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Evaluating the Results of Early Breastfeeding Implementation at the University Hospital for Obstetrics and Gynecology "Koço Gliozheni", Tirana, Albania

Enkeleda Prifti[*1], Alketa Hoxha (Qosja)[2], Valbona Alliu[3], Donjeta Bali[4], Enxhi Vrapi[5]

[1*] Department of Obstetrics, University Hospital of Obstetrics and Gynecology 'Koço Gliozheni'; Faculty of Medicine, University of Medicine Tirana, Albania
[2] Department of Neonatology, University Hospital of Obstetrics and Gynecology 'Koço Gliozheni'; Faculty of Medicine, University of Medicine Tirana, Albania
[3] Faculty of Technical Medical Sciences, University of Medicine Tirana, Albania
[4] Faculty of Medicine, University of Medicine Tirana Albania
[5] Obstetrics and Gynecology Unit, University Hospital of Obstetrics and Gynecology 'Koço Gliozheni', Tirana, Albania

Abstract

Background: The benefits of breastfeeding for infant nutrition, development, reduced morbidity and mortality, and prevention of long-term chronic diseases are now widely recognized. After the first study presented we reiterated to see the results. In this case we also include the information that we received from the mothers when they leave the maternity ward.

Aim: Awareness and training of the maternity staff in order to promote and support breastfeeding within the first hour of life.

Methods: This is a prospective study conducted at the Department of Obstetrics, UHOG 'Koco Gliozheni'. Data was collected during a one-month period. Singletons born at term, either vaginally or by means of cesarean section were included in the study. All other deliveries were excluded.

Results: In this study a total of 101 infants and mothers were included in the average gestational ages: 39.36±0.80 (weeks). Skin-to-skin contact immediately after birth was performed in 85.5% of infants with vaginal delivery and about 63.6% of infants' delivery by surgical section, but the time was less than 5 minutes [OR 3.38 (0.8 - 13.2), p = 0.07]. Early breastfeeding is performed for about 88.8% of babies born vaginally and only one case at birth with surgery. Delivering by c-section significantly delays the initiation of breastfeeding beyond the one-hour recommendation [OR 80 (9.2 - 692), p = 0.0001].

Address for correspondence: Enkeleda Prifti *, Department of Obstetrics, University Hospital of Obstetrics and Gynecology 'Koço Gliozheni'; Faculty of Medicine, University of Medicine Tirana, Street Lidhja Prizrenit, Tirana, Albania. Email: enkeledaprifti@yahoo.com

Conclusions: Information and awareness of health staff is the Achilles' heel in improving results. The time of staying in skin-to-skin contact with the mother should be increased and there is need to work and collaborate with the team in the operating room in order to get early breastfeeding.

Key words: newborn, early breastfeeding, information, awareness, health staff

INTRODUCTION

The benefits of breastfeeding for infant nutrition, development, reduced morbidity and mortality, and prevention of long-term chronic diseases are now widely recognized. 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 birthweight infants (WHO) (1). Breastfeeding can be challenging to learn, particularly in the first moments after birth.

Early initiation of exclusive breastfeeding serves as the starting point for an optimal breastfeeding and for continuum of care for mother and new-born that can have long-lasting effects on health and development.

Initiation of breastfeeding after birth is an integral part of the safe delivery procedure[1] and is widely acknowledged as a beneficial practice. Lancet neonatal survival series identifies breast-feeding as one effective intervention that can reduce 55–87% of all-cause neonatal mortality and morbidity (2). Recent evidence shows, newborns who were put to breast within one hour of birth had 29% less chance of dying within the first 28 days of their lives than those who were breastfed 2–23 hours of birth (3). The World Health Organization (WHO), therefore, recommends that breastfeeding should be initiated early and preferably within the first hour of birth (1). Initiation of breastfeeding within one hour of birth can also avert up to 22% of all newborn deaths. Several studies find that breastfeeding reduces the risk of neonatal deaths particularly due to infections like diarrhea, neonatal sepsis, pneumonia and meningitis.

Breastfeeding is today the single most effective preventive intervention for improving the survival and health of children. Initiating breastfeeding within the first hour of life is no easy feat: mothers cannot be expected to do it alone. They require adequate support and guidance on positioning and feeding their newborns. The appropriate care of both newborn and mother in the moments after birth is critical to ensuring that breastfeeding not only begins but continues successfully. While a small proportion of women cannot breastfeed for medical reasons, most mothers simply need the right support at the right time to ensure that breastfeeding gets an early start (4).

When it comes to breastfeeding, timing is everything. Newborns who are put to their mother's breast within the first hour of life are more likely to survive, while those left waiting face life-threatening consequences. Indeed, the longer newborns wait for the first critical contact with their mother, the greater their risk of death (4). Prior studies have shown that early initiation of breastfeeding is associated with a lower risk of neonatal mortality (5,6,7,8). It is found that globally, only half of newborn babies are breastfed during their first hour of birth, despite strong evidence of nutritional and immunological benefits of early initiation in reducing neonatal mortality and morbidity (7,9,10). While the benefits of breastfeeding have been known for

decades, only recently has the role of time to initiation of breastfeeding in neonatal mortality and morbidity been assessed.

