Northern Ontario Women's Health Conference

Breastfeeding 101: Establishing and Maintaining Supply

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Disclosure Slide – Dr. Haggarty

- **Relationships with commercial interests:**
  - **None**
- **Potential for conflict(s) of interest:**
  - No payment/funding from any organizations or products discussed today.

Disclosure Slide – Liana

- **Relationships with commercial interests:**
  - **None**
- **Potential for conflict(s) of interest:**
  - No payment/funding from any organizations or products discussed today.

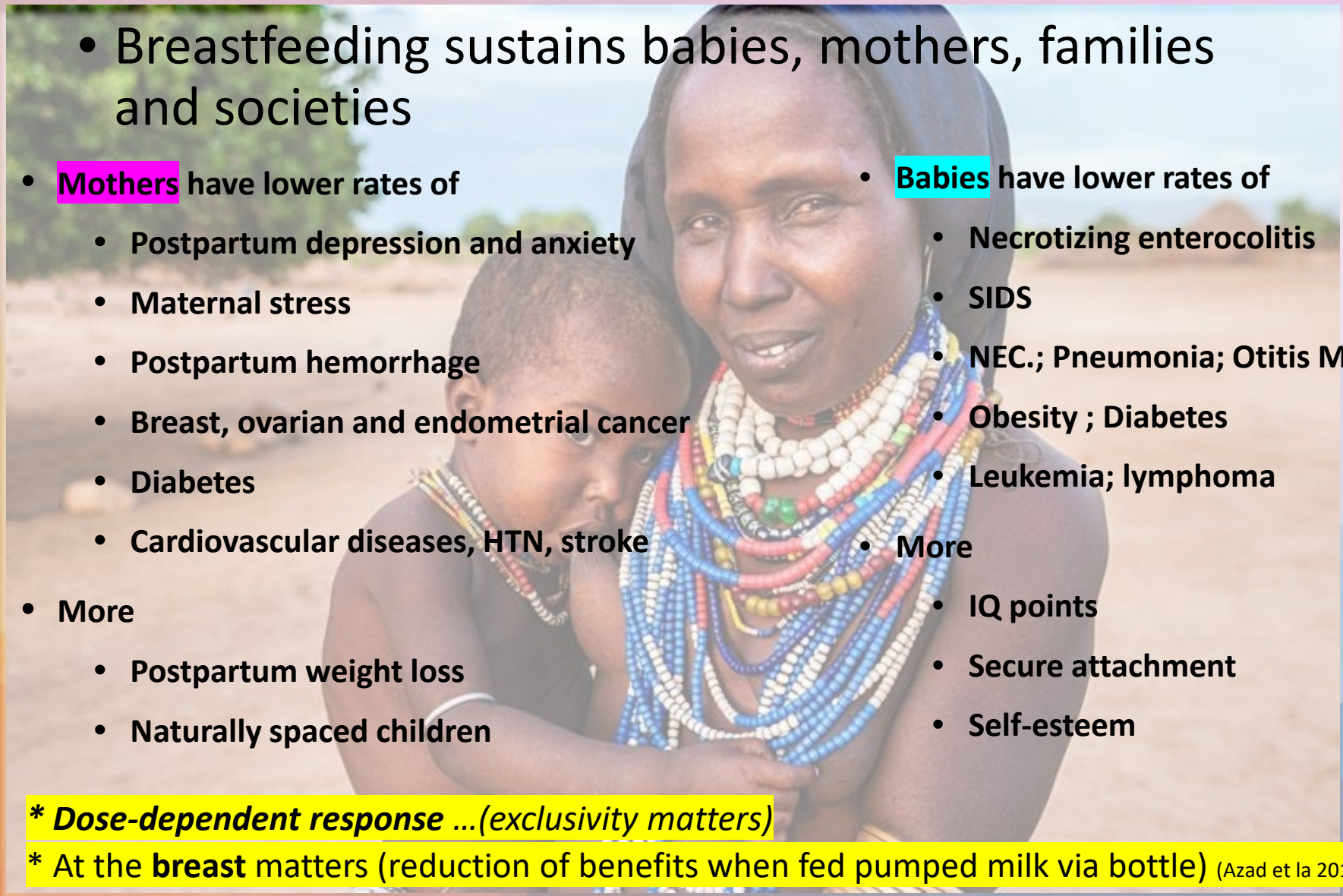
Learning Objectives

1. Describe the actions necessary for a breastfeeding mother to establish adequate milk supply

2. Identify how oral restrictions may contribute to low supply, how to properly assess a tongue-tie, and what indications would warrant dividing an infant's frenulum.

3. Identify when galactagogue medications are indicated, and gain comfort prescribing.

Why breastfeeding matters



- Breastfeeding sustains babies, mothers, families and societies

- **Mothers have lower rates of**
  - **Postpartum depression and anxiety**
  - **Maternal stress**
  - **Postpartum hemorrhage**
  - **Breast, ovarian and endometrial cancer**
  - **Diabetes**
  - **Cardiovascular diseases, HTN, stroke**
- **More**
  - **Postpartum weight loss**
  - **Naturally spaced children**

- **Babies have lower rates of**
  - **Necrotizing enterocolitis**
  - **SIDS**
  - **NEC.; Pneumonia; Otitis Media**
  - **Obesity ; Diabetes**
  - **Leukemia; lymphoma**
- **More**
  - **IQ points**
  - **Secure attachment**
  - **Self-esteem**

**** Dose-dependent response** …(exclusivity matters)*

* At the **breast** matters (reduction of benefits when fed pumped milk via bottle) (Azad et la 2018)

DID YOU EVER WONDER WHAT'S IN... ?

