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Impact of Marjory Gordon's model on nursing care of CKD patients undergoing hemodialysis: A cross-sectional study

Impacto del modelo de Marjory Gordon en la atención de Enfermería de pacientes con insuficiencia Renal Crónica sometidos a Hemodiálisis: Un estudio transversal

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Abstract

This article focuses on how the Marjory Gordon model improves nursing care in patients with chronic renal failure undergoing hemodialysis. The study, conducted over 5 months at Mount Sinai Hospital, explores the efficacy of this model in identifying and treating prevalent health problems in this patient group. The Marjory Gordon model, known for its holistic and systematic approach to nursing care, was implemented to assess dysfunctional patterns in patients with chronic renal failure. A quantitative, descriptive, cross-sectional research design was used, applying surveys to a sample of 67 patients, ranging in age from 30 to 75 years, both outpatients and inpatients. The results revealed significant improvements in several

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aspects of patient care, including nutrition, metabolism, elimination, activity, exercise, sleep, rest, and stress management. These findings underscore the importance of adopting a structured, patient-centered approach to nursing care, especially in complex clinical settings such as hemodialysis. The study concludes the need to integrate and socialize care plans based on this model among nursing staff, which could significantly improve the quality of care provided. In addition, it is recommended that nursing staff reinforce and formally adopt these care plans, ensuring more effective and patient-centered care.

Keywords: nursing process, chronic renal failure, hemodialysis, Marjory Gordon, care.

Resumen

El presente artículo se centra en cómo el modelo de Marjory Gordon mejora la atención de enfermería en pacientes con insuficiencia renal crónica sometidos a hemodiálisis. El estudio, realizado durante 5 meses en el Hospital Monte Sinaí, explora la eficacia de este modelo en identificar y tratar problemas de salud prevalentes en este grupo de pacientes. El modelo de Marjory Gordon, conocido por su enfoque holístico y sistemático en la atención de enfermería, se implementó para evaluar patrones disfuncionales en pacientes con insuficiencia renal crónica. Se utilizó un diseño de investigación cuantitativo, descriptivo y transversal, aplicando encuestas a una muestra de 67 pacientes, con edades de 30 a 75 años, tanto ambulatorios como hospitalizados. Los resultados revelaron mejoras significativas en varios aspectos del cuidado del paciente, incluyendo la nutrición, metabolismo, eliminación, actividad, ejercicio, sueño, descanso, y en la gestión del estrés. Estos hallazgos subrayan la importancia de adoptar un enfoque estructurado y centrado en el paciente en el cuidado de enfermería, especialmente en contextos clínicos complejos como la hemodiálisis. El estudio concluye la necesidad de integrar y socializar planes de cuidado basados en este modelo entre el personal de enfermería, lo que podría mejorar significativamente la calidad del cuidado brindado. Además, se

recomienda que el personal de enfermería refuerce y adopte oficialmente estos planes de atención, asegurando una atención más efectiva y centrada en el paciente.

Palbras clave: proceso enfermero, insuficiencia renal crónica, hemodiálisis, Marjory Gordon, cuidado.

Introduction

In the context of chronic renal failure (CRF), especially when accompanied by hemodialysis treatments, there is a complexity of care needs, which go beyond the physical aspects and encompass psychological and social dimensions of patient care. In the field of nursing, there is a growing need for holistic approaches that address the diverse needs of these patients(Suárez Oropesa et al., 2020).

This study arises from the identification of a gap in current nursing care methodologies for CKD patients on hemodialysis. Traditional approaches often focus primarily on physical symptoms and treatment adherence, neglecting the holistic needs of the patient (Araya et al., 2023).. This gap underscores the need for a more integrated and patient-centered approach to nursing, a role that the Marjory Gordon Model is uniquely qualified to play, thanks to its holistic and systematic methodology.

The main objective of this study is to evaluate the effectiveness of the Marjory Gordon Model in improving nursing care for CKD patients on hemodialysis. Specifically, it seeks to determine how this model can contribute to improving overall patient outcomes, including aspects such as symptom management, adherence to treatment, and patient satisfaction with the care received(Martin, 2014)

It is hypothesized that implementation of the Marjory Gordon Model of nursing care will lead to significant improvements in the management of CKD patients on hemodialysis. By focusing on comprehensive patient assessment and care planning, it is expected that the model will address both the physiological and psychosocial needs of these patients, thereby improving their overall well-being and treatment experience.

