Chapter 06 / Capítulo 06

Screening, Diagnosis, and Prevention in Clinical Practice: Evidence from Argentine and Latin American Medicine (English Version)
ISBN: 978-9915-704-33-3
DOI: 10.62486/978-9915-704-33-3.Ch06
Pages: 78-85

©2026 The authors. This is an open access book distributed under the terms of the Creative Commons Attribution (CC BY) 4.0 License.

Nursing Care Plan for a Person with Renal Failure in the Hospitalization Service

Plan de Cuidado de Enfermería a Persona con Insuficiencia Renal en el Servicio de Hospitalización

Andrea Yeratzi Reyes Martínez[1], Daina Jocelyn De La Cruz Bacilio[1], Maheva Adalid Jiménez Oropeza[1], Michel Oria Saavedra[1], María del Pilar Vargas Escamilla[1], Alicia Monzalvo López[1]

[1]Instituto Universitario de las Naciones Hispana (IUNHi). Pachuca de Soto, Hidalgo, México.

ABSTRACT

Introduction: renal failure is a public health problem that progressively affects kidney function, generating metabolic and cardiovascular complications that require hospitalization and continuous nursing supervision. The Nursing Care Process enables integral, systematic, and humanized care based on the scientific method.
Objective: to develop a nursing care plan for a person with renal failure in the hospitalization service using NANDA, NOC, and NIC taxonomies to promote clinical stability and effective coping with the disease.
Methods: descriptive case study conducted in a general hospital. Assessment was based on Marjory Gordon's functional health patterns. Nursing diagnoses (NANDA-I 2023–2026) included: excess fluid volume, risk for electrolyte imbalance, and ineffective coping. Expected outcomes (NOC) were fluid balance, electrolyte regulation, and active coping. Interventions (NIC) included fluid management, electrolyte monitoring, health education, and emotional support.
Results: the patient demonstrated improvement in fluid balance, stabilization of biochemical parameters, and better understanding of the treatment, evidencing the effectiveness of the nursing care plan.
Conclusions: the Nursing Care Process based on standardized taxonomies ensured safe, effective, and person-centered care, promoting patient participation in self-care.

Keywords: Renal Failure; Nursing Care Process; Nursing Diagnosis; Care Plan; Hospitalization; Self-Care.

RESUMEN

Introducción: la insuficiencia renal constituye un problema de salud pública que afecta de manera progresiva la funcionalidad del sistema renal, generando complicaciones metabólicas y cardiovasculares que requieren hospitalización y vigilancia enfermera continua. El Proceso de Atención de Enfermería permite brindar cuidados integrales, sistematizados y humanizados, sustentados en el método científico.
Objetivo: elaborar un plan de cuidados de Enfermería para una persona con insuficiencia renal en el servicio de hospitalización, utilizando las taxonomías NANDA, NOC y NIC para promover la estabilidad clínica y el afrontamiento efectivo ante la enfermedad.
Métodos: estudio de caso descriptivo, realizado en el Hospital ISSSTE Columba Rivera Osorio,

Pachuca de Soto, Hidalgo, en el periodo del 30 de junio al 8 de agosto del 2025. Se aplicó la valoración por los patrones funcionales de Marjory Gordon. Se identificaron diagnósticos de Enfermería (NANDA-I 2023–2026): exceso de volumen de líquidos, riesgo de desequilibrio electrolítico y afrontamiento ineficaz. Se establecieron resultados esperados (NOC): equilibrio hídrico, regulación electrolítica y afrontamiento activo. Las intervenciones (NIC) incluyeron manejo de líquidos, monitoreo electrolítico, educación para la salud y apoyo emocional.
Resultados: el paciente mostró mejoría del equilibrio hídrico, estabilidad de parámetros bioquímicos y mayor comprensión de su tratamiento, evidenciando eficacia del plan de cuidados implementado.
Conclusiones: el Proceso de Atención de Enfermería fundamentado en las taxonomías estandarizadas permitió una atención segura, efectiva y centrada en la persona, promoviendo su participación activa en el autocuidado.

Palabras clave: Insuficiencia Renal; Proceso de Atención de Enfermería; Diagnóstico de Enfermería; Plan De Cuidados; Hospitalización; Autocuidado.

