Original Article

Investigation of the Attitudes of Women of Reproductive Age to Family Planning with the Anxiety they Experienced during the Pandemic Period

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Abstract

Objective: It was planned to investigate the anxiety experienced by women of reproductive age during the pandemic and their attitudes towards family planning.

Method: A descriptive and correlational study was conducted across the country between June and August 2021 with women of reproductive age, sexually active, without sexual dysfunction and anxiety disorder. "Personal Information Form", "State-Trait Anxiety Scale" and "Family Planning Attitude Scale" were used to collect data.

Results: The mean age of the women participating in the study was 31.96±7.48 years, and the majority (38.2%) use condoms as a family planning method. Anxiety total scale score average was 102.17±23.48 and Family Planning Attitude Scale total score average was 129.19±20.67. There was a weak negative correlation between the Anxiety Total score of women and the Attitude of the Society towards Family Planning sub-dimension score (r:-.341, p:.000), and a very weak negative statistically significant relationship between the Family Planning Attitude Scale score (r:-.242, p:.000).

Conclusion: It was found that the state anxiety levels of women were higher than the trait anxiety levels during the pandemic period, and it was determined that high anxiety had a negative effect on family planning attitudes.

Keywords: Family Planning, women's health, anxiety, pandemics.

Introduction

Coronaviruses (CoV) are a large family of viruses that can range from mild, self-limiting infections common in the community, such as the common cold, to more serious infections such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). The World Health Organization (WHO) declared it an international public health emergency on January 30, 2020. Most countries in the world have recognized this as a national emergency and have begun to take measures against infection. The first case in our country was detected on March 11, 2020 (Sharma et al., 2020; TR Ministry of Health, 2020).

The Covid 19 pandemic has led to couples being unemployed, spending long hours at home, frustrated, financial instability, and thus increasing gender-based violence and other harmful practices (Kumar, 2020). Traumatic events can reduce people's sense of security, remind them of the reality of death, and have negative effects on mental health. Suggestions/prohibitions such as when the epidemic will end and treatment methods, constant exposure to the flow of information about the pandemic and its effects, reduction in social relations due to the pandemic, and staying at home as much as possible can adversely affect the mental health of individuals (Ozdin & Ozdin, 2020).

Due to the nature of the epidemic and the contagious power of the virus, the pandemic period can inevitably cause anxiety, depression and other stress reactions in humans (Wang, Di, Ye, & Wei, 2021). The COVID 19 pandemic poses a global stressor to society with potential consequences for the mental health and well-being of individuals (Brehl, Schene, Kohn, & Fernández, 2021). Conditions such as anxiety, depression, fear, stress and sleep problems are more common during the COVID 19 pandemic (Torales, O'Higgins, Castaldelli-Maia, & Ventriglio, 2020). It has been found that variables such as occupation, education and gender affect the symptoms of anxiety and depression that develop during the pandemic (Wang vd., 2021).

The aim of family planning services is to plan pregnancies, to leave the desired time between pregnancies and to prevent unwanted pregnancies. It increases the health of women, children and families by allowing individuals to adjust the desired birth interval and family size. Women in every income group, education level and age group may face unwanted pregnancies. With unintended pregnancies, taking prenatal care and breastfeeding may decrease, as well as postpartum depression and parental adjustment problems may increase. Family planning services should be continued to prevent complications related to unintended pregnancies. Access to family planning services is a human right, saves lives and builds healthy populations (Sharma et al., 2020).

It is thought that the Covid 19 pandemic may hinder family planning needs from being met. Women avoid going to health centers because of fear of contagion or restrictions on Covid 19. Interruptions in global production and supply chains can hinder access to contraceptive products (UNFPA, 2020). It is thought that women in reproductive age are one of the most affected groups, together with the experiences in previous pandemic periods (Tran et al., 2020). The most serious effect of the unmet need for birth control is the increase in unwanted pregnancies and related complications (Kumar, 2020).