The importance of this study lies in its potential to influence nursing practices on a larger scale, both nationally and internationally. The findings could provide empirical evidence on the efficacy of the model in a specific clinical context, offering valuable insights for health policies and administrative decisions in care centers for CKD patients.

From this perspective, and prior to discussing the subject, it is important to present a brief theoretical review, which allows us to place ourselves within a favorable conceptual framework.

Chronic renal failure (CKD) represents a significant medical and public health challenge. Characterized by a progressive decline in kidney function, CKD leads to the accumulation of wastes and fluids in the body, negatively impacting the patient's overall health and quality of life. As the disease progresses to the terminal stage, known as end-stage renal disease (ESRD), it becomes imperative to resort to renal replacement treatments such as hemodialysis(de Sequera et al., 2023).

Hemodialysis is a blood filtering process that mimics some kidney functions, including removing waste, excess salt and water, and maintaining nutrient balance. This treatment is generally performed three times a week, with each session lasting between three and five hours. During hemodialysis, blood is removed, cleaned through a dialyzer and then returned to the body. To facilitate this process, vascular access is required, either through an arteriovenous fistula, a graft, or a catheter(de Sequera et al., 2023; González-Robledo et al., 2020).

The management of CKD on hemodialysis is complex and goes beyond mere medical treatment. It involves substantial patient engagement, including adherence to a rigorous treatment schedule, dietary and fluid restrictions, and management of side effects such as hypotension, cramping, and fatigue. In addition, nursing care plays a vital role, not only in the administration of hemodialysis, but also in the ongoing education and support of the patient and family. Nurses provide guidance on disease management, diet, medication, and strategies for coping with treatment challenges(Hernandez et al., 2018).

The approach to care is multidisciplinary, involving nephrologists, nurses, dietitians, social workers and, on occasion, psychologists, to provide comprehensive and personalized care. This team collaborates closely to ensure that patients receive not only the necessary medical treatment, but also the emotional and psychological support, crucial to manage a chronic disease and its associated treatments(Suárez Oropesa et al., 2020). .

The implementation of the Marjory Gordon Model of nursing care for patients with chronic renal failure (CKD) undergoing hemodialysis represents a significant evolution in health care. This model, with its focus on eleven functional patterns, provides a comprehensive framework for the assessment and management of care for these patients(González-Parra et al., 2023; Martín, 2014).

CKD often culminates in the terminal stage where hemodialysis becomes essential. However, this treatment imposes unique challenges for both the patient and the nursing staff, including the need to manage physical and emotional side effects and adhere to a strict therapeutic regimen.

The person-centered Marjory Gordon Model addresses these challenges by focusing on patterns such as health perception and management, nutritional-metabolic, elimination, activity/exercise, sleep/rest, cognitive-perceptual, self-perception/self-concept, roles/relationships, sexuality/reproductive, adaptation/stress tolerance, and values/beliefs. In the context of hemodialysis, this model guides nurses to conduct a comprehensive assessment, identify potential problems, and develop personalized care plans (Aziz et al., 2015; Nuñez-Marrufo et al., 2017).

Application of the model begins with a detailed assessment of how the patient perceives his or her disease and treatment. Understanding the patient's perception of his or her health is crucial to developing effective treatment management strategies and education. Nutritional care is another critical aspect, given that hemodialysis patients require a special diet to control fluid balance, electrolytes, and prevent waste accumulation(Martínez-López et al., 2014).

Regarding the elimination pattern, it is critical to monitor residual urinary function and manage the effects of anuria or oliguria. The activity/exercise pattern encompasses assessment of the patient's

physical capacity and promotion of safe activities that improve strength and general well-being. Sleep quality and rest are also vital, as fatigue is a common symptom in these patients(Khan et al., 2023; Martinez Lopez et al., 2014).

The cognitive-perceptual pattern focuses on the patient's ability to understand and process information, crucial for the effective management of their treatment. Self-image and self-concept are often affected in patients undergoing intensive and prolonged treatments such as hemodialysis, requiring emotional and psychological support(Abad López & Abad López, 2021).

The patient's roles and relationships may change drastically due to his or her disease, impacting his or her social and family life. In this sense, Gordon's model helps to identify changes in these patterns and provide the necessary support. Sexuality and reproduction may also be affected, requiring a sensitive and respectful approach.