INTRODUCTION

Renal failure is a growing public health problem that requires a comprehensive approach from the nursing discipline. According to the World Health Organization (2023), more than 850 million people worldwide have some degree of kidney disease, and nearly 2.4 million die each year from this condition, placing it among the top ten causes of death globally. In Latin America, the prevalence of chronic kidney disease is estimated to have increased by more than 30 % over the last decade, with significant progression to advanced stages requiring replacement therapies such as dialysis or kidney transplantation (Luyckx et al., 2023). In Mexico, data from the National Institute of Public Health (2024) indicate that kidney failure ranks seventh among causes of mortality, mainly affecting adults between the ages of 45 and 70.

Despite technological and therapeutic advances, caring for people with renal failure remains a multidimensional challenge. The physical, emotional, and social impact of the disease requires interventions that transcend the biomedical sphere to integrate the human, educational, and self-care components of professional nursing practice. From this perspective, nursing care becomes relevant as a scientific process that seeks to promote the adaptation, stability, and well-being of the individual across all dimensions (Carper, 2021).

The hospital setting is a critical scenario in which the adverse effects of renal failure manifest themselves: fluid and electrolyte imbalance, fluid overload, hypertension, fatigue, emotional disturbances, and changes in health perception. Nursing, as a scientific discipline, has the responsibility to apply the Nursing Care Process to provide individualized, safe, and evidence-based care. This process structures professional practice into five phases: assessment, diagnosis, planning, implementation, and evaluation (Alfaro-LeFevre, 2022).

In this context, the nursing care plan becomes an essential tool for guiding clinical practice and strengthening professional autonomy. Its application not only meets the patient's biological needs but also addresses the psychological, social, and spiritual dimensions, aligning with the holistic approach to care (Potter & Perry, 2021).

The case presented here is relevant to nursing science because it emphasizes innovation in care centered on the hospitalized person with renal failure, where nursing intervention is not

limited to monitoring or therapeutic administration but also incorporates self-care education, therapeutic communication, emotional management, and family support as fundamental pillars.

From a scientific point of view, the interest of this work lies in demonstrating how implementing the NANDA-I (Herdman et al., 2023), NOC (Moorhead et al., 2023), and NIC taxonomies operationalizes nursing knowledge into specific, measurable, and evaluable actions. The integration of these taxonomies strengthens standardized disciplinary language, supports systematic recording of care, and improves the quality of care through the continuity and traceability of interventions.

Several studies have shown that the consistent application of nursing taxonomies increases clinical effectiveness and patient satisfaction. In this regard, García-Santos et al. (2022) demonstrated that the use of the Nursing Care Process with NANDA, NOC, and NIC in patients with kidney disease enabled the identification of priority health problems and improved indicators of adherence to dialysis treatment. Similarly, Martínez and Rojas (2021) reported that care planning based on NOC outcomes promoted fluid balance regulation and active coping in patients.

At the national level, nursing practice in hospital units still faces the challenge of consolidating the use of the Nursing Care Process as a daily scientific methodology. Research conducted in Mexican public hospitals shows that although nursing staff recognize the importance of the Nursing Care Process, there are limitations due to work overload, insufficient standardized records, and outdated international taxonomies (Soto-Sánchez et al., 2023). This study aims to contribute to closing this gap by demonstrating the practical applicability and positive impact of the systematic process in the care of a patient with renal failure.

The relevance of the case lies in its innovative approach to nursing care during hospitalization, which aims to strengthen patient autonomy through educational and emotional interventions. This humanistic and scientific approach aligns with the principles of Marjory Gordon's functional health patterns theory, used as an assessment framework, enabling the identification of real and potential needs and facilitating comprehensive, context-specific care (Gordon, 2020).

Likewise, this work seeks to highlight the role of nursing knowledge in self-care management, recognizing that people with renal failure are active participants in their recovery. Professional intervention aims to promote water balance, electrolyte regulation, and positive coping with the disease through educational and motivational strategies grounded in scientific evidence (Orem, 2021).

In line with Jean Watson's philosophy of care, which conceives nursing as a humanistic science, this study emphasizes the importance of the nurse-patient therapeutic relationship as a means of generating trust, hope, and well-being. Empathetic and reflective care is a transformative element that gives meaning to the act of caring in contexts of chronic illness (Watson, 2022).

Thus, this case not only illustrates the technical application of the Nursing Care Process but also highlights the ethical, educational, and emotional dimensions of care, which are essential elements for the construction of a scientific and humanized nursing practice.

