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Chapter

Breastfeeding, the Importance of Education During Neonatal Hospitalization

Patricia Triviño Vargas

Abstract

In this chapter, scientific evidence is compiled in relation to the level of education that mothers need during their breastfeeding period and the importance of it. Studies are presented from a base on the promotion and protection of breastfeeding as well as from the publication of UNICEF, defends with conviction the rights of children in the promotion of parental care from around the world constituting the basis of human development to nursing care models for direct care. The nutrition, center of this work, which plays a key role in this development through the dietary needs of the organism since its inception and the way in which we, as health professionals, produce behavioral changes in lactating mothers. UNICEF in 2017 suggests a point of view of the wealth of nations to emphasize the promotion of health and invest in the development of breastfeeding. Therefore, breastfeeding is one of the most effective and cost-effective investments that nations can make for the health of their youngest members and the future health of their economies and societies. The tools that health professionals have for promotion and prevention of optimal nutrition from the newborn stage are those who through studies and research based on scientific evidence, such as Ramona Mercer's theory, they conclude that the mother achieves knowledge through multiple interventions highlighting the importance of health education. Consequently, health education and programs to promote breastfeeding constitute vital support to develop parental skills for parents.

Keywords: breast feeding, health education, infant nutrition, nursing model

1. Introduction

According to the Convention on the Rights of the Child, all infants and children have the right to good nutrition. The estimated number of child deaths due to malnutrition is 2.7 million, which represents 45% of all infant deaths. Infant and young child feeding is critical to improving child survival and promoting healthy growth and development. Accordingly, approximately 40% of infants from 0 to 6 months are exclusively breastfed. Optimal breastfeeding is of great importance as it saves the lives of more than 820,000 children under 5 years of age every year [1].

The World Health Organization (WHO) and UNICEF are concerned about the low prevalence of breastfeeding worldwide, despite the promotional campaigns

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they carry out. It is undoubtedly a challenge for health teams to focus their efforts on promoting this precious food from one human to another to create mutual benefit.

Breastfeeding is an unbeatable issue that provides perfect nutrition for infants, promoting healthy growth and development, reducing, and limiting the risk of contracting serious infectious diseases, therefore, reducing infant mortality and morbidity. As a result of that, it also favors women's health by reducing the risk of breast and ovarian cancer, and increasing pregnancy periods since it is a natural contraceptive method. In this sense, breastfeeding provides social and economic benefits to the family nucleus and why not say it, to a particular nation. For all that has been stated in the previous paragraphs, it is possible to provide most mothers with a feeling of satisfaction when it is carried out successfully and, according to recent research, they have found that these benefits increase with the exclusive nutrition of breastfeeding during the first few months, 6 months of life and later with solid and liquid food supplements [2].

The interventions of an educational program can result in positive behaviors toward exclusive and complementary breastfeeding. It has significantly influenced adherence to it and has collaborated in postponing feeding with infant formulas.

This review involves based on the latest and historical research that breastfeeding implies that it is not just a one-woman job, it requires encouragement and support from trained counselors, supportive family members, health care providers, employers, legislators, and others.

2. The importance of the promotion of breastfeeding

The publication of the Global Breastfeeding Collective in 2017 gives an account of the reasons why you should invest in the promotion of natural breastfeeding from a mother to her infant. It proposes that meeting this investment goal could save the lives of 520,000 children under the age of five and potentially create \$300 billion in economic gains over 10 years because of reduced illnesses and costs of medical care, and the increase in the productivity of the population due to the cognitive development that is generated in this fundamental nutrition for the neuronal cell strengthening of the child population [3].

In this sense, within the statements issued by non-profit and governmental institutions, it is highlighted that breastfeeding from one human being to another is one of the most powerful and profitable investments that countries can manage in favor of health of people in their economies and societies. By not investing in breastfeeding, one is failing to provide ethical well-being to mothers and their babies and consequently generating lost lives and opportunities [4].

Consequently, through decades, the World Health Organization (WHO) actively promotes breastfeeding as the best source of nutrients for infants and young children, since it is an ideal way to provide them with the necessary nutrients for growth and development healthy. Exclusive breastfeeding is recommended for the first 6 months of life [5].