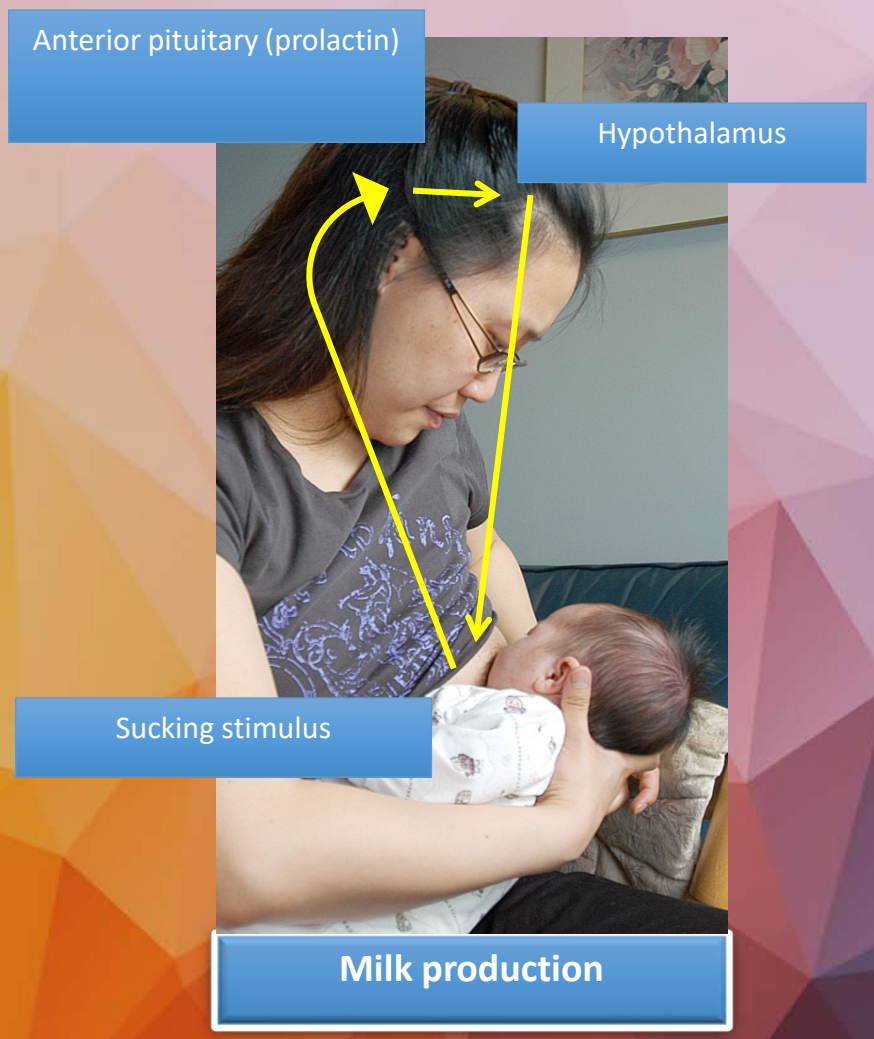
BREASTMILK

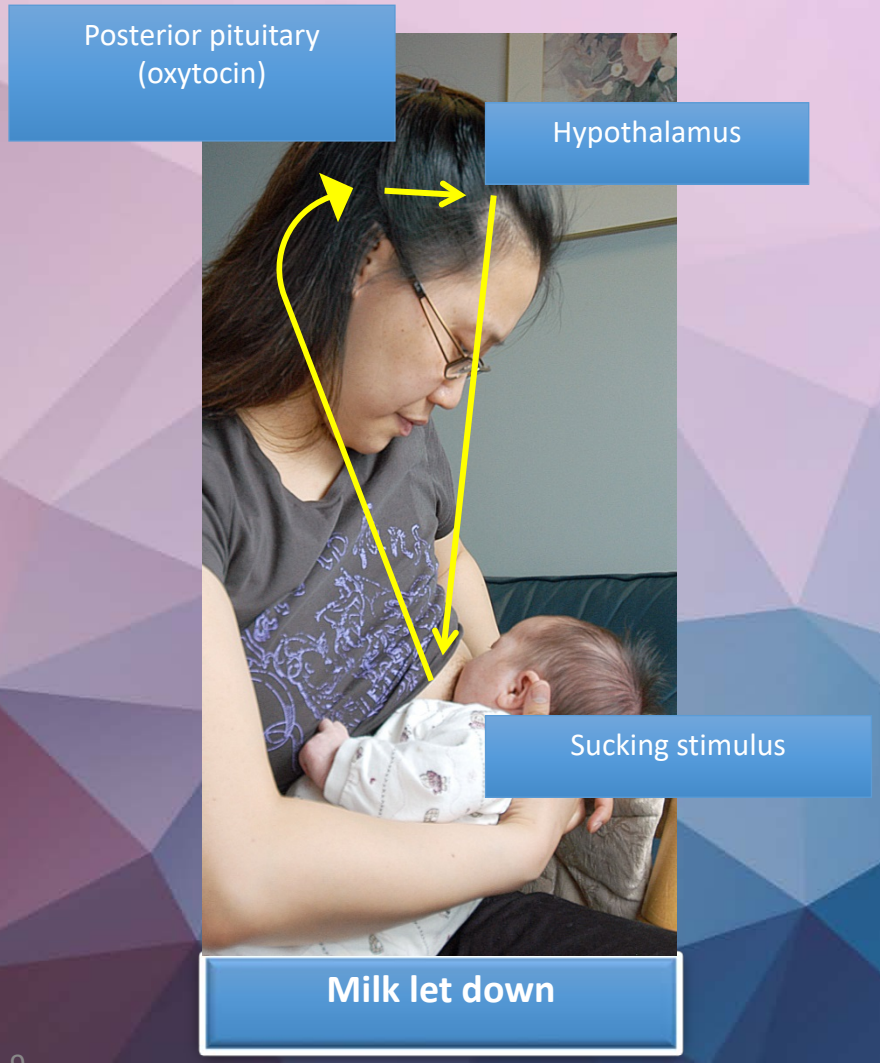
FORMULA

Establishing Supply

Frequent suckling & Effective emptying

Hormonal Pathway for Milk Production

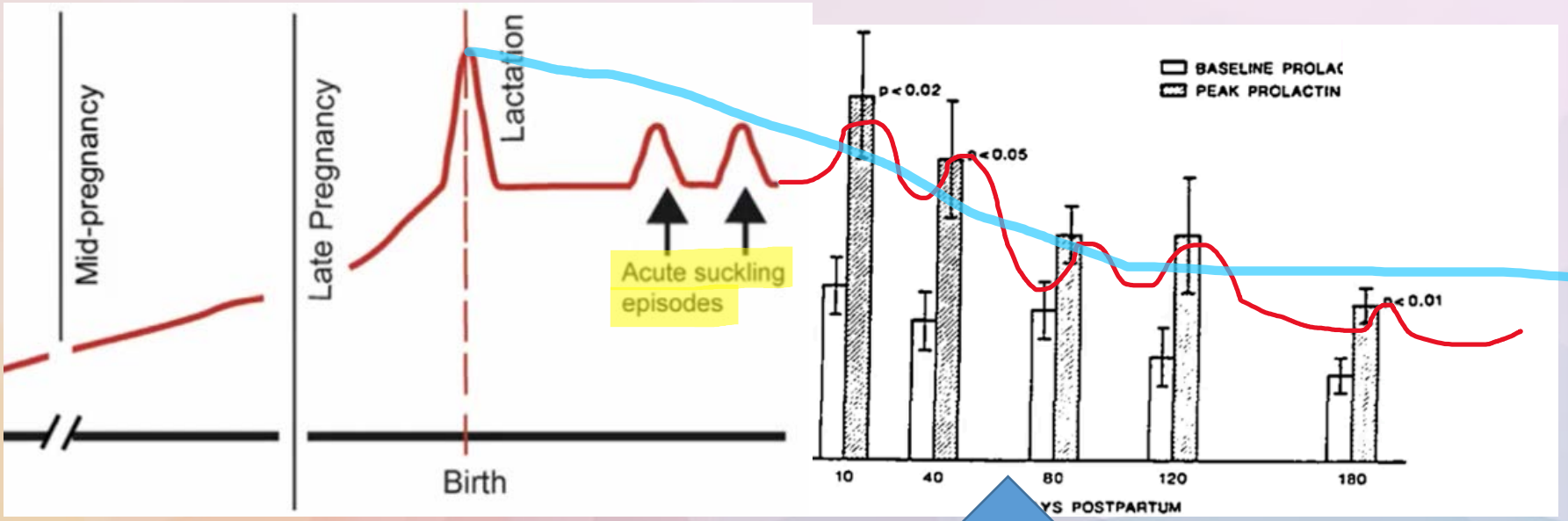




Lactogenesis & Prolactin Levels

"Lactogenesis I"

"Lactogenesis II"



Slopes till 12 wks PP

Real-time PRL levels

Mean PRL levels

Phillips HR, Yip SH, Grattan DR Molecular and Cell Endo 502(2020)

Battan DA, Marrs RP et al Obstet & Gynecol 65(6) June 1985

How to establish breastfeeding with Frequent Suckling & Effective Emptying

- Prenatal education on breastfeeding
- Early and extended skin-to-skin
- Limit any separation of dyad to only medical necessity
- Unrestricted nursing on baby's cues
- Social support for food, cleaning, childcare etc.
- Realistic expectations (mom can't do it all)

Baby feeding cues

States:

* Deep sleep
* Light sleep
* **Drowsy**
* **Quiet alert**
* **Active alert**
* Crying

www.health.qld.gov.au/breastfeeding/documents/feeding_cues.pdf

How to establish breastfeeding: Frequent Suckling & Effective Emptying

- Comfortable non-painful latch + positioning
  - Early correction of latch +/- frenectomy if indicated
- Sometimes: Pumping qFeed if baby not latching
  - Double electric; newer motor;
  - proper flange size *avg. is 17mm not 21mm
- Prompt expert support to troubleshoot problems
- SNS to keep baby at the breast

Which would you choose?

Would you prefer to give your baby:

Pumped breastmilk from a bottle? **OR** Formula from your breast?

