



Breastfeeding:

What you don't know can hurt your patient

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Disclosures

None of the planners or presenters for this educational activity have relevant financial relationships to disclose with ineligible companies.

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Introduction: Hannah Pye

- MSN, RN, CEN
- Emergency department nurse
- Nursing faculty
- Doctor of Nursing Practice (DNP) student
 - Breastfeeding research
- Passionate about breastfeeding medicine and evidence-based care



Case Studies





Case Study #1

You are caring for a 32-year-old woman who presents to your place of practice for pain and redness of the left breast. She has an oral temperature of 101.5°F and reports body aches and chills.

- What do you do in this scenario?

A provider diagnoses the patient with mastitis and counsels her to stop breastfeeding until the course of antibiotics is finished

- Is this appropriate care for this patient?
- Why or why not?
- What would you do?





Case Study #2

Tired parents of a 3 month old infant present to your facility with concerns about the child's stooling habits. Parents report the child has not stooled in 4 days and is fussy.

- What questions do you need to ask these parents?

The parents report the child is feeding and urinating appropriately. The child is well-appearing upon assessment. The child's abdomen is soft and nontender.

- How do you treat this child?
- What conversation(s) will you have with these parents?



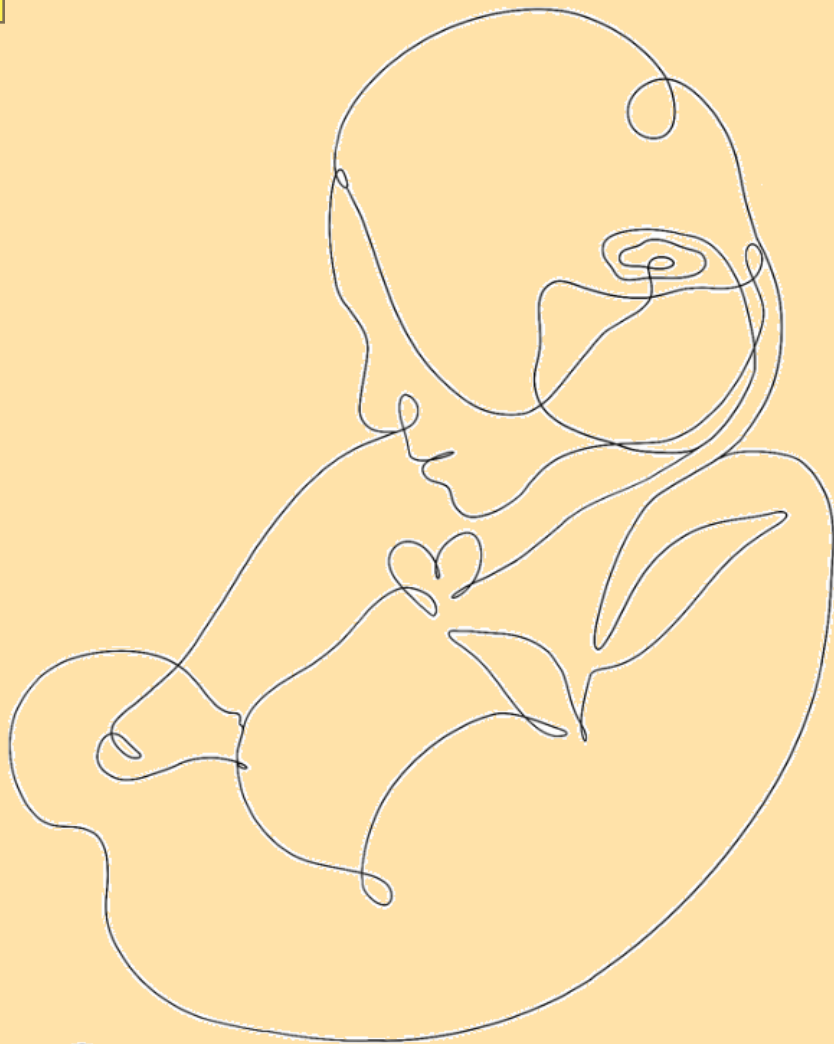


Case Study #3

A lactating parent presents to your facility for a preoperative appointment. They tell you the operating providers educated them to “pump and dump” for 48 hours after surgery due to the anesthesia and the contrast they will need for pre- and post-procedure imaging. The parent is concerned about feeding their infant formula for 2 days and about how they will pump after surgery.

