

Academic article

Nursing Management of Thai Buddhist Monks on Hemodialysis during Religious Intermittent Fasting: A Narrative Review and Practical Guidance

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Abstract

Hemodialysis is life-sustaining for end-stage renal disease patients; however, managing therapy in Thai Buddhist monks is complex due to strict religious fasting and dietary constraints. This challenge is particularly acute in elderly, frail monks with multiple comorbidities.

This narrative review synthesizes evidence on the impact of religious fasting on hemodialysis outcomes and proposes tailored nursing management strategies. Findings indicate that fasting in this population can exacerbate malnutrition, electrolyte imbalance, and hemodynamic instability.

Effective management requires a structured, culturally sensitive approach, including tailored nutritional support, rigid electrolyte monitoring, medication adjustment, and care plans that honor monastic rules. This review provides a comprehensive framework to support safe, holistic care in this unique population.

Keywords: Cultural competence, Hemodialysis, Nursing management, Religious intermittent fasting, Thai Buddhist monks

Introduction

Fasting is a significant religious practice in Buddhism, symbolizing self-discipline, mindfulness, and detachment from worldly desires.¹ Thai Buddhist monks observe a daily fasting pattern by abstaining from eating after noon until dawn the next day. For monks undergoing hemodialysis, this spiritual observance introduces physiological and management complexities that healthcare professionals must understand and address.¹⁻²

Chronic kidney disease (CKD) represents a

significant global health burden, with a worldwide prevalence of approximately 13.4%.³ The incidence is rising, particularly among older adults with comorbidities such as diabetes and hypertension. In Thailand, CKD affects roughly 17.6% of the population, impacting over eight million people, however, nationwide epidemiological data specifically for Buddhist monks remains unavailable.⁴ Despite this data gap, existing evidence suggests a high burden of non-communicable diseases (NCDs) within this group. Studies indicate that the prevalence of metabolic

syndrome among monks ranges from 13% to 20.8%, and more than half have underlying conditions like diabetes or hypertension.⁵ These factors point to a potentially elevated risk for CKD and its associated complications.

Patients undergoing hemodialysis are physiologically vulnerable to rapid fluctuations in fluid and electrolyte balance, protein-energy wasting, and intradialytic hypotension (IDH).⁶⁻⁹ These vulnerabilities stem from impaired renal function, significant fluid shifts during ultrafiltration, and dysregulated metabolic pathways. Such risks are further exacerbated during fasting, as restricted nutritional intake and altered fluid consumption patterns disrupt homeostasis. Within this context, elderly monks represent a particularly high-risk subgroup. Aging is characterized by reduced physiological reserve, sarcopenia, diminished cardiovascular responsiveness, and a high prevalence of multimorbidity. Collectively, these factors increase susceptibility to malnutrition, electrolyte imbalances, and hemodynamic instability during dialysis, especially under conditions of prolonged fasting. Notably, while monks are permitted to consume fluids during fasting periods, inadequate or inappropriate intake, such as the consumption of high-sugar or high-potassium beverages, may contribute to dehydration or electrolyte disturbances. From a clinical perspective, patients with ESRD and multiple comorbidities are generally considered high-risk for prolonged fasting.^{7,10} However, in practice, many monks continue to observe fasting due to strong religious commitment.¹⁻² Therefore, rather than discouraging fasting entirely, healthcare providers must adopt a culturally sensitive and risk-informed approach to ensure patient safety while respecting religious values.

