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Research Article

# The Determination of Female Students' Perspectives on Breastfeeding in Public Places and Attitudes Towards Fertility and Childbearing

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## **Abstract**

Fertility, childbearing, and breastfeeding are among the most significant milestones in life. This research aims to assess the perspectives of female students enrolled in the Faculty of Health Sciences regarding breastfeeding in public places, as well as their attitudes toward fertility and childbearing. This is a descriptive and cross-sectional study conducted with female students (n=202) enrolled in the Faculty of Health Sciences at a foundation university. Data were collected using a "Data Collection Form" and the "Attitudes towards Fertility and Childbearing Scale (AFCS)". Descriptive data were expressed as numbers, percentages, and frequencies. The Mann-Whitney U test and Kruskal-Wallis H test were used for data analysis. The study determined that female students generally have a positive attitude toward breastfeeding in public places. Eighty-eight percent of the students reported that they were not uncomfortable being in the same environment with a breastfeeding woman, and 85.15% stated that talking to or interacting with a breastfeeding woman was a normal occurrence. However, 17.3% of the students believed that breastfeeding in public places is not normal. The mean scores of female students for the AFCS were as follows: 35.8±10.4 for the 1st Factor, 40.9±7.6 for the 2nd Factor, and 22.7±3.3 for the 3rd Factor. Overall, female students exhibited positive attitudes toward breastfeeding in public spaces, as well as toward fertility and childbearing.

**Keywords:** Attitudes, Childbearing, Fertility, Public breastfeeding, Woman

Kadın Öğrencilerin Topluma Açık Alanlarda Emzirmeye Yönelik Bakış Açıları ile Doğurganlık ve Çocuk Sahibi Olmaya Yönelik Tutumlarının Belirlenmesi

## Özet

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Journal Email: sbfdergisi@arel.edu.tr Journal Abbrevations: J. H. Sci. Arel U. Arel Ü. S. Bil. Derg. Doğurganlık, çocuk sahibi olma ve emzirme, yaşamın en önemli dönüm noktalarından bazılarıdır. Bu araştırma, bir Vakıf Üniversitesi Sağlık Bilimleri Fakültesi'nde öğrenim gören kadın öğrencilerin kamuya açık alanlarda emzirme konusundaki bakış açılarını ve doğurganlık ile çocuk sahibi olmaya yönelik tutumlarını değerlendirmeyi amaçlamaktadır. Araştırma, bir Vakıf Üniversitesi Sağlık Bilimleri Fakültesi'nde öğrenim gören kadın öğrencilerle (n=202) yapılan tanımlayıcı ve kesitsel bir çalışmadır. Veriler, "Veri Toplama Formu" ve "Doğurganlık ve Çocuk Sahibi Olmaya Yönelik Tutum Ölçeği (AFCS)" kullanılarak toplanmıştır. Tanımlayıcı veriler sayı, yüzde ve frekans olarak ifade edilmiştir. Veri analizinde Mann-Whitney U testi ve Kruskal-Wallis H testi kullanılmıştır. Kadın öğrencilerin genel olarak kamuya açık alanlarda emzirmeye karşı olumlu bir tutuma sahip olduğu belirlenmiştir. Öğrencilerin %88,0'i, emziren bir kadınla aynı ortamda bulunmaktan rahatsız olmadığını belirtmiş, %85,15'i ise emziren bir kadınla konuşmayı veya etkileşimde bulunmayı normal bir durum olarak değerlendirmiştir. Kamuya açık alanlarda emzirmenin normal olmadığını düşünen öğrenci oranı %17,3'tür. Kadın öğrencilerin AFCS'nin 1. Faktör için ortalama puanı 35,8±10,4; 2. Faktör için 40,9±7,6; ve 3. Faktör için 22,7±3,3 olarak bulunmuştur. Kadın öğrencilerin genel olarak kamuya açık alanlarda emzirmeye, doğurganlık ve çocuk sahibi olmaya yönelik olumlu tutumlara sahip olduğu görülmüştür.

