



# Perceptions of adults in selected family health centers in Samsun Çarşamba District towards breast milk: A regional study

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## Abstract

**Objective:** This study was carried out to determine the educational needs of not only the mothers but also the whole society about breast milk and breastfeeding.

**Methods:** The study was conducted in three family health centers at similar socio-economic levels between March and June 2015. The sample of the study consist of 1750 adult individuals. The research data were collected by a questionnaire and a 5-point Likert scale titled "Perceptions of Adults in Selected Family Health Centers in Samsun Çarşamba District towards Breast Milk: A Regional Study Abstract" prepared by the researchers in line with the literature. Kruskal - Wallis H Test and Mann - Whitney U Test was used in the evaluation.

**Results:** It was determined that the total score average of the adults participating in the study was  $120.94 \pm 16.74$ . According to the results of the total score averages obtained from the "Perceptions of Adults in Selected Family Health Centers in Samsun Çarşamba District towards Breast Milk: A Regional Study Abstract and the age variable; The scores in the 33-39 age group were significantly higher than the scores in the 19-25, 26-32 and 47-53 age groups.

**Conclusions:** It was concluded that the scores obtained by the participants from scale were above the average, but their perceptions about breast milk should be improved.

**Keywords:** Adults; breast milk; breast-feeding; perception.

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## Introduction

The future of society is determined by the presence of healthy individuals [1]. The importance and place of breastfeeding in laying the foundations of healthy lives cannot be discussed [2]. When the historical development of practices related to infant nutrition is examined, it is seen that breast milk has been the most important food until today.

Breast milk is a unique food that provides optimum growth of the baby and meets all the needs of the baby by itself, and the milk of each creature is unique to itself and its baby [3]. Breast milk is the most ideal food for infants because it reduces infant morbidity and mortality rates, provides optimal growth and development, and provides economic benefits to the family and the country [4]. The World Health Organization and the American Academy of Pediatrics follow a policy encouraging breastfeeding of term and premature infants and recommend exclusive breastfeeding for the first 6 months and continuation of breastfeeding with complementary foods until the age of 2 years [5].

Breastfeeding is a common practice in our country; according to the 2013 Turkish Demographic and Health Survey (TDHS), 96% of all children have been breastfed for some time. Information on the timing of initiation of breastfeeding shows that the initiation of breastfeeding is quite late in our country. 50% of breastfed children started breastfeeding within the first hour after birth [6]. According to TDHS 2018 data, seven out of ten children (71%) were breastfed within the first hour after birth and 86% were breastfed within the first day after birth [7].

Information on the time of initiation of breastfeeding shows that the initiation of breastfeeding is quite late in our country. Among breastfed children, 50% of breastfeeding was initiated within the first hour after birth [6]. According to TDHS 2018 data, seven out of ten children (71%) were breastfed within the first hour after birth and 86% were breastfed within the first day after birth [7].

Contrary to the recommendation that children under six months of age should be exclusively breastfed, 23% of children receive other non-breast milk and 12% of children receive supplementary foods in addition to breast milk [7]. In summary, although breastfeeding is a common practice in Turkey, exclusive breastfeeding is not widely practiced as recommended. Exclusive breastfeeding in children was 42% in TDHS 2008 and this rate decreased to 30% in TDHS 2013. According to TDHS 2018 data, the rate of exclusive breastfeeding in

children was 41% [6-8].

It is the most fundamental right of the newborn to be fed with breast milk in order to maintain a healthy life. The benefits of breast milk are not only limited to the mother and the baby, but also provide numerous benefits to the family, environment, society and the national economy. Therefore, in initiating and maintaining a healthy breastfeeding process, the mother should be supported by her spouse, friends, family elders, relatives and health professionals, and the awareness of the society about the advantages and benefits of breast milk should be increased.

'This study was carried out to determine the Perceptions of Adults in Selected Family Health Centers in Samsun Çarşamba District towards Breast Milk, to determine the educational needs of not only mothers but also other members of the society on breast milk and breastfeeding and to contribute to the society to become more conscious about breast milk and breastfeeding.

## Materials and Methods

The population of the study consisted of individuals living within the borders of Çarşamba district of Samsun province between March and June 2015. The sample of the study consisted of 1750 volunteer individuals between the ages of 19-65 who came to the family health centers where the study was conducted between March-June 2015. In forming the sample, 10 times the number of items in the 33-item scale was taken into consideration. The test-retest method was performed with 70 adult individuals. Without sample selection, the relevant ASMs adult individuals admitted to the hospital were included in the study.

