

Araştırma Makalesi/ Research Article

# Attitudes of Women and Men towards Contraceptive Methods and Affecting Factors

## Kadın ve Erkeklerin Gebelikten Koruyucu Yöntemlere İlişkin Tutumları ve Etkileyen Faktörler

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### ÖZ

**Objective:** This study aimed to determine the attitudes of women and men towards contraceptive methods and the factors affecting them.

**Method:** The study was conducted in a descriptive and correlational, and it was conducted online on social networking websites. The sample of the study consisted of 541 people in total, 434 women and 107 men over the age of 18. Data were collected through a Personal Information Form and Contraceptive Attitude Questionnaire.

**Results:** In our study, 80.2% of the participants were female and 19.8% were male. The most commonly known contraceptive methods among, respectively, women and men were condoms (74%, 70%) and oral contraceptives (67.3%, 53.3%). Women's attitudes towards contraceptive methods are more positive than men's (99.38±18.59, 91.48±20.23; p<0.05). The most important determinants of positive attitude towards contraceptive method use were sex and having information about contraceptive methods (p<0.05; Adj R2: 0.096). Being women (12%) and information about contraceptive methods (27%) increase the positive attitude towards contraceptive method use (p<0.05). Being married (27%) decreases the attitude towards contraceptive method use in women, while having a partner with a university or higher education level (16%) increases it (p<0.05; Adj R2 : 0.084). In men, information about method (32%) increases the positive attitude towards contraceptive method use (p<0.05; Adj R2 : 0.148).

**Conclusion:** It was determined that women's attitudes towards the use of contraceptive methods were more positive than men. Marital status, education level of the partner, and having information about contraceptive methods in women and having information about contraceptive methods and smoking in men are important determinants of attitude towards contraceptive method use. Trainings that increase knowledge and awareness about the types of contraceptive methods, their use, benefits and risks should be planned with the participation of men in the community.

**Keywords:** Attitude, contraceptive method, family planning, men, women

### ABSTRACT

**Amaç:** Bu çalışmanın amacı, kadın ve erkeklerin gebelikten koruyucu yöntemlere yönelik tutumlarını ve etkileyen faktörleri belirlemektir.

**Yöntem:** Çalışma tanımlayıcı ve ilişkisel türde gerçekleştirilmiş olup sosyal paylaşım sitelerinde çevrimiçi olarak yürütülmüştür. Araştırmanın örneklemini 18 yaş üstü 434 kadın ve 107 erkek olmak üzere toplam 541 kişi oluşturmuştur. Veriler, "Kişisel Bilgi Formu" ve "Gebelikten Koruyucu Yöntemlere İlişkin Tutum Ölçeği" aracılığıyla toplanmıştır.

**Bulgular:** Çalışmamızda katılımcıların %80.2'si kadın, %19.8'i erkektir. Kadın ve erkeklerde sırasıyla en fazla bilinen kontraseptif yöntemler kondom (%74, %70) ve oral kontraseptiflerdir (%67.3, %53.3). Kadınların gebeliği önleyici yöntemlere yönelik tutumları erkeklerinkinden daha olumludur (p<0.05). Gebelikten koruyucu yöntem kullanımına ilişkin olumlu tutumun en önemli belirleyicileri cinsiyet ve kontraseptif yöntem hakkında bilgi sahibi olmadır (p<0.05; R2 : 0.099). Kadın olmak (%12) ve yöntem bilme durumu (%27) gebelikten koruyucu yöntem kullanımına ilişkin olumlu tutumu artırmaktadır (p<0.05). Kadınlarda gebelikten koruyucu yöntem kullanımına ilişkin olumlu tutumu evli olmak (%27) azaltırken; partnerin üniversite ve üzeri eğitim düzeyine sahip olması (%16) artırmaktadır. Erkeklerde ise yöntem bilme durumu (%32) gebelikten koruyucu yöntem kullanımına ilişkin olumlu tutumu artırmaktadır (p<0.05).