Anahtar Kelimeler: Çocuk sahibi olma, Doğurganlık, Emzirme, Kadın, Tutumlar

#### 1. INTRODUCTION

Breastfeeding is one of the most special and unique experiences shared between a mother and her baby. It offers a wide range of benefits for both the child and the mother. Breastfeeding significantly contributes to the healthy growth and development of infants, accelerates the mother's postnatal recovery process, and strengthens the mother-infant bond [1]. It is recommended that breastfeeding should begin as soon as possible after birth. Infants should be exclusively breastfed for the first six months, and breastfeeding should continue until at least two years of age [2, 3]. However, the breastfeeding experience may not always proceed as smoothly as desired, as various environmental factors can negatively impact it [4]. Factors such as a lack of suitable breastfeeding environments, adherence to traditional practices, and insufficient social support can hinder breastfeeding. Additionally, breastfeeding should occur every one to three hours during the initial postnatal period, depending on the infant's hunger cues, and should be guided by the infant's needs as they grow [5]. Therefore, it is recommended that mothers continue breastfeeding in any environment. However, mothers may not always find appropriate spaces to breastfeed and may need to do so in public. Unfortunately, breastfeeding in public is often viewed as taboo and is frequently met with societal disapproval [6]. This can lead to mothers feeling reluctant to breastfeed in public. Mothers who do not breastfeed in public are more likely to cease breastfeeding at an earlier stage [7]. Research has shown that mothers who breastfeed at their own discretion tend to have more positive attitudes toward breastfeeding [8]. However, societal criticism can negatively affect a mother's breastfeeding attitudes. Consequently, this may result in the cessation of breastfeeding at an earlier stage. Data from the Turkey Demographic and Health Survey (2018) indicate that only 41% of infants in Turkey are breastfed exclusively for the first six months, with an average breastfeeding duration of 1.8 months [9]. This rate is below the global average for breastfeeding [10]. Given these findings, it is essential for society and healthcare systems to prioritize supporting and encouraging breastfeeding. Raising awareness and understanding the attitudes of individuals, particularly those in educational institutions, toward breastfeeding is crucial. Exploring the perspectives of female students, who will become mothers in the future, on breastfeeding in public spaces could help improve breastfeeding rates in Turkey. Nevertheless, it is possible that the perspectives of female students may be influenced by a number of factors. It is possible that the levels of empathy displayed by female students who intend to have children in the future towards other mothers may vary. Understanding the awareness of individuals studying in health-related fields is particularly important.

The aim of this study was to evaluate the perspectives of female students at the Faculty of Health Sciences on breastfeeding in public places, as well as their attitudes toward childbearing and fertility.

## 2. MATERIAL AND METHODS

## 2.1. Study Design

This study employed a descriptive and cross-sectional design. It was conducted at the Faculty of Health Sciences of a foundation university in Istanbul, Turkey, between October 2023 and January 2024.

## 2.2. Study Population

The study population consisted of female students enrolled at the Faculty of Health Sciences of a foundation university. The faculty includes departments of nursing, nutrition and dietetics, and physiotherapy and rehabilitation. The total number of female students in the faculty is known to be 225. Based on a sample size calculation with a 5% margin of error and 80% power, it was determined that at least 95 participants should be included in the study. However, no sampling calculation was performed, as the aim was to reach the entire population using the full census method, a type of non-probability sampling. The study was completed with a total of 202 participants who met the inclusion criteria and agreed to participate.

The inclusion criteria for the study were as follows: being female, over 18 years of age, an active student at the Faculty of Health Sciences, having no communication barriers, voluntarily agreeing to participate, having no prior childbirth experience, having no mental disabilities, and being able to communicate in Turkish. The exclusion criteria were as follows: being under 18 years of age, being male, not being a student at the Faculty of Health Sciences, having given birth previously, having communication barriers, declining to participate in the study, having mental disabilities, and being unable to communicate in Turkish.

## 2.3. Data Collection

The data were collected through face-to-face interviews using the 'Data Collection Form' and the 'Attitudes Towards Fertility and Having Children Scale (AFCS)'.

**Data Collection Form:** The data collection form was developed by the researchers in accordance with the existing literature on the subject [1, 4, 6-7]. The questionnaire comprises two sections. The first section gathers information on the socio-demographic characteristics of female students, while the second section includes 20 questions designed to assess their perspectives on breastfeeding in a social context.

Attitudes towards Fertility and Childbearing Scale (AFCS): The scale was developed by Söderberg et al. (2013) to assess the attitudes of women aged 20-30 years who have never given birth toward fertility and childbearing [11]. The adaptation of the scale into Turkish was carried out by Aşcı and Gökdemir in 2021 [12]. The AFCS is a five-point Likert-type scale consisting of three factors: Factor I (Importance of Fertility for the Future), Factor II (Seeing Having Children as an Obstacle) and Factor III (Expectations and Planning). The evaluation of the AFCS is based on the sum of the scores assigned to each factor. Higher scores in the first and third factors indicate that women hold positive attitudes toward having children. Conversely, an increase in the score for the second factor suggests that women perceive having children as an obstacle to their current lives. In the Turkish version of the scale, Cronbach's alpha values were found to be 0.91 for the first factor, 0.90 for the second factor, and 0.60 for the third factor.

