medical records, in 2023, there were 619 hospitalizations and 184 cases in the adult ICU. Meanwhile, in 2024, there was an increase to 714 hospitalizations and 239 cases in the adult ICU. This data indicates a significant upward trend and is a concern in nursing services, particularly in emergency care.Based on this background, the author is interested in presenting a case study on service excellence-based emergency nursing care management for patients with CKD.

Keywords: Chronic Kidney Disease: ExelLent; Emergency

Introduction

Chronic kidney disease (CKD) is a general term for a heterogeneous group of disorders associated with various factors, including diabetes, nephritis, hypertension, and immune system disorders. While these etiologically distinct causes develop, common pathological manifestations of the kidney, including glomerulosclerosis and/or interstitial fibrosis, develop regardless of the underlying cause. Chronic kidney disease (CKD) is generally caused by various factors, including diabetes mellitus, hypertension, glomerulonephritis, and other kidney disorders that result in a progressive decline in kidney function (1)

According to WHO data, 254,028 deaths were recorded in 2020 due to chronic kidney disease. In the following year, 2021, the number of people with this disease was reported to have reached more than 843.6 million worldwide. It is estimated that the death rate from chronic kidney disease will increase by 41.5% by 2040. Chronic kidney disease is ranked the 12th leading cause of death worldwide (2)

In Indonesia, the prevalence of chronic kidney disease (CKD) for at least three consecutive months, based on a doctor's diagnosis, is 638,178 people aged

≥ 15 years (Ministry of Health, 2023). According to data from the Ministry of Health of the Republic of Indonesia in 2020, there was an increase in the number of patients undergoing hemodialysis in Indonesia during the period 2017-2020, both among new patients, namely 10,318 new patients, and among patients already undergoing hemodialysis treatment, as many as 31,076 patients (3)

Based on data from the 2023 Indonesian Health Survey (SKI) Report, the prevalence of Chronic Kidney Disease (CKD) sufferers in North Sumatra based on doctor's diagnosis in the population aged ≥ 15 years was 0.17% or around 33,884 people (Ministry of Health, 2023). Based on the results of a preliminary study conducted by several researchers at H. Adam Malik General Hospital, the number of patients with Chronic Kidney Disease (CKD) fluctuates from year to year. In 2016 and 2017, the number of CKD patients was recorded at 276 people. This number increased to 383 patients in 2018 and continued to grow to 438 patients in 2019. However, in 2020, the number of patients decreased to 280 people. These data show an increasing trend in CKD cases in the 2016-2019 period, before experiencing a decline in 2020 (4)

Based on data obtained during the initial survey, the number of incidents that occurred at H. Adam Malik General Hospital who experienced CKD in 2023 was recorded at 619 cases in the Inpatient room, 184 in the Adult ICU room and in 2024 was recorded at 714 cases in the Inpatient room, 239 cases in the Adult ICU room. This data shows an increase in the number of patients at Adam Malik Hospital both in inpatient services and ICU services from the period 2023 to the period 2024.

From the data above, CKD is a disease whose prevalence continues to increase and has a significant impact on the quality of life of patients and the burden of health costs.

Research Method

The case study method applied in this research is a qualitative descriptive method, where the meaning of this method is one type of research with an investigation of a social phenomenon and human problems. The characteristic of this research is where the data is collected directly. This research raises the topic of Emergency Nursing Care Management for Mr. P with Chronic Kidney Disease in Room RA6 RSUP H. Adam Malik in 2025. This research uses a systematic nursing care approach starting from the assessment stage, formulation of nursing diagnoses, nursing interventions, implementation and evaluation of nursing.

