



Mothering
Transitions
RESEARCH

Breastfeeding and Mental Health: Lessons Learned

Cindy-Lee Dennis, PhD

Professor in Nursing and Psychiatry, University of Toronto
Canada Research Chair in Perinatal Community Health
Research Chair in Women's Health, St. Michael's Hospital



Outline

- This session will provide an up-to-date overview of mental health concerns in pregnancy and postpartum
- Recent research will be used to highlight the interconnection of breastfeeding and maternal mental health
- What we can do to support affected families



Clinical Importance of Depression



- Depression is one the most common health problems women experience
- It is estimated that 20-25% of women will experience depression during their lifetime
- Further, for 30-50% of women who do experience depression, it is estimated to become a chronic recurring condition



Perinatal Depression



- **Perinatal depression** is an episode of depression with an onset either during pregnancy or the first 12 months postpartum
- **Antenatal depression** is an episode of depression with an onset during pregnancy
- **Postpartum depression** is an episode of depression the first 12 months postpartum



Depression Prevalence

Antenatal Depression

- Prevalence across pregnancy: 12.7% (18.4% with minor depression)
(Gavin et al, 2005)

Postpartum Depression (PPD)

- Prevalence in the first 12 weeks postpartum: 13% (O'Hara & Swain, 1996)
 - For women with a history of depression, 35% PPD rate
 - For women with depression during pregnancy, 50% PPD rate
- National Canadian data suggest 8% of mothers will continue to experience PPD past the first 5 months postpartum and into the following year (Dennis, et al 2012)



Maternal PPD Risk Factors

- Depression during pregnancy
- Anxiety during pregnancy
- Previous history of depression

- Childcare stress
- Life stress
- Lack of social support
- Marital dissatisfaction/conflict
- Low self-esteem
- Low socio-economic status
- Single marital status
- Unwanted/unplanned pregnancy





A growing body of research suggests that immigrant women internationally have higher rates of depression across the perinatal period

Prevalence of PPD among Immigrant Women

- Systematic review and meta-analyses (postdoctoral fellow Dr. Kobra Falah-Hassani)
- 24 studies met the inclusion criteria of which 22 (12 cross-sectional and 10 prospective cohort) contributed data for meta-analyses
- Overall prevalence of PPD among immigrant women was 20% (95% CI=17-22, 18 studies, N=14,239 women)

Immigrant vs Non-Immigrant Women

- Immigrant women were twice as likely to experience depressive symptomatology in the postpartum period than non-immigrant women
- pooled unadjusted OR = 2.17, 95% CI = 1.79 to 2.65, 15 studies, N = 50,519 women
- pooled adjusted OR = 1.95, 95% CI = 1.58 to 2.41, 7 studies, N = 35,557 women



Unfortunately, PPD occurs at a time when the infant is:

- Maximally dependent on parental care
- Highly sensitive to the quality of the interaction

- Given the persistence of PPD and its association with recurrent depressive episodes (*Copper et al 2003; Nysten et al 2010*), concern for child development is warranted as maternal depression can:
 1. Be incompatible with good parenting cognitions and behaviours
 2. Cause significant distress for children due to a stressful home environment (*Goodman & Gotlib 1999*)



Child Developmental Consequences

- Mothers with PPD have children with poorer developmental trajectories
- Risk transmission through altered maternal-child interaction (*Rishel, 2012*)



What are the effects of maternal-child interaction difficulties on child development?

- **Cognitive development**
 - General consensus that PPD predicts poorer language and IQ development in children and that this effect is found across childhood into adolescence
- **Behavioural development**
 - Meta-analysis of 193 studies → small but significant association between maternal depression and child behavioural outcomes
- **Emotional development**
 - Meta-analyses → consistent associations between PPD and insecure attachment and difficulty in establishing effective self-regulation skills (*Martins and Gaffan, 2000; Atkinson et al., 2000; Campbell et al., 2004*)

Pacing Tension Chest Jumpy Trembling
Restlessness Dread Symptoms
ANXIETY Attacks Scared
Desperate Fear Emotional Pain
Overreaction Stress Phobia Fatigue Nervous Turmoil Worry
Disorder Headache Panic
Cope Tense Sweating Angst

Clinical Importance of Anxiety

- A common mental health problem women experience during the perinatal period is anxiety
- It has received limited attention from researchers and health professionals
- This is an important omission given the ever-growing evidence indicating maternal anxiety both antenatally and postnatally may lead to serious negative outcomes



Antenatal Anxiety Consequences

- ↑ preference for caesarean section delivery
- ↑ rates of eating disorders
- ↑ risk for suicide
- ↓ decreased effective coping strategies

Neonatal Implications

- ↑ preterm birth rates
- ↓ lower Apgar scores



Postnatal Anxiety Consequences

- ↓ maternal self-confidence
- ↓ quality of life

Accumulating evidence of a negative impact on:

- maternal-infant relationship
- infant social and physiological responsiveness



Prevalence of Maternal Anxiety

- We reviewed 21,464 abstracts, retrieved 783 articles, and included 102 studies
- Involved 221,974 women from 34 countries spanning 6 continents
- 26 study authors provided additional information to promote the comprehensiveness and generalizability of the meta-analytic results
- Antenatal anxiety data = 70 studies
- Postnatal anxiety data = 57 studies