## 2.4. Statistical Analysis

The data were analyzed using the Jamovi statistical software (version 2.3.28.0). The normality of the data was evaluated using the Shapiro-Wilk test, along with the assessment of skewness and kurtosis values and the examination of Q-Q plot graphs. Descriptive data were expressed as numbers, percentages and arithmetic means. Nonparametric tests were applied to data that did not follow a normal distribution. The Mann-Whitney U test was used to compare the mean scores

between two groups, while the Kruskal-Wallis test was employed for datasets involving more than two groups.

## 2.5. Ethic Approval

The study was conducted in accordance with the Declaration of Helsinki. Prior to the study, institutional permission (dated 27.09.2023) was obtained from the location where the research would be conducted. Additionally, the necessary approvals were secured from the non-interventional ethics committee of a foundation university. The owner of the scale used in the study was contacted via email to obtain permission for its use. Furthermore, the researcher obtained informed consent from each participant before beginning data collection. This study was presented as a summarized oral presentation at the 12th International Gevher Nesibe Health Sciences Conference, held on February 19-20, 2024.

## 3. RESULTS

The study was conducted with a total of 202 female students enrolled at the Faculty of Health Sciences of a foundation university. The mean age of the women who participated in the study was  $20.8 \pm 3.44$  years. Table 1 presents a comparison of the sociodemographic characteristics and scale sub-factor scores of female students enrolled at the Faculty of Health Sciences.

**Table 1.** Comparison of sociodemographic characteristics and scale sub-factor scores of female students (N=202)

Variable	n (%)	Factor 1: Importance of Fertility for the Future M±SD	Factor 2: Seeing Having Children as an Obstacle M±SD	Factor 3: Expectations and Planning M±SD
Age (years)				
18-24 (1)	182(90.1)	35.5±10.5	41.4±7.4	22.9±3.0
25-34 (2)	17(8.4)	38.9±8.1	35.4±7.3	21.2±4.1
35-44 (3)	3(1.5)	40.3±17.9	39.3±7.8	19.3±9.8
Statistical Analysis		$X^2=2.37$	$X^2=10.4$	$X^2=3.46$
p		p=0.306	p=0.006	p=0.177
Marrital Status				
Married	7 (3.5)	38.7±12.8	34.7±9.5	17.3±6.8
Unmarried	195 (96.5)	35.7±10.3	41.1±7.4	22.9±2.9
Statistical Analysis		Z=600	Z=399	Z=365
p		p=0.589	p=0.062	p=0.030
Income Status				
Income equals expenses	98 (48.5)	34.1±9.6	$40.8 \pm 7.9$	22.4±3.6
Income less than expenses	66 (32.7)	37.4±10.6	41.8±6.8	22.9±3.2
Income more than expenses	38 (18.8)	37.6±11.4	$39.5 \pm 8.0$	23.1±2.6
Statistical Analysis		$X^2 = 6.28$	$X^2=1.98$	$X^2=0.867$
p		p=0.043	p=0.371	p=0.648
Study Programme				
Nursing (1)	102 (50.5)	36.6±10.7	40.3±7.4	22.3±3.1
Nutrition and Dietetics (2)	59 (29.2)	35.0±10.2	42.8±7.4	23.5±3.5
Physiotherapy	41 (20.3)	35.0±9.8	39.6±7.9	22.6±3.5
and Rehabilitation (3)				
Statistical Analysis		$X^2=0.670$	$X^2=7.27$	$X^2=11.9$
p		p=0.715	p=0.026	p=0.003

Class level				
1st-year student (1)	65 (32.2)	32.1±9.5	41.2±7.9	$22.8 \pm 3.7$
2nd-year student (2)	49 (24.3)	$37.3\pm10.9$	$38.9 \pm 8.7$	21.1±3.9
3rd-year student (3)	71 (35.1)	36.2±9.7	$42.4 \pm 6.0$	23.5±2.3
4th-year student (4)	17 (8.4)	44.4±9.8	39.1±8.0	23.6±1.9
Statistical Analysis		$X^2 = 18.6$	$X^2 = 5.67$	$X^2 = 21.0$
p		p<0.001	p=0.129	p<0.001
Status of Previously				
Receiving Information on				
Breastfeeding				
Yes	99 (49.0)	36.6±9.5	41.1±7.5	22.8±3.1
No	103 (51.0)	35.1±11.3	40.7±7.7	22.6±3.5
Statistical Analysis		Z=4639	Z=4956	Z=4952
p		p=0.268	p=0.732	p=0.713
Status of Seeing				
Breastfeeding Women in				
<b>Public Places</b>				
Yes	162(80.2)	36.1±9.9	40.7±7.7	22.6±3.4
No	40 (19.8)	34.5±12.2	41.5±7.2	23.0±3.0
Statistical Analysis		Z=2865	Z=3067	Z=3030
p		p=0.257	p=0.602	p=0.510

Note. n=population size, %= percentage, M=Mean, SD= Standart Deviation, Z= Mann Whitney U,  $X^2$ =Kruskalwallis.

