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The Effect of Maternal Education Level on Initiation of Breastfeeding: The Case of Turkey

Sevda BERİGEL[1]

[1] Sakarya Üniveristesi, Sosyal Bilimler Enstitüsü, İktisat Anabilim Dalı
Sevda Berigel: https://orcid.org/0000-0002-8573-5369

Abstract
Breast milk is a liquid that can meet all the needs of the newborn in the first 6 months. Breastfeeding is encouraged all over the world so that every baby can benefit from breast milk, which is considered unique for the development of the baby. This study includes a literature review to determine the effect of mother's education level on initiation of breastfeeding in Turkey. For this purpose, first the breastfeeding literature was examined on the basis of education, and then the situation in Turkey was evaluated through the Turkey Demographic and Health Survey reports published the first of which was published in 1993 and the last one in 2018. According to the Turkey Demographic and Health Survey reports, breastfeeding is quite common in Turkey. Although many factors play a role in the initiation and maintenance of breastfeeding, breastfeeding rates increase as the education level of the mother increases.

Keywords: Breastfeeding, breast milk, maternal education

Annenin Eğitim Seviyesinin Emzirmenin Başlatılmasına Etkisi: Türkiye Örneği

Özet
Anne sütü, yenidoğanın ilk 6 ay tüm ihtiyaçlarını karşılayacak nitelikte bir sıvıdır. Bebeğin gelişimi için eşsiz kabul edilen anne sütünden her bebeğin yeterince faydalanması için tüm dünyada emzirme teşvik edilmektedir. Bu çalışma, Türkiye'de annenin eğitim seviyesinin emzirmenin başlatılmasındaki etkisini belirlemeye yönelik literatür taramasını içermektedir. Bu amaçla önce emzirme literatürü eğitim temelinde incelenmiş, daha sonra da ilki 1993 sonuncusu ise 2018 yılında yayımlanan Türkiye Nüfus ve Sağlık Araştırması raporları kanalıyla Türkiye'deki durum değerlendirilmiştir. Türkiye Nüfus ve Sağlık Araştırması raporlarına göre Türkiye'de emzirme oldukça yaygındır. Emzirmenin başlatılmasında ve sürdürülmesinde pek çok etmen rol oynamakla birlikte, annenin eğitim seviyesi arttıkça emzirme oranları da artmaktadır.

Anahtar kelimeler: Anne eğitimi, anne sütü, emzirme

Yazışma Adresi/Address for Correspondence:
Sevda BERİGEL
Sakarya Üniversitesi Sosyal Bilimler Enstitüsü İktisat ABD 54100/Sakarya/Türkiye
Telefon/Phone: +90 545392 5703 ***E-mail:*** sevdacaki2002@hotmail.com
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INTRODUCTION

Nutrition during infancy is important because it affects lifelong health. Most of the diseases that occur later in life are due to malnutrition and malnutrition in infancy (1). For this reason, breastfeeding is vital for all living things. The yellowish and sticky breastmilk, called colostrum, is recognized by World Health Organization (WHO) as a unique nutrient for neonatal nutrition. Colostrum with high protein, low fat and lactose. It has immunological and developmental properties (2). Breast milk is a natural and economical food that contains everything the baby needs and protects it from various infections and diseases. Sufficient nutrition with breast milk provides goodness spreading to the individual's whole life. According to the WHO, when all children between 0-23 months are breastfed as suggested by the authorities, the lives of more than 820,000 children under the age of 5 can be saved each year (3). WHO recommends breastfeeding in the first hour after birth and breastfeeding only for the first six months. Only breastfeeding means that no food or drink other than breast milk is given to the baby, even water (4). Research shows that only 40% of babies younger than six months of the world are only breastfed as recommended.

According to WHO, complementary food should be started in the sixth month after birth in infants. Care should be taken to ensure that the complementary food consists of nutrients and nutrients that help the development of infants. Breastfeeding should continue for two years or more (4). The risk of obesity decreases in children who are breastfed sufficiently as a baby. Breastfeeding is also associated with high income during adulthood (5,6). Breastfeeding benefits the mother as well as the baby. Postpartum depression reduces the risk of developing type 2 diabetes, breast and ovarian cancer (7). It is also a good birth control method. Lowering health care costs through breastfeeding will have a positive impact on household and national economy (8).

WHO and United National International Children's Emergency Fund (UNICEF) launched the Baby-Friendly Hospital Initiative in 1992 to promote breastfeeding, which is considered a natural action and can be improved through learning (9). This initiative aims to inform the mother about breastfeeding before and after childbirth and to provide the necessary support for the maintenance of breastfeeding. In addition, the adoption of policies by the International Labor Organization, such as the Convention on Birth Protection 183 and Recommendation 191; and the promotion of breastfeeding both within the

family and in the community, increasing the duration of maternity leave of working mothers, and providing appropriate conditions for breastfeeding comfortably at any time and anywhere. The World Health Organization aims to increase only breastfeeding rate to 50% during the first 6 months by 2025 (10).