In epistemological terms, the scientific problem this presentation addresses is the need to develop systematic nursing care plans grounded in standardized taxonomies that ensure

comprehensive, safe, and high-quality care for people with renal failure during hospitalization.

This approach is based on the premise that modern nursing cannot be limited to the execution of medical orders, but must consolidate itself as an autonomous science with the capacity to generate, apply, and evaluate its own knowledge for the benefit of human care (Marriner-Tomey & Alligood, 2023).

The objective of this study is to develop and apply a nursing care plan for a person hospitalized with renal failure, using the nursing care process based on the NANDA-I, NOC, and NIC taxonomies, based on Marjory Gordon's assessment model, to improve fluid balance, coping with illness, and the quality of care provided.

METHOD

A descriptive case study with a qualitative approach was conducted in the internal medicine hospitalization service of the ISSSTE Columba Rivera Osorio Hospital, Pachuca de Soto, Hidalgo, during the period from June 30 to August 8, 2025. The case was selected based on clinical criteria and relevance to nursing practice, considering the complexity of the care process for patients with renal failure and the opportunity to apply the Nursing Care Process in its entirety.

Methodology used

The study was conducted following the five phases of the Nursing Care Process: *assessment, diagnosis, planning, implementation, and evaluation*, according to Marjory Gordon's theoretical model of functional health patterns. This methodology enabled a holistic identification of human responses to renal impairment, encompassing physiological, emotional, social, and spiritual aspects.

Assessment framework

Marjory Gordon's model was used, which structures nursing assessment into eleven functional patterns: health perception, nutritional-metabolic, elimination, activity-exercise, sleep-rest, cognitive-perceptual, self-perception, role-relationships, sexuality, coping-stress, and values-beliefs. This tool facilitated the identification of real and potential needs, forming the basis for accurate nursing diagnoses.

The NANDA-I taxonomies (Herdman et al., 2023) were used to identify nursing diagnoses, the Nursing Outcomes Classification (Moorhead et al., 2023) to determine expected outcomes, and the Nursing Interventions Classification (NIC) to define the corresponding interventions. The relationship among the three systems enabled the nursing process to be operationalized in a scientific, standardized manner.

The institutional nursing record system was used, supplemented by manual records in standardized clinical formats, which enabled traceability of information and ensured continuity of care (Soto-Sánchez et al., 2023).

Information processing and analysis

The information collected was analyzed descriptively, following the inductive logic of the case study. Patterns of human response were identified by comparing clinical, observational, and subjective data, which were grouped into NANDA diagnoses. Subsequently, relationships were established among the diagnoses, expected outcomes (NOCs), and proposed interventions (NICs), and their effectiveness was evaluated in practice.

CASE REPORT

The nursing assessment, carried out using Marjory Gordon's model, identified relevant alterations in several functional patterns.

Assessment

The patient, a 58-year-old male with a medical diagnosis of stage IV chronic renal failure, was admitted to the hospital for exacerbation of symptoms related to fluid overload and electrolyte imbalance.

- In the *nutritional-metabolic pattern*, generalized edema, reduced intake, and weight gain due to fluid retention were observed.
- In the *elimination pattern*, the patient reported oliguria and changes in urine color.
- In the *activity-exercise pattern*, he reported fatigue at minimal exertion.
- In the *coping-stress pattern*, anxiety and concern about the possibility of starting dialysis were evident.
- The *role-relationship pattern* showed limited family support due to a lack of knowledge about the disease.

Based on this assessment, three priority nursing diagnoses were formulated according to NANDA-I (2024–2026).

Table 1. Three priority nursing diagnoses

Code and Diagnosis (NANDA-I)	Expected outcomes (NOC)	NOC indicators	Interventions (NIC)	Main activities
00026 Excess fluid volume.	0601 Water balance.	Weight control; absence of edema; adequate diuresis.	4120 Fluid management.	Assess daily water balance; monitor weight; restrict fluids; monitor signs of overload.
00195 Risk of electrolyte imbalance.	0603 Electrolyte regulation.	Normal serum sodium and potassium levels.	2080 Electrolyte monitoring.	Monitor laboratory results; coordinate therapeutic adjustments with the medical team; educate on renal diet.
00069 Ineffective coping.	1302 Active coping.	Verbalizes emotional control; uses adaptive strategies.	5230 Emotional support 5602 Teaching: disease process	Listen actively; provide clear information; strengthen self-esteem and family networks.