Problems experienced by women of reproductive age and their ability to use family planning methods are issues that midwives should follow. The problems and anxiety caused by the current pandemic process suggest that women may have an effect on the use of methods.

The aim of study was to investigate the anxiety experienced by women of reproductive age during the pandemic and their attitudes towards family planning.

Research Questions

1. What is the level of women's attitudes towards family planning during the pandemic process?
2. Does anxiety experienced during the pandemic affect the attitudes of women of reproductive age towards family planning?

Methodology

Population and Sample of the Research: The population of the research, which is descriptive and correlational, consisted of women of reproductive age and sexually active living in Turkey. The research sample consisted of women of reproductive age (15-49 years old), sexually active, non-pregnant, without sexual dysfunction in their spouses/partners, without anxiety disorders before the pandemic period, and volunteering to participate in the research between June and August 2021.

Sample Calculation: The sample size of the study was decided by using power analysis. Calculated based on the relationship between two averages in power analysis. In the calculation, two-way correlation, type 1 error rate (α)=0.05, power of the study (1- β) was taken as 0.95. Since no similar studies were found, the calculation was made based on the large effect size 0.5 value for the correlation in Cohen's standardized effect size. As a result of the analysis, the minimum number of women to be reached was calculated as 212. Considering the case losses in this study, the study was completed with 233 women. Free Statistics Calculators website was used for sample calculation [10].

Data Collection Tools: The data were collected using the "Personal Information Form" (29 questions), the "State-Trait Anxiety Scale (STAI)" (40 questions) and the "Family Planning Attitude Scale (FPAS)" (34 questions).

Personal Information Form: The form created by the researchers in line with the literature; it consists of 29 questions about socio-demographic, obstetric characteristics and relationships with spouse (Bilgin & Kesgin, 2020; Gozukara, Kabalcıoglu, & Ersin, 2015).

State-Trait Anxiety Scale (STAI): The State-Trait Anxiety Inventory was developed by Spielberger et al. in 1970 (Spielberger, Gorsuch, & Lushene, 1970), and its validity and reliability in Turkey was done by Öner (Oner & LeCompte, 1983). The scale consists of two sub-scales

consisting of 20 questions in 5-point Likert type. The state anxiety scale shows the level of anxiety in a particular situation, while the trait anxiety scale shows the general anxiety level of the individual regardless of the situation she/he is in. High scores on the scale indicate high anxiety levels, and low scores on the contrary indicate low anxiety levels.

Direct statements in the scale express negative emotions, reversed statements express positive emotions. Reversed statements on the State Anxiety Scale ıtems 1,2,5,8,10,11,15,16,19 and 20, in the Trait Anxiety Scale items are 21,26,27,30,33,36 and 39. After the total weights of the direct and reversed statements are found separately, the total weight score of the reverse statements is subtracted from the total weight score obtained for the direct statements. A predetermined and unchanging value is added to this number. This constant value is 50 for the State Anxiety Inventory and 35 for the Trait Anxiety Inventory. The most recent value is the individual's anxiety score. In the reliability analyzes performed, the Cronbach Alpha internal consistency coefficient was found to be between .83 and .87 for the State Anxiety Inventory, and between .94 and .96 for the Trait Anxiety Inventory. The Cronbach Alpha internal consistency coefficient for this study was .84 for STAI-S and .94 for STAI-T.

Family Planning Attitude Scale (FPAS): The scale, which was developed by Orsal and Kubilay in 2007, is in 5-point Likert type and consists of 34 items. It consists of 3 sub-dimensions: "Societal attitudes towards family planning (SATFP)", "Attitude Towards Methods (ATM)" and "Attitude towards Pregnancy (ATP)". A minimum of 34 points and a maximum of 170 points are obtained from the scale. The points that can be taken from the scale are 34-170. As the scores get higher, the attitude towards family planning also increases positively. Cronbach's alpha internal consistency coefficient was found to be 0.90 in the reliability analysis (Orsal & Kubilay, 2007). For this study, the SATFP cronbach alpha internal consistency coefficient value was .96, the ATM cronbach alpha internal consistency coefficient value was .91, the ATP cronbach alpha internal consistency coefficient value was .89, and the FPAS cronbach alpha internal consistency coefficient value was .93.

