

# Can bedsharing protect against sleep-related death?

Melissa Bartick, MD, MS, MPH

Adetola Louis-Jacques, MD

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Recommends “human milk feeding” to reduce the risk of SIDS.

All research has been done on “breastfeeding.”

No studies have looked only at “human milk feeding” and SIDS.

# Human Milk Feeding $\neq$ Breastfeeding



$\neq$



# Breastfeeding is associated with a lower risk of sleep-related death (SIDS and SUID)

- Most breastfeeding mothers bedshare
- Is it the milk, or bedsharing, or both, or other things?



# Contributors to sleep-related death

- Prone sleep
- Deep sleep
- Suffocation by pillows, bedding, or wedging in sofa or chairs.
- Lack of parental response to infant distress (infant too far away)
- Parental impairment by alcohol or drugs
- Minor infant infections
- Exposure to tobacco smoke (bedsharing with smoker->More exposure to smoke-related toxins).

# Is it the milk or is it “breastfeeding”?

## **The Milk**

- Has immunologic properties
  - May reduce infections
- Nutritional properties may affect arousal
- May affect nerve myelination

## **The Behavior**

- May affect sleeping position in bed with respect to pillows
- May affect if infant sleeps prone
- May affect arousability and depth of sleep
- May affect ability of mother to respond to distressed infant

# Positions Not Seen With Breastfeeding



- 70% of formula feeding parents put infant on their pillow or between parents' pillow.
- 0% of breastfeeding bedsharing mothers did so. (n=20 families)<sup>1</sup>

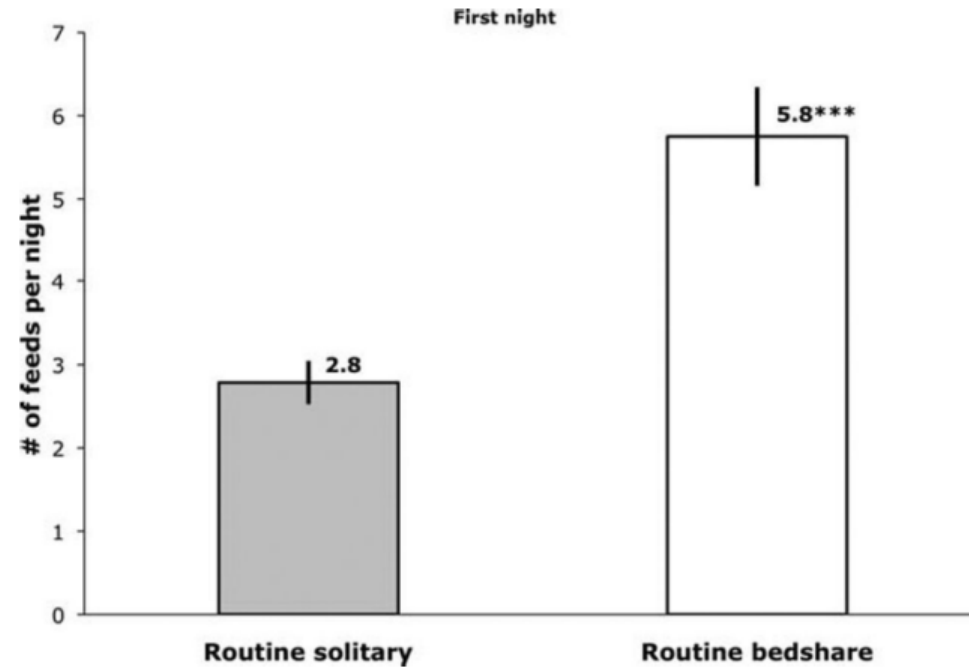
<sup>1</sup>Ball HL. Parent-infant bed-sharing behavior: Effects of feeding type and presence of father. Hum Nat. 2006;17(3):301-18.

- Breastfeeding infants will not be prone.
- Baby and mom will be more alert.
- They wake both more often.
- Infants will not be on pillows or near pillows.
- Mother is close: can respond to infant distress.





# Bedsharing breastfeeding dyads feed more often



**Fig. 2.** Mean number of breastfeeds per night (with SE) for routine solitary sleepers (while sleeping separately,  $n = 14$ ) and routine bedsharers (while bedsharing,  $n = 12$ ) on the first laboratory night. Significant between group difference, \*\*\* $P < 0.001$ .

Gettler LT, McKenna JJ. Evolutionary perspectives on mother-infant sleep proximity and breastfeeding in a laboratory setting. *Am J Phys Anthropol.* 2011;144(3):454-462.

