

## Do dummies help prevent SIDS?

Case-control studies suggest that babies who are regularly given a dummy when put down to sleep are less likely to die suddenly and unexpectedly than those who are not. Rosemary Dodds, NCT senior policy adviser, explores the strength of the evidence on dummies, SIDS and breastfeeding.

Dummies or pacifiers are used in many countries to settle or soothe babies. The Avon Longitudinal Study found that nearly 60% of the 10,950 babies in the sample had used a dummy by four weeks of age. Younger, smoking mothers, with less education, those living in council and overcrowded accommodation, and those reporting financial difficulties were significantly more likely to give their baby a dummy.<sup>1</sup>

Dummies create strong feelings, based mainly on family tradition, culture and custom. Partly for this reason, controversy surrounds advice given to parents about dummy use, with conflicting information from different sources, which contributes to confusion and anxiety.

Two meta-analyses of case control studies report an association between dummy use and a lower risk of sudden infant death syndrome (SIDS), particularly when used for sleeps, with a potential reduction in the risk by as much as 61%.<sup>2,3</sup> This evidence led the American Academy of Pediatrics (AAP) to recommend offering a dummy at every sleep time to reduce the risk of SIDS.<sup>4</sup> For breastfed babies, they recommend delaying introduction of the dummy until one month of age for breastfeeding to become established, and gently withdrawing the dummy after six months as the risk of cot death declines, whereas the risk of potential dental and speech problems increases for older babies. The Foundation for the Study of Infant Deaths (FSID) endorses this advice and tells parents not to worry if the dummy falls out while the baby is asleep, and not to force babies to take a dummy if they don't want it. One of the many questions that remain is whether babies who are used to having a dummy but do not have one for a particular sleep are then at any increased risk.<sup>5</sup>

### How might dummies work to prevent SIDS?

Potential mechanisms for a protective effect of dummies have been put forward: stopping the baby sleeping on their front, maintaining their ability to breathe and lowering their arousal threshold, allowing them to wake if something is wrong.<sup>6,2</sup> However, observational studies find most dummies fall out within 30 minutes of the baby falling asleep, while many SIDS babies are discovered several hours after this.<sup>7,8</sup>

While many of the risk factors that are more likely to be found in babies who are regular dummy users have been controlled for in the analyses, it is not possible to control for everything. Although there is some strong evidence of an association, a cause and effect relationship has not been established. The most recent UK study found no association between dummy use and SIDS.<sup>9</sup> They point out that 'the fall in SIDS rate despite a fall in prevalence of dummy use [in the UK] does not support the hypothesis that dummies are directly involved in a potentially protective mechanism against SIDS'.

### SIDS, breastfeeding and dummy use

The possible effect of dummies on the establishment of breastfeeding is important in considering the balance of risks as breastfed babies are less likely to succumb to SIDS. A meta-analysis of seven case-control studies in developed countries found that a history of breastfeeding was associated with a 36 percent (95% CI 19% to 49%) reduction in the risk of SIDS compared to those without a history of breastfeeding.<sup>10</sup>

The impact of dummy use on breastfeeding has been investigated but studies are inconclusive, partly because babies randomised to the 'no dummy' group were sometimes given dummies and vice versa.<sup>11</sup> In a systematic review,

Renfrew et al. reported that current studies could not resolve the issue of whether pacifier use was a cause of breastfeeding problems or a marker of existing problems. Overall, there was no effect of dummy use on breastfeeding duration, but early pacifier use, and use by first-time mothers, was associated with less breastfeeding, suggesting that breastfeeding is vulnerable to the use of dummies in some circumstances.<sup>12</sup> There is some evidence that dummy use may be a marker of breastfeeding difficulties or reduced motivation to breastfeed, rather than a true cause of early cessation. It is plausible that where dummies are used to space out feeds or babies' feeding cues are missed they may affect milk supply, which is determined by frequent baby-led feeding.<sup>13,14</sup>

If there is a causative relationship between using a dummy and a reduced risk of SIDS, it may be related to characteristics, such as arousal, which are similar for breastfeeding and using a dummy.<sup>15</sup> In this context, it is worth noting that the word dummy is used in the UK because it is, in its dictionary definition, 'an imitation of a real or original object, intended to be used as a substitute'. More bottle-fed than breastfed babies use dummies but there has not been a systematic review of SIDS risk factors which takes mode and exclusivity of feeding into account as a possible confounding factor.

So, in conclusion, it seems possible that dummy use is protective against SIDS for formula-fed babies, as a whole group. It is not clear in breastfed babies that dummy use would have a positive contribution overall as there may be greater natural arousal and other protective factors. In addition, dummy use may undermine breastfeeding in some situations. So these factors all need to be weighed up and considered in the context of individual circumstances and concerns.

## Information for parents

The evidence is far from complete or clear-cut. Those working with parents should aim to share information on the risk factors in a balanced way to enable them to make decisions that are right for them and their babies.

- Baby Friendly recommend that all breastfeeding mothers should be discouraged from using teats and dummies during the establishment of breastfeeding. Interestingly, the new Breastfeeding Care pathway from the Department of Health in England states: 'Avoid teats and dummies as they interfere with breastfeeding.'
- The NHS Choices website points out that 'It's possible that using a dummy at the start of any sleep period reduces the risk of cot death. However, the evidence is not strong and not all experts agree that dummies should be promoted.'
- It has been suggested that being aware of the recommendations on dummy use is

more important for parents who are formula feeding, because they are more likely to have other characteristics that may place their infants at greater risk for SIDS.

- It is not unusual for babies to refuse to accept a dummy and they 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 the dummy is recommended only when settling the baby to sleep.

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