Countries of Included Studies

- The countries with the largest number of included studies:
- United States (N=19), Australia (N=11), Brazil (N=9), Canada (N=8), France (N=4), Netherlands (N=4), Norway (N=4), United Kingdom (N=4), Germany (N=3), and Sweden (N=3)
- 10 countries from the Asian continent provided data (Bangladesh, China, Hong Kong, Israel, Japan, Jordan, Malaysia, Saudi Arabia, Singapore, and Vietnam)
- 4 countries from Africa (Ghana, Nigeria, South Africa, and Tanzania)
- **Importantly, 24 countries were classified as low- to middle-income using World Bank categories**



Antenatal Anxiety

Self-Reported Anxiety Symptoms

- 1st trimester = **18.2%** (95%CI 13.6-22.8, 10 studies, N=10,577)
- 2nd trimester = **19.1%** (95%CI 15.9-22.4, 17 studies, N=24,499)
- 3rd trimester = **24.6%** (95%CI 21.2-28.0, 33 studies, N=116,720)

Overall pooled prevalence across the three trimesters was
22.9% (95% CI 20.5-25.2, 52 studies, N=142,833)



Antenatal Anxiety

Clinical Diagnosis of Any Anxiety Disorder

- 1st trimester = **18.0%** (95% CI 15.0-21.1, 2 studies, N=615)
- 2nd trimester = **15.2%** (95% CI 3.6-26.7, 4 studies, N=3002)
- 3rd trimester = **15.4%** (95% CI 5.1-25.6, 4 studies, N=1603)

- Overall = **15.2%** (95% CI 9.0-21.4, 9 studies, N=4648)



Postnatal Anxiety

Self-Reported Anxiety Symptoms

- 1-4 weeks = **17.8%** (95% CI 14.2-21.4, 14 studies, N=10,928)
- 5-12 weeks = **14.9%** (95% CI 12.3-17.5, 22 studies, N=19,158)
- 1-24 weeks = **15.0%** (95% CI 13.7-16.4, 39 studies, N=145,293)
- >24 weeks = **14.8%** (95% CI 10.9-18.8, 7 studies, N=11,528)



Postnatal Anxiety

Clinical Diagnosis of Any Anxiety Disorder

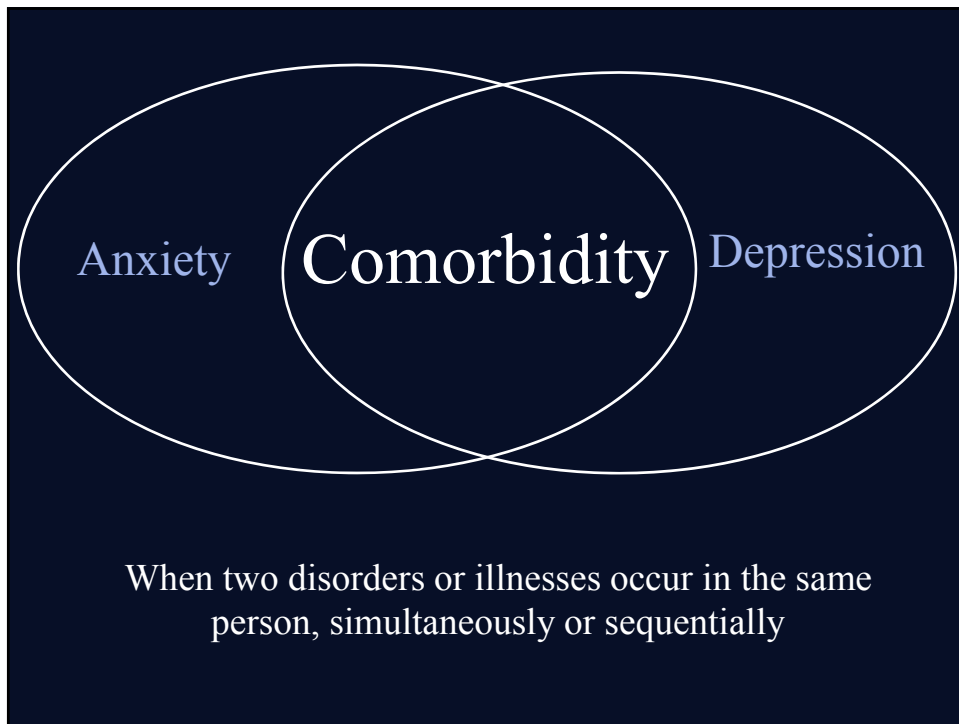
- 5-12 weeks = **9.6%** (95% CI 3.4-15.9, 5 studies, N=2712)
- 1-24 weeks = **9.9%** (95% CI 6.1-13.8, 9 studies, N=28,495)
- >24 weeks = **9.3%** (95% CI 5.5-13.1, 5 studies, N=28,244)



Anxiety in General Populations

- Depression and anxiety disorders are the most common mental health problems worldwide
- Together they make up 50% of the international disease burden attributable to psychiatric and substance abuse disorders
- Epidemiologic data suggests that more than 20% of the general population will have at least one of these disorders in their lifetime





Comorbidity is common with depression and anxiety

At least 50% of all women with depression are diagnosed with co-occurring anxiety



Why is Comorbidity Important Clinically?