A statistically significant difference was identified between the overall mean scores for 'Factor 2: Seeing Having Children as an Obstacle' and the age groups of the students (p<0.05) (Table 2.) The mean scores for students in the 18-24 age group were significantly higher than those for students in other age groups. A significant difference was found between the marital status of the students and the mean scores of 'Factor 3: Expectations and Planning' (p<0.05). 'Factor 3; Expectations and Planning' scores of single students were found to be higher than married students. A statistically significant difference was identified between the students' department of study and the mean scores for Factors 2 and 3 (p<0.05). The mean scores of the second and third sub-factors of the scale for students in the Department of Nutrition and Dietetics were found to be higher than those of students in other departments. There was a significant difference between the students' class levels and the average scores for 'Factor 1: The Importance of Fertility for the Future' and 'Factor 3: Expectations and Planning.' The average scores for "Factor 1: The Importance of Fertility for the Future" were found to be higher among fourth-year students compared to other class levels. Conversely, the average scores for "Factor 3: Expectations and Planning" were lower among second-year students compared to other class levels (Table 2).

**Table 2.** Attitudes towards fertility and childbearing scale (AFCS) sub-factor scores (N=202)

Sub-Factors	Item	M±SD	Min-Max
	Number		(Median)
Factor 1: The Importance of Fertility for the	12	$35.8 \pm 10.4$	12.0-60.0 (36.0)
Future			
Factor 2: Seeing Having Children as an	10	$40.9 \pm 7.6$	10.0-50.0 (42.0)
Obstacle			
Factor 3: Expectations and Planning	5	22.7±3.3	5.0-25.0 (24.0)

*Note. M=Mean, SD=Standart Deviation, Min=Minimum, Max= Maximum* 

Table 3 shows the perspectives of female students on breastfeeding in public places.

**Table 3.** Female students' perspectives on public breastfeeding (N=202) Variables % I feel uncomfortable being in the same environment with a breastfeeding woman 5.0 Yes 10 No 177 88.0 Undecided 14 7.0 It is normal to talk or interact with a breastfeeding woman. 172 85.15 Yes No 18 8.91 12 Undecided 5.94 Breastfeeding in public places such as public transport, shopping malls, cafes and parks is a normal behaviour. 130 64.4 Yes No 17.3 35 Undecided 37 18.3 A woman should bottle-feed her baby instead of breastfeeding in public. 30 14.9 123 60.9 No 49 24.3 Undecided Breastfeeding mothers should only breastfeed in breastfeeding rooms in public places. 30.2 Yes 61 No 94 46.5 Undecided 47 23.3 If there is no breastfeeding room in a public area, the mother should breastfeed her baby in the toilet. Yes 26 12.9 67.3 No 136 Undecided 40 19.8 The breast is a sexual object. It is therefore disrespectful to show the breast during breastfeeding. Yes 30 14.9 69.8 No 141 Undecided 31 15.3 When breastfeeding in public, a woman should always cover her breast with a blanket or sheet. Yes 145 71.9 No 18 8.9 Undecided 39 19.3 I think breastfeeding in public is against social morality. 16 7.9 Yes 81.2 No 164 Undecided 22 10.9 I would be embarrassed to see a photo/video of a woman breastfeeding in the presence of others. Yes 31 15.3 No 157 77.7 7.0 Undecided 14 A woman should not share a photo or video of herself breastfeeding on social media. Yes 100 49.5 48 23.8 No Undecided 54 26.7

I do not find it hygienic for a mother to breastfeed her baby in p	oublic.	
Yes	71	35.1
No	68	33.7
Undecided	63	31.2
If I have a child in the future, I don't want to breastfeed in publi	ic.	_
Yes	96	47.5
No	50	24.8
Undecided	56	27.7

*Note. n*=population size, %= percentage

Table 4 shows the comparison of female students' perspectives towards breastfeeding in the social field and scale sub-factor scores. There is a statistically significant difference between the responses to the statement "It is normal to talk or interact with a breastfeeding woman" and the mean scores of Factor 1: The Importance of Fertility for the Future (p<0.05).