Breastfeeding upto the 6th month of life favors adequate growth and development, impacting avoidable causes of infant morbidity and mortality, regardless of socioeconomic level or maternal work. Infants who are not fully breastfed during the first 3–4 months of life are more likely to develop infections of the stomach and intestines, respiratory tract, and lungs, or develop ear infections. In addition, non-breastfed infants are more likely to be overweight or have diabetes later in life, and non-breastfeeding mothers are at increased risk of breast and ovarian cancer. For all

this, a better knowledge of the benefits of breastfeeding is associated with earlier and greater initiation of lactation. Other practical benefits of breastfeeding include saving money in the purchase of breast milk substitutes and, for society, in the treatment of diseases [6].

2.1 Health education

On the other hand, health education and educational programs for fathers and mothers constitute one of those supports that the family needs to develop parental skills or abilities that allow them to face the vital task of being a father and mother.

Therefore, health education is developed in specific areas: prenatal intentions, breastfeeding experiences and support for the mother, this education affects the initiation or early suspension of breastfeeding.

The World Health Organization, already in 1989, specified that the recommendation and educational intervention on breastfeeding in support of mothers and their babies, carried out by health professionals, is related to the decision-making process, overcoming difficulties, and implementing adequate feeding practices. The key to the success of these processes is the interaction that occurs between the mother and the health professional.

Therefore, the educational recommendation and intervention is an example of a preventive connotation that emphasizes the interaction between mother/infant and a health worker, rather than the top-down approach often more characteristic of intervention-based types in education. Therefore, all counseling can be considered supportive, but not all supportive interventions include counseling [7].

WHO describes supportive counseling for mothers and infants by health workers to assist in decision-making, overcoming difficulties, and implementing optimal feeding practices [8].

Breastfeeding takes place during the postpartum period, which is a transition state from the stage of that close relationship between the mother and her daughter and the period of greater autonomy for both. The postpartum period is essential for the development of children, for the recovery of the mother, for learning parental functions, and for establishing the affective bond between newborns and their parents.

It is striking that various studies show the importance of certain predictive factors, determinants, barriers, influences, and contributing factors that act together and affect breastfeeding practices. These factors that influence maternal decisions are described at 3 levels, such as: individual, group, and social.

In turn, as a team that provides care, we must have a better understanding of how effective and functional it is to maintain exclusive breastfeeding at the time of neonatal discharge, focusing on health promotion and prevention for women, their families, and society. With this, we will have healthy and fit children for the society of the future. With the appropriate strategies to achieve an impact on the motivation and understanding of providing natural milk to infants, we solve and take charge of the questions of mothers who the potential donors of human milk for another human being.

The context is described, but not the problem, because you want to investigate this phenomenon, what is the need to investigate the subject?

2.2 Breastfeeding and its importance of historical evolution

Breastfeeding is an unparalleled way of providing excellent food for beneficial growth and development of infants, it is also an additional part of the reproductive

process, with transcendental repercussions on the health of mothers. The analysis of scientific data has discovered that, at the population level, exclusive breastfeeding for 6 months is the imponderable form of feeding for the child population. They should subsequently start receiving additional foods, but not stop breastfeeding until 2 years or older [9].

Likewise, it determines a decrease in morbidity and mortality in the infant and the mother herself. Research in recent years shows that children who are breastfed have an increase in their cognitive capacity and present less frequently with different diseases such as bronchial asthma, atopic and gastrointestinal diseases, obesity, type I and II diabetes mellitus, and autoimmune diseases. Mothers benefit in the short and long term through natural contraception, greater recovery of weight prior to pregnancy, lower incidence of osteoporosis, and lower incidence of breast and ovarian cancer [10].

From a historical context, breastfeeding has been observed with many changes in relation to infant feeding. In ancient times, the only feeding alternative for newborns and infants was breast milk; if for some reason the biological mother could not breastfeed or decided not to, wet nurses or "nurses of pups" were used to fulfill that function.

While some cultures assumed breastfeeding in a natural and exclusive way, in Europe, between the 16th and 17th centuries, the use of wet nursing was encouraged among women from more affluent social classes, since it was not well seen that they breastfed, because this work gave them it took away beauty and negatively affected her figure. The wet nurses usually corresponded to low-income women, who lived with the family of the newborn, they were given lodging, food, and a salary for their services [11].