Nurses play a critical role in balancing clinical safety with respect for religious beliefs. They must recognize the physiological impact of fasting on dialysis outcomes, monitor changes in nutritional and hemodynamic status, and provide individualized guidance that aligns with both medical and monastic principles.^{7,11-12}

This narrative review aims to synthesize current evidence regarding the impact of religious intermittent fasting on hemodialysis care and to propose practical

nursing management strategies tailored to Thai Buddhist monks. A narrative review was conducted using PubMed, Scopus, CINAHL, and Thai Journals Online (ThaiJO). Search terms included “hemodialysis,” “chronic kidney disease,” “intermittent fasting,” “religious fasting,” and “culturally sensitive nursing care.” Articles published in English and Thai between 2011 and 2024 were considered. Studies were selected based on relevance to hemodialysis care, fasting-related physiological and clinical outcomes, and nursing or multidisciplinary management. Eligible sources included clinical studies, systematic reviews, guidelines, and context-relevant reports.^{7,11-13} Articles were excluded if they were unrelated to dialysis care, lacked clinical applicability, or were duplicates. The extracted evidence was narratively synthesized into thematic domains to inform clinical interpretation and practical nursing recommendations. These themes guided the organization of the subsequent sections.

This narrative review identified four key thematic domains: 1) physiological effects of intermittent fasting, 2) clinical risks in hemodialysis patients, 3) nursing management strategies, and 4) cultural and ethical considerations. These themes guided the organization and interpretation of the subsequent sections and informed the development of practical nursing recommendations.

Theme 1: Physiological Effects of Intermittent Fasting

Religious Intermittent Fasting in Thai Buddhist Monks

Thai Buddhist monks follow the Vinaya—the monastic code of conduct—which prohibits eating solid food after midday. During fasting, monks may consume water, fruit juice, or herbal drinks in the afternoon, depending on monastic interpretation and health conditions. Fasting is not primarily for asceticism but for maintaining mindfulness and discipline.

From a physiological perspective, intermittent fasting can influence glucose levels, hydration status, and energy metabolism.¹⁴ While healthy individuals may tolerate fasting well, patients with chronic kidney disease face additional risks. Reduced caloric intake

and limited fluid consumption can contribute to hypotension during dialysis, electrolyte disturbances, and nutritional deficiencies.¹¹⁻¹³ In elderly patients, these metabolic adaptations are further compounded by age-related physiological decline, including sarcopenia, impaired gluconeogenesis, and diminished renal and cardiovascular reserves.¹⁵⁻¹⁶ Consequently, older hemodialysis patients exhibit a heightened susceptibility to hypoglycemia, metabolic dysregulation, and a protracted recovery from physiological stress during fasting periods. Nurses must, therefore, evaluate each monk's physical condition, dialysis prescription, and fasting capability before any adjustments are made.

Physiology of Intermittent Fasting and Implications for Dialysis Patients

Intermittent fasting (IF) involves structured periods of abstinence from food and, in some traditions, fluids. For Thai Buddhist monks, this typically entails consuming one or two meals before midday, followed by a fast that lasts until the subsequent dawn. This pattern triggers significant metabolic shifts, including suppressed insulin levels, accelerated lipolysis, and the induction of ketogenesis. In patients undergoing hemodialysis, these adaptations can become maladaptive, as impaired renal function prevents the precise regulation of fluid, electrolytes, and acid-base homeostasis.

Fasting significantly disrupts fluid volume status. Inadequate intake during the fasting window may precipitate intravascular volume depletion and subsequent intradialytic hypotension (IDH). Conversely, compensatory over-consumption of fluids before the fast begins may lead to interdialytic weight gain and acute fluid overload. Furthermore, altered dietary patterns and the misalignment of medication timing, specifically phosphate binders may contribute to electrolyte imbalances, such as hyperkalemia and hyperphosphatemia.⁷ In elderly monks, the restricted protein window may further exacerbate protein-energy wasting (PEW), particularly when compounded by pre-existing comorbidities.

Metabolic Effects

During fasting, the body shifts from glucose use to fat metabolism. Liver glycogen maintains blood glucose initially, but with prolonged fasting, insulin levels fall, glucagon rises, and lipolysis predominates, producing ketone bodies for energy.¹⁷⁻¹⁸ In healthy individuals, this may improve insulin sensitivity and reduce oxidative stress. However, in hemodialysis patients, reduced renal clearance can lead to accumulation of ketones and metabolic acids, increasing the risk of acid-based imbalance.^{7,10} Therefore, even mild fasting requires monitoring of glucose, electrolytes, and bicarbonate levels.