World Alliance for Breastfeeding Action (WABA) considers that breastfeeding is one of the effective and short ways to improve economic and social progress on an individual and national basis. That's way, it studies to maintain and support breastfeeding all over the world. According to WABA's research results, although breastfeeding rates are relatively high in the world, the recommendations breastfeeding rates are 40% in an infant under 6 months. Breastfeeding which according to recommendation can prevent more than 20.000 maternal deaths each year. Besides, insufficient breastfeeding is associated with low IQ (intelligence quotient), so this causes approximately 302 billion dollars per year (11). The biggest obstacle to inadequate breastfeeding is the lack of adequate support for parents in the workplace. Women who receive breastfeeding support in the workplace stay longer in the workplace (12). According to the search, each additional month's leave for birth can help reduce infant mortality 13% ratio (13). WABA consider that parenting is teamwork, and it carried out a study that calls "The Empowering Parents Campaign" to support and maintain breastfeeding both in the family and at work. EPC focuses on having paid maternity leave at least 6 months in both public and private sectors, making arrangements to facilitate breastfeeding at the workplace and expanding paternity leave. More than 800 million female workers haven't been able to obtain adequate birth support in the world. Supporting parents and increasing paternity leave play an important role both in achieving gender equality and on developing family relationships and making an emotional bond between father and child (14). Finally, a layout is intended that more egalitarian, defending women and providing ideal breastfeeding.

The main purpose of this study is to determine how the education level of the mother affects the initiation of breastfeeding in Turkey. For this, the breastfeeding literature was examined in terms of education; then, the breastfeeding profile in Turkey was evaluated in the light of the Turkey Demographic and Health Survey reports.

Literature Review

There are many studies on how education given to parents affects breastfeeding. When we look at the literature on the

subject, we see that different methods are used. Sciacca et al. (1995) (15) examined how health education affects breastfeeding among low-income women in the United States. They used Randomized Controlled Trial (RCT) method in this study. Twenty six of the volunteer women were in the control group and 29 were in the intervention group. The reward offered to women and spouses to participate in breastfeeding training and various activities is the factor that the intervention group is exposed to. At the end of the study, positive changes were observed in the attitudes and knowledge of breastfeeding among the intervention group members. Compared to control group partners, intervention group partners tend to support breastfeeding more (15). This result shows that the breastfeeding process will be positively affected if socioeconomically disadvantaged parents are provided with incentives and support for breastfeeding.

Pisacane et al. (2005) (16), another study that applied the same method, investigated how fathers' support breastfeeding affects breastfeeding, 140 in the control group, 140 in the intervention group, and 560 in the couples group. At the end of the study, it was found that the women in the intervention group received more support from their partners than the women in the control group. Bich et al. (2013) (17) conducted a study using quasi-experimental methods to determine how breastfeeding duration is affected among mothers who have babies between 4-6 months of age whose spouses receive breastfeeding training and support. For this purpose, 241 pairs in the control group and 251 pairs in the experimental group were included in the study. Breastfeeding training and counseling were given to the fathers in the experimental group. As a result of the study, the special lactation rate in the experimental group showed a significant increase compared to the control group (17).

There are many factors that have been examined and are waiting to be examined that affect the breastfeeding process. Among these factors, the attitudes that probably affect the quality of this process most probably belong to the mother. For this reason, many studies have focused on mothers, especially the level of education of the mother and her knowledge of breastfeeding. Colodro-Conde et al. (2015) (18) and have examined the breastfeeding tendencies in Spain and the relationship between education level and duration of breastfeeding. The study conducted with 666 adult women and children born between 1958 and 2002 found that the relationship between mother's education level and breastfeeding period was not consistent over the time examined.

Breastfeeding time was high in the 1960s and low in the 1070s; It started to increase again in the 1990s. Breastfeeding time in low-educated women has decreased significantly during the period in which they work. Breastfeeding time in women with high educational levels decreased until the 1970s, but began to increase in the late 1990s. This recorded variability can be explained by socioeconomic changes over time and by having jobs that allow longer breastfeeding. As a result, the relationship between education level and breastfeeding may vary at different times or at the same time but under different social conditions. The study emphasizes that the relationship between breastfeeding time and education level is positive in western societies and negative in developing societies. Van Rossem et al. (2009) (19) investigated the effect of mother's level of education on initiation and maintenance of breastfeeding. Especially in western countries, it was stated that socially disadvantaged mothers started to breastfeed their babies late and the duration of breastfeeding was low. The level of education affected the duration of breastfeeding up to 2 months after birth, but training had no effect on the duration of breastfeeding between 2-6 months.

Kristiansen et al. (2010) (20) investigated breastfeeding factors in Norway in a study examining the breastfeeding process of 1490 infants between 6-12 months. According to this, while breastfeeding for 4 months old baby was related to parental education and geographical region characteristics; for a 5.5-month-old infant, it was only associated with maternal age. Again, the duration of breastfeeding for 6 months was related to the education of the parent, the age of the mother and marital status, while the breastfeeding of 12 months was associated with the education, age of the mother and the number of children in the household. In the study, it was stated that the country's encouragement of breastfeeding and supportive activities for the mother did not prevent the effect of mother's education, age and relationship with smoking on the breastfeeding process.

Although the mother's education is mostly chosen as the focal point for initiating, sustaining and performing breastfeeding, there are studies investigating the effect of the father on this issue. In their study, Abbass-Dick et al. (2019) (5) concluded that the inclusion of the father in the breastfeeding process positively influenced the initiation, maintenance, and realization of breastfeeding as suggested. In the same study, it was also stated that fathers who do not have sufficient knowledge about breastfeeding are willing to apply for expert information. Al Namir et al. (2017) (21), in their studies in the literature

between 1992 and 2015, aimed to review the literature about the father's attitudes towards breastfeeding and how it affects the breastfeeding process. In the study, it was stated that the fathers of the mothers accepted social support and their support positively affected the initiation and duration of breastfeeding. One of the results of the study is that the attitudes of the father towards the breastfeeding process are not independent from the social, cultural and personal background, but it is not clear what constitutes the quality of the father's support. Therefore, determining what determines the attitude of the father and carrying out studies on these factors increase the father's support for breastfeeding and create a healthy generations.