**Table 4.** Comparison of female students' social perspectives on public breastfeeding and scale sub-factor scores (N=202)

	n	%	Factor 1:	Factor 2:	Factor 3:
Variable			Importance of		<b>Expectations</b>
			Fertility for the	Children as an	and Planning
			Future	Obstacle	
			M±SD	M±SD	M±SD
			conment with a breastfo		
Yes	10	5.0	$43.90 \pm 14.68$	45.30±6.62	23.50±2.01
No	177	88.0	35.54±10.09	40.68±7.33	22.62±3.19
Undecided	14	7.0	34.20±9.48	39.78±10.50	22.57±5.301
Statistical Analysi	S		$X^2=4.90$	$X^2=4.97$	$X^2=1.04$
p			p=0.086	p=0.083	p=0.595
		eract with a breast			
Yes	172	85.15	34.80±10.00	40.65±7.66	22.52±3.47
No	18	8.91	39.80±12.30	42.55±6.98	23.11±2.05
Undecided	12	5.94	42.00±10.80	39.58±7.50	24.25±1.71
Statistical Analysi	S		$X^2 = 8.66$	$X^2=2.16$	$X^2=4.66$
р			p=0.013	p=0.340	p=0.097
	oublic p	laces such as publ	ic transport, shopping	malls, cafes and pa	irks is a normal
behaviour.					
Yes	130	64.4	35.50±10.76	41.08±7.69	22.59±3.21
No	35	17.3	36.30±10.93	40.34±8.13	22.62±3.93
Undecided	37	18.3	35.90±8.89	40.02±6.73	23.02±3.08
Statistical Analysi	S		$X^2=0.486$	$X^2=1.62$	$X^2=0.527$
_p			p=0.784	p=0.444	p=0.768
A woman should	bottle-fe	eed her baby instea	nd of breastfeeding in p		
Yes	30	14.9	36.40±10.81	41.50±6.57	23.33±2.26
No	123	60.9	35.50±11.00	41.00±8.08	22.75±3.40
Undecided	49	24.3	35.80±8.77	40.30±7.00	22.08±3.56
Statistical Analysi	S		$X^2=0.111$	$X^2=0.934$	$X^2=4.54$
p			p=0.946	p=0.627	p=0.103
Breastfeeding mothers should only breastfeed in breastfeeding rooms in public places.					
Yes	61	30.2	37.00±10.10	40.10±7.80	22.24±4.67
No	94	46.5	35.10±10.80	41.39±7.76	22.90±2.59
Undecided	47	23.3	35.30±10.10	40.74±6.99	22.78±2.35
Statistical Analysi	S		$X^2=2.11$	$X^2=1.90$	$X^2=1.03$
р			p=0.348	p=0.386	p=0.597
If there is no breastfeeding room in a public area, the mother should breastfeed her baby in the toilet.					

Yes	26	12.9	36.20±9.90	39.90±9.09	22.65±3.98
No	136	67.3	35.90±11.01	41.22±7.39	22.97±2.73
Undecided	40	19.8	34.80±8.77	40.22±7.11	21.67±4.38
Statistical Anal	ysis		$X^2=0.518$	$X^2=1.09$	$X^2=3.01$
p	,		p=0.772	p=0.580	p=0.222
	sexual obj	ect. It is there	fore disrespectful to sho	ow the breast during	breastfeeding.
Yes	30	14.9	38.00±11.40	40.66±6.92	21.36±5.08
No	141	69.8	35.20±10.20	40.90±7.71	22.97±2.56
Undecided	31	15.3	35.80±10.70	40.22±7.80	22.58±3.95
Statistical Anal	ysis		$X^2=1.16$	$X^2=0.528$	$X^2=1.17$
p			p=0.559	p=0.768	p=0.557
I think breastfe	eding in p	oublic is agains	t social morality.		
Yes	16	7.9	37.00±12.70	39.75±10.15	21.12±6.35
No	164	81.2	35.70±10.10	40.85±7.50	22.90±2.50
Undecided	22	10.9	34.50±11.70	40.81±6.23	22.13±4.97
Statistical Anal	ysis		$X^2=1.02$	$X^2=0.207$	$X^2=0.005$
р	,		p=0.602	p=0.902	p=0.997
I would be emb	arrassed t	to see a photo/	video of a woman breas	tfeeding in the prese	nce of others.
Yes	31	15.3	37.50±12.57	39.20±8.55	21.93±5.25
No	157	77.7	35.20±9.94	41.20±7.61	22.77±2.87
Undecided	14	7.0	37.30±10.87	41.00±4.70	23.21±2.22
Statistical Anal	ysis		$X^2 = 2.22$	$X^2=1.91$	$X^2=0.269$
p			p=0.329	p=0.385	p=0.874
A woman shoul	d not sha	re a photo or v	ideo of herself breastfe	eding on social media	ì.
Yes	100	49.5	34.90±10.70	40.20±7.53	22.28±3.96
No	48	23.8	35.80±10.20	41.97±8.48	23.08±2.70
Undecided	54	26.7	37.10±10.10	41.03±6.79	23.05±2.26
Statistical Anal	ysis		$X^2=1.97$	$X^2=3.86$	$X^2=1.57$
p			p=0.374	p=0.145	p=0.455
I do not find it l	hygienic f	or a mother to	breastfeed her baby in	public.	
Yes	96	47.5	36.00±10.40	40.60±7.53	22.37±4.05
No	50	24.8	35.10±10.10	40.14±8.51	23.04±2.69
Undecided	56	27.7	35.70±11.00	41.82±6.77	22.87±2.21
	•		$X^2=0.686$	$X^2=1.16$	$X^2=1.19$
Statistical Anal	ysis –		$\Lambda = 0.000$	p=0.559	$\Lambda = 1.17$

