

# Expressed Breast Milk for the Very Premature Neonate

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**BENEFITS** 

the infants.

inconclusive.

Benefits of Breastmilk

Colostrum "Liquid Gold"

The early consumption of breastmilk provides an infant

a 'powerful line of defence' against infection. It is best

practice for a baby to be fed within an hour of being

born, as it is vital for their survival (WHO & UNICEF,

colostrum; it contains large amounts of nutrients and

neonates that received colostrum, reach the criteria to

be discharged earlier in comparison to those who did

not receive this therapy (Romero-Maldonado et al.,

2022; Abd-Elgaward et al., 2019). The administration

of colostrum to the buccal mucosa of the infant via a

in all neonatal units to support better outcomes for

Breastmilk is the best nutrition for all babies; it has

been described to act like 'medicine' for premature

infants. Research has found that breastmilk reduces

such as sepsis, necrotizing enterocolitis (NEC), and

these infants, some of the nutritional and

death (Ochoa et al., 2020). Due to the early arrival of

immunological factors have not all been transferred in

the infant, so having a different composition to that of

Despite this, very premature infants still require extra

nourishment to gain weight, so a fortifier is added to

breastmilk. This is very beneficial, as it helps prevent

emerging concerns over its part in increasing the risk

extrauterine growth restriction, but there are

of NEC (Gu et al., 2021), but evidence remains

the womb. Fortunately, this can be attained through

the mother's breastmilk, as it caters to the needs of

a mother who birthed at term (Underwood, 2013).

the risk of premature infants acquiring serious illnesses

syringe is a free therapy that should be used routinely

immunological factors. According to recent studies,

2018). The initial breast milk produced is called

#### INTRODUCTION

Children's nurses are advocates for their patients and play a part in educating parents about the best nutrition for their babies. This poster will delve into the benefits and challenges that may arise with feeding a very premature neonate (<32 weeks gestation), who is admitted into a neonatal unit with breast milk. It will discuss the advantages of a neonate receiving breastmilk and the holistic care practices nurses provide mothers with expressing their milk for the consumption of their infant; as well as the physical barriers and emotional challenges to completing this practice and how nurses can support them appropriately.

## BACKGROUND

Neonatal units care for infants who are born prematurely, experience complications during birth, are of low birth weight or are ill. UNICEF and the WHO (2015) recommend that for the best start in life, the following optimal breastfeeding practices should be followed, this includes initiation of breastfeeding within the first hour of birth and exclusive breastfeeding for the first 6 months. However, for the very premature neonate, direct breastfeeding may be a challenge, therefore, these infants are gavage fed through a nasogastric tube, that has been inserted through their nose and into their stomach (Gupta and Parikh, 2020). Mothers are supported with producing natural, renewable food for their babies, by expressing their breastmilk, until the baby is strong enough to orally feed.

# CHALLENGES

#### Lactation & Breast Milk Expression

Birthing prematurely comes with an increased risk of the delayed onset of lactogenesis II, which is associated with lower milk volumes and early cessation of breastfeeding (Dong et al., 2022). Mothers are encouraged to begin expressing milk within 6-12 hours after delivery and perform this regularly to maintain their milk flow (Underwood, 2013). Although there is a lack of research as to when expressing should begin, the majority of medical professionals and researchers agree that the earlier the better, whereas Parker et al. (2015) report that there is no significant difference between starting within 6 hours of delivery or after, regarding an earlier start of the onset of lactogenesis II. Nurses are ideally positioned to support and educate mothers on the feeding of their infants, but due to a lack of resources this is not being met (Hallowell et al., 2014; & Wilson, 2012).

#### Barriers Imposed by prematurity & the NICU environment

Due to their immature sucking, swallowing and breathing coordination, very premature neonates are unable to feed orally; Instead, a nasogastric tube allows breastmilk to be directly absorbed by the stomach (Gupta and Parikh, 2020); Madiba and Sengane (2021) recognise the mix feelings from parents regarding tube feeding. The Baby Friendly Initiative (UNICEF, n.d.) encourages the implementation of skin-to-skin care, when possible, as it involves the release of hormones that helps the mother's body to produce more breastmilk, among a plethora of other benefits. Despite these benefits, it can be challenging to engage parents in SSC due to the physical facility and fear of injuring the fragile infant may discourage them from doing so, therefore it is the role of the nurse to help facilitate this practice (Gonya et al., 2017).



(Bliss, 2023)

## Key Points

- **Streastmilk is the best nutrition for all infants.**
- Colostrum administration is a free therapy that supports better outcomes.
- Regular breast milk expression produces more milk production.
- Facilitating skin-to-skin care improves milk production, along with a plethora of other benefits.

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