In our study, data collection was carried out through the Questionnaire for Descriptive Characteristics of Adult Individuals consisting of 16 questions and the Perception Scale of Adults Regarding Breast Milk developed by the researcher. The Adult Perception Scale on Breast Milk was developed by Eren and Çınar (2016) and a validity and reliability study was conducted [9]. In the validity study of the scale, the opinions of a total of 14 experts in the evaluation, the content validity ratio (CVR) for each item was calculated. The content validity index (CVI) was determined by taking the average of the calculated CVIs, and the CVI greater than 0.51. It is concluded that the content validity of the items with the same value is ensured (Table 1).

The scale is a 5-point Likert-type scale consisting of 30 positive items. Each item is scored from 1 to 5 and the scores vary according to the responses. The minimum score is 30 and the maximum score is 150. A high score indicates that adults have a good perception of breast

milk. The scale is in a form that can be easily filled in by literate individuals.

Before the application, the appropriate days for data collection were determined by contacting the family

health centers where the study would be conducted. The data related to the study were collected by the researcher by going to family health centers two days a week and interviewing volunteer individuals face-to-face. Data collection continued until the determined sample size was reached.

The data of the study group were

**Table 1:** Minimum values for CSOs at  $\alpha=0.05$  significance level

Number of experts	Minimum value	Number of experts	Minimum value
5	0.99	13	0.54
6	0.99	14	0.51
7	0.99	15	0.49
8	0.78	20	0.42
9	0.75	25	0.37
10	0.62	30	0.33
11	0.59	35	0.31
12	0.56	40+	0.29

**Table 2:** Distribution of Participants' Descriptive Characteristics

Identifying features		n	%
Gender	Female	1360	77.7
	Male	390	22.3
Age	19-25 age between	411	23.5
	26-32 age between	513	29.3
	33-39 age between	371	21.2
	40-46 age between	262	15.0
	47-53 age between	112	6.4
	54-60 age between	66	3.8
	60-65 age between	15	.9
Education Status	Illiterate	91	5.2
	Primary School	428	24.5
	Middle School - High School	626	35.8
	University	584	33.4
	Other	21	1.2
Employment Status	Unemployed	893	51.0
	Continuous Operation	707	40.4
	Part-time Work	150	8.6
Income Level	Good	696	39.8
	Middle	939	53.7
	Bad	115	6.6
Family Type	Extended family	707	40.4
	Nuclear family	1043	59.6
Child Status	Yes	1344	76.8
	No	406	23.2
Status of Receiving Information on Breast Milk	Taking	1119	63.9
	Non-taking	631	36.1
Information Source *	Nurse	350	31.3
	Doctor	493	44.1
	Midwife	328	29.3
	Family elders	295	26.4
	Friend	99	8.8
	Health education materials	277	24.8
	Radio, television, newspaper, internet	197	17.6
	Other**...	30	2.7

\*Since there was more than one response, percentages were taken over the total number of participants,

\*\*Other (While studying during training, Congress, In-service training)

analyzed using SPSS 21 package program in computer environment. Normality tests of the data were evaluated

**Table 3:** Distribution of Breastfeeding Status of Children of Parents with Children

		n	%
Children's Breastfeeding Status	Breastfed	1255	93.4
	Not breastfed	53	3.9
	Does not remember	36	2.7
	Total	1344	100.0
Duration of Breast Milk Intake	Less than 3 months	187	14.9
	4-6 months	312	24.9
	1 year	357	28.4
	2 years	329	26.2
	Other	70	5.6
	Total	1255	100.0
Receiving Support for Breastfeeding	Taking	970	73.2
	Non-taking	285	26.8
	Total	1255	100.0

by Kolmogorov-Smirnov Test. After examining the normal distribution of the data, Mann-Whitney U test was used for two-group comparisons and Kruskal-Wallis H test was used for comparisons with three or more groups because the scores were not normally distributed. When interpreting the results, 0.05 was used as the significance level and it was stated that there was a significant relationship if  $p < 0.05$  and there was no significant relationship if  $p > 0.05$ .

### Ethics

Before starting the study, approval was obtained from the Sakarya University Faculty of Medicine Non-Interventional Ethics Committee dated 09.12.2014 and numbered 16214662/050.01.04/137. Necessary written permissions were obtained from the administration of the hospital where the study was conducted. Verbal and written informed consent was obtained from the individuals who volunteered to participate in the study.

### Results

Of the individuals included in the study, 77.7% were female and 22.3% were male. While 23.5% of the individuals were in the 19-25 age group, 29.3% were in the 26-32 age group, 21.2% in the 33-39 age group, 15% in the 40-46 age group, 6.4% in the 47-53 age group, 3.8% in the 54-60 age group and 9% in the 60-65 age group. 63.9% of the participants reported receiving education about breastfeeding.