Note. n=population size, %= percentage,  $X^2$ =Kruskalwallis test, p=significancy.

## 4. DISCUSSION

The objective of this study was to evaluate the perspectives of female students at the Faculty of Health Sciences on breastfeeding in public places, as well as their attitudes toward childbearing and fertility. The study revealed that female students exhibited a predominantly positive attitude toward fertility and childbearing. The mean score of the female students in the study for the 'Importance of Future Fertility' factor was found to be  $35.8 \pm 10.4$ . In studies conducted in Turkey using the same scale, the mean scores of women for the importance of future fertility ranged between 28.42 and 39.47 [4, 12, 13]. The findings of this study are consistent with those reported in the existing literature.

Fertility and childbearing are significant and highly valued aspects for many women. However, factors such as career focus and economic uncertainties may lead women to postpone childbearing [14]. According to 2022 data from the Turkish Statistical Institute, the fertility rate in Turkey has been steadily declining, and the average age at which women have their first childbirth is reported to be 26.8 years [15]. The results of this study indicate that students in the 18-24 age group, who perceived having children as an obstacle, exhibited higher scores compared to students in other age groups. In a study conducted by Soederberg and colleagues, it was found that younger women

had higher scores for perceiving having children as an obstacle than older women [16]. This may be attributed to the fact that younger women have recently begun their educational careers and are more focused on their future professional development, leading them to view having children as a potential obstacle to their career advancement.

Breastfeeding should occur every 1-3 hours in the first days after birth, depending on the infant's hunger cues. As the infant grows, the frequency of breastfeeding should be determined by the infant's needs [5]. Therefore, it is recommended that mothers be able to breastfeed in any environment. However, the mother may not always find a suitable environment for breastfeeding and may need to breastfeed in public places. Among the female students who participated in the study, 64.4% indicated that they considered breastfeeding in public places—such as public transport, shopping malls, cafés, and parks—to be normal behavior. In another study conducted in Turkey, 60% of the participants also reported that they viewed breastfeeding in public places as normal behavior [4]. Similarly, in a study conducted by Russell and Ali in Canada (2017), 75% of participants found it acceptable for mothers to breastfeed their babies in restaurants and shopping centers [17]. In a study conducted in China, 65% of participants considered breastfeeding in public to be normal [18]. Although breastfeeding is a natural and essential practice for mothers and infants, it is important to note that it may not be universally accepted as normal in every culture. This may be attributed to the visibility of the breast or the perception of the breast as a sexual object [19]. In the present study, 14.9% of female students perceived the breast as a sexual object and considered it disrespectful to expose the breast during breastfeeding. Negative attitudes toward breastfeeding in public may lead mothers to breastfeed their infants in unhygienic environments. Therefore, it is recommended that awareness programs be implemented to normalize breastfeeding in public places or to provide appropriate breastfeeding environments for mothers.

Some mothers may choose to share images or videos of breastfeeding on social media platforms. In this study, 49.5% of the surveyed students expressed the opinion that women should refrain from sharing such content on social media. This highlights a clear dichotomy in societal views regarding the sharing of breastfeeding-related content on social media [20]. The findings of this study align with those reported in the existing literature. As the students in the sample did not have children, they may have perceived such posts as meaningless. However, the visibility of breastfeeding on social media can serve as a source of inspiration for other mothers facing challenges with breastfeeding, potentially fostering more positive attitudes toward the practice. In a pilot study conducted by Newell et al. (2022), participants were shown photographic images of women breastfeeding in public [21]. The study yielded positive results, demonstrating an improvement in breastfeeding attitudes among the participating mothers.

