

Pacifier use in the first month of life

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Abstract

Question As a family physician who frequently attends deliveries and follows up with neonates, parents often ask me if they can provide their newborns with pacifiers in order to calm infants down, reduce crying, and improve sleep. Is pacifier use safe in the first month of life?

Answer While pacifiers are useful for soothing, there is concern that their use might cause early weaning of breastfeeding owing to “nipple confusion.” Several organizations, such as the World Health Organization and the United Nations Children’s Fund, recommend avoiding use of pacifiers in term infants who breastfeed. However, evidence suggests that it might not be pacifier use that causes premature cessation of breastfeeding, and that use of pacifiers might only be a sign of a maternal decision to stop breastfeeding.

La suce durant les premiers mois de vie

Résumé

Question En tant que médecin de famille qui procède souvent à des accouchements et qui fait le suivi des nouveau-nés, les parents me demandent souvent s’ils peuvent donner une suce à leur bébé pour le calmer, atténuer ses pleurs et améliorer son sommeil. L’utilisation de la suce est-elle sécuritaire durant les premiers mois de vie?

Réponse Bien que les sucres soient utiles pour apaiser, on s’inquiète que leur usage puisse causer un sevrage précoce de l’allaitement en raison de la «confusion de mamelons». Plusieurs organisations, dont l’Organisation mondiale de la Santé et le Fonds des Nations Unies pour l’enfance, recommandent d’éviter l’utilisation des sucres chez les enfants nés à terme et allaités au sein. Par contre, des données probantes portent à croire que l’utilisation de la suce pourrait ne pas être la cause d’un arrêt prématuré de l’allaitement maternel et le recours à la suce pourrait n’être qu’un signe de la décision de la mère d’arrêter l’allaitement au sein.

Breastfeeding has been promoted heavily in recent decades as the sole means of nutrition for infants up to 6 months of age. The Canadian Paediatric Society¹ and the American Academy of Pediatrics² recommend exclusive breastfeeding for the first 6 months of life for healthy, term infants, recognizing breast milk as the optimal food for infants. After that period, additional food should be introduced, and breastfeeding can be continued as a complementary source of food.

Infants have a strong sucking reflex that helps with breastfeeding. The process of sucking was also found to be helpful in calming and soothing babies. In one Canadian study, more than 80% of parents used pacifiers for their babies.³ However, in recent years a potential “nipple confusion” between breast, bottle, and pacifier was suspected.

Should parents avoid pacifiers?

Owing to the possibility of premature weaning, the Baby-Friendly Hospital Initiative of the World Health Organization and United Nations Children’s Fund recommends avoiding pacifier use in term infants who breastfeed.⁴


One Canadian study found that pacifier use was possibly a marker of breastfeeding difficulties or a potential lack of motivation to breastfeed among mothers rather than a true cause of early weaning.³ In this randomized trial in Montreal, Que, 140 mothers were asked to avoid pacifier use (experimental group) and were compared with a similar group that was not asked to restrict use (control group). The experimental group avoided pacifier use more often (38.6% vs 16.0% in the control group) and reduced infants’ daily use of pacifiers (40.8% vs 55.7% in the control group); however, similar rates of early weaning were reported (18.9% in the experimental group vs 18.3% in the control group in the intention-to-treat analysis). Interestingly, in a separate analysis based on treatment given (ignoring randomization), an association was found between daily exposure to pacifiers and weaning by 3 months of age (25.0% of the exposed group vs 12.9% of the unexposed group).³

Recent evidence—more confusion

A 2011 Cochrane review⁵ looked at randomized and quasi-randomized controlled trials investigating the

effects of pacifiers in healthy, breastfeeding, full-term newborns. In 2 trials with almost 1300 newborns, pacifier use had no significant effect on the proportion of infants exclusively breastfed at 3 months of age (risk ratio [RR] 1.00; 95% CI 0.95 to 1.06) and at 4 months of age (RR 0.99; 95% CI 0.92 to 1.06). Similarly, there was no effect on partial breastfeeding at 3 months of age (RR 1.00; 95% CI 0.97 to 1.02) and at 4 months of age (RR 1.01; 95% CI 0.98 to 1.03). However, Jaafar et al cautioned that short-term breastfeeding difficulties faced by mothers and the long-term effects of pacifier use on infants' health were not investigated.

Most recently, a retrospective before-and-after study attempting to determine the association between removing routine distribution of pacifiers in a mother-baby unit and breastfeeding initiation was conducted in Oregon.⁶ Restricting pacifiers (while not restricting access to formula) actually decreased exclusive breastfeeding, increased supplemental formula feeding, and increased exclusive formula feeding.

The issue of pacifier use is still under some debate. While awaiting more definitive studies, the Pediatric Research in Emergency Therapeutics program recommends following current guidelines: avoid pacifier use in the first month of life for healthy, breastfeeding newborns. 

Competing interests

None declared

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References

1. Blonde M. *Nutrition for healthy term infants: recommendations for birth to six months*. Ottawa, ON: Canadian Paediatric Society; 2013. Available from: www.cps.ca/documents/position/nutrition-healthy-term-infants. Accessed 2013 Mar 24.
2. American Academy of Pediatrics Section on Breastfeeding. Breastfeeding and the use of human milk. *Pediatrics* 2012;129(3):e827-41. Epub 2012 Feb 27.
3. Kramer MS, Barr RG, Dagenais S, Yang H, Jones P, Ciofani L, et al. Pacifier use, early weaning, and cry/fuss behavior: a randomized controlled trial. *JAMA* 2001;286(3):322-6.
4. United Nations Children's Fund [website]. *The Baby-Friendly Hospital Initiative*. New York, NY: United Nations Children's Fund; 2013. Available from: www.unicef.org/programme/breast-feeding/baby.htm. Accessed 2013 Mar 24.
5. Jaafar SH, Jahanfar S, Angolkar M, Ho JJ. Pacifier use versus no pacifier use in breastfeeding term infants for increasing duration of breastfeeding. *Cochrane Database Syst Rev* 2011;(3):CD007202.
6. Kair LR, Kenron D, Etheredge K, Jaffe AC, Phillipi CA. Pacifier restriction and exclusive breastfeeding. *Pediatrics* 2013;131(4):e1101-7. Epub 2013 Mar 18.



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