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Co-sleeping in Infancy: the Controversies

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From time to time, healthcare professionals may encounter expectant or new parents who are pondering how best to arrange their baby's sleep. Should the baby sleep in his own cot or with the parent(s)? What are the benefits and risks? What should healthcare professionals advise with reference to the latest scientific evidence while taking into account the needs of parents?

What is Co-sleeping?

Co-sleeping is defined as the caregiver and the child sleeping in the same room (room-sharing), or sleeping on the same surface such as a bed, a sofa or a chair (bed-sharing). ^{1, 2. 3} Co-sleeping in this article refers to the latter.

How common is co-sleeping?

Numerous studies have shown that bed-sharing is common in infancy.

- The Survey on Infant Sleep Behavior (US Centers for Disease Control and Prevention, 2014) revealed that 19.5% of American parents reported always/often bed-sharing with their infants⁴. Asians were among the three non-Hispanic ethnic groups with the highest percentage of bed-sharing.
- In the United Kingdom, Blair (2004)⁵ reported nearly half of the English parents bed-shared with their infants, while Ball (2016)⁶ found 28% and 28% of mothers reported sleeping with their infants intermittently and frequently respectively.

- In China, an epidemiological study on Shanghai children aged 1 to 23 months showed that 58% of the parents bed-shared with their children. Regular bed-sharing increased significantly with age from 44% at 1 month to 72% at 23 months⁷. Among those co-slept with parents, 61% had their own bedroom but parents did not want to leave their children alone at night.
- A web-based survey on children's sleep (age ranged from 0 to 36 months) found a high prevalence of bed-sharing (70-84%) in Vietnam, Thailand, India and Indonesia, compared with other Asian and Western countries⁸.

What are the reasons for and perceived benefits of bed-sharing? What is the evidence?

From a systematic review of 34 articles, Ward (2015)⁹ found that there are various reasons for parents to bed-share with their infants, including facilitating breastfeeding, providing emotional and physical comfort, better sleep, closer monitoring of infants (both cries and sleep), enabling bonding and attachment, and as a cultural practice (e.g. Indians, Mexicans, Aboriginal families, etc.).

Among all, breastfeeding is the most commonly given reason for bed-sharing^{9, 10}. Some studies found that bed-sharing enabled infants to have more frequent suckling and an overall longer suckling duration that stimulated and maintained milk supply^{11, 12}. Consistent with earlier studies, a recent cross-sectional study found an association between bed-sharing and exclusive breastfeeding or partial breastfeeding, when compared with mothers who room-shared without bed-sharing¹³; while a large longitudinal study provided considerable evidence that bed-sharing promoted breastfeeding duration, with frequent bed-sharing producing the greatest effect ¹⁴. However, it was noted that bed-sharing may only be one of many other factors, such as intent, that impacted on successful breastfeeding⁶.

Co-sleeping and SIDS & the evidence: What do the authorities recommend?

Sudden Infant Death Syndrome (SIDS) is the sudden and unexplainable death of infants, in which all appropriate investigations including a thorough postmortem examination fail to reveal an adequate cause of death.¹ SIDS is a leading cause of sleep-related death in infancy¹⁵. The cause of SIDS is unknown and is likely to be multifactorial³.

In Hong Kong, the incidence of SIDS was estimated at 0.29/1000 in 1987 and $\leq 0.16/1000$ during 1999-2002.¹⁶ These rates were lower than the overseas counterparts (e.g. unexplained infant deaths: 0.31 per 1,000 live births in UK in 2015).¹⁷ The newly issued Child Fatality Review Report by the Hong Kong Social Welfare Department¹⁸ showed that for the cases reviewed from 2006 to 2013, there were 24 cases of Sudden and Unexpected Death in Infancy (SUDI) which might be related to co-sleeping and/or other sleep safety issues.

Based on a similar set of study reports, the National Institute for Health and Care Excellence (NICE) in its "Addendum to Clinical Guideline 37, Postnatal Care (2014)"³ and the American Academy of Pediatrics (AAP), in its "SIDS and Other Sleep-Related Infant Deaths: Updated 2016 Recommendations for a Safe Infant Sleeping Environment"¹ had found an association³ between co-sleeping and SIDS or an increased risk¹ of SIDS with co-sleeping, and identified the following situations which might further increase the association / risk:

- Bed-sharing with infants who are born prematurely, and/or with low birth weight^{1, 3}, or full-term normal-weight infants younger than 4 months old¹
- Bed-sharing with a current smoker, even if not smoking in bed^{1, 3} or if mother smoked during pregnancy¹
- Bed-sharing with someone impaired in alertness or ability to arouse due to fatigue¹, using substances
 (illicit drugs or alcohol)^{1,3} or medications¹
- Bed-sharing on soft surfaces like sofas, waterbed, old mattress, couch or armchairs, or with soft bedding accessories like pillows or blankets¹

NICE Guideline committee highlighted the challenges of conducting research on SIDS. It cautioned that the generation of evidence from case-control studies was fraught with methodological difficulties, resulting in high risks of recall bias and residual confounding, among others, that could compromise the results. Thus, a causal relationship between co-sleeping and SIDS could not be established based on the available low-quality evidence. Nonetheless, in view of the seriousness of the condition, despite being rare, the committee conceded the use of lower quality evidence was warranted.