A good latch

- Asymmetric
- Chin is in; nose is not

BAD >>

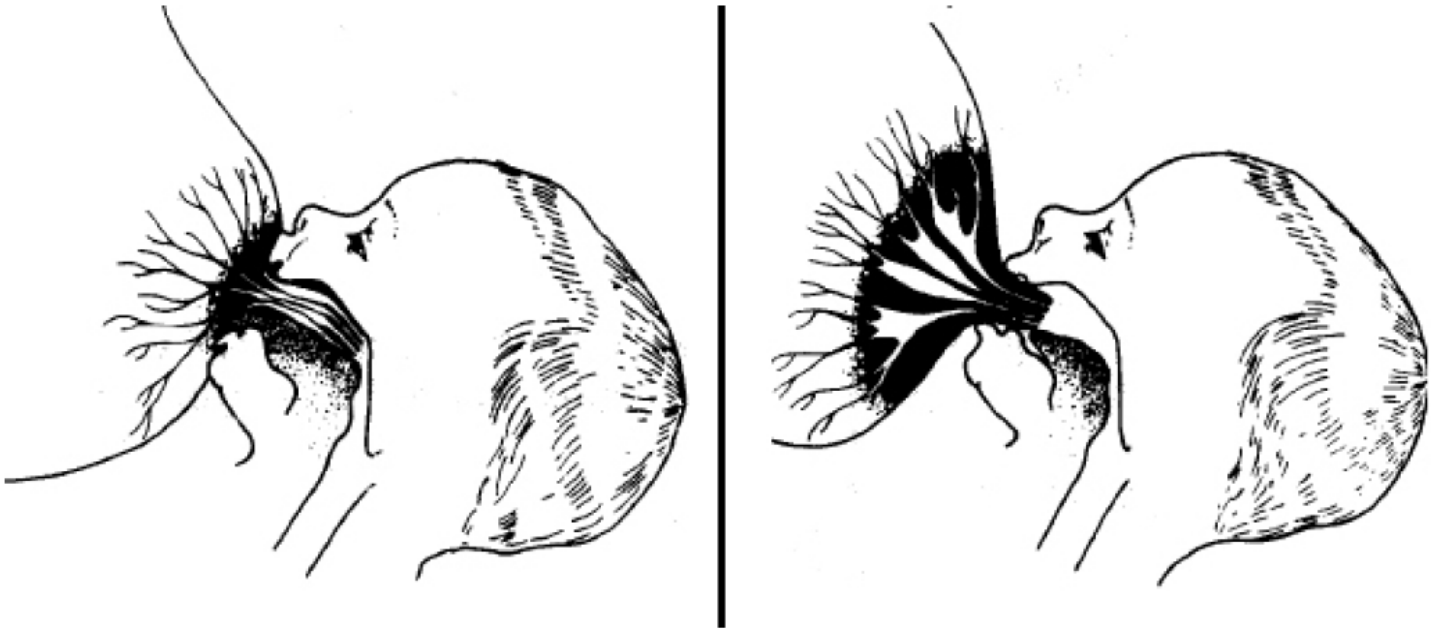
Getting a good latch

- Starting with cross-cradle
- Shape breast + support baby's neck (not head)

Latching: inside the baby's mouth

6/3

What can you see?



Good attachment

Poor attachment

Breastfeeding Counselling: a training course, WHO/CHD/93.4, UNICEF/NUT/93.2

Getting a good latch

- Wait till baby open's WIDE
- Then bring baby to breast, (rather than breast to baby)
- Support nape of neck/shoulder blades (not behind head)

Good position

- Baby's body is well supported
- Pressed IN, not falling away
- Mom is comfortable too

SIDE-LYING

Nature’s BEST nursing position

Interferences to early milk supply

- X “Nipple pain is normal”
- X Nipple shields (dec. nipple stimulation)
- X “Let me take the baby so you can sleep”
- X “Let the sleepy baby sleep”
- X “Baby needs to be on each breast for 20min”
- X Topping-up when not medically indicated

Maintaining Supply

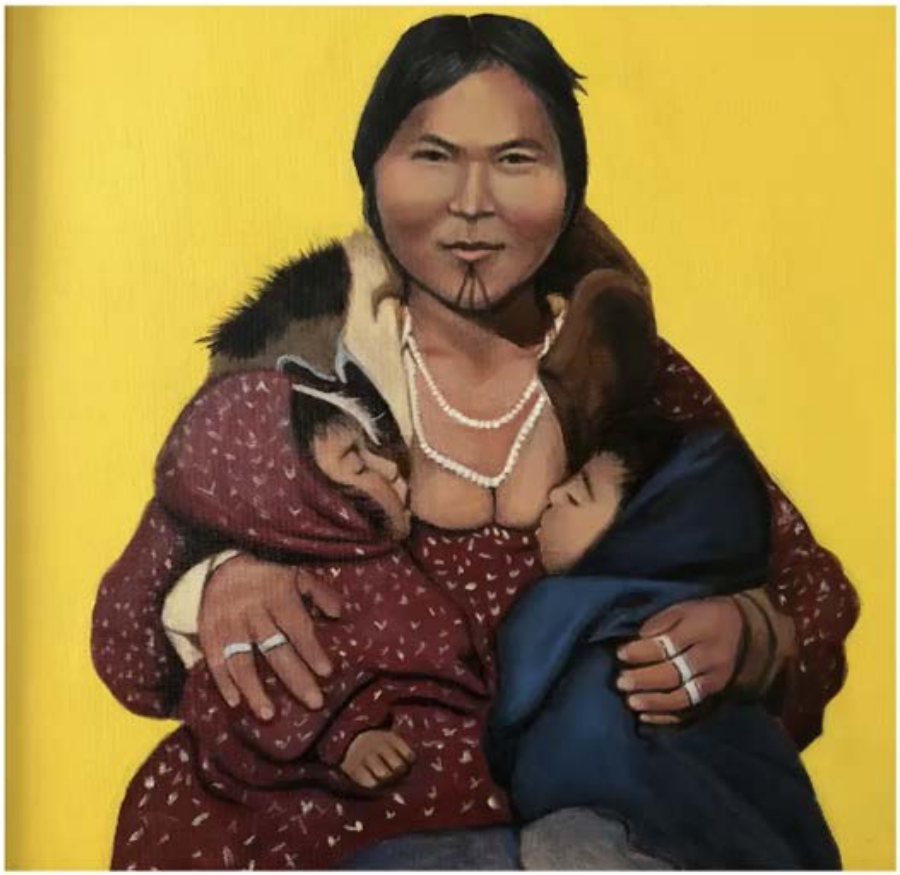


Image: Shondinii Walters

Maintaining Supply

(Again…)

