

## ***Kontraseptif Yöntemlerin Türkiye'deki Kadınların Cinsel Doyum ve Cinsel Hazlarına Etkisi ve Etkileyen Faktörler***

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### **ÖZ**

**Amaç:** Bu çalışmada, Türkiye'de yaygın olarak kullanılan kontraseptif yöntemlerin kadınların cinsel doyumunu ve cinsel hazzı üzerindeki etkilerinin incelenmesi ve etkileyen faktörlerin araştırılması amaçlanmıştır.

**Yöntem:** Bu kesitsel çalışma Türkiye'de 18-45 yaşları arasında cinsel yönden aktif 230 kadın ile yapılmıştır. Araştırma verileri çevrimiçi platformlar aracılığıyla toplanmıştır. Veriler Kadın Tanımlayıcı Özellikler Formu, Yeni Cinsel Doyum Ölçeği (NSSS) ve Kadınlar İçin Cinsel Doyum Ölçeği (SSS-K) kullanılarak toplanmıştır. Veri analizi SPSS versiyon 22 yazılımı kullanılarak yapıldı.

**Bulgular:** Kadınların %74,8'inin modern aile planlaması yöntemini, çoğunlukla kondom yöntemini (%37) kullandığı belirlendi. Kadınların eğitim, gelir, çalışma durumu gibi tanımlayıcı özelliklerinin cinsel doyumunu etkilemediği görülmüştür. Modern yöntemler kullanan kadınlar ile geleneksel yöntemler kullanan kadınlar arasında cinsel tatmin açısından anlamlı bir fark bulunmamıştır.

**Sonuç:** Kullanılan kontraseptif yöntemden kadınların memnuniyetinin ve yöntemin kullanımında eşin desteğinin kadınların cinsel doyumunu artırdığı belirlenmiştir. Etkili izlem konsültasyonları ile eşlerini/partnerlerini danışmanlık hizmetlerine dahil ederek kadınların cinsel doyumları artırılabilir.

**Anahtar Sözcükler:** *kadın, doğum kontrol yöntemi, cinsel haz, cinsel doyum*

## The Effect Of Contraceptive Methods On Sexual Satisfaction And Sexual Pleasure Of Women In Turkey And Affecting Factors

### ABSTRACT

**Aim:** In this study, it was aimed to examine the effects of contraceptive methods, which are widely used in Turkey, on women's sexual satisfaction and sexual pleasure, and investigation of affecting factors.

**Methods:** This cross-sectional study was conducted with 230 sexually active women between the ages of 18-45 in Turkey. Research data were collected through online platforms. Data were collected using the Women's Descriptive Characteristics Form, The New Sexual Satisfaction Scale (NSSS), and Sexual Satisfaction Scale For Women (SSS-W). Data analysis was performed using SPSS version 22 software.

**Results:** It was determined that 74.8% of the women used the modern family planning method, mostly using the condom method (37%). It was observed that descriptive characteristics of women, such as education, income, and employment status, did not affect sexual satisfaction. There was no significant difference in sexual satisfaction between women using modern methods and women using traditional methods.

**Discussion:** It has been determined that the satisfaction of the women with the contraceptive method used and the support of the spouse in the use of the method increase the sexual satisfaction of women. With effective follow-up consultations, women's sexual satisfaction can be increased by including their spouses/partners in counseling services.

