

EVALUATION of FAMILY PLANNING METHODS in TERMS of WOMEN'S SEXUAL LIFE

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Abstract

This study was carried out in order to evaluate family planning (FP) methods in terms of women's sexual life. This descriptive and cross-sectional study utilized a relational screening design. The sample of the study included 264 women who visited the gynecology clinic for any reason. Data were collected through the Participant Information Form and the Female Sexual Function Index (FSFI). Significant differences were detected in the FSFI sub-scales of Arousal, Lubrication, Orgasm and the FSFI total mean score ($p<0,05$). Further analyses showed that the Arousal, Lubrication, and Orgasm sub-scales and FSFI total score were highest in women who used COC and lowest in women who did not use FP methods; the statistical difference was found to be between women who used COC and women who did not use FP methods ($p<0,05$). It was found that the family planning methods used by women did not affect the Desire, Satisfaction, and Pain sub-scales of sexual function, but they affected the Arousal, Lubrication, Orgasm sub-scales and FSFI total mean score.

Keywords: Family planning, sexual satisfaction, nursing care, women's health

AİLE PLANLANMASI YÖNTEMLERİNİN KADIN CİNSEL YAŞAMI AÇISINDAN DEĞERLENDİRİLMESİ

ÖZ

Bu çalışma, aile planlaması (AP) yöntemlerinin kadınların cinsel yaşamı açısından değerlendirilmesi amacıyla yapıldı. Tanımlayıcı ve kesitsel olan bu çalışmada ilişkisel tarama deseni kullanılmıştır. Araştırmanın örneklemini herhangi bir nedenle kadın hastalıkları polikliniğine başvuran 264 kadın oluşturmuştur. Veriler, Katılımcı Bilgi Formu ve Kadın Cinsel İşlev İndeksi (FSFI) aracılığıyla toplanmıştır. FSFI'nin Uyarılma, Islanma, Orgazm alt boyutlarında ve FSFI toplam puan ortalamasında anlamlı farklılıklar saptandı ($p<0,05$). Yapılan ileri analizler sonucunda, Uyarılma, Islanma ve Orgazm alt boyutlarının ve FSFI toplam puanının KOK kullanan kadınlarda en yüksek, AP yöntemlerini kullanmayan kadınlarda ise en düşük olduğu saptandı. KOK kullanan kadınlar ile AP yöntemi kullanmayan kadınlar arasında istatistiksel olarak anlamlı fark bulundu ($p<0,05$). Kadınların kullandıkları aile planlaması yöntemlerinin cinsel işlev Arzu, Doyum ve Ağrı alt ölçeklerini etkilemediği ancak Uyarılma, Islanma, Orgazm alt ölçeklerini ve FSFI toplam puan ortalamasını etkilediği belirlendi.

Anahtar kelimeler: Aile planlaması, cinsel doyum, hemşirelik bakımı, kadın sağlığı

1. Introduction

Family planning is defined as the couples' controlling the number of children they have, the time they want to have children as well as and the intervals between births, making decisions responsibly, and having information, education, and tools for this purpose (1). FP methods also have important benefits in preventing the negative effects of gynecological diseases, illnesses related to excessive births, many and frequent pregnancies on the woman and community health as well as unwanted pregnancies and their negative consequences in maternal and child health (2,3,4). Although FP methods are effective in preventing pregnancy, they need to be acceptable for both men and women (5,6). The utilization of family planning methods is affected by some factors. Studies show that sexuality plays a great role in women's FP method preferences, practices, and use of the methods over a period of time (7,8). With its physiological, psychological, and social aspects, sexuality is affected by many factors as well as the FP method used. Its association with sexuality affects the acceptability of the FP method (9). Several studies indicate one of the reasons for not using an FP method anymore as its negative effects on sexuality (9,10,11). Therefore, regulation of family planning methods considering individuals' sexuality affects its success (2,12). Increased reliability and comfort of the method increase couples' sexual quality of life by decreasing their pregnancy anxiety (2). In addition, the type of the FP method used is also important. Türk and Terzioğlu (2012) investigated the withdrawal method and the factors affecting its use and found that sexual satisfaction was affected negatively in women who used this method (13). Kaplan and Zeyneloğlu also reported that women using the withdrawal method had low sexual satisfaction, and women with low sexual satisfaction also had low marital adjustment (14).

