

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

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**Context:** The Affordable Care Act of 2010 increased availability of low to no cost breast pumps and lactation consultant services. Breast pumps help lactating women reap the extensive infant and maternal health benefits of human milk feeding although their use is not benign; there are potential risks to milk supply, skin integrity, and bonding. First-time mothers are more likely to initiate use of a breast pump during early postpartum. The purpose of this study is 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.

**Research paradigm:** A qualitative, descriptive approach was selected for this study informed by Azjen's Theory of Planned Behavior (TPB).

**Methods of data collection:** Recruitment over one month yielded eight fully or partially breastfeeding, English-speaking, primiparous women over the age of 18, each with a healthy infant between 24 and 72 hours old. Written demographic information, verbal responses, and field notes during one semi-structured interview with each participant were collected on the postpartum unit at a community hospital in the southeastern U.S. The interview guide consisted of researcher-developed, open-ended questions.

**Data analysis:** The audio-taped interviews were transcribed verbatim by the PI into data files in the NVivo software program. To achieve a descriptive summary, conventional content analysis of transcribed data consisted of in vivo and process coding followed by inductive analysis for emerging themes. Codes, sub-themes, and themes align with the TPB model where behavioral, normative, and control beliefs converge to form intentions to engage in specific behaviors.

**Quality of data and analysis:** To promote rigor, an audit trail of reflexive memos was maintained, and coding was reviewed by a research mentor.

**Findings:** Purposive sampling led to demographics resembling the local population of childbearing women with 75% returning to full-time employment and planning to pump. Themes constructed to re-present the participant responses were: *Resource gathering*, *Intention refining*, and *Behavior navigating*. Heavy reliance on insurer and manufacturer websites and an inherent trust in online peer reviews characterized pump selection. There were minimal references to pump and milk collection safety. Participants delayed exploring pumps once obtained but planned to rely on IBCLC assistance. Negotiating privacy, scheduling, and pumping necessity illustrated discussions of work needs.

**Application of critical thinking to analysis:** The researcher is an International Board-Certified Lactation Consultant (IBCLC) and Registered Nurse with 23 years of experience in maternal health, lactation, and childbirth education.

**Transferability:** This study offers information on formation of beliefs about breast pumps and plans for use by first-time mothers. An understanding of these beliefs gives insight on ways health professionals can increase collaboration with expectant and new mothers about feeding goals, anticipate resource needs, and enhance education about selection and safe use of breast pumps.