

## Beliefs and Decision-Making of First-Time Mothers Planning to use a Breast Pump

Lori Hubbard, PhD, RN, IBCLC  
Pamela Reis, PhD, CNM, NNP-  
BC, FACNM (Committee Chair)

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### Background

Breast pumps used by up to 85% of women <sup>1-2</sup>


- Improper use of devices can cause injury, contamination, and reduced volume <sup>3-5</sup>
- Instructions can be confusing and inconsistent <sup>6-8</sup>
- First-time mothers more likely to use a breast pump within days of the birth <sup>2</sup>

40-92% of women report breastfeeding problems in early postpartum <sup>9-10</sup>

- Breastfeeding problems most prevalent from 3 days to 2 weeks postpartum <sup>10-11</sup>
- Nonelective device use increases early cessation and reduced exclusivity <sup>12-16</sup>
- Breastfeeding self-efficacy is lower when using a device for feeding problems <sup>17-18</sup>

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"Breastfeeding"



**STUDY #2**

Actual device use ranged from 0-12 devices ( $M = 4.22, SD = 2.8$ )

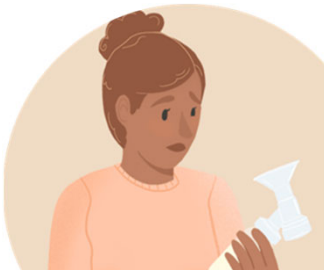
- **T1 (n = 121)**
- electric breast pump 55.4%
- Manual breast pump 49.6%

- **T2 (n = 101)**
- electric breast pump 84.2%
- manual breast pump 47.5%

<https://bonnieandblithe.com/bare-basics-for-baby-12-minute-blanket-tutorial/>

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- To explore beliefs and decision-making processes associated with breast pump use in first-time mothers providing full or partial human milk feedings to healthy, term newborns at 24-72 hours after birth
- Qualitative, descriptive study
- Pilot investigation
  - Cone Health IRB & NRC
  - 100% participation



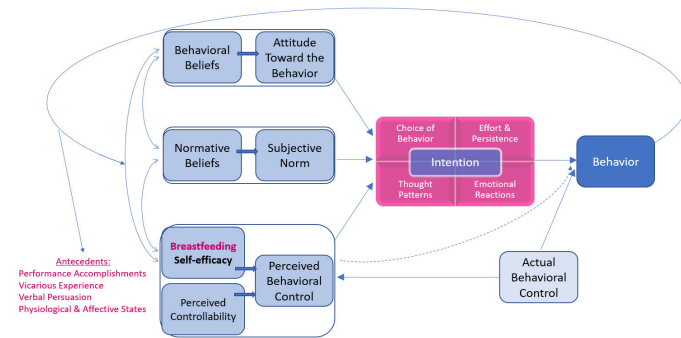
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## Sample & Procedure

- Eight English-speaking primiparas
- IBCLC collaboration
- 11 demographic questions
- One, 20 - 40 min, semi-structured, face-to-face interview on the inpatient postpartum unit with a researcher-developed interview guide
- \$10 grocery gift card
- Audio-taped interviews transcribed into NVivo v.12

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## Theory of Planned Behavior (Ajzen, 1991, 2002, 2020) & Breastfeeding Self-Efficacy Theory (Dennis, 1999)



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## Interview Guide

- Tell me about your **plans for feeding** your baby.
- Have any of your plans for feeding or using a pump **changed** since you have had your baby?
- Thinking back through pregnancy and the time since birth, tell me about your process for **deciding if and when** you might use a breast pump.
- During pregnancy and the time since birth, how did you **learn** about the types of breast pumps and how to use them?
- What do the **important people in your life** think about breast pumps or about feeding the baby any way other than at the breast?
- What do you believe mothers specifically **want to know** about breast pumps?
- How will you **obtain** a breast pump if you want to use one?
- What might **get in the way** of your plans to use a pump?
- If you think you might use one, what will help you be **successful** at incorporating a breast pump into your infant feeding plans?
- What are your thoughts about breastfeeding and about breast pump use in our **society** at this time?