Stress management and coping are crucial, as CKD and hemodialysis can be stressful experiences. Finally, understanding the patient's values and beliefs allows for care that respects their individuality and cultural preferences.

Methodology

This research adopted a quantitative approach, centered on measurement and calculation(Sampieri et al., 2014). to identify altered Marjory Gordon functional patterns in patients with chronic renal failure (CKD) undergoing hemodialysis at Mount Sinai General Hospital. A survey validated by three nursing experts was used: Dr. Mery Rea, Mgtr. María Olalla and Mgtr. David Agualongo. The quantified results of the survey made it possible to develop specific care plans and socialize priority problems with the nursing professionals.

The research design was non-experimental, descriptive and cross-sectional cohort. No variables were manipulated and no participants were randomly assigned. Instead, phenomena were described as they occurred in their natural setting, particularly between January and May 2023. The descriptive objective focused on specifying

properties, characteristics, and conditions of CKD patients, detailing aspects related to their health status, treatment, and disease management. The population studied included 67 outpatients and inpatients of Internal Medicine and Emergency of the Mount Sinai General Hospital, aged 30 to 75 years. This diverse population, composed of men and women with different medical backgrounds, shared the common diagnosis of CKD, a condition requiring regular hemodialysis treatment. The sample was selected using a nonprobability method by convenience. All patients with CKD who were receiving in-center hemodialysis were included, following inclusion criteria such as confirmed diagnosis of CKD, current hemodialysis treatment, and willingness to give informed consent. Those on peritoneal dialysis, under 18 years of age or with acute renal failure were excluded.

For data collection, a structured survey of 50 closed-ended questions with a 3-level Likert scale was used. This survey allowed detailed identification of the alteration of the Marjory Gordon functional patterns in the patients. Each participant gave informed consent prior to the application of the survey.

Finally, the information collected was analyzed using SPSS V.25 software, which allowed the generation of tables and frequency graphs for each question applied to the patients. This analysis facilitated the understanding of the alterations in the functional patterns and the development of appropriate nursing care plans.

Results

Table 1. *Distribution of vital signs in patients with CKD.*

NO.	Vital Signs	Definition	Percentage of Patients
1	Normal Blood Pressure	120/80 mmHg	23.9%
2	High Normal Blood Pressure	130/89 mmHg	10.4%
3	Hypertension Grade 1	140/99 mmHg	29.9%
4	Hypertension Grade 2	160/104 mmHg	23.9%
5	Hypertension Grade 3	≥ 180/110 mmHg	6.0%
6	Hypotension	90/60 mmHg	6.0%
7	Bradycardia	< 60 beats/min	11.9%

8	Normocardia	60-100 beats/min	67.2%
9	Tachycardia	> 100 beats/min	20.9%
10	Eupnea	16-22 breaths/min	94.0%
11	Tachypnea	> 22 breaths/min	6.0%
12	Afebrile	36-37.5 °C	97.0%
13	Fever	> 38 °C	3.0%
14	Normal Oxygen Saturation	> 95%	77.6%
15	Mild Hypoxia	93-95%	22.4%

Note: Vital signs of patients diagnosed with CKD. WHO (2023).

In the population of patients with chronic renal failure undergoing hemodialysis, the table shows a varied distribution of vital signs. Some 23.9% had normal blood pressure, while 60.7% had varying degrees of hypertension, indicating an elevated cardiovascular risk. In addition, 6.0% experienced hypotension. In terms of heart rate, the majority (67.2%) had normocardia, although 20.9% presented tachycardia and 11.9% bradycardia, suggesting the need for detailed evaluation for these groups. Regarding respiratory rate, the majority (94.0%) showed a normal rate (eupnea), reflecting good respiratory control. These data reflect the complexity of health management in these patients, highlighting the importance of personalized monitoring and care to address these varied vital signs and their potential clinical implications.

Table 2. *Marjory Gordon's Functional Patterns of Health*

Items evaluated	Always	%	A/v	%	Never	%	Total
Compliance with recommendations	57	85%	7	10%	3	5%	67
Adherence to medication schedule	54	81%	9	13%	4	6%	67
Consumption of psychotropic substances	9	13%	14	21%	44	66%	67
Skin problems due to hemodialysis	13	19%	43	64%	11	16%	67
Nursing assessment of vital signs	60	90%	7	10%	0	0%	67
Fistula cleaning by nursing	67	100%	0	0%	0	0%	67
Explanation of the	65	97%	2	3%	0	0%	67

procedure by the nurse							

Note: Description of the health perception-management pattern. By authorship (2023).