**Keywords:** *woman, contraceptive method, sexual pleasure, sexual satisfaction.*

## **INTRODUCTION**

Sexuality, which is an integral part of a natural and healthy life (Zeren & Gürsoy, 2018) is an important element that integrates life and increases the quality of life throughout a lifetime (Zeren & Gürsoy, 2018). According to the World Health Organization Sexual health is a state of physical, emotional, mental and social well-being related to sexuality; it is not merely the absence of disease, dysfunction or infirmity (World Health Organization [WHO], 2002). Sexuality includes sexual enjoying, giving pleasure and reproduction (Bozdemir & Özcan, 2011). In sexuality, people, unlike other living things, show sexual behaviors for pleasure/pleasure other than reproduction (Sexual Education Treatment and Research Association [CETAD], 2006). Sexual health requires both a positive and respectful approach to sexuality and sexual relations, as well as having safe, satisfying and enjoyable sexual experiences free from coercion, discrimination and violence (Bozdemir & Özcan, 2011; Cayır & Kızılkaya Beji, 2015). Sexual pleasure/enjoyment and satisfaction are important determinants in the evaluation of sexual health (CETAD, 2006) Decrease or absence of pleasure and satisfaction during sexual activity is an indication of deterioration of sexual health (Bilgin & Kömürcü, 2016). Problems related to sexual health located among the health problems that make individuals the unhappiest and concern the society the most. Deterioration of sexual health not only affects physical health, but also negatively affects psychosocial health, and then family and community health (Bozdemir & Özcan, 2011; Zeren & Gürsoy, 2018).

There are many factors that affect the sexual satisfaction and pleasure of individuals. These are frequency of sexual activity, variety of sexual behavior, positive attitudes towards sexuality age, marital status, income level, empathy, stress, irritability, sexual activity and performance that includes trait and situational anger (Abali Cetin & Aslan, 2018). Unwanted pregnancy and abortion, STI (Sexually Transmitted Infections) caused cancer and infertility, sexual dysfunction problems are other factors that negatively affect sexual health (Cayır & Kızılkaya Beji, 2015). Contraceptive methods, with positive effects other than birth control pave the way for safe sexual intercourse by reducing the fear of pregnancy (preventing unwanted pregnancies, protection against STIs with barrier methods, etc.) and positively affect women's sexual life and quality of life (Bozoklu Akkar, Karakuş, Yıldız, Korgal & Cetin, 2015; Ertekin Pinar, Demirel, Yildirim & Daglar, 2019).

As women's roles in life evolve, the importance of being healthier also increases, and in this context, women's expectations in the field of contraception and sexual

health are also changing (Bozoklu Akkar et al., 2015). While contraceptives need to be effective to prevent pregnancy, they must be acceptable for individuals to use them. One of the factors affecting the method choice of individuals is whether the method used has an effect on sexual life (Ertekin Pinar et al., 2019). For this reason, it is important for individuals to consider the effect of the method on their sexual life when deciding on the method selection. In the training and consultancy services regarding the contraceptive method, individuals should question the contraceptive methods they use and their effects on their sexual lives, and be careful about the problems that may arise due to the method used. Studies in this area are needed to determine the relationship between sexuality and birth control and to plan appropriate interventions (Egelioglu Cetisli, Top, Arkan, Kaba & Ertop, 2016).

The effect of contraceptive methods on the sexual lives of individuals continues to be a controversial issue today. However, there are limited studies in the literature on the determination of sexual satisfaction and satisfaction in women using contraceptive methods. For this reason, it is thought that the results obtained from our study will contribute to the increase of scientific knowledge on the subject and contribute to the protection and development of women's sexual health and therefore public health. In this study, it was aimed to examine the effects of contraceptive methods, which are widely used in Turkey, on women's sexual satisfaction and sexual pleasure, and investigation of affecting factors.

## **MATERIAL AND METHODS**

### **Study design, setting, and sample**

This was a cross-sectional study. Women were invited to the study through social media platforms (Whatsapp, Facebook, and Instagram). Eligible participants were asked to share the study on their personal and professional social media accounts. G\*Power 3.1.9.4 program was used for sample size and power calculation. Sample of the study in the calculation made with reference to the results of a similar study in the literature (CI: 80%;  $\alpha$ : 1%), the sample number was found to be 230 women. (Peixoto, Correia, Gomes, & Machado, 2020). Participants were recruited using snowball sampling. The inclusion criteria were (1) Being between the ages of 15-45 (2) being sexually active (3) using any family planning method (4) not having a disease that affects sexual function (5) Not using a drug that affects sexual function. The exclusion criteria were (1) Having physical and mental health problems that prevent communication, (2) Refusal to participate in the study, (3) History of abortion or miscarriage in the last 4 weeks (4) Exposure to sexual abuse (5) Exposure to sexual violence, (6) Being pregnant

### **Procedure**

Data were collected between 15 November 2021 and 15 January 2022. As part of the preventive measures taken against the COVID-19 pandemic, an online survey application (google forms) was made. Web-based questionnaires is an efficient tool in terms of time and cost, safety and health protection and its use further increasing during the COVID-19 pandemic. All women were informed about the purpose and procedure of the study. Those who accepted to participate were directed to the online survey. Each participant was asked to fill out the questionnaire only once and answer all questions.