Fluid and Electrolyte Balance

Fluid management is central to dialysis care. Fasting-related reduced fluid intake may worsen dehydration, particularly in hot climates, leading to intradialytic hypotension, cramps, or dizziness.^{8-9,19} Conversely, excessive fluid intake before fasting hours can cause excessive interdialytic weight gain and pulmonary congestion. Altered meal timing may also disturb electrolyte balance and medication schedules. For example, delayed phosphate binder intake may increase serum phosphate.⁷ Regular assessment of weight, blood pressure, and laboratory values, coupled with patient education, is essential.

Cardiovascular and Hemodynamic Effects

Reduced plasma volume during fasting can decrease venous return and cardiac output, increasing the risk of hypotension during dialysis.^{8-9,19} In patients with underlying cardiovascular disease, fasting-related hemodynamic changes may contribute to hemodynamic instability, including hypotension or related symptoms. Although IF has been linked to lower blood pressure and improved lipid profiles in the general population¹⁸, its cardiovascular benefits in dialysis patients remain unclear. Careful monitoring and adjustment of ultrafiltration targets are required.⁸⁻⁹

These risks are magnified in the elderly due to impaired autonomic regulation and diminished vascular reactivity.¹⁵⁻¹⁶ Age-related attenuation of baroreceptor sensitivity increases the risk of intradialytic hypotension (IDH) and postural insta-

bility, particularly when exacerbated by reduced fluid intake during fasting. Furthermore, decreased vascular compliance, often seen in older patients with chronic kidney disease, limits the body's ability to compensate for the rapid fluid shifts inherent in the hemodialysis process.^{7,10}

Nutritional and Glycemic Considerations

Restricted eating windows may reduce total calorie and protein intake, exacerbating protein-energy wasting is a common problem in dialysis patients.⁶⁻⁷ Limited food offerings may further increase this risk for monks. Nutrient-dense meals rich in high-quality protein should be prioritized before fasting begins, and supplements considered when appropriate.⁷ In diabetic patients, fasting raises the risk of hypoglycemia or postprandial hyperglycemia, necessitating individualized glucose monitoring and medication adjustment.²⁰

Elderly patients are uniquely vulnerable to protein-energy wasting (PEW) and sarcopenia, a state driven by suboptimal dietary intake, anabolic resistance, and the inflammaging characteristic of chronic inflammation.^{6,15-16} For these individuals, fasting may further accelerate proteolysis and functional decline, precipitating a cycle of increased morbidity and diminished quality of life.

Overall Implications

Intermittent fasting presents both opportunities and challenges for hemodialysis patients. While potential metabolic benefits exist, risks of dehydration, electrolyte imbalance, and malnutrition are significant. For monks, fasting is a spiritual obligation, requiring a culturally sensitive approach. Comprehensive assessment, close monitoring, and individualized care are essential to ensure safety while respecting religious practice.⁷

Theme 2: Clinical Risks in Hemodialysis Patients

Clinical Challenges in Hemodialysis Management during Fasting

Managing hemodialysis during fasting requires attention to several interrelated factors:

1. Fluid Balance and Dehydration

Monks who fast may have reduced fluid intake, increasing the risk of dehydration. This can lead to hypotension during dialysis or post-dialysis fatigue.^{6,8-9} Accurate assessment of dry weight, interdialytic weight gain, and urine output is essential.

2. Electrolyte and Nutritional Imbalance

Skipping meals may affect potassium, sodium, and phosphate levels. Inadequate protein or calorie intake can exacerbate malnutrition, common among long-term dialysis patients.⁶⁻⁷

3. Blood Pressure Regulation

Fasting and dialysis both affect hemodynamic stability. Nurses must monitor pre- and post-dialysis blood pressure closely and adjust ultrafiltration targets as needed.⁸⁻⁹

4. Medication Timing and Pharmacokinetics

Medication management for fasting monks on hemodialysis must account for altered meal-to-dose timing, polypharmacy, and dialysis-related drug clearance. Many therapeutic agents particularly water-soluble and low protein-bound drugs, such as certain antibiotics are significantly removed during the dialysis process, necessitating precise dose adjustments or post-dialysis administration.²¹

