

IZMIR DEMOCRACY UNIVERSITY HEALTH SCIENCES JOURNAL IDUHES

e-ISSN:2651-4575

IDUHeS, 2022; 5(3): 635-650 doi: 10.52538/iduhes.1127267

Araştırma Makalesi- Research Paper

CULTURAL PERSPECTIVE ON INFERTILITY IN TURKISH SOCIETY: THE ISTANBUL SAMPLE

TÜRK TOPLUMUNDA İNFERTİLİTEYE KÜLTÜREL BAKIŞ: İSTANBUL ÖRNEKLEMİ

Zehra ACAR¹, Ilkay GUNGOR SATILMIS²

Özet

Bu çalışmanın amacı, toplumun infertiliteye ilişkin bilgi, tutum ve görüşlerinin incelenmesidir. Bu tanımlayıcı çalışma, Kasım 2019 ile Nisan 2020 arasında 711 kişiyle (511 kadın ve 200 erkek) gerçekleştirildi. Araştırma verilerin toplanmasında, "Tanıtıcı Bilgi Formu" ve "İnfertiliteye Yönelik Tutum Ölçeği" kullanıldı. Katılımcıların çoğunluğu çocuk sahibi olmanın önemli olduğunu, %28,4'ü gelecekte çocuk sahibi olamama endişesi taşıdığını belirtti. Katılımcıların %22,9'unun infertiliteyi bir yıldan az süredir çocuk sahibi olamama durumu olarak tanımladığı ve %82,4'ünün infertilitenin tedavi edilebilir bir sorun olduğunu düşündüğü belirlendi. İnfertiliteye Yönelik Tutum Ölçeği puan ortalamasının yaş, medeni durum ve çocuk sayılarına göre farklılık gösterdiği belirlendi (p<0,05). İstenen çocuk sayısı ile çocuk sahibi olmaya verilen önem arasında zayıf bir negatif ilişki bulundu. Araştırma sonucunda infertilite konusunda olumlu bir tutumun olduğu saptandı. Ayrıca çocuk sahibi olmanın önemli olduğu ve çocuk sahibi olmaya verilen değer arttıkça infertiliteye yönelik olumsuz tutumun da arttığı saptandı.

Anahtar Kelimeler: İnfertilite; Kültür; Toplum; Bilgi; Tutum

Abstract

The objective of this study was to find out what people in the community knew about infertility, as well as their attitudes and beliefs regarding it. This cross-sectional descriptive survey was conducted between November 2019 and April 2020 with 711 people (511 females and 200 males). To collect the study data, the researchers used the "Descriptive Information Form" and the "Attitudes toward Infertility Scale (ATIS)". The majority of the participants stated that it was important to have a child, 28.4% stated that they were worried about not having a child in the future. It was determined that 22.9% of the participants defined infertility as not having a child in less than one year, and 82.4% of them thought that infertility was a treatable problem. The mean score of ATIS was found to be 48.69±6.8. There was a significant difference between The ATIS score and age, marital status, and the number of live children. The number of children desired and the priority placed on having children were found to have a weak negative correlation. It was discovered as a result of the research that there was a favorable attitude regarding infertility. Furthermore, it was discovered that having a child was significant and that as the value placed on having a child increased, so did the negative attitude toward infertility.

Keywords: Infertility; Culture; Society; Knowledge; Attitude

Geliş Tarihi (Received Date): 07.06.2022, Kabul Tarihi (Accepted Date): 23.11.2022, Basım Tarihi (Published Date): 26.12.2022, ¹ Istanbul University – Cerrahpasa, Florence Nightingale Faculty of Nursing, Department of Women's Health and Diseases Nursing. **E-mail:** zehraky3434@gmail.com, ² Istanbul University – Cerrahpasa, Florence Nightingale Faculty of Nursing, Department of Women's Health and Diseases Nursing. **E-mail:** ilkay.gungorsatilmis@iuc.edu.tr, **ORCID ID's:** Z.A.; http://orcid.org/ 0000-0002-1923-3096, İ.G.S.; http://orcid.org/ 0000-0002-9446-6148. Note: This study was presented as an oral presentation at the 19th National Nursing Students Congress.