Results of the studies concerning the effects of hormonal contraceptives on sexual functions showed that some women were affected positively, some were affected negatively, and most did not experience any changes (10, 12). When couples start using an FP method, generally they are not administered any measurements to identify the effects of the method on their sexual life (5,8). On the other hand, there is insufficient knowledge about the potential method-related side effects, compatibility of the partners, and effects on woman's sexuality (9,15). In light of this information, there is a need for planning more studies in this field in terms of the identification of the relationship and effect of family planning on sexual health and planning appropriate interventions in family planning education and consultancy services given by women's health nurses and midwives.

Research questions

1. Does the family planning method used by women affect the quality of sexual life?

2. Method and Methods

Study Design: This descriptive and cross-sectional study, which aims to evaluate family planning (FP) methods in terms of women's sexual life, utilized a relational-screening design.

Target Population and Sample: The target population of the study was all women who visited the gynecology and obstetrics clinic at Çankırı State hospital for gynecological reasons between July 2019 and February 2020. The sample size was calculated with the Stata 13.1 program. Alpha of 0.05 (two-sided) and 80% power ($\beta = 0.2$) were taken in the calculation. Cetisli et al. (2016), the Cohen d value was found to be 0.198 (2). As a result of these data, the sample size was determined as 264. Women who came to the hospital due to gynecological reasons within the dates the study was conducted, who were not pregnant, who used a family planning method, who did not have communication problems, and who agreed to participate in the study formed the inclusion criteria.

Data Collection Tools: Data were collected through the Participant Information Form developed by the researchers in line with the literature and the Female Sexual Function Index. The Participant Information Form was first administered to 30 women to test its comprehensibility. As no problems were reported in the pilot study phase, the form was administered to the sample without any changes.

Participant Information Form: The form consists of questions concerning women's sociodemographic characteristics (age, partner's age, education level, partner's education level, partner's occupation, income level, number of pregnancies experienced, number of children, and the family planning method used).

Female Sexual Function Index (FSFI): Reliability and validity of the index were performed by Rosen et al. (2000), and Turkish reliability and validity analysis was performed by Öksüz and Malhan (2005). The FSFI is a 19-item Likert scale that assesses sexual dysfunction in women. The scale is composed of six sub-scales including Desire, Arousal, Lubrication, Orgasm, Satisfaction, and Pain. Each sub-scale is scored between 0 and 6, and the total score ranges between two (2) and 36. Higher scores indicate better sexual functions. Rosen et al. (2000) and Taş et al. (2006) in Turkey reported the functional status as good if the score is >30, moderate if the score is 23-29, and poor if the score is <23. Cronbach's alpha values of the original scale as Desire 0.84, Arousal 0.94, Lubrication 0.90, Orgasm 0.86, Satisfaction 0.75, Pain 0.93 and FSFI 0.95. This study found Cronbach's alpha of the scale as Desire 0.79, Arousal 0.91, Lubrication 0.84, Orgasm 0.80, Satisfaction 0.94, Pain 0.90 and FSFI 0.94.

Data Collection: Data were collected from women who met the research criteria and agreed to participate in the study through interviews conducted face-to-face. After participating women were informed about the study, they were administered the questionnaires by the researchers. Administration of the data collection forms took about 10-15 minutes.