### **Measurements**

#### ***Women's Descriptive Characteristics Form***

The form, which was created by scanning the relevant literature, was created to obtain information about the sociodemographic characteristics of women and the contraceptive methods they used. The form consists of 14 questions, 11 of which are closed and 3 of which are open-ended.

#### ***The New Sexual Satisfaction Scale (NSSS)***

The New Sexual Satisfaction Scale (NSSS) is a 20-item measure based on sexual

health counseling and therapy literature (Štulhofer, Buškob & Brouillard, 2010). The validity and reliability study of the original scale was conducted by Tugut in 2016 (Tugut, 2016). It was found that the item total score reliability coefficient of the scale ranged between  $r=.57-.61$  and the Cronbach's alpha coefficient for internal consistency was .94. Participants responded to questions using a 5-point Likert scale (1 = not at all satisfied to 5 = extremely satisfied) to describe their satisfaction with their sex life over the previous 6 months. The lowest score that can be obtained from the scale is 20, and the highest score is 100. The scale consists of self-centered sub-dimension and co-partner/sexual activity-centered sub-dimension. Mean scores across all items are used, with higher scores indicating higher levels of sexual satisfaction.

### ***Sexual Satisfaction Scale for Women (SSS-W)***

It is a 30-item scale developed by Meston and Trampnell in 2005 to assess female sexual pleasure. The SSS-W-E is divided into 5 dimensions or domains comprising 6 items each, namely contentment, communication, compatibility, concern about the relationship and personal concerns. The score range for each domain is 6–30, and it is calculated by adding the scores of the individual items comprising each separate dimension. Higher scores indicating higher levels of sexual satisfaction. The SSS-W-E global score is calculated by summing up the scores of the 5 domains (Contentment + Communication + Compatibility + (Relational Concern + Personal Concern/2)) The Turkish validity and reliability analysis of the scale was conducted by Aslan and Abalı in 2018 (Abalı Cetin & Aslan, 2018).

### **Data analysis**

Statistical analyzes were performed using SPSS version 22 software. The conformity of the variables to the normal distribution was examined using visual (histogram and probability graphs) and analytical methods (Kolmogorov-Smirnov/Shapiro-Wilk tests). Descriptive analyzes were given using median and interquartile range for non-normally distributed variables. For ordinal and nominal variables, they are given as numbers and percentages. Mann Whitney U test and Kruskal Wallis test were used for data not suitable for normal distribution. Spearman correlation analysis was used for the relationship between variables. For statistical significance, the total type-1 error level was determined as 0.05.

## **Ethical value**

Ethical approval to conduct the study has been received from Non-Interventional Clinical Research Ethics Committee of Kastamonu University (Date: 06/10/2021& No: 2020-KAEK-143-114). All women were informed about the purpose, procedure, and confidentiality of the study. Online consent was obtained from the women showing they volunteer to participate in the study. Women were also informed that they could leave the study whenever they wanted. Participants were not paid for their participation in the study.

## **RESULTS**

Table 1 includes the descriptive characteristics of the participants. The mean age of the women was  $34.01 \pm 7.36$ , and 46.5% of women are university graduates. 62.6% of them are employees and 58.3% of them are equal to their income and expenses. 74.8% of the women stated that they used the modern family planning method, and they mostly used the condom method (37%). 34.3% of the women stated that they used the family planning method for 6-7 years or more. 73.9% of the women stated that they were satisfied with the family planning methods used and 87.8% of them stated that their spouses supported the family planning method they used. Table 2 shows the factors affecting women's sexual satisfaction and pleasure. There was no statistically significant difference in terms of new sexual satisfaction scale scores between those who were completely satisfied with the family planning method, slightly satisfied and satisfied ( $p > 0.05$ ), but there was a statistically significant difference between the groups in terms of sexual satisfaction scale for women total scores ( $p < 0.05$ ). There was no statistically significant difference ( $p > 0.05$ ) in terms of new sexual satisfaction scale scores between whose family planning method was supported, unsupported and unsure women by their spouses however, it was determined that there was a statistically significant difference between the groups in terms of sexual satisfaction scale for women total scores ( $p < 0.05$ ). There was no statistically significant difference ( $p > 0.05$ ) in terms of new sexual satisfaction and sexual satisfaction scale for women scale total scores among women, according to the duration of application of the family planning method (3-6 months; 7-11 months; 1-2 years; 2-3 years; 4-5 years; 6-7 years). When women were evaluated according to their educational status, no statistically significant difference was found between the education levels of women in terms of new sexual satisfaction and sexual satisfaction scale for women total scores ( $p > 0.05$ ).