The monastic fasting schedule further complicates the administration of medications that require a food bolus for absorption or to mitigate gastric irritation. In elderly monks, age-related pharmacokinetic alterations including reduced hepatic metabolism and altered volume of distribution coupled with polypharmacy, heighten the risk of drug accumulation and adverse drug-drug interactions.²¹⁻²² Consequently, individualized regimens and robust interprofessional coordination between physicians, pharmacists, and nursing staff are essential to maintain therapeutic efficacy.²¹ Patient education, culturally adapted to the monastic lifestyle, is critical to ensuring medication adherence and preventing complications during fasting periods.²²

5. Fatigue and Weakness

Fasting may be associated with fatigue or dizziness, which may overlap with dialysis-related complications.¹¹⁻¹³ Nurses should distinguish between fasting-related symptoms and dialysis-related events through careful assessment.

Theme 3: Nursing Management Strategies

Nursing Management and Clinical Challenges

The management of hemodialysis for fasting Buddhist monks represents an integration of clinical care and spiritual practice. To provide truly holistic care, nurses must serve as a bridge between evidence-based protocols and the unique socio-cultural requirements of the Sangha. Through individualized risk stratification, vigilant physiological monitoring, and culturally congruent communication, it is possible to facilitate safe religious fasting without compromising clinical outcomes. This approach not only ensures patient safety but also respects the autonomy and spiritual integrity of the monk, fostering a stronger therapeutic alliance.^{7,11-12}

This approach aligns with Thailand's cultural context, where religion and healthcare are deeply interconnected. Promoting cultural competence among nurses not only enhances patient satisfaction but also strengthens the ethical foundation of care for special populations such as monks.

Effective nursing care requires integrating clinical knowledge with respect for monastic values. Key management strategies include:

1. Pre-Fasting Assessment

Before fasting periods, nurses should assess the monk's overall health, dialysis adequacy, nutritional status, and risk factors.⁸⁻⁹ Collaboration with the nephrology team helps determine whether fasting is medically advisable.⁷

2. Individualized Care Planning

Care plans should be tailored to each monk's fasting practice, dialysis schedule, and comorbid conditions. When possible, dialysis sessions can be scheduled in the morning to minimize fatigue from prolonged fasting.¹¹⁻¹²

3. Fluid and Dietary Adjustments

Nurses should guide monks on the appropriate volume and timing of fluid intake before noon. Encouraging nutrient-dense morning meals helps maintain energy throughout the day.^{8,19}

4. Medication Coordination

Adjustments in medication timing should be made with physician approval²¹. Nurses should educate monks about medication adherence and possible side effects during fasting.²²

5. Monitoring and Documentation

Continuous monitoring of vital signs, weight, and laboratory values is crucial. Any abnormal findings should be reported promptly and recorded systematically to ensure consistent follow-up.⁸⁻⁹

6. Communication and Respect

Nurses should use polite, compassionate communication, addressing monks with proper respect according to Thai cultural norms. Any discussions regarding health decisions should be handled with sensitivity to monastic hierarchy and beliefs.¹¹⁻¹²

7. Geriatric Considerations for Monastic Populations

Nursing interventions for elderly monks undergoing hemodialysis during fasting must incorporate multidimensional geriatric assessments, including frailty screening, functional status evaluation, and rigorous fall risk stratification.¹⁵⁻¹⁶ Individualized care plans should address diminished physiological reserve (homeostenosis), heightened sensitivity to rapid fluid shifts, and an elevated risk of protein-energy wasting. Proactive monitoring and early clinical intervention are paramount to mitigating adverse outcomes, such as syncopal episodes or electrolyte crises in this highly vulnerable population.

Nutritional Assessment Tools

Malnutrition and protein-energy wasting (PEW) are pervasive complications in hemodialysis patients, particularly among the elderly with significant comorbidities.⁶⁻⁷ These risks are further compounded by religious fasting; therefore, a systematic and tiered nutritional assessment is vital for early detection and longitudinal monitoring.