Data Analysis: Data obtained from the study were analyzed using Statistical Package for Social Sciences (SPSS) 22.0 program on the computer. Dependent variables were evaluated with the Shapiro Wilk and Kolmogorov Smirnov tests. As a result of the study, $p=0.125$ was found. Since the P value was greater than 0.05, it was found to have a normal distribution. Data analysis included descriptive statistical methods (means, standard deviation, median, frequency, ratios, minimum, maximum), t-test in independent groups, ANOVA test, and LSD test to find out which groups created the differences. Statistical significance was taken $p<0,01$ and $p<0,05$.

Ethical Considerations: Before the study was conducted, a report indicating the purpose, methods, and data collection tools of the study was submitted to Çankırı Karatekin University Ethics Committee (Decision no:2019/133 dated: 11.06.2019). After Ethics committee approval was received, written permission was obtained from Çankırı Public Hospital. The participants were told that the data would be used and published for scientific purposes without disclosing their names. The participants' written and verbal consent was received in line with the Declaration of Helsinki.

3. Results

The average age of the participating women was 33.22 ± 6.57 (min: 20-max: 48), and the average age of partners was 36.79 ± 7.32 (min:21-max:56).

Table 1: Comparison of the FSFI Scores according to the Participants' Socio-demographic and Obstetric Characteristics and FP Methods

Participants' Characteristics	25.55 ≤	25.56 ≥	Statistics	
	Sexual Dysfunction	Sexual Function		
Age	33.46±6.95	33.09±6.15	t=0.455	p=0.650
Partner's Age	37.22±7.78	36.44±6.85	t=0.858	p=0.393
Number of Pregnancies	2.68±2.39	2.34±1.78	t=1.269	p=0.206
Number of Children	1.98±1.43	1.88±1.18	t=0.650	p=0.516
	Number	Percentage	Ort±SD	Statistics
Education Level				
12 years and less	155	58.7	24.43±6.13	t*=-0.658 p=0.511
More than 12 years	109	41.3	24.93±5.90	

Partner's Education Level				
12 years and less	144	54.5	24.42±6.43	t=-0.633
More than 12 years	120	45.5	24.89±5.53	p=0.528
Working or not				
Not working	156	59.1	24.80±5.77	t=0.499
Working	108	40.9	24.42±6.39	p=0.618
Partner's Occupation				
Worker	141	53.4	24.54±6.16	t=0.499
Civil Servant	123	46.6	24.75±5.89	P=0.618
Income Level				
Income more than expenses	27	10.Şub	24.94±7.95	F**=0.140 p=0.870
Income equal to expenses	163	61.7	24.72±6.01	
Income less than expenses	74	28.0	24.34±5.29	
Type of Marriage				
Arranged marriage	98	37.1	24.84±6.09	t=0.420
Meeting before marriage	166	62.9	24.52±6.01	p=0.675
Total	264	100	24.63±6.02	

*t=independent t test **F=One Way Anova Statistical significance was taken p<0,01 and p<0.05.

According to the FSFI cut-off point, the average age of women who received 25.55 points or lower was 33.46±6.95; the average age of partners was 37.22±7.78; the average number of pregnancies was 2.68±2.39; and the average number of children was 1.98±1.43. Mean scores for women's age, partners' age, number of pregnancies, and number of children were found to distribute similarly according to the FSFI cut-off point (p>0.05). Besides, 58.7% of women and 54.5% of partners had an education level of 12 years and less, 59.1% did not work, 61.7% had income equal to expenses, and 62.9% met before they got married. Education level, working, income level, and type of marriage of the participants and their partners were found to demonstrate a similar distribution according to their FSFI total score (p>0.05) (Table 1).

