Impact of educational, recording and organizational interventions regarding critical care nutritional support

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Our experience production: In a preceding article the state of Nutritional support (NS) in an Intensive Care Unit (ICU) was documented [Martinuzzi A et al. Estado del soporte nutricional en una unidad de Cuidados críticos. RNC 2011; 20: 5-17]. In this follow-up work we set to assess the impact of several organizational, recording and educational interventions upon the current state of NS processes. Materials and methods: Interventions comprised presentation of the results of the audit conducted at the ICU for both the institution's medical and paramedical personnel; their publication in a periodical, peer reviewed journal; drafting and implementation of a protocol regulating NS schemes to be carried out at the ICU; and conduction of continuous educational activities on Nutrition (such as "experts talks", interactive courses, and training in the implementation of the NS protocol). The state of NS processes documented after the interventions was compared with the results annotated in the preceding article. Study observation window ran between March 1st, 2011 and May 31th, 2011, both included. Results: Study series differed only regarding overall mortality: Phase 1: 40.0% vs. Phase 2: 20.5%; Difference: 19.5%; Z = 1.927; two-tailed-p = 0.054. Interventions resulted in a higher fulfillment rate of the prescribed NS indication; an increase in the number of patients receiving ≥ 80% of prescribed energy; and a reduction in the number of NS lost days. Mortality was (numerically) lower in patients in which the prescribed NS scheme was fulfilled, NS was early initiated, and those who received ≥ 80% of prescribed energy. Adopted interventions had no effect upon average energy intakes: Phase 1: 574.7 ± 395.3 kcal/24 h-1 vs. Phase 2: 591.1 ± 315.3 kcal/24 h-1; two-tailed-p > 0.05. Conclusions: Educational, recording and organizational interventions might result in a better conduction of NS processes, and thus, in a lower mortality. Hemodynamic instability is still the most formidable obstacle for initiating and completing NS. "Impact of quality improvement process upon the state of nutritional support in a critical care unit"

Biography

Martinuzzi A has completed his degree at the age of 26, at “La Plata” University (UNLP) and postgrade studies at Buenos Aires University (UBA) as Specialist on Intensive and Critical Care Medicine at the age of 31. He is the Director and founder of EDU-CI a premier Web Magazine of medicine (www.EDU-CI.COM). He has published 6 papers in reputed journals and has presented over 20 original papers in congresses of the specialty. Called several times as an expert to develop in Congresses, issues such as intestinal failure, diarrhea in critically ill patients, etc. He is a member of the "Committee of Nutritional Support for Critical Ill Patients" at the Argentina Association of enteral and parenteral nutrition (AANEP), and an active member of the Argentina Society of Intensive Care (SATI).