



The dietitian-nutritionist as an agent of change in the intensive care unit

El nutricionista-dietista como agente de cambio en la unidad de cuidados intensivos

O dietista-nutricionista como agente de mudança na unidade de cuidados intensivos

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Critically ill patients require care from a team of experts in critical care including, among others, specialized physicians and nurses, physical rehabilitation staff and respiratory therapy technicians. Medical nutritional therapy is currently recognized as a low-risk and cost-effective strategy to improve inpatient quality of care. It requires interdisciplinary collaboration and the involvement of the dietitian-nutritionist (DN) with the skills needed to implement the nutritional care process⁽¹⁻³⁾.

Barriers to the inclusion of the DN as part of the interdisciplinary team have been identified, including little time spent with the patients, absence of protocols for nutritional approach and the lack of a nutritional therapy section as part of the medical indications. Regarding time spent with patients, a survey given to DNs in France revealed that devoting less than four hours per week to critically ill patients limits the sense of being considered a part of the team by physicians and nurses⁽⁴⁾. Other barriers identified in surveys done in Australia and New Zealand are lack of knowledge regarding the role of DNs, lack of openness of the medical team to the role of the DN, a perception of mistrust or even of DN training deficiencies⁽⁵⁾, as well as budgetary constraints⁽⁶⁾.

Several studies have highlighted the benefits of integrating DNs into the intensive care unit (ICU): development and implementation of nutritional algorithms, early initiation of enteral nutrition,⁽⁷⁾ and optimal provision of calories and nourishment^(8,9). This latter consideration is especially relevant, given that suboptimal provision (<80% of energy and protein requirements) is a situation that occurs in more than 70% of ICU patients worldwide^(10,11).

Suboptimal provision of nutritional support and protein/energy debt have been associated with more days on mechanical ventilation, longer stays and higher ICU mortality, as well as lower quality of life of patients discharged to their homes, creating higher costs for the health system^(12,13). The implementation of the nutritional care process in the ICU and training provided by the DN to the interdisciplinary team have been shown to optimize nutritional support provision, covering more than 80% of the requirements in over 90% of patients by day 4 of their ICU stay⁽¹⁴⁾.

In Latin America there are still barriers preventing the incorporation of DNs into the ICU teams, partly because of lack of interest or knowledge regarding the skills and abilities of these professionals. It is essential to recognize DNs as a human resource and the recommendation is to include one DN for every ten patients receiving care in the ICU⁽¹⁵⁾. Being present, perseverance, discipline, knowledge and active collaboration of the DN as part of the interdisciplinary team will help reach the goal of repositioning this professional as the key to implementing the nutritional care processes, optimizing nutritional support and adding value to the therapeutic intervention (Figure 1).

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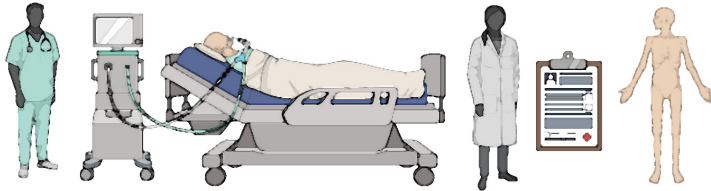
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With the aim of giving visibility to the importance of the DN as a member of multidisciplinary teams, we call to our colleagues who practice the profession to publish research studies in the special issue of *Nutrición*

del Paciente Crítico (Nutrition in the Critically Ill Patient) that will be published in March 2023. This special issue will include papers on nutritional assessment and therapy in critically ill patients.



Uses screening tools within the first 24 hours in the ICU, identifying the patient's nutritional risk or malnutrition on a timely basis. Establishes algorithms in accordance with the individual nutritional risk.



Participates in the clinical rounds for decision-making regarding nutritional intervention.

Generates knowledge and conveys it to the members of the interdisciplinary team, creating awareness about the importance of nutrition.

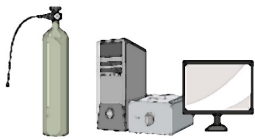
Documents the nutritional care process in the chart.



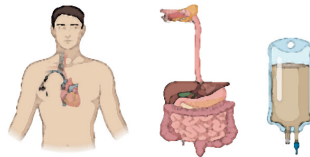
Analyzes the information obtained during assessment, identifies the problems and establishes a diagnosis.

Assesses the nutritional status based on the ABCD indicators:

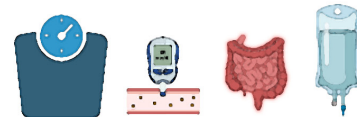
- **Anthropometric:** weight, height, BMI, body circumferences, body composition by means of electrical bioimpedance.
- **Biochemical:** blood biometrics, glucose, renal and liver function tests, electrolytes (special attention paid to patients at risk of refeeding syndrome).
- **Clinical:** vital signs, physical examination focused on nutrition, medications and vasopressor dosage, glucose solutions and propofol (consider caloric contribution in the nutritional support calculations to avoid overfeeding), gastrointestinal intolerance information (bowel movements, gastric residual volume).
- **Dietary:** nutritional support provision and estimated protein/energy debt.



Determines individual energy, macro and micronutrient needs using estimation methods or technology such as indirect calorimetry.



Considers individual clinical conditions and, based on evidence, determines the route and prescribes the most adequate early nutritional support.



Makes adjustments to nutritional support based on daily monitoring of ABCD indicators and implements strategies in the event barriers are identified during nutritional support infusion.

Figure 1. Role of the nutritionist as part of the multidisciplinary team in the intensive care unit. Source: the authors.

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