## **Editorial**

## Six Months of Exclusive Breastfeeding: Continuing the Discussion

## RUTH A. LAWRENCE

NE OF THE MOST DIFFICULT responsibilities of an editor is to publish a scientific research paper whose results are counter to current dogma or negative to a concept held dear. To bury such scientific evidence, however, is unthinkable. Thus was the dilemma when the Chantry et al. article was submitted. It reported that exclusive breastfeeding for 6 months was associated with lower hemoglobin levels. Thus, according to the authors, "young children in the United States fully breastfed for 6 months may be at increased risk of iron deficiency." They further suggest that the healthcare providers be vigilant to prevent iron deficiency in this group. Unfortunately, the conclusions drawn by many will be that breastfeeding exclusively for 6 months should not be recommended.

The article was carefully reviewed by our expert reviewers, who acknowledged the work as valid, the report as accurate, and recommended publication. The article appears as the lead article in this issue of *Breastfeeding Medicine*.

The significance of this finding is not completely clear. The authors refer to the reports of long-term cognitive deficits associated with iron deficiency. Among these reports, the ones with the most concerning outcomes<sup>2–4</sup> do not mention breastfeeding or any feeding details. They do not mention time of cord clamping at birth or any cause of the iron deficiency. It has even been suggested that anemia is a poor predictor of iron deficiency in toddlers,<sup>5</sup> and fur-

ther, that most children with iron deficiency are not anemic. The report by Chantry et al.<sup>1</sup> depends on the maternal report of anemia or low hemoglobin or the measurement of ferritin levels for diagnosis. There are no developmental outcome data for the breastfed infants who were reported in this analysis.

The authors do refer to the work of Dewey and Chaparro<sup>6</sup> with children in Honduras, relating their iron status to the timing of the clamping of the umbilical cord at delivery. They correlate the iron deficiency with clamping the cord in less than 2 minutes, not with feeding history. For decades, perinatologists have taken care to postpone the clamping of the cord until the infant had cried lustily. Crying is a signal that the pulmonary vascular bed has been perfused. The pulmonary vasculature is minimally perfused in utero. It has also been shown that the infant can be overperfused by as much as 10% of the blood volume by milking the umbilical cord predisposing to hyperbilirubinemia.

Dewey and Chaparro<sup>6</sup> suggest that iron deficiency is a function of early cord clamping and not iron obtained from early diet. They further state that for an exclusively breastfed, full-term, normal birthweight infant with delayed umbilical cord clamping, whose mother has adequate iron status during pregnancy, the iron provided from stores and breast milk is sufficient for at least 6 months.

The editors look forward to your opinion in the form of a letter to the editor. 62 EDITORIAL

Other special articles in this issue include the historical tale from the past by Chambers and Wagner,<sup>7</sup> which reminds us all that medical problems during lactation have changed very little, while treatments have improved with new technology such as antibiotics. Wouldn't it be grand to have Dr. Bedford magically present at the October Meetings in Austin.

## REFERENCES

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   Breastfeed Med 2007;2:105–110.

—Ruth A. Lawrence, M.D. Editor-in-Chief