

NARRATIVE REVIEW ABOUT THE INTERVENTION ON EARLY INITIATION OF EARLY BREASTFEEDING INITIATION DURING 2015-2024

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ABSTRACT

Background: Although early initiation of breastfeeding could save the lives of thousands newborn, it is a far from mother's practice worldwide. This narrative review paper aims to identify and describe intervention activities intended to increase the initiation of early breastfeeding during 2015-2024.

Materials and Method: The search was undertaken from January to March, 2024. The methods and reporting were developed and conducted with the guideline of PRISMA reporting guidelines. Search terms were applied with various Boolean operators for three core concepts: breastfeeding; timing of breastfeeding initiation; and hospital-based intervention

Result: 14 studies were included for review. After more than three decades of implementation (1991-present), reports on 168 countries in 2017 show that the majority of countries (86%) have implemented BFHI. WHO estimates that BFHI coverage (calculated as the proportion of children born at BFHIs) was only 10% in 2016. BFHI coverage varies by region, with coverage rates above 35% in Europe but less than 5% in Africa and Southeast Asia.

Conclusion: Whilst some barriers manifest similarly across the region some factors are context-specific thus tailored interventions are imperative. Initiatives halting factors and directed towards contextual barriers are required for greater impact on newborn survival and improved nutrition in low- and middle-income countries.

Keyword: Early initiation of breastfeeding, narrative review, hospital-based intervention.

1. INTRODUCTION

Breastfeeding has many health benefits for both the mother and infant. The World Health Organization (WHO) recommends early and uninterrupted skin-to-skin contact between mothers and infants should be facilitated and encouraged as soon as possible after birth [1]. Although early initiation of breastfeeding could save the lives of thousands newborn, it is a far from mother's practice worldwide [1]. No country had more than 80% of babies breastfeeding within an hour of birth [1]. In People's Democratic Republic of Lao (Lao PDR), the rate of breastfeeding within the first hour of life increased from 39.1% in 2011 to 50.1% in 2021 [2].

Existing reviews on early initiation of breastfeeding intervention has been published [3]. However, it is nearly 10 years from this publication. Therefore, this narrative review paper aims to identify and describe intervention activities intended to increase the initiation of early breastfeeding during 2015-2024.

2. METHODOLOGY

2.1. Search methods and source of literature

The search was undertaken from January to March, 2024. The methods and reporting were developed and conducted with the guideline of PRISMA reporting guidelines [4]. This drew on published literature in the electronic bibliographic databases of: Academic Search Complete, Cumulative Index to Nursing and Allied Health (CINAHL), Global Health, MEDLINE Web of Knowledge and Scopus and supplemented by scanning the reference lists of papers included for review

2.2. Search terms

- *Search terms were applied with various Boolean operators for three core concepts:* Breastfeeding; timing of breastfeeding initiation; and hospital-based intervention.

- *The various search terms are:*

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Breastfeed* or “Breast feed*” or Breastfed* or Breast-fed or “Breast fed*” Breast-feed* or “breast milk” or “breastmilk” or “breast-milk”

Initiat* or colostrum or “pre-lacteal” or “pre lacteal” or prelacteal or “early” or delay.

“hospital*” intervention

2.3. Inclusion and exclusion criteria

The eligibility of studies for review was assessed on a set of inclusion and exclusion criteria, based on the reporting of timing of breastfeeding initiation, hospital-based setting, year, study design and full text availability.

2.4. Study selection and data extraction

Studies retrieved from databases were exported to Endnote X9 and duplicated citations were removed. Abstracts were screened for relevance to the study question and country of the study. All other inclusion and exclusion criteria were applied through assessment of the full text publications.

3. RESULTS

The search strategy retrieved 4540 studies. After applying the process of selection, 14 studies were included for review. Scanning reference lists of reviewed articles did not produce additional results, suggesting that the search was comprehensive.

3.1. Worldwide

The Baby-friendly Hospital Initiative (BFHI) was launched in 1991 by the World Health Organization (WHO) and the United Nations Children’s Fund (UNICEF), in response to the 1990 Innocenti Declaration on the promotion, protection and support of breastfeeding [5]. Immediately after its promulgation, many countries conducted trials to build the BFHI hospital model. Through many trials, BFHI has been proven to be one of the most comprehensive models in interventions to enhance breastfeeding at health facilities. BFHI enhances breastfeeding practices compared to previous single hospital interventions. BFHI is also an effective model in enhancing treatment outcomes for newborns in Intensive Care Units (ICU) [6].