586 families participated in the study conducted by Susin et al. (2008) (22) at a maternity hospital in Southern Brazil. In Brazil, where the rate of breastfeeding was very low in the first 6 months recommended by WHO, the effect of the inclusion of the father in the breastfeeding process was investigated and the inclusion of the father in the process significantly increased the rate of breastfeeding only in the first 6 months. In addition, the rate of breastfeeding at the end of the inclusion of fathers with less than 8 years of education was lower than that of mothers only. It is stated that the difference here arises from the disregard of the personal and behavioral differences that enable the father to support breastfeeding. As the studies show, the father's involvement in the breastfeeding process and the knowledge about breastfeeding play a very important role in the initiation, maintenance and continuation of breastfeeding.

Chezem (2012) (23), in the study of couples in the USA, aimed to reveal the difference of attitudes between couples planning to feed their baby only with breast milk and couples planning to feed mixed. A total of 71 couples, 56 of whom planned to feed their babies exclusively with breast milk and 15 of them with mixed feeding, were educated above high school and were married. It was observed that couples planning to breastfeed only their babies had higher parent age and higher maternal education than couples planning mixed feeding. In addition, it was found that mothers had a more positive attitude than breastfeeding that breastfeeding was beneficial and strengthened the bond with the baby. Karande and Perkar (2012) (24) examined how parents' attitudes towards infant feeding affect nutrition and duration of breastfeeding alone. At the end of the study, it was found that 34.9% of the mothers breastfed their babies for only 4-6 months. The attitudes of mother and father

about how long they will breastfeed their babies are very similar. The couples had similar opinions about 13 out of a total of 17 attitudes. Some of the similar attitudes were about ease of administration of breastfeeding, long-term benefits of breastmilk for infants, and the acceptability of breastfeeding in public. Only breastfeeding was observed in mothers between 4-6 months. As a result, it was found that father's attitude affects breastfeeding but not only breastfeeding duration.

Tohotoa et al. (2009) (25) have examined 76 couples who were breastfed in the last 6 months in their Australian-based study. One of the important results is that the father wants to be involved in the breastfeeding process. Mothers emphasized that the support of the father positively affected breastfeeding. It was stated that fathers want to learn more about baby nutrition and to assume the role of parenting. Fathers are not only physical; emotional and practical support also affects breastfeeding positively.

The period between infancy and adulthood, the exploration of the environment and the universe in which the individual lives, is very important in terms of shaping almost the longest stage of the life we call adulthood in almost every aspect. The family and then the environment are the two most critical factors that determine the nature of this period called childhood. Childhood health is one of the issues affected by family and environmental characteristics. many studies on these issues reveal that the educational level of the parent is decisive on child health.

According to the 1960 census results in Ghana, Caldwell says that mother's education has a major impact on child mortality. In fact, the ratio of children who die is approximately twice as high in uneducated mothers as in primary school, and this difference is not very different in urban and rural areas. Another important result emphasized in the study is that when the mother is more educated than the father, child mortality rates decrease dramatically (Caldwell, 1979) (26).

Another study on the subject was conducted by Currie and Moretti (2003) (27). In this study, the effects of maternal education on prenatal care, smoking, marriage age and fertility were investigated. At the end of the examination of birth data for 1970-1999, it was revealed that highly educated mother is more conscious about prenatal care, uses less cigarettes and birth weight of babies is higher and healthier than babies of low educated mothers. It was also stated that an additional year of education reduced the low birth weight rate by about 10% and the premature birth rate by about 6%; higher

educated women tend to have fewer children.

Glewwe's (1999) (28) study on Morocco states that child health is an indicator of the standard of living for developing countries. In this study, under the assumption that mother education positively affects the health of the child, the mechanisms through which this effect is investigated were investigated. The mechanisms involved in the research are: the numerical skills taught in the school to help the child with health problems, the education provided to the mother to provide health knowledge and access to more modern therapies due to school. As a result of the research, it was seen that the knowledge about health was the most influential factor on child health among these three mechanisms. Therefore, the acquisition of health information in schools is important for the development and improvement of child/baby health.

Lastly, Hobcraft et al. (1984) (29), who covered a much broader field of study, discussed 28 developing countries and benefited from the World Fertility Survey data to determine the rate of infant/child mortality in the first 5 years of life, education of the father, education of the father, mother's job status, father's occupation and the type of residence variables were analyzed. As a result of the analysis, the variables of the education of the mother, the education of the father and the profession of the father were the three main variables that clarified the differences in the model. The study also indicated that factors affecting the health of the child varied from continent to continent. For example, the most important factor affecting the child's health is the education of the father in the Americas and the education of the mother in the Asian continent. Hobcraft (1993) (30), in another study, investigated whether mothers' education had any effect on the health of infants aged 0-2 years and noted that it had a positive effect on diarrhea and similar diseases, but there was no significant effect on other diseases such as cough.

An Overview of The Initiation of Breastfeeding in Turkey

For babies who are protected by the mother's body against the dangers of intrauterine life, the first year of life is a period which is very important for the development and growth of organs (31). In this period, the most suitable and perfect food for the newborn and infant feeding is breast milk due to their superior nutritional characteristics (32). According to the report published by WHO and UNICEF, the rate of death in children who are breastfed is 4-6 times more than those not fed. Therefore, the WHO and UNICEF will only provide breastfeeding for the first

six months of infants; from the sixth month onwards, she recommends breastfeeding up to a minimum of two years with additionalfood (33).

Breast milk is white, its density is between 1025-1037 and it is opaque and 80% water (8). Breast milk is more hygienic, economical and nutritious to all other foods. Breast milk, which develops the emotional bond between mother and baby, is always at the same temperature and because of its content, it provides the development of the immune system of the babies (34).