Frequent suckling

& Effective emptying

Lactogenesis & Prolactin Levels

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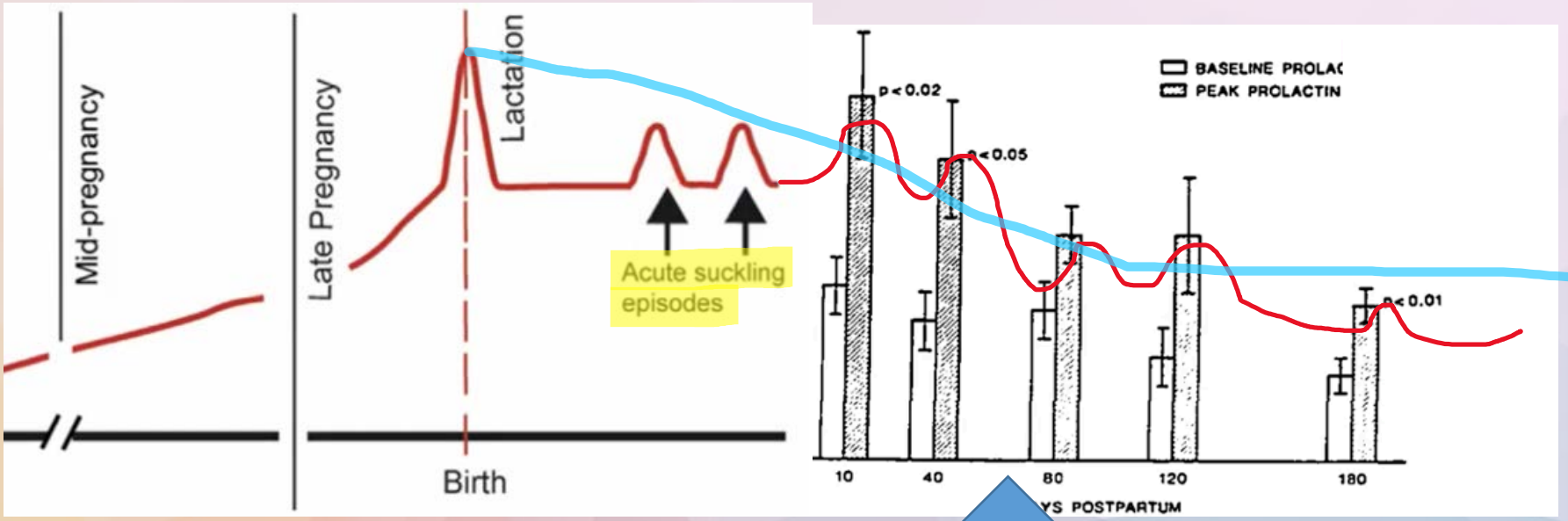

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Causes of late onset decreased milk supply

- Suboptimal latch due to technique or oral restriction
  - Baby “living off the letdown”
- Only offering one breast per nursing session
- Stress. Mom is doing too much.
- Early return to work
- More than occasional use of pacifiers and bottles
- Pregnancy
- Meds:
  - Hormonal birth control
  - Pseudoephedrine
  - Aripiprazole
  - Testosterone

- X Spacing feeds
- X “Schedules”
- X Sleep training

Newman & Polokova (2022)

Symptoms of Late onset decreased milk supply

- Baby fussing, squirming at breast
- Baby pulls, chomps or bites breast
- Increased crying and fussing between feeds
- Breast refusal when awake *(only takes when sleeping)*
- Green, mucousy or blood in stools
- Hand-chewing and sucking
- Sore nipples
- Sometimes, slowed gain (later sign)

Newman & Polokova (2022)

Tongue-Ties

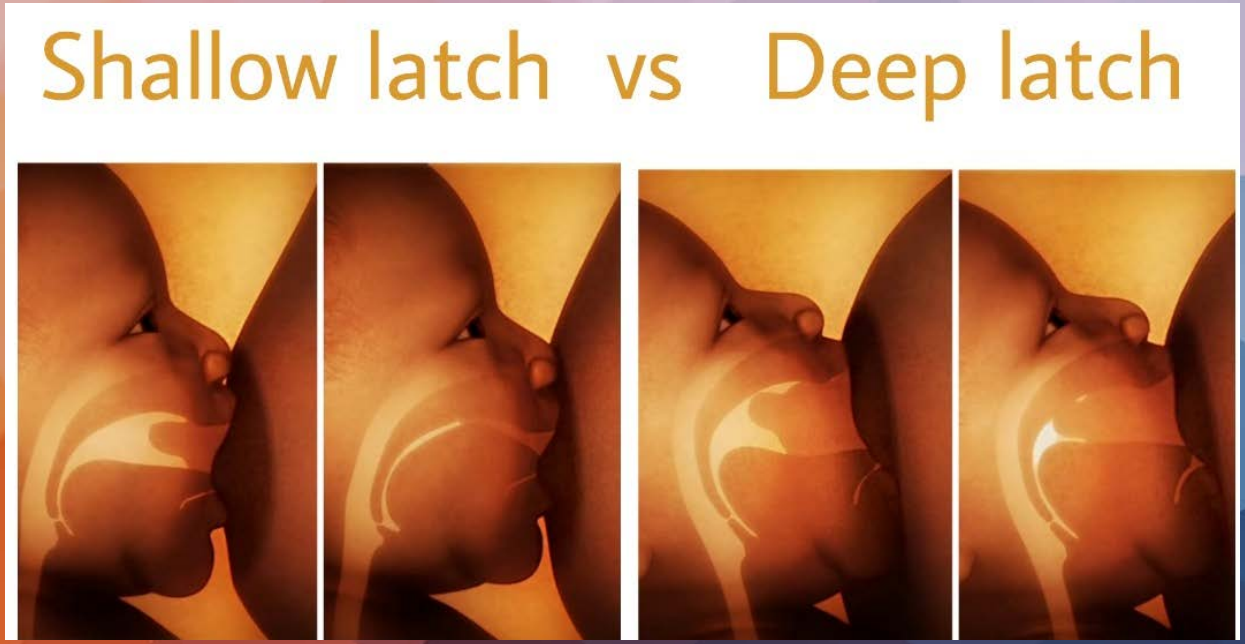
- Sometimes can contribute to low supply **early on** or **late** onset decreased milk supply
- ++ social media hype --> probable overdiagnosis

When is tongue tied, then?