Source: Medical Record

Planning, implementation, and evaluation

A care plan was designed to improve fluid balance, maintain adequate electrolyte levels, and promote positive coping strategies. Interventions were implemented during seven days of hospitalization, with daily reassessment of NOC indicators.

The results showed a decrease in limb edema, stable body weight, and electrolyte levels within the normal range. The patient expressed understanding of his treatment, adherence to the fluid regimen, and a more positive attitude toward the disease.

The results obtained are consistent with those of García-Santos et al. (2022), who

demonstrated that the systematic application of the Nursing Care Process with standardized taxonomies improves clinical and self-care indicators in renal patients. They also coincide with the findings of Martínez and Rojas (2021), who reported that patient education and emotional support promote coping and therapeutic adherence.

From a disciplinary perspective, practice grounded in Gordon's model enabled the integration of biological and psychosocial aspects of care, reaffirming the importance of a holistic, humanistic approach. According to Watson (2022), the nurse-patient therapeutic relationship is an essential means for well-being and the transformation of care.

Among the limitations of the case, the patient's difficulty in maintaining fluid control at home was identified, suggesting the need to strengthen outpatient follow-up and family education. However, the results confirm the effectiveness of the Nursing Care Process as a scientific method and the applicability of the NANDA-NOC-NIC taxonomies as a conceptual and operational framework for nursing care.

CONCLUSIONS

The application of the Nursing Care Process based on the NANDA-I, NOC, and NIC taxonomies enabled the development of a comprehensive care plan focused on the hospitalized person with renal failure. The use of Marjory Gordon's assessment model facilitated the identification of physical, emotional, and social needs, promoting evidence-based decision-making. The study showed that the systematic implementation of the Nursing Care Process improves the quality of care, promotes patient autonomy, and strengthens the professional practice of nursing as a science of human care.

BIBLIOGRAPHIC REFERENCES

Alfaro-LeFevre, R. (2022). *Aplicación del proceso de enfermería: fundamentos para la práctica clínica* (10.ª ed.). Elsevier.

Carper, B. (2021). Fundamental patterns of knowing in nursing. *Advances in Nursing Science*, 44(4), E1–E7.

García-Santos, M. E., López-Rivas, J., & Moreno-Torres, R. (2022). Plan de cuidados de enfermería en pacientes con insuficiencia renal: aplicación de NANDA, NOC y NIC. *Revista Enfermería Actual en Costa Rica*, 43, 35–46.

Gordon, M. (2020). *Manual de valoración de los patrones funcionales de salud* (5.ª ed.). Mosby.

Herdman, T. H., Kamitsuru, S., & Lopes, C. T. (2023). *NANDA international nursing diagnoses: Definitions and classification 2023–2026*. Thieme.

Instituto Nacional de Salud Pública (México). (2024). *Informe sobre la enfermedad renal crónica en México 2024*. INSP.

Luyckx, V., Tonelli, M., & Stanifer, J. (2023). The global burden of kidney disease and the sustainable development goals. *Bulletin of the World Health Organization*, 101(1), 45–55.

Marriner-Tomey, A., & Alligood, M. R. (2023). *Modelos y teorías en enfermería* (10.ª ed.). Elsevier.

Martínez, L., & Rojas, C. (2021). Aplicación del proceso enfermero en pacientes con enfermedad renal: resultados de un estudio de intervención. *Revista Chilena de Enfermería*, 34(2), 89–98.

Moorhead, S., Johnson, M., Maas, M. L., & Swanson, E. (2023). *Nursing outcomes classification (NOC): Measurement of health outcomes* (7.ª ed.). Elsevier.

Orem, D. E. (2021). *Nursing: Concepts of practice* (8th ed.). Elsevier.

Potter, P. A., & Perry, A. G. (2021). *Fundamentos de enfermería* (10.ª ed.). Elsevier.

Soto-Sánchez, M., Vega, L., & Herrera, M. (2023). Uso del proceso de enfermería en hospitales públicos mexicanos: barreras y oportunidades. *Revista de Enfermería Mexicana*, 30(1), 22–31.

Watson, J. (2022). *Nursing: The philosophy and science of caring* (Rev. ed.). University Press of Colorado.

World Health Organization. (2023). *Global report on kidney health 2023*. WHO.