**Sonuç:** Araştırmada kadınların gebeliği önleyici yöntem kullanımına yönelik tutumlarının erkeklere göre daha olumlu olduğu belirlenmiştir. Kadınlarda medeni durum, partnerin eğitim düzeyi ve yöntem hakkında bilgi sahibi olma; erkeklerde ise yöntem hakkında bilgi sahibi olma ve sigara kullanımı gebelikten koruyucu yöntem kullanımına ilişkin tutumun önemli belirleyicilerdir. Toplumda erkeklerin de katılımının sağlandığı; kontraseptif yöntemlerin çeşitleri, kullanım şekli, yarar ve riskleri hakkında bilgi ve farkındalığı artıran eğitimler planlanmalıdır.

**Anahtar Kelimeler:** Tutum, kontraseptif yöntem, aile planlaması, erkek, kadın

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## Introduction

A significant part of women's health indicators consists of measurements related to fertility. Unwanted/unplanned pregnancies affecting these measurements continue to remain an integral issue in various developing and developed countries (Bearak et al., 2020). Unplanned pregnancies cause miscarriages and problems that affect both mother and the baby in cases where pregnancy is in progress (Hall et al., 2017). In these cases where woman is negatively affected, inevitably, family and community are also negatively affected. It is asserted the biggest reason for unplanned pregnancies is either lack in the use of contraceptive methods or their inconsistent use (Bellizzi et al., 2020). The fact that the rate of women who use contraception despite not wanting children is 30% suggests use of contraceptive methods is affected by a wide range of factors (TDHS, 2018). As the reason for this might be a lack of access to contraceptive services and tools, cultural and social factors significantly affect the use of this method, as well. It is claimed in communities where fertility is perceived to increase women's social status, women's avoidance of using contraception and the attitudes of those around women towards the use of contraception is effective in the use of this method (Jungari and Panswan, 2020; Gözükkara et al., 2015). Particularly, the attitudes of women's partners affect their use of contraceptive methods. Men's attitudes towards contraceptive methods may differ from women in important ways. This difference stems from the fact that women and men have different levels of knowledge about contraceptive methods, experience in making decisions about method use, the fact that some contraceptive methods require different behaviors, and the effects of the results of method use on women's health. These differences in knowledge and experiences regarding contraceptive methods may lead to differences in the attitudes of women and men towards certain methods (Grady et al, 1999).

Though not directly, attitudes are effective on actions. Therefore, attitudes of individuals are likely to affect the use of method. While both parties are responsible for the use of contraception, particularly in developing countries, the suggests women should be the ones in charge of using contraceptive methods (Adelekan et al., 2014; Ankomah et al., 2013). Nevertheless, recent studies indicate men are now more willing to take part in the process of using contraceptive methods (Başer et al., 2020; Kaya and Özgülner, 2020). Determining the attitudes of

women and men towards contraceptive methods is important for the provision of family planning services. Consideration of gender-specific differences in training and counseling services to be provided on contraceptive methods will enable the development of behaviors that will create positive attitudes towards method use. In literature, studies regarding the identification of attitudes towards the contraceptive methods are usually conducted with married women, adolescents and women in postpartum periods. Our study aims to determine the attitudes of women and men towards contraceptive methods and the affecting factors.

## Methods

### Design and Setting

This research was conducted in a descriptive and correlational design to determine the attitudes of women and men over the age of 18 towards contraceptive methods and the affecting factors. This study was designed according to the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) Statement guidelines (Vandenbroucke et al., 2014).

Within the scope of the study, answers to the following research questions were sought:

1. Is there a sex difference in the attitudes of women and men towards contraceptive methods?
2. Is there a difference in the attitudes of women and men towards contraceptive methods according to various parameters (sociodemographic characteristics, obstetric characteristics, smoking, medication use, having a chronic disease, receiving contraception counseling and method knowledge etc.)?

