

## **Abstract**

**Background:** Critically ill patients are at high risk of malnutrition. Optimal enteral nutrition (EN) delivery, including early initiation and evidence-based management, is crucial for improving clinical outcomes. This audit aimed to evaluate adherence to local and international guidelines for EN practices in the Intensive Care Units (ICUs) at District General Hospital, Ampara.

**Methods:** A retrospective closed-loop audit was conducted in the medical and surgical ICUs of DGH Ampara. Data were collected from the medical records of 50 consecutive adult patients who received EN over a six-month period (June 2025 – November 2025). Practices were evaluated against key standards from the Sri Lankan Ministry of Health (2021), ESPEN (2023), and ASPEN (2021) guidelines, focusing on timely EN initiation, gastric residual volume (GRV) management, referral to a nutrition physician, and nutritional adequacy.

**Results:** EN was initiated within the recommended 24-48 hours in only 56% (n=28) of patients, with no documented reasons for delays in the remaining 44%. While GRV checks were performed once per shift in all patients (100% compliance), EN was unnecessarily interrupted for a single GRV <500mL in 72% of cases. Prokinetics were appropriately administered after a second high GRV (>400mL) in only 8% (n=4) of patients. Referral to a consultant nutrition physician occurred for just 42% (n=21) of patients, and only 38% (n=19) of patients achieved 80% of their prescribed kcal and protein targets. All patients who met their nutritional targets had been seen by the nutrition physician.

**Conclusion:** Significant gaps exist between current practice and evidence-based guidelines for EN management in the ICUs at DGH Ampara. Key areas for improvement include timely EN initiation, avoiding unnecessary interruptions based on GRV, appropriate use of prokinetics, and increasing involvement of the nutrition physician. A multifaceted action plan involving targeted education, promoting a multidisciplinary approach, and systematic supervision is recommended to enhance compliance and optimize nutritional care for critically ill patients. A re-audit is planned to assess the impact of these interventions.