In the 19th century, there was an important change in relation to infant feeding, since mothers began to feed their children in a general way and, only in case of need, they sought out the wet nurse, who used to be highly valued. The feeding guidelines gained increasing concern since it was related to infant mortality. There was a movement in support of breastfeeding and human milk was defined as the healthiest food.

At the Academy of Medicine in Paris (1870) [12], there was a discussion about wet nurses and the promotion of breastfeeding by the mother herself to reduce infant mortality. The mother was held responsible for the direct upbringing of the children and mothers who did so were praised. It was accepted that milk could be affected both in quality and quantity, depending on the maternal diet, the characteristics of the home in which the mother lived, genital disorders, temperament, age, and the exclusivity of the child which was fed.

In the year 1890, the "Infant Clinics" and "The Drop of Milk" were created, these were two French initiatives based on an idea by Pierre Budin. They consisted of providing parents with information on food and hygiene issues in general so that they could care for their newborn and infant children. Then they spread throughout Europe. Sterilized mammalian milk subsidized partly by municipalities and partly by private charity was supplied daily, free, or semi-free [13].

At the end of the 19th century, when scientific development was in full swing, artificial milk formulas appeared, which claimed to satisfy all the nutritional needs of infants. In its beginnings, they were highly valued since they were chemically manufactured using all the available technology, which supported the quality of the preparations. The commercialization of these types of products and the medicalization of childcare established a propitious environment so that formula feeding was not only acceptable but also something desirable and normal.

During the 20th century, other factors were added that promoted the use of artificial milk, to the detriment of breastfeeding: urbanization, the incorporation of women to work, changes in family patterns, with smaller families and isolated generations. Previous; the appearance of the Human Immunodeficiency Virus (HIV), among others. The wet nurse disappears completely, especially in developed countries, and breastfeeding is very low. All these sociodemographic and cultural changes led to the lowest rates of breastfeeding in the United States at the beginning of the 1970s, reaching 25% at hospital discharge and close to 5% at 6 months of life.

Since the 1990s, breastfeeding has been increasing and currently, most mothers already choose this practice to feed their baby. However, its duration is short since after 3 months they switch to artificial feeding in a general way.

At the beginning of the 21st century, it is certain that breastfeeding will be compatible with modern and industrialized society, but social awareness is necessary, and the proven scientific advantages of breastfeeding are known, both for the newborn and for the mother. The media have a very important role in the transmission of aspects related to breastfeeding, in the education and awareness of people, and the dissemination of the laws and recommendations established by international organizations such as the WHO and UNICEF [14].

For several decades, work has been done to promote exclusive breastfeeding for up to 6 months of the child's life and up to 2 years of age, complemented with non-dairy food. The evidence gives an active position, aimed at the promotion and protection of breastfeeding [15].

2.3 Strategies for the promotion of breastfeeding in the field of public health

From the point of view of international evidence to promote breastfeeding, multiple studies have been conducted to assess the effectiveness of various interventions to promote the initiation and maintenance of breastfeeding. Those with the best methodological quality have been in systematic reviews, with or without meta-analyses, which take a critical look at primary studies and evaluate the weighted effect of interventions to promote breastfeeding [6].

According to the Balogun study, an updated review that includes 28 randomized controlled studies with 107,362 women, they analyzed interventions to promote breastfeeding in primiparous women in high-income developed countries: Australia, 1 study; UK, 4 studies and the USA, 14 studies and one middle-income country: Nicaragua, 1 study. Three studies studied the effect of an intervention to increase the number of women who started breastfeeding early, within one hour after birth. 76,373 women from Malawi, Nigeria, and Ghana participated in them. The Malawi study was large, with 55,931 participants.

It can be inferred from these studies that health education by health professionals, especially doctors and nurses, and peer counseling and support by trained volunteers, optimized the number of women who attempted to breastfeed their babies. Five investigations with 564 women reported in their results that women who received breastfeeding education and support from health professionals were more likely to start breastfeeding compared to women who received standard or conventional care. Four of these investigations were conducted in low-income or ethnic minority women in the United States, where baseline breastfeeding rates are generally low. Eight trials involving 5712 women showed better rates of breastfeeding initiation with volunteer-trained interventions and support groups compared with women receiving standard conventional care.

