# Monitoring the implementation of "breastfeeding within the first hour of life" at a university hospital of Obstetrics-Gynecology in Tirana, Albania

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## **Abstract**

Aim: Initiation of breastfeeding within the first hour can help prevent neonatal deaths caused by sepsis, pneumonia, and diarrhea and may also prevent hypothermia-related deaths, especially in preterm and low birth weight infants. The aim of this study was to assess the level of awareness and training of the maternity staff in Tirana, Albania, for performing, documenting and reporting indicators of breastfeeding within the first hour of life.

Methods: This was a prospective study conducted at the Department of Obstetrics of the Maternity "Koco Gliozheni" in Tirana during the period July-October 2014. Overall, 80 infants were included in this study.

**Results:** The average gestational ages was 39.4±0.9 weeks, whereas the average birth weight of the newborns was 3224±306 g. Evaluation based on physical development of infants was as follows: AGA: 59 (73%), LGA: 11 (13.7%), and SGA/IUGR: 10 (12.5%). Distribution by sex: 44 (55%) males and 36 (45%) females. Based on the parity, 21 (26.2%) were primiparous, 34 (42.5%) were secondiparous and 34 (42.5%) were tertiparous. About 49% of the babies were placed in the breast within the first hour of life. The medical charts, however, documented that 100% of infants were placed in the breast within the first hour of life.

**Conclusions:** Nearly half of the babies were not put in the breast within the first hour of life in this study conducted in Tirana. Babies were put in the breast significantly more in the morning hours where the attention of the medical staff is usually much higher. Medical staff is aware of documenting breastfeeding within the first hour of life, but we noticed discrepancies between documentation and the exact time of initial breastfeeding of the newborns.

**Keywords:** awareness, documentation, performance, placement in the breast within the first hour of life.

## Introduction

Provision of mother's breast milk to infants within one hour of birth is referred to as "early initiation of breastfeeding" and ensures that the infant receives the colostrum, or "first milk", which is rich in protective factors (1). Initiating breastfeeding within one hour of birth was one the Ten Steps to Successful Breastfeeding on which the BFHI was based and launched in 1992 (1). More specifically, step 4 reads as follows: "Help mothers initiate breastfeeding within a half-hour of birth" and its explanation is provided in the respective WHO's document (2). The Baby-friendly Hospital Initiative (BFHI) is a global effort launched by WHO and UNICEF to implement practices that protect, promote and support breastfeeding (2).

In the first hour of life, the baby is most alert and able to imprint the unique suckling movements necessary for successful breastfeeding. As time passes, the baby becomes sleepier as he/she recovers from the birthing process. During this entire first hour of alertness, it is important to keep the baby with the mother, ideally skin-to-skin. Uncomfortable distractions and separations should be avoided until after the first feed. The Academy of Breastfeeding Medicine recommends that the infant should be dried and Apgar-scores assessed while the baby is on the mother, and Vitamin K and eye prophylaxis should be delayed until the first feed, up to one hour (3,4).

Currently, countries around the world start celebrating World Breastfeeding Week, which in 2015 emphasizes the importance of breastfeeding in the first hour of life.

World Breastfeeding Week (WBW) 2007 has encouraged breastfeeding in the first hour of life because research showed that early initiation and exclusive breastfeeding for six months can save lives. This is the reason behind this year's WBW catchphrase: "Breast Feeding the first Hour - Save One Million Babies". Also, part of WBW is the slogan "Welcome Baby Softly". It encourages protecting the first hour between a mother and

baby, so they're able to bond naturally (5,6). One of the best ways to do this is by placing the newborn on the mother's chest, skin-to-skin. During this time, babies actually feel less pain and it's not uncommon for the baby to intuitively latch onto to the feed. It has been estimated that about 40% of newborns that die in the first month of life could be saved if breastfed in the first hour of life (6-8).

Regarding Albania, in the period May-December 2013, it was supported by WHO and UNICEF the establishment and operation of a surveillance system of child feeding practices 0-2 years.

The functioning of this system helps:

- Recognition and enforcement of care standards for newborns.
  - Allows assessment of progress.
- Assists in planning interventions in accordance with the situation.
  - Keeps alive the known facts and skills.
  - Improving documentation of this indicator.

For this purpose, there were conducted a series of workshops with all the medical staff of the two maternity hospitals in Tirana. During these training session, it was emphasized not only the importance of breastfeeding within the first hour of life, but also its implementation and the documentation of this important process.

In this context, the aim of this study was to assess the awareness and training level of the maternity staff for performing, documenting and reporting indicators of "breastfeeding within the first hour of life", in order to promote and suport the early breastfeeding practices.

## Methods

This was a prospective study conducted at the Department of Obstetrics, Maternity "Koco Gliozheni" in Tirana from July 15th to October 1st, 2014 (overall study duration: 2.5 months).