The content of breastmilk does not remain the same, and every baby suckling according to the needs of the baby and the physiological and psychological needs of the baby alone is sufficient to meet it, makes it indispensable for babies (35). In the content of the mother's milk, there are numerous factors that are needed for the growth and development of the baby from the moment she is born, but also for the protection from the diseases (36). Breast milk, considered the first vaccination of the baby (8); protects the baby against many infectious diseases such as respiratory tract infections, urinary tract infections (31). Breast milk alone fulfills all the needs of the baby for the first 6 months except for vitamin D. Anemia, iron deficiency, hypothermia, tooth and palate diseases, digestive system diseases, immune system diseases in the face of many diseases acts as a shield for the baby (36). Breast milk affects the development of the baby's intelligence in a positive way. It has been proven by studies that breast-fed children are much more successful in the following years and that speech disorders are seen less frequently. According to studies conducted in the breastfed children in the later years of life obesity, diabetes metabolism diseases such as; hypertension, liver, cardiovascular diseases are seen less frequently (2).

The importance of breast milk, which is vital for human life, was emphasized in the Convention on the Rights of the Child adopted by the General Assembly of the United Nations in 1989 and “ensuring that all sections of the society are informed about breastfeeding, being supported and provided with educational opportunities in this area; Breastfeeding has been accepted as a human right because breast milk is the best food for the baby (31).

Breastfeeding is a very useful action for both mother and baby. Especially in the first hour after birth, breastfeeding is important in terms of baby health. According to the report published by UNICEF and WHO, approximately 78 million children - three out of every five children - are not breastfeeded within the first hour following birth. This increases

the risk of death and disease; reduces the likelihood of sustaining breastfeeding (37).

In Turkey, there are studies that examine factors affecting children's health, but the number of studies directly examining the effect of maternal education on child health is extremely low. At this point, the work of Çelik (2015) (38) is very valuable. In this study institution in Turkey Statistics (TUIK) made in the year 2008-2009-2010-2011 "Income and Living Conditions Survey" of the child care and parental education has benefited from the influence tested. In the study, the effects of mother and father education on boys and girls were tested separately. For the years 2009 and 2010, it was found that the education of the mother generally affected the health of the child. In the study, it was found out that the education of the father affected the health of the child more than the education of the mother in the years discussed; It has been emphasized that the education of the mother has a positive effect on the health of the child due to the increasing sampling over the years.

According to the 1993 Turkey Demographic Health Survey (TDHS) report, breastfeeding is quite common in Turkey. 94.6% of male births and 95.8% of female births were breastfed. While the rate of breastfeeding within the first hour after birth is 20% for male infants, it is 19.8% for female infants. While the rate of those who are breastfed for a while is 96.7% in rural areas, it is 94.2% in urban areas. The rate of breastfeeding in the first hour after birth is higher in urban (20.2%) than rural (19.4%). According to the region, the highest rate of breastfeeding was recorded in the North (95.9%) and the lowest in the East (94.5%). As the education level of the mother increases, the rate of breastfeeding also increases.

Table 1: Initial Breastfeeding (TDHS, 1993) (%)

Background characteristic		Among last-born children, percentage who started breastfeeding		
		Percentage ever breastfed	Within 1 hour of birth	Within 1 day of birth
Sex	Male	94.6	20.0	74.0
	Female	95.8	19.8	78.0
Residence	Urban	94.2	20.2	76.8
	Rural	96.7	19.4	74.3
Region	West	94.9	18.6	80.1
	South	95.6	20.8	74.2
	Central	95.7	22.4	77.4
	North	95.9	24.3	75.7
	East	94.5	16.5	70.1
Education	No educ./pri. incomp.	95.4	19.0	70.3
	Pri.comp./sec. incomp.	94.7	20.1	78.1
	Sec. comp./+	96.5	21.2	79.8

Source: Turkey Demographic and Health Survey, 1993

As a matter of fact, while the rate of breastfeeding is 95.4% for mothers who have no education or who have not completed primary school, this rate is 96.5% for mothers who have completed secondary school or higher education (39) (Table 1).

When we look at the 1998 TDHS report, we see that breastfeeding rates are still high in Turkey. 95.5% of male births and 94.9% of female births were breastfed. Breastfeeding rates are higher in female infants than male infants, both within the first hour after birth and within the first day after birth. While the rate of those who are breastfed for a while is 94.3% in rural areas, it is 95.8% in urban areas. This rate was measured higher in rural areas than in urban areas in the 1993 TDHS report. The highest rate of breastfeeding on a regional basis belongs to the West with 96.5%. The Eastern region has the lowest breastfeeding rate with 93.9%. In this report, we see the positive contribution of the mother's education level to breastfeeding. While the rate of breastfeeding is 97.2% for mothers with high school or higher education, this rate is 94.5% for mothers who have no education or have not completed primary school (40) (Table 2). The data on breastfeeding in the 2003 TDHS report are similar to data from previous years (39,40). While breastfeeding rate is 96.9% in urban areas, it is 96.7% in rural areas. While the rate of those who are breastfed within the first hour after birth is 53.7% in male babies, it is 54.2% in female babies. The rate of breastfeeding in the first hour after birth is higher in urban (57.2%) than in rural areas (47.6%). The impact of mother's education level on breastfeeding varied in this year's report. While the rate of breastfeeding was 96.6% for mothers with high school or higher education, this

Table 2: Initial Breastfeeding (TDHS, 1998) (%)