Table 3 shows the comparison of the new sexual satisfaction and sexual satisfaction scale for women total scores according to the family planning method used by women. There is no statistically significant difference in the new sexual satisfaction and sexual satisfaction scale for women scores between the groups

**Table 1.** Descriptive characteristics of women

Variable	n	Minimum	Maximum	X±SS
Age	230,00	19	61	34,01±7,36
			<b>n</b>	<b>%</b>
<b>Education level</b>	Primary school		27	11.8
	Middle School		18	7.8
	High school		37	16.1
	University		107	46.5
	Master Degree		19	8.3
	Doctorate		21	9.1
<b>Working status</b>	Working		144	62.6
	Not working		86	37.4
<b>Income level</b>	Income less than expenses		36	15.7
	Income more than expenses		60	26.1
	Income equals expense		134	58.3
<b>Contraceptive method currently used</b>	Monthly injection		1	0.4
	Combined Oral Contraceptives		24	10.4
	Methods of tracking fertility		2	0.9
	Withdrawal		54	23.5
	Implant		1	0.4
	Condom		85	37.0
	Intrauterine device		46	20.0
	Calendar method		4	1.7
	Tubal ligation		7	3.0
	Quarterly injection		4	1.7
	Vaginal douche		1	0.4
Vasectomy		1	0.4	



<b>Duration of using contraceptive method</b>	3-6 months	34	14.8
	7-11 months	17	7.4
	1-2 years	30	13.0
	2-3 years	33	14.3
	4-5 years	37	16.1
	6 -7 years and above	79	34.3
<b>Degree of satisfaction with the contraceptive method used</b>	Unsatisfied	8	3.5
	Somewhat satisfied.	52	22.6
	Satisfied	170	73.9
<b>Spousal support in using contraceptive method</b>	I am not sure	16	7.0
	Yes	202	87.8
	No	12	5.2

**Table 2.** Comparison of new sexual satisfaction and sexual satisfaction scale for women scores according to descriptive characteristics of women

Variable	Group	n	X	SS	Min	Max	25th	% 50th (Median)	75th	X <sup>2</sup>	p
NSSS <sup>1</sup>	Unsatisfied	8.00	67.13	18.26	40.00	97.00	52.75	67.00	79.25	0.093	0.954
	Somewhat satisfied	52.00	67.48	20.60	20.00	100.00	50.00	72.00	84.00		
	Satisfied	170.00	68.55	19.29	22.00	100.00	51.75	70.00	83.25		
SSS-W <sup>2</sup>	Unsatisfied	8.00	68.69	10.56	56.00	88.50	60.63	66.25	76.75	11.614	*0.003
	Somewhat satisfied.	51.00	65.52	11.42	50.00	106.00	58.50	63.00	73.00		
	Satisfied	170.00	60.91	8.20	44.00	98.00	56.00	59.50	64.13		
NSSS <sup>1</sup>	Supporting	202.00	68.89	19.40	20.00	100.00	51.75	71.50	84.00	3.436	0.179
	No Support	12.00	57.17	18.90	22.00	89.00	43.00	55.00	75.00		
	I am not sure	16.00	68.63	19.69	38.00	99.00	51.00	71.50	84.50		
SSS-W <sup>2</sup>	Supporting	201.00	61.27	8.36	44.00	98.00	56.00	59.50	64.25	19.093	*0.000
	No Support	12.00	62.83	11.53	45.50	82.50	53.00	64.00	73.38		
	I am not sure	16.00	73.47	12.11	56.00	106.00	64.75	71.75	79.00		
NSSS <sup>1</sup>	3-6 months	34.00	67.71	18.57	31.00	100.00	53.25	66.50	80.00	1.619	0.899
	7-11 months	17.00	67.59	20.55	37.00	99.00	49.50	67.00	87.00		
	1-2 years	30.00	67.20	18.04	40.00	100.00	49.50	71.00	80.00		
	2-3 years	33.00	70.33	19.48	40.00	100.00	48.50	75.00	86.50		

