

Perceived Insufficient Milk Supply & Galactagogues

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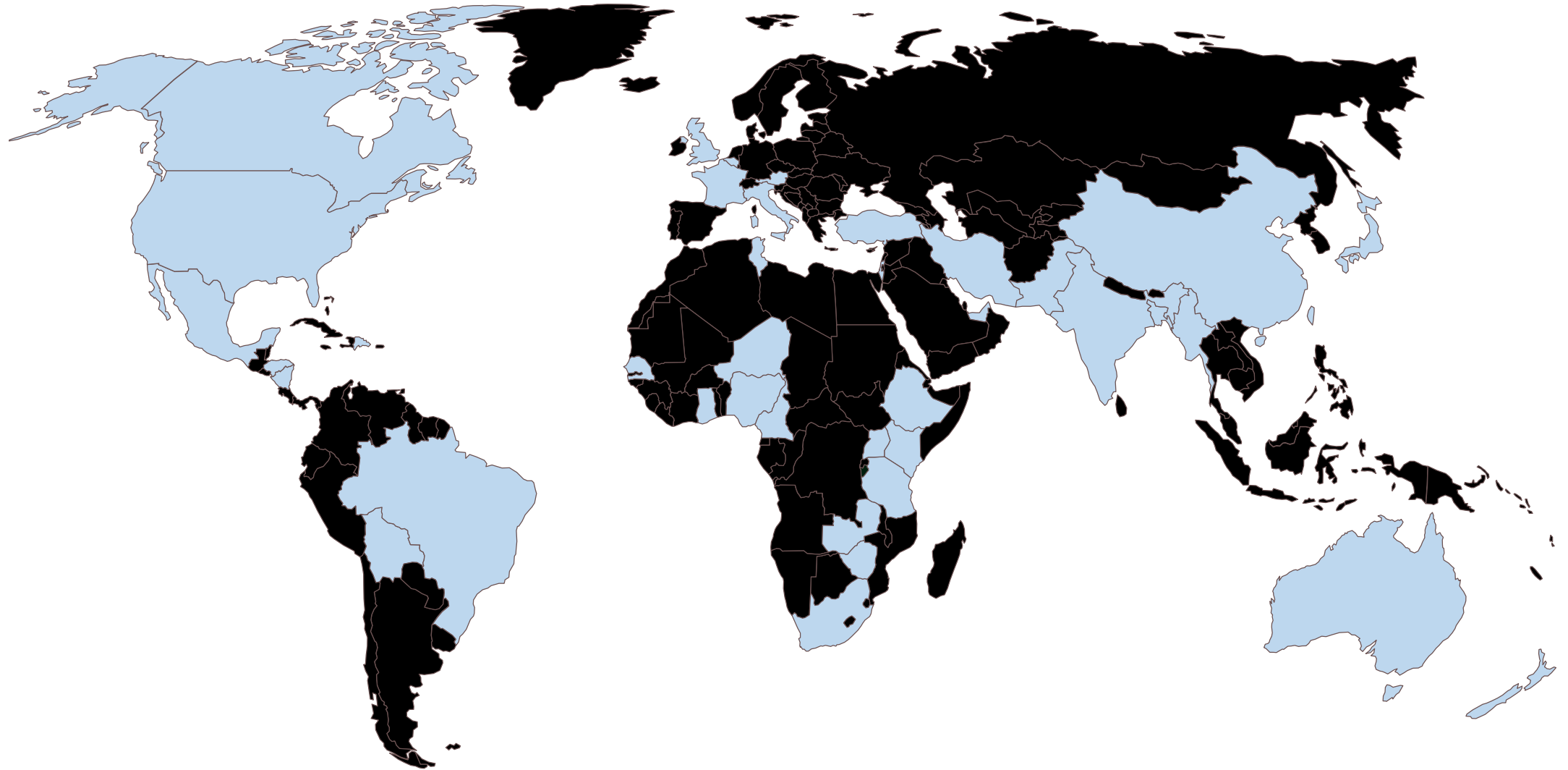
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We have no conflicts of interest to disclose.

Objective

- After the presentation participants will be able to:
 - 1) Define Insufficient Milk Supply-"actual vs. perceived"
 - 2) Identify effective counseling strategies for assessment of insufficient milk supply.
 - 3) Apply current evidence for pharmacological and herbal galactagogues.
 - 4) Identify common practices and cultural traditions used to "treat" milk supply issues.

