Maternal Depression and Breastfeeding

American Academy of Pediatrics recommends exclusive breastfeeding for the first 6 months of life.
CDC data shows 77% of women initiate breastfeeding.
Breastfeeding rate drops to 49% at 6 months and 27% at one year.

1. Does breastfeeding help protect women from postpartum depression?
2. How does having postpartum depression impact breastfeeding outcomes?
3. How does taking an antidepressant influence a woman's decision to breastfeed?
4. How should women who need antidepressants during lactation be best counseled?
Postpartum depression is the maternal medical condition that is most likely to negatively impact breastfeeding outcomes.

Depressed mothers experience:
- Less sensitivity to infant cues and ability to “read” their babies which can lead to problems in infant latching and establishment of breastfeeding routines.
  Murray, Child Development, 1996(67)
- Greater frustration and feeling overwhelmed with common problems such as latching difficulties, cracked nipples and engorgement.
- Greater fatigue and view breastfeeding as more demanding and exhausting than bottle-feeding.
  Zauderer, Br Journal Midwifery, 2012(18)2

- Cognitive distortions that result in more dissatisfaction with breastfeeding and lower levels of their own “competency” with breastfeeding.

- Higher anxiety about their ability to meet their breastfed infants emotional and nutritional needs.
  Zauderer, Br Journal of Midwifery, 2012(18)2
Women who are depressed during pregnancy are significantly less likely to attempt breastfeeding. 82% vs. 94% in British study. (Green, Perinatal Psychiatry, UK; Gask, I. 1994(180-198))

Depressed mothers discontinue breastfeeding earlier and are less likely to breastfeed exclusively compared to non-depressed mothers. (Dennis, www.pediatrics.org/cgi/doi/10.1542/peds.2003-1625)

Australian study of 1745 new mothers: Depressed mothers stopped breastfeeding, on average, 3 months earlier than non-depressed mothers. (25 weeks versus 39 weeks) (Henderson, 2002;89[3]:175-180)

U.K. study of 500 new mothers diagnosed with postpartum depression: 45% of mothers with depression were still breastfeeding at 8 weeks compared with 79% of non-depressed women. (Cooper, J. Psychological Med. 1998.7(79))

In a U.S. study, failure to have established and maintained breastfeeding at the 6-week postpartum visit was associated with only one maternal factor – an elevated depression rating score (EPDS.) (Ferguson, Am J Obstet Gynecol 2002;186(5))
• No study has specifically evaluated interventions to support breastfeeding mothers who are experiencing PPD.

• We do not know what interventions would be most effective in improving infant-feeding outcomes in depressed women.

### Does breastfeeding protect mothers from developing postpartum depression?

- Commonly held belief based on theoretical models of prolactin elevation and oxytocin release in response to breastfeeding.

- There are only two prospective studies in humans that have examined the association between breastfeeding and risk of developing PPD.
• Maternal depression levels at 3, 6 and 12 months postpartum did not differ between lactating and non-lactating women.
• At 3 months postpartum, mothers who were exclusively breastfeeding did not have less depression than bottle-feeding mothers - the time when the differences in oxytocin and prolactin levels between the two groups is at its highest.

Hahn-Haltz, Arch Gen Psychiatry, 1993(30)

Effects of maternal antidepressant-use on breastfeeding

Women with depressive symptoms were just as likely as non-depressed women to initiate breastfeeding but women who were taking antidepressant medication during pregnancy were less likely to breastfeed, either exclusively or in combination with formula.

J Clinical Psych, Bogren, 2010(Aug 7)4(8)
Strongest predictor for exclusive breastfeeding was a woman's intention to do so during her pregnancy.

An interpretation of the results is that women who are taking antidepressants during pregnancy believe that breastfeeding is incompatible with their treatment and decide early not to breastfeed.

Women on antidepressant medication need additional support to initiate breastfeeding and discussion should be done as early as possible during pregnancy.

Women who decide to stop antidepressants to breastfeed are at risk of depressive recurrence which results in premature discontinuation of breastfeeding.

Danish study, at six months postpartum:
- 70% of women taking their ADs were still breastfeeding.
- 57% of women who had stopped their ADs were still breastfeeding.
- 54% of women with untreated depressive symptoms were breastfeeding.

18th Perinatal Society of Australia Conference, Melbourne.

Discussing Antidepressant Use During Breastfeeding
All antidepressants are compatible with breastfeeding.

It is misleading to say that one antidepressant is "best" or "safest" for breastfeeding.

The amount of data on individual medications is simply too small to compare between drugs.

The best antidepressant for a woman to take while breastfeeding is the one she has been taking during pregnancy or one that she has responded to in the past.

"Pooled Analysis of Antidepressant Levels in Lactating Mothers, Breast Milk and Nursing Infants"

Most comprehensive review of antidepressant levels in breast milk - evaluated all studies to-date in which maternal serum levels, breast milk levels and infant serum levels were measured.

Authors found 15 studies with 337 mother-baby pairs involving 15 different antidepressants.

*American J Psych, Weissman, June 2001, 6(6)*

- Study published largest number of cases for individual antidepressants comparing the level of a drug in *mother's serum* with the level of that drug in the *infant's serum*.

- Although total numbers are small, these studies are a more accurate measure of exposure than breast milk levels of medication.
Maternal drug doses did not predict infant serum levels for Prozac, Paxil or Zoloft. i.e. high maternal dose did not result in higher infants serum levels than low maternal doses. Maternal drug dose was correlated with infant plasma levels for only one drug - Celexa.

Message: Do not undertreat maternal depression - lower dose of antidepressant does not mean less exposure in breast milk.

Infant age was not correlated with infant serum levels for any of the drugs.

Zoloft was the only antidepressant that showed a clear time course between ingestion and peak breast milk level. Peak breast milk level occurred 7 to 10 hours after maternal Zoloft dose. Dumping breast milk 8-hours after taking Zoloft reduced infants overall exposure by 20% but pump-and-dump is not recommended.

• Difficult to properly time and accurately accomplish.
• The decrease in exposure is of no known benefit.
• Gives mothers a concerning, mixed message.
• Stresses mothers and wastes breast milk.

<table>
<thead>
<tr>
<th>AD</th>
<th>Mean Infant Serum Level (ng/ml)</th>
<th>Percent of Maternal Serum Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoloft (60)</td>
<td>.02</td>
<td>6%</td>
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<tr>
<td>Paxil (47)</td>
<td>.01</td>
<td>&lt;1%</td>
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<tr>
<td>Prozac (36)</td>
<td>.06</td>
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<tr>
<td>Celexa (12)</td>
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<td>Effexor (5)</td>
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<tr>
<td>Wellbutrin (2)</td>
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