The study was conducted online on social networking websites (Twitter®, Instagram®, Facebook®, Whatsapp®) in Türkiye. To determine the sample size, the number of individuals in the universe was calculated according to the unknown formula. ( $n = t^2 \times \sigma^2 / d^2$ ). In the sample calculation, the total score average ( $128.48 \pm 9.25$ ) determined in Özer and Yaman's (2022) study titled "Evaluation of the impact of humor used in contraception education on the attitudes of university students towards contraceptive methods" was referenced (Özer and Yaman, 2022). Accordingly, the minimum number of samples was calculated as 328. The study was conducted between 10.10.2022-15.11.2022 and the sample of the study consisted of 541 people in total, 434 women and 107 men. The inclusion criteria were men and women over the age of 18 who had access to the survey, were at least

literate and agreed to participate in the survey. The exclusion criterion is being under 18 years of age.

#### **Data Collection**

Research data were collected through an online questionnaire consisting of Personal Information Form and Contraceptive Attitude Questionnaire an electronic form developed in Google Forms was applied. The link to the online survey was shared on the researchers' social media accounts (Twitter®, Instagram®, Facebook®, Whatsapp®). First of all, the people who follow the social media accounts of the researchers and then the other participants were reached by using the snowball sampling method.

#### **Data Collection Tools**

1. Personal Information Form: The form, which was created based on literature (Ayaz and Efe, 2009; Aydođdu and Akça, 2018; Bilgin et al., 2019; Yeşilçınar et al., 2022) includes 13 questions that aims to determine participants' socio-demographic properties (age, level of education, etc.), fertility characteristics (number of planned/unintended pregnancies, number of miscarriages, number of living children, etc.) and the level of knowledge about contraceptive use.

2. Contraceptive Attitude Questionnaire (CAQ): The Contraceptive Attitude Questionnaire (CAQ) developed by Pelit Aksu et al. in 2022 measures attitudes towards contraceptive methods in women and men. A total of 25 items in the scale consist. It is a five-point Likert-type scale with three sub-dimensions. "Effects on family economy and sexual life" of 10 items (1,2,3,4,5,6,7,8,9,10), "Effects on the moral values of the society" 9 items (11, 12, 13, 14, 15, 16, 17, 18, 19) and "Effects on men and religion" consists of 6 items (20, 21, 22, 23, 24, 25). A total of 15 items in the scale (11,12,13,14,15,16,17,18,19,20,21,22,23,24,25) are reversed items. Items were scored on a five point Likert scale as follows: "totally disagree:1", "disagree:2", "neither disagree nor agree:3", "agree:4", and "totally agree:5". The minimum

In The suitability of the data for the normal distribution was determined by evaluating the skewness and kurtosis coefficients. In this direction, it was determined that the skewness and kurtosis values of all variables were between -1.5 and +1.5 that the data fit the normal distribution.

The results regarding the sociodemographic characteristics of the participants are given in Table

score is 25 and the maximum score is 125. As the mean score obtained from the total and sub-dimensions of the scale increases, the attitude towards contraceptive use also increases positively. The Cronbach Alpha value of the scale is 0.90 (Pelit Aksu et al., 2022). In our study, the Cronbach- $\alpha$  coefficient of the scale was determined to be 0.92.

#### **Statistical Analysis**

The data collected during the research was evaluated by a package data program IBM SPSS 24.0 (Statistical Package for Social Sciences, drive 24.0, for Windows) in a computerized environment. In the analysis of the data, descriptive statistics such as number and percentage, independent sample t-test, one-way analysis of variance (ANOVA), Bonferroni test and multivariate regression analysis were performed depending on the variables. The suitability of the data for the normal distribution was determined by evaluating the skewness and kurtosis coefficients. For statistical significance, the alpha level will be set at 0.05. The Cronbach- $\alpha$  coefficient was used to evaluate the reliability of the scale used in the study.

#### **Ethical Considerations**

Ethical approval (04.10.2022/ E-77082166) was obtained from Gazi University Ethics Committee for the research. In the application phase of the research, the survey questions became visible after the participants were informed about the study and indicated the option that they agreed to participate in. No personal identification information was requested from the participants. The answers of the participants were accepted as anonymous. The researchers did not see to whom the answers belonged. All data obtained from the participants is kept confidential and stored in an e-mail address accessible only to researchers. This study was performed in line with the principles of the Declaration of Helsinki.

