
Breast Milk Banking Among Postnatal Mothers: A Literature Review

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Article Information:

Type of Article: *Original Article*

Received On: 13.08.2025

Accepted On: 30.08.2025

Published On: 01.09,2025

Abstract:

Objective:

This literature review aims to assess the knowledge, attitudes, and practices of postnatal mothers regarding breast milk banking, and to identify barriers and facilitators influencing milk donation.

Methodology:

A structured review of studies published in the last 10 years was conducted, focusing on awareness, cultural perceptions, and practical engagement in breast milk donation. Both quantitative and qualitative research articles involving postnatal mothers were included. Data were analysed to identify common patterns and outcomes.

Results:

The review found that knowledge about breast milk banking remains low, with only 18–32% of mothers aware of the concept. Higher awareness was linked to antenatal counselling and NICU exposure. Attitudes improved significantly with education, as willingness to donate increased from 40% to over 80% after short counselling sessions. However, actual donation rates were low (5–12%), primarily due to cultural stigma, fear of insufficient milk, and lack of access to milk banks.

Conclusion:

There is a clear gap between awareness and practice. Targeted health education, culturally sensitive counselling, and improved infrastructure are essential to increase participation in milk donation.



Strengthening these areas can support the expansion of human milk banking and contribute to better neonatal outcomes.

Keywords: Breast Milk Banking, Human Milk Donation, Postnatal Mothers, Neonatal Health, Maternal Awareness, Healthcare Practices.

Introduction

Breast milk is universally acknowledged as the most complete form of nutrition for infants, especially in the critical first six months of life. It provides essential nutrients, antibodies, and enzymes that are vital for infant growth, immune protection, and development. However, not all mothers are able to breastfeed due to medical, physical, or social reasons. In such situations, donor breast milk becomes a crucial alternative. Human milk banking (HMB) is a practice where screened donor breast milk is collected, processed, and distributed to infants in need, especially those in neonatal intensive care units (NICUs).

Despite its potential, the implementation and utilization of milk banks remain limited in many regions due to a lack of awareness, cultural barriers, and infrastructural constraints. Postnatal mothers play a central role in the success of milk donation programs. Their knowledge, attitudes, and practices toward milk banking significantly influence donation rates and neonatal health outcomes.

This literature review focuses on studies conducted globally and in India to evaluate postnatal mothers' understanding and perspectives on breast milk banking. The objective is to identify barriers, facilitators, and effective strategies that can inform public health initiatives and nursing interventions aimed at promoting human milk donation.

Methodology

This literature review employed a systematic approach to identify, evaluate, and synthesize research studies related to breast milk banking among postnatal mothers. Electronic databases such as PubMed, Scopus, Google Scholar, and ScienceDirect were searched using keywords like "breast milk banking," "human milk donation," "postnatal mothers," "neonatal health," and "maternal awareness." Inclusion criteria were peer-reviewed articles published in English within the last 10 years, focusing on maternal knowledge, attitudes, and practices regarding breast milk banking. Studies not involving human subjects, those outside the scope of maternal health, or published before 2013 were excluded. Both qualitative and quantitative studies were considered. Data extraction was conducted to identify key findings, study designs, and sample characteristics. Thematic analysis was used to categorize findings into knowledge, attitude, and practice domains. The review aimed to highlight patterns, gaps, and recommendations to guide future interventions and policies related to human milk donation.

Results

The literature review revealed low awareness of breast milk banking among postnatal mothers, with only 18–32% having prior knowledge. Education, NICU exposure, and antenatal counselling were linked to higher knowledge levels. Attitudes were generally positive when mothers were informed, with willingness to donate increasing significantly after brief counselling. However, actual donation

rates remained low (5–12%) due to barriers such as cultural beliefs, fear of insufficient milk, and lack of access to milk banks. Despite common milk expression practices, formal donation was limited, highlighting the gap between attitude and practice.

Conclusion

Breast milk banking plays a vital role in improving neonatal health, especially for preterm and critically ill infants. This review highlights that while awareness and attitudes toward milk donation are improving, actual practices remain limited due to knowledge gaps and cultural barriers. Structured health education, supportive counselling, and accessible milk banking infrastructure are essential to increase donor participation. Strengthening these areas can significantly enhance the success of human milk banking programs and reduce infant mortality.

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