1. INTRODUCTION

Infertility is defined by the World Health Organization (WHO) as the situation where pregnancy does not occur despite regular unprotected intercourse in the last year, and this problem affects an estimated 48.5 million couples and 186 million individuals worldwide (WHO 2020). Infertility is a severe problem for both individuals and society, despite the fact that it is not a life-threatening disease in many cultures and societies. (Siyez et al., 2018, p. 174). Culture determines the perception of exposure to diseases and the methods of combating these diseases. The sociocultural meaning of fertility originates from the importance that individuals and societies place on reproduction (Sen & Sevil, 2012, p. 359; Yücesoy et al., 2021, p. 257). In many cultures, having a child is a very valuable phenomenon (Ahmadi & Bamdad, 2017, p. 204). In Turkey's patriarchal culture, motherhood is seen as the center of women's status (Koropeckyj-Cox & Çopur, 2015, p. 374). The decision to have a child can sometimes be taken for individual and sometimes cultural reasons. In most cultures, having children is perceived as the true meaning of life, a sign of love and happiness between spouses, considered necessary for the continuation of marriage, and accepted as a biological, psychological, social and cultural requirement (Aşçı et al., 2017, p.19). Fertility is considered as reproductive success for couples, and infertility is seen as insufficiency and deficiency (Siyez et al., 2018, p. 174). Infertility can cause physical and mental health problems, decreased quality of life, separation and divorce through affecting the quality of marriage, loss of self-confidence, sadness, threat, melancholy, and guilt (Amiri et al., 2016, p. 90). The level of knowledge about having or not having a child is important. In many parts of the world, it is stated that there is insufficient and many misinterpreted information about infertility (Alaee et al., 2019, p. 183). The knowledge of women's fertility and reproductive biology is insufficient, according to a global survey conducted in ten nations with 17,500 women, the majority of whom are of childbearing age (Fido, 2004, pp. 24-28). Infertility may be related to reasons that require treatment in some individuals, and lifestyle behaviors (weight, smoking/alcohol/caffeine consumption, sedentary lifestyle) and changeable causes (time of sexual intercourse, frequency, etc.) in some individuals. Knowing the fertile period in the menstrual cycle increases the chances of pregnancy. Couples must also understand the elements that affect fertility and develop healthy living habits in order to attain their reproductive goals (Hammarberg et al., 2016, p. 7).

In addition to the lack of knowledge, attitudes towards infertility also play an important role in early interventions. Because attitudes affect how individuals see their lives, how they evaluate themselves and how they shape their future relationships. Infertility is frequently described as a humiliating and embarrassing experience, and it is viewed as a failure. Negative attitudes and problems in help-seeking behavior lead individuals to various searches (Siyez et al., 2018, 174). It is critical to assess attitudes regarding infertility in order for couples to have a healthy reproductive experience and to live with infertility in a healthy manner.

It is stated that having sufficient medical knowledge about infertility will be effective in increasing awareness of the subject, understanding the causes of infertility, gaining healthy



lifestyle behaviors that will positively affect fertility, and increasing their participation in the treatment process in case of possible infertility (Çakır et al., 2020, p. 110). In this context, it is important and necessary to evaluate the cultural perspective of the society on infertility, to shed light on the health care and the education programs. (Top et al., 2015, p.48). The purpose of this descriptive study was to determine community members' knowledge, attitudes and beliefs about infertility.

2. MATERIALS AND METHODS

The study's participants were males and females over the age of 18 who lived in Istanbul and could read and understand Turkish. Since Istanbul is the most developed and most populous metropolitan city in Turkey, which receives immigrants from many parts of the country, it constitutes a good example for the cultural perspective of the Turkish society. The study was conducted between November 2019 and April 2020. The convenience sampling method was used for sampling and totally 711 people (511 females, 200 men) volunteered to participate. Research data was collected by face-to-face interviews in crowded public places in Istanbul (squares, shopping center etc.) and by online Google© survey link shared in social media, forums, etc. on the internet.

This study was approved by the Ethical Committee of Istanbul University-Cerrahpaşa Social and Human Sciences Research Ethics Committee (52223-25.10.2019). The study was conducted in accordance with the Principles of the Helsinki Declaration of Principles, and "informed consent" was obtained from the individuals participating in the study.

The research data were obtained with the "Descriptive Information Form" consisting of 52 questions questioning socio-demographic information, knowledge, attitudes and beliefs about infertility, and the "Attitudes toward Infertility Scale (ATIS)" developed by Siyez et al. (2018).

Introductory Information Form

This form, which was developed by the researchers in line with the literature (Karaca et al., 2017, pp. 55-55; Alaee et al., pp. 185-187; Çakır et al., 2020, p. 112) included 52 questions asking the participants' socio-demographic information (age, educational status, economic status, employment status, etc.), their history of having children and infertility, their knowledge of infertility (factors affecting fertility, information about infertility diagnosis, diagnosis and treatment process, etc.), their beliefs and attitudes.

Attitudes toward Infertility Scale (ATIS)

The ATIS developed by Siyez et al. (2018) consists of 12 items. The response style of the scale was arranged in a five-grade structure as "(1) I totally disagree, (2) I disagree, (3) I am undecided, (4) I agree, (5) I totally agree". Items 1, 2, 5, 6, 8, 9, 11 and 12 in the scale are scored in reverse. The scale's highest possible score is 60, while the lowest possible score is 12.



A positive attitude about infertility is indicated by a rise in the scale's scores. The scale's Cronbach Alpha reliability coefficient was found to be 0.83 in Siyez et al. (2018) and 0.82 in this study.