Does Breastfeeding Protect against SIDS in Co-sleeping Infants?

As mentioned above, bed-sharing is commonly associated with breastfeeding. A video-observational study¹⁹ reported that bed-sharing mothers might display different sleep behaviours from non-bedsharers. Irregular bed-sharing mothers and non-breastfeeding mothers tended to turn their backs on their infants while bed-sharing, whereas regular bed-sharing breastfeeding mothers slept in close proximity and responded more quickly to their infants. However, the generalisability of the study findings is doubtful in view of the limitations of the study design and small sample size, etc.

Breastfeeding is a known protective factor against SIDS, with the protective effect increasing with breastfeeding exclusivity.¹ Nonetheless, according to the AAP technical report²⁰, a Dutch case-control study²¹ found that the risk of SIDS while bed-sharing was similar among infants in the first 4 months of life, regardless of the breastfeeding status, which implied the potential benefits of breastfeeding do not outweigh the risk of bed-sharing. On the other hand, the UK NICE Guideline committee acknowledged that there was very limited evidence found in relation to co-sleeping and breastfeeding and SIDS, and therefore could not make any further comment with regard to breastfeeding alone.

To co-sleep or not: what should health professionals advise?

Room-sharing, with the infant sleeping close to the parents on a separate surface designed for infants for the first year of life (at least the first 6 months) is recommended as the safe practice to guard against SIDS, and facilitate breastfeeding and child care¹. The safest place for a baby to sleep is in a cot beside the mother's bed. If it is not possible to do so due to a lack of space, the baby may be placed in a cradle on the parent's bed for the first three postnatal months.



However, Volpe & Ball (2015)²² cited various reasons for parents not to comply with the safe sleeping practices: lack of knowledge, challenges in adopting the practices (e.g. breastfeeding at night, caring for an unsettled child, lack of space for a baby cot) and specific parental values or cultural norms. Ball (2016)⁶ found that in the UK, regular bed-sharers were likely mothers who were university-educated with high prenatal intent to breastfeed, and perceived bed-sharing as a strategy of night-time feedings. If health professionals fail to recognize and address parental values and preferences, as well as the aforesaid difficulties, any advice on safe sleep practices may be totally ignored or even rejected. Besides, other than being planned, the NICE Guideline committee³ stressed that bed-sharing may also be unintentional.

It would therefore be prudent for healthcare professionals to provide anticipatory guidance by exploring parents' intended sleep arrangement and their specific circumstances. They are helped to make an informed decision through:^{23, 24}

- acknowledging the possible benefits of bed-sharing (e.g. facilitating breastfeeding and prompt response to baby cues);
- (2) helping parents to understand the potential risks of bed-sharing; and
- (3) adopting a risk-minimizing approach in advising parents, who are likely to bed-share with their infants intentionally or unintentionally, to:
 - abstain from smoking during antenatal and postnatal period,
 - avoid taking alcohol or drugs,
 - avoid co-sleeping with preterm, low-birth-weight infants or infants under 4 months,

in addition to other well-known childcare practices that reduce the risk of SIDS, e.g. placing the infant on his back to sleep and on a firm surface without loose beddings (including avoiding sleeping on a sofa or chair).



Source of Photo: Family Health Service, Department of Health

The following are relevant local and overseas resources:

- Parent checklist "Is Your Newborn Baby Safe? (你的初生寶寶安全嗎?)" to help parents review their home environment and practices, and facilitate discussion between professionals and parents on safety measures <u>http://s.fhs.gov.hk/uoghe</u>
- Factsheet on "Providing a safe environment for your baby (給寶寶一個安全環境)": http://s.fhs.gov.hk/tdjz4
- Leaflet on "Protect Baby from Sudden Infant Death Syndrome (SIDS) (預防嬰兒猝死症)": http://s.fhs.gov.hk/086ly
- Booklet on "Love, Starts from Breastfeeding...(愛·從母乳開始)": http://s.fhs.gov.hk/0zni2
- Infant Safe Sleep@ Campaign (US), Raising Children Network (Australia), Zero to Three (US)
- Co-sleeping and SIDS: A guide for health professionals (Infant Sleep Information Source/ UNICEF The Baby Friendly Initiative)

https://www.unicef.org.uk/babyfriendly/wp-content/uploads/sites/2/2016/07/Co-sleeping-and-S IDS-A-Guide-for-Health-Professionals.pdf

 Caring for your baby at night: A guide for parents (UNICEF Baby Friendly Initiative) https://www.unicef.org.uk/babyfriendly/baby-friendly-resources/leaflets-and-posters/caring-for-y our-baby-at-night/

Key Message:

Healthcare professionals should help parents and carers understand the possible benefits and potential risks of bed-sharing. Room-sharing is recommended as the safe practice to guard against SIDS, and facilitate breastfeeding and child care. For parents who are likely to bed-share with their infants, risk-minimizing strategies should be adopted.

醫護人員應讓父母和照顧者認識與嬰兒同牀共睡的好處和風險。與嬰兒共睡一室,既可減低嬰 兒猝死症發生的機會,也方便餵哺母乳和照顧嬰兒。若父母選擇與嬰兒睡在一起,他們應採取 有效的方法,以減低同牀共睡的風險。

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Views expressed in this article are the author's and do not necessarily reflect the opinion or position of the BFHIHKA.

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