Table 2 shows the Marjory Gordon functional health patterns in patients with chronic renal failure undergoing hemodialysis, the results reflect a high level of compliance and adherence to medical recommendations and medication schedules, with 85% and 81% respectively, indicating a significant commitment to treatment. Although 13% of patients always consumed psychotropic substances, the majority (66%) never did, suggesting a generally adequate management of psychological conditions. Skin problems were experienced by 19% of the patients consistently, but the majority faced them only occasionally. Nursing care was outstanding, with constant assessment of vital signs (90%), fistula cleaning (100%) and explanation of the procedure (97%) always performed, demonstrating exceptional care practice and effective communication with patients. These findings underscore the importance of a comprehensive and personalized care approach in the management of hemodialysis and chronic renal failure treatment.

Table 3. *Nutritional-metabolic pattern according to Marjory Gordon*

Items evaluated	Always	%	A/v	%	Never	%	Total
Lack of appetite after diagnosis	20	30%	26	39%	21	31%	67
Post-hemodialysis weight gain	1	1.5%	21	31%	45	67.5%	67
Post-hemodialysis weight loss	59	88%	7	10.5%	1	1.5%	67
Consumption of a balanced and healthy diet	44	66%	19	28%	4	6%	67

Note: Scrutiny of dietary habits linked to kidney disease and its hemodialysis treatment. Authored by the author (2023).

Table 3 presents the analysis of the nutritional-metabolic pattern in patients with chronic renal failure undergoing hemodialysis, according to Marjory Gordon, reveals crucial aspects about the eating habits affected by the disease and its treatment. Thirty percent of patients experienced lack of appetite after diagnosis, and a similar percentage (39%) experienced it occasionally, which can significantly influence their nutritional status. Regarding post-hemodialysis body weight, 88% of patients reported weight loss, which could reflect metabolic problems or inadequate nutrient intake. Conversely, only 1.5% experienced weight gain, while 31% did so occasionally, suggesting individual variations in metabolic response to treatment. Positively, 66% of patients consumed a balanced and healthy diet, an essential factor in the management of CKD. These findings highlight the importance of personalized nutritional care in the treatment of CKD, focusing on addressing poor appetite and ensuring a balanced diet to optimize patients' well-being and quality of life.

Table 4. *Elimination pattern according to Marjory Gordon*

Items evaluated	Always	%	A/v	%	Never	%	Total
Difficulty urinating post-hemodialysis	25	37%	10	15%	32	48%	67
Post-hemodialysis stool problems	35	52%	26	39%	6	9%	67
Post-hemodialysis burning, pain or bleeding	4	6%	21	31%	42	63%	67

Note: The table reflects elimination problems faced by renal patients after hemodialysis treatment. Authored by author (2023).

Table 4, which evaluates the elimination pattern in patients with chronic renal failure undergoing hemodialysis according to Marjory Gordon, reveals significant information on the difficulties faced by these patients. Thirty-seven percent reported always having difficulty

urinating after hemodialysis, while 48% never experienced this problem, suggesting that most do not face this specific challenge.

Regarding post-hemodialysis stool problems, 52% of patients experienced them always and 39% sometimes, indicating that these problems are common and could be related to the dialysis process and changes in diet and hydration. Only 9% never had stool problems. On the other hand, post-hemodialysis burning, pain or bleeding was less common, with only 6% experiencing it always, while 63% never faced these symptoms. These results highlight the importance of proper elimination management and the need for specific interventions for those patients who face difficulties, thus improving their quality of life and comfort during hemodialysis treatment.

Table 5. *Activity-exercise pattern according to Marjory Gordon*

Items evaluated	Always	%	A/v	%	Never	%	Total
Shortness of breath in daily activities	14	21%	28	42%	25	37%	67
Incapacity for fear of damaging the fistula	32	48%	28	42%	7	10%	67
Use of assistive mobility devices	28	42%	15	22%	24	36%	67

Note: Specification of the functional capacity of the renal patient to perform daily activities in relation to the disease and treatment. Authored by author (2023).

Table 5, focusing on the Marjory Gordon activity-exercise pattern in patients with chronic renal failure undergoing hemodialysis, provides valuable information on the functional capacity of these patients in relation to their disease and treatment. Twenty-one percent of patients always experienced shortness of breath in daily activities, while 42% experienced it occasionally and 37% never had this problem, indicating that, although it is a concern for some, it does not affect most on a consistent basis.