Background characteristic		Among last-born children, percentage who started breastfeeding		
		Percentage ever breastfed	Within 1 hour of birth	Within 1 day of birth
Sex	Male	95.5	51.4	83.7
	Female	94.9	52.2	86.0
Residence	Urban	95.8	53.2	85.1
	Rural	94.3	49.4	84.2
Region	West	96.5	51.5	86.1
	South	94.9	55.2	86.1
	Central	95.6	55.7	89.6
	North	94.5	55.8	82.9
	East	93.9	45.2	78.5
Education	No educ./pri. incomp.	94.5	44.5	78.5
	Primary school	95.3	52.4	86.8
	Secondary school	96.5	65.0	88.7
	High school and +	97.2	53.8	73.0

Source: Turkey Demographic and Health Survey, 1998

Table 3: Initial Breastfeeding (TDHS, 2003) (%)

Background characteristic		Among last-born children, percentage who started breastfeeding			Among children born and breastfed in the last 5 years before the survey
		Percentage ever breastfed	Within 1 hour of birth	Within 1 day of birth	Percentage of prelakteal food takers
Sex	Male	96.4	53.7	83.2	40.3
	Female	97.3	54.2	84.0	38.4
Residence	Urban	96.9	57.2	86.1	38.3
	Rural	96.7	47.6	78.7	41.3
Region	West	96.5	60.4	89.6	31.5
	South	97.3	50.0	81.5	41.0
	Central	96.9	63.2	87.0	35.3
	North	96.6	60.8	86.9	27.6
	East	97.1	40.6	74.7	52.8
Education	No educ./pri. incomp.	97.1	39.1	73.3	51.2
	Primary school	96.7	59.2	86.6	34.8
	Secondary school	97.7	57.1	91.2	30.0
	High school and +	96,6	60.8	88.0	38.4

Source: Turkey Demographic and Health Survey, 2003

rate was recorded as 97.1% for mothers who had no education or did not complete primary school (41) (Table 3).

According to the 2008 TDHS report, the rate of breastfed male babies for a while is 97.2%, while this rate is 96.1% for female babies. The rate of breastfeeding within the first hour after birth is higher in female babies (41.1) than in male babies (36.9). While the rate of prelacteal food intake is 24.2% in female infants, this rate is 22.2% in male infants. There were no significant differences in breastfeeding rates between settlements and regions. While the rate of breastfeeding is 96.9% in mothers with no education, this rate is 96.5% in mothers with high school and above (42) (Table 4).

According to (Table 5), compiled from the 2013 TDHS report and presenting information on the breastfeeding status of children born in the 5 years preceding the survey, according to basic characteristics, 96.7% of male babies and 95.9% of female babies were breastfed for a while. These rates show us that breastfeeding is common in Turkey. The rate of breastfeeding in the first hour after birth is similar for boys and girls. 50.1% of male babies and 49.7% of female babies were breastfed within the first hour after birth. Breastfeeding rate in the first hour after birth is higher in urban (51.5%) than rural (44.1%). On a regional basis, we see the highest breastfeeding rate in the Southern region with a rate of 97.2%. East region has the lowest breastfeeding rate as in previous years. We see in this report that the education of the mother has a positive

Table 4: Initial Breastfeeding (TDHS, 2008) (%)

Background characteristic		Among last-born children, percentage who started breastfeeding			Children born and breastfed in the last 5 years prior to the study
		Percentage ever breastfed	Within 1 hour of birth	Within 1 day of birth	Percentage of prelakteal food takers
Sex	Male	97.2	36.9	73.5	22.2
	Female	96.1	41.1	73.2	24.2
Residence	Urban	96.7	41.0	76.2	23.5
	Rural	96.7	33.9	66.1	22.3
Region	West	96.7	47.9	80.0	23.4
	South	95.4	40.7	75.2	20.9
	Central	97.2	31.8	76.0	27.0
	North	97.3	41.0	77.0	20.2
	East	96.7	32.1	61.0	21.5
Education	No educ./pri. incomp.	96.9	31.8	62.6	22.5
	Primary school	96.5	40.2	75.4	21.9
	Secondary school	97.8	39.9	77.7	19.5
	High school and +	96.5	43.9	78.7	29.0

Source: Turkey Demographic and Health Survey, 2008

effect on breastfeeding. While the rate of breastfeeding is 95.1% for mothers who have no education or who have not completed primary school, this rate is 97.2% for mothers with high school or higher education (43).

The percentage of both initiating breastfeeding within the first hour after birth and initiating breastfeeding within the first day after birth is higher in urban than rural areas. In addition, as the education of the mother increases, the rates of initiation and continuation of breastfeeding also increase. Breastfeeding within the first hour after birth rate, Turkey's eastern Anatolia region with the lowest at 39%; it is the highest in Western Anatolia with 61% (44). International Lansinoh Breastfeeding Survey (2017) (45), according to Turkey's rate of breastfeeding mothers over 12 months 28%. Turkey participated in the survey is the second highest in 9 countries. Another finding of the same study was that the rate of the mother aiming to breastfeed between 4-6 months was 34% in 2015 and this rate increased to 44% in 2017 (44). The rate of the mothers who wanted to give breast milk in the first 6 months decreased from 26% to 21%. Turkey's being fed with breast milk only the first two months after birth, 57.9% of infants, the rate decreases with the age of the child and infant 4-5 months 9.5%, while in infants 6-9 months 2.4% (44). The median duration of breastfeeding for children born within the three years preceding the TDHS 2013 was 16.7 months. Boys (18.0) are breastfed for

Table 5: Initial Breastfeeding (TDHS, 2013) (%)