Perceived Milk Insufficiency: A Global Problem



Normal Weight Gain Parameters

- ***All newborns lose weight and it varies by mode of delivery***
 - Nomograms demonstrate percentiles for weight loss by delivery mode for those who are exclusively breastfed. <http://www.newbornweight.org>.
- No more weight loss after 5th day of life
- Regaining birth weight by 10-14 days
 - Transition to yellow seedy stools and wet diapers
- Weight gain 5-7 oz per week
- Double BW by 6 months and Triple BW by 12 months.
 - [The WHO Growth Charts](#)

Insufficient Milk Supply- Who is at risk?

- Breast surgery or injury
 - Retained placenta
 - Hypothyroidism
 - Theca lutein ovarian cysts
 - Mammary hypoplasia (congenital)
 - Polycystic ovarian syndrome
 - Sheehan's syndrome secondary to postpartum hemorrhage
 - Maternal Obesity
 - Maternal Diabetes
 - Premature Delivery
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- Hurst, Recognizing and treating delayed or failed lactogenesis II. J Midwifery Womens Health. 2007;52(6):588-594.

Insufficient Milk Supply- Who is at risk?

- Potential Causes of Decreased Milk Supply:
- Anything that limits the infant's ability to extract milk **effectively** and **frequently**, such as:
 - Separation of mother and infant
 - Scheduled intervals between feedings
 - Poor latch
 - Early use of pacifiers
 - Prematurity
- Supplementation with formula
- Delayed milk ejection secondary to Stress & Pain
- Maternal medications (e.g., combination oral contraceptive)

Sensitive Time Periods

- Breastfeed infants have increased variation in feeding frequency compared to bottle fed infants.
- During the 1st-3rd month the number of breastfeeding sessions decreases yet the median and max breastfeeding intake during breastfeeding sessions increased.....
- This was also found to remain pretty stable from three –six months of age.
- ***So Less Time but More Milk.....Babies become more efficient***
- ***We need to tell our moms it will get better!***

Kent JC, Hepworth AR, Sherriff JL, Cox DB, Mitoulas LR, Hartmann PE. 2013. Longitudinal changes in breastfeeding patterns from 1 to 6 months of lactation. Breastfeeding medicine : the official journal of the Academy of Breastfeeding Medicine 8(4):401-407.

Most common reason of IMS

- Iatrogenic causes and mismanagement of breastfeeding/milk supply

Metoclopramide (Reglan)

- Most commonly used in the US
- Studied in preterm mothers
- Off label use to treat IMS, approved for gastric motility in US.
- Most studies have used metoclopramide in a dosage of 10 mg 2 or 3 times daily for 7 to 14 days.
 - Tapering dose may be needed

Metoclopramide: Need to Know

- Increases risk of depression, avoid use in women with a history of major depression.
- Recommended to use for 10-14 days and not for prolonged periods.
- Long-term uses of metoclopramide also increases the risk of tardive dyskinesia.
- Side effects reported: tiredness, nausea, headache, diarrhea, dry mouth, breast discomfort, vertigo, restless legs, intestinal gas, hair loss and anxiety

Domperidone

- ***Not approved in USA.*** Similar to metoclopramide but less side effects as little crosses blood brain barrier
- Maternal use for IMS is not a significant risk factor for the infant.
- Dosage usually 10 mg 3 times daily for 4 to 10 days.

- Wan EW, Davey K, Page-Sharp M, Hartmann PE, Simmer K, Ilett KF. 2008. Dose-effect study of domperidone as a galactagogue in preterm mothers with insufficient milk supply, and its transfer into milk. *British journal of clinical pharmacology* 66(2):283-289.
- Donovan TJ, Buchanan K. 2012. Medications for increasing milk supply in mothers expressing breastmilk for their preterm hospitalised infants. *The Cochrane database of systematic reviews*(3):CD005544.

Domperidone: Need to Know

- Not FDA approved to treat IMS
 - <http://www.fda.gov/Drugs/DrugSafety/InformationbyDrugClass/ucm173886.htm>
- Contraindicated in Mothers with prolonged QT interval
 - Dosages greater than 30 mg daily may increase risk
- Stop and seek medical advice if experiencing abnormal heart rate or rhythm, dizziness, palpitations, syncope or seizures
- Side effects include: dry mouth, headache, dizziness, nausea, abdominal cramping, and diarrhea

Fenugreek



- Used as an herb, spice or vegetable and ***generally regarded as safe.***
 - India is the largest producer
 - Fenugreek has not been proven to increase milk supply
-
- Mortel M, Mehta SD. 2013. Systematic review of the efficacy of herbal galactogogues. Journal of human lactation : official journal of International Lactation Consultant Association 29(2):154-162.