Concern about damaging the fistula is notable, with 48% feeling unable always for fear of damaging it and another 42% occasionally concerned about this, reflecting the significant impact that hemodialysis treatment has on lifestyle and perception of safety in daily activities. In addition, 42% always required the use of assistive devices to mobilize and 22% did so sometimes, suggesting that mobility is a considerable challenge for many of these patients. These results underscore the importance of providing adequate support and resources to renal patients to improve their mobility and reduce the fear of fistula damage, thereby improving their independence and quality of life.

Table 6. *Sleep-rest pattern according to Marjory Gordon*

Items evaluated	Always	%	A/v	%	Never	%	Total
Maintains 8 hours of sleep	17	25%	41	61%	9	13%	67
Comfortable sleep	15	22%	43	64%	9	13%	67
Use of sleep medications	2	3%	12	18%	53	79%	67
Problems resting due to fistula	11	16%	33	49%	23	34%	67

Note: Characterization of sleep quality, relaxation perceived by patients in relation to the diagnosis of chronic renal failure. Authored by author (2023).

Table 6 shows the quality of sleep in patients with chronic renal failure undergoing hemodialysis varies. Twenty-five percent maintain 8 hours of sleep and 22% always sleep comfortably, which is positive. However, 61% and 64% achieve it only sometimes, respectively, suggesting sleep problems in a significant proportion. The use of sleep medication is low (3% always), indicating that it is not a commonly adopted solution. In addition, 16% always have problems resting due to the fistula, highlighting a specific aspect of the treatment that affects rest.

Table 7. *Cognitive-perceptual pattern according to Marjory Gordon*

Items evaluated	Always	%	A/v	%	Never	%	Total
Hearing difficulties	10	15%	27	40%	30	45%	67

Vision problems	27	40%	20	30%	20	30%	67
Changes in concentration or memory	12	18%	36	54%	19	28%	67
Difficulty with hemodialysis treatment	9	13%	31	46%	27	40%	67

Note: Changes in cognitive abilities experienced by respondents after undergoing hemodialysis. Authorship (2023).

Patients face varied cognitive and perceptual challenges, according to Table 7 15% always have difficulty hearing and 40% sometimes, while vision problems are more common (40% always). Concentration and memory are also affected, with 18% always and 54% sometimes experiencing changes. In addition, 13% always encounter difficulty with hemodialysis treatment, which could affect their ability to manage their care effectively.

Table 8. *Self-perception-self-concept pattern according to Marjory Gordon*

Items evaluated	Always	%	A/v	%	Never	%	Total
Self-satisfaction	44	66%	14	21%	9	13%	67
Well-being with body image after fistula	45	67%	13	19%	9	13%	67
Mood changes due to illness	10	15%	46	69%	11	16%	67
Fear, anxiety, depression in the face of disease	22	33%	32	48%	13	19%	67
Emotional support from nursing staff	61	91%	6	9%	0	0%	67

Note: Manifestation of the mood and communication state of the patient with chronic renal failure. Authored by author (2023).

Self-esteem and body image are generally positive, as shown in Table 8, with 66% satisfied with themselves and 67% always well with their body image after fistula. However, mood change due to the disease is common (69% sometimes), and 33% always experience fear, anxiety

or depression. Notably, 91% always receive emotional support from the nursing staff, highlighting the importance of emotional support in their treatment.

Table 9. *Role-relationship pattern according to Marjory Gordon*

Items evaluated	Always	%	A/v	%	Never	%	Total
Considered sociable	61	91%	5	7.5%	1	1.5%	67
Belongs to a social group	32	48%	22	33%	13	19%	67
Social exclusion due to illness	3	4.5%	17	25%	47	70%	67
Income for health needs	20	30%	31	46%	16	24%	67
Feeling part of the community where you live	42	63%	24	36%	1	1.5%	67
Illness-related violence (physical, psychological, emotional)	4	6%	15	22.5%	48	71.5%	67
Coexistence:							
- Alone	3	4.5%	-	-	-	-	67
- Family	62	93%	-	-	-	-	67
- Caregivers	2	3%	-	-	-	-	67
- Residence	0	0%	-	-	-	-	67

Note: Family and social relationships of the patient with chronic renal failure. Authored by author (2023).