- **Functional** diagnosis (not anatomical)
- Everyone has a frenulum. Only ‘tied’ if there are problems that arise in relation to the function.

Oral restriction

- Tongue cannot undulate to top of soft palate
- Tongue cannot create deeply sealed vacuum
- Mouth cannot open widely enough to compress areola breast tissue (where from milk flows)



Symptoms of a tongue-tie

- **Early:**
- Nipple pain & trauma
- Long feeds
- Baby not satisfied after
- Slow gain
- Baby squirms/fusses at breast
- Engorgement or fullness after feeds
- Frequent blocked ducts/ mastitis

- **Later** (signs of decreased milk supply)
- Baby pulls, bites or pops off breast
- Increased crying
- Breast refusal *(or only feeds well when sleeping or drowsy)*
- Green mucousy stools
- New nipple pain
- Slow gain

Signs of a tongue-tie

- **Signs (on exam)**
- Uncoordinated suck
- Limited vertical lift
- “Heart-shaped” tongue
- Lateral lift of tongue only
- Weak suction on finger
- Tight neck/jaw muscles
- Chompy suck
- Cheek dimpling
- Lip blisters

- **Signs (observed feeding)**
- Shallow latch (despite optimizing technique)
- Baby slips/pops off lots
- Baby quickly falls asleep
- Baby squirms/fusses
- Baby is unsettled after
- Clicking with feeds
- Leaking milk with feeds

TABBY Tongue Assessment Tool

	0	1	2	SCORE
What does the tongue-tip look like?				
Where it is fixed to the gum?				
How high can it lift (wide open mouth)?				
How far can it stick out?				

 Design and Illustration: Hanna Oakes | oakshed.co.uk

(Ingram et. Al (2019)

Benefits of releasing

- Lessened maternal nipple pain
- Improved maternal reports of breastfeeding difficulty

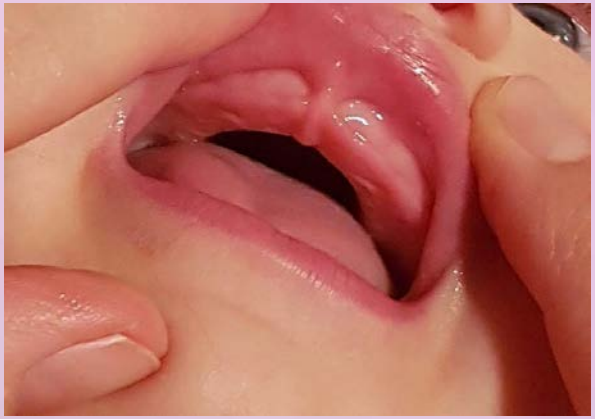
- *No evidence that frenectomy prevents future speech or feeding disorders.*

Messner et al. (2019); Dennis et al. (2014)

Risks of releasing

- No improvement of breastfeeding difficulties
- Re-attachemnt (all do to some degree)
- Few drops of blood
- Brief pain for baby
- ?Scarring / damage to surrounding tissue
- **Feeding aversion**

A note on “lip ties”



- Lip frenula are normal anatomy
- 100% newborns have lip frenula.
- 100% normal
- No evidence that lip clipping alleviates breastfeeding difficulty
- No evidence that clipping prevents gapped teeth
- (Messner et al, 2019)

Domperidone

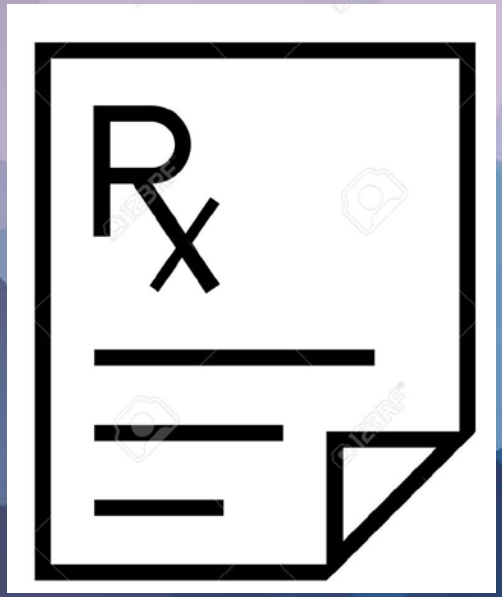
“It should be in the water.” – Dr. Jack Newman

About Domperidone

- ✓Most commonly prescribed galactagogue
  - ✓Others: metformin
  - ✓Herbal: goat's rue; moringa

Domperidone Indications

- ✓**Early underproduction** despite all efforts
- ✓Symptoms of **late onset decreased supply**
- ✓**Prior to release** of an older baby's tongue-tie (prevents feeding aversion)