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## Analysis

- Conventional content analysis
- Field notes
- in vivo and process coding <sup>19</sup>
- Thought maps and analytic memos

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## Resource gathering

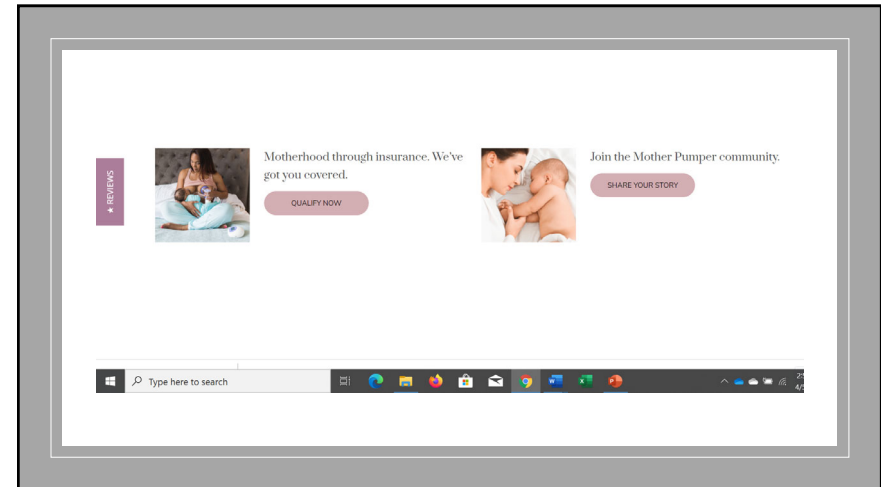
### Building knowledge

- “All of it is just a ton of information, so when you look at it, you just have to really have time to sit down and process it all.”
- “So, I am gonna try to get one that's very discreet. And, um, fashionable, hopefully...That's not just a big, bulky like hospital looking thing.”

### Trusting others

- “I'll probably go to my sister-in-law who is already a mom (chuckling), ...First I'll try to figure it out myself. But then I will seek out help from other mamas who know how to use it.”
- “I didn't ask a whole lot of questions or I didn't post a whole lot. I just went off of other mothers' stories or questions.”

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## Intention refining

### Decision-making

- “I looked at what my insurance provided because you can't just, you know, buy a pump and they pay for it. You have to select the ones they offer.”
- “I really didn't want to compromise something that...does have a high failure rate and I know will be really challenging for me. I just wanted to go for the very best one.”
- “Well in all honesty, to me, there wasn't one that was best. 'Cause I'm a new mom so I don't know what's better than the next. So ultimately in the end, it was just 'get a pump!'”

### Determining degree of use

- “Just for us moms that *have* [emphasis added] to go back to work, that I *can't* [emphasis added] stay home with him 24-7, um, 'cause you know you have to pay bills.”
- “Like I said, I wasn't planning on using it unless I needed it, desperately, kind of thing.”

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## Behavior navigating

### Envisioning or engaging use

- “So, I was just like 'let me just get through pregnancy, and then let me just get through labor and delivery and then I'll worry about it'. So now I'm starting to think about it, and I'm gonna get my pump out and look at it. Try to figure out how to work it [laughing].”
- “But I haven't thought about that [safety]. [laughing] But I guess that would be important too!”
- “Go through the manual, play with it, set it up, then go ahead and go to YouTube.”

### Self-advocacy

- “They've said they can give me some time for it, but the law says that you can't use the bathroom, um that they've got to give a room for you, but they try to offer you the bathroom. I'm like “no, that's not what the law says”. I'm worried they won't give me the proper room and comfort that I need to be able to do that.”
- “I shouldn't have to...You know it's her food. Why am I in a bathroom? That's just gross.”
- “Um, knowing that my job will allow me to, the time that I need to get things right. You know, making my schedule *consistent*.”

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## Conclusions/Implications

- Online peer interaction for reviews and instruction <sup>20-21</sup>
- Heavy reliance on product and manufacturer websites
- Minimal references to proper function and safe milk collection
- Return to work
  - Privacy and timely breaks
- Increased collaboration with those intending to use a breast pump
  - Selection and safe use
  - Resource availability at various stages, *especially first-time use*
  - Anticipatory guidance for returning to work

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