#### **Results**

1. It was determined that 80.2% of the participants are women and 19.8% are men. 53.9% of the women who participated in our study and 51.4% of the men were between the ages of 18-24, 40.6% of the women and 44.9% of the men were sexually active (Table 1).

**Table 1.** Some characteristics of the participants (n:541)

Characteristics	Women (n:434)		Men (n:107)	
	n	%	n	%
<b>Age (X±SS)</b>	28.14±10.32		30.19±12.26	
18-24	234	53.9	55	51.4
25-49	169	38.9	38	35.5
50-69	31	7.2	14	13.1
<b>Education level</b>				
Primary school	32	7.4	7	6.5
High school	63	14.5	10	9.3
University and higher	339	78.1	90	84.1
<b>Partner education level (n:222)</b>				
Primary school	13	7.3	4	8.6
High school	52	29.5	6	13
University or higher	111	63.2	36	78.4
<b>Sexually active</b>				
Active	176	40.6	48	44.9
Not active	258	59.4	59	55.1
<b>Marital status</b>				
Married	172	39.6	36	33.6
Single	262	60.4	71	66.4
<b>Duration of marriage (X±SS) (n:172)</b>	12.89±10.25		14.44±9.50	
0-5 year	49	29	8	22.2
6-10 year	44	26	7	19.4
11 year and higher	76	45	21	58.4
<b>Employment status</b>				
Yes	114	26.3	53	49.5
No	320	73.7	54	50.5
<b>Job</b>				
Public	67	58.8	22	41.5
Private	42	36.8	22	41.5
Self-employment	5	4.4	9	17
<b>Perceived income level</b>				
High	109	25.1	27	25.2
Middle	286	65.9	64	59.8
Low	39	9.0	16	15.0
<b>Smoking</b>				
Yes	59	13.6	40	37.4
No	375	86.4	67	62.6
<b>Chronic disease</b>				
Yes	65	15.0	13	12.1
No	369	85.0	94	87.9
<b>Medicine use</b>				
Yes	113	26.0	13	12.1
No	321	74.0	94	87.9

The results of the obstetric characteristics of participants/partners are presented in Table 2. It was determined that women (19.6%) received contraception counseling at a higher rate than men (15%) and information about contraceptive

methods. The most commonly known contraceptive methods among, respectively, women and men were condoms (74%, 70%) and oral contraceptives (67.3%, 53.3%), (Table 2).

**Table 2.** Obstetric characteristics of the participants/partners (N:541)

Characteristics	Women (n:434)		Men (n:107)	
	n	%	n	%
<b>Number of children</b>				
No children	274	63.1	71	66.4
1-3	153	35.3	33	30.8
4-6	7	1.6	3	2.8
<b>Number of pregnancy*</b>				
No pregnancy	274	63.1	74	69.2
1-3	137	31.6	29	27.1
4-6	23	5.3	4	3.7
<b>Number of unintended pregnancy*</b>				
No	403	92.9	99	92.5
1-3	28	6.5	6	5.6
4-6	3	0.7	2	1.9
<b>Miscariage*</b>				
Yes	47	10.8	9	8.4
No	387	89.2	98	91.6
<b>Induced abortion*</b>				
Yes	24	5.5	7	6.5
No	410	94.5	100	93.5
<b>Receiving contraceptive counseling</b>				
Yes	85	19.6	16	15
No	349	80.4	91	85
<b>Information about contraceptive methods</b>				
Yes	373	85.9	79	73.8
No	61	14.1	28	26.2
<b>Contraceptive methods**</b>				
Condom	321	74.0	72	67.3
Oral Contraceptive	304	70.0	57	53.3
Withdrawal	270	62.2	57	53.3
Intrauterin device (IUD)	287	66.1	49	45.8
Tubal ligation	254	58.5	38	35.5
Quarterly injection	202	46.5	26	24.3
Monthly injection	213	49.1	24	22.4
Other***	62	14.3	9	8.4

\* Male participants' responses to their partners. \*\*Multiple answers were possible. \*\*\*Vaginal ring, Implant, women's condom, vasectomy

The sub-dimension and total mean scores of the participants from the CAQ according to sex are presented in Table 3. It was determined that there

were significant differences in terms of sub-dimensions and total mean scores according to sex (Table 3).