- More severe and persistent symptomatology
- Increased disability and impaired functioning
- Poorer response to treatment
- Increased risk to commit suicide



General Risk Factors Co-Morbidity

- Not having a partner
- lower socioeconomic status
- lower educational level
- parental psychiatric history
- childhood trauma
- negative life events
- Neuroticism



What is the prevalence of comorbidity among women in the perinatal period?

Co-Morbidity Prevalence

- Meta-analysis of 66 studies
- Antenatally, the overall prevalence of self-report anxiety symptoms and mild to severe depressive symptoms was **9.5%** (95% CI 7.8-11.2, 17 studies, N=25,592)
- Postnatally between 1 to 24 weeks postpartum, the prevalence of comorbid anxiety symptoms and mild to severe depressive symptoms was **8.2%** (95% CI 6.5-9.9, 15 studies, N = 14,731)

New Mothers in a New Country

Understanding Postpartum Depression
among Recent Immigrant and
Canadian-Born Chinese Women



Funded by Canadian Institutes of Health Research

Design

- A longitudinal study where immigrant Chinese mothers were followed for the first year postpartum; a Canadian-born cohort of Chinese mothers was also being followed as a control group for comparisons
- All mothers (N= 571) were followed-up at 12, 24, and 52 weeks postpartum via telephone by trained research nurses
- Goal: to develop culturally sensitive preventive interventions

Prevalence

- Depressive symptomatology
 - 24% at 4 weeks – 17% at 1 year
- Anxiety
 - 21% at 4 weeks – 18% at 1 year
- Comorbidity
 - 14% at 4 weeks – 10% at 1 year



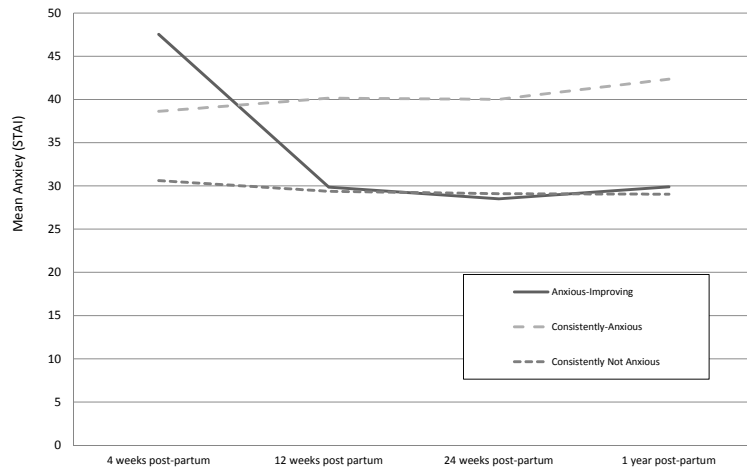
Anxiety Trajectories

Three distinct groups provided the best fit to the data:

1. “consistently non-anxious” group
 - (74%, n=422; stable low levels of anxiety)
2. “consistently anxious” group
 - (19.5%; n=111; anxiety at 4 weeks and the postpartum period)
3. “anxious-improving” group
 - (6.5%; n=37; very high anxiety at 4 weeks then significant decline over time)



Figure 1. Model-Implied Trajectories of Anxiety Symptomology among Mothers During the Postpartum Period



Note: Continuous predictors expressed as OR for 1 SD increase in predictor

Anxiety Risk Factors

		Model 1			Model 2		
		Odds ratio	95% confidence interval	P value	Odds ratio	95% confidence interval	P value
Socio-demographic	Multiparous parity	3.46	1.39-8.65	0.008	3.29	1.28-8.48	0.014
Biological	History of psychiatric problems	2.73	1.12-6.62	0.026	3.07	1.19-7.97	0.021
Life stressors	Perceived stress	5.19	2.92-9.22	<0.001	4.92	2.62-9.26	<0.001
	Childcare stress	1.74	1.13-2.70	0.013	1.63	1.01-2.64	0.045
Social support	Partner support	0.66	0.44-0.99	0.045	0.70	0.47-1.06	0.097
Maternal adjustment	Breastfeeding self-efficacy	0.66	0.46-0.96	0.028	0.71	0.48-1.04	0.082
	Anxiety symptomatology at 1 week	---	---	---	2.78	1.04-7.43	0.042
	Depression symptomatology at 1 week	---	---	---	0.55	0.18-1.68	0.297



How do maternal mental health and breastfeeding intersect?

Postpartum Depression and Breastfeeding



Dennis, C-L., & McQueen, K. (2009). The relationship between infant feeding outcomes and postpartum depression: A qualitative systematic review. Pediatrics, 123: e736-e751.

Anxiety and Breastfeeding



Fallon, V., Groves, R., Halford, J, Bennett, K., Harrold, J. (2016). Postpartum Anxiety and Infant-Feeding Outcomes. *Journal of Human Lactation*, 32(4):740-758.

