

# The Impact of Covid-19 Lockdown Restriction on the Duration and Breastfeeding at Discharge from the Neonatal Units

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### Abstract

WHO recommends exclusively breastfeeding infants for six months after birth. It is well known that exclusive breastfeeding after discharge from NNU in the United Kingdom is highly recommended although there are barriers that make it difficult for mothers to breastfeed. The evidence related to the barrier (prenatal, medical, societal, hospital, and sociocultural) that many mothers face, however during 2020, COVID 19 pandemic restrictions has impacted on a woman's ability to breastfeed her infant, especially where babies have been admitted to NNU.

We reviewed breastfeeding at day one and at discharge from NNU over 2 periods. During our study, we looked at Period 1 between March to December 2019 and compared it to Period 2 between March 2020 till December 2020.

We identified, during Period 1, 242 (45.2%) babies were discharged home exclusively breastfed, whilst 98 babies had been mixfed. There is 63.5% of children who were discharged home and received breast milk in Period 1. However, during Period 2 of observation that the percentage of children who were discharged home breast-fed fell. We identified 84 (22.1%) children who received milk, whilst 138 were mix fed. We identify that during Period 2 only 58.4% of children received breast milk on discharge.

It is significant for hospitals to develop adequate training to all medical staff who would be able to deliver skilled breastfeeding counselling to mothers and families of the premature babies or term infant who admitted to NNU during COVID19 via ZOOM or other communicative platforms.

We recommend for the healthcare community come together to discuss how we can improve our services to protect breastfeeding and give the best opportunity to mothers be able to breastfeed the infants after discharge from NNU.

Keywords: Covid-19 Lockdown Restriction; Breastfeeding; Neonatal Units

#### **Key Points**

- 1. The COVID 19 lockdown led that mother of newborn children admitted to NNU have been isolated and likely have minimum support in breastfeeding.
- 2. The strict visiting policy in hospitals significantly affects breastfeeding.
- 3. Online breastfeeding support could be developed and used during the COVID19 restriction.

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## Introduction

WHO recommends exclusively breastfeeding infants for six months after birth. It is well known that exclusive breastfeeding after discharge from NNU in the United Kingdom is highly recommended although there are barriers that make it difficult for mothers to breastfeed. The evidence related to the barrier (prenatal, medical, societal, hospital and sociocultural) that many mothers face, however during 2020, COVID 19 pandemic restrictions has impacted on a woman's ability to breastfeed her infant, especially where babies have been admitted to NNU.

By breastfeeding their babies, mothers provide them with the best opportunities to wholly develop their potential, while protecting the infants and themselves from a whole range of diseases in the near and distant future [1].

Infants admitted to a neonatal unit (NNU) are frequently unable to feed by breast or bottle because of ill health or prematurity. These infants require nutritional support until they can start oral feeding. Often, mothers are encouraged to express the breast milk and infants initially to be fed via the nasogastric tube with a slow introduction of breastfeeding However, breastfeeding rates decline after discharge.

Sars-CoV-2 (COVID-19) was firstly reported at the end of 2019. The Covid-19 restrictions have been imposed in the UK since began on 16 March 2020, which includes visiting restrictions in all UK hospitals. Most NNUs have restricted their visiting to only one parent per baby at any one given time. Furthermore, breastfeeding cafes have been closed. We suggested that in 2020, the COVID-19 pandemic restrictions have a negative impact on the rate of breastfeeding in the NNU.

# Methodology

This was a retrospective study. We used the Badger system, the electronic nation health care registrar of all children who were born in the UK and admitted to the neonatal unit, the EVOLVE- a local health care system at the General District Hospital. During our study, we looked at the first day where the EBM or breastfeeding was introduced and the number of breastfeeding babies on time of discharge.

We reviewed breastfeeding trends over 2 periods. Period 1 between March to December 2019. was compared to Period 2 between March till December 2020 when the COVID 19 lockdown rules were implemented as per hospital policy and only one parent was able to visit the baby at NNU.