Data analysis was conducted using SPSS 20 package program. In descriptive statistics, mean, standard deviation, minimum, and maximum values were determined for continuous data, whereas percentage values were calculated for discontinuous data. Conformity to the normal distribution was evaluated by one-sample kolmogorov smirnov, skewness and kurtosis values. In statistical analysis of the statistical significance of the difference between the medians of normally distributed data, student's t-test was used for two groups and f-test was used for more than two groups. The level of significance in statistical differences and relationships was accepted as p<0.05.

3. RESULTS

3.1. Sociodemographic Characteristics

511 women and 200 men were included in the study. The mean age of the participants was 30.77 ± 10.86 (min=18, max=75), the mean age at marriage was 23.93 ± 5.15 , and the mean duration of marriage was 13.58 ± 10.68 years. 50.6% of the participants were married. 60.6% of the participants had a university or higher education level, 50.9% were working, and 53% had equal income and expenses (Table 1).

Table-1: Distribution of participants' socio-demographic characteristics (n=711)

Variable	n	%
Age		
≤20	108	15.2
21-30	311	43.7
31-40	148	20.8
41≥	144	20.3
Gender		
Female	511	71.9
Male	200	28.1
Marital status		
Single	351	49.4
Married	360	50.6
Educational status		
Primary School Graduate	59	8.3
Secondary School Graduate	40	5.6
High School Graduate	181	25.5
University or higher	431	60.6
Employment status		
Yes	349	49.1
No	362	50.9
Economical status		
Income less than expenses	200	28.1
Income equal to expenses	377	53.0
Income more than expenses	134	18.9
Family type		
Nuclear family	616	86.6

Extended family 95 13.4

3.2. Features regarding fertility history/plans

Participants reported that having a child was essential to them (mean 7.92±2.91 out of 10) and that family and environmental pressure had a minor impact on their decision to have a child (mean 3.35±3.26 out of 10). 16.9% of the married participants stated that they could not get pregnant within the desired time and 62.2% of these people stated that they applied to a health institution for this reason. 28.4% of the participants were worried about not having children in the future. While 7.9% of married women had three or more children, 39.7% of those surveyed said they desired to have three or more (Table 2).

Table-2: The characteristics of the participants regarding their fertility history/plans (n=711)

Table-2: The characteristics of the participants regarding their fertility history/plans (n=/11)								
Variable	X±SD	Median/Mode						
Importance of having children (out of 10)	7.92 ± 2.91	9/10						
The extent to which family and environmental pressure affect	3.35 ± 3.26	3/0						
the decision to have a child (out of 10)								
	n	%						
Getting pregnant in the desired period after marriage (n=360)								
Pregnancy not planned								
Yes	57	15.9						
No	242	69.3						
	61	16.9						
Applying to the health board due to inability to have children								
(n=61)								
Yes	38	62.2						
No	23	37.7						
Worry about not having children in the future								
Existent								
Nonexistent	202	28.4						
	509	71.6						
Desired number of children								
1	46	6.5						
2	383	53.9						
3 and above	282	39.7						
Number of living children (n:360)								
1	88	12.4						
2	151	21.2						
3 and above	56	7.9						

3.3. Information on Infertility

Only 22.9% of the participants stated that they could consider infertility if they did not have a child in less than a year. 31.6% of the participants stated that infertility was a problem that cannot be prevented, 17.6% stated that it was not a treatable problem. 54.7% of the participants knew at least one treatment method. The most known infertility treatment methods were in vitro fertilization (49.9%) and intrauterin insemination (18.8 %), respectively. The majority of information concerning therapeutic procedures came from the family and the surroundings (Table 3).

Table-3: The knowledge level of the participants about the infertility problem and the treatment process (n=711)

Variable	n	%
How long would you consider infertility without pregnanc	y?	
in less than 1 year	•	
1 year	163	22.9
2-5 years	211	29.7
over 5 years	280	39.4
·	57	8.0
Is infertility a preventable problem?		
Yes	486	68.4
No	225	31.6
Is infertility a treatable problem?		
Yes	586	82.4
No	125	17.6
Knowing infertility treatment methods		
Yes	389	54.7
No	322	45.3
Known infertility treatment methods*		
Intrauterine insemination	73	18.8
In vitro fertilization	355	49.9
Drug therapy	32	4.5
Surgery	15	2.1
Alternative treatment	15	2.1
Other treatment methods	19	2.5
Where did you learn about treatment methods?		
Books	22	3.1
Friend	17	2.4
From family and environment	148	20.9
Television, internet, social media	130	18.3
Hospital or school	75	12

^{*} More than one option

3.4. Comparison of knowledge levels on diagnosis and treatment of infertility in the context of gender

Among the participants, the rate of those who said "I disagree" positively with the statements about infertility such as "Infertility occurs only in women.", " If it is not possible to have children, it is the man's responsibility.", " Women are always at the same chance of having children until they reach menopause." was found to be significantly higher in women than in men (p<0.05). While the proportion of those who said "I agree" positively with the statements "Working conditions of couples can prevent them from having children." is higher in males, the rate of those who said "I agree" with the statement " Overexposure to heat reduces the likelihood of having children for men was found to be significantly higher in women (p<0.05). There was no significant difference between men and women in the responses to other statements regarding the diagnosis and treatment of infertility (p>0.05) (Table 4).