	4-5 years	37.00	65.84	19.32	37.00	100.00	47.50	68.00	80.00		
	6-7 years	79.00	69.32	20.66	20.00	100.00	54.00	72.00	87.00		
SSS-W <sup>2</sup>	3-6 months	33.00	62.70	9.48	50.00	95.00	56.00	60.50	66.75	2.096	0.836
	7-11 months	17.00	62.91	7.18	56.00	84.00	56.75	62.50	64.00		
	1-2 years	30.00	63.58	13.09	44.00	98.00	56.00	60.00	68.88		
	2-3 years	33.00	62.59	8.94	48.00	80.50	56.00	61.50	67.50		
	4-5 years	37.00	59.88	5.71	51.00	71.50	55.25	59.50	64.00		
	6-7 years	79.00	62.26	9.59	45.50	106.00	56.00	60.00	66.00		
NSSS <sup>1</sup>	Income less than expenses	36.00	65.42	18.37	31.00	99.00	48.50	67.50	80.00	3.998	0.135
	Income more than expenses	134.00	69.37	20.05	20.00	100.00	51.00	71.00	87.00		
	Income equals expense	60.00	67.50	18.94	33.00	100.00	51.00	71.50	79.50		
SSS-W <sup>2</sup>	Income less than expenses	36.00	65.99	12.54	48.00	106.00	56.75	60.50	72.75	1.459	0.482
	Income more than expenses	134.00	61.52	8.68	44.00	98.00	56.00	59.75	65.13		
	Income equals expense	59.00	61.46	8.01	49.00	84.50	56.00	62.00	65.50		
NSSS <sup>1</sup>	Primary school	27.00	63.84	8.92	51.00	82.00	57.50	63.50	65.75	5.802	0.326
	Middle School	18.00	64.00	11.86	50.00	88.50	55.50	60.00	70.75		
	High school	37.00	62.78	10.12	45.50	96.00	56.00	61.00	66.00		
	University	106.00	61.05	8.94	44.00	106.00	56.00	59.00	64.00		
	Degree	20.00	64.50	10.07	52.00	98.00	56.88	62.75	67.88		
	Doctorate	21.00	60.88	7.32	51.50	75.00	55.25	59.50	66.00		
SSS-W <sup>2</sup>	Primary school	25.00	67.00	22.46	20.00	100.00	47.00	68.00	87.50	7.810	0.167
	Middle School	18.00	73.67	16.62	38.00	100.00	67.75	76.00	82.00		
	High school	37.00	61.95	18.19	22.00	98.00	50.00	56.00	76.50		
	University	107.00	71.69	19.79	31.00	100.00	56.00	72.00	89.00		
	Degree	20.00	58.80	18.30	38.00	87.00	41.25	53.00	78.25		
	Doctorate	21.00	67.52	16.04	39.00	100.00	54.00	73.00	78.50		
NSSS <sup>1</sup>	Working	144.00	68.17	19.87	22.00	100.00	50.00	71.50	83.75	0.096	0.923
	Not Working	86.00	68.42	18.93	20.00	100.00	51.75	70.00	80.50	**	**
SSS-W <sup>2</sup>	Working	144.00	62.58	9.34	45.50	98.00	56.00	60.50	65.88	0.600	0.548
	Not Working	85.00	61.58	9.33	44.00	106.00	56.00	60.00	65.25	**	**

Kruskal Wallis test, \*,  $p < 0,01$ , X; average, SS; standard deviation,

\*\*;; Mann Whitney U Test; 1 The New Sexual Satisfaction Scale (NSSS); 2 Sexual Satisfaction Scale for Women (SSS-W)