Table 9 shows that patients maintain an active social life, with 91% considering themselves always sociable. Membership in social groups is less common (48% always). Social exclusion due to the disease is low (4.5% always), but 30% always need income for health needs. Most feel part of their community (63% always), and disease-related violence is low (6% always).

Table 10. *Sexuality-reproduction pattern according to Marjory Gordon*

Items evaluated	Always	%	A/v	%	Never	%	Total
Sexually active	7	10.5%	21	31%	39	58.5%	67
Satisfactory sexual relations	8	12%	19	28.5%	40	60%	67
Changes in sexual health due to disease	15	22.5%	19	28.5%	33	49%	67

Note: Describes the satisfaction or dysfunction of the patient with CKD in sexual and reproductive health in relation to the disease and treatment. Authorship (2023).

According to Table 10, sexual activity in these patients is limited, with only 10.5% always being sexually active and 12% always having satisfactory sexual relations. Changes in sexual health due to the disease are reported by 22.5% always, suggesting that CKD and treatment significantly affect this area of their lives.

Table 11. Adaptation-stress tolerance pattern according to Marjory Gordon

Items evaluated	Always	%	A/v	%	Never	%	Total
Perform activities to reduce anxiety or depression	14	20.9%	25	37.3%	28	41.8%	67
Tenseness during hemodialysis	22	32.8%	36	53.7%	9	13.4%	67
Crisis or major problems in the last year	13	19.4%	27	40.3%	27	40.3%	67

Note: The table reflects stressful situations that patients with CKD feel in relation to the disease and treatment. Authored by author (2023).

According to Table 11, stress management varies, with 20.9% always performing activities to reduce anxiety or depression. Stress during hemodialysis is common (32.8% always), and 19.4% have had crises or major problems in the last year, reflecting the emotional impact of their condition and treatment.

Table 12 . *Values-beliefs pattern according to Marjory Gordon*

Items evaluated	Always	%	A/v	%	Never	%	Total
Considers it important to belong to a religious group	43	64.2%	15	22.4%	9	13.4%	67
His religion prevents him from carrying out his treatment	4	6%	5	7.5%	58	86.5%	67
Plans for the future	35	52.2%	15	22.4%	17	25.4%	67
Religious group to which you belong	-	-	-	-	-	-	-
a) Catholic	39	58.2%	-	-	-	-	39
b) Evangelical	24	35.8%	-	-	-	-	24
c) Jehovah's Witness	4	6%	-	-	-	-	4
d) Others	0	0%	-	-	-	-	0

Note: Emphasizes spiritual and religious beliefs that influence the health of CKD patients. Authored by author (2023).

Table 12 establishes that most consider it important to belong to a religious group (64.2% always), and few see their religion as an impediment to treatment (6% always). More than half have plans for the future (52.2% always), and most belong to Catholic or evangelical religious groups. These results indicate that religious and spiritual

beliefs play an important role in their perspective and management of the disease.

Conclusions

The adoption of Gordon's model has facilitated a more comprehensive and detailed assessment of patients' needs, allowing nurses to address critical aspects of care that go beyond immediate physical needs.

One of the key findings is improved self-care and adherence to treatment. The model has proven effective in educating patients about the importance of following medical recommendations and medication schedules, which is crucial to the successful management of chronic renal failure. This increased adherence is a testament to the model's effectiveness in empowering patients and encouraging their active participation in their own care.

In terms of nutrition and metabolism, the study highlights the usefulness of the model in identifying and treating specific nutritional problems associated with chronic renal failure and hemodialysis. Personalized attention in this area has led to more effective nutritional interventions, improving the overall health and well-being of patients.

Mobility and daily functional ability have also benefited. The model has helped to recognize and address patient concerns related to mobility, especially regarding fear of damaging the fistula and the need for assistive devices. This comprehensive approach has improved patients' independence and quality of life.

In addition, the model has provided valuable insights into sleep and rest challenges, allowing nurses to develop strategies to improve sleep quality and provide adequate rest, crucial aspects for patients' recovery and overall well-being.

Taken together, these findings emphasize the importance of the Marjory Gordon Model in nursing practice for hemodialysis patients. By providing more holistic, patient-centered care, the model not only improves the quality of nursing care, but also comprehensively supports patients in their treatment and management of chronic renal failure.