Breastfeeding health education and intervention delivered by trained volunteers could also improve rates of early initiation of breastfeeding within one hour after delivery in low-income countries [16].

Continuing with this study, it was concluded that health professionals with training in breastfeeding, including midwives, nurses, doctors, and trained volunteers can conduct educational sessions and provide peer counseling and support to increase the number of women who start breastfeeding their babies. More studies are needed in low- and middle-income countries to find out which strategies will encourage women to start breastfeeding right after birth.

On the other hand, in our country, the use of promotion strategies is a resource that has had positive consequences in the improvement of lactation rates. Since 1990, Chile has implemented different regular programs that promote breastfeeding, such as the WHO/UNICEF "Friendly Hospital for Children and Mothers," prenatal education workshops for pregnant women and their companions on breastfeeding issues. Breastfeeding, in addition to the Child Protection Program, called "Chile Crece Contigo" of Law 20,379, and finally training of health teams and creation of a breast milk bank, among other state and private benefits [16].

In 2011, the parental postnatal leave was increased from 12 to 24 weeks of maternity leave through parliamentary law 20.54514. National surveys that measure the prevalence of breastfeeding in Chile conducted between 1993 and 2002 revealed an increase in the prevalence of exclusive breastfeeding at the 6th month of life from 25% in 1993 to 43% in 2002. Significantly very auspicious and encouraging from a public health standpoint [17].

It was also observed that the prevalence of exclusive breastfeeding at the 6th month in women who worked outside the home was half that of those who stayed at home [18].

The last national survey on breastfeeding carried out by the Ministry of Health (MINSAL) in 2013, carried out in children aged 6–24 months who were cared for in the public health system, showed a national average of exclusive breastfeeding at the 6th month of 56%. These results show an increase in the duration of exclusive and complementary breastfeeding when comparing data from 1993 to 2013 [19].

There are other strategies that are probably effective, among them, the promotion of early attachment in maternity wards promoted by the Chile Crece Contigo Comprehensive Protection System and counseling or visits focused on breastfeeding carried out by professionals within the family health model. Investing in printed material and promotional packages for the population seems to be an ineffective strategy to promote breastfeeding. These resources should be redirected toward other strategies with a greater cost-effectiveness ratio, such as peer support, a modality that has not been implemented at the national level.

A systematically searched European study found that a mother's own maternal education is a protective factor in the decision-making of the type of breastfeeding that mothers will offer their children and that it will improve the maintenance of breastfeeding. The experience is better valued when this education is carried out by midwives through audiovisual methods in the first prenatal control visit, ideally to be carried out in the preconception visit, paying special attention to women with a lower level of education. The inclusion and participation of pregnant women in spaces where satisfactory breastfeeding is practiced help to start and maintain breastfeeding, as well as the distribution of simple guides to resolve doubts and complications during the first days. This is a type A recommendation after analyzing the studies carried out [20].

2.4 Elements of Ramona mercer's theory: mother-newborn-father support

In the circumstance of hospitalization of the newborn in neonatal care units, the educational intervention that the health professional needs to demonstrate is based on scientific evidence provided by the care models. Ramona Mercer's model would help in part to develop the process of acquiring nutritional knowledge in the newborn by its eager mother.

Nurses have recognized the importance of the process of becoming a mother (BAM) since studies Rubin's, 1967 [21]. This was based on Ramona Mercer's theory that requires extensive psychological, social and physical work toward mother. During this transition, a woman is more vulnerable and faces great challenges. Nurses have a unique opportunity to help women learn, gain confidence, and experience as they come to terms with their identity as mothers [22].

Four stages of the process of becoming a mother have been identified from nursing research reports: (a) commitment, attachment, and preparation during pregnancy to receive the newborn, (b) knowledge and attachment to the newborn (NB), learning the care of the NB and physical restoration during the first weeks after birth, (c) moving and advancing toward the normality of the first 4 months and (d) achievement of a maternal identity around 4 months of age of the infant. The stages are not discrete, they overlap in the maternal, infant, family, and environmental variables [23].

