**UNICEF UK Baby Friendly Initiative statement on *Bed-sharing when parents do not smoke: is there a risk of SIDS? An individual level analysis of five major case-control studies***

21 May 2013

Following publication today in BMJ Open of a new paper on the link between bed-sharing and Sudden Infant Death Syndrome (SIDS)[1], UNICEF UK Baby Friendly Initiative has issued the following statement.

This research presents the individual records of 1,472 cot death cases and 4,679 control cases across five studies from different countries conducted between 1987 and 2003. From these records, the researchers conclude that the risk of SIDS among breastfed babies under 3 months increased with bed-sharing, even when the parents did not smoke and the mother had not consumed alcohol or drugs. The researchers called for health professionals to "make a definite stand against all bed-sharing, especially for babies under 3 months."

When considering this paper the following points are of note:

1. The stated objective of the paper is to resolve uncertainty about the risk of SIDS and bed-sharing, but this is not possible if essential data has not been collected. A more recent study (Blair et al, BMJ 2009) has demonstrated a significant interaction between co-sleeping and recent parental consumption of alcohol and drugs. None of these five case-control studies collected data on recent drug consumption and only two collected data on alcohol consumption. The over-arching argument is thus whether bed-sharing in itself poses a risk to infants or whether the risk is within the hazardous circumstances in which we bed-share. These older studies simply do not have the data to resolve this argument.

2. None of the studies collected data on paternal alcohol consumption preceding the last sleep, or made clear whether the parent who drank alcohol was the parent sleeping next to the infant for the last sleep. Maternal alcohol consumption prior to the last sleep was only collected for two fifths of the mothers and trying to impute values of alcohol consumption from different cultures in different countries at different time periods requires unreasonable assumptions about equivalence and homogeneity to be made.

3. The adjusted OR for bed-sharing as stated in the paper is 2.7 [95% CI: 1.4-5.3]. The overall adjusted OR for bed-sharing amongst smokers is not presented but the authors intimate it is much higher than amongst non-smokers (nearly ten-fold higher according to Figure 2 in the paper). Therefore the overall adjusted OR for bed-sharing amongst non-smokers must be considerably lower than 2.7. This data is absent from the paper.

What is presented is an age specific odds ratio of 5.1 [95% CI: 2.3-11.4] for parents who bed-share and do not smoke when the baby is less than 3 months

[1] Carpenter R, McGarvey C, Mitchell EA et al. (2013) Bed sharing when parents do not smoke: is there a risk of SIDS? An individual level analysis of five major case-control studies. BMJ Open. doi:10.1136/bmjopen-2012-002299

old. This is taken from Table 3 where the baseline group are at low risk of SIDS (baby girls, placed on their back to sleep with no other risk factors present). By using a very low risk group for the baseline, this has the effect of making other odds ratios appear unusually high (for instance Table 3 also shows a 20-fold risk of bed-sharing when the mother smokes and a 151-fold risk when the parent has also recently consumed alcohol).

Thus, the OR of 5.1 needs to be put into context in the abstract, the paper and the press release. The impression from the press release is that infants in the general population are at a 5-fold risk of SIDS when the parents bed-share and don't smoke, which is untrue. The risk is considerably smaller than 2.7 and might not even be significant. Considering these findings, it is surprising that the authors have focused on the risk among non-smoking, non-drinking bed-sharing mothers, when there are groups at far higher risk.

4. Given the authors are advocating that parents should not bed-share, an alternative environment observed in other studies is to feed the baby at night on the sofa or an armchair (and sometimes fall asleep). The authors have chosen not to present this data but the risk associated with such an environment is far greater than co-sleeping in a parental bed.

There is strong evidence that breastfeeding and bed-sharing have an interdependent relationship and the issue of what to discuss with parents regarding parent-infant bed sharing is controversial and confusing. Bed-sharing has advantages and dangers and views are informed by culture and personal belief.

UNICEF UK's recommendation to health professionals on the key information which should be discussed with all parents in order to protect babies is outlined below. It is intended to be used in conjunction with the leaflet *Caring for your baby at night*[2]. These recommendations will not be changing in the light of the limited findings from this paper.

**Recommendations for health professionals on discussing bed-sharing with parents**

Simplistic messages in relation to where a baby sleeps should be avoided; neither blanket prohibitions nor blanket permissions reflect the current research evidence.

The current body of evidence overwhelmingly supports the following key messages, which should be conveyed to all parents:

- The safest place for your baby to sleep is in a cot by your bed
- Sleeping with your baby on a sofa puts your baby at greatest risk
- Your baby should not share a bed with anyone who:
    - is a smoker

[2] *Caring for your baby at night* is available from the UNICEF UK Baby Friendly Initiative at www.unicef.org.uk/caringatnight along with an accompanying Health professionals' guide to its use in practice.

- has consumed alcohol
- has taken drugs (legal or illegal) that make them sleepy.

The incidence of SIDS (often called “cot death”) is higher in the following groups:

- Parents in low socio-economic groups
- Parents who currently abuse alcohol or drugs
- Young mothers with more than one child
- Premature infants and those with low birthweight

Parents within these groups will need more face to face discussion to ensure that these key messages are explored and understood. They may need some practical help, possibly from other agencies, to enable them to put them into practice.