Table 2: Comparison of the Participants' FSFI Total and Sub-scale Mean Scores according to the FP Methods

FP Methods	N percenta ge	Desire	Arousal	Lubrication	Orgasm	Satisfaction	Pain	FSFI Total
		Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD
IUDa	31(11.7)	3.50±1.10	3.37±1.51	4.18±1.71	3.87±1.71	4.12±1.56	4.45±1.81	23.50±7.88
Condomb	82(31.1)	3.40±1.06	3.79±1.19	4.55±1.17	4.39±1.08	4.26±1.11	4.74±1.26	25.12±4.99
COCc	58(22.0)	3.66±0.98	4.23±1.15	4.61±1.12	4.57±1.11	4.14±1.25	4.76±1.26	25.99±5.03
Withdrawal d	75(28.4)	3.49±0.99	3.67±1.36	4.50±1.35	4.27±1.26	4.27±1.25	4.37±1.32	24.53±5.85
Tubal Ligationse	7(2.7)	4.11±1.94	3.43±1.81	3.43±2.27	3.31±2.01	3.43±2.14	3.89±2.15	21.60±9.79
No FP methods f	11(4.2)	2.89±1.34	2.56±1.54	3.11±2.13	3.13±1.57	4.40±1.13	4.00±1.70	20.09±8.01
Test value		F=1.597	F=4.020	F=3.367	F=3.903	F=0.690	F=1.488	F=2.574
P value		p=0.161	p=0.002	p=0.006	p=0.002	p=0.631	p=0.194	p=0.027

FSFI total b>f, c>f, d>f LSD, Groups creating differences according to the Tukey test result. Statistical significance was taken p<0,01 and p<0.05.

The FP methods used by the participants were as follows: UID (11.7%), condom (31.1%), COC (22.0%), withdrawal (28.4%), and no FP methods (4.2%). FSFI sub-scales of Desire, Satisfaction, and Pain mean scores were found to distribute similarly across the FP methods used (p>0.05). Significant differences were found between the FSFI sub-scales of Arousal, Lubrication, and Orgasm and FSFI total mean score (p<0.05). Further analysis showed that the Arousal, Lubrication, and Orgasm sub-scales and FSFI total score had the highest mean scores in women who

used COC, and the lowest in women who did not use an FP method; the statistical difference was found to be between the women who used COC and who did not use an FP method ($p < 0.027$) (Table 2).

4. Discussion

Female sexual dysfunction is a wide, complicated, and multidimensional disorder and affects women's life negatively in various periods. With the differences in its biological, psychological, socio-cultural, and relational aspects, sexuality requires a multidimensional evaluation (16). While many biological, cognitive, emotional, and social factors play a role in a woman's sexual function (17), important changes are experienced particularly with fertility and age (18). This study found that factors such as age, partner's age, number of pregnancies and number of children, partner's education level, working or not, income level, and type of marriage did not have effects on female sexual function. Similar studies in the literature report no significant relationships between age, duration of the marriage, number of children, frequency of sexual intercourse, working or not, perceived financial level, use of family planning methods or not, delivery method and sexual dysfunction (19). Another study reported a significant relationship between a woman's and partner's age, woman's education duration, type of marriage, duration of the marriage, and sexual dysfunction (20). Keseroğlu et al. (2018) reported that the FSFI scores of those who had a high education level were higher in comparison to those who had a low education level (21). Tekin et al. reported that the FSFI scores were higher in women who had a medium education level and used contraceptive methods, and the sexual function mean scores did not indicate changes according to economic level (22). Another study reported that sufficient income and use of modern FP methods were protective factors against sexual dysfunction (23). The results of this study, which are in line with the literature in some aspects, are considered to be related to participants' individual and cultural characteristics. The majority of the participants of this study used a family planning method. On the other hand, 28.4% used the withdrawal method, and 4.2% did not use any FP methods. The results of the Turkey Demographic and Health Survey (TDHS 2018) reported that to prevent pregnancy, 49% of Turkish women used modern methods, 21% used traditional methods, and 30% did not use any methods (24). The results of the present study revealed higher ratios of the use of modern methods in comparison to the report. Fear of unwanted pregnancy, especially when the partner does not share the same concern, is reported to affect women's sexual arousal negatively. The frequency of sexual activity and sexual pleasure is reported to be positively associated with contraceptive satisfaction (25). The use of modern or traditional contraceptive methods affects sexual function. As a traditional method, withdrawal causes negative effects such as increased concerns about pregnancy, interrupting sexual intercourse, and decreased satisfaction while modern family planning methods enable to experience safer sexual intercourse free from the fear of pregnancy (26). Studies show that the use of contraceptives increased libido in women who had decreased worries about pregnancy (27). Lack of use of contraception is even reported to be associated with sexual dysfunction and dissatisfaction (28). The frequency of sexual dysfunction is less common in those who used modern methods in comparison to those who use traditional methods (29).