It was observed that health professionals constituted the

majority of the source of information (Table 2). Among the individuals included in the study, 73.2% reported receiving support for breastfeeding (Table 3). The status of receiving information about breastfeeding in all participants is shown in Table 3.

According to the results of the Kruskal-Wallis H Test between the mean total scores obtained from the 'Perception of Breastfeeding Scale for Adults' and the age variable; it was found that the scores in the 33-39 age group were significantly higher than the scores in the 19-25, 26-32 and 47-53 age groups ( $p < 0.05$ ) (Table 4). As seen in Table 3, there was no significant difference between the mean total scores of the adults on the Perception Scale about Breast Milk and gender and educational status ( $p > 0.05$ ).

According to the results of the Mann-Whitney U Test between the mean total scores of the adults on the Perception Scale for Breastfeeding and their family type, the scores of nuclear family were significantly higher ( $p < 0.05$ ) (Table 4).

According to the results of the Kruskal-Wallis H Test between the mean total scores of the adults on the Perception Scale for Breastfeeding and their employment status, it was determined that the scores of those who had a permanent job were significantly higher than those who were unemployed and part-time workers ( $p < 0.05$ ) (Table 4).

According to the results of the Kruskal-Wallis H Test performed between the mean total scores of the adults on the Perception Scale about Breast Milk and income level, the breast milk perception scores of those with poor income level were significantly higher than those with good and medium income level ( $p < 0.05$ ) (Table 4). As shown in Table 4, there was no significant difference between the mean total scores of the adults on the Perception Scale Related to Breast Milk and the status of having a child and receiving information about breast milk ( $p > 0.05$ ) (Table 5). According to the results of the Kruskal-Wallis H Test performed between the mean total scores of the adults on the Perception Scale Related to Breast Milk and the duration of breastfeeding of their children, those who received less than 3 months of breast milk were significantly lower than those who received 4-6 months of breast milk and the other group ( $p < 0.05$ ) (Table 5).

### Discussion

In the validity study of the scale, the opinions of a total of 14 experts in the evaluation, the content validity ratio (CVR) for each item was calculated. The content validity

**Table 4:** The Relationship Between Participants' Descriptive Characteristics and 'Perception Scale of Breastfeeding in Adults' Scores

Identifying features		Adults' Perception Scale on Breast Milk				
		N	Mean ± SS	Rank Mean	Test statistic	Pairwise Comparison
Age	19-25 age between	411	119.95 ±16.73	811.9	$\chi^2_{KW}=27.7$ p=0.0001 <sup>a</sup>	3-1 3-2 3-5
	26-32 age between	513	121.46±17.19	860.9		
	33-39 age between	371	125.63±15.29	980.9		
	40-46 age between	262	122.62±17.25	893.0		
	47-53 age between	112	119.07±17.23	784.4		
	54-60 age between	66	121.27±18.01	855.8		
	60-65 age between	15	124.13±19.88	972.1		
Gender	Female	1360	121.79±16.89	868.0	Z=-1.2	p=0.248 <sup>b</sup>
	Male	390	122.86±16.78	901.5		
Family Type	Extended family	707	119.33 ±17.88	798.9	Z=-5.2	p=0.0001 <sup>b</sup>
	Nuclear family	1043	123.86±15.90	927.4		
Education status	Illiterate	91	121.34±15.05	840.0	$\chi^2_{KW}=4.7$ p=0.322 <sup>a</sup>	
	Primary School	428	121.54±17.15	859.9		
	Middle School - High School	626	121.60±16.80	866.9		
	University	584	122.73±16.98	895.1		
	Other	21	128.10±16.94	1058.5		
Employment status	Unemployed	893	121.27±16.66	849,6	$\chi^2_{KW}=6.6$ P=0.036 <sup>a</sup>	2-1 2-3
	Continuous work	707	123.13±17.25	913.3		
	Part-time job	150	121,32±16,10	851.8		
Income Level	Good	696	120,67±17,39	836.4	$\chi^2_{KW}=8.1$ P=0.018 <sup>a</sup>	3-1 3-2
	Middle	939	122.71±16.61	895.5		
	Bad	115	124.66±15.09	948.7		

<sup>a</sup>Kruskall-Wallis H T Test, <sup>b</sup>Mann-Whitney U Test

index (CVI) was determined by taking the average of the calculated CVIs, and the CVI greater than 0.51. It is concluded that the content validity of the items with the same value is ensured.