Maternal Anxiety

- Systematic review of 33 articles
- Women with anxiety are:
 - ↓ likely to initiate breastfeeding
 - ↑ likely to supplement with formula in the hospital
 - ↓ likely to continue to breastfeed
 - ↓ likely to breastfeed exclusively
- Maternal anxiety ↓ self-efficacy, ↑ breastfeeding difficulties, and may negatively affect breastfeeding behaviours and breast milk composition



What should we do to support affected mothers and their families?

Proactive
~~Reactive~~

Not only focus on individual treatment
but also include preventive approaches
to the management of depression and anxiety

Preventive Approach

- Moving beyond a model where we wait for a mother to develop major symptoms and then provide evidence-based treatment

A NEW Philosophy

- FOCUS on the long-term healthy development of mothers and their children
- PROACTIVELY provide resources to support this healthy development



**Can You
Prevent
Postpartum
Depression?**



Cochrane Systematic Review



THE COCHRANE
COLLABORATION
Preparing, maintaining and disseminating
systematic reviews of the effects of health care

Psychosocial and Psychological Interventions for the Prevention of Postpartum Depression: An Update

Dennis, C-L., Dowswell, T. (2013). Psychosocial and psychological interventions for preventing postpartum depression. The Cochrane Database of Systematic Reviews, Issue 2.



Summary

- Overall psychosocial and psychological interventions may decrease the risk of developing PPD by approximately 22%



- There is beginning evidence to suggest the importance of:
 1. Additional professional support initiated postnatally
 2. Telephone-based peer support initiated postnatally
 3. Interpersonal psychotherapy (IPT)



- Interventions are more likely to be beneficial if they are:
 - Initiated postnatally
 - Individually-based
 - Include multiple contacts
 - Target ‘at risk’ women



- Postnatal interventions that were successful
→administered Edinburgh Postnatal Depression Scale (EPDS) early in the postpartum period to identify depressive symptomatology
- Secondary preventive interventions



Postpartum Depression Peer Support Trial

(Dennis et al . *BMJ* 2009)



Funded by Canadian Institutes of Health Research (CIHR)

Summary

- Telephone-based peer support may be effective in preventing PPD among high-risk mothers
- Mothers who received peer support were at half the risk to develop PPD



Underlying Mechanisms of Peer Support

- Peer support can:
 - Increase social networks
 - Reinforce help-seeking behaviours
 - Decrease barriers to care
 - Encourage effective coping
 - Promote social comparisons
 - Increase self-efficacy
 - Aid self-esteem



Management of Perinatal Depression



Case Identification

- The first step in the management of PPD is case identification
- Research consistently demonstrates that informal surveillance is imprecise with less than 50% of mothers with perinatal depression identified despite various interactions with health professionals (*Yawn et al 2012; Goodman & Tyer-Viola, 2010*)



Antenatal Screening

- You can screen antenatally but most effective if it is to identify women with current depressive symptoms needing intervention → decreased predictive validity when trying to identify asymptomatic women at risk of developing PPD
- Flag women at high risk to develop PPD
 - History of depression
 - Elevated anxiety
 - History of abuse
 - Migrant status
 - Poor marital relationship



Postnatal Screening

Edinburgh Postnatal Depression Scale (EPDS)

- 10-item self-report instrument
- Scores range from 0 to 30
- Cut-off 12/13 (> 12) – probable PPD
- Cut-off 9/10 (> 9) – possible PPD
- Widely available and free



EPDS

- Validated for antenatal use
- Translated and psychometrically tested in many non-English populations – over 30 different languages
- Surveys of large samples of perinatal women have found acceptability to be high (80-90%)

- Critical factor
 - Provides a common language
 - Enables comparability of clinical and research results



Does perinatal depression screening
increase the number of mothers
who recover?