While specific nutritional tools were not the primary focus of this review, their inclusion is justified by their high clinical relevance and validation within Thai cohorts. Validated instruments (Table 1), such as the Malnutrition-Inflammation Score (MIS), Nutrition Alert Form (NAF), and NT-2013, are recommended. The NAF is highly suitable for routine application in Thai clinical settings due to its high feasibility and contextual alignment with local dietary patterns.²³ In daily clinical practice, the Nutrition Alert Form (NAF) may be considered as the first-line screening tool given its simplicity and ease of integration into standard nursing workflows. It is ideal for frequent

monitoring (e.g., weekly or monthly) to identify at-risk patients before clinical deterioration occurs.²⁴ For patients stratified as high-risk, a more granular evaluation using the Subjective Global Assessment (SGA) or the Malnutrition-Inflammation Score (MIS) is warranted. The SGA provides a validated clinical judgment of nutritional status, while the MIS offers a comprehensive, quantitative analysis, specifically beneficial for elderly patients where underlying inflammation contributes to wasting. It should be noted that both tools require specialized training and more extensive clinical time. Additionally, the NT-2013 may serve as an initial screen in acute or inpatient settings due to its high sensitivity; however, its lower specificity may lead to an overestimation of malnutrition risk. Consequently, the NAF remains the preferred instrument for routine screening, while the SGA and MIS are best reserved for confirmatory diagnosis and guiding intensive clinical interventions.²³⁻²⁴

Theme 4: Cultural and Ethical Considerations

Ethical and Cultural Considerations

Providing nursing care to Buddhist monks requires deep cultural awareness. Respecting the monk's autonomy and religious commitment is essential, even when medical advice may suggest modifying or discontinuing fasting.

Ethical practice involves shared decision-making, where nurses, physicians, and monks collaboratively determine safe fasting plans. Cultural competence also includes understanding the monastic environment—temple settings, food offerings (alms), and reliance on lay supporters—which influence dietary and health behaviors.²⁵

Nurses must uphold both professional ethics and religious respect, ensuring that patient safety is prioritized without violating spiritual values.

Practical Guidance and Recommendations

To ensure safe, respectful, and evidence-based dialysis care for fasting Buddhist monks, the following clinical guidelines are recommended:

1. Comprehensive Nutritional Assessment

Given the high prevalence of protein–energy wasting (PEW) and sarcopenia in elderly monks, a

multidimensional assessment is recommended⁷:

Anthropometry: Monitor Body Mass Index (BMI), mid-arm muscle circumference (MAMC), and skinfold thickness to track muscle mass depletion.⁶⁻⁷

Biochemical Profiling: Regular evaluation of serum albumin, prealbumin, blood urea nitrogen (BUN), and creatinine to assess visceral protein stores and dialysis adequacy.

Dietary Evaluation: Use 24-hour recalls specifically focused on the “pre-noon” window to ensure protein targets (typically 1.2 g/kg/day) are met.

2. Targeted Dietary and Fasting Management

While monks fast from midday to dawn, fluid intake (“Nam Pana”) is generally permitted.

Nutritional Density: Nurses should emphasize a “nutrient-dense” morning window, focusing on high-quality protein while strictly managing potassium and sodium.

Geriatric Focus: For elderly monks, address anabolic resistance by encouraging protein intake immediately following dialysis sessions when feasible within monastic rules.^{6,15}

3. Optimized Hemodialysis Scheduling

Schedules should be individualized to minimize physiological stress.