How domperidone works

→ Raises PRL secretion from pituitary gland

→ Stimulates more milk production

→"Turns up the faucet" of the tank

→ **Faster flow, longer letdowns**

→ Baby drinks better at breast and for longer

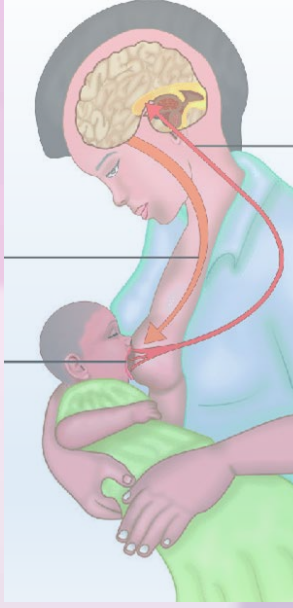
→ Better emptying of breast

→Further raising of PRL secretion from pituitary

→Baby takes breast readily again and is more content overall

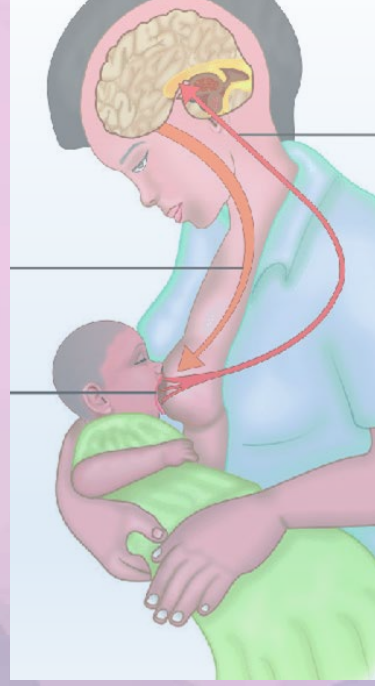
→Resolution of "colic", "reflux", squirming at breast

Prescribing domperidone



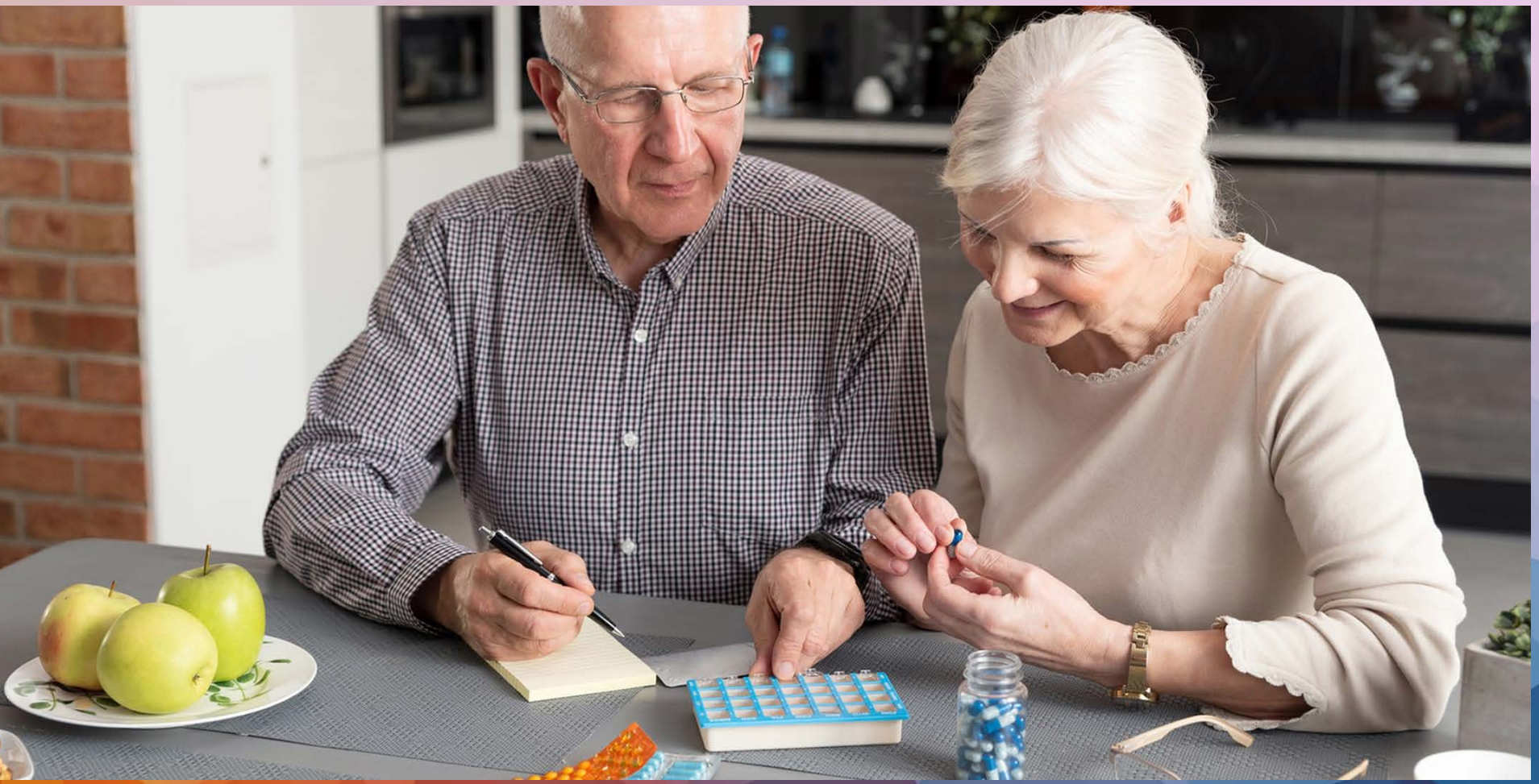
- Off-label use but very safe
- No reports to Health Canada of any serious cardiac effects when taken by childbearing aged women
- US Ban, citing qTC prolong and associated deaths: given IV, high doses, older population with multiple comorbidities
- ECG (after starting) if:
  - On other qTC prolonging drugs
  - Personal Hx qTC prolongation
  - FHx sudden death in younger person due to arrhythmia
- Do not delay Rx-ing while awaiting ECG