Reference

Abad López, L., & Abad López, L. (2021). *Pediatric nursing assessment : based on Marjory Gordon's philosophy*. https://repositorio.xoc.uam.mx/jspui/handle/123456789/26030

Araya, A. V., Bezanilla, C. G., Figueroa, M., Pino, J., Cancino, J., & Mackenney, B. (2023). Effects of a resistance exercise routine applied to patients with chronic kidney disease during hemodialysis. *Revista Médica Clinica Las Condes*, *34*(1), 92-98. https://doi.org/10.1016/J.RMCLC.2022.12.002

Aziz, A., Hidayat, A., & Kes, M. (2015). Model documentation of assessment and nursing diagnosis in the practice of nursing care management for nursing students. *International Journal of Advanced Nursing Studies*, *4*(2), 158-163. https://doi.org/10.14419/IJANS.V4I2.5116

de Sequera, P., Bover, R., Ivanova-Markova, Y., Ivanova, A., González-Domínguez, A., Valls, M., & Campos, V. (2023). Economic impact of the use of patiromer in chronic kidney disease or heart failure for the treatment of chronic hyperkalemia in Spain. *Nefrología*, *43*(6), 721-730. https://doi.org/10.1016/J.NEFRO.2022.08.007.

González-Parra, E., Moreno-Gómez-Toledano, R., Mas-Fontao, S., & Bosch, R. J. (2023). Bisphenol A in renal failure: how long can it be used? Is it time to avoid it? *Nephrology*. https://doi.org/10.1016/J.NEFRO.2023.10.003

González-Robledo, G., Jaramillo Jaramillo, M., & Comín-Colet, J. (2020). Diabetes mellitus, heart failure and chronic kidney disease. *Revista Colombiana de Cardiología*, *27*, 3-6. https://doi.org/10.1016/J.RCCAR.2019.12.009. https://doi.org/10.1016/J.RCCAR.2019.12.009

Hernández, A., Monguí, K., & Rojas, Y. (2018). Description of body composition, muscle strength and physical activity in patients with chronic renal failure on hemodialysis in a renal unit in Bogotá, Colombia. *Revista Andaluza de Medicina Del Deporte*,

11(2), 52-56. https://doi.org/10.1016/J.RAMD.2016.09.005. https://doi.org/10.1016/J.RAMD.2016.09.005

Khan, W., Khan, A. A., Khan, J., Khatoon, N., Arshad, S., & De los Ríos Escalante, P. (2023). Death caused by covid-19 in top ten countries in asia affected by covid-19 pandemic with special reference to Pakistan. *Brazilian Journal of Biology*, *83*. https://doi.org/10.1590/1519-6984.248281. https://doi.org/10.1590/1519-6984.248281.

Martín, R. A. (2014). Patient satisfaction in hemodialysis as a criterion of quality of care in nursing. *Revista Mexicana de Urología*, *74*(5), 292-295. https://doi.org/10.1016/J.UROMX.2014.09.008

Martínez López, M. A., Pérez Constantino, M., & Montelongo Meneses, P. P. (2014). Nursing Care Process for an infant with pneumonia based on Marjory Gordon's functional patterns. *Enfermería Universitaria*, *11*(1), 36-41. http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S1665-70632014000100006&lng=es&nrm=iso&tlng=es. http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S1665-70632014000100006&lng=es&nrm=iso&tlng=es

Martínez-López, M. A., Pérez-Constantino, M., & Montelongo-Meneses, P. P. (2014). Nursing Care Process for an infant with pneumonia based on Marjory Gordon's functional patterns. *Enfermería Universitaria*, *11*(1), 36-43. https://doi.org/10.1016/S1665-7063(14)72662-4.

Nuñez-Marrufo, J., Jiménez-González, M., Moreno-Pérez, N., Padilla Raygoza, N., & Flores-Polanco, S. (2017). Standardization of hemodialysis vascular access management in the Hospital de Alta Especialidad de Yucatán. *Enfermería Universitaria*, *14*(4), 286-292. https://doi.org/10.1016/J.REU.2017.08.004

Sampieri, R. H., Collado, C. F., Lucio, P. B., Valencia, S. M., & Torres, C. P. M. (2014). *Research methodology*. McGraw-Hill Education.

Suárez Oropesa, A., María Martínez Cutiño, P., Junior, C., & Rojas, G. (2020). Vascular accesses in patients with CKD on hemodialysis. *April 16*, *59*(277), 1-6. http://www.rev16deabril.sld.cu/index.php/16_4/article/view/864.