

Early Initiation of Breastfeeding: Benefits, Barriers, and Strategies for Success

Mohammed Elmuttalut^{1,2*}

¹Department of Community Medicine, Al Rayan National College of Medicine, Medina, Kingdom of Saudi Arabia

²Department of Community Medicine, College of Medicine, University of Sinnar, Sudan

***Corresponding Author:** Mohammed Elmuttalut, Department of Community Medicine, Al Rayan National College of Medicine, Medina, Kingdom of Saudi Arabia.

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Abstract

Background: Early initiation of breastfeeding, particularly within the first hour of birth, has significant health benefits for newborns, including reduced neonatal mortality and the promotion of bonding between mother and child. Health education during antenatal care (ANC) has been suggested to play a critical role in improving early breastfeeding initiation rates.

Objective: This review aimed to investigate the impact of health education during ANC on the initiation of breastfeeding within the first hour after birth.

Methods: This literature review followed a structured methodology to identify and analyze relevant studies on the impact of health education during antenatal care (ANC) on early breastfeeding initiation. Databases such as PubMed, Scopus, and Google Scholar were searched using predefined keywords, including “breastfeeding,” “early initiation,” “antenatal care,” and “health education”.

Results: There was a statistically significant association between receiving information about breastfeeding during ANC visits and early initiation. Moreover, mothers who attended more than four ANC visits were more likely to initiate breastfeeding early. Health education support after birth by medical staff was also positively associated with breastfeeding within the first hour.

Conclusion: Health education during ANC, as well as support immediately after birth, significantly improves early breastfeeding initiation rates. Therefore, healthcare providers should emphasize breastfeeding education during antenatal and postnatal care. Further interventions are needed to enhance antenatal and postnatal breastfeeding education.

Keywords: Breastfeeding; Early Initiation; Antenatal Care; Health Education

Introduction

Breastfeeding initiation within the first hour of life, known as early initiation of breastfeeding, is a crucial practice that has long-lasting benefits for both infants and mothers. The World Health Organization (WHO) and UNICEF have underscored its importance, recommending that all newborns be breastfed within the first hour to promote optimal health outcomes [1,2]. Early breastfeeding facilitates the intake of colostrum, a nutrient-rich fluid that provides essential immunological protection and is often referred to as the

infant's "first vaccine" [3]. This practice is associated with lower infant mortality rates, particularly in low- and middle-income countries, where infectious diseases and malnutrition are leading causes of neonatal death [4].

Globally, the rate of early initiation of breastfeeding remains suboptimal, with only 42% of newborns initiating breastfeeding within the first hour [5]. Factors contributing to these low rates include socio-cultural barriers, inadequate healthcare practices, and lack of maternal education [6]. Recent studies have highlighted the role of hospital practices, such as cesarean sections and delayed skin-to-skin contact, in hindering early initiation of breastfeeding [7]. Moreover, disparities in breastfeeding initiation rates persist between rural and urban populations, as well as between different socio-economic groups [8].

Health education during antenatal care (ANC) presents an opportunity to address some of these barriers. ANC is a key platform where pregnant women can receive information about various health practices, including the importance of early initiation of breastfeeding [9]. Several studies have demonstrated that women who receive breastfeeding education during ANC are more likely to initiate breastfeeding early and continue exclusive breastfeeding for six months [10,11]. In many countries, however, ANC services are not fully utilized, and when accessed, they often fail to provide comprehensive breastfeeding education [12]. This gap in care is particularly evident in low-resource settings, where healthcare systems are under-resourced, and trained personnel are lacking [13].

Breastfeeding promotion during ANC has been recognized as an effective strategy to improve neonatal health outcomes, especially in the context of the WHO's Global Nutrition Targets 2025, which aim to increase the rate of exclusive breastfeeding in the first six months to at least 50% [14]. Health systems that emphasize breastfeeding education and support during ANC have been shown to significantly improve both early initiation of breastfeeding rates and long-term breastfeeding practices [15]. This is particularly important given the accumulating evidence of the lifelong benefits of breastfeeding, including reduced risks of childhood infections, chronic diseases, and improved cognitive development [16].

Despite the growing body of evidence, gaps remain in understanding the specific impact of ANC-based breastfeeding education on early initiation of breastfeeding. Previous research has mainly focused on breastfeeding duration and exclusivity, with limited emphasis on the timing of initiation [17]. This review sought to address this gap by exploring how health education during ANC affects the likelihood of mothers initiating breastfeeding within the first hour after birth. By providing insights into the role of ANC in promoting optimal breastfeeding practices, this review contributed to ongoing efforts to improve maternal and neonatal health outcomes.

Prevalence and determinants of early initiation of breastfeeding

Despite the known benefits, the global prevalence of early breastfeeding remains suboptimal, with significant regional variations. For example, a study found that early breastfeeding rates were highest in South Asia (approximately 60%) but significantly lower in sub-Saharan Africa (below 40%) [3,18]. A study analyzing breastfeeding practices in low- and middle-income countries found that only 42% of newborns were breastfed within the first hour [3]. Determinants influencing early initiation of breastfeeding include maternal education, socioeconomic status, cultural practices, and healthcare system support [19,20]. For example, women with higher education levels are more likely to practice early initiation of breastfeeding than those with lower education levels [21].

