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## **TEAM**

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## **FUNDING**

Island Health Research & Capacity Building

Island Medical Program
UBC

**BC Support Unit** 









# FEAR OF CHILDBIRTH

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- Pregnancy
  - Avoidance
  - Termination
- Increased
  - Pain during childbirth
  - Length of labour
- Increased risk of
  - Emergency CS
  - Postpartum depression
  - Posttraumatic stress

- \(\sigma\) mother-infant bonding
- Strong desire for either
  - VAGINAL
  - CESAREAN
- Increased
  - Parenting stress

# **PREVALENCE**

- Should be established using diagnostic interviews
- 20-30% of women may be affected
- Prevalence studies questionnaire-based
  - 7.5% to 15.6% pregnant women
  - 9.8% in our sample
- Specific phobia, FoB
  - 2.5% nulliparas
  - 4.5% multiparas



# **EXISTING MEASURES**

## **OVERVIEW**

- Current FoB assessment
  - $\sim$  10 measures
  - Range from 1-64 items
- Limitations
  - Some domains = 1-2 items only
  - Include non-fear related items
  - Subpopulation specific

## W-DEQ

- Most common measure
- Good psychometrics
- Limitations
  - Excludes some fears
    - Pain
    - Sexual functioning
    - Embarrassment
  - Includes non-fear
    - Нарру
    - Strong
    - Lonely

# **OBJECTIVES**

## Develop a measure of FoB to...

- Overcome limitations of existing measures
- Identify women experiencing clinically significant (i.e., diagnosable) levels of fear
- Assess full spectrum of women's childbirth fears
- Identify targets for treatment
- Use with women who are fearful of
  - VAGINAL, or
  - CESAREAN birth





The Childbirth Fear Questionnaire (CFQ)

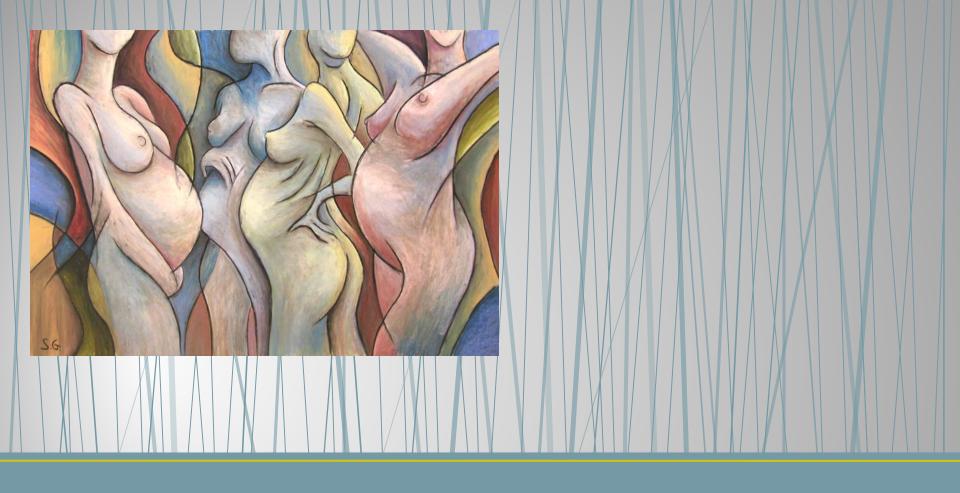
# CFQ DEVELOPMENT

## ITEM SELECTION

- Researchers from psychology, midwifery, & nursing
- Team reviewed items for wording / inclusion
- Multiple items / fear domain
- Approximate diagnostic measure

## FEAR DOMAINS

- Embarrassment
- Physical safety
- Bodily changes
- Sexual functioning
- Medical interventions
- Pain
- Pain medication
- Mode of delivery



# CFQ PSYCHOMETRIC DEVELOPMENT

# STUDY METHODS

## INITIAL SCALE

- Likert-type scale
  - 0 (not at all) to
  - 4 (extremely)
- 49 initial items
- 7-item interference scale