IZMIR DEMOCRACY UNIVERSITY HEALTH SCIENCES JOURNAL

IDUHES e-ISSN:2651-4575

Table-4: Comparison of the knowledge levels of the participants about the diagnosis and treatment of infertility in the context of gender

		Female (n: 511) Male (n: 200)										Test	p	
	Agree		Undecided		Disagree		Agree			Undecided		Disagree		_
	n	%	n	%	n	%	n	%	n	%	n	%		
Infertility is the inability to have children	170	33.3	134	26.2	217	40.	57	28.	57	28.5	86	43.0	1.517	.306
of the couple despite not being protected for at least 1 year.						5		5						
If a woman does not get pregnant after the first sexual intercourse, she is infertile.	12	2.3	23	4.5	476	93. 2	11	5.5	12	6.0	177	88.5	5.408	.067
The one who has a child is not infertile.	281	55. 0	96	18.8	134	26. 2	117	58. 5	31	15.5	52	26.0	1,188	.552
A person can be infertile after giving birth to a child.	264	51. 7	142	27.8	105	20. 5	95	47. 5	54	27.0	51	25.5	2.132	.344
Infertility occurs only in women.	15	2.9	33	6.5	463ª	90. 6	10	5.0	27	13.5	163 ^b	81.5	11.543 a>b	.003*
If it is not possible to have children, it is the man's responsibility.	12	2.3	16	3.1	483ª	94. 5	10	5.0	12	6.0	178 ^b	89.0	6.742 a>b	.034*
One or both of the couples can be infertile.	450	88.1	41	8.0	20	3.9	165	82. 5	22	11.0	13	6.5	4.023	.134
Women are always at the same chance of having children until they reach menopause.	84	16.4	102	20. 0	325ª	63. 6	29	14. 5	76	38.0	95 ^b	47.5	25.332 a>b	.000*
Working conditions of couples can prevent them from having children.	309ª	60.5	100	19. 6	102	20. 0	133 ^b	66. 5	20	10.0	47	23.5	9.499 b>a	.009*
Smoking and consuming alcohol do not affect having children.	73	14.3	61	11. 9	377	73. 8	28	14. 0	30	15.0	142	71.0	1.214	.545
Overexposure to heat reduces the likelihood of having children for men.	158ª	30.9	251	49. 1	102	20. 0	58 ^b	29. 0	80	40.0	62	31.0	.546 a>b	.006*
Infertility is a very difficult disease to treat.	151	29.5	192	37. 6	168	32. 9	54	27. 0	80	40.0	66	33.0	.546	.761
Infertility treatment can be easily done under certain conditions.	284	55.6	184	36. 0	43	8.4	100	50. 0	88	44.0	12	6,0	4.312	.116
Infertility treatment is not a reliable treatment method.	29	5.7	167	32. 7	315	61. 6	18	9.0	65	32.5	117	58.5	2.639	.267

^{*}p<0.05 significance level



IZMIR DEMOCRACY UNIVERSITY HEALTH SCIENCES JOURNAL IDUHES e-ISSN:2651-4575

3.5. Comparison of beliefs and attitudes towards infertility in the context of gender

Among the participants, "If a man is infertile, it indicates that he has not fulfilled his masculine duty." and "Infertile individuals are always excluded from society.", the rate of those who positively said "I disagree" was found to be significantly higher in women than in men (p<0.05). Similarly, the rate of those who said "I agree" positively to the statements "I can ask a woman who is infertile about the process." and "I have no problem helping and talking to a woman who is infertile." was found to be significantly higher in women than in men (p<0.05). Other statements, such as beliefs and attitudes towards infertility, did not show a significant difference between men and women's responses (p>0.05) (Table 5).