Background characteristic		Children born in the last 5 years before the survey			Children born and breastfed in the last 5 years prior to the study
		Percentage ever breastfed	Within 1 hour of birth	Within 1 day of birth	Percentage of prelakteal food takers
Sex	Male	96.7	50.1	70.1	26.5
	Female	95.9	49.7	70.4	24.8
Residence	Urban	96.6	51.5	72.2	26.5
	Rural	95.5	44.1	62.9	22.5
Region	West	96.9	52.9	75.7	27.1
	South	97.2	53.3	69.6	24.8
	Central	96.6	56.6	71.4	25.2
	North	96.9	51.3	73.1	27.3
	East	94.9	39.3	61.6	24.2
Education	No educ./pri. incomp.	95.1	39.8	59.7	19.7
	Primary school	96.8	50.8	74.6	24.2
	Secondary school	95.7	53.2	68.9	26.5
	High school and +	97.2	53.8	73.0	31.3

Source: Turkey Demographic and Health Survey, 2013

longer than girls (16.3). While the median duration of breastfeeding was 17.9 in rural areas, this rate is 16.4 17 in the city. Turkey's breastfeeding common, though, is not only the rate of feeding with breast milk is still the desired level (TDHS- 2008 from 42% TDHS-2013 to 30%) (43,44).

When we look at the TDHS 2018 report, we see that 98% of the children born in the last two years before the survey date in Turkey are breastfed. This shows us that breastfeeding is quite common in our country. As can be seen in TDHS, 2018 report, seven out of ten children (71%) were breastfed within the first hour after birth, while 86% were breastfed within the first day after birth. Although recommended otherwise, 42% of breastfed children received prelacteal nutrition (46).

As can be seen in Table 6, while the rate of initiation of breastfeeding within the first hour after birth is 75% in female births, it is 67% in male child births. Again, early initiation of breastfeeding is 73% in urban areas and 67% in rural areas. When we look at the early initiation of breastfeeding at the regional level, the West region has the highest rate with 76%, and the North region has the lowest rate with 65%. As in the TDHS 2013 report, in the TDHS 2018 report, the proportion of children who are breastfed in the first hour after birth increases with the education level of the mother. As a matter of fact, while this rate is 64% among mothers with no education or who have not completed primary school, it is above 71% among mothers with higher education (47).

Table 6: Initial Breastfeeding (TDHS, 2018) (%)

Background characteristic		Children born in the last 2 years before the survey			Children born and breastfed in the last 2 years prior to the study
		Percentage ever breastfed	Within 1 hour of birth	Within 1 day of birth	Percentage of prelakteal food takers
Sex	Male	97.6	67.0	83.1	44.6
	Female	97.9	75.2	87.8	39.2
Residence	Urban	97.4	72.9	85.7	41.4
	Rural	98.8	68.8	85.2	42.4
Region	West	97.8	76.3	86.2	41.6
	South	97.3	72.6	87.6	36.5
	Central	98.8	66.6	83.2	51.1
	North	96.1	64.6	85.9	44.0
	East	97.6	67.5	85.1	38.1
Education	No educ./pri. incomp.	99.1	63.7	86.7	35.0
	Primary school	96.7	73.4	87.9	39.6
	Secondary school	99.1	71.3	87.4	42.0
	High school and +	97.0	72.6	82.1	45.2

Source: Turkey Demographic and Health Survey, 2018

CONCLUSION

Nutrition in the first years of life is very important because it affects both the development of organs and health throughout life. The most important nutrient in this period is breast milk. Breast milk is a white liquid whose density varies between 1025-1037, 80% of which is water, and its content is renewed according to the needs of the baby. Breast milk alone is sufficient to meet all the needs of the baby for the first 6 months. At the end of the studies, the incidence of some diseases was found to be lower in individuals who are fed adequately with breast milk. This shows that the benefit of breastfeeding is not limited to infancy.

Breastfeeding is beneficial for both the baby and the mother. It plays an important role in establishing the emotional bond between mother and baby. Breastfeeding also has protective effects on the mother from diseases such as postpartum depression and ovarian cancer.

In this study, the role of mother's education level in initiating breastfeeding in Turkey was examined. To determine this, Turkey's population and health survey reports were examined. According to the joint results of the reports, the first of which was published in 1993 and the last one in 2018, breastfeeding is common in Turkey. There is not much difference in breastfeeding rates on the basis of gender. Both boys and girls are commonly breastfed. When we look at the

breastfeeding rates in the urban-rural divide, it is seen that the difference between the two settlements has decreased over the years.

The effect of mother's education level on breastfeeding rate supports the literature. According to the TDHS reports published every 5 years starting from 1993, it has been observed that breastfeeding rates increase in parallel with the education level of the mother. The effect of mother's education level on breastfeeding rates for a period of time showed slight differences in the years studied. Except for 2013, the highest rate of breastfeeding for a while was recorded in mothers who graduated from secondary school. In 2013, mothers with high school or higher education had the highest rate. The highest rate of breastfeeding in the first hour after birth was recorded in mothers with high school or higher education. Although there is no big difference with other education levels, the rate of initiation of breastfeeding within the first hour increases as the education level of the mother increases.

In the light of all these data; breast milk, in particular for the mother and the baby, due to its perfect and economical content. In general, it is important for the home economy and the country's economy.

Supporting the mother by both health personnel and family during the breastfeeding process positively affects individual and social welfare outcomes. One of the most important policies in supporting breastfeeding is to increase maternity leave. Thanks to this policy, it is easier for women to stay in business life. It also contributes to gender equality in working life. Another important step in supporting breastfeeding will be increasing paternity leave. This will both strengthen the bond between father and baby and relieve the mother's burden.