**Table 3.** The participants' scores on CAQ sub-dimension and total according to sex

	Women (X±SD)	Men (X±SD)	Test ve p value
Total Mean Score	99.38±18.59	91.48±20.23	t=3.86 df=539 p< 0.001
Effects on family economy and sexual life sub-dimension mean score	45.05±5.79	41.97±10.52	t=4.09 df=539 p< 0.001
Effects on the moral values of the society sub-dimension mean score	30.35±10.81	28.22±12.42	t=1.62 df=539 p>0.05
Effects on men and religion sub-dimension mean score	23.97±7.45	21.28±9.00	t=3.18 df=539 p< 0.05

Comparison of Contraceptive Attitude Questionnaire (CAQ) total mean score according to some characteristics of the participants is presented

in Table 4. In the analyses, it was determined that the variables of age, educational status, sexually active, duration of marriage, employment status,

job, perceived income level, chronic disease, medication use, number of unintended pregnancies, number of induced abortions and receiving contraceptive method counseling didn't have a significant difference on the CAQ total mean scores of women and men participants ( $p>0.05$ ). It has been determined that the number of children and the number of pregnancies have a significant difference

on the CAQ mean score ( $p<0.05$ ). Bonferroni test was used to determine from which group the difference originated. According to this, compared to those who have 1-3 children; it was determined that those who had no previous pregnancy had higher attitudes towards contraceptive methods compared to those who had pregnancy experience 1-3 times (Table 4).

**Table 4.** Comparison of participants' Contraceptive Attitude Questionnaire mean scores according to some characteristics (n=541)

Characteristics	CAQ Total Mean Scores	
	Women (n:434)	Men (n:107)
<b>Marital status</b>		
Married	96.02±18.00	93.83±20.38
Single	101.58±18.68	90.29± 20.20
Test ve p value	t=-3.07 df=432 <b>p&lt; 0.05</b>	t=-0.85 df=105 p>0.05
<b>Partner education</b>		
Primary school	91.61±16.76	99.75±20.83
High School <sup>a</sup>	93.63±17.46	89.83±13.58
University or higher <sup>b</sup>	100.88±17.88	94.30±20.46
Test ve p value	F=3.90 <b>p&lt; 0.05</b> a,b	F=0.30 p>0.05
<b>Smoking</b>		
Yes	99.57±18.50	85.52±17.25
No	99.35±18.63	95.04±21.15
Test ve p value	t=0.86 df=432 p>0.05	t=-2.53 df=95.14 <b>p&lt; 0.05</b>
<b>Miscarriage</b>		
Yes	94.25±16.33	98.55±21.35
No	100±18.77	90.83±20.12
Test ve p value	t=-2 df=432 <b>p&lt; 0.05</b>	t=-1.09 df=105 p>0.05
<b>Number of children</b>		
No children <sup>a</sup>	101.51±19.23	91.80±21.07
1-3 <sup>b</sup>	96.05±16.97	91.24±19.53
4-6	88.71±13.84	86.66±2.88
Test ve p value	F=5.50 <b>p&lt; 0.05</b> a,b	F=0.95 p>0.05
<b>Number of pregnancy</b>		
No pregnancy <sup>a</sup>	101.62±18.97	91.18±21.12
1-3 <sup>b</sup>	95.78±17.69	90.89±18.28
4-6	94.08±15.25	101.25±18.98
Test ve p value	F=5.59 <b>p&lt; 0.05</b> a,b	F=0.48 p>0.05



**Table 4.** Comparison of participants' Contraceptive Attitude Questionnaire mean scores according to some characteristics (n=541)