Table-5: Comparison of participants' beliefs and attitudes towards infertility in terms of gender

			Femal	e (n: 511)				Male	(n: 200)	Test	p			
	Agree		Unde	Undecided D		Disagree Agree		e Undecided		cided	Disagree		value	•
	n	%	n	%	n	%	n	%	n	%	n	%		_
Children are essential in a family.	268	52.4	113	22.1	130	25.4	116	58.0	32	16.0	52	26.0	3.473	.176
Having children is a woman's duty.	57	11.2	34	6.7	420	82.2	28	14.0	20	10,0	152	76.0	3.778	.151
If a man is infertile, it indicates that he has not fulfilled his masculine duty.	18	3.5	28	5.5	46 ^a	91.0	18	9.0	15	7.5	167 ^b	83.5	10.397 a>b	.006*
An infertile person can never have children.	44	8.6	92	18.0	375	73.4	17	8.5	39	19.5	144	72.0	.214	.898
If I found out that we were infertile, I would have had a child through adoption, rather than treatment.	100	19.6	205	40.1	206	40.3	40	20.0	66	33.0	94	47.0	3.447	.178
nfertile men are under more stress and pressure than infertile women.	158	30.9	139	27.2	214	41.9	79	39.5	53	26.5	68	34.0	5.540	.066
The marriage of infertile couples is n danger.	277	54.2	158	30.9	76	14.9	117	58.5	50	25.0	33	16.5	2.448	.294
infertile individuals are always excluded from society.	64	12.5	68	13.3	379ª	74.2	39	19.5	32	16.0	129 ^b	64.5	7.450 a>b	.024*
wouldn't talk about a child with a couple on infertility treatment.	209	40.9	123	24.1	179	35.0	73	36.5	43	21.5	84	42.0	2.997	.224
can ask a woman who is infertile bout the process.	190	37.2	161	31.5	160	31.3	53	26.5	62	31.0	85	42.5	10.003	.007*
have no problem helping and alking to a woman who is nfertile.	339 a	66.3	132	25,8	40	7,8	102 ^b	51,0	57	28,5	41	20,5	26.100 a>b	,000*

Pearson's chi-squared test, *p<0.05 significance level



IZMIR DEMOCRACY UNIVERSITY HEALTH SCIENCES JOURNAL

e-ISSN:2651-4575

3.6. Comparison of Attitudes toward Infertility Scale (ATIS) score and sociodemographic characteristics

The mean score of ATIS was found to be 48.69 ± 6.8 . A significant difference was found between the ATIS score and age, marital status, and the number of living children (p<0.05) (Table 6).

Table-6: Comparison of the participants' total scores on ATIS with their sociodemographic characteristics

	ATIS score	Test value	p value
Age			
1<20	$49,60\pm6,64$	F: 8,442	,000*
² 21-30	48,69±7,35	4<1	
³ 31-40	47,00±7,73		
⁴ 41<			
Condon	$45,34\pm8,05$		
Gender Female	40 70 1 6 74	4. 1.015	211
Male	$48,58\pm6,74$	t: 1,015	,311
Wate	$47,97\pm7,52$		
Marital status			
Single	$49,29\pm6,60$	t: 3,341	,001*
Married	$47,55\pm7,21$		
Employment status			
Yes	$48,43\pm6,86$	t: ,077	,938
No	48,39±7,08		
Educational status	10,37=7,00		
Primary School Graduate	47,96±7,74	F: ,409	,746
Secondary School Graduate	48,47±7,59	,	,
High School Graduate	* *		
University or higher	$48,18\pm7,68$		
	$47,55\pm7,57$		
Economical status			
Income less than expenses	$48,49\pm7,54$	F: 2,073	,127
Income equal to expenses	$47,25\pm7,88$		
Income more than expenses	$48,30\pm6,82$		
Family type	-,,-		
Nuclear family	48,36±6,98	t: -,499	,617
Extended family		,	,
Number of living children	48,74±6,94 48,44±7,58		
1 1	46,37±7,79	F: 4,798	,003*
$\overset{1}{\overset{2}{2}}$	43.82 ± 7.42	7. 4,798 3<1	,003
² ³ 3	42,64±8,99	3<1 4<1	
⁴ 4 and above	1 ∠,0 1 ±0,99	4~1	
1 4114 400 10			

Student t test t value (T), F test F value (F), *p < 0.0

3.7. Attitudes toward Infertility Scale (ATIS) score and correlation

A weak negative correlation was found between the number of children wanted (r=.294, p=.000) and the importance given to having children (r=-.167, p=.000).



4. DISCUSSION

Being married in many traditional countries entails the expectation of having children, and having children is viewed as a factor of social status and family life. Within the context of gender roles, being a woman is frequently associated with motherhood (Boz et al., 2018, pp. 507-8; Kaya & Oskay, 2020, p. 486). In a study aiming to determine the perception of infertility of nursing students in Turkey, it was stated that students gave meaning to having children as the purpose/meaning of life and the continuation of the generation (Karaca et al., 2017, pp. 54-6).