Fenugreek: Need to Know

- Remember that herbal supplements are not FDA regulated.
- ***It is not recommended*** for people who have ***allergies to peanuts or other legume plants*** (ie, peanuts, soy beans, green peas, lentils, chick peas ..over 730 types exist) and ***ragweed allergies***.
- Common side effects in moms are diarrhea, gassiness and a maple syrup odor in a mom's sweat, urine, feces and breastmilk.
- Rarely, potential side effects include low blood sugar, easy bleeding and wheezing
- ***If you have asthma, diabetes or a bleeding problem, it is better not to take fenugreek.***

Galactagogues: When *should they be used?*

1. Ensure proper breastfeeding or pumping technique prior to use
2. ***Refer for further evaluation.....***
3. Need to attempt to determine the etiology of low milk supply prior to starting galactagogues
4. Consider need to evaluate for medical co morbidities
e.g., hypothyroidism, retained placental fragments,
theca lutein ovarian cysts
5. Only use galactagogues with adequate milk removal by effective nursing or electrical pumping ***if not milk stasis will occur.***
 - ***Potentially increasing risk of engorgement, plugged ducts/mastitis.***

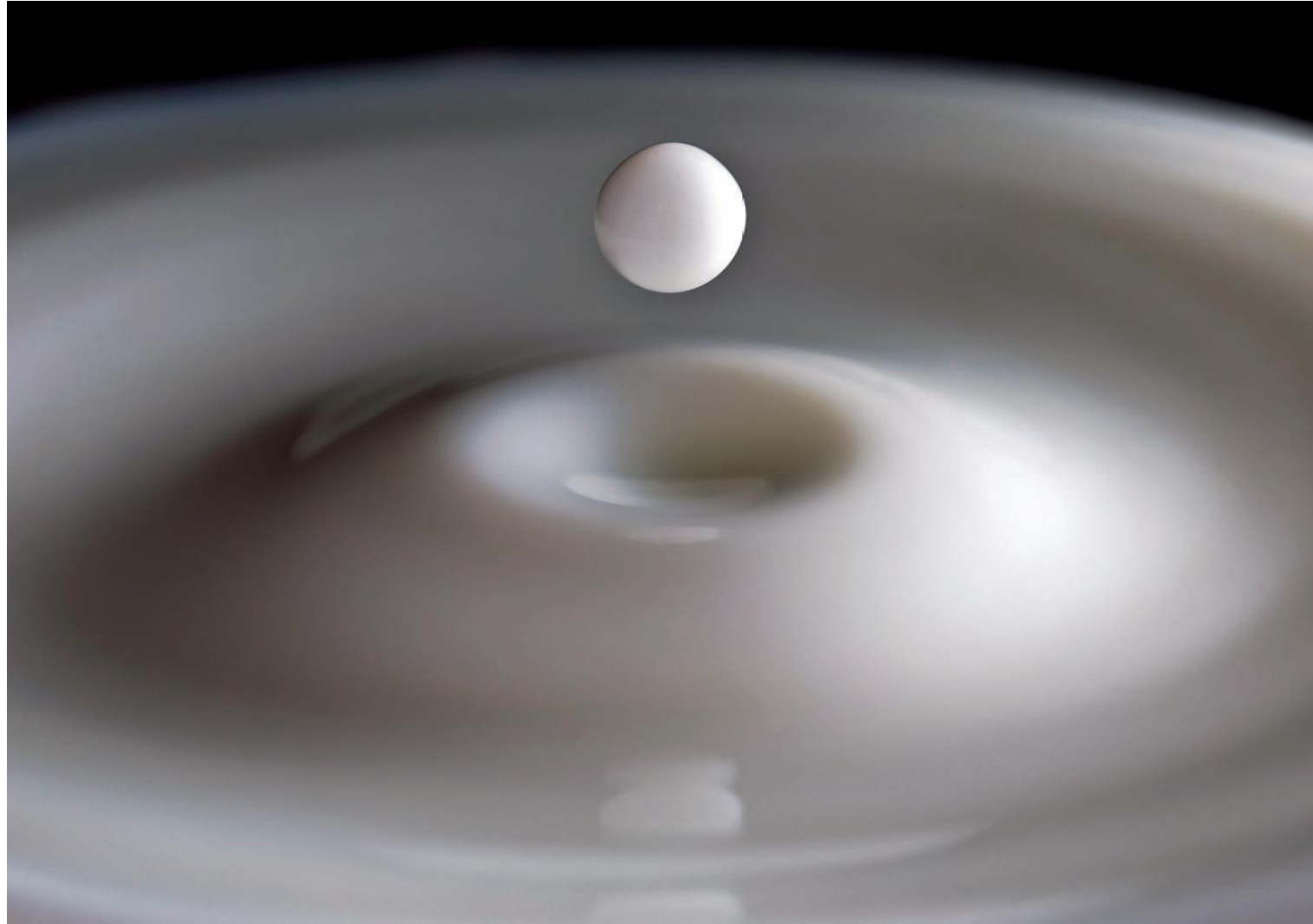
Galactagogues: Summary

- Current challenge of prescribing or recommending galactagogues without the benefit of robust evidence.
 - There exists suboptimal rates of exclusive breastfeeding worldwide
 - We need high quality clinical trials!
-
- Bazzano AN, Hofer R, Thibeau S, Gillispie V, Jacobs M, Theall KP. 2016. A Review of Herbal and Pharmaceutical Galactagogues for Breast-Feeding. *The Ochsner journal* 16(4):511-524.
 - The Academy of Breastfeeding Medicine Protocol Committee. ABM clinical protocol #9: use of galactagogues in initiating or augmenting the rate of maternal milk secretion (First revision January 2011). *Breastfeed Med.* 2011;6:41-9. PMID: 21332371