In our county, the months from May till December 2013 supported the establishment and operation of surveillance system of child feeding practices 0-2 years. The functioning of this system helps in the recognition and enforcement of care standards for newborns, allows the assessment of progress, assists in planning interventions in accordance with the situation, keeps alive the known facts and skills and helps in improving documentation of this indicator.

The first study was done in 2013 and its results showed us the real situation and the tasks that came before us to improve the situation.

The study was repeated in 2015 and again in 2019. The results were compared and used as a guidance tool on where to focus to improve the awareness of doctors and nurses about the importance of early breastfeeding and the impact it has on reducing morbidity and infant mortality. After the first and second studies presented in national meeting and international congress we reiterated to see the results, BUT in this case (2019) we also include the information that we received from the mothers when they leave the maternity ward.

MATERIALS AND METHODS

This is a prospective study performed at the Department of Obstetrics at UHOG 'Koco Gliozheni' in Tirana, Albania from October 1st to October 31st 2019. Singleton babies and babies born at term either vaginally or with cesarean section were included in the study. Exclusion criteria were set as following: preterm infants, twin or triplet births, births with low Apgar score and babies born with congenital abnormalities. Skin to skin contact, time of breastfeeding initiation were analyzed. Results were compared with similar studies performed at our institution in 2015 and 2013 respectively.

RESULTS

In this study a total of 101 infants and mothers were included in the average gestational ages: 39.36±0.80 (weeks); the average birth weight: 3252±301(g). Cases of the current study are shown on table I, alongside data from two previous similar studies undertaken by our team. Skin-to-skin contact immediately after birth was performed in 85.5% of infants with vaginal delivery and about 63.6% of infants' delivery by surgical section, but the time was less than 5 minutes [OR 3.38 (0.8 - 13.2), p = 0.07]. Table II summarizes the percentage of skin to skin contact among the two delivery groups as well as compares the current results with the ones we got from earlier studies. An increase in skin to skin contact among cesarean section deliveries is observed through the years. Early breastfeeding is performed for about 88.8% of babies born vaginally and only one case at birth with surgery, as shown on table III. Delivering by c-section significantly delays the initiation of breastfeeding beyond the one-hour recommendation [OR 80 (9.2 - 692), p = 0.0001]. About 98% of infants

who were breastfed within the first hour of life were exclusively breastfed at the time of discharge.

delivery can significantly affect when the newborn is put to the breast. Consistently, across all 51 countries studied, early initiation rates

Table 1. Distribution of cases

	C-section	Vaginal Delivery	Total
2013	9	47	56
2015	13	82	95
2019	11	90	101

Table 2. Infants placed in skin-to-skin contact in all three studies (n - %)

	2013	2015	2019
Vaginal delivery	19 (40.4%)	39 (47.5%)	77 (85.5%)
Caesarean section	0	2 (15.3%)	7 (63.6%)

Table 3. Breastfeeding for the first time before 1h (early breastfeeding), (%)

	2013	2015	2019
Vaginal delivery	24 (51%)	64 (78%)	80 (88.8%)
Caesarean section	0	0	1 (0.9%)

DISCUSSION

Giving all newborns an early start to breastfeeding requires action on the part of multiple actors – particularly governments, health care institutions and health care workers.

An analysis of key factors linked to early initiation rates among babies delivered by a skilled birth attendant showed that the type of

among newborns delivered by vaginal birth were more than twice as high as early initiation rates among newborns delivered by caesarean section. A statistically significant difference was seen in all but 4 of the 51 countries studied (4).

With the right support, most newborns delivered by caesarean section can be put to the breast within the first hour after birth. However, in

practice, women who deliver by caesarean section often face important challenges in initiating breastfeeding, such as managing the effects of anesthesia, recovering from surgery and finding help to hold the baby safely. As reported in other studies, birth rates with SC are increased while breastfeeding is reduced. Also our study showed that only 1 baby is placed in the breast within the first hour of life.

Key actions to facilitate skin-to-skin contact and initiation of breastfeeding immediately after birth include having an appropriate policy and protocol in the maternity facility, building the skills of staff and involving fathers in breastfeeding support (11).

Too many newborns are not put to the breast in the first hour of life. While access to maternity facilities and skilled birth attendants at delivery have the potential to improve children's and mothers' chances of survival and wellbeing, the quality of care provided is often inadequate and missed opportunities leave far too many newborns waiting for the first critical contact with their mother. Even from our study (2015) it results that health workers behave differently when they are in the first shift and differently when they are in the third shift. Therefore, the biggest challenge is informing and raising awareness of the staff and also informing the mothers during the antenatal visits about the importance of early breastfeeding. So about 49% of babies are placed in the breast within the first hour of life and the card is documented that 100% of infants were placed in the breast within the first hour of life. Nearly half of the babies are not put in the breast within the first hour of life. If these results are noticed in the morning when the attention of the medical staff is the highest, then we expect lower results in night. There is awareness of medical staff to document establishing breastfeeding within the first hour of life but noticed documenting abuse exact time when this happens (14,15,16).