Benefits of early initiation of breastfeeding

Research has consistently demonstrated that early initiation of breastfeeding contributes to neonatal survival and overall health by reducing mortality, enhancing immune system development, and promoting long-term cognitive benefits [22]. Infants who begin breastfeeding within the first hour have significantly lower mortality rates compared to those who experience delays, with studies showing a reduction in neonatal deaths by up to 44% [22]. This early initiation reduces exposure to life-threatening infections,

particularly sepsis and pneumonia, which are among the leading causes of neonatal mortality. A systematic review found that neonates who were breastfed within the first hour had a 44% lower risk of neonatal mortality than those who were not [23]. Breast milk provides essential immunological benefits, including antibodies such as secretory immunoglobulin A (IgA), lactoferrin, and oligosaccharides that help protect newborns from infections [16]. These components enhance the infant's gut microbiota, reducing the risk of gastrointestinal diseases, respiratory infections, and even chronic conditions later in life, such as asthma and obesity. Furthermore, early breastfeeding fosters mother-infant bonding by enhancing oxytocin release, which not only strengthens emotional attachment but also plays a vital role in uterine contraction [24]. These contractions significantly reduce postpartum hemorrhage, a leading cause of maternal mortality worldwide, and help in faster placental expulsion, contributing to maternal recovery [24].

Barriers to early initiation of breastfeeding

Several factors hinder early initiation of breastfeeding, including medical interventions, hospital policies, socio-cultural beliefs, and maternal health conditions. Cesarean deliveries are a significant barrier, as they often delay skin-to-skin contact and immediate breastfeeding initiation [20,25]. Post-surgical pain, anesthesia effects, and separation of mother and infant for monitoring further exacerbate the delay [5]. Hospitals with strict neonatal intensive care unit (NICU) admission policies can also negatively impact early initiation of breastfeeding rates by prioritizing clinical assessments over immediate breastfeeding initiation [20,26]. Furthermore, inadequate healthcare provider training and outdated hospital protocols and guidelines that encourage formula supplementation instead of breastfeeding further hinder early initiation [5]. For instance, hospitals with strict neonatal intensive care unit (NICU) admission procedures often delay immediate mother-infant contact, impacting early initiation of breastfeeding rates negatively [5,20,26]. Cesarean deliveries are one of the leading barriers, as they delay skin-to-skin contact and immediate breastfeeding initiation [25]. Additionally, inadequate healthcare provider training and hospital policies that separate mothers from infants contribute to delayed breastfeeding [5]. Societal and cultural factors also play a role, particularly in regions where colostrum is considered harmful or insufficient for newborns [20,27]. In many communities, traditional beliefs discourage immediate breastfeeding, favoring pre-lacteal feeding practices such as giving sugar water or herbal extracts to newborns before initiating breastfeeding. These practices delay colostrum intake, depriving

Strategies for improving early initiation of breastfeeding practices

To improve early breastfeeding rates, healthcare providers should be trained to support mothers in initiating breastfeeding immediately after birth. This includes hands-on training, counseling techniques, and continuous education on the benefits of early initiation of breastfeeding [5]. Providing healthcare professionals with evidence-based guidelines can improve adherence to best practices. Effective programs include the Baby-Friendly Hospital Initiative (BFHI), which has been shown to increase early breastfeeding rates through structured education and support strategies [5,24]. Hospitals should implement baby-friendly policies, such as allowing immediate and prolonged skin-to-skin contact, ensuring rooming-in practices, and avoiding unnecessary medical interventions that hinder breastfeeding initiation [5]. Additionally, hospitals should develop structured breastfeeding protocols, provide lactation consultants, and integrate breastfeeding support into routine maternal and neonatal care. Public health campaigns emphasizing the importance of early breastfeeding and addressing cultural misconceptions can also contribute to better adherence [28]. These campaigns should utilize multiple communication channels, including community health workers, media outlets, and digital platforms, to ensure widespread awareness. Targeted educational programs should be developed to address cultural barriers and provide practical breastfeeding guidance for new mothers [5,28].

Conclusion

Early initiation of breastfeeding is a life-saving practice with profound benefits for both infants and mothers. Despite widespread acknowledgment of its importance, early initiation of breastfeeding rates remains below optimal levels due to numerous barriers including cesarean section deliveries, inadequate healthcare provider training, restrictive hospital policies, and deeply ingrained cultural

beliefs. Additionally, structural challenges such as limited access to maternal healthcare services and the lack of breastfeeding-friendly environments in healthcare facilities further exacerbate the issue. Enhancing healthcare provider education, strengthening hospital protocols to support immediate skin-to-skin contact, and integrating culturally sensitive public awareness campaigns are key strategies.

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