REFERENCES

1. İnce T, Aktaş G, Aktepe N, Aydın A. Annelerin emzirme özyeterlilikleri ve emzirme başarılarını etkileyen özelliklerin değerlendirilmesi. İzmir Dr. Behçet Uz Çocuk Hast. Dergisi. 2017;7(3):183-190. doi:10.5222/buchd.2017.183
2. Çakmak S, Demirel Dengi AS. Postpartum dönemdeki annelerin emzirme ve anne sütünün önemi hakkındaki bilgilerinin değerlendirilmesi. Türk Aile Hekimliği Dergisi. 2019;23(1):9-19. doi:10.15511/tahd.19.0000
3. World Health Organization, Infant And Child Feeding. http://www.Who.İnt/Mediacentre/Factsheets/Fs342/En/İndex.Html (Date of Access: 18.04.2021).

4. Unicef: From The First Hour of Life. Making The Case For Improved Infantand Young Child Feding Every Where. October (2016):8.
5. Abbass-Dick J, Brown HK, Jackson KT, Rempel L, Dennis C. Perinatal breastfeeding interventions including fathers/partners: A systematic review of the literature. Midwifery. 2019:41-51. doi:10.1016/j.midw.2019.04.001
6. Nielsen SB. The First-Feed Study: Milk Intake, Energy Balance and Growth in Infants Exclusively Breast-Fed To 6 Months of Age. Doctoral thesis. College of Medical, Veterinary & Life Sciences School of Medicine University of Glasgow Scotland. 2012:32.
7. Dennis, C. Breastfeeding initiation and duration: A 1990-2000 literature review. Jognn in Review. 2002;31(1):12-32. doi:10.1111/j.1552-6909.2002.tb00019.x
8. Victora CG, Bahl R, Barros GVA, et al. Breastfeeding in the 21st century: Epidemiology, mechanisms, and lifelong effect. Lancet. 2016;387(10017):475–490. doi:10.1016/S0140-6736(15)01024-7
9. https://www.Who.İnt/Activities/Promoting-Baby-Friendly-Hospitals/Promoting-Baby-Friendly-Hospitals (Date of Access: 10.03.2020).
10. https://Www.Who.İnt/Health-Topics/Breastfeeding#Tab=Tab_1 (Date of Access: 10.03.2020).
11. https://Waba.Org.My/Epc/ (Date of Access: 12.03.2021).
12. https://Www.İlo.Org/Global/About-The-İlo/Newsroom/News/Wcms_218710/Lang--En/İndex.Htm (Date of Access: 13.03.2021).
13. Jahagirdar D, Harper S, Heymann J, Swaminathan H, Mukherji A, Nandi A. The effect of paid maternity leave on early childhood growth in low-income and middle-income countries. BMJ Glob Health. 2017;2:e000294. doi:10.1136/bmjgh-2017-000294
14. Internatıonal Labour Office. Maternity and paternity at work Law and practice across the world 2014. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_242615.pdf (Date of Access: 02.01.2022).
15. Sciacca JL, Dude DA, Phipps BL, Ratliff MI. A breast feeding education and promotion program: Effects on knowledge, attitudes, and support for breast feeding. Journal of Community Health. 1995;20(6):473-490. doi:10.1007/BF02277064
16. Pisacane A, Continisio GI, Aldinucci M, D'Amora S, Continisio P. A controlled trial of the father's role in

breastfeeding promotion. Pediatrics. October 2005;116(4):e494-8. doi:10.1542/peds.2005-0479

17. Bich TH, Hoa DTP, Målqvist M. Fathers as supporters for improved exclusive breastfeeding in Viet Nam. Matern Child Health J. 2014;18(6):1444-53. doi: 10.1007/s10995-013-1384-9
18. Colodro-Conde L, Sanchez-Romera JF, Tornero-Gomez MJ, Perez-Riquelme F, Polo-Tomas M, Ordonana JR. Relationship between level of education and breastfeeding duration depends on social context: Breastfeeding trends over a 40-year period in Spain. Journal of Human Lactation. 2015;27(3):272-278. doi:10.1177/0890334411403929
19. van Rossem L, Vogel I, Steegers EAP, et al. Breastfeeding patterns among ethnic minorities: The generation R study. J Epidemiol Community Health. 2010;64(12):1081-5. doi:10.1136/jech.2009.095380
20. Kristiansen AL, Lande B, Øverby NC, Andersen LF. Factors associated with exclusive breast-feeding and breast-feeding in Norway. Public Health Nutrition. 2010;13(12):2087-96. doi:10.1017/S1368980010002156
21. Al Namir HMA, Brady A, Gallagher L. Fathers and breastfeeding: Attitudes, involvement and support. British Journal of Midwifery. 2017;25(7):429. https://doi.org/10.12968/bjom.2017.25.7.426
22. Susin LRO, Giugliani ERJ. Inclusion of fathers in an intervention to promote breastfeeding: Impact on breastfeeding rates. Journal of Human Lactation. 2009;24(4):386-392. doi:10.1177/0890334408323545
23. Chezem JC. Breastfeeding attitudes among couples planning exclusive breastfeeding or mixed feeding. Breastfeeding Medicine. 2012;7(3):156-157. https://doi.org/10.1089/bfm.2011.0024
24. Karande S, Perkar S. Do Fathers' attitudes support breastfeeding? A cross-sectional questionnaire-based study in Mumbai, India. Indian Journal of Medical Sciences. 2012;66(1-2):30-39.
25. Tohotoa J, Maycock B, Hauck YL, Howat P, Burns S, Binns CW. Dads make a difference: An exploratory study of paternal support for breastfeeding in Perth, Western Australia. International Breastfeeding Journal. 2009;4:3-15. doi:10.1186/1746-4358-4-15
26. Caldwell JC. Education as a factor in mortality decline an examination of Nigerian data. Population Studies. 1979;33(3):395-413. https://doi.org/10.2307/2173888

