



NURSING CARE IN NEPHROLOGICAL DISEASES AND HEMODIALYSIS

Topic: Nursing Care in Hemodialysis

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Abstract: Hemodialysis is a life-sustaining therapy for patients with acute and chronic kidney failure. Nurses play a critical role in ensuring safe, effective treatment and improving patients' quality of life. This article discusses the principles of nursing care in nephrological diseases with a particular focus on nursing responsibilities before, during, and after hemodialysis

Keywords: Hemodialysis, Nursing care, Nephrological diseases, Chronic kidney disease, Renal failure, Dialysis nursing, Vascular access, Patient monitoring, Fluid and electrolyte balance, Infection prevention, Patient education, Quality of life

Introduction: Nephrological diseases affect the kidneys' ability to maintain fluid, electrolyte, and metabolic balance. When kidney function declines significantly, hemodialysis is often required to remove waste products and excess fluid from the blood. Nursing care in hemodialysis is comprehensive and patient-centered, involving clinical skills, continuous monitoring, patient education, and emotional support

Role of Nurses in Hemodialysis

Nurses are essential members of the dialysis team. Their responsibilities include:

Preparing the patient and dialysis equipment

Monitoring vital signs and patient condition

Preventing and managing complications



Providing education and psychological support

Effective nursing care ensures patient safety and improves treatment outcomes.

Nursing Care Before Hemodialysis

Before starting hemodialysis, nurses should:

Assess the patient's general condition and medical history

Measure vital signs (blood pressure, pulse, temperature, respiratory rate)

Check body weight to evaluate fluid balance

Inspect vascular access (arteriovenous fistula, graft, or catheter) for signs of infection or dysfunction

Review laboratory results such as electrolytes and hemoglobin

Explain the procedure to reduce patient anxiety

Nursing Care During Hemodialysis

During the dialysis session, continuous observation is essential. Nursing responsibilities include:

Monitoring vital signs at regular interval

Observing the patient for symptoms such as dizziness, nausea, headache, or muscle cramps

Ensuring proper functioning of the dialysis machine

Maintaining aseptic technique to prevent infection

Providing comfort and emotional reassurance

Prompt intervention is required if complications such as hypotension, bleeding, or dialysis disequilibrium occur.

Nursing Care After Hemodialysis

After completion of hemodialysis, nurses should:



Reassess vital signs and compare pre- and post-dialysis values

Measure post-dialysis body weight

Observe the vascular access site for bleeding or infection

Ensure hemostasis at needle insertion sites

Document the dialysis session and patient response

Educate the patient on diet, fluid restriction, and medication adherence

Patient Education and Psychosocial Support

Education is a key component of nursing care in hemodialysis. Nurses should teach patients about:

Dietary and fluid restrictions

Medication compliance

Care of vascular access

Recognizing warning signs and when to seek medical help

Additionally, long-term dialysis can affect patients emotionally. Nurses provide psychological support, encourage coping strategies, and promote adherence to treatment.

Conclusion

Nursing care in hemodialysis is complex and requires specialized knowledge, technical skills, and compassionate patient interaction. Through careful assessment, vigilant monitoring, patient education, and emotional support, nurses significantly contribute to the safety, effectiveness, and quality of life of patients undergoing hemodialysis.

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