**Table 3.** Comparison of new sexual satisfaction and sexual satisfaction scale for women scores among the groups determined according to the family planning method currently used by women

Variable	Group	n	X	SS	Min	Max	25th	% 50th (Median)	75th	X <sup>2</sup>	p
NSSS <sup>1</sup>	Condom	85.00	71.80	13.39	54.00	89.00	59.00	74.00	83.50	5.986	0.541
	Intrauterine device	46.00	69.76	20.02	31.00	100.00	50.00	75.00	87.00		
	Withdrawal	54.00	69.29	19.11	38.00	100.00	55.00	68.00	84.00		
	Combined oral contraceptive	23.00	68.87	15.72	40.00	100.00	55.50	70.50	80.00		
	Tubal ligation	7.00	69.25	23.49	22.00	100.00	48.75	74.50	88.00		
	Quarterly injection	4.00	52.14	28.30	20.00	99.00	28.00	48.00	80.00		
	Vaginal douche	2.00	57.43	15.47	38.00	85.00	46.00	57.00	68.00		
SSS-W <sup>2</sup>	Condom	85.00	69.60	7.05	64.50	82.00	65.50	67.00	75.00	9.027	0.251
	Intrauterine device	46.00	62.14	9.57	50.00	98.00	56.00	59.75	64.00		
	Withdrawal	54.00	61.86	10.04	45.50	106.00	56.00	59.50	65.50		
	Combined oral contraceptive	23.00	61.83	7.40	44.00	80.50	57.75	61.75	65.13		
	Tubal ligation	7.00	61.57	7.77	53.00	77.00	55.50	58.00	67.00		
	Quarterly injection	4.00	60.64	6.79	53.50	75.00	56.50	60.00	60.00		
	Vaginal douche	2.00	59.86	6.85	52.00	66.50	52.00	63.00	66.00		

*Kruskal Wallis test, \*; p<0,01, X; average, SS; standard deviation,*

*1 The New Sexual Satisfaction Scale (NSSS); 2 Sexual Satisfaction Scale for Women (SSS-W)*

## DISCUSSION

A major reason woman starts, change, or quit birth control methods is their satisfaction with birth control methods (Walker et al., 2019). In our study, there was no difference between the new sexual satisfaction scale scores between the women who were satisfied with the family planning they used and the women who were slightly dissatisfied ( $p>0.05$ ) and women's satisfaction with the family planning method they use increased, their sexual satisfaction scale for women scores also increased ( $p<0.05$ ). The reason for the increase in sexual satisfaction scale for women scores with the method used in our study; It can be said that it is due to the physical and psychological changes in the methods used, the health concerns of the women related to the method, and the decrease in their fear of getting pregnant, making them more adaptable to sexual intercourse. Lack of communication between spouses causes spouses to change their own preferences for family planning and thus may affect their attitudes towards family planning in environments where couples do not share the same family planning preferences or do not know each other's preferences (El-Khoury et al., 2016; Zelalem, Worku, Alemayehu & Dessie 2021). At the same time, spousal support in using family planning services can affect women's sexual satisfaction and pleasure. In our study, there was no difference between sexual satisfaction scale for women and new sexual satisfaction scale scores of women who did not receive spousal support and who stated that they were not sure about their spouse support ( $p>0.05$ ), but sexual satisfaction was found to be higher in women who received spousal support ( $p<0.05$ ). This result can be interpreted as spousal support has positive effects on empathetic understanding, partnership in decision making, and communication quality to increase sexual pleasure, but do not affect sexual satisfaction. In our study, there was not statistically significant difference in term of the new sexual satisfaction scale and sexual satisfaction scale for women score among women according to the duration of family planning method implementation (3-6 months; 7-11 months; 1-2 years; 2-3 years; 4-5 years; 6-7 years) ( $p>0.05$ ). In a prospective study by Kramer et al. (2022), similar to our study results, individuals who have just started family planning methods and individuals who have been using family planning methods for 3 months were compared. It was stated that the side effects of family planning methods decreased over time, satisfaction with the method used increased, but it did not affect sexual function and sexual satisfaction. Various sociodemographic characteristics such as race, age, gender, education, personality, self-confidence, sexual orientation, acceptance of sexual roles, pregnancy and childbirth, psychological illnesses, chronic illnesses, drugs, alcohol or tobacco, and sexual abuse, sexual injury or