## DESIGN

- Cross-sectional
- Online survey
- Recruited online
- Inclusion Criteria
  - English-speaking
  - Pregnant & 18+
  - Resident of English language country

## **MEASURES**

## BACKGROUND

- Demographic information
- Birth history
  - Mode of delivery
  - Traumatic births
- Current pregnancy
  - Mode of conception
  - Pregnancy complications
  - Number of babies
- Care provider preference
- Location of birth preference

#### **OTHER**

# Wijma Delivery Expectancy Questionnaire (W-DEQ-A)

- 33-item measure of FoB
- Most commonly used

# Edinburgh Postnatal Depression Scale (EPDS)

 10-item self-report measure of pre and postnatal depression

## Mutilation Questionnaire (MQ)

 30-item self-report measure of blood and injury fears

# PARTICIPANTS (n = 643)

DEMOGRAPHICS		REPRODUCTIVE HISTORY		
Married / cohabitating	93%	Prior Births	769	
Some postsecondary	86%	Vaginal	819	
Location of residence		Cesarean	269	
Canada	64%	Pregnancy loss < 20 weeks	309	
United States	31%	Pregnancy loss > 20 weeks	2%	
United Kingdom	3%			
Caucasian	93%			

76%

81%

26%

30%

2%

# FACTOR ANAYSIS

- Exploratory factor analysis
- Produced
  - 40-item questionnaire
  - 9 factors

## Model

- Was supported by a MAP test
- Exhibited reasonable model fit
- Good simple structure
- Factors were readily interpretable.
- Evidence of invariance between parity and nationality groups



# FINAL 9 FACTORS

## FEAR OF...

- SEX: Loss of sexual pleasure/attractiveness
- PAIN: Pain from a vaginal birth
- INTERVENTIONS: Medical interventions
- SHY: Embarrassment
- HARM: Harm to baby
- DEATH: Mom and baby dying
- CESAREAN: Cesarean birth
- MEDICATION: Insufficient pain medication
- BODY DAMAGE: Body damage from a vaginal birth

# **PSYCHOMETRIC PROPERTIES**

- Good reliability
  - Alpha coefficients 0.76 0.94
- Highest mean scores
  - Harm to infant
  - Cesarean birth
- Lowest mean scores
  - Loss of sexual pleasure/attractiveness
  - Embarrassment
  - Insufficient pain medication
- Good convergent/discriminant validity



# CONVERGENT / DISCIRIMINANT VALIDITY

#### CFQ COMPARED TO...

- Another measure of FoB
  - W-DEQ-A
- Depressed mood
  - EPDS
- Blood, injury, injection fears
  - MQ

## **FINDINGS**

- CFQ with W-DEQ full
  - CFQ-W-DEQ >
    - CFQ-MQ
    - Not CFQ-EPDS
- CFQ with W-DEQ fear
  - CFQ-W-DEQ >
    - CFQ-MQ
    - CFQ-EPDS

# **BIRTH PREFERENCES**

- Compared those with ≥
   strong preference for
  - VAGINAL
  - CESAREAN
- Prefer
  - VAGINAL = 83.8%
  - CESAREAN = 5.1%

- Prefer Cesarean
  - HIGHER fear of...
    - PAIN (from vaginal birth)
    - HARM
    - DEATH
    - INSUFFICIENT PAIN MEDICATION
  - LOWER fear of...
    - CESAREAN
    - MEDICAL INTERVENTIONS

# **PARITY**

- Nullips and multips differed on
  - 6 of 9 CFQ subscales
  - CFQ Total Score



- Fear of...
  - Loss of sexual pleasure / attractiveness
  - Pain from a vaginal birth
  - Embarrassment
  - Harm to baby
  - Insufficient pain medication
  - Body damage from vaginal birth
  - CFQ Total scores