Characteristics	CAQ Total Mean Scores	
	Women (n:434)	Men (n:107)
<b>Information about contraceptive methods</b>		
Yes	101.28±17.74	95.43±19.87
No	87.72±19.54	80.35±17.10
Test ve p value	t=5.45 df=432 <b>p&lt; 0.001</b>	t=3.56 df=105 <b>p&lt; 0.001</b>
<b>Known contraceptive Methods*</b>		
<b>Condom</b>		
Yes	102.73±17.20	96.91±19.74
No	92.34±18.58	80.14±14.85
Test ve p value	t=3.99 df=371 <b>p&lt; 0.001</b>	t=2.18 df=77 <b>p&gt;0.05</b>
<b>Oral Contraceptive</b>		
Yes	103.05±17.14	99.94±19.20
No	93.49±18.37	83.72±16.88
Test ve p value	t=4.12 df=371 <b>p&lt; 0.001</b>	t=3.47 df=77 <b>p&lt; 0.001</b>
<b>Withdrawal</b>		
Yes	101.07±18.01	98.75±20.00
No	101.85±17.09	86.81±17.09
Test ve p value	t=-0.37 df=371 <b>p&gt;0.05</b>	t=2.47 df=77 <b>p&lt; 0.05</b>
<b>IUA</b>		
Yes	103±17.17	100.28±18.78
No	95.55±18.51	87.50±19.32
Test ve p value	t=3.46 df=371 <b>p&lt; 0.001</b>	t=-2.90 df=77 <b>p&lt; 0.05</b>
<b>Tubal ligation</b>		
Yes	103.22±17.63	102.57±19.24
No	97.16±17.35	88.80±18.27
Test ve p value	t=3.10 df=371 <b>p&lt; 0.05</b>	t=3.26 df=77 <b>p&lt; 0.05</b>
<b>Quarterly injection</b>		
Yes	104.02±17.69	99.80±18.76
No	98.05±17.30	93.28±20.22
Test ve p value	t=3.27 df=371 <b>p&lt; 0.001</b>	t=1.37 df=77 <b>p&gt;0.05</b>
<b>Monthly injection</b>		
Yes	103.32±18	97.95±18.33
No	98.58±17.08	94.32±20.57
Test ve p value	t=-2.57 df=371 <b>p&lt; 0.05</b>	t=0.74 df=77 <b>p&gt;0.05</b>

\* Multiple answers were possible.

According to the multiple regression analysis conducted on the sex, information about the contraceptive methods, and receiving contraceptive counseling variables regarding the factors affecting the participants' attitudes towards contraceptive method use, sex and information about the contraceptive method significantly predicted the attitude towards contraceptive methods ( $p<0.05$ ). As a result of the analysis, it was determined that 9% of the variance in the model was explained by the

independent variables (Adj R2: 0.096). Being a woman increases the positive attitude towards contraceptive methods by 12% and known a method by 27%.

Multiple regression analyzes were conducted separately for the factors affecting the attitudes of some characteristics of women (marital status, partner educational status, miscarriage, number of children, number of pregnancy, information about contraceptive methods and known contraceptive

methods) and men (smoking, information about contraceptive methods and known contraceptive methods) towards the use of contraceptive methods. Accordingly, marital status and partner education level significantly predict positively attitude towards contraceptive methods in women ( $p < 0.05$ ). 9% of the variance in the model was explained by the independent variables. While being married reduces the attitude towards contraceptive methods by 27%; If the partner's education level is university

or higher, it increases by 16%. In men; smoking and information about contraceptive methods significantly predict the attitude towards contraceptive methods ( $p < 0.05$ ). In the model, 16% of the variance was explained by the independent variables. While smoking reduces the attitude towards contraceptive methods by 23%; knowing a contraceptive method positively increases the situation by 32% (Table 5).