27. Currie J, Moretti E. Mother's education and the intergenerational transmission of human capital: Evidence from college openings. The Quarterly Journal of Economics. November 2003;118(4):1495-1532. https://doi.org/10.1162/003355303322552856
28. Glewwe P. Why does mother's schooling raise child health in developing countries? Evidence from Morocco. The Journal of Human Resources. 1999;34(1):124-159. https://doi.org/10.2307/146305
29. Hobcraft JN, Mcdonald JW, Rutstein SO. Socio-economic factors in infant and child mortality: A cross-national comparison. Population Studies. July 1984;38(2):193-223. doi:10.2307/1967021
30. Hobcraft JN. Women's education, child welfare and child survival: A review of the evidence. Health Transition Review. 1993;3(2):159-173. http://www.jstor.org/stable/40652016
31. Akyüz A, Kaya T, Şenel N. Annenin emzirme davranışının ve emzirmeyi etkileyen durumların belirlenmesi. TSK Koruyucu Hekimlik Bülteni. 2007;6(5):331-335.
32. Gartner LM, Morton J, Lawrence RA, et al. Breastfeeding and the use of human milk. Pediatrics. 2005;115(2):496-506. doi:10.1542/peds.2004-2491
33. Who / Unicef. Innocenti Declaration on The Protection, Promotion And Support of Breastfeeding. http://Www.Who.İnt/Mediacentre/Factsheets/Fs342/En/İndex.Html, Http://Www.Unicef.Org/Programme/Breastfeeding/İnnocenti.Html (Date of Access: 10.12.2020).
34. Türkiye Nüfus ve Sağlık Araştırması. Hacettepe Üniversitesi Nüfus Etütleri Enstitüsü, Ankara. Kasım 2014:157.
35. Toksöz P. Diyarbakır Yöresinde Anne ve Çocuk Sağlığını Etkileyen Etmenlerin Analizi. Dicle Üniversitesi Gap Araştırma ve Uygulama Merkezi Yayınları. Diyarbakır. 1992;6-8.
36. Yoldaş İlktaç H, Dinçer T, Garipağaoğlu M. 0-6 aylık bebeklerin büyüme gelişme ve beslenme özelliklerinin değerlendirilmesi. Sağlık Akademisyenleri Dergisi. 2021;8(1):29-35.
37. Pillitteri A. Maternal and Child Health Nursing-Care of The Childbearing and Childrearing Family. Fifth Edition, Lippincott Williams and Wilkins Company, Philadelphia. 2007;730.
38. http://Unicef.Org.Tr/Basinmerkezidetay.Aspx?İd=32873&D=1&Dil=Tr (Date of Access: 15.03.2021).
39. Çelik M. Türkiye'de eğitimin sağlığa etkisi. Gebze Teknik Üniversitesi

Sosyal Bilimler Enstitüsü. Gebze. Yüksek Lisans Tezi. 2015:72-74,75.

40. Türkiye Nüfus ve Sağlık Araştırması. Hacettepe Üniversitesi Nüfus Etütleri Enstitüsü, Ankara. Ekim 1994:107-116. https://fs.hacettepe.edu.tr/hips/dosyalar/yayinlar/1993_TNSA.pdf (Date of Access: 16.01.2021).
41. Türkiye Nüfus ve Sağlık Araştırması. Hacettepe Üniversitesi Nüfus Etütleri Enstitüsü, Ankara. Ekim 1999:123-128. https://fs.hacettepe.edu.tr/hips/dosyalar/yayinlar/1998_TNSA1998-AnaRapor.pdf (Date of Access: 16.01.2021).
42. Türkiye Nüfus ve Sağlık Araştırması. Hacettepe Üniversitesi Nüfus Etütleri Enstitüsü, Ankara.Ekim 2004:141-144. https://fs.hacettepe.edu.tr/hips/dosyalar/yayinlar/2004_TNSA2003-AnaRapor.pdf (Date of Access: 16.01.2021).
43. Türkiye Nüfus ve Sağlık Araştırması. Hacettepe Üniversitesi Nüfus Etütleri Enstitüsü, Ankara. Ekim 2009:171-175. https://fs.hacettepe.edu.tr/hips/dosyalar/yayinlar/2009_TNSA2008-AnaRapor.pdf (Date of Access: 16.01.2021).
44. Türkiye Nüfus ve Sağlık Araştırması. Hacettepe Üniversitesi Nüfus Etütleri Enstitüsü, Ankara. Kasım 2014:157-161. https://fs.hacettepe.edu.tr/hips/dosyalar/Ara%C5%9Ft%C4%B1rmalar%20-%20raporlar/2013%20tnsa/TNSA_2013_ana_rapor (Date of Access: 16.01.2021).
45. International Lansinoh Breastfeeding Survey (2017). http://www.Lansinoh.Com.Tr/Onerilerimiz/Lansinoh-2017-Uluslararasi-Emzirme-Arastirmasi (Date of Access: 16.03.2021).
46. Yeşilçiçek Çalık K, Coşar Çetin F, Erkaya R. Annelerin emzirme konusunda uygulamaları ve etkileyen faktörler. Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi. 2017;6(3):80-91.
47. Türkiye Nüfus ve Sağlık Araştırması. Hacettepe Üniversitesi Nüfus Etütleri Enstitüsü, Ankara. Kasım 2019:143-145. http://www.sck.gov.tr/wp-content/uploads/2020/08/TNSA2018ana Rapor.pdf (Date of Access: 16.01.2021).