H. Adam Malik Central General Hospital is a hospital that was established on July 21, 1993. H. Adam Malik General Hospital is a central government-owned hospital under the auspices of the Directorate General of Health Services of the Ministry of the Republic of Indonesia, located at Jalan Bunga Lau, Kemenangan Tani, No. 17 Medan Tuntungan, Medan City. H. Adam Malik General Hospital is also known as a Teaching Hospital in accordance with the Decree of the Minister of Health No. 502 / Menkes / SK / IX / 1991, dated September 6, 1991 (5)

This research was conducted in the Rindu A Inpatient Room, H. Adam Malik General Hospital, with the implementation of nursing care for Mr. P starting from April 23 to April 25, 2025.

Result

The initial assessment was conducted on April 23, 2025, on a male patient identified by the initials Mr.P, aged 65 years, with an address in the Medan Merelan area. Based on the data collected, the patient is married, adheres to Islam, and comes from Suka Java. The patient's contact information is recorded with the telephone number 081362227996. The patient was recorded as being admitted to the hospital on April 21, 2025, with the medical record number 00959845. The source of the assessment data was obtained from the patient's medical record. The closest family member who can be contacted in the patient's care is Mrs. S, who is the patient's wife. Her last education was high school and she works as a housewife.

Based on the assessment data, the patient presented to the hospital with a chief complaint of decreased consciousness that occurred approximately one hour before arrival at the healthcare facility. Details regarding the nature of the complaint or any exacerbating factors were not available. However, it was discovered that the complaint began with sudden onset of lower back pain, which was suspected to be the precipitating factor. Prior to arriving at the hospital, the family had taken immediate medical attention.

The patient was known to have a history of chronic kidney disease (CKD) and acute hypertension. Approximately one week before being admitted to H. Adam Malik General Hospital, the patient had received treatment at Mitra Sejati Hospital in Medan.

The results of vital signs measurements showed that the patient's blood pressure was 130/82 mmHg, pulse rate 112 times/minute, respiratory rate 27 times/minute, body temperature 36.2˚C and oxygen saturation (SpO2) of 96%.

The diagnosis obtained was (1) Spontaneous circulation disorders related to decreased ventricular function as evidenced by the patient in a state of decreased consciousness GCS 13, blood pressure 130/82 mmHg, pulse 112 times/minute, respiration 27 times/minute, spo2 96, pale acral and decreased urine production. (2) Gas exchange disorders related to imbalance of percussion ventilation as evidenced by the patient appearing restless, appearing to snore, pulse 112 times/minute, respiration 27 times/minute, GCS 13 and decreased arterial pH. (3) Activity intolerance related to bed rest and weakness as evidenced by the patient appearing to be lying weak, abnormal vital signs, a urinary catheter, NGT, and the patient's activities were also assisted by the family. (4) Urinary elimination disorders related to decreased bladder capacity as evidenced by oliguric urine production, urine color not clear and the patient appearing to be using a urinary catheter.

The first nursing diagnosis was ineffective tissue perfusion related to decreased ventricular function, as evidenced by the patient's impaired consciousness and abnormal vital signs. Nursing interventions were initiated on April 23, 2025, including monitoring neurological status using the Glasgow Coma Scale (GCS), regulating patient positioning, and administering nutrition via NGT. The patient was also closely monitored for intake-output balance and collaborated medication administration. Evaluation on the same day revealed persistent symptoms, such as restlessness and abnormal breathing sounds, with a pulse rate of 112 bpm. The interventions were continued, focusing on stabilizing

vital signs and patient comfort. On April 24–25, the patient showed gradual improvement, including responsiveness to pain and auditory stimuli, more stable blood pressure, and reduced restlessness, indicating partial resolution of ventilation issues (6)

The second nursing diagnosis involved impaired gas exchange related to ventilation-perfusion imbalance, indicated by signs of restlessness and irregular breathing patterns. Interventions included respiratory monitoring every 2–4 hours, assessing sputum production, lung expansion symmetry, oxygen saturation, and oxygen flow rate. On April 23, the patient's oxygen saturation was 96%, and restlessness persisted, prompting continuation of interventions. By April 24, the patient's saturation improved to 98%, snoring decreased, and extremities appeared less pale. The nurse adjusted the oxygen supply and ensured airway patency. On April 25, family reported a reduction in restlessness, and the patient's breathing pattern showed improvements, suggesting partial resolution of gas exchange disturbances (7)