Research is Clear

Screening alone is insufficient

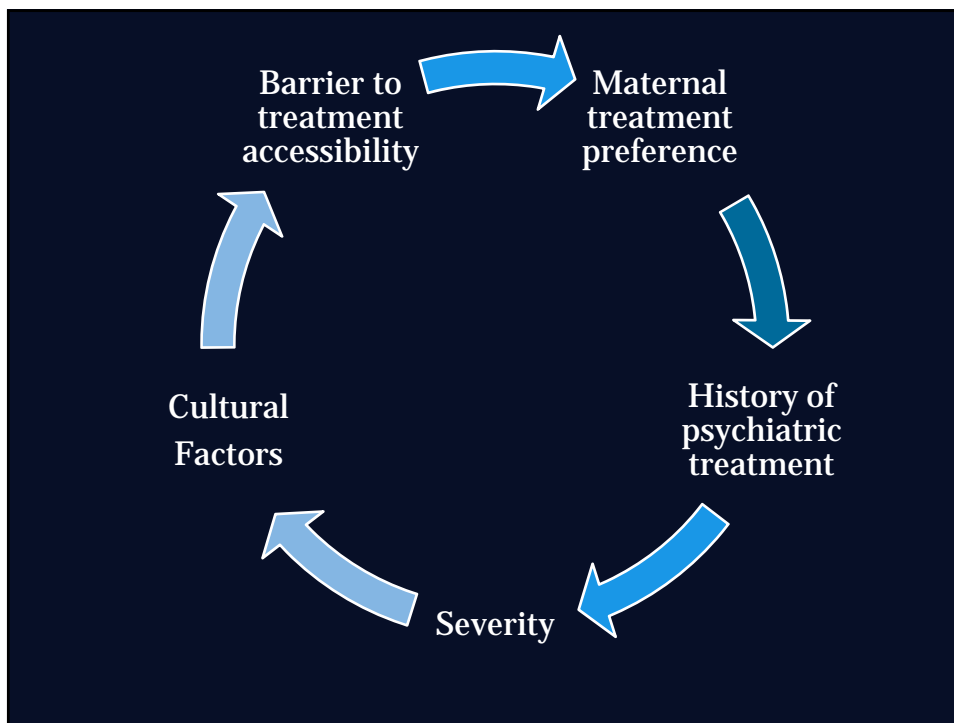
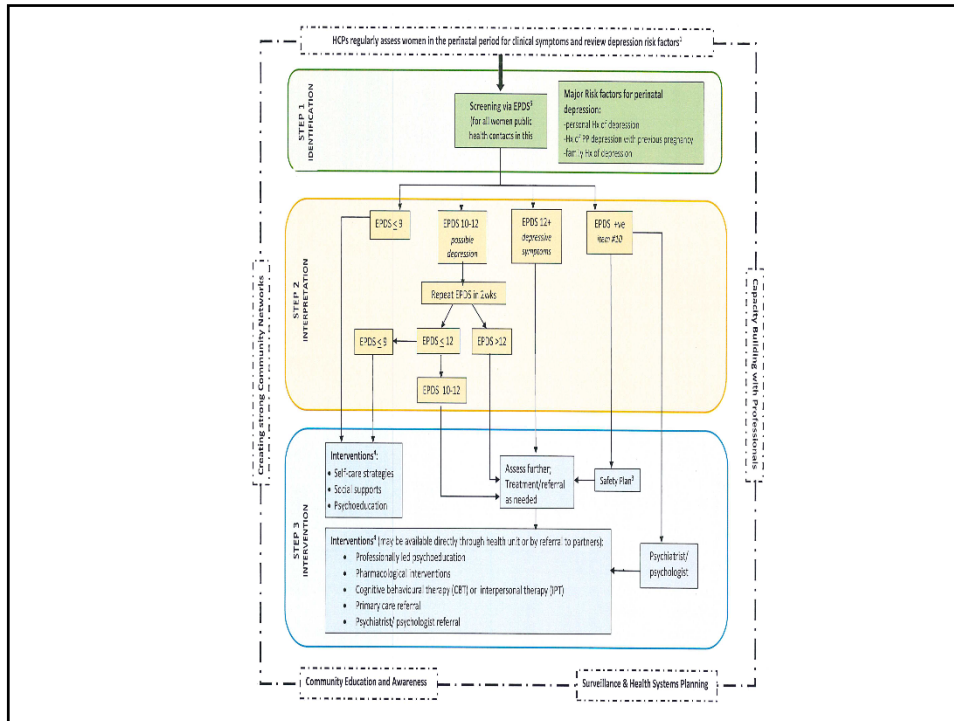
to ensure the provision of appropriate treatment
and thus ultimately improving clinical outcomes



- The U.S. Preventive Services Task Force recommends screening adults for depression in clinical practices that have systems in place to assure:

1. Accurate diagnosis
2. Effective treatment
3. Follow-up





Effective Treatment Tools

Pharmacological

Psychological

- Interpersonal psychotherapy (IPT)
- Cognitive behavioural therapy (CBT)
- Mindfulness-based strategies

Psychosocial

- Peer support /support groups
- Non-directive counselling

Alternative

- Exercise
- Bright light therapy



- Pharmacological interventions are a very effective treatment
- Many mothers are reluctant to take antidepressant medication due to concerns about breast milk transmission or potential side-effects
- The majority of mothers prefer “**talking therapies**” → especially if they are breastfeeding



Interpersonal Psychotherapy Trial



Telephone-Based Interpersonal Psychotherapy for the Treatment of Postpartum Depression

Funding: Canadian Institutes of Health Research

Design Overview

- Randomized controlled trial to evaluate the effect of telephone-based IPT by trained nurses among clinically depressed mothers (SCID positive)
- 36 health regions across Canada from 6 provinces:
 - Nova Scotia
 - Ontario
 - Manitoba
 - Saskatchewan
 - Alberta
 - British Columbia

- Technology plays a major role in the development and evolution of our lives
- It has percolated into all aspects including education, banking, and business management



E-Health

The implementation of technology in the health sector, popularly known as eHealth, is emerging as one of the most rapidly growing areas in healthcare today