In a study in which breastfeeding attitudes were

evaluated, the mean age of mothers was 27.29±4.82 and 36.6% were in the 22-26 age group [10]. It is thought that the fact that the majority of the individuals in the age group of 30 years and above in the region where the study was conducted had more children and therefore

**Table 5:** Comparison of the Data Related to Breast Milk and the Mean Scores of the Perception Scale Related to Breast Milk of Adults

		Adults' Perception Scale on Breast Milk				Pairwise Comparison
		N	Mean ± SS	Rank Mean	Test statistic	
Having children	Yes	1344	121.88±16.82	869.3	Z=-0.93	
	No	406	122.52±17.03	896.1	P=0.349 <sup>b</sup>	
Receiving information about breastfeeding	Yes	1119	122.01±17.04	874.5	Z= -0.115	
	No	631	122.06±16.58	877.3	P=0.909 <sup>b</sup>	
Breastfeeding status of their children	Yes	1255	121.82±16.91	671.9	$\chi^2_{\text{KW}}=0.04$	
	No	53	122.57±16.04	678.5		
	Don't remember	36	122.92±15.29	683.0		
Duration of breastfeeding for their children	Less than 3 months	187	117.12±17.05	525.4	$\chi^2_{\text{KW}}=29.9$	1-2 1-4
	4-6 months	312	124.75±15.89	689.3		
	1 year	357	121.38±17.57	624.5		
	2 years	329	121.19±16.78	610.8		
	Other	70	126,50±14,74	727,7		

<sup>a</sup>Kruskall-Wallis H T Test, <sup>b</sup>Mann-Whitney U Test

these individuals had more experience in breast milk and breastfeeding increased their perception scores regarding breastfeeding.

It was emphasized that in developed countries, the duration of breastfeeding is prolonged as the mother's education level increases, whereas in developing countries, the continuation of breastfeeding is inversely proportional to the level of education [4]. When the literature is examined, there is no study showing the perceptions of individuals about breastfeeding in our country. In this study, only education level was found to prolong the duration of breastfeeding. In another study conducted in our country, it was found that breastfeeding behavior was positively affected positively as the educational level of mothers increased and breastfeeding duration was prolonged in parallel [10].

In another study, it was found that mothers' working in an additional income-generating job contributed positively to their level of knowledge about breast milk and breastfeeding [11]. In this study, the breast milk perception scores of those who stated that their income level was 'poor' were significantly higher than those who stated that their income level was 'good' and 'moderate'. Contrary to the results of this study, there are studies indicating that economic status does not affect breastfeeding self-efficacy, and there are also studies reporting that mothers with good economic status have higher breastfeeding self-efficacy than those with poor

economic status [12-14]. In addition to the numerous advantages of breastfeeding for mother and baby, it is also thought to contribute to the family economy [15-16].

In TDHS 2018 data, the median duration of breastfeeding was determined according to maternal education level. The median breastfeeding duration was found to be 19.3 months for mothers with no education/ no primary school education, 12.0 months for mothers with primary school education, 15.9 months for mothers with secondary school education, and 17.8 months for mothers with high school education and above [7]. In this study, the fact that there was no significant difference between those who received information from various sources, especially health workers, and those who did not receive information on this issue is a result that should be taken into consideration. This result obtained in our study is interesting. Studies should be conducted on what can be done to make the trainings given to the mother and the community on the subject more effective, and it should be ensured that the trainings of health professionals on the subject for the community are more effective. In order to achieve this goal, it is thought that reviewing the training techniques and methods related to the subject, taking care to ensure that the visual and written materials prepared for the community meet the needs of the community and are comprehensible (brochures, handbooks, public service

announcements, etc.), determining whether the training tools are comprehensible by people from all educational levels while preparing them with pilot applications and then offering them to the service of the community will make this training more effective.

### Limitations

Since the study was conducted in three family health centers, the results obtained can only be generalized to this group.

### Conclusion

In line with these results; the benefits of breastfeeding are not only limited to the mother and the infant, but also provide numerous benefits to the family, society, the environment and the national economy. Therefore, it is important that the mother is supported by her partner, friends, family elders, relatives and health professionals in initiating and maintaining a healthy breastfeeding process. Therefore, it is necessary to raise public awareness about the advantages and benefits of breast milk. When studies and scales related to breastfeeding were examined, it was observed that these were mostly directed towards breastfeeding mothers and women. No scale was found to determine the perceptions of adult individuals constituting the society about breast milk. Based on this deficiency, this study is thought to contribute to the literature in this sense. At the same time, the developed scale can be used in our society and other cultures by adapting it. The scale can be used in more comprehensive surveys in our society to determine the educational needs of the society on the subject and trainings can be provided using methods in this direction. The support to be given to breastfeeding mothers can be increased by improving the perceptions of the society about breast milk and breastfeeding in a positive way.

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