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Letter to the Editor

## Nosocomial infections increase the length of hospital stay

*To the editor*

We read with great interest the article published by Honey et al. [1], in which the authors evaluated the effect of early enteral nutrition on pediatric respiratory failure via a cohort study. The authors concluded that early enteral nutritional decreases the length of stay in the pediatric intensive care unit (PICU), the hospital stay in general and guarantees a greater delivery of proteins and kilocalories to the patient. We believe that the findings were important because decreasing one or two days of hospital stay would decrease spending by more than \$ 1000 per day.

It is known that nosocomial infections directly affect the length of hospital stay. We would like to know if one of these infections occurred during their study, if so, it would be represent a confounding variable and would affect the outcome (LOS). The study by Albert et al. [2], found that the patients who acquired nosocomial infections (such as ventilator-associated pneumonia) had more days of mechanical ventilator and longer time of stay in the PICU. Therefore, we considered that in case nosocomial infections presented during the study, they could have been included in the multiple regression analysis.

A regression analysis is used to obtain an equation that allows us to predict the values of a variable based on the data observed in the other [3]. We considered the use of multiple regression analysis to be more appropriate than Poisson regression analysis, because the outcomes (LOV, PLOS and LOS) are continuous, not discrete variables.

**Conflict of interest**

None declared.

**References**

- [1] Haney A, Burritt E, Babbitt CJ. The impact of early enteral nutrition on pediatric acute respiratory failure. *Eur Soc Clin Nutr Metabol* 2018;26:42–6.
- [2] Mehta NM, Bechard LJ, Cahill N, Wang M, Day A, Duggan CP, et al. Nutritional practices and their relationship to clinical outcomes in critically ill children—an international multicenter cohort study. *Crit Care Med* 2012;40:2204–11.
- [3] Garcés D, Jaimes F. Ronda clínica y epidemiológica. Introducción al análisis multivariable. *Iatreia Revista médica de la Universidad de Antioquia* 2014;27:3.

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