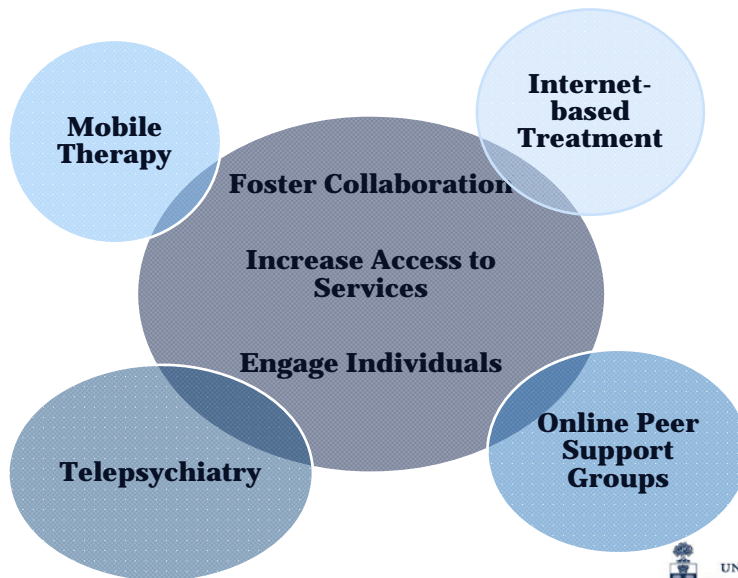


E-Mental Health

- E-Mental health has tremendous potential to address the **gap** between the identified need for mental health services and the limited capacity to provide conventional care
- Applications can address four areas of mental health service delivery:
 1. Information provision
 2. Screening, assessment, and monitoring
 3. Intervention
 4. Social support
- Primarily based on its ability to improve “**reach**”



Technologies Transforming Mental Health



How do we support breastfeeding women and their families?



Canadian Breastfeeding Rates

Good News!

- Breastfeeding rates continue to rise in the Canada
- 89% of mothers initiated breastfeeding in 2012, a slight increase from 85% in 2003
- More mothers were breastfeeding exclusively at 6 months: 26% in 2012 compared with 17% in 2003

However...

Only 1 in 4 mothers are achieving breastfeeding recommendations



Dose-Response Effect

- Breastfeeding has a dose-response effect, with increased benefits being proportionate to the extent of breastfeeding duration and exclusivity
- Suboptimal breastfeeding rates indicate that mothers and their infants are not receiving the maximum health benefits breastfeeding provides

***Breastfeeding Saves More Lives
Than Any Other Preventive Intervention!***



Target Non-Modifiable Risk Factors

- Many health professionals have targeted mothers at high risk to prematurely discontinue breastfeeding → based on non-modifiable characteristics:

- Maternal age
- Education level
- Socioeconomic status
- Ethnicity



Modifiable Risk Factors

If health professionals are to effectively improve low
breastfeeding exclusivity and duration rates



We need to reliably assess high-risk mothers and identify
risk factors that are amenable to intervention



How can we reliably identify mothers early who are at
high-risk to prematurely discontinue breastfeeding?

One possible modifiable variable is:

Breastfeeding Confidence



Breastfeeding Confidence

- The saliency of breastfeeding confidence has been demonstrated consistently:

- Initiation
- Duration
- Exclusivity



Breastfeeding confidence
is also associated with
maternal perceptions of insufficient milk

How do we assess confidence?

Self-efficacy theory has been used as a framework in a number of situations to determine perceived confidence



Definition

Self-Efficacy is a cognitive process
in which an individual evaluates their perceived ability
to perform a specific task or behaviour

(Bandura 1977)

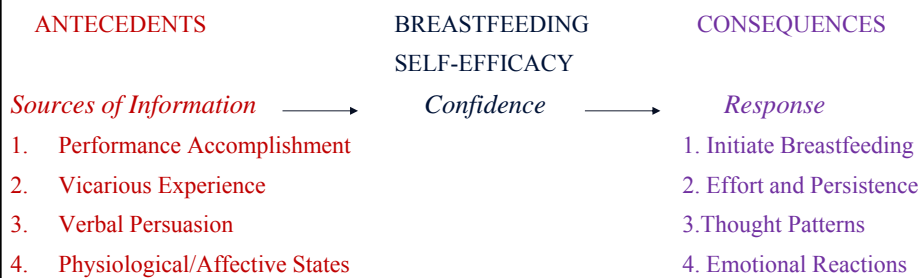
What is Breastfeeding Self-Efficacy?

A mother's confidence in her perceived ability to breastfeed her infant



Breastfeeding Self-Efficacy Theory

(Dennis, 1999)



1. Performance Accomplishments

- Personal experiences are often the most immediate and powerful source of efficacy information
 - Successful performances = ↑ self-efficacy
 - Repeated failures = ↓ self-efficacy
- The impact of a previous successful breastfeeding experience on breastfeeding outcomes
- Self-efficacy is modified by individuals' interpretations of their performance
 - Attention to improved aspects = ↑ self-efficacy
 - Attention to unsuccessful aspects = ↓ self-efficacy



2. Vicarious Experience

- Other individuals' performances (e.g. live, recorded, or printed) provide a common source of information about skills and abilities
- Observational learning = powerful impact on perceived self-efficacy, especially in the absence of previous experience



- Women who have seen friends or family members successfully breastfeed are more likely to initiate breastfeeding
- Women who have never seen an infant breastfed have reported that breastfeeding evokes feelings of awkwardness



3. Verbal Persuasion

Individuals often accept the appraisals of others as valid assessments of their own abilities

- Directing attention to the successful aspects of a breastfeeding session and praising new breastfeeding skills = ↑ self-efficacy

However...