While having children was once widely accepted in the Western world as an unavoidable natural element of femininity, it is now said that due to social changes, motherhood has become more of a choice problem, and the decision to have a child has been postponed (Batool & Visser, 2014, pp. 180-1). The couples' decision to have a child is social, cultural and economic, etc. many factors affect it. Advancing marriage and gestational age, changing roles of women and their participation in working life, inadequacy of support mechanisms related to childcare, employment inequality that occurs with having children cause not to have children voluntarily and to postpone the decision to have a child (DeMaria et al., 2020, pp. 9-11). The global average fertility rate is 2.44 per woman for 2020. For the reasons mentioned above, the global fertility rate has decreased by half in the last 50 years (Our World in Data 2020). According to the 2018 Turkey Demographic and Health Survey (TDHS 2018), the ideal number of children among married women has increased from 2.4 to 3.0 in the last 25 years, while the total fertility rate has decreased from 2.7 to 2.3. It was discovered in this study that having children is extremely essential to the participants, with over half of them wanting to have three or more children. As a result in this study, society's influence on the decision to have children was shown to be minimal. This situation can be explained by the changing cultural structure of the society and the change in the meaning of having a child in this context.

Despite the expectation of having a child, approximately 180 million individuals, 8-12% of couples, face infertility problems today (Borght & Wyns, 2018, p. 2). In this study, 16.9% of married women stated that they have problems in having children regardless of medical diagnosis. Individuals may experience worry about not having a kid as a result of society's expectation that they have a child when they marry. In a study, it was determined that 57.63% of women and 42.86% of men were worried about not having a child (Alaee et al., 2019, p. 186). In our study, it was found that 28.4% of the participants were worried about being infertile in the future. Concern about being infertile, it is thought that the value given to having children is increasing for many reasons such as social pressure, increasing infertility prevalence. In addition, the stress of infertility is significant since it can lead to infertility.

Fertility awareness and level of knowledge about infertility can affect individuals' perspective on infertility. Information on fertility and infertility is insufficient in many parts of the world. Many women have little awareness of when they are most fertile and when to seek treatment (Ali et al., 2011). In a study conducted with 277 fertile and 104 infertile individuals,



it was determined that 59% of the participants had poor knowledge about infertility (Abolfotouh et al., 2013). In a study of 447 participants, it was discovered that only 25% of them properly identified that infertility is usually diagnosed after one to two years of regular unprotected sexual intercourse, while the majority assumed it was less than one year or perhaps more than three years (Ali et al., 2011, pp. 3-7). As a result of this study, it was found that only 29.7% of the participants correctly defined the infertility. In addition in this study, the rates of "agree" with the statements "Women are always at the same chance of having children until they reach menopause.", "Working conditions of couples can prevent them from having children and "Overexposure to heat reduces the likelihood of having children for men" were found to be significantly different between men and women. Knowing the correct definition of infertility, fertile periods and affecting factors will affect the perceived stress of being infertile and the pressure of society on infertile couples. For this reason, it is important to correct the common misconceptions about these issues in the society.

In the treatment of infertility, assisted reproductive technologies are used, including the cause of infertility, the duration of infertility, the age of the spouse and partner, personal preferences, lifestyle changes and surgical methods and drug therapy (ACOG, 2021). In the study of Ahmadi and Bamdad (2017, p 207), it was reported that almost all women and men (95.9%) found it acceptable for couples to receive medical treatment for infertility. According to a study involving 210 men, the majority of the participants thought infertility was a treatable problem (68%), while only a small percentage (11%) thought infertility treatments were risky (Gerhard et al., 2014, p. 858). In this study, the rate of those who thought that infertility was not a treatable problem was 17.6%. In addition in this study few of the participants stated that "Infertility is a very difficult disease to treat." and "Infertility treatment is not a reliable treatment method.". It is thought that being properly informed about infertility treatment will enable the couple who have infertility problems to seek medical treatment early without resorting to traditional methods.

The fact that pregnancy happens in the female body and that femininity is associated with parenting leads to the woman being blamed for infertility. Infertility, on the other hand, is a couple's issue that affects both men and women (Kaya & Oskay, 2020, p. 486). In a study, it was reported that 40% of the participants stated that infertility is a problem of both men and women (Ali et al., 2011, p. 3). In this study among the participants, the rate of those who disagreed with the statements "Infertility occurs only in women." and " If it is not possible to have children, it is the man's responsibility." was significantly higher in women than in men. It is thought that understanding the reasons of infertility correctly will lessen social pressure and shame on women, and that treating infertility as a couple's problem will reduce emotional load and improve men's participation in the treatment process.

Since reproductive ability depends on cultural and social beliefs about sexual identity, failing in this regard may negatively affect the infertile person's perception of femininity or masculinity (Bayraktar, 2018, p. 235). For men, not being able to have children is expressed as inadequacy in masculinity function, not continuing the lineage and not experiencing the feeling



of paternity (Kaya & Şahin, 2019, p. 329). In Arya and Dibb's (2016) study, it was stated that men's inability to reproduce causes them to feel "less men". In this study, among the participants "If a man is infertile, it indicates that he has not fulfilled his masculine duty." the rate of those who positively said "I disagree" was found to be significantly higher in women than in men. Similarly, this result shows that reproductive problems negatively affect men's self-perceptions. In Turkish culture, the word "kısır" which expresses infertility, means inefficiency and it is accepted as a defect or deficiency. Cultures place too much social pressure on couples to reproduce. The response to infertility may differ between cultures (Batool & Visser, 2016; Kaya & Oskay, 2019). In this study," Infertile individuals are always excluded from society.", the rate of those who positively said "I disagree" was found to be significantly higher in women than in men. Similarly, the rate of those who said "I agree" positively to the statements "I can ask a woman who is infertile about the process." and "I have no problem helping and talking to a woman who is infertile." was found to be significantly higher in women than in men.