The adoption of the maternal role is a process that follows four stages of role acquisition. These stages have been adapted from Thornton and Nardi's 1975 research [24].

The four stages are: the first stage is anticipation, this stage begins during pregnancy and incorporates the first social and psychological adjustments to pregnancy. The mother generates the expectations of the role, speculates about it, establishes a relationship with the fetus that is in the intrauterine environment and the adoption of the role begins, then comes the formal stage that begins when the newborn is born and is included learning the role and its activation. Role behaviors are accommodated through the formal and agreed expectations of others in the mother's own social system, then the informal stage which begins when the mother develops with her own stamp when performing the role not transmitted by the social system. The mother creates her new role by settling into her lifestyle based on her previous experiences and her future goals, finally, the personal or identity stage of the role appears, where the mother internalizes her own maternal role. The woman feels an effect of harmony, confidence, and aptitude in the way she carries out the role, reaching her maternal role and adapting it to her new reality.

Mercer in 1995, designs a "Maternal Role Adoption" model situated in Bronfenbrenner's in 1979, concentric circles of the microsystem, mesosystem, and macrosystem. The original model proposed by Mercer was modified in 2000, changing the term exosystemic to mesosystem, which groups, influences, and interacts with people in the microsystem. Mesosystem interaction can influence what happens to the developing maternal role and to the child. The mesosystem includes daily care, the school, the workplace, and other entities found in the more immediate community [23].

The limited success of many of the interventions suggests that important areas of BAM have not been addressed, especially the relationship of the father with his newborn daughter or son and the mother, which would mean and determine the process of contention of the binomial, either in the interposition content on the process. For these reasons, the authors propose an expanded model of the complex

Aspect	Description
Author	Ramona T. Mercer
Theory	Becoming a mother (BAM)
Focus area	Obstetric nursing and maternal-infant care
Main goal	Understanding the experience and transition of women toward motherhood.
Key elements	 Maternal commitment: The mother establishes an emotional commitment to her baby during the pregnancy. Maternal learning: The mother acquires knowledge and skills related to the care and upbringing of the baby. Development of a maternal role: The mother assumes the role of caregiver and establishes a unique relationship with her baby. Maternal adaptation: The mother adjusts physically, emotionally, and socially to her new role.
Importance	It helps health professionals to understand and support the transition to motherhood, promoting quality maternal and childcare.
Applications	 Prenatal and postnatal education for mothers. Guidance and support in the transition to motherhood. Development of nursing interventions focused on the needs of mothers during pregnancy and postpartum.
Criticisms and developments	Mercer's model has been widely used and accepted in the field of obstetric nursing, but it has also been the subject of debates and revisions to adapt to new realities and approaches in maternal and childcare. After years of research, Mercer has taken this process and simplified it making her theory one of the only theories available for studying and working with families after birth regardless of environment, age, health disparities or socioeconomic class [25].

Table 1.Summary of BAM theory by Ramona T. Mercer RN, PhD, FAAN.

elements involved in BAM and the related contextual effects (see **Table 1**). Even if no study can be expected to cover the scope of this model, it provides a structure for selecting key aspects of the transition to motherhood that may be of special significance in specific populations [26]. The mother, infant, and father are shown in the center of cooperating conditions that affect the process of becoming a mother and have the potential to facilitate or inhibit the process. These environment variables and attributes of the mother and infant are important concerns in both nursing interventions and future intervention research construct [26].

The importance of a conceptual base for health professionals in the orientation, guidance and education of mothers or main caregivers. Below is a summary of this important theory of care.

3. Final considerations

Clearly, the assertions and results of the investigations give consequently a positive effect on the knowledge and attitudes of the essential nutrient for infants such as breast milk. Among the findings, the percentage of schoolchildren who believed that breast milk is recommended for up to 2 years of life increased and that all mothers produce adequate milk to feed their child, based on the results of this study, the

reference can be established that evidence on breastfeeding is given early before adolescents start life as a couple and include schoolchildren of both sexes in educational programs on breastfeeding because it is known that men will have a vital influence on the woman's decision about the feeding method for her child and the success or failure of lactation. Likewise, these educational intervention programs could be developed using new technologies, through the Internet, App, Social Networks, which could successfully replace traditional methods for the promotion of breastfeeding [27].

