The impact of dummy use on breastfeeding: the Cochrane findings

Senior policy adviser Rosie Dodds considers the recent Cochrane review on dummies and breastfeeding.

Although dummy use is widespread in some cultures, there is concern from experience and observational studies that it may have an adverse effect on breast milk production and lead to shorter duration of breastfeeding. It may be that offering a dummy to calm a fractious baby may lead to less frequent feeds, reducing breast milk production and breastfeeding duration. Also women who are less motivated to breastfeed exclusively, because they are experiencing difficulties or want to stop, are more likely to use a dummy.

A new Cochrane review of randomised controlled trials (RCTs) examines dummy use and breastfeeding duration.1 RCTs are very useful for determining the effect of specific interventions, but they also have limitations depending on the study design and how well the study protocols are adhered to. Only two trials met all of the reviewers’ research quality criteria. In one from Argentina, 1,021 mothers who were highly motivated to breastfeed were recruited when their babies were 15 days old2 and in the second, from Canada, 281 mothers were recruited at birth.3 Meta-analysis showed that dummy use in healthy, breastfed babies had no significant effect on the proportion exclusively or partially breastfed at three months or four months of age. The authors’ conclusion is: ‘Pacifier use in healthy, term breastfeeding infants, started from birth or after lactation is established, did not significantly affect the prevalence or duration of exclusive and partial breastfeeding up to four months of age. However, evidence to assess the short-term breastfeeding difficulties faced by mothers and long-term effect of pacifiers on infants’ health is lacking.’

How widely can we apply the Cochrane conclusion?
To interpret this review for the UK, it is important to emphasise that all the mothers included in the two RCTs were motivated to breastfeed. The Canadian study selected only mothers who were breast feeding with no problems at two weeks and who indicated their intention to continue for at least three months.2 Women who had a preference about dummy use and mothers with sore nipples, mastitis, inverted nipples or breast surgery were excluded. Fewer than four in ten women in the UK would fit these criteria. About 60% are breastfeeding at two weeks but one third have problems. Further, only 38% are breastfeeding exclusively at two weeks of age.3 Mothers randomised to the ‘offer’ group were given dummies and a guide for parents. The ‘no-offer’ group received a guide recommending other alternatives for comforting a crying baby. Dummy use was common in both groups (67% in the ‘offer’ group and 40% in the ‘no-offer’ group).

Link between dummy use and early weaning
The Argentinean trial limited inclusion to women with a healthy term baby who intended to breastfeed for at least three months.4 The authors reported that there was no difference in babies’ cry/fuss behaviour according to whether they were randomised to the ‘dummy’ or ‘no dummy’ group. In the ‘no dummy’ group only 35% of mothers totally avoided pacifier use compared with 16% in the ‘dummy’ group.3 Daily use of pacifiers was as high in both groups (41% in the ‘no dummy’ group and 56% in the ‘dummy’ group), meaning less than a 30% difference in daily use between the two and thus seriously limiting any effect size. There was a strong observational association between pacifier use and early weaning but no statistically significant association when the data were analysed by randomised allocation, using the ‘intention to treat’ principle. The authors note this strongly suggests that ‘pacifier use is a marker of breastfeeding difficulties or reduced motivation to breastfeed rather than a true cause of early weaning’.

Findings from countries with high breastfeeding rates may not be generalisable to communities with lower breastfeeding rates, such as many UK communities. In the Argentinean study, 86% of babies were exclusively breastfed and 98% partially breastfed at three months; while 81% of babies were partially breastfed at three months in the smaller study from Canada.3 In the UK just 13% of babies are exclusively breastfed at three months and only 34% receive breast milk at four months.4

As discussed in a previous article,5 it is possible that where the culture of breastfeeding is strong, dummy use may not influence breastfeeding duration. In the UK, there is still the possibility that it is associated with earlier cessation of breastfeeding. If there is a relationship, it is not clear whether this is a causal one. The Cochrane reviewers themselves state that their findings ‘may not apply to mothers who are less motivated or who have no desire to breastfeed their infant(s) longer.’ However, although this important caveat was put forward in the discussion, it is not included in their conclusion, so many readers will miss this key point.

More research is needed
Neither of the studies reported on the mean duration of partial or exclusive breastfeeding, assessed mothers’ confidence or satisfaction, the post-randomisation incidence of breastfeeding problems such as engorgement, mastitis, sore nipples or the baby’s longer term health including ear infections, thrush, sudden infant death syndrome and dental malocclusion. Further research is needed to address the effect of dummy use on duration of breastfeeding in less motivated women, breastfeeding difficulties faced by mothers associated with dummy use and the long-term effect on mother and infant health.

References

Practice points
Breastfed babies often refuse to accept a dummy and babies should never be made to take one. Mothers who decide to use a dummy and breastfeed need to know how to recognise feeding cues and that dummies are recommended only when settling babies to sleep, after breastfeeding is established. In addition to the information in the previous article, parents can be informed that:

- Women are strongly motivated to breastfeed, dummies have not been shown to reduce breastfeeding.
- Many studies have found that babies who had a dummy stopped breastfeeding earlier but this is not necessarily a causative relationship.