The most recent official report on 168 countries by WHO in 2017 indicates the majority of countries (86%) have implemented BFHI (as of date of collection) [7]. 71% of countries reported having an active BFHI program as of 2016-17. However, only a fifth of countries said they had more than 50% of their facilities and equipment as BFHI [7]. BFHI coverage (calculated as the proportion of children born at BFHIs) is estimated to reach 10% in 2016 [7]. BFHI coverage varies by region, with coverage above 35% in Europe but below 5% in Africa

and Southeast Asia [7].

A report on 917 neonatal units from 36 countries in 2017 showed an overall average score of 77 and average country scores ranging from 52 to 91/100 points [8]. Step 1 (Hospital Policies), Step 5 (Support mothers with breastfeeding) and Step 6 (Supplementing) had the highest scores, 100, 88 and 88 respectively. Step 3 (Antenatal care) and Step 7 (Rooming-in) had the lowest scores, 63 and 67 respectively. High-income countries scored higher on Step 2 (Staff competency) and Step 4 (Care right after birth) and health facilities [8]. Early skin-to-skin contact between mother and newborn is facilitated although it usually does not last more than 30 minutes. Breastfeeding is facilitated by practical, although not always adequate, support. Most mothers have erectile dysfunction during their hospital stay. Mothers are roomed with their babies and most are encouraged to breastfeed. BFHI hospitals performed better on steps 6 and 9 than non BFHI [8].

Research designs, settings and differences in intervention methods are limitations in synthesizing and unifying the results of these interventions. Findings suggest that prenatal interventions, delivered alone or in combination with intrapartum and/or postpartum interventions, are effective in increasing the likelihood of early, prolonged breastfeeding. Prolong breastfeeding or exclusive breastfeeding when interventions incorporate education and interpersonal support and when involve the woman's partner or family. However, varying study quality and the lack of standardized assessment of participants' breastfeeding intentions limit the ability to recommend any intervention as most effective [9].

3.2. High-income countries

In the United States, an overview report by Bartick M and colleagues in 2017 showed that on average, hospitals only achieved 63 points/a total of 100 BFHI points with large differences between states and regions of the United States [10].

In Norway, a randomized controlled clinical trial intervention following the BFHI 10 steps (1051 mothers in the intervention group and 981 mothers in the control group) showed that mothers in the intervention group were able to Complete breastfeeding was higher than mothers in the control group (17.9% vs. 14.1% in the first 6 months - OR=1.33; 95% CI: 1.03, 1.72; p = 0.03] and 41.4% vs. 35.8% in the first 5 months [11].

In Canada, only 35% of mothers breastfeed for up to six months as recommended, but at BFHI hospitals, the rate of early breastfeeding reaches 80% out of 604 hospitals in Canada that have received BFHI certification [12].

3.3. Low and middle-income countries

Brazil is one of the leading countries in implementing interventions using this model. A study

published in 2016 analyzing nationwide hospital birth data of 22,035 mothers/newborns in Brazil found that only 40% of births took place in hospitals that were certified or certified. during the construction of BFHI. Research shows that mothers giving birth at hospitals that meet BFHI, giving birth normally, and receiving BF health care during antenatal care are factors that promote early breastfeeding and exclusive breastfeeding [13]. In Mexico, Bueno A. et al. in their 2023 report found no information to assess access to and retention of the Ten Steps to WHO's BFHI recommended practices [14].

In Lebanon, a study on BFHI development showing the steps needed to bring hospitals in line with BFHI standards was conducted between November 2015 and February 2016. These steps can be grouped into three phases: updating hospital policies and infrastructure (Phase 1); changes in medical staff practices (Phase 2); and improving patient education (Phase 3). The baseline percentage of EBF was 2.4% of all live births [15].

In Kenya, analysis of data periodically collected by the health system shows that improvements in early breastfeeding and complete breastfeeding were recorded in Migori province with rates increasing from 85.9% to 89.3% respectively. and 75.2% to 92.3% in 2 years 2016-2017 [16].

In Sri Lanka, a report shows that the rate of compliance with BFHI steps reached 15.9%-100%, including the rate of early breastfeeding (23.5%-100%) in Sri Lankan hospitals [17].