The General District Hospital has a level 2 Neonatal Unit. The vast majority of children admitted to NNU were premature babies and term infants admitted for a short stay at NNU with respiratory distress, suspected sepsis, hypoglycaemia or HIE.

On admission to the NNU, mothers were asked what their feeding preferences are. All mothers of premature children and term infants have explained the importance of breastfeeding and, they have been advised to express milk until the child can breastfeed. The express equipment was provided. The mother also had an educational session with the midwifery team.

#### Results

During period 1 there were 535 children admitted, during period 2 there were 380 children admitted to NNU.

For the analysis, we looked at the first day of introduction of breast milk product, colostrum. We can see that the majority of admitted children in the unit, were introduced to colostrum within the first 24 hours of age, across both observed periods. However, after day 7 of baby life, across both periods, is a noticeable trend in the reduction in receiving of breast milk.

Secondly, we identify, during period 1, 242 babies were discharged home exclusively breastfed, whilst 98 babies had been mix-fed. There is 63.5% of children who were discharged home and received breast milk in Period 1.

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On the other hand, during period 2 of observation, the percentage of children who were discharged home breastfed decreased. We identified 84 (22.1%) children who received milk, whilst 138 were mix fed. We identify that during period 2 only 58.4% of children received breast milk on discharge.

	Period 1 March to December 2019: pre-COVID-19	Period 2 March to December 2020: during lockdown
Number of babies admitted to NNU	535	380
Number of babies that received breast milk/colostrum on day 1	171 (31.9%)	91 (23.9%)
Number of babies discharged home exclusively breastfed	242 (45.2%)	84 (22.1%)
Number of babies discharged home with mixed feeding	98 (18.3%)	138 (36.3%)
% receiving some breast milk on dis- charge to home	63.5%	58.4%

Table 1: The patient group (n = 20).

# Discussion

We demonstrate that the intentional breastfeeding among the mother who delivered the babies admitted to NNU at General District Hospital was reduced during the COVID 19. The lockdown restrictions and anxiety of travelling to the hospital mean that mothers may have little time to spend with the babies, which can impact the forming of a paternal bond and affect the feeding choice.

Furthermore, our analysis revealed that most children admitted to NNU received colostrum on their first day of life. In both observed periods, breastfeeding decreased the longer a child stayed at the NNU. It can be due to reduced skin-to-skin contact, less contact with other mums on the NNU therefore less sharing of experiences. We believe that mothers need support, encouragement, and advice from the nurse, while assistance in expressing milk and later teaching their baby how to breastfeed. As it can be reluctance by mothers to breastfeed because of perceived risk of COVID-19 transmission. It's the known fact the COVID 19 lockdown effects on maternal mental health and the mothers required support During the COVID-19 pandemic, it is important to find innovative solutions to ensure that access to breastfeeding support services is not disrupted and that families continue to receive the breastfeeding counselling they need to be able to breastfeed premature infants. It is important that breastfeeding counselling is available for the parents of premature babies via ZOOM or other online platforms.

We also believe sometimes the supplementation of premature infants can reduce milk production and intention of breastfeeding. We would not recommend the early discharge from the NNU

## Conclusion

In the wake of the pandemic, healthcare has been under constant strain it is likely that support for new mothers from staff was reduced during the restriction period in 2020.

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We believed that during COVID19 it is important for hospitals to provide adequate care for mothers who are planning on breastfeeding, therefore, to provide adequate training to all medical staff that would be able to guide mothers and families of premature babies or term infants who were admitted to NNU during COVID19, discuss with mothers the importance of regular, frequent breastfeeding. Many mothers stop breastfeeding because they feel that their milk supply is inadequate; the medical and nursing staff would be advised to reassure women who might feel this way and, where appropriate, encourage milk expression to build an adequate supply. We believe the internet service and use of the online platform significant during the lockdown as it can improve and encourage community-based lactation support (e.g. midwives, electronic communication platforms, breastfeeding online cafes).

We recommend for the healthcare community come together to discuss how we can improve our services to protect breastfeeding and give the best opportunity to mothers be able to breastfeed the infants after discharge from NNU.

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