# **NATIONALITY & CUT SCORES**

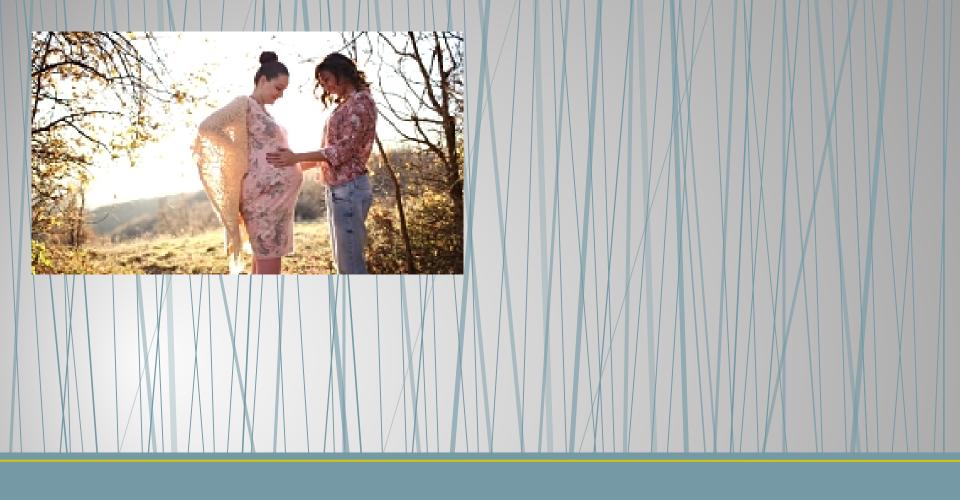
## **COUNTRY**

- US > Canadian on fear of...
  - Medical interventions
  - Cesarean birth

## **CUT SCORES**

- SEVERE ≥ 105
  - 90<sup>th</sup> percentile
- MODERATE ≥ 83
  - 75<sup>th</sup> percentile





# **CFQ DIAGNOSTIC STUDY**

# **DIAGNOSTIC STUDY**

## **PURPOSE**

- Conduct a confirmatory factor analysis
- Assess CFQ as screening tool for specific phobia, FoB
- Require N = 700
  - > 700 participants recruited

## DESIGN

- Cross-sectional design
- Administer
  - CFQ
  - Diagnostic interview for specific phobia
  - Additional questionnaires



# TREATMENT STUDY

# CBT FOR FEAR OF CHILDBIRTH

## INTERVENTION

- Exposure based CBT
- Online
- Self-administered
- Midwife-supported
- Guided by CFQ content domains

## PILOT PLANS

- Patient-led treatment development
  - Dr. Melanie O'Neill
- Focus groups of women
- Diagnostic assessments
- Pilot treatment

ID		Date:
	Fear of Childbirth Questionnaire	

Below is a list of a range of labour and childbirth situations that some women may find frightening. For each of the situations listed, please indicate how fearful you are. Please use the scale below as a guide:

Not at all	0	I am not at all afraid of this aspect of labour and delivery.
Slightly	1	I am a little bit afraid of this aspect of labour and delivery.
Moderately	2	I am quite afraid of this aspect of labour and delivery.
Very	3	I am very afraid of this aspect of labour and delivery.
Extremely	4	I'm extremely afraid of this aspect of labour and delivery.

SITUATION			FEAR			
How fearful are you of	Not at all	Slightly	Moderately	Very	Extremely	
Being harmed because of incompetent medical care?	0	1	2	3	4	
Rectal tearing/damage as a consequence of labour/birth?	0	1	2	3	4	
3. Dying during labour/birth?	0	1	2	3	4	
4. Having general anesthetic?	0	1	2	3	4	
5. Being administered injections?	0	1	2	3	4	
6. The baby being damaged/handicapped as a consequence of labour/birth?	0	1	2	3	4	
7. Other people seeing me naked during labour/birth?	0	1	2	3	4	
8. Vaginal tearing during labour/birth?	0	1	2	3	4	
The baby being harmed during labour/birth?	0	1	2	3	4	
10. Baby being hurt by a medical intervention that takes place during labour/birth (e.g., vacuum, anesthetics)?	0	1	2	3	4	
11. Not being able to have a cesarean birth, even though this is what I would prefer?	0	1	2	3	4	
12. Stretching of my vagina from giving birth vaginally?	0	1	2	3	4	
13. Enjoying sexual intercourse less because of stretching from a vaginal birth?	0	1	2	3	4	