In Middle Eastern countries, a study published in 2024 showed that there was a statistically significant difference between the total scores of nurses practicing in pediatrics in compliance with early breastfeeding advice compared to nurses in gynecology and gynecology. obstetrics departments. Research also shows that the most common factors associated with late initiation of breastfeeding are cesarean section, maternal anemia, maternal illness during pregnancy and childbirth, and premature birth. The BFHI program needs to be re-implemented as many hospitals have lost their BFHI Accreditation due to non-compliance with BFHI standards [18].

3.4. Vietnam

In Vietnam, BFHI has been implemented since 1994 on the basis of public and private obstetrics and pediatrics hospitals in a voluntary spirit and with outside sponsorship, such as UNICEF. After more than 20 years of implementation, many lessons have been learned, contributing to the summary and revised guidelines of WHO globally on the effective implementation of child protection and breastfeeding.

From January 2019 to June 2021, 58 hospitals in 13 provinces/cities have registered to participate in the

Excellent Breastfeeding Hospital. A report by Duong Hoang Vu in 2023 showed that in the 14 months after changing the episiotomy policy at BFHI hospitals, there were no deaths or injuries of newborns in the hospital's medical records [19]. According to the latest statistics, Vietnam has deployed "Excellent Breastfeeding Hospital" in 18 provinces/cities, of which 86 medical facilities have been certified. On average, for every 5 children born in Vietnam, 1 child is born at a facility recognized as an "Excellent Breastfeeding Hospital" [19].

3.5. Lao PDR

A number of studies on evaluating the implementation of breastfeeding have been implemented in Lao PDR. However, most of them only stop at small studies with small sample sizes and often do not have international publications. A 2012 study by Vanphanom Sychareun and colleagues pointed out the difficulty in intervening in breastfeeding because the birth rate at health facilities was only 15%. The main reason is due to the attitude, quality of care and expertise of the medical staff at the hospital as well as the lack of privacy when giving birth in the hospital and with male staff [20].

In 2010, 41% of hospitals (61 out of 148 hospitals) in Laos were BFHI certified: 6 central hospitals, 16 provincial hospitals and 39 district hospitals [7]. In general, BFHI has only been implemented in public health facilities, with no support from private clinics. From 2007 to 2010, the BFHI was not renewed. Recent focus has been on re-evaluating the BFHI Status with the aim of improving BFHI quality. Lack of funding has limited the expansion of BFHI to remaining health facilities [7]. WHO estimates report that only 1.9% of children in Laos were born in BFHI facilities in 2014 [7].

4. DISCUSSION

Early initiation of breastfeeding, specifically within 1 h of birth, refers to the best practice recommendation by the WHO. The findings of this systematic review suggest that achieving more widespread practice of early breastfeeding initiation hinges on multisector interventions. imilarly, promotion of gender equality and empowerment of women, lack of decision making power of mothers is a barrier to early initiation of breastfeeding, and mothers-in-law are often decision makers on pregnancy and childbirth-related practices.

In Lao PDR, one of the major findings of this review is the influence of traditional beliefs and role of mother in law on breastfeeding. Traditional feeding practices, such as prelacteal feeds, misperceptions regarding colostrum, and taking advice of priests and mothers in-laws that discourage breastfeeding immediately after birth have been highlighted. Therefore, strategies that engage social and family decision-makers to shape

traditional beliefs and attitudes towards safer breastfeeding practices in Lao [7].

Policies are in place to support recommended breastfeeding practices worldwide. Most of the countries have a national breastfeeding strategy officially adapted by government. Yet, the rates of early breastfeeding initiation remain some of the lowest worldwide. Filling the gap, identified in this review, in evidence concerning socio-economic and political context that influence breastfeeding practices may lead to better informed and more context-specific policies that impact more significantly. Further, the exploration of factors and barriers presented sheds light on the factors and barriers that undermine the effective implementation of policies at the individual level [1, 12, 17].

5. CONCLUSION AND RECOMMENDATION

Attention to raise rates of early breastfeeding initiation is a public health priority given that the rates of early initiation of breastfeeding in the region is lowest, newborn mortality now accounts for more than half of the U5MR, and early initiation may prevent up to half of the newborn deaths and improve childhood nutritional status. After more than three decades of implementation (1991-present), reports on 168 countries in 2017 show that the majority of countries (86%) have implemented BFHI. WHO estimates that BFHI coverage (calculated as the proportion of children born at BFHIs) was only 10% in 2016. BFHI coverage varies by region, with coverage rates above 35% in Europe but less than 5% in Africa and Southeast Asia. This is due to many reasons, including the lack of commitment by countries to invest in implementing the ten steps or the lack of a process for monitoring services or not implementing activities to build BFHI.

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