As recommended by the Baby Friendly Hospital Initiative (BFHI), newborn infants should be placed in skin-to-skin contact with their mothers immediately after their birth for at least one hour, and mothers should be helped to initiate breastfeeding within the first half-hour following the birth of their infants (11,12,13).

The analysis found that a combination of interventions had the greatest impact on the early initiation of breastfeeding, leading to a significant 85 per cent increase in rates. It is evident that policy makers need to ensure that all health professionals support and promote early breastfeeding initiation. It is also important to promote deliveries in hospitals and other healthcare facilities as they may increase early initiation (17,18,19,20).

CONCLUSIONS

Information and awareness of health staff is the Achilles' heel in improving results. The time of staying in skin-to-skin contact with the mother should be increased and need to work and collaborate with the team in the operating room in order to get early breastfeeding.

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1. poster presentation at the XXVII European Congress of Perinatal Medicine organized by the European Association of Perinatal Medicine, held virtually on 14 - 17 July 2021

2. oral presentation at 2nd Congress of the International Association of Preventive Pediatrics held on 5 - 7 November 2021

Conflicts of interest: The authors declare no conflict of interest.

REFERENCES

1. World Health Organization." Integrated management of pregnancy and childbirth: WHO recommended interventions for improving maternal and newborn health: World Health Organization; 2009.

2. Darmstadt GL, Bhutta ZA, Cousens S, AdamT, Walker N, De Bernis L, et al."Evidence-based, cost-effective interventions: how many new born babies can we save? Lancet 2005;365(9463):977–88.

3. Group NS. Timing of initiation, patterns of breastfeeding, and infant survival: prospective analysis of pooled data from three randomised trials. Lancet Glob Health 2016;4(4):e266–e75.

4. UNICEF, WHO. Capture the Moment – Early initiation of breastfeeding: The best start for every newborn. New York: UNICEF; 2018

5. 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):S19.

6. Berde AS, Yalcin SS. Determinants of early initiation of breastfeeding in Nigeria: a population-based study using the 2013 demographic and health survey data. BMC Pregnancy and Childbirth 2016;16:32.

7. NEOVITA Study Group. Timing of initiation, patterns of breastfeeding, and infant survival: prospective analysis of pooled data from three randomised trials. Lancet Glob Health 2016;4:e266-e275

8. Lassi ZS, Middleton PF, Crowther C, Bhutta ZA. Interventions to improve neonatal health and later survival: an overview of systematic reviews. EBiomedicine 2015;2:985–1000.

9. Victora CG, Bahl R, Barros AJ, França GV, Horton S, Krasevec J, Murch S, Sankar MJ, Walker N, Rollins NC, Group TL. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. Lancet 2016;387:475–90.

10. Khan J, Vesel L, Bahl R, Martines JC. Timing of breastfeeding initiation and exclusivity of breastfeeding during the first month of life: effects on neonatal mortality and morbidity a systematic review and meta-analysis. Matern Child Health J 2015;19:468–79.

11. Stevens, Jeni, et al, 'Immediate or early skin-to-skin contact after a Caesarean section: a review of the literature, Maternal and Child Nutrition 2014;10:456–473.

12. WHO. CHD. Evidence for the Ten Steps to successful breastfeeding. Geneva: World Health Organization; 1998.

13. WHO.UNICEF. Baby-friendly hospital initiative, revised updated and expanded for integrated care. Geneva: WHO press, World Health Organization; 2009.

14. Moisiu R, Hoxha (Qosja) A, at al. Monitoring the implementation of " breastfeeding within the first hour of life" at a UHOG in Tirana, Albania. Albanian Medical Journal 2015;1:46-51. ISSN 0255-6790, ishp.gov.al

15. Hoxha (Qosja) A, at al. Monitoring of the Albanian breastfeeding law for protecting mothers from the pressure of infant formula. Albanian Journal of Obstetrics – Gynecology 2015;7,20. ISSN 2220-4008.

16. Hoxha (Qosja) A, at al. The impact of improved staff education and perinatal care on neonatal mortality in Albania. Albanian Journal of Obstetrics – Gynecology 2015;7,20. ISSN 2220-4008.

17. Mihrshahi S, Kabir I, Roy SK et al. Determinants of infant and young child feeding practices in Bangladesh: secondary data analysis of Demographic and Health Survey 2004. Food Nutr Bull 2010; 31, 295–313.

18. Sandor M, Dalal K. Influencing factors on time of breastfeeding initiation among a national representative sample of women in India. Health 2013; 5:2169-2180.

19. Ogunlesi TA. Maternal socio-demographic factors influencing the initiation and exclusivity of breastfeeding in a Nigerian semi-urban setting. Matern Child Health J 2010;14(3):459-65.

20. Bbaale E. Determinants of early initiation, exclusiveness and duration of breastfeeding in Uganda. J Health Popul Nutr 2014; 32(2):249-260.