Raquel Proença¹, André Gustavo Neves de Albuquerque¹, Geisy de Carvalho Alcantara¹, Valéria Lima da Cruz¹

1. Department of Epidemiology, Instituto de Medicina Social, Universidade do Estado do Rio de Janeiro - Rio de Janeiro (RJ), Brazil.

Conflicts of interest: None.

Submitted on October 2, 2019 Accepted on December 10, 2019

Corresponding author:

Raquel Proença Department of Epidemiology, Instituto de Medicina Social Universidade do Estado do Rio de Janeiro Rua São Francisco Xavier, 524 - 7º andar Zip Code: 20559-090 - Rio de Janeiro (RJ), Brazil E-mail: raquelproencaufrj@gmail.com

DOI: 10.5935/0103-507X.20200080

To: Adequacy of enteral nutritional support in intensive care units does not affect short- and long-term prognosis of mechanically ventilated patients: a pilot study

Para: A adequação do suporte nutricional enteral na unidade de terapia intensiva não afeta o prognóstico em curto e longo prazos dos pacientes mecanicamente ventilados: um estudo piloto

To the Editor

In their original article "Adequacy of enteral nutrition support in intensive care units does not affect short- and long-term prognosis of mechanically ventilated patients: a pilot study", Couto et. al. reported that critically ill patients provided \geq 70% caloric intake during the first 72 hours following admission failed to show improved short- and long-term outcomes.⁽¹⁾

It is informed in the title that it is a pilot study, however, a pilot study aims gathering data for planning and provide a rationale for larger research. Notwithstanding, the above-mentioned work appears to be a complete trial, as it aimed to assess a causal hypothesis: the relationship between exposure (nutritional intake \geq 70%), and short- and long-term outcomes. Regarding the sample size, a pilot study may serve to make feasible a larger trial, providing data to estimate the losses and deaths magnitude and to help on the sample size calculation, among others.⁽²⁾

Therefore, considering that this is not a pilot study, we add below three substantial observations. First, in the discussion, the authors state that one of this study limitations was the lack of data collection regarding nutrients prescription and supply, but it is not clear how were the patients separated into the two different caloric supply groups (\geq 70% versus < 70%).

Second, even having the authors mentioned as limitations that no assessment of the patients' functional capacity by the time of admission to the intensive care unit (ICU) was conducted, they conclude that the long-term functional capacity appears not to be influenced by the nutrition adequacy. We understand this conclusion not to be appropriate, as the patient could already have a low Lawton's score before being admitted to the ICU.

Last, regarding the long-term outcomes, it is not possible to draw inferences, as the sample size was not large enough to allow this analysis. Therefore, presenting these results is not appropriate, and even less appropriate is drawing conclusions based on them. To calculate the number of patients for long-term analysis in a future study, we suggest using the data from this trial as a base to estimate how many patients are sufficient for this secondary analysis.

Some other general considerations also should be commented on. In table 2, the authors present data on short- and long-term outcomes plus mortality, however, each analysis has a different sample size, rendering reading the results

 (\mathbf{i})

unclear, as additionally, they do not agree with the table's title. In this same table, results are presented only for the variable functional capacity, failing to mention details on how is this categorization made. Regarding the Lawton and Brody 1969 tool, the most appropriate reference would be Santos and Virtuoso Júnior,⁽³⁾ as the tool is already validated in Brazil. In the introduction, we missed references to support electing a 70% calory adequacy value as the cutoff point.

REFERENCES

- Couto CF, Dariano A, Texeira C, Silva CH, Torbes AB, Friedman G. A adequação do suporte nutricional enteral na unidade de terapia intensiva não afeta o prognóstico em curto e longo prazos dos pacientes mecanicamente ventilados: um estudo piloto. Rev Bras Ter Intensiva. 2019;31(1):34-8.
- Thabane L, Ma J, Chu R, Cheng J, Ismaila A, Rios LP, et al. A tutorial on pilot studies: the what, why and how. BMC Med Res Methodol. 2010;10:1.
- Santo RL, Virtuoso Júnior JS. Confiabilidade da versão brasileira da Escala de Atividades Instrumentais da Vida Diária. RBPS. 2008;21(4):290-6.