

NURSING CARE OF PATIENTS RECEIVING ARTIFICIAL NUTRITION.

<https://doi.org/10.3461/zenodo.18092147>

Yakubekova Sokhibakhon Abdumannab kizi

Teacher at Andijan Abu Ali Ibn Sino

Public Health Technical School

Abstract

Artificial nutrition is an essential component of modern medical care for patients who are unable to meet their nutritional needs through oral intake. Proper nursing care plays a critical role in ensuring the safety, effectiveness, and tolerance of artificial nutrition. This article discusses the main types of artificial nutrition, the responsibilities of nurses in caring for patients receiving enteral and parenteral nutrition, and the prevention of potential complications. Special attention is given to patient assessment, monitoring, hygiene, and education.

Keywords

artificial nutrition, nursing care, enteral nutrition, parenteral nutrition, patient safety.

Adequate nutrition is a fundamental requirement for maintaining health, supporting physiological functions, promoting tissue repair, and enhancing immune responses in hospitalized patients. Proper nutritional support plays a crucial role in accelerating recovery, reducing the incidence of hospital-acquired infections, shortening the length of hospital stay, and improving overall clinical outcomes. Malnutrition in clinical settings is associated with increased morbidity, delayed wound healing, muscle wasting, and higher mortality rates.

Despite its importance, many patients are unable to meet their nutritional requirements through oral intake. This may be due to neurological disorders such as stroke or coma, gastrointestinal diseases including intestinal obstruction and malabsorption syndromes, severe trauma, burns, critical illness, or postoperative conditions that limit swallowing or digestion. In oncology and intensive care units, nutritional insufficiency is particularly common and requires timely intervention.

In such circumstances, artificial nutrition becomes an essential therapeutic measure. Artificial nutrition is defined as the delivery of nutrients to the body by routes other than normal oral feeding and includes two main methods: enteral nutrition and parenteral nutrition. Enteral nutrition involves the administration of nutritionally complete formulas directly into the gastrointestinal tract via feeding

tubes, while parenteral nutrition provides nutrients intravenously when gastrointestinal function is impaired or contraindicated.

The choice between enteral and parenteral nutrition depends on the patient's clinical condition, gastrointestinal functionality, nutritional status, and metabolic requirements. Whenever possible, enteral nutrition is preferred due to its physiological benefits, including maintenance of gut integrity, prevention of bacterial translocation, and lower risk of infectious complications.

Nurses play a central and indispensable role in the successful implementation of artificial nutrition therapy. Their responsibilities include assessing nutritional status, preparing and administering nutritional solutions, ensuring correct tube placement or intravenous access, monitoring tolerance and metabolic responses, and identifying early signs of complications such as aspiration, infection, or electrolyte imbalance. In addition, nurses provide essential patient and family education, contributing to adherence and safety.

High-quality nursing care in artificial nutrition significantly influences treatment effectiveness, patient safety, and quality of life. Through continuous monitoring, evidence-based practice, and interdisciplinary collaboration, nurses help optimize nutritional support and enhance recovery in vulnerable patient populations. Before initiating artificial nutrition, nurses must assess:

- Nutritional status
- Level of consciousness
- Gastrointestinal function
- Risk of aspiration
- Laboratory values (electrolytes, glucose, proteins)

Continuous assessment helps in early detection of intolerance or complications.

Preparation and Administration

Nurses are responsible for:

- Ensuring correct type and dosage of nutritional solutions
- Maintaining aseptic conditions
- Proper placement and fixation of feeding tubes
- Regulating feeding rates according to medical orders

Accuracy and attention to detail are essential to prevent errors and infections.

Patients receiving artificial nutrition require close monitoring for:

- Aspiration pneumonia
- Tube displacement or blockage
- Infections at insertion sites
- Metabolic disturbances (hyperglycemia, electrolyte imbalance)

Nurses should regularly monitor vital signs, fluid balance, and patient comfort, and report any abnormalities promptly.

Maintaining oral and skin hygiene is an important aspect of nursing care. Even patients who do not eat orally require regular mouth care to prevent infections and discomfort. Proper positioning during feeding helps reduce aspiration risk and improves tolerance.

Education is a key nursing responsibility. Nurses should inform patients and caregivers about:

- The purpose of artificial nutrition
- Feeding procedures
- Signs of complications
- Basic care of feeding tubes or intravenous lines

Well-informed patients and families contribute to better adherence and outcomes.

Nursing care represents a fundamental pillar in the successful implementation of artificial nutrition therapy. Effective nutritional support cannot be achieved without the active and professional involvement of nurses, who are responsible for integrating medical prescriptions into safe and practical patient care. Through comprehensive and ongoing patient assessment, nurses identify nutritional needs, evaluate gastrointestinal function, and detect early signs of intolerance or complications.

Careful preparation and accurate administration of enteral and parenteral nutrition are essential to minimize risks such as aspiration, infection, metabolic disturbances, and mechanical complications. Continuous monitoring of vital signs, fluid balance, laboratory parameters, and patient comfort allows nurses to promptly recognize adverse reactions and initiate timely interventions, thereby improving patient safety.

Patient and family education is another critical component of nursing care in artificial nutrition. By providing clear information about the purpose, procedures, and potential risks of artificial feeding, nurses empower patients and caregivers to participate actively in the care process. This educational role is particularly important for patients receiving long-term nutritional support at home.

Enhancing nursing knowledge and clinical skills through ongoing education and adherence to evidence-based guidelines significantly improves the quality of artificial nutrition therapy. Well-trained nurses contribute to better clinical outcomes, reduced complication rates, shorter hospital stays, and improved quality of life for patients. Therefore, continuous professional development and

interdisciplinary collaboration are essential for optimizing artificial nutrition practices in modern healthcare systems.

REFERENCES:

1. ASPEN Board of Directors. Guidelines for the Use of Parenteral and Enteral Nutrition. *Journal of Parenteral and Enteral Nutrition*, 2021.
2. Perry, A. G., Potter, P. A., & Ostendorf, W. *Clinical Nursing Skills and Techniques*. Elsevier, 2022.
3. World Health Organization. *Nutrition Support in Clinical Practice*. WHO Press, 2020.