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## **Breastfeeding Practices and Attitudes Toward Breastfeeding in Human Milk Donors**

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**Purpose:** Mother's milk is recommended as the best primary source of infant nutrition for the first year of life. However, human donor milk can be the next best option especially for premature infants when mothers' own milk is not available. Data regarding human milk donors' breastfeeding practices and attitudes toward breastfeeding are underreported. Thus, this study aimed to determine breastfeeding outcomes and attitudes toward breastfeeding among human milk donors. In addition, barriers to milk donation process were also assessed.

**Methods:** A prospective descriptive study using an online internet survey was conducted in milk donor women who were on the U.S. National Milk Bank list serve. The questionnaire has been previously validated for reliability and validity to measure variables on milk donation process, breastfeeding outcomes, facilitators and barriers to milk donation. Iowa Breastfeeding Attitudes scale was used to assess women's attitudes toward breastfeeding. Data were analyzed using descriptive statistics, Chi-square, and Independent samples t-test.

**Results:** A total of 236 milk donor women with the mean age of 33 years old (SD = 4.3) and infant mean gestational age of 38 weeks (SD=3.42) completed the online survey. These women resided in suburban (63%), urban (19.7%), and rural (16%) areas. Infants' first feedings were reported as using mothers' own breast milk (85%), donated milk (5%), and formula (8%). Most women, 66% (n=158) initiated breastfeeding within the first hour of delivery. Women who did not breastfeed during the first hour of delivery (n=66, 28%) tended to have more low birth weight and small for gestational age infants compared to those women who initiated breastfeeding within the first hour of delivery ( $p < .05$ ). Approximately 29% (n=69) infants were hospitalized due to complications such as jaundice (23%), dyspnea (11%), and hypoglycemia (6%). Breastfeeding practices reported by these women were exclusive (83%), partial (12%), and formula (1.3%) feedings. Attitude toward breastfeeding mean scores were high (42.5/SD=6.09) among the participants. There was no significant difference in women's breastfeeding attitude scores in terms of their infants' gestational age, birth weight, and infant hospitalization status ( $p > .05$ ). Top three barriers to milk donation reported were: breast pump related issues (17.5%), milk transport (10%), and milk donor screening process (6.3%).

**Conclusion:** Milk donor women in this study had positive attitudes toward breastfeeding with high breastfeeding initiation and exclusivity rates. Mothers' milk donor screening process and standard procedures including collection, storage, and transport can be streamlined to accommodate women who are willing to donate their breast milk. Implications to practice and policy include increasing milk donation

awareness among breastfeeding women, healthcare professionals, and lactation consultants.

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**Title:**

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**Keywords:**

Barriers, Breastfeeding Practices and Human Milk donors

**Abstract Summary:**

This study aimed to determine breastfeeding outcomes and attitudes toward breastfeeding among human milk donors. In addition, barriers to milk donation process were also assessed. A prospective descriptive study using an online internet survey was conducted in milk donor women who were on the U.S. National Milk Bank list serve.

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