The third and fourth nursing diagnoses addressed activity intolerance related to bed rest and weakness and impaired urinary elimination related to decreased bladder capacity, respectively. For activity intolerance, the patient received passive ROM exercises, regular repositioning, and nutritional support through NGT. Initially, the patient remained weak and needed assistance, but by April 25, there was slight improvement in tolerating light activity. Meanwhile, the urinary elimination issue was managed through regular monitoring of urine frequency and color, perineal care, and fluid intake education for the family. Although the patient still had a catheter, urinary frequency and clarity showed signs of improvement over time. These findings demonstrate that while the patient's condition had not fully resolved, continued nursing interventions contributed to progressive clinical improvement (8).

Discussion

The discussion is made where the author will compare the theory with the results of Mr. P's nursing care management research which starts from assessment, diagnosis, intervention, implementation to nursing evaluation. The method used is aqualitative descriptive method where data is collected directly to determine and evaluate the results of the nursing care provided.

Data obtained from the assessment of Mr.P aged 65 years with a body weight of 60 kg with a height of 163 cm. Mr.P was admitted to the hospital on April 21, 2025 with a medical diagnosis of Acute on CKD dd / CKGD5 ec Hypertensive Nephropathy in the RA6 Inpatient Room of H. Adam Malik General Hospital. At the time of the first assessment the patient was found in a state of decreased consciousness with a GCS score of 11 (delirium), 5 L nasal canus O_2 was installed, 0.9% NaCl infusion was installed in the left hand, a syringe pump was installed, an NGT and a urinary catheter were installed, the amount of urine was 400cc / day. The patient looked restless with vital signs, BP 130/82 mmHg, Pulse 112 times / minute, Respiration 27 times / minute, Temperature 36.2˚ and Spo2 96%

In the theoretical review of nursing care, 7 nursing diagnoses were obtained,

namely:Hypervolemia, Impaired gas exchange, Impaired skin integrity, Activity intolerance, Ineffective breathing pattern, Ineffective peripheral production, and Impaired spontaneous circulation. Meanwhile, in this case, the author identified four nursing diagnoses based on the data obtained: Impaired spontaneous circulation related to decreased ventricular function, evidenced by the patient's decreased level of consciousness; Impaired exchange related to imbalanced percussion ventilation, evidenced by the patient's restlessness; Activity intolerance related to weakness, evidenced by the patient's limp appearance; and Impaired urinary elimination related to decreased bladder capacity, evidenced by oliguric urine production. The data revealed discrepancies between the theory and the case, namely the lack of supporting data that aligns with the Nursing Diagnosis Standards (SDKI) and the patient's data, allowing for the development of other nursing diagnoses.

Interventions carried out in the diagnosis (1) Spontaneous circulation disorders, the nursing interventions arranged are identifying the cause of changes in vital signs, monitoring the neurological system and consciousness, monitoring blood pressure, monitoring pulse, monitoring respiration, monitoring temperature, positioning the patient and monitoring fluid intake-output. When compared to theoretical interventions, they are very different. In the diagnosis (2) gas exchange disorders, the interventions arranged are monitoring respiration (mel. Frequency, rhythm, depth, and respiratory effort), palpating the symmetry of lung expansion, monitoring SPO2, collaborating to check ABG values, setting the respiratory monitoring interval according to the patient's condition, monitoring oxygen flow rate, monitoring the integrity of the nasal mucosa due to oxygen installation, continuing to provide oxygen when the patient is transported and informing the monitoring results. When compared to theoretical interventions, the author made the same interventions. In the diagnosis (3) activity intolerance, the interventions arranged are monitoring vital signs, monitoring consciousness, monitoring muscle strength, providing a comfortable and low-stimulation environment, providing passive ROM, assisting with light activities such as providing a diet, positioning the patient and educating the family. When compared with theoretical interventions, the author made almost the same interventions. In the diagnosis (4) of urinary elimination disorders, the interventions that were arranged were to monitor urine frequency (mel: amount, color), provide sufficient fluids, monitor fluid intake-output, provide treatment and collaborate on administering medication.