The study revealed that the majority of female students expressed a favorable attitude toward breastfeeding in public. Only 5% of the students indicated that they felt uncomfortable in the presence of a woman who was breastfeeding. In a study conducted by Coomson et al. (2018) involving 300 women, 31.3% of participants reported feeling uncomfortable with another woman breastfeeding in a public place [22]. Similarly, in a qualitative study conducted by Aloysius and Jamaludin (2018) with 40 undergraduate students, some participants reported feelings of embarrassment, shyness, nervousness, and discomfort when observing a woman breastfeeding in public [19]. Furthermore, 35% of the female students participating in the study expressed no support for the practice of breastfeeding in public. The findings of the study indicate that the students' perspectives on breastfeeding in the community are more positive than those reported in the existing literature. This may be attributed to the fact that the students who participated in the study were pursuing studies in the field of health, and breastfeeding education was incorporated into their academic programs.

Although individuals may hold favorable attitudes toward other women breastfeeding in public, they may be reluctant to engage in this behavior themselves. In the study, 47.5% of female students indicated that they would be disinclined to breastfeed in public if they had a child in the future, while 17.7% expressed uncertainty on the matter. In a study conducted by Locascio and

Cho (2017), 57.4% of participants indicated that they would not engage in public breastfeeding [23]. Similarly, in a study conducted by Scott et al. (2015), only 59.1% of the participating mothers reported that they breastfed their babies in public [7]. The findings of this study are consistent with those of previous studies in the literature. This reluctance may be attributed to women's fear of being judged by society and the assumption that others may not demonstrate the same level of understanding or compassion toward them when they breastfeed in public.

#### Limitations

It should be noted that the Attitudes towards Fertility and Childbearing Scale, as used in the study, is only applicable to women of childbearing age. Consequently, the study is limited in that it only considered female students' attitudes toward fertility and their perspectives on breastfeeding. Additionally, the variation in the number of students enrolled in different departments within the Faculty of Health Sciences may have influenced the study's outcomes, particularly in the context of comparative analyses.

#### 5. CONCLUSIONS

The findings indicated that female students generally held positive views on breastfeeding in public spaces and exhibited favorable attitudes toward childbearing and fertility. However, it was determined that they held negative perspectives and taboos on certain issues. It is crucial to address and challenge these taboos among female students, who will become the mothers of the future, in order to foster positive perspectives and increase breastfeeding rates in Turkey. To this end, it is recommended that the education programs for students studying at the Faculty of Health Sciences include a greater focus on public breastfeeding and fertility.

## **Ethics Committee Approval**

Before starting the study, institutional permission (dated 27.09.2023) was obtained from the place where the research would be conducted. Prior to the commencement of the study, the requisite permissions were obtained from the non-interventional ethics committee of a foundation university (dated 12/10/2023 and numbered 2023/120).

## **Contribution of Authors**

Fatma Toksöz: Conception, Design, Supervision, Resources, Analysis and/or Interpretation, Literature Review, Writing, Critical Review; Rabia Aydın: Conception, Design, Supervision, Resources, Data Collection and/or Processing, Literature Review, Critical Review; Bayram Demir: Conception, Design, Supervision, Resources, Data Collection and/or Processing, Literature Review, Critical Review

### **Conflict of Interest**

There is no conflict of interest between the authors.

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## REFERENCES

- 1. North, K., Gao, M., Allen, G. and Lee, A.C. (2022). Breastfeeding in a global context: Epidemiology, impact, and future directions. *Clinical Therapeutics*, 44(2), 228-244.
- 2. Meek, J.Y., Noble, L. and Section on Breastfeeding. (2022). Policy statement: Breastfeeding and the use of human milk. *Pediatrics*, 150(1), e2022057988.
- 3. WHO (2023). Infant and young child feeding. World Health Organization (WHO). Accessed date: 25.08.2024. https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding#:~:text=WHO%20and%20UNICEF%20recommend%3A,years%20of%20age%20or%20 beyond.
- 4. Dundar, C. and Elverdi, T.K. (2023). The impact of the COVID-19 pandemic on the attitude towards childbearing of married aged 20-30 Turkish women who are not yet mothers: A cross-sectional study. *BMC Public Health*, 23(1), 1050.
- 5. CDC (2022). How much and how often to breastfeed. Centers for Disease Control and Prevention (CDC). Accessed date: 25.08.2024.

