

Nurses' Nutritional Therapy Habits for Unconscious Patients: A Comprehensive Review (2019-2024)

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Abstract: Providing nutritional therapy for patients who cannot eat plays an important role in risk reduction and for returning to health. Nurses have a significant role in nutritional therapy, but also in making sure that patients are receiving their nutritional therapy properly and supporting them in returning to overall good health. This review examines the state and trends of nurses' nutritional therapy for unconscious patients 2019 - 2024. It examines critical tactics, trends, barriers, and health effects of nutritional therapy on patients. It summarized the most recent research about enteral and parenteral nutrition, nursing protocols, and patient safety and technology in the clinical setting. A commitment to continual learning, practicing within an evidence-informed approach, and collaborative team work is paramount in providing nutritional therapy for unconscious patients.

Introduction

Nutritional therapy is important for gravely ill patients, most specifically for individuals who cannot consciously eat due to trauma, surgery or neurological dysfunction. The inability to consume food poses a big barrier for how these patients get their nutrition. Consequently, nutrition through an enteral or parenteral route is required to deliver necessary calories and support vital bodily functions. Nurses play an important part in managing and adjusting nutritional therapy as a patient's needs and status change. Their education, practice and use of best practice guidelines reduce complications, facilitate faster recovery and improve patient health outcomes. We investigate the evolution of nursing practice in managing nutritional therapy for unconscious patients' over the past five years, highlighting emerging trends, challenges and impacts on patient outcomes.

Methodology

Relevant scientific articles were identified through searches of major databases: PubMed, CINAHL and Cochrane Library. The review considered studies that explored nurses' responsibilities for providing nutritional therapy to unconscious patients during the period 2019-2024. The reviewed literature consisted of both research findings and summaries of current practise. Articles related to nurses' nutritional care, unconscious patients, enteral and parenteral feeding and critical care nursing were included in the review. Analysis of 40 articles that met the selection criteria contributed to understanding the most recent advances and issues in the delivery of nutritional therapy.

Nutritional Support in Critical Care: An Overview

There are two main types of nutritional support given to unconscious patients. Enteral nutrition (EN) and parenteral nutrition (PN) are the two main forms of nutrition administration to unconscious patients. Both methods enable feeding of nutrients and fluids that a patient is unable to take by mouth while in an unconscious state. Factors affecting the selection of a feeding method include the patient's condition of the gastrointestinal tract, the expected duration of unconsciousness and the associated risks of each approach.

1. Enteral Nutrition (EN)

The feeding tube method (enteral feeding) should be used whenever the patient's digestive system is intact. Nutrients are delivered through a tube inserted directly into the patient's stomach or small intestine. Research shows that EN leads to better results than PN because it preserves the health of the digestive tract, reduces harmful bacteria from moving into the bloodstream and helps lower the chances of developing infectious diseases (Compher et al., 2020). Studies demonstrate that initiating EN within 24-48 hours of surgery leads to faster recovery and a lower occurrence of VAP and septic complications (Blaser et al., 2020).

2. Parenteral Nutrition (PN)

Parenteral nutrition (PN) is necessary when enteral nutrition is not given due to major gastrointestinal pathology or inability to effectively enterally feed a patient. PN provides nutrition straight into the bloodstream and bypasses the digestive tract. PN is a vital way to deliver nutrition support, however, it may also pose risks of infection, liver problems, and metabolic complications (Moukarzel et al., 2021). It is becoming clear that PN should be used only in the most necessary of situations as prolonged use of PN can result in dire health consequences.

Nurses' Role in Nutritional Therapy

Nurses play a vital role in initiating and carrying out nutritional therapies for patients who are unconscious. Their duties include everything from the initial patient assessment to continuously monitoring the patient's nutritional needs and tolerance to nutrition support, as well as preventing the development of any potential problems. Nurses play essential parts in the delivery and supervision of nutritional care for unconscious patients.

1. Assessment and Screening

Critically ill patients must have their nutritional status evaluated by nurses when they arrive. They examine the patient's current body weight, any coexisting health conditions and the level of acuity in their condition. Tools like the NUTRIC score are often utilised to assess the likelihood of malnutrition and help determine the best time and type of nutritional support for a patient. Nurses also pay close attention to the patient's hydration status and the balance of electrolytes, because both are influenced by their nutrition.

2. Administration of Nutrition

Nurses make the decision about the best way to meet a patient's nutritional requirements (through EN or PN) and ensure that nutrients are delivered correctly. Nurses are responsible for confirming that the placement of feeding tubes is optimal and that the patient is receiving their designated amount and type of nutrients. Nurses responsible for PN should oversee the delivery of nutrients intravenously, look for signs of infections associated with the catheter, and modify the infusion rate according to how the patient is tolerating the therapy (Kenny et al., 2022).