Nursing Implementation in the first diagnosis, namely spontaneous circulation disorders, the implementation carried out is measuring vital signs which aims to provide a real-time picture of the patient's circulation and perfusion. This helps prevent the patient's condition from worsening. In the second diagnosis, namely gas exchange disorders, the implementation carried out is monitoring breathing patterns to assess the extent to which the patient's oxygenation and ventilation are impaired. In the third diagnosis, namely activity intolerance, the implementation carried out is assisting the patient's activities which aims to prevent physical complications for the patient and maintain body function and prevent decubitus ulcers in the patient. In the fourth diagnosis, namely urinary elimination disorders, the implementation

carried out is monitoring medication administration to avoid complications that can worsen oliguria and adjusting the dose to kidney function.

Evaluation is the final step of the nursing process where the goal is to evaluate the results of the patient's development. Nursing evaluations were conducted daily starting from April 23 to April 25, 2025. From the evaluations conducted until the third day, the results obtained in the first diagnosis, namely spontaneous circulation disorders, were partially resolved because the patient was still in a state of decreased consciousness. In the second diagnosis, namely gas exchange disorders, it was also partially resolved because the patient's breathing was not yet normal and the patient still looked restless. In the third diagnosis, namely activity intolerance, it was also partially resolved because the patient was still lying weak and the patient's activities were still assisted by the family and in the fourth diagnosis, urinary elimination disorders, it was still partially resolved.

Conclusion and Suggestion

The implementation of emergency nursing care for Mr. P, a patient with Chronic Kidney Disease (CKD) in Room RA6 at H. Adam Malik General Hospital in 2025 was carried out using the five-step nursing process: assessment, nursing diagnosis, nursing intervention, nursing implementation, and evaluation. During the assessment stage, data obtained aligned with theoretical standards, supporting the establishment of four priority nursing diagnoses: (1) Impaired spontaneous circulation related to decreased ventricular function, indicated by decreased consciousness and abnormal vital signs; (2) Impaired gas exchange related to ventilation-perfusion imbalance, indicated by restlessness and decreased arterial pH; (3) Activity intolerance related to bed rest and weakness, indicated by the patient being bedridden and dependent on others; and (4) Impaired urinary elimination related to reduced bladder capacity, evidenced by oliguria.

The nursing interventions developed were aligned with theoretical frameworks and focused on monitoring vital signs, collaborating on medication administration, assisting patient activity during consciousness decline, and providing education to the patient’s family. These interventions were implemented over three consecutive days. Upon evaluation, the four nursing diagnoses were found to be partially resolved. The patient showed gradual improvements, including reduced restlessness, stabilized vital signs, improved urinary output, and a better tolerance for minimal activity. However, full resolution had not yet been achieved, indicating the need for ongoing nursing care and monitoring.

For the **author**, this experience is expected to enhance both theoretical understanding and clinical skills in managing emergency care, particularly in chronic kidney disease cases. It also serves as a foundation for future research or career advancement as a responsive and competent nurse in chronic care. **For nursing science development**, this study can serve as a reference and inspiration for further exploration in managing CKD in emergency settings. **For RSUP H. Adam Malik**, the findings are expected to contribute to improving the quality of nursing services, especially in the emergency and inpatient management of CKD patients. Lastly, **for patients and the wider community**, the results are expected to improve understanding and awareness of

CKD risk factors like hypertension and diabetes mellitus, and to encourage early health checks to prevent complications.

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