# Using a crib instead isn't necessarily safer

- A breastfeeding mother could be doing something more dangerous than bedsharing
- Dangerous bedding or positioning might be used



# Bedsharing is common with breastfeeding

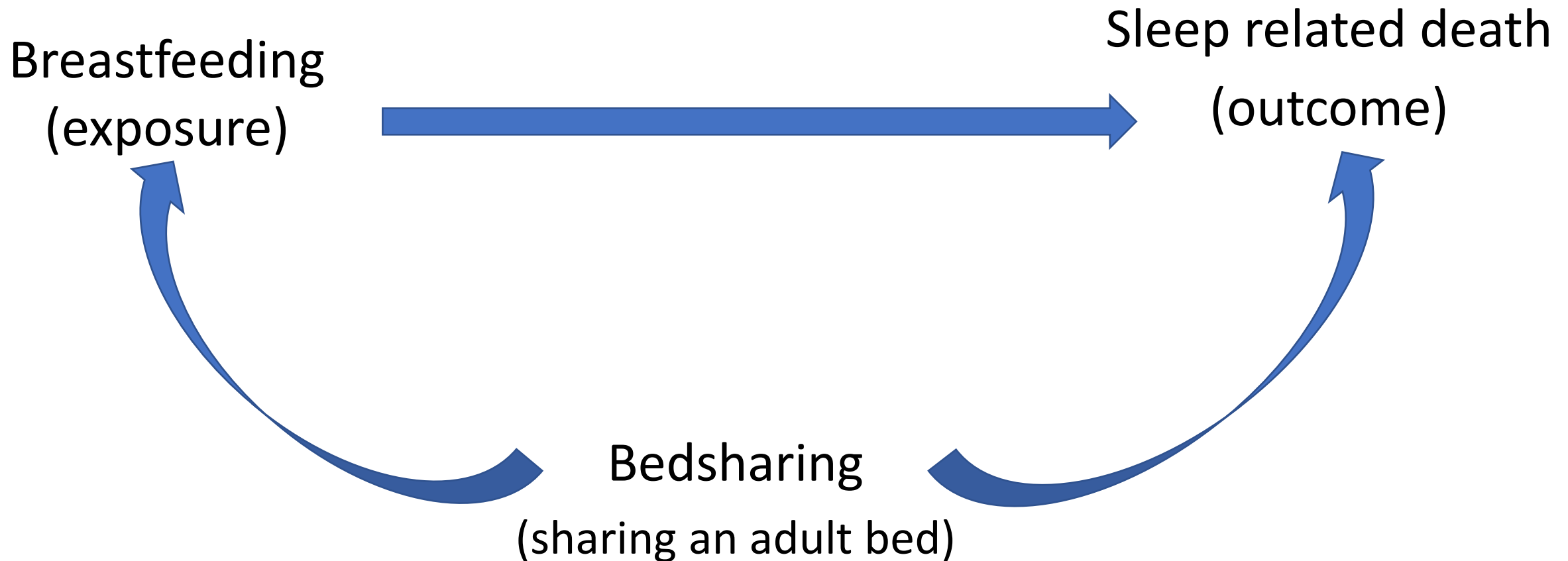
- At least 61% of US mothers bedshare some of the time<sup>1</sup>
- This percentage is likely much higher among breastfeeding mothers



1. Bombard JM, Kortsmid K, Warner L, Shapiro-Mendoza CK, Cox S, Kroelinger CD, et al. Vital Signs: Trends and disparities in infant safe sleep practices - United States, 2009-2015. MMWR Morb Mortal Wkly Rep. 2018;67(1):39-46.

# Bedsharing is a confounder

(It is associated with the exposure and the outcome)



# What the literature says-

## Only 2 case control studies

**Blair et al. (2014)**- Only reliable study done.

- Not significant risk if NO risk factors (OR 1.1; CI 0.6-2.0)
- Breastfeeding was highly protective

**Carpenter et al. (2013)** -Flawed comparator group and few with alcohol.

- Meta-analysis of 5 case control studies
- Bedsharing associated with 5-fold risk of death in younger infants in non-hazardous circumstances.

Blair PS, Sidebotham P, Pease A, Fleming PJ.. PloS one. 2014;9(9):e107799.

Carpenter R, McGarvey C, Mitchell EA, et al. 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. 2013;3(5).

# Hazardous Circumstances (In Order)

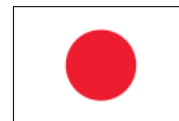
- **Sharing a sofa** with a sleeping adult (“sofa-sharing”)
- Infant sleeping next to an adult who is impaired by **alcohol** or drugs
- **Tobacco** exposure
- Sleeping in the prone position
- Never initiating breastfeeding
- Sharing a chair with a sleeping adult
- Sleeping on soft bedding
- Being born preterm or of low birth weight