- Is this appropriate information for this parent?
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Why should we
care about
breastfeeding ?



Health Benefits

- Breastfed child has reduced risk of ^[1]
 - Asthma
 - Obesity
 - T1D
 - Respiratory disease
 - Otitis media
 - SIDS
 - GI infections
- Lactating parent has reduced risk of ^[1]
 - HTN
 - DMII
 - Ovarian & breast cancers





Economic Concerns

- Globally, not breastfeeding costs an estimated \$3.4 trillion annually ^[2]





Economic Concerns

- Globally, not breastfeeding costs an estimated \$3.4 trillion annually ^[2]
- Almost 80% of medical costs from not breastfeeding are maternal ^[3]





Why should **we** care
about breastfeeding?



Why should nurses care about breastfeeding?

- Very few true medical contraindications for breastfeeding^{[4][5]}
- Incorrect advice can lead to early weaning and infant or maternal harm^[4]

Your care of the breastfeeding dyad matters to the long - term success of their breastfeeding journey.



**Who cares
about breastfeeding?**



**WHO cares
about breastfeeding!**



Current WHO Recommendations^[6]

- Exclusive breastfeeding for the first six months of a child's life
 - Nothing but breast milk (medications are okay)
- Continued breastfeeding to 12 months and beyond
 - “Any breastfeeding” – diet containing breast milk and other foods



How does the United States measure up?

Breastfeeding Goals and Current Rates

	Recommendations		Current Rates	
	Global Breastfeeding Collective [7]	Healthy People 2030 [8,9]	Global [7]	U.S. [8,9]
Exclusive breastfeeding to 6 months	70%	42%	48%	30%
Continued breastfeeding to 12 months	80%	54%	70%	36%



Why is it so hard to meet these goals?

- Barriers to breastfeeding ^[10-13]
 - Perceived hypolactation
 - Cluster feeding
 - Nipple pain
- Undereducated medical staff ^[15,16]





What is breastfeeding?





Important Definitions

Breastfeeding: feeding the child breast milk, either directly at the breast or through a bottle or supplemental nutrition system ^[16]

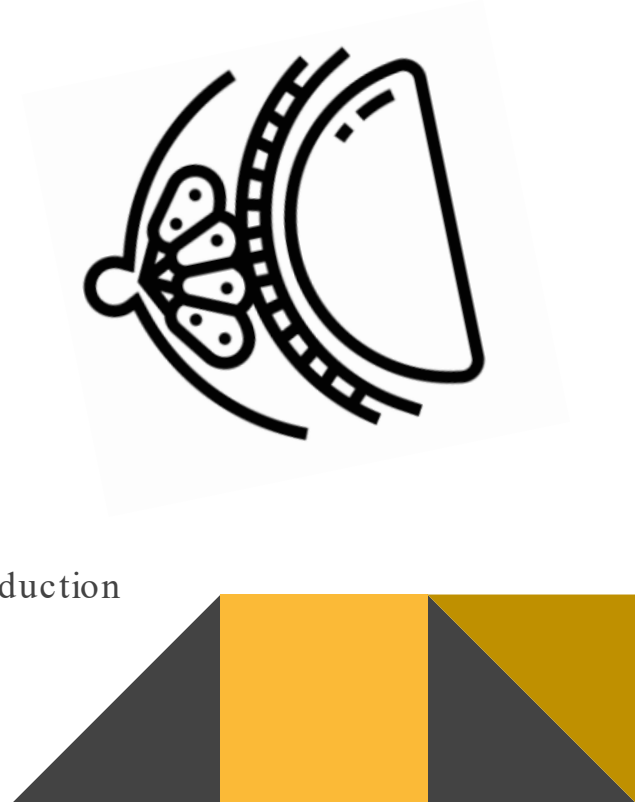
Breastfeeding dyad: unit composed of the lactating parent and breastfeeding child





Breastfeeding basics

- Colostrum (24-48 hours post delivery)^[4]
 - Nutrient rich, yellow in color
- Breast milk (3-4 days post delivery)^[4]
 - Foremilk
 - Higher water and lactose content
 - Important for hydration
 - Hindmilk
 - Higher fat content
 - Important for growth and development
- Emptying the breast stimulates milk production^[4]
 - Skipping feeds inhibits feedback mechanism, decreasing production
- Newborns should nurse 10-12 times a day^[4]





What are the contraindications
to breastfeeding?