- The more credible the individual providing verbal persuasion, the greater the potential to ↑ self-efficacy



The ever-growing research highlights the importance of
FATHERS
in improving breastfeeding outcomes

Coparenting breastfeeding support and exclusive breastfeeding: A randomized controlled trial (COSI Trial)

PI: Dr. Jennifer Abbass-Dick

- A multi-site randomized controlled trial
- To evaluate the effect of a Coparenting Breastfeeding Support Intervention (COSI) on breastfeeding outcomes among primiparous mothers and fathers



4. Physiological and Affective States

- Individuals make inferences about their abilities from emotions and other physiologic cues experienced while enacting a behaviour or anticipating its enactment
 - Positive interpretations (**excitement, satisfaction**) = ↑ self-efficacy
 - Negative interpretations (**pain, fatigue, anxiety**) = ↓ self-efficacy



Consequences of Breastfeeding Self-efficacy

- Breastfeeding self-efficacy predicts:
 1. Whether a mother chooses to breastfeed
 2. How much effort she will expend and whether she will persevere until mastery is achieved
 3. Whether she will have self-enhancing or self-defeating thought patterns
 4. How she will respond emotionally to breastfeeding difficulties



How Do We Measure
Breastfeeding Self-Efficacy?



Breastfeeding Self-Efficacy Scale

Breastfeeding Self-Efficacy Scale-Short Form (BSES-SF)

- 14 items
- Stem for each item is “I can always...”
- 5-point Likert scale
- 1 = not at all confident
- 5 = always confident
- Item scores are summed
- Range from 14 to 70 with higher scores indicating higher levels of breastfeeding self-efficacy



- Many other methodological studies have been published where the scale has been translated into diverse languages and tested with different maternal populations
- In total, over 1000 researchers and health professionals from over 30 different countries have requested the use of BSES-SF



Evaluate with Diverse Populations



Ethnic Samples

- Chinese
- Arabic
- Spanish



Maternal Populations

- Adolescent
- NICU
- Low-Income



Perinatal Time Periods

- Antenatal
- Postnatal

In these studies, BSES-SF scores in the early postpartum period have **consistently predicted** breastfeeding duration and exclusivity across the postpartum period

Results provide good evidence that the BSES-SF is a **reliable and valid** measure to assist in identifying high-risk mothers

Clinical Implications

1. **Identification tool**: to recognize which mothers require additional assistance
2. **Assessment tool**: to individualize interventions
3. **Evaluation tool**: to determine the efficacy of various supportive interventions and guide program development



Women Who Are Breastfeeding: Increasing Self-Efficacy to Improve Outcomes (WISE Trial)

- A multi-site randomized controlled trial
- To evaluate the effect of a breastfeeding self-efficacy enhancing intervention on breastfeeding exclusivity among primiparous mothers
- Need for a booster between 3-6 months



Clinical Implications Using Breastfeeding Self-Efficacy to Improve Breastfeeding Outcomes

Prenatal Care

1. Administer the **Edinburgh Postnatal Depression Scale** (EPDS)
2. Administer BSES-SF – review low and high scoring items
3. Review any previous breastfeeding experience
4. Assessing such experiences may enhance self-efficacy by defusing negative emotional responses, such as fear and anxiety, and by correcting misinformation
5. Provide **verbal persuasion** based on BSES-SF scores
6. Provide opportunities to **talk to other mothers** who have successfully breastfed

Common
Breastfeeding
Myths



Postnatal Care

Mothers should be:

- encouraged to initiate breastfeeding immediately after birth
- given multiple opportunities to breastfeed during their hospital stay

Promotes performance mastery

A knowledgeable health professional should:

- observe all initial breastfeeding attempts

Provides verbal persuasion



Self-Efficacy Enhancing Strategies

- Attention should be given to the successful or improved aspects of the breastfeeding performance
- Procedures done well should be targeted for positive reinforcement with decisions made about how to improve the breastfeeding performance in the future



Administer BSES-SF

- Provides important information regarding the individualized needs of a new breastfeeding mother
 - **Low scoring items** (<4) could be used to identify areas to promote self-efficacy enhancing strategies
 - **High scoring items** could be identified as strengths warranting recognition and reinforcement



- The BSES-SF could be used to make apparent to the mother the unobservable breastfeeding skills such as:
 - Envisioning successful performances
 - Thinking analytically to solve problems
 - Managing self-defeating thoughts
 - Persevering through difficulties



During such a review, note whether the mother is experiencing:

- *discomfort*
- *anxiety*
- *fatigue*
- *sense of failure*

Assess for Postpartum Depression

- 50% of cases missed through informal surveillance
- Administer the **Edinburgh Postnatal Depression Scale** (EPDS)
- Especially if mother is experiencing ++ breastfeeding problems
- Very high risk to prematurely discontinue breastfeeding

Edinburgh Postnatal Depression Scale

In the past 7 days:

1. I have been able to laugh and see the funny side of things
 - As much as I always could
 - Not quite so much now
 - Definitely not so much now
 - Not at all
2. I have looked forward with enjoyment to things
 - As much as I ever did
 - Rather less than I used to
 - Definitely less than I used to
 - Hardly at all
- *3. I have blamed myself unnecessarily when things went wrong
 - Yes, most of the time
 - Yes, some of the time
 - Not very often
 - No, never
4. I have been anxious or worried for no good reason
 - No, not at all
 - Hardly ever
 - Yes, sometimes
 - Yes, very often
- *5. I have felt scared or panicky for no very good reason
 - Yes, quite a lot
 - Yes, sometimes
 - No, not much
 - No, not at all
- *6. Things have been getting on top of me
 - Yes, most of the time I haven't been able to cope at all
 - Yes, sometimes I haven't been coping as well as usual
 - No, most of the time I have coped quite well
 - No, I have been coping as well as ever
- *7. I have been so unhappy that I have had difficulty sleeping
 - Yes, most of the time
 - Yes, sometimes
 - Not very often
 - No, not at all
- *8. I have felt sad or miserable
 - Yes, most of the time
 - Yes, quite often
 - Not very often
 - No, not at all
- *9. I have been so unhappy that I have been crying
 - Yes, most of the time
 - Yes, quite often
 - Only occasionally
 - No, never
- *10. The thought of harming myself has occurred to me
 - Yes, quite often
 - Sometimes
 - Hardly ever
 - Never

0 to 3 points/item, 10+ is probable Postpartum Depression.

Cox, J.L., Holden, J.M., & Sagovsky, R. (1987). Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry* 150, 782-786.

Encourage Breastfeeding Goals

Nervous about meeting your long-term breastfeeding goal? Break it down into smaller, more achievable goals. Take it one feeding at a time. You're doing a great job, Mama.

itsmorethanmilk.com
facebook.com/itsmorethanmilk



Afraid to reach a long-term breastfeeding goal?



set a more achievable short-term goal (like 6 weeks) when you reach that goal set another, then another... then another... you can do this mammal!

If you have a breastfeeding question, please call or text or visit our website for more Facebook pages: facebook.com/itsmorethanmilk
FREE telephone support: Helpline 800-976-1988 • Anytime 401-4388 • Fax 412-947-3432

Just give it **ONE MORE DAY**
#milkmemo



Anticipatory Guidance

- Through anticipatory guidance, the tendency to experience difficulties, pain, and fatigue should be explicitly acknowledged and normalized while strategies for controlling these states should be taught



Vicarious Experience

- Excellent opportunities increase self-efficacy through observational learning:
 - mother-to-mother support groups
 - breastfeeding clinics
 - public nursing areas
 - high-quality videos



Peer Support

- New mothers can learn by observing breastfeeding and by listening to other mothers recount their breastfeeding experiences
- Develop a simple telephone peer support program where new mothers are matched with experienced mothers in the same community
- A link between mothers in the community and health professionals



- The promotion, protection, and support of breastfeeding takes on a **different type of engagement** with the health system
- It is not a typical intervention
 - not a pharmaceutical product to be purchased or distributed
 - not a practice dependent on a facility or health provider

**Breastfeeding is a
social behaviour not a medical practice**

Social Marketing

- Social marketing is an approach used to develop activities aimed at changing or maintaining people's behaviour for the benefit of individuals and society as a whole
- Mass media behaviour change campaigns can target all of society including mother-in-laws or families from diverse cultures

Campaign Development

Based on Community-Based Social Marketing



Do something amazingly ordinary.

My mom protects her baby from asthma and diabetes by doing the most ordinary thing in the world. Breastfeeding.

24 oz. of breastmilk = 50 minutes of vigorous jumping jacks = 500 calories burned

SHE'S NOT A CELEBRITY. SHE'S A STAR.

onlynatural.org.uk
Join our only natural facebook group

Breastfeeding. It's only natural.

THE LANCET BREASTFEEDING SERIES CONFIRMS:
EACH YEAR OF BREASTFEEDING decreases a woman's chance of developing **INVASIVE BREAST CANCER BY 6%**

powered by **mama's milk**
Breastfeeding is the best feeding.

408.885.5950

WIC

Need to Target Exclusive Breastfeeding

- Previous social marketing = “Breast is Best”
- Focused on the benefits of breastfeeding
- Resulted in ↑ initiation and duration

Little impact with exclusive breastfeeding

- Poor job conveying the message:

**Exclusive breastfeeding
is better than
‘Any’ breastfeeding**



Summary

- Perinatal mental health issues goes beyond PPD and includes anxiety and comorbidity
- Highly prevalence with approximately 1 in 6 mothers experiencing one of these conditions
- They significantly impact breastfeeding behaviours and outcomes



Addressing Mental Health Issues

- Step 1: Think about prevention
- Step 2: Identify perinatal mental health issues
- Step 3: Develop treatment plan with mothers
- Step 4: Make referrals and follow-up



- Among breastfeeding mothers, increase their breastfeeding self-efficacy based on:
 1. past experiences and performances
 2. vicarious experience
 3. verbal persuasion, and
 4. their present physiological and emotional states
- Professionals can incorporate self-efficacy enhancing strategies into their general practice



- The Breastfeeding Self-Efficacy Scale-Short Form (BSES-SF) has been developed to measure a mother's confidence in her ability to breastfeed and may be used as an assessment tool to:

1. identify at-risk mothers
2. individualize care
3. evaluate health care interventions



Cindy-Lee Dennis, PhD
*Professor and Canada Research Chair
University of Toronto*

cindylee.dennis@utoronto.ca

www.cindyleedennis.ca