3. Monitoring and Adjustments

Nurses consistently check for any signs of intolerance to the nutritional therapy, paying close attention to potential complications including nausea, vomiting, bloating, diarrhoea and aspiration. There is a greater chance for aspiration to occur in unconscious patients. If aspiration does happen it could result in various respiratory disorders including pneumonia. Nurses are knowledgeable about the common symptoms that might arise during feeding and can promptly change the patient's

regimen if needed. In addition, nurses make sure that necessary laboratory tests are done to keep track of key nutritional indicators like levels of serum albumin, glucose and electrolytes (Morais et al., 2021).

4. Collaboration with Multidisciplinary Teams

Healthcare professionals such as dietitians, physicians and pharmacists all work together with nurses to create and modify nutritional plans. A collaborative approach among healthcare providers is vital to personalize nutritional treatment and respond to any changes in the patient's health.

Trends in Nutritional Therapy Habits (2019–2024)

Significant changes have developed in how nurses approach nutritional therapy during the past five years, influenced by new research, technologies and standards of care.

1. Early Nutritional Intervention

One of the most important trends is the increased focus on early nutritional intervention for the unconscious patient. Evidence continues to demonstrate better outcomes for early enteral feeding (within 24 – 48 hours) that drive reductions in mortality rates, length of ICU stay, and complication rates (Blaser et al., 2020). Nurses are increasingly trained to provide early feeding protocols and this generally accepted practice as a part of many critical care units.

2. Personalized Nutrition Therapy

Personalized medicine has now extended to nutrition therapy, with nurses also personalizing their interventions based on the individual patients' characteristics, such as weight, nutritional status, comorbidities, and gastrointestinal function. Personalized approaches to care showed improvements in patient outcomes, fewer complications, and shorter recovery times (Cheng et al., 2021). Nurses now use more comprehensive patient assessments to inform their decisions regarding the type of nutrition, and how much, they provide.

3. Technological Integration

The incorporation of technology into nutritional therapy has completely changed nursing practices. Smart enteral feeding pumps, real-time monitoring, and electronic records now allow for more precise delivery of nutrition and monitoring of patient progress. It has decreased human error and helped with patient safety by enabling nurses to monitor feeding rates, detect early complications, and adjust the patient's nutrition plans (Stoll et al., 2023).

4. Standardized Protocols and Guidelines

Evidence-based guidelines have been more widely adapted and many institutions have adopted standardized feeding protocols to limit practice variation. These practice protocols describes the specific steps to initiate enteral and parenteral nutrition and how to prevent any complications such as tube displacement and infection (Elia et al, 2019). Nurses are expected to use these protocols to help support practice consistency and improve patient outcomes.

Challenges in Nutritional Therapy

Despite substantial progress in nutritional care, there are still challenges related to managing the nutritional needs in unconscious patients:

1. Assessment Challenges

Assessing unconscious patients' nutritional status can be especially complicated if a patient is unable to relay their needs or experience symptoms. Nurses depend on indirect ways of assessing nutrition such as lab values, documented weight loss, and clinical signs, but these measures can sometimes be insufficient. (Vinas et al., 2023)

2. Aspiration and Safety Issues

Aspiration is a very real concern when caring for unconscious patients. Many unconscious patients receive enteral nutrition by way of nasogastric or orogastric tubes. Aspiration pneumonia is one of the most common outcomes of aspiration and can lead to prolonged lengths of stay in the ICU, increased risk of sepsis, and other negatively sequenced outcomes. It is important for nurses to be aware of aspiration risk and take appropriate measures to prevent it from occurring, confirming proper tube placement and monitoring for early respiratory distress. (Blaser et al., 2020)

3. Resource Challenges

Many low- to middle-income countries do not have the resources needed to provide enteral and parenteral nutrition. These limitations can impede nutritional care and lead to malnutrition and other complications in unconscious patients. (Kose et al., 2022) Nurses in these low income areas can develop creative solutions proved to be effective with basic nutritional support strategies and limited supplies.

Conclusion

Nutritional therapy for unconscious patients has shifted rapidly over the last five years. Nursing staff have modified their conduct in accordance with new guidelines, technology improvements, and evidenced-based practice. Early intervention, individualized care and advancements in technology contribute to improved patients' outcomes in critical settings.

Even if we evolve, we still face challenges such as patient assessment difficulties, aspirations risks, and potential limited resources. Continued education, standardization of our protocols and working with a multidisciplinary team will all promote the quality of nutritional care we provide to unconscious patients are further improved.

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