Research Procedure: "Personal Information Form", "State-Trait Anxiety Scale" and "Family Planning Attitude Scale" were applied to the women who met the sampling criteria and volunteered to participate in the study via the Google forms online platform. They were asked to fill in each item by specifying explanations in the directive. The women answered "yes" to the question "Do you agree to participate in the study" in the first form, and after their written consent was obtained, they moved on to the survey questions. Completing the questionnaire took an average of 15-20 minutes.

Evaluation of Data: Research data were evaluated in the SPSS 16.0 (Statistical Package for Social Science) package program. In the evaluation of the data, the number, percentage, mean and standard deviation from descriptive statistical analyzes were used, while their distribution was checked with the Kolmogorov Smirnov test. In the examination of the relationship between STAI-S-T and FPAS sub-dimension and total scores; Spearman's rho Analysis. "p" values below 0.05 were considered statistically significant. The results were evaluated at a significance level of $p \leq 0.05$ at a 95% confidence interval.

Ethical Principles of Research: For the ethical permission of the research, permission was obtained from the Scientific Research Ethics Committee of XX University (Number: 594 Date: 03.06.2021). The women who will participate in the research were informed that their personal information would be kept confidential in the disclosure section of the google forms, and the "principle of confidentiality" was complied with and acted in accordance with the rules in the Declaration of Helsinki.

Results

The mean age of the women participating in the study was 31.96±7.48 (min: 17, max: 49), the mean age of spouses/partners was 34.67±8.27 (min: 19, max: 59), and other socio-demographic data are presented in Table 1.

The findings of women regarding their obstetric and family planning choices are presented in Table 2. Most of the women had no pregnancy (36.9%), delivery (45.5%), abortion (84.5%) and curettage (90.1%). Most of the women (38.2%) use condom as a family planning method. While the majority of women (59.7%) defined their spouse/partner relationships as "very good" before the pandemic period, it was found that this rate (51.1%) decreased after the pandemic. While the majority of women (52.8%) were not afraid of becoming pregnant before the pandemic period,

they were afraid of becoming pregnant during the pandemic period (51.9%) (Table 2).

While the mean STAI-S score of the women was 66.85±13.43, the mean total scale score of the STAI-T was 35.31±11.50, the mean total scale score of anxiety was 102.17±23.48 (Table 3). While the mean total scale score of the women was 129.19±20.67, the mean total scale score of SATFP, which is one of its sub-dimensions, was 61.15±14.63, the mean total scale score of ATM was 35.47±7.35, and the total scale score of ATP was determined as 32.55±6.53 (Table 4).

There was a weak negative correlation between the state anxiety score of the women and the SATFP score, and a very weak negative correlation between the FPAS score (respectively r:-.340; r: -.252; p<0.05).

A statistically significant correlation was found between trait anxiety and SATFP scores of

women, and a negative and very weak relationship between FPAS scores (respectively r: -.329; r: -.227 ; p<0.05).

A statistically significant correlation was found between the anxiety total score of the women and the SATFP score, and a negative and very weak relationship between the SATFP score (respectively r: -.341; r: -.242; p<0.05).

Table 1. Findings on Socio-demographic Characteristics of Women (N=233)

Variables		Mean±SD	
Average age of women		31.96±7.48 (min: 17. max: 49)	
Average age of spouses/partners		34.67±8.27 (min: 19. max: 59)	
		n	%
Educational Status of Women	Literate	9	3.9
	Primary education	25	10.7
	High school	35	15.0
	Bachelor's degree	121	51.9
	Postgraduate	43	18.5
Marital status	Married	188	80.7
	Single	45	19.3
Working Status	Yes	149	63.9
	No	84	36.1
Educational Status of Spouse/Partners	Literate	3	1.3
	Primary education	19	8.2
	High school	52	22.3
	Bachelor's degree	111	47.6
	Postgraduate	48	20.6
Working Status of Spouse/Partners	Yes	217	93.1

