Topic Expert Group: Nutrition

Providing mother's own milk (MOM) for preterm and ill term infants

Jonat S, Koletzko B, Fewtrell MS, Embleton ND, van Goudoever JB, Gruszfeld D, Lapillonne A, McNulty A, Szitanyi P

Target group

Preterm and ill term infants and parents

User group

Healthcare professionals, neonatal units, hospitals, and health services

Statement of standard

Mothers are informed about the benefits of breastfeeding, encouraged and supported to provide their own breast milk for their infant. However, staff should be sensitive to maternal choice and avoid putting pressure on women who are unable to provide any or sufficient MOM or who choose not to do so.

Rationale

The promotion and provision of mother's own milk (MOM) is a convincing strategy for reducing the risk of necrotising enterocolitis (NEC), sepsis and the associated costs, and improving brain, visual and cognitive development in preterm infants. (1–5) Evidence has accumulated that feeding fortified MOM achieves greater benefits that fortified donor human milk. (6–9)

Although the use of feeding MOM to preterm infants has increased over the last decade, breast-pump dependant mothers of preterm infants face specific barriers to the initiation and maintenance of sufficient lactation. (10) Similarly, term infants benefit from the provision of MOM. Implementation of multidisciplinary lactation teams for education and advocacy of healthcare professionals, mothers and families as well as accessible milk pumps, and sufficient technology for pasteurisation and storage improve milk volume, infant nutrition and might lead to improved health measures in very low birth weight (VLBW) infants. (11,12)

Unfortified human milk does not fully provide for the unique nutritional needs of the very preterm infant. Fortification of MOM improves protein-to-energy and mineral-to-protein ratios, and micronutrient supply. (13,14) The recommended supply of docosahexaenoic acid (DHA) for very low birth weight infants can be met through MOM if mothers take a high dose DHA supplement. (15,16)

Benefits

Short-term benefits

- Reduced prematurity related morbidity (less feeding intolerance, decreased risk of serious morbidity, i.e. NEC and sepsis) (1–3)
- Reduced healthcare costs (2,3)

Long-term benefits

• Improved neurodevelopmental outcomes (4,5)



Components of the standard

Component		Grading of evidence	Indicator of meeting the			
			standard			
Fo	For parents and family					
1.	Parents are informed by healthcare professionals about the benefits of mother's own milk (MOM) and encouraged and supported to provide MOM (see Care procedures).	A (Low quality) B (High quality)	Guideline, patient information sheet ¹			
Fo	r healthcare professionals					
2.	A unit guideline on infant nutrition, including the importance and provision of MOM as well as the initiation and maintenance of lactation and its appropriate documentation, is adhered to by all healthcare professionals.	B (High quality)	Guideline			
3.	Training on infant nutrition, including the importance and provision of MOM as well as the initiation and maintenance of lactation, is attended by all responsible healthcare professionals (see Care procedures).	B (High quality)	Training documentation			
Fo 4.	A unit guideline on infant nutrition, including the importance and provision of MOM as well as the initiation and maintenance of lactation and its appropriate documentation, is available and regularly updated.	B (High quality)	Audit report, clinical records, guideline			
5.	Multidisciplinary infant nutrition and lactation teams to provide education and advocacy for MOM provision are available.	A (Low quality)	Audit report			
6.	Timely access to effective and efficient breast pumps, containers, pump kits and breast shields for mothers of preterm infants is provided.	A (Low quality)	Audit report, guideline, parent feedback			

¹ The TEG Nutrition very much supports the need of good communication with families and regular sharing of key information, but it is not in favour of sharing information on each standard by a "parent information sheet", which is term chosen by the Chair Committee. In our view, sharing multiple parent information sheets bears the risk of overloading families with a plethora of written information during a stressful time period, which may not be very helpful. We suggest to consider other means of sharing information.



european standards of care for newborn health

For hospital					
7.	Training on infant nutrition, including the importance and provision of MOM as well as the initiation and maintenance of lactation, is ensured.	B (High quality)	Training documentation		
8.	Sufficient resources (staff (nurses, lactation specialists, dieticians, doctors), equipment including fridges and freezers, pasteurisers, and space for milk expression) are provided.	A (Low quality) B (High quality)	Audit report		
For health service					
9.	A national guideline on infant nutrition, including the importance and provision of MOM, fortification, and supplementation is available and regularly updated.	B (High quality)	Guideline		

Where to go – further development of care

Further development	Grading of evidence			
For parents and family				
N/A				
For healthcare professionals				
N/A				
For neonatal unit				
• Review the impact of the bundle of measures on the ratio of fully or partially breastfeed infants and MOM availability at discharge, respectively	A (Low quality)			
For hospital				
• Review impact of establishing and increasing MOM usage and potential cost saving from decreased use of parenteral nutrition.	A (Low quality)			
For health service				
N/A				

Getting started

Initial steps

For parents and family

- Parents are verbally informed by healthcare professionals about the benefits of mother's own milk (MOM) during pregnancy and after delivery.
 For healthcare professionals
- Attend training on infant nutrition, including the importance and provision of MOM as well as the initiation and maintenance of lactation without pressurising mothers who are unable to provide their own milk or who choose not to do so.



For neonatal unit

- Develop and implement a unit guideline on infant nutrition, including the importance and provision of MOM as well as the initiation and maintenance of lactation and its appropriate documentation (e.g. (11)).
- Develop information material on the importance and provision of MOM as well as the initiation of lactation for parents.

For hospital

- Support healthcare professionals to participate in training on infant nutrition, including the importance and provision of MOM as well as the initiation and maintenance of lactation.
- Provide facilities and equipment for milk expression.

For health service

• Develop and implement a national guideline on infant nutrition, including the importance and provision of MOM, fortification, and supplementation.

Description

The use of mother's own milk (MOM) for preterm and ill term infants should be encouraged. Special emphasis should be placed on the early lactation period during the first two weeks after delivery when the mammary gland transits from secretory differentiation to secretory activation. Special guidance of the lactating mother with regard to pumping strategies to facilitate breastfeeding should be implemented in the daily routine on the NICU. Mothers should also be informed about the physiology of lactation to set their expectations; in particular they need to understand the importance of small amounts of colostrum (see Care procedures) and that they should not expect to express large volumes of milk in the early days. Protocols for the safe handling are helpful to preserve the high quality of mother's own milk. Fortification of own mother's milk and nutrient supplementation of the lactating mother will further improve the nutritional value of MOM for the preterm infant.

Source

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Lifecycle

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