



Hospital-acquired malnutrition

Dear Editor,

The article by Rocha et al., "The effects of hospitalization on the nutritional status of children,"¹ was extremely propitious in demonstrating that a little more than half of the children admitted to a tertiary hospital in Fortaleza lose weight during their hospital stays, that around 10% of well-nourished children become malnourished and that those who are admitted already suffering from malnutrition do not improve their nutritional status while in hospital. Similar results were observed in a teaching hospital in the city of Recife.² In the Northeast of Brazil severe forms of protein-energy malnutrition (PEM) affect more than 20% of children in hospitals who are less than 5 years of age. This elevated frequency provides striking evidence of the relevant role of hospitals as centers of demand for severe DEP cases. This led the World Health Organization (WHO) to publish, in 2000, a manual for the management of severe pediatric malnutrition in hospital, recently translated by the Brazilian Health Ministry, after certain adaptations for Brazil had been made.³

More severe is evidence that DEP generated in hospitals has powerful implications for the health sector, increasing rates of morbidity and mortality, extending hospital stays and increasing costs per bed. Hospital-acquired malnutrition is caused by a reduction in the hospitalized child's nutritional intake and an increase in their calorie requirements as a result of morbidity.^{4,5} Even in teaching hospitals and those that have standardized their dietary regimes, very often medical prescriptions are given that do not meet patients' calorie requirements, particularly the increased calorie requirements resulting from nosological challenges, and also diagnostic omissions with respect of nutritional status.² Added to this is the impossibility of flexible mealtimes, which often results in a reduction from the prescribed level because the basic rule of "on demand" feeding is not observed, particularly among small children.

The belief that weight loss is inevitable during a hospital stay is false, both for children and for adults.⁶ Early identification of those patients who require nutritional support is important and can prevent this. In December 2000, the Instituto Materno Infantil Prof. Fernando Figueira (IMIP) in Recife implemented the WHO protocol for hospital management of severely malnourished children and have been able to reduce hospital lethality of these more severe forms of malnutrition from 33.8 to 16.2%.⁷ For young

infants, the age group in which the greatest indications of morbidity and mortality are concentrated, hospitals can function as an excellent support center for relactation, i.e. a return to exclusive breastfeeding for children weaned early. This practice, which is both viable and effective for young infants, as long as there is a rearguard with human resources that are prepared and available, contributes to improved nutritional status and reduced hospital mortality due to the principal infectious conditions that we face: diarrhea and pneumonia.^{8,9} Breastmilk offers nutritional protection and combats infections, is very well tolerated by young infants, especially when they are ill and can be offered without fixed times.

In the light of all this, we emphasize the important contribution made by this study published in the *Jornal de Pediatria*,¹ and also the need for further research that can indicate the best paths to follow in the management and prevention hospital-acquired malnutrition in order to reduce rates of hospital morbidity and mortality from DEP which remain elevated, especially in the Northeast region of Brazil.

References

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