	No	16	6.9
Family Type	Elementary Family	206	88.4
	Extended family	27	11.6
Economic Level Before the Pandemic	Income less than expenses	16	6.9
	Income equals expense	102	43.8
	Income more than expenses	115	49.4
Economic Level of the Pandemic Period	Income less than expenses	60	25.8
	Income equals expense	89	38.2
	Income more than expenses	84	36.1
Getting infected with Covid 19	Yes	66	28.3
	No	167	71.6

Table 2. Characteristics of the Obstetrics and Family Planning Choices of Women (N=233)

Variables		n	%
Gravida	0	86	36.9
	1	64	27.5
	2	37	15.9
	3	22	9.4
	4 and above	24	10.3
Para	0	106	45.5
	1	59	25.3
	2	47	20.2
	3	9	3.9
	4 and above	12	5.2
Abortion	0	197	84.5
	1	29	12.4
	2	3	1.3

	3	3	1.3
	4 and above	1	0.4
Curettage	0	210	90.1
	1	15	6.4
	2	2	.9
	3	5	2.1
	4 and above	1	0.4
Family Planning Method Used	Pill	36	15.5
	IUD	13	5.6
	Condom	89	38.2
	Rhythm Method	13	5.6
	Symptothermal method	2	.9
	Monthly Injection	2	.9
	Quarterly Injection	4	1.7
	Norplant	2	.9
	I do not use	69	29.6
Spouse/Partner Relationships Before the Pandemic Period	Too bad	1	.4
	Bad	1	.4
	Average	20	8.6
	Good	72	30.9
	Very Good	139	59.7
Spouse/Partner Relationships During the Pandemic Period	Too bad	3	1.3
	Bad	13	5.6
	Average	28	12.0
	Good	70	30.0
	Very Good	119	51.1

Fear of Getting Pregnant Before the Pandemic Period	Yes	94	40.3
	No	123	52.8
	I'm undecided	16	6.9
Fear of Getting Pregnant During Pandemic Period	Yes	121	51.9
	No	90	38.6
	I'm undecided	22	9.4

Table 3. Findings Related to State-Trait Anxiety and Anxiety Total Scores (N=233)

	Min.-Max.	Mean±SD
STAI-S Total Scale Score	26-80	66.85±13.43
STAI-T Total Scale Score	2-51	35.31±11.50
Anxiety Total Scale Score	28-131	102.17±23.48

Table 4. Findings Regarding the Family Planning Attitude Scale Sub-Dimension and Total Scores (N=233)

	Min.-Max.	Mean±SD
SATFP Total Scale Score	15-75	61.15±14.63
ATM Total Scale Score	9-45	35.47±7.35
ATP Total Scale Score	11-40	32.55±6.53
FPAS Total Scale Score	75-160	129.19±20.67

Table 5. Findings on the Relationship between Women's Total Anxiety Scores and Sub-Dimension Average Scores and Family Planning Attitude Scale Total Scores and Sub-Dimensions Average Scores

		SATFP	ATM	ATP	FPAS
State Anxiety Total Score Avg.	*r	-.340	.040	.033	-.252
	p	**.000**	.542	.618	**.000**
Trait Anxiety Total Score Avg.	*r	-.329	.065	.058	-.227

	p	**.000**	.324	.382	**.000**
Anxiety Total Score Avg.	*r	-.341	.060	.051	-.242
	p	**.000**	.365	.438	**.000**

* Spearman's rho

Discussion

This research was conducted to invastigate the anxiety experienced by women of reproductive age during the pandemic and their attitudes towards family planning. Access to family planning is not just a human right. It also saves lives and promotes healthier populations, more efficient healthcare systems and stronger economies (UNFPA, 2020). Family planning has the potential to reduce 32% of maternal deaths and 10% of neonatal, infant and child deaths (WHO, 2010). For this reason, the importance of family planning should not be ignored during the pandemic period when clinics make more effort to care for people with COVID-19. It is known that individuals stop going to clinics except for important health problems during the pandemic process. However, it is important to ensure that women and men have access to a basic service, family planning services (Bahamondes & Makuch, 2020).