Timing: Afternoon or early evening sessions may be preferable. This allows the monk to complete morning alms (Pindapata) and their meal before treatment, reducing the risk of fasting-induced hypoglycemia or exhaustion during the session.¹¹⁻¹²

4. Vigilant Clinical Monitoring

Hemodynamics: Frequent monitoring of blood pressure and fluid status is vital. Elderly monks have diminished baroreceptor sensitivity, making them prone to sudden intradialytic hypotension (IDH).⁸⁻⁹

Electrolyte Surveillance: Proactive monitoring of potassium and phosphate is essential, as concentrated meal patterns can lead to fluctuations in these levels.^{7,10}

5. Strategic Medication Management

Dosing Alignment: Adjust medication timing to ensure drugs requiring food are taken during the morning window.²¹

Dialysis Clearance: Pay close attention to water-soluble medications (e.g., certain antibiotics and antihypertensives). Ensure post-dialysis admin-

istration to prevent subtherapeutic drug levels.

6. Culturally Congruent Care

Vinaya Adherence: Nursing care must respect monastic discipline, including appropriate physical distance, gender-sensitive care, and quiet environments for meditation or chanting.

Spiritual Autonomy: Acknowledge the monk's spiritual goals as a primary motivator, using this to build a therapeutic alliance.

7. Peridialytic Nursing Protocols

Pre-dialysis: Screen for frailty and assess fluid intake from the previous evening's "Nam Pana."

Intradialytic: Maintain a calm environment conducive to spiritual practice; monitor for early signs of cramping or dizziness.

Post-dialysis: Perform orthostatic vital sign checks (sitting vs. standing) before discharge to prevent falls, as fasting increases the risk of postural instability.

8. Education and Interdisciplinary Collaboration

Caregiver Engagement: Provide tailored education to the monk's lay assistants (Luk Sit) or younger monks regarding medication timing and "renal-safe" allowable drinks.

Team Synergy: Foster active communication between nephrologists, renal dietitians, and nurses to adjust care plans dynamically based on the monk's nutritional and spiritual needs.²²

Research Gaps and Future Directions

Despite its clinical and cultural importance, research on religious fasting among Thai Buddhist monks receiving hemodialysis is limited. Most existing evidence is derived from studies in Muslim or Christian populations during Ramadan or Lent. These findings cannot be directly applied to Buddhist monastic contexts because fasting patterns, dietary practices, and cultural values differ substantially.

Limited Empirical Data

There is a notable lack of systematic research specifically involving Thai Buddhist monks on hemodialysis. Current knowledge largely depends on anecdotal reports or single-center experiences. As a result, the physiological impacts of intermittent

fasting on fluid balance, metabolic control, and dialysis adequacy remain poorly defined. Prospective or cohort studies comparing fasting and non-fasting monks are needed to generate robust clinical evidence.

Gaps in Nursing Evidence and Assessment Tools

Many nursing recommendations for fasting monks are based on expert opinion rather than validated research. Studies are required to evaluate the effectiveness of interventions such as pre-fasting counseling, individualized fluid management, and flexible dialysis scheduling. In addition, existing nutritional and clinical assessment tools may not adequately reflect monastic lifestyles or reliance on alms. Developing culturally adapted assessment instruments is an important research priority.

Interdisciplinary, Educational, and Policy Needs

Collaboration between healthcare professionals, Buddhist scholars, and temple communities is limited but essential for holistic care. Nursing education and hospital policies in Thailand rarely address monastic patients specifically. Future research should explore culturally sensitive curricula, supportive policies, and innovative approaches—such as longitudinal monitoring and qualitative studies—to improve care quality.

Addressing these gaps will strengthen evidence-based, culturally respectful dialysis nursing care for monks and offer insights applicable to other religious patient populations worldwide^{7,22}.

Conclusion

Religious intermittent fasting among Thai Buddhist monks represents a profound intersection of spiritual discipline and clinical complexity, particularly for those dependent on hemodialysis. This narrative review has synthesized current evidence to delineate the physiological vulnerabilities, unique clinical challenges, and sociocultural nuances inherent in managing this population.

Our findings underscore that high-quality renal care for monks must be culturally congruent, highly individualized, and evidence informed. The integration of structured risk stratification, Thai-validated nutritional screening tools (such as the NAF), and

flexible treatment scheduling is essential to uphold patient safety without infringing upon monastic vows. From a nursing perspective, clinical competence alone is insufficient; practitioners must possess a deep-seated understanding of the religious context and the core values that drive the patient's adherence to fasting.