bad sexual experiences affect satisfaction and satisfaction (Howard, O'Neill, & Travers, 2006; Zihel & Masten, 2010). In our study, it was determined that the new sexual satisfaction scale score and sexual satisfaction scale for women scores did not change according to education level ( $p>0.05$ ). In the studies in the literature, it was stated that the level of education did not affect sexual satisfaction (Rahmani, Safavi, Jafarpoor & Merghati-Khoei, 2010; Ruiz de Viñaspre-Hernández, 2022). Our study results show that income and employment status of women are independent indicators of sexual satisfaction and pleasure. In our study, it was determined that the income and employment status of women did not affect their sexual satisfaction and satisfaction ( $p>0.05$ ). Other study results, unlike our study, stated that low income reduces sexual satisfaction and affects it negatively (Afzali, Khani, Hamzehgardeshi, Mohammadpour and Elyasi, 2020; Barrientos & Páez, 2006). It can be said that the difference in our study results is because other studies were conducted with different sample groups in other countries, and expectations from sexuality may vary according to cultures.

The use of family planning methods is related to their effects on marriage and sexual life, and the satisfaction of the couples who used (Barroilhet et al., 2018). In our study, no statistically significant difference was found between women using modern methods and women using traditional methods in terms of new sexual satisfaction and sexual satisfaction scale for women scores ( $p>0.05$ ). In the study conducted by Toorzani et al. (2010), no significant relationship was found between the mean sexual satisfaction scores of women and the common birth control method. Higgins et al. (2016) stated in their study that the sexual function and satisfaction scores of women who use different methods do not change over time. Unlike our study results, Egelioglu Cetisli et al. (2015) determined that the sexual functions of women using modern family planning methods are better than those using traditional family planning methods, and the sexual response is strong, easy, and satisfying. In our study, new sexual satisfaction and sexual satisfaction scale for women scores of women using condom were found to be higher than other methods. Studies have shown that women who use condoms frequently, regardless of whether they use hormonal contraception, have more frequent sexual intercourse (Blumenstock & Barber, 2022; Sayegh, Fortenberry, Shew & Orr, 2006). However, contrary to our study results, in a study, women using condoms caused dryness and numbness in the vagina and has been determined that condom reduces sexual satisfaction and pleasure due to the concern about sexual satisfaction of their spouses (Casey, MacLaughlin & Faubion, 2017).

## **LIMITATIONS AND STRENGTHS**

This is the first study to investigate the effect of contraceptive methods on women's sexual satisfaction and sexual pleasure and the affecting factors. The study was conducted in the Muslim society where sexuality is taboo, and the data was collected online to protect the privacy of women about their private lives. There are also some limitations of our study. Our study was conducted only with women, and since the data were collected online, the sample of study were relatively economically and more educated women with internet access. The results on satisfaction were based on women's self-reporting.

## **CONCLUSION**

Our results examine the effects of commonly used contraceptive methods on sexual satisfaction and satisfaction. Our results show that the contraceptive methods used do not affect the sexual satisfaction and satisfaction of women. While using family planning methods, the sexuality of individuals is often ignored. For this reason, health professionals should address the fear of sexual life while giving family planning counseling. All health professionals, especially physicians and nurses, play a key role in this process. Nurses are healthcare professionals who spend the most time with patients. For this reason, they should encourage their patients to evaluate their sexual lives for family planning and refer them to specialists when necessary.

### **Ethical committee:**

Approval to conduct the study has been received from Non-Interventional Clinical Research Ethics Committee of Kastamonu University (Date: 06/10/2021& No: 2020-KAEK-143-114).

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### **Author contribution**

All authors listed have contributed sufficiently to the project to be included as authors, and all those who are qualified to be authors are listed in the author byline. All authors reviewed the manuscript and have seen and approved the final version. The authors declare no conflicts of interest.

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