Breastfeeding is one of the most effective and cost-effective investments that nations can make for the health of their youngest members and the future health of their economies and societies [3].

In recent studies, political participation, poverty, employment, and income have been associated with breastfeeding practices at the state level and thus may make important contributions to maternal and child health. While peer, professional, and hospital lactation support were associated with state-level breastfeeding rates, only professional support—specifically, the presence of (International Board-Certified Lactation Consultants (IBCLC))—was substantially associated with breastfeeding rates after controlling for women's status. Increasing the number of IBCLCs in each state is an important strategy to make breastfeeding practices a reality in the USA [28].

It should be noted that we must pay attention to variables that can be worked on in such a way that we generate changes in positive and sustainable attitudes over time to enhance the nutrition of infants. These variables or factors that are associated with a longer period of exclusive breastfeeding were: higher maternal education, having a partner, knowledge of breastfeeding, belonging to a lower income level, having a delivery attended by a qualified team, and low birth weight. This study allowed a better understanding of the abandonment of exclusive breastfeeding based on its social determinants, providing evidence to implement more effective interventions for nutrition [29].

Consequently, health education, model theories of nursing, and programs to promote breastfeeding constitute vital support to develop parental skills for mothers and fathers in neonatal units or in any context that requires knowledge support to face the family task regarding nutrition, best for your children. It is a constant challenge for the mother and the consequence for the well-being of the infant.

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References

- [1] Victora CG et al. Breastfeeding in the 21st century: Epidemiology, mechanisms, and lifelong effect. The Lancet. 2016;387(10017):475-490. DOI: 10.1016/S0140-6736(15)01024-7
- [2] Innocent Declaration On the Protection, Promotion and Support of Breastfeeding. 1990. Available from: htttp://waba.org.my/v3/wp-content/uploads/2019/04/1990-Innocenti-Declaration.pdf [Accessed: December 10, 2022]
- [3] United Nations International Children's Emergency Fund (UNICEF). Nurturing the Health and Wealth of Nations: The Investment Case for Breastfeeding. Global breastfeeding investment case [Internet]. 2017. Available from: https://www.who.int/nutrition/publications/infantfeeding/global-bf-collective-investmentcase.pdf?ua=1
- [4] World Health Organization (WHO). Press release. 2017. Available from: https://www.who.int/es/news-room/detail/01-08-2017-babies-and-mothers-worldwide-failed-by-lack-of-investment-in-breastfeeding
- [5] World Health Organization.
 Protecting, Promoting, and Supporting
 Breast-Feeding: The Special Role of
 Maternity Services: A Joint WHO/
 UNICEF Statement. Geneva: World
 Health Organization; 1989
- [6] Balogun O, O'Sullivan E, McFadden A, Ota E, Gavine A, Garner C, et al. Interventions for promoting the initiation of breastfeeding. The Cochrane Database of Systematic Reviews. 2016;**11**(11):CD001688. DOI: 10.1002/14651858.CD001688.pub3

- [7] McFadden A, Siebelt L, Marshall J, Gavine A, Girard L, Symon A, et al. Counseling interventions to enable women to initiate and continue breastfeeding: A systematic review and meta-analysis. International Breastfeeding Journal. 2019;14:42. DOI: 10.1186/s13006-019-0235-8
- [8] Kim S, Park S, Oh J, Kim J, Ahn S. Interventions promoting exclusive breastfeeding up to six months after birth: A systematic review and meta-analysis of randomized controlled trials. International Journal Nursing Studies. 2018;80:94-105. DOI: 10.1016/j. ijnurstu.2018.01.004
- [9] IRIS PAHO Pan American Health Organization. "Infant and young child feeding: Model chapter for textbooks for students of medicine and other health sciences" [Internet]. 2010. Available from: https://www.paho.org/hq/dmdocuments/2010/IYCF_model_SP_web.pdf
- [10] Bernard J, De Agostini M, Forhan A. Breastfeeding duration and cognitive development at 2 and 3 years of age in the EDEN mother-child cohort American Academy of Pediatrics. Grand Rounds. 2013;29(6):64. DOI: 10.1016/j. jpeds.2012.11.090
- [11] De la Peña G. Evolution of breastfeeding throughout history. From the beginning of humanity to the present [Internet]. 2018. Available from: https://www.revista-portalesmedicos.com/revista-medica/evolucion-la-lactancia-materna-lo-largo-la-historia-desde-inicio-la-humanidad-la-present/
- [12] Senior N. Aspects of infant feeding in eighteenth-century France.