**-Academy of Breastfeeding Medicine, 2020**

## Sudden infant death and social justice: A syndemics approach

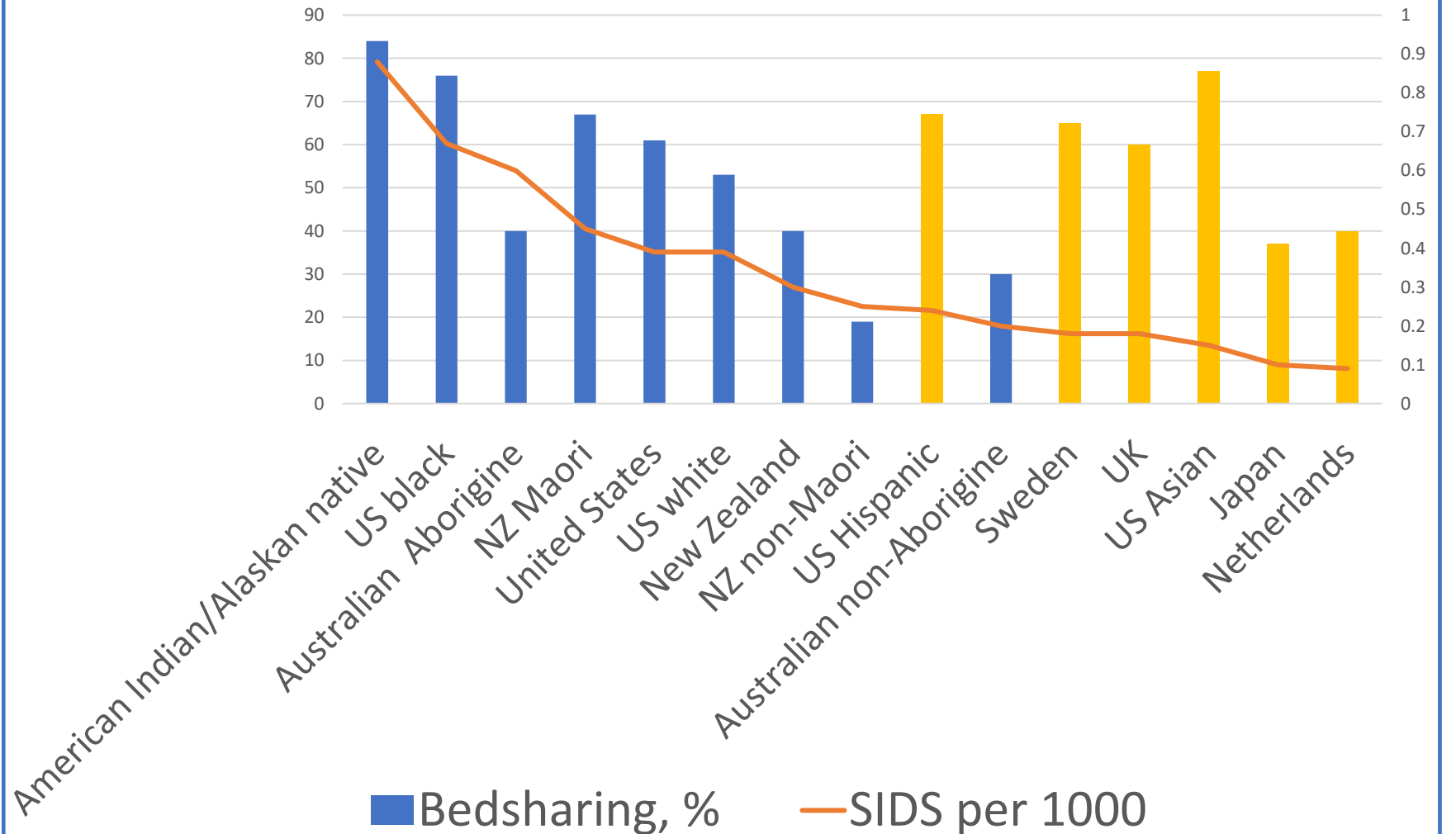
Melissa Bartick<sup>1</sup>  | Cecília Tomori<sup>2</sup> 

- Examined high- and low-SIDS prevalence populations globally
- Examined SIDS risk factors for each population, including bedsharing



Bartick M, Tomori C. Sudden Infant Death and Social Justice: A syndemics Approach. *Matern Child Nutr.* 2018 Aug 23:e12652. doi: 10.1111/mcn.12652

# Bedsharing as a cultural norm and SIDS



 Populations with low SIDS and high to moderate bedsharing



# To summarize



- We can't separate out bedsharing from breastfeeding when describing the decreased risk of SIDS associated with breastfeeding
- Bedsharing might even explain part of this decreased risk of death (in the absence of other hazards)
- There is no evidence to recommend “human milk feeding” as a SIDS reduction strategy. Only “breastfeeding” can be recommended.

# Other considerations

- Exclusive pumping, bedsharing, and sleep related death?
  - Exclusive pumping moms may bedshare differently who bottle feed expressed milk vs formula vs direct breastfeeding



**RECOMMEND:** Co-sleepers in case parents have alcohol or other temporary circumstances that make bedsharing unsafe