**Table 5.** Multiple regression (stepwise) analysis of the factors affecting the attitudes of some characteristics of women and men towards contraceptive use

Sex	Variables	B	SE	$\beta$	p	R <sup>2</sup>	Adj R <sup>2</sup>
Women	Marital status	-15.431	4.439	-0.273	0.000	0.090	0.084
	Partner education (Ref: Universty or higher)	6.001	2.693	0.162	.027		
Men	Information about contraceptive methods	15.295	4.11	0.329	0.001	0.164	0.148
	Smoking	-9.805	3.73	-0.236	0.010		

B: Regression Coefficient SE: Standard Error  $\beta$ : Odds Ratio Adj R<sup>2</sup>: Adjusted R<sup>2</sup> \* $p < 0.05$

### Discussion

Although contraception is both women's and men's responsibility, studies in literature mostly examined women's attitudes towards contraceptive methods. It is known that though the number of contraceptive methods for women is higher, men are effective in both the use of these methods and the number of desired children (Egelioğlu Çetişli et al., 2020; Bucak et al., 2018; Nelson et al., 2018; Hellström et al., 2019). Therefore, this study investigates the attitudes of both women and men towards contraceptive methods.

It is clear that the education status of women in Türkiye regarding contraceptive methods is low and the methods are not used efficiently (Gavas and İnal, 2019). In our study, the top three methods most commonly known by women were condoms, oral contraceptives and intrauterine device, while for men it was condoms, oral contraceptives and withdrawal method. In the study conducted by Yeşilçınar et al. (2022) the best-known family planning for men are condom (82.9%), oral contraceptives (73.8%), withdrawal (65.2%) and intrauterine device (48.7%). In the study conducted by Bilgin et al. (2019) 79.5% of women and 81% of

men stated they knew contraceptive methods. Best-known method for women is oral contraceptives while best-known method for men is condom. Our study results are similar to the literature.

In Türkiye, services related to contraceptive methods are in progress. It is known receiving counseling regarding family planning increase women's awareness, knowledge and accurate practices (Yılmaz, 2020; Kahramanoğlu et al., 2017). Our study confirmed that both in women and men the attitudes towards contraceptive methods are affected by the information about contraceptive methods and the type of the known contraceptive methods. It was determined the attitudes of those aware of the contraceptive methods are higher. Similar to our study findings, in the studies of Eryılmaz and Ege (2016) and Nazik et al. (2021), women who received counseling on contraceptive methods had high attitudes towards family planning. Another study revealed the family planning attitudes of women who are willing to get or have received information about family planning methods and regard them as essential are more positive than those who think these methods are inessential and have never received information about the relative issue (Bilgin and Kesgin, 2020). Besides, conducted studies suggest misinformation and myths affect the



attitudes towards family planning negatively (Ankomah et al., 2013; Sultan et al., 2018). All in all, it can be thought women's recognition and awareness regarding contraceptive methods affect their attitudes positively.

Use of contraceptive methods can be affected by many factors such as traditional beliefs, attitude, pregnancy, giving birth, religion, family type, information about contraceptive methods and obstacles in healthcare services (Ayaz and Efe, 2009). Our study determined that marital status and partner's level of education affect the attitude towards contraceptive methods in women. Single women and those having a partner with university or higher educational level have higher attitude towards contraceptive methods. Similar to our study, in the study conducted by Ayaz and Efe (2009) it was determined the scores that women whose partners are graduates of high school or over received from family planning attitude scale are significantly higher. Also, the study conducted by Nazik et al. (2021) found the attitudes of women whose partners have educational background of university or over have higher attitude towards contraceptive methods. In addition, the study conducted by Bilgin et al. (2019) demonstrated the attitudes towards family planning differs according to partners of both women's and men's educational level (university, high school, primary school) and the attitudes of those graduating from university have higher attitudes towards family planning. The fact that married women in Türkiye have higher attitude towards family planning can be explained with their reluctance to have children. Partners with higher educational levels have easier access to contraceptive methods and receive broader information about the relevant subject.