Infertile people's experiences are influenced by sociocultural influences and the significance that society assigns to infertility (Hasanpoor-Azghady et al., 2019, p. 178). In a study conducted in our country, the score obtained from the Attitudes Towards Infertility Scale was determined as 48.59±6.33 in midwifery students and 46.80±6.37 (female:47.58±6.28, male:43.96±6.74) in nursing students (Çakır et al., 2020, p. 111). Similarly, as a result of this study it was found that the mean score of ATIS was 48.69+6.8 (female: 48,58±6,74, male:47,97±7,52), and the participants had a positive attitude towards infertility. This finding can be explained by the fact that the study was done in a major city, the participants had a high level of education, and the average age was young. In addition, as an expected result, in this study, it was found that the more the number of children they wanted and the value they attached to having children, the more negative attitudes they had towards infertility. It is seen that marriage, which has fulfilled the expectation of having children or is accepted as a way of fulfilling, is an important factor determining the attitude. Studies show that cultural factors such as the nuclear or large family, living in an urban or rural area, the family's perspective on the child and pregnancy, and cultural factors can affect the response to infertility (Bayraktar, 2018).

5. CONCLUSION

The findings of this study revealed that having a child was important to the participants, and they had a positive attitude regarding infertility. In addition, it was determined that women had more information about infertility than men. There are differences between cultures in the perception of infertility. In this context, the effect of cultural values on infertility should be questioned. Cultural sensitivity in the treatment of infertility is an important component of patient-centered care (Yücesoy et al., 2021, p. 257). For this reason, it is important for the nurse working in the infertility unit to provide holistic care and treatment by recognizing the society, the culture of that society and the environment in which the person lives, with a professional approach. Knowing the cultural factors affecting infertile individuals by nurses is important and necessary in terms of shedding light on the services to be provided and the training programs



to be made, taking into account the cultural perspective of women in this regard (Top et al., 2015, p. 48). Moreover, an important task falls on primary health care services about supporting people to reach their reproductive goals, increasing knowledge and awareness about fertility and providing preconceptional counseling. The pressure of the society to have a child is undeniable, so it is thought that developing a positive attitude with correct information will reduce the emotional burden experienced by couples.

Acknowledgments

We thank Gizem Babur, Işıl Şen and Pınar Temel for their support in data collection.

Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

6. REFERENCES

Abolfotouh, M. A., Alabdrabalnabi, A. A., Albacker, R.B., Al-Jughaiman, U. A., Hassan SN (2013). Knowledge, attitude, and practices of infertility among Saudi couples. Int J Gen Med, 6:563. doi:10.2147/IJGM.S46884

Ahmadi, A., Bamdad, S (2017). Assisted reproductive technologies and the Iranian community attitude towards infertility. Hum. Fertil, 20(3):204-211. doi:10.1080/14647273.2017.1285057.

Alaee, S., Yousefian, E., Talaiekhozani, A., Ziaee, G. R., Homayoon, H. (2019). Infertility knowledge, attitudes, and beliefs among Iranian college students. J. Environ. Treat. Tech, 7(1),171-178.

Ali, S., Sophie, R., Imam, A. M., Khan, F. I., Ali, S. F., Shaikh, A., Farid-ul-Hasnain, S. (2011). Knowledge, perceptions and myths regarding infertility among selected adult population in Pakistan: A cross-sectional study. BMC Public Health, 11(1),760. doi:10.1186/1471-2458-11-760

American College of Obstetricians and Gynecologists (ACOG) (2018). Treating infertility. Avaible from: https://www.acog.org/womens-health/faqs/treating-infertility Access date: 07 Agust 2021

Amiri, M., Khosravi, A., Chaman, R., Sadeghi, Z., Raei, M., Jahanitiji, M. A., Mehrabian, F. (2016). Social consequences of infertility on families in Iran. Glob J Health Sci, 8(5), 89. doi:10.22074/ijfs.2015.4181



Aşcı, Ö., Gökdemir, F., & Altuntaş, G. (2017). Hemşirelik öğrencilerinin çocuk sahibi olmaya yönelik görüşleri ve çocuk sevme durumları. International Refereed Journal of Nursing Researches, 18. doi:10.17371/UHD2017.2.02

Batool, S. S., de Visser, R. O. (2016). Experiences of infertility in British and Pakistani women: A cross-cultural qualitative analysis. Health Care Women Int. 37(2), 180-196. doi:10.1080/07399332.2014.980890

Bayraktar, E. (2018). Toplumsal cinsiyet, kültür ve şiddetin infertilite ile ilişkisi. Sağlık Bilimleri Dergisi, 27(3), 234-238.