Contraindications for breastfeeding

- **Absolute contraindications** [17]
 - Infant galactosemia
 - Maternal Ebola infection
 - Maternal illicit drug use
 - Maternal HIV & CMV infection (sometimes)
- **Temporary contraindications** [17]
 - Maternal brucellosis infection
 - Herpes simplex lesion on the breast
 - Medications (few)
 - Maternal nuclear medicine studies (some)
- **Contraindications to breastfeeding but NOT feeding expressed milk** [17]
 - Maternal active TB infection (untreated)
 - Maternal varicella infection





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How should we
care for the
breastfeeding
dyad?



Care of the breastfeeding child: Bottle feeding

- Bottle feeding is easier for the baby
 - May intake too fast
 - May intake too much
- Paced feeding^[18]
 - On cue, until satiated
 - Upright
 - Switch sides halfway through feed
 - Slowly, with frequent pauses





Care of the breastfeeding child: Breastfeeding as analgesia

- Breastfeeding is an effective analgesia method for infants [22]
- Other effective analgesia methods include^[22]
 - Sucrose (Sweat-ease)
 - Non-nutritive sucking (pacifiers, etc.)





Care of the breastfeeding child: The ill child

- Dehydration^[19]
- GI upset^[19]
- Congestion^[19]
- Constipation^[20,21]

Breast milk should be the first choice of PO hydration and nutrition for a breastfeeding infant.





Care of the Lactating Parent: Medications

✘ Myth	<input checked="" type="checkbox"/> Fact
✘ Most maternal medicine consumption constitutes a safety risk for the breastfeeding infant	<input checked="" type="checkbox"/> Unsafe medications are the exception ^{[4][5]}
✘ Medications unsafe in pregnancy are unsafe in breastfeeding	<input checked="" type="checkbox"/> Safety considerations for pregnant and breastfeeding patients are completely different ^[4]
✘ Maternal opiate consumption is unsafe for breastfeeding infants	<input checked="" type="checkbox"/> Appropriate single-dose narcotic pain control for the nursing mother poses little risk to the breastfeeding infant ^[4]



Care of the Lactating Parent: Medications

- What factors affect the transfer of medications into breast milk?^[23]
 - Molecular size
 - Protein binding
 - pH
 - Lipid solubility
 - Volume/dose
- Lactating women can take more medications than can pregnant women^[4]
 - Remember that lactation does NOT preclude pregnancy

Most medications are safe for use in the lactating mother.





Care of the Lactating Parent: Implications for breastfeeding

- **Maternal illness**

- For most communicable illnesses, breastfeeding decreases likelihood infant will contract illness^[24]

- **Studies**

- X-rays of the nursing mother pose no risk to the breastfeeding infant^{[4][25]}
- Contrast CT and gadolinium MRI of the nursing mother are also generally safe for the breastfeeding infant^{[4][25]}
- Nuclear medicine studies
 - Depend on isotope used^{[4][25]}
 - May require pumping and waiting to give baby pumped milk until breast milk radiation decreases to a safe level^[4]

- **Procedures**

- If mother is alert enough to hold baby, breastfeeding is permissible^{[4][26]}





Care of the Lactating Parent: Mastitis

- Most common cause is prolonged engorgement^[27]
- Occurs most frequently in the first 6 weeks postpartum
- Symptoms include^[27]:
 - Redness at the site
 - Pain
 - Fever
 - Flu-like symptoms (myalgia, fatigue, chills)
- Risk factors include^[27]:
 - Oversupply
 - Weaning
 - Illness
 - Blocked mammary duct





Care of the Lactating Parent: Mastitis

- Treatment^[27]
 - Emptying the breast (regularly)
 - Massaging from above clog to nipple^[28]
 - NSAIDs for pain and inflammation
 - Heat before feeds
 - Assists with emptying
 - Cold after feeds
 - Reduces inflammation
 - Antibiotics
 - Not always required
 - Recommended if symptoms persist longer than 1-2 days



Where can I find
this information in
the future?