The screenshot shows a web browser window with the URL <http://onlinelibrary.wiley.com/doi/10.1111/mcn.12366>. The page features the journal logo for 'Maternal & Child Nutrition' and the article title 'Suboptimal breastfeeding in the United States: Maternal and pediatric health outcomes and costs'. The authors listed are Melissa C. Bartick, Eleanor Bimla Schwarz, Brittany D. Green, Briana J. Jegier, Arnold G. Reinhold, Tarah T. Colaizy, Debra L. Bogen, Andrew J. Schaefer, and Alison M. Stuebe. The article was first published on 19 September 2016. The DOI is 10.1111/mcn.12366. There are 0 articles cited by this work. An 'Early View' section is visible on the right side of the page, indicating an online version of the record published before inclusion in an issue.

- Nearly 80% of the excess deaths and medical costs attributable to suboptimal breastfeeding are maternal.
- Bartick MC, Schwarz EB, Green BD, Jegier BJ, Reinhold AG, Colaizy TT, Bogen DL, Schaefer AJ, Stuebe AM. 2016. Suboptimal breastfeeding in the United States: Maternal and pediatric health outcomes and costs. *Maternal & child nutrition*.

Prevention is Key!
Move It Or Lose It



Resources : Medications and Breastfeeding

- LactMed
 - <http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?LACT>
- Infant Risk Center
 - Monday – Friday, 8am – 5pm CT (806) 352-2519
 - <http://www.infantrisk.com/>
- MotherToBaby Organization of Teratology Information Specialists (OTIS)
 - <https://mothertobaby.org/>
- Medications & Mother's Milk \$ (Text & Online)
 - <http://www.medsmilk.com/>

Educational Resources

- **Breastfeeding**

<http://breastfeeding.sph.unc.edu/what-we-do/programs-and-initiatives/healthcare/ready-set-baby/> materials & [wall-posters](#), are freely available for downloading and printing.

Women'shealth.gov It's Only Natural Campaign
<http://womenshealth.gov/itsonlynatural/index.html>

Academy of Breastfeeding Medicine Protocols:
<http://www.bfmed.org/Resources/Protocols.aspx>

- **NICU families**

- Power of pumping trailer: https://www.youtube.com/watch?v=6nmNQ_0jqkk

- FPQC MOM Initiative: <http://health.usf.edu/publichealth/chiles/fpqc/mom>

- **Mom's Mental Health Matters** <https://www.nichd.nih.gov/ncmhpep/initiatives/moms-mental-health-matters/moms/Pages/default.aspx>

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