Borght, M. V., Wyns, C. (2018). Fertility and infertility: Definition and epidemiology. Clinical Biochemistry, 62, 2-10. doi:10.1016/j.clinbiochem.2018.03.012.

Boz, İ., Özçetin, E., Teskereci, G. (2018). İnfertilitede anne olma: Kuramsal bir analiz. Psikiyatride Güncel Yaklaşımlar, 10(4), 506-521. doi:10.18863/pgy.382342

Çakır, D., Dağlar, G., Bilgiç, D. (2020). Ebelik ve hemşirelik bölümü son sınıf öğrencilerinin infertiliteye ilişkin tutumlarının belirlenmesi. Balıkesir Sağlık Bilimleri Dergisi, 9(2), 109-114.

DeMaria, A. L., Rivera, S., Naoum, Z., Ramos-Ortiz, J., Meier, S., Dykstra, C. (2020). Contextualising challenges of reproduction and motherhood in Florence, Italy: A qualitative study. Eur J Contracept Reprod Health Care, 25(1):8-19. doi:10.1080/13625187.2019.1709814

Fido, A. (2004) Emotional distress in infertile women in Kuwait. Int J Fertil Women, 49(1):24-28.

Gerhard, R. S., Ritenour, C. W., Goodman, M., Vashi, D., Hsiao, W. (2014). Awareness of and attitudes towards infertility and its treatment: A cross-sectional survey of men in a United States primary care population. Asian J Androl, 16(6), 858. doi: 10.4103/1008-682X.132782

Hammarberg, K., Collison, L., Nguyen, H., Fisher, J (2016). Knowledge, attitudes and practices relating to fertility among nurses working in primary health care. Aust J Adv Nurs, 34(1), 6.

Hasanpoor-Azghady, S. B., Simbar, M., Abou Ali, Vedadhir S. A. A., Amiri-Farahani, L. (2019). The social construction of infertility among Iranian infertile women: A qualitative study. J Reprod Infertil, 20(3),178.

Karaca, A., Özkan, F. S., Gülen Savaş, H. (2017). Perceptions of infertility in Turkish nursing students. Türkiye Klinikleri Hemşirelik Bilimleri Dergisi, 9(1), 51-60.



Kaya, Z., Oskay, U. (2020). Stigma, hopelessness and coping experiences of Turkish women with infertility. J Reprod Infant Psychol, 38(5), 485-496. doi:10.1080/02646838.2019.1650904

Koropeckyj-Cox, T., Çopur, Z. (2015). Attitudes about childlessness and infertility treatments: A comparison of Turkish and American university students. J Comp Fam Stud, 46(3), 373-402. doi:10.3138/jcfs.46.3.373

Our World in Data (2020). Fertility rate. Avaible from: https://ourworldindata.org/fertility-rate Access date: 07 Agust 2021

Siyez, D. M., Esen, E., Baran, B., Seymenler, S., Kağnici, D. Y., Siyez, E.(2018) Development of the Attitudes toward Infertility Scale (ATIS): Validity and reliability study. Cukurova Medical Journal, 43:173-180.

Sen, S., Sevil., Ü. (2012). İnfertilite ve Kültürlerarası Yaklaşım. Ümit Seviğ ve Gülbu Tanrıverdi (Ed.), Kültürlerarası Hemşirelik içinde. (s. 359). İstanbul.

Turkey Demographic and Health Survey (TDHS) (2018). Hacettepe University, Institute of Population Studies. Avaible from:

http://www.hips.hacettepe.edu.tr/eng/tdhs2018/TDHS_2018_main_report.pdf Access date: 07 Agust 2021

Top, E. K., Yiğitoğlu, S., Kavlak, O. (2015). Kültürel değerlerin infertilite üzerine etkileri: Bir pilot çalişma. Uluslararasi Katılımlı III. Kültürlerarasi Hemşirelik Kongresi Bildiri Kitabı p. 48, (21-23 mayıs 2015), Çanakkale.

Yücesoy, H., Yıldırım, F., & Şahin, E. (2021). İnfertilitenin kültürel, ekonomik, psikososyal ve cinsel yönüne güncel bir bakış: Temel hemşirelik yaklaşımları. Androloji Bülteni, 23(4), 256-263. doi:10.24898/tandro.2021.97360

World Health Organization (WHO) (2020). İnfertility. Avaible from: https://www.who.int/news-room/fact-sheets/detail/infertility Access date: 07 Agust 2021