Breastfeeding resources for the nurse

- Information

- LactMed
 - <https://toxnet.nlm.nih.gov/newtoxnet/lactmed.htm>
 - Free
- KellyMom
 - <https://kellymom.com/category/bf/can-i-breastfeed/illness-surgery/>
 - Great evidence-based resource for most breastfeeding questions
- e-Lactancia
 - <https://www.e-lactancia.org/>
 - Free
- IABLE (Institute for the Advancement of Breastfeeding and Lactation Education)
 - <https://trashthepumpanddump.org/>
 - Free
- InfantRisk app
 - <https://www.infantrisk.com/apps>
 - Link offers free flyer downloads
 - Smartphone app (good reviews on iPhones, not on Android devices)
 - \$4 annually
- *Medications & Mothers' Milk*
 - <https://medsmilk.com/>
 - \$66 annually
- Journal article on ED care of the breastfeeding patient
 - [https://www.annemergmed.com/article/S0196-0644\(19\)30525-6/fulltext](https://www.annemergmed.com/article/S0196-0644(19)30525-6/fulltext)
 - Contains useful tables that can be printed for quick reference





Breastfeeding resources for the nurse

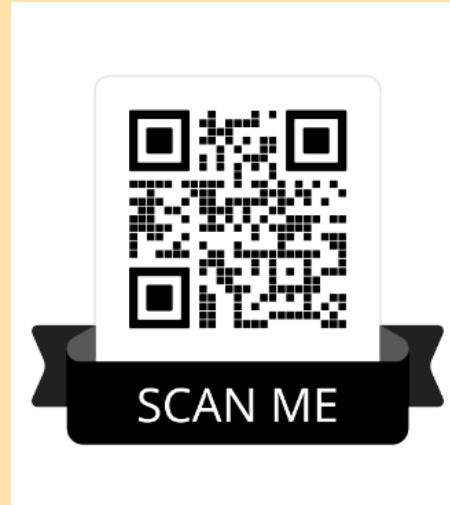
- Community resources

- National Breastfeeding Hotline
 - 1-800-994-9662
 - Monday-Friday 9am-6pm ET (closed on federal holidays)
- InfantRisk Center Helpline
 - 806-352-2519
 - Monday-Friday 8am-5pm CST
- La Leche League
 - Local group
 - Online groups
- Local International Board Certified Lactation Consultant (IBCLC)
- Other certified lactation support individuals
- Other breastfeeding support groups





Resource Document



Case Studies, Revisited





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What are the contraindications
to breastfeeding?







Key takeaways...



Conclusion

- The nurse needs basic evidence-based knowledge on breastfeeding
- The nurse needs basic knowledge on available resources
- The nurse can play an important role in breastfeeding support

Appropriate, evidence-based care of the breastfeeding dyad requires the nurse to be an informed, engaged advocate for breastfeeding.



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[29]




Questions?





ED concerns for care of the breastfeeding mother




Medications Highyield ED Meds

	Preferred 	Generally Safe 	Unsafe 	Safe for baby, May affect supply
Antibiotics	penicillin, cephalosporins, vancomycin	metronidazole, fluoroquinolones, clindamycin	trimethoprim-sulfamethoxazole, nitrofurantoin, azithromycin	—
Pain Control	ibuprofen, acetaminophen, local anesthetics	other NSAIDs, morphine, fentanyl, hydrocodone	codeine, oxycodone, tramadol	—
GI Medications	famotidine, PPIs, sucralfate	ondansetron, metoclopramide	dicyclomine	—






ED concerns for care of the breastfeeding mother

Medications Highyield ED Meds

	Preferred 	Generally Safe 	Unsafe 	Safe for baby, May affect supply
Blood Thinners	warfarin, heparin, LMWHs	aspirin*	apixaban, aspirin*, clopidogrel	—
HEENT	nasal saline	guaifenesin, dextromethorphan,	codeine, benzonatate	antihistamines, pseudoephedrine, promethazine
Seizures	phenytoin	valproic acid**	valproic acid**, phenobarbital	levetiracetam
RSI	etomidate, propofol, succinylcholine, rocuronium	ketamine	—	—

ED concerns for care of the breastfeeding mother

Medications Highyield ED Meds

	Preferred 	Generally Safe 	Unsafe 	Safe for baby, May affect supply
Agitation	midazolam, lorazepam, olanzapine	haloperidol, risperidone, ketamine	—	—
Asthma	albuterol, ipratropium, magnesium, inhaled corticosteroids, prednisone	terbutaline	—	—
Migraine	—	sumatriptan	acetaminophen-butalbital-caffeine	—