This review offers actionable nursing recommendations designed to bridge the gap between abstract evidence and the real-world complexities of the Thai healthcare system. By adopting this integrated framework, nurses can deliver holistic, patient-centered care that aligns rigorous medical standards with the spiritual aspirations of the monk.

Ultimately, the nursing management of Thai Buddhist monks during religious fasting must strike a delicate balance between clinical vigilance and cultural reverence. Such an approach is paramount to achieving optimal health outcomes while preserving the dignity and religious integrity of this venerable patient population.

Case study

A 70-year-old Thai Buddhist monk with End-Stage Renal Disease (ESRD) secondary to Diabetes Mellitus has been receiving maintenance hemodialysis three times weekly. The patient strictly adheres to monastic fasting, consuming all nutrition before midday and relying solely on the morning alms round (Pindapata) for his dietary intake. He presented with recurrent intradialytic hypotension (IDH), chronic fatigue, and persistent hypoalbuminemia.

Nursing Assessment

Clinical assessment revealed a deficit in nutritional literacy regarding the protein and caloric density required for dialysis patients. Because alms-derived foods are unpredictable and nutritionally unrefined, the patient suffered from inadequate protein-energy intake, irregular fluid distribution, and suboptimal medication-to-meal timing. Utilizing the Nutrition Alert Form (NAF), the patient was classified as high risk for malnutrition (NAF score = 9/15).

Multidisciplinary Interventions

An individualized care plan was implemented, bridging clinical requirements with monastic discipline:

Nutritional Strategy: Nurses provided practical guidance on selecting high-biological-value proteins (e.g., egg whites, fish, tofu) from alms bowls to maximize intake within the restricted eating window.

Fluid & Electrolyte Management: Education was provided on “renal-safe” Nam Pana (allowable beverages) to maintain hydration and prevent intravascular volume depletion without triggering hyperkalemia.

Pharmacological Re-alignment: Medication schedules were adjusted to ensure that phosphate binders and oral hypoglycemics were synchronized with the pre-noon meal.

Treatment Optimization: Hemodialysis sessions were rescheduled to the afternoon to allow for the completion of morning religious duties and meal consumption, thereby reducing treatment-induced exhaustion.

Outcomes and Clinical Significance

Following these targeted interventions, the patient demonstrated enhanced hemodynamic stability and improved biochemical markers of nutrition. This case underscores the necessity of integrating rigorous clinical assessment with culturally congruent nursing interventions to ensure the safety and spiritual integrity of elderly monks undergoing hemodialysis.

Table 1. Practical Nutritional Assessment Tools for Hemodialysis Patients

Tool	Key Components	Clinical Use	When to Use	Score for Diagnosis	Strengths	Limitations
NAF (Nutrition Alert Form)	Weight change, dietary intake, gastrointestinal symptoms	Screening	Routine (weekly/monthly)	≥ 6 indicates malnutrition risk	Simple, feasible in Thai settings	Moderate sensitivity
SGA (Subjective Global Assessment)	Clinical history and physical examination	Assessment	When patient is at risk	Classified as A (well), B (moderate), C (severe)	Validated, widely used	Requires trained personnel
MIS (Malnutrition–Inflammation Score)	SGA + laboratory parameters (albumin, TIBC)	Comprehensive assessment	Elderly/high-risk patients	Higher score = worse nutritional status (0–30)	Quantitative, detailed	Time-consuming
NT-2013	Dietary intake, disease severity	Screening (acute care)	Inpatient setting	≥ 8 indicates high risk	High sensitivity	Low specificity

Note: Nutritional assessment should be multidimensional, incorporating anthropometry (BMI, mid-arm muscle circumference), biochemical markers (serum albumin, BUN), and dietary intake assessment, in accordance with CKD nutrition guidelines.

NAF is recommended as the first-line screening tool in routine clinical practice in Thailand, while SGA and MIS are used for confirmatory assessment and clinical decision-making.

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