- https://www.cdc.gov/nutrition/InfantandToddlerNutrition/breastfeeding/how-much-and-how-often.html
- 6. Kaya, Z., Yılmaz, B. and Satılmış, İ.G. (2019). Views and attitudes toward breastfeeding in public places. *Journal of Health Science Professionals*, 6(3), 595-609.
- 7. Scott, J.A., Kwok, Y.Y., Synnott, K., Bogue, J., Amarri, S. and Norin, E. (2015). A comparison of maternal attitudes to breastfeeding in public and the association with breastfeeding duration in four European countries: Results of a cohort study. *Birth*, 42(1), 78-85.
- 8. Toksöz, F., Uslu, H., Açıkgöz, A. and Çemrek, F. (2023). Attitudes toward breastfeeding of mothers breastfeeding 0–6-month-old infants during the COVID-19 pandemic and impacting factors. *Journal of Health and Life Sciences*, 5(2), 71-79.
- 9. Hacettepe University Institute of Population Studies. (2019). 2018 Turkey Demographic and Health Survey: Main report. Ministry of Health. http://www.sck.gov.tr/wp-content/uploads/2020/08/TNSA2018 ana Rapor.pdf
- 10. UNICEF (2022). Breastfeeding. United Nations International Children's Emergency Fund (UNICEF). Accessed date: 25.08.2024. https://data.unicef.org/topic/nutrition/breastfeeding/
- 11. Söderberg, M., Lundgren, I., Christensson, K. and Hildingsson, I. (2013). Attitudes toward fertility and childbearing scale: An assessment of a new instrument for women who are not yet mothers in Sweden. *BMC Pregnancy and Childbirth*, 13(1), 197.
- 12. Aşcı, Ö. and Gökdemir, F. (2021). Turkish adaptation of the attitudes toward fertility and childbearing scale. *Kocaeli Medical Journal*, 10(1), 194-205.
- 13. Acer, M.H., Özbek, H. and Çakır, D. (2023). Investigation of nulliparous women's attitudes toward fertility and childbearing. *Cumhuriyet Medical Journal*, 45(3), 125-134.
- 14. Nazaré, P.F., Fernandes Pais, A.S. and Figueiredo-Dias, M. (2022). Postponing motherhood: A demographic and contemporary issue. *Current Women's Health Reviews*, 18(1), 28-36.
- 15. TSI (2023). Birth statistics, 2022. Turkish Statistical Institute (TSI). Accessed date: 25.08.2024. https://data.tuik.gov.tr/Bulten/Index?p=Dogum-Istatistikleri-2022-49673
- 16. Söderberg, M., Christensson, K., Lundgren, I. and Hildingsson, I. (2015). Women's attitudes towards fertility and childbearing: A study based on a national sample of Swedish women validating the Attitudes to Fertility and Childbearing Scale (AFCS). *Sexual & Reproductive Healthcare*, 6(2), 54-58.
- 17. Russell, K. and Ali, A. (2017). Public attitudes toward breastfeeding in public places in Ottawa, Canada. *Journal of Human Lactation*, 33(2), 401-408.
- 18. Zhao, Y., Ouyang, Y.Q. and Redding, S.R. (2017). Attitudes of Chinese adults to breastfeeding in public: A web-based survey. *Breastfeeding Medicine*, 12(5), 316-321. https://doi.org/10.1089/bfm.2017.0013
- 19. Aloysius, M. and Jamaludin, S.S.S. (2018). Breastfeeding in public: A study of attitudes and perception among Malay undergraduates in Universiti Sains Malaysia. *Geografia*, 14(4).
- 20. Timurturkan, M. (2020). Evaluation of the visuals shared by mothers on Instagram about breastfeeding from the point of heteronormative gender patterns. *Akdeniz Journal of Women's Studies and Gender*, 3(1), 1-29.
- 21. Newell, C., Sandoz, E. and Tyndall, I. (2022). A pilot study of the impact of brief exposure to images of breastfeeding mothers on attitudes toward mother's breastfeeding in public. *Health Communication*, 37(2), 185-190.
- 22. Coomson, J.B. and Aryeetey, R. (2018). Perception and practice of breastfeeding in public in an urban community in Accra, Ghana. *International Breastfeeding Journal*, 13(1). https://doi.org/10.1186/s13006-018-0161-1
- 23. Locascio, S.P. and Cho, H.W. (2017). The effect of attitudes toward breastfeeding in public on breastfeeding rates and duration: Results from South Korea. *Asian Journal of Public Opinion Research*, 4(4), 208-245.