Prescribing domperidone



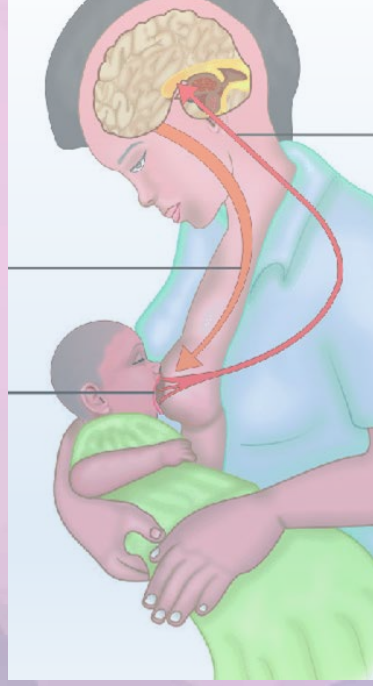
- Starting dose: 90mg PO TID
- Middle dose: 120mg PO TID
- Max dose: 180mg PO TID
- Side effects: few.
  - faint headache; ?weight gain; depressed/irritable mood

Prescribing domperidone



Tapering domperidone

- Slow taper 1 pill/week after baby 12mo
  - Prevents sudden supply drop for baby
  - Prevents insomnia/anxiety for mom



Future directions

- Certification as IBCLC and Fellowship in Breastfeeding Medicine
- Providing E-consults via OCEAN *(starting November 2022)*
- NOAMA grants for clinical and research innovation
- Providing shared care at TBRHSC Maternity Centre
- In-patient consultations
- NWO regional breastfeeding support
- Prenatal and postpartum breastfeeding group courses
- Policy reviewing
- Teaching and taking on learners

References

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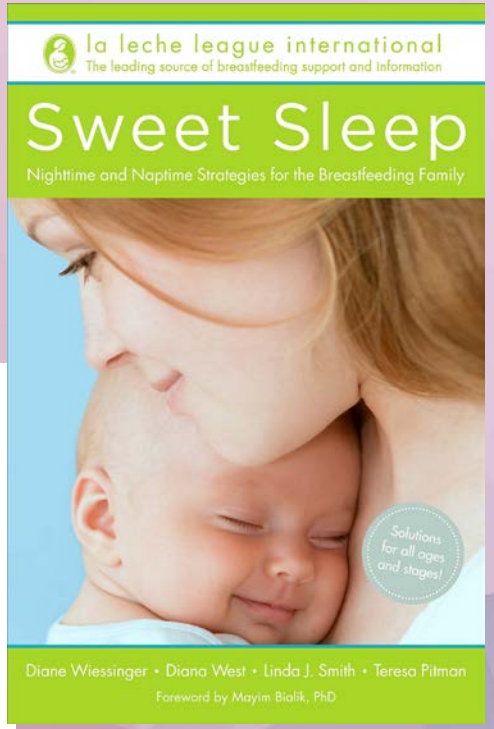
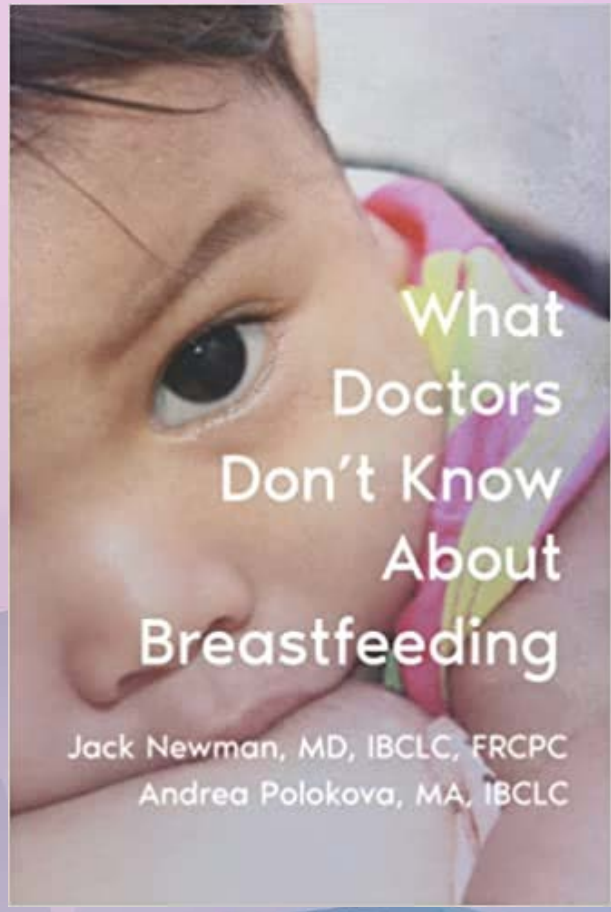
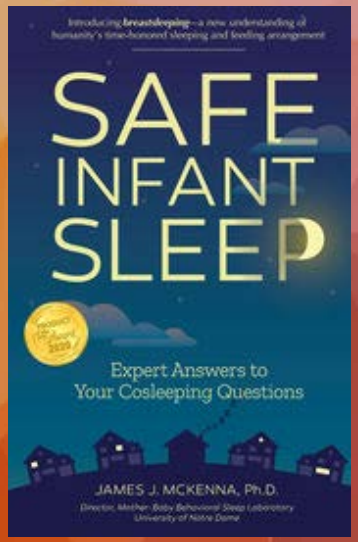
Resources

IABLE
Institute for the Advancement of Breastfeeding & Lactation Education







ABM
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Breastfeeding Medicine

Questions ?

Thank you for your time today!

Session Evaluation and Reflection

These short forms are important to your learning process and our planning process!

- For **speakers**: Your responses help them understand their strengths and weaknesses, participant learning needs, and teaching outcomes
- For **the CEPD office**:
  - To plan future programs
  - For quality assurance and improvement
  - To demonstrate compliance with national accreditation requirements
- For **YOU**: Reflecting on what you've learned and how you plan to apply it can help you enact change as you return to your professional duties

Use your phone camera to access the evaluation via the QR Code.

Please take 3-5 minutes to fill the evaluation form out. Thank you!