Studies show that women who used contraception methods had lower total FSFI scores in comparison to those who did not use contraceptive methods, and the Desire, Lubrication, and Pain sub-scales of both groups indicated statistically significant differences (30). In this study, the family planning method used was found to have no effects on the Desire, Satisfaction, and Pain sub-scales, but significant levels of effects were reported in the Arousal, Lubrication, and Orgasm sub-scales. While the Arousal, Lubrication, and Orgasm sub-scales and FSFI total score were the highest in women who used COC, it was found to be the lowest in women who did not use an FP method.

While the literature indicates no clear results concerning the effects of contraceptive methods containing estrogen-progestin on sexual functions (6,11), contraceptive methods containing only progestin are reported to have no significant effects on sexuality (31,32). Tekin et al. (2014) reported

that the arousal score was higher in those who used hormonal contraceptive methods (22). In their study conducted with women aged between 18 and 37, Caruso et al. reported that third-generation contraceptive pills increased sexual functions 3 to 6 months later (33). In addition, sexual desire was reported to increase in women aged from 18 to 35 who used pills containing progestin drospirenone and gestodene (third-generation) (34). Another study reported that female sexual function was found to increase 3, 5, and 9 months later in women aged 18-35 who used pills containing 15 µg ethinyl estradiol and 60 µg gestodene (35). The findings of this study are in line with the literature.

An analysis of various studies on the effects of family planning methods on sexuality shows that the women who had tubal ligation had higher FSFI total and sub-scale mean scores in comparison to other groups (36). In another study, women's sexual functions were reported to be affected negatively after tubal ligation (37). Another study reported lower FSFI scores in women who used IUD in comparison to those who did not, yet the difference was not statistically significant (38). It was also reported that the use of Cu-IUD could increase sexual pain and affect female sexual function negatively (39). İlhan et al. (2018) stated that the majority of women who used IUD had sexual dysfunction (40). The results of this study showed that socio-demographic and obstetric characteristics such as age, partner's age, number of pregnancies, number of children, partner's education level, working or not, income level, and type of marriage did not affect sexual function levels. The family planning methods used by participating women did not affect the Desire, Satisfaction, and Pain sub-scales while the Arousal, Lubrication, Orgasm sub-scales and FSFI total mean scores were found to increase. Sexual functions are affected negatively in women who used COC.

Limitations of the Research

Since the study was conducted in a state hospital in a province in Central Anatolia in Turkey, the results cannot be generalized to the whole population. Between the dates of the research, the data collection tool developed in accordance with the purpose of the research and the answers given by the participants to the questions in the data collection tool are also limited.

5. Conclusion

The family planning method used affects the sexual functions of women. While the use of highly protective methods such as COCs increases sexual satisfaction, not using the method negatively affects sexuality. In line with these results, socio-demographic and obstetric characteristics of women who seek family planning methods should be assessed holistically, and both women and their partners should be provided with detailed consultancy regarding the positive and negative aspects of the preferred method as well as its use and efficiency. In addition, considering their need for knowledge about sexuality, individuals seeking family planning methods should also be provided with consultancy about issues such as sexual health and sexual dysfunctions; awareness should be raised about these issues, and sexual health and sexual dysfunction should be identified by midwives and nurses before a method is chosen.

Ethical considerations

Before the study was conducted, approval was obtained from Çankırı Karatekin University Ethics Committee (Decision no:2019/133 dated: 11.06.2019). The participating women were informed about the consent form, and their written approval was obtained.

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