This study found the attitudes of non-smoking men higher towards contraceptive methods. Smoking has not been thoroughly investigated in studies dealing with contraceptive methods (Yeşilçınar et al., 2022; Bilgin et al., 2019; Aydoğdu and Akça, 2018; Ayaz and Efe, 2009; Gümüş Şekerci and Aydın Yıldırım, 2020). Ayaz and Efe (2009) proclaimed in their study that smoking does not affect women's attitude toward contraceptive methods. Similarly, in their study, Keskin and Keskin (2015) declared there is no correlation among patients' rate and methods of contraceptives and smoking. Our study, on the other hand, suggests that the fact that non-smoking men have higher attitudes indicates they adopt a healthier lifestyle and regard contraception in this respect.

This study found miscarriage, number of children and pregnancies affect attitudes towards contraceptive methods. Accordingly, in contrast with those having 1-3 children, those having no kids; in contrast with having 1-3 pregnancy experiences, those having no such experience and in contrast with those undergoing miscarriages, those having no such experience have higher attitudes towards contraceptive methods. The study conducted by Nazik et al. (2021) are similar to ours in that it asserts women who have not given birth have higher attitudes according to those experiencing 3 or more deliveries. However, unlike our study, it was found that women with more living children have lower mean scores of family planning attitude scale and the difference is statistically significant (Gözükara et al., 2015; Egelioglu Çetişli et al., 2020; Ayaz and Efe, 2009; Ejder Apay et al., 2010; Tezel et al., 2015). In countries where having multiple children refers to higher social status, this can be interpreted by means of the negative effects of wanting multiple children on family planning. Similar to the findings of our study, Gözükara et al. (2015) revealed those with high number of pregnancies, living children and miscarriages have lower mean scores in the family planning attitude scale and the difference is statistically significant. The fact that the attitudes are great in those with low numbers of pregnancies, living children and miscarriages indicate that these attitudes reflect positively on their reproductive nature. According to these results, it is suggested that, in order to transform the women's and men's attitudes towards contraceptive methods into behavior, contraceptive methods programs and consultancy services should be planned and applied.

In future research; It is recommended that this study be planned in samples with different characteristics such as education, income, chronic diseases, access to contraceptive methods, and diverse fertility characteristics in women and men.

### Conclusions

Our study demonstrated women's attitudes towards contraceptive methods are affected by marital status, partner's level of education, experience of miscarriage, number of children and pregnancies, information about contraceptive methods and the type of the known contraceptive methods. Conversely, for men, the study determined these attitudes are affected by smoking, information about contraceptive methods and the type of the known contraceptive methods. In accordance, to

transfer women's and men's attitudes towards contraceptive methods to their actions, it is recommended family planning training programs and counseling services be planned and carried out. In addition, it is essential to prioritize the status of women and men to come up with a solution to the problem. In order to identify the attitudes or fix misconceptions towards contraceptive methods, it can also be recommended women and men be provided educational opportunities, contraception-specific training and counselling services, as well as equality in reaching these services.

### Limitations

In literature, studies regarding the identification of attitudes towards the contraceptive methods are usually conducted with married women, adolescents and women in postpartum periods. In our study, determining the attitude towards contraceptive methods and the affecting factors in terms of both genders is the strength of the research. In addition, another strength are that getting information about contraceptive methods has a positive effect on attitudes in both sex and the results of the regression analysis related to the study findings are presented. The research has certain limitations. Lack of questioning the condition of using contraceptive methods is the first limitation. Others are related to the fact that the responses to the questions in the data collection form of the study are based only on the statements of women and men.

**Ethics Committee Approval:** Ethical approval (04.10.2022/E-77082166) was obtained from Gazi University Ethics Committee for the research. In the application phase of the research; the survey questions became visible after the participants were informed about the study and marked the option that they agreed to participate.

**Author Contributions:** Concept: SPA; Design: SPA, SA; Consultancy: SPA; Data collection and/ or Processing: SPA, SA; Analysis: SPA, SA; Literature Search: SPA; Writing Manuscript: SPA, SA; Critical Review: SPA, SA.

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### What did the study add to the literature?

- It In order to increase knowledge and use of contraceptive methods, family planning education programs and counseling services need to be planned in line with individuals' attitudes.
- It is thought that this study will be a guide in providing family planning services by taking into account attitudes that differ according to sex.

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