University Hospital of Obstetrics-Gynecology "Koco Gliozheni" is a tertiary center and has an average number of about 5000 births per year.

During the period under investigation, all first-shift births from Monday to Friday were included in the study.

Overall, 80 infants were included in this study. The inclusion criteria included the following:

- Babies born at term
- Unique births
- Vaginal births

On the other hand, exclusion criteria included the following:

- Infants born preterm
- Twin births, triplets, and so on.
- Births with low Apgar-score
- Congenital abnormalities
- Cesarean section delivery

#### Results

Number of births in the period 15 July-1 October 2014, the period in which this study was conducted, was about 1,280 births.

Basic characteristics of infants who were included in the study are presented in Table 1.

Babies AGA comprised about 73% of the cases, SGA about 13% and LGA about 14% of the cases. In relation to the distribution by gender, male babies comprised about 55% of the cases, while female babies about 45% of the sample.

Related to the parity, primiparous women consisted of 23% of the cases, secondiparous women about 39% of the cases and tertiparous women about 38% of the overall sample.

Table 1. Basic	characteristics	of the infants	included in the study

Characteristic	Value	
Sample size	N=80	
Mean gestational age	$39.40 \pm 0.90$ weeks	
The average birth weight	3224±306 g	
Evaluation of physical development:		
AGA	59 (73%)	
LGA	11 (13.7%)	
SGA/IUGR	10 (12.5)	
Gender:		
Males	44 (55%)	
Females	36 (45%)	
Parity:		
Primiparous	21 (26.2%)	
Secondiparous	34 (42.5%)	
Tertiparous	34 (42.5%)	

The number of babies who were actually placed in the breast within the first hour of live was 49 (61%). On the other hand, the documented number

of newborns placed in the breast within the first hour of life was 80 (100%) (Figure 1).

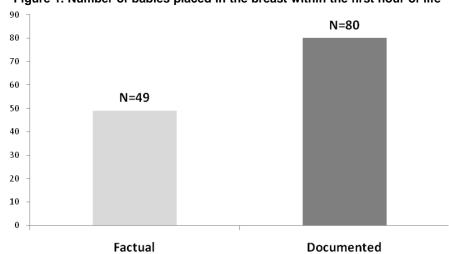


Figure 1. Number of babies placed in the breast within the first hour of life

## Discussion

While research assessing the importance of breastfeeding over the past century has reinforced the protective effect of breastfeeding including the neonatal period, few studies have assessed the impact of the time breast feeding initiation on infant and neonatal mortality and morbidity (1). For the first time, researchers assessed in Alabama, USA, the effect of the timing of the first breastfeed on newborn mortality-showing that mortality may be less if infants start to breastfeed in the first hour. In 2009, the Centers for Disease Control and Prevention implemented the Maternity Practices in Infant Nutrition and Care (mPINC) survey in all US birth facilities to assess breastfeeding-related maternity practices. Maternity practices and hospital policies are known to influence breastfeeding, and Alabama breastfeeding rates are very low. After this finding, it was concluded that educating hospital staff to improve breastfeeding-related knowledge, attitudes, and skills; implementing a written hospital breastfeeding policy; and ensuring continuity of prenatal and postnatal breastfeeding education and support may improve newborn breastfeeding rates (9-11).

While advocating for mothers to breastfeed within the first hour after delivering their babies sounds easy, it should be noted that breastfeeding rates have stagnated and, globally, only 40% of the mothers breastfed their children (12-16). Save the Children has documented four barriers that hinder mothers' ability to breastfeed exclusively at least for the first six months of life:

- Cultural and community pressure: Even though breastfeeding is one of the most natural gifts a mother can give her child, cultural customs prevent some mothers from immediate and sustained breastfeeding.
- Global health worker shortage: Across the developing world, there is a major shortage of frontline health workers that must be addressed. When health workers help deliver a baby, a mother is two times more likely to breastfeed during the first hour after delivery than when giving birth without a skilled birth attendant.
- Lack of maternity legislation: Women in most low-income countries do not benefit from protections and legislation to help them breastfeed. Out of the 36 low-income countries that Save the Children looked at, Vietnam was the only country that provided adequate maternity leave (six weeks).
- Aggressive marketing of breast-milk substitutes: The global baby food market is

currently worth \$36 billion, and it often aggressively targets mothers to convince them buy their products, especially breast-milk substitutes.

If we refer to the data by UNICEF, one can observe that the world range of breastfeeding babies within the first hour of life is about 42%.