- Eighteenth-Century Studies. 1983;**16**(4): 367-388. DOI: 10.2307/2738104
- [13] Muñoz PF. The implantation of the drops of Milk in Spain (1902-1935): A study from the historical press. Asclepius. 2016;**68**(1):131
- [14] Rollins NC, Bhandari N, Hajeebhoy N, Horton S, Lutter CK, Martines JC, et al. Lancet breastfeeding series group. Why invest and what will it take to improve breastfeeding practices? Lancet. 2016;387:491-504. DOI: 10.1016/ S0140-6736(15)01044-2
- [15] American Academy of Pediatrics [Internet]. 2015. Available from: https://www.healthychildren.org/English/ages-stages/baby/breastfeeding/Pages/Where-We-Stand-Breastfeeding.aspx
- [16] Atalah E. Current status of breastfeeding in Chile. Medwave. 2006;**6**(05):e3528. DOI: 10.5867/medwave.2006.05.3528
- [17] Ilabaca J, Atalah E. Breastfeeding at the southern metropolitan health service. Revista Chilena de Pediatria. 2002;7:127-134. DOI: 10.4067/S0370-41062002000200004
- [18] Atalah E, Castillo C, Reyes C. Effectiveness of a national program to promote breastfeeding in Chile 1993-2002. ALAN. 2004;54:374-379
- [19] Ministry of Health (MINSAL). Technical report. National survey of breastfeeding in primary care (ENALMA) [Internet]. 2013. Available from: https://www.minsal.cl/sites/default/files/INFORME_FINAL_ENALMA_2013.pdf
- [20] Martínez P, Martín E, Macarro D, Martínez E, Manrique J. Prenatal education and initiation

- of breastfeeding: Literature review. University Nursing. 2017;**14**:54-66. DOI: 10.1016/j.reu.2016.11.005
- [21] Rubin R. Attainment of the maternal role. Part 1. Processes. Nursing Research. 1967;**16**:237-245
- [22] Mercer RT. Nursing support of the process of becoming a mother. Journal of Obstetric, Gynecologic, and Neonatal Nursing. 2006;**35**:649-651. DOI: 10.1111/j.1552-6909.2006.00086. x
- [23] Raile M, Marriner A. Models and Theories in Nursing. 8th ed. Barcelona, Spain: Elsevier; 2015. p. 600
- [24] Weidman JC, Twale DJ, Stein EL. Socialization of graduate and professional students in higher education: A Perilous Passage? ASHE-ERIC Higher Education Report. Vol. 28, No 3. Jossey-Bass Higher and Adult Education Series; 2001
- [25] Noseff J. Theory usage and application paper: Maternal role attainment. International Journal of Childbirth Education. 2014;29(3):58-61
- [26] Mercer RT, Walker LO. A review of nursing interventions to foster becoming a mother. Journal of Obstetric, Gynecologic, and Neonatal Nursing. 2006;35(5):568-582. DOI: 10.1111/j.1552-6909.2006.00080. x
- [27] Hernández C, Díaz-Gómez M, Romero M, Díaz M, Rodríguez V, Jiménez A. Effectiveness of an intervention to improve breastfeeding knowledge and attitudes among adolescents. Revista Española de Salud Pública. 2018;**92**:e201806033
- [28] Yourkavitch J, Hall SP. Women's status, breastfeeding support, and breastfeeding practices in the United

States. PLoS One. 2022;**17**(9):e0275021. DOI: 10.1371/journal.pone.0275021

[29] Arocha G, Caicedo B, Forero L. Economic, social, and health determinants that influence exclusive breastfeeding in Colombia. Cadernos de Saúde Pública. 2022;38(9):e00186621. DOI: 10.1590/0102-311XES186621