Different data related to studies from all over the world in connection with the influence of breastfeeding within the first hour of life in morbidity and infant mortality (13-19). For instance, data from India show that colostrums feeding makes a large contribution to survival: neonatal and post-neonatal deaths are around 5-6 times lower in infants fed with colostrums than among those not fed with colostrums (20). Similar findings are reported from Nepal: approximately 19.1% of all neonatal deaths may be avoided with universal initiation of breast-feeding within the first hour, and approximately 7.7% of all neonatal deaths may be avoided with universal initiation of breast-feeding within the first day of life (18). Likewise, findings from Ghana suggest that

Conflicts of interest: None declared.

approximately 22% of all neonatal deaths may be avoided with universal initiation of breast-feeding within the first hour, and approximately 16% of all neonatal deaths may be avoided with universal initiation of breast-feeding within the first day of life (6).

As a matter of fact, in our study conducted in Tirana we had intended to highlight implementation and documentation of the breastfeeding within the first hour of life, but in future studies we should assess its effects on neonatal mortality and morbidity in transitional Albania.

## Conclusions

Nearly half of the babies were not put in the breast within the first hour of life in this study conducted in Tirana. Babies were put in the breast significantly more in the morning hours where the attention of the medical staff is usually much higher.

Medical staff is aware of documenting breastfeeding within the first hour of life, but we noticed discrepancies between documentation and the exact time of initial breastfeeding of the newborns.

## References

- 1. Debes AK, Kohli A, Walker N, Edmond K, Mullany LC. Time to initiation of breastfeeding and neonatal mortality and morbidity: A systematic review. BMC Public Health 2013;13(Suppl 3):19. DOI: 10.1186/1471-2458-13-S3-S19.
- 2. World Health Organization, UNICEF. Friendly Hospital Initiative. Revised, updated and expanded for integrated care; 2009.
- Venancio SI, Saldiva SR, Escuder MM, Giugliani ER. The Baby-Friendly Hospital Initiative shows positive effects on breastfeeding indicators in Brazil. J Epidemiol Community Health 2012:66:914-18.
- Zamora G, Lutter CK, Peña-Rosas JP. Using an Equity Lens in the Implementation of Interventions to Protect, Promote, and Support Optimal Breastfeeding Practices. J Hum Lact 2015;31:21-5.
- World Health Organization (WHO); United Nations Children's Fund (UNICEF). Baby-friendly hospital initiative: revised, updated and expanded for integrated care. Geneva: WHO; 2009.
- 6. Edmond KM, Zandoh C, Quigley MA, Amenga-Etego S,

- Owusu-Agyei S, Kirkwood BR. Delayed breastfeeding initiation increases risk of neonatal mortality. Pediatrics 2006;117:e380-6.
- 7. Oddy WH. Breastfeeding in the first hour of life protects against neonatal mortality. J Pediatr (Rio J) 2013;89:109-11.
- World Health Organization (WHO); United Nations Children's Fund (UNICEF). Baby-friendly hospital initiative: revised, updated and expanded for integrated care. Section 1. Background and Implementation. Geneva: WHO; 2009.
- 9. Li CM, Li R, Ashley CG, Smiley JM, Cohen JH, Dee DL. Associations of hospital staff training and policies with early breastfeeding practices. J Hum Lact 2014;30:88-96.
- 10. United Nations Children's Fund: Infant and young child feeding — UNICEF response; 2012.
- 11. World Health Organization and United Nations Children's Fund. Baby-Friendly Hospital Initiative. Geneva, Switzerland: World Health Organization; 2009.
- 12. United Nations Children's Fund, AED. Consolidated report

- of six-country review of breastfeeding programmes. New York, United States: United Nations Children's Fund; 2010.
- Jones G, Steketee RW, Black RE, Bhutta ZA, Morris SS; Bellagio Child Survival Study Group. How many child deaths can we prevent this year? Lancet 2003:362:65-71.
- Labbok MH, Wardlaw T, Blanc A, Clark D, Terreri N. Trends in exclusive breastfeeding: findings from the 1990s. J Hum Lact 2006;22:272-6.
- Dorea JG. Breastfeeding is an essential complement to vaccination. Acta Paediatr 2009;98:1244-50.
- Mortensen EL, Michaelsen KF, Sanders SA, Reinisch JM. The association between duration of breastfeeding and adult intelligence. JAMA 2002;287:2365-71.

- Drane DL, Logemann JA. A critical evaluation of the evidence on the association between type of infant feeding and cognitive development. Paediatr Perinat Epidemiol 2000;14:349-56
- Mullany LC, Katz J, Li YM, Khatry SK, Leclerq SC, Darmstadt GL, Tielsch JM. Breast-feeding patterns, time to initiation, and mortality risk among newborns in southern Nepal. J Nutr 2008;138:599-603.
- Butte NF, Lopez-Alarcon MG, Garza C. Nutrient adequacy of exclusive breastfeeding for the term infant during the first six months of life. Geneva, Switzerland: World Health Organization; 2002.
- Singh K, Srivastava P. The effect of colostrums on infant mortality: Urban rural differentials. Health Popul 1992;15:94-100