In the study, it was found that the mean age of the participants was 31.96±7.48 years, 51.9% had a bachelor's degree, 9.9% had a history of curettage, and 70.4% used a family planning method. When the related studies in the literature were examined in terms of participant sociodemographic and obstetric characteristics, results similar to our study were found (Bilgin & Kesgin, 2020; Goksu & Kumcagiz, 2020).

While the majority (59.7%) of the women included in our study defined their spouse/partner relationships as "very good" before the pandemic period, it was observed that this rate decreased (51.1%) after the pandemic. While the rate of women who were afraid of becoming pregnant before the pandemic period was 40.3%, it is remarkable that this rate increased to 51.9% after the pandemic. It has been reported that negative emotional states such as anxiety, worry and stress created by the pandemic process have a negative impact on family relationships (Askin & Gungor, 2021). In line with this information, the change in the proportion of women who are afraid of getting pregnant before and after the pandemic period and before and after the pandemic period is an expected situation.

Pandemic periods are considered unusual epidemic periods and greatly affect living conditions. It is inevitable that mental health will be adversely affected by adversely affected living conditions. Anxiety disorders are stated as one of the most common mental disorders in the pandemic (Kocak & Harmanci, 2020). There are studies showing that women have higher anxiety levels during the pandemic (Goksu & Kumcagiz, 2020; Kim vd., 2014; Ozdin & Ozdin, 2020; Wang vd., 2021). Göksu and Kumcagiz (2020), in their study during the pandemic period, stated that women's state anxiety mean score was 51.45±12.02, and trait anxiety mean score was 49.43±6.86. Kul, Demir, and Katmer (2020) reported in their study that the state anxiety scores of women were 43.78±12.14. In the study of Ozmete and Pak (2021), in which they examined the relationship between anxiety level and perceived social support during the pandemic period, the mean state anxiety score of women was 48.32±9.05, and the mean trait anxiety score was 46.04±7.41. In our study, the mean STAI-S score of women (66.85±13.43) was found to be higher, unlike the studies in the literature. As the reason for this difference, it was thought that the emergence of different variants of the Covid-19 infection in the time period of the research may be effective in state anxiety (Ozdin & Ozdin, 2020; Spielberger et al., 1970; Tezel et al., 2015; Torales et al., 2020; Tran et al., 2020).

As a result of the research, it can be said that although women's attitudes towards family planning are positive, they are not at the desired level. When different studies were examined, it was determined that women exhibited positive attitudes towards family planning (Apay, Nazik, Ozdemir, & Pasinlioglu, 2010; Citak et al., 2019; Gozukara et al., 2015; Tezel et al., 2015). Our research shows parallelism with other literature

findings within the scope of women's attitudes towards family planning.

The aim of our study was to examine the anxiety experienced by women during the pandemic process and their attitudes towards family planning and to reveal the relationship between them. In this context, in our study, it was determined that there was a negative and significant relationship between the state anxiety, trait anxiety and total anxiety scores of women in the Covid 19 pandemic and their SATFP and FPAS attitudes. In other words, it can be said that the increase in women's anxiety decreases their positive attitudes towards family planning. This finding is an important result in terms of revealing the possible negative effects of anxiety on family planning attitudes, as it paves the way for situations that will adversely affect women's health.

Conclusion and Recommendations: As a result of the research, it was found that the state anxiety levels of women during the pandemic period were higher than their trait anxiety levels, and it was determined that high anxiety had a negative effect on family planning attitudes. Midwives should evaluate what can be done to examine the causes of anxiety of women and to facilitate access to family planning methods in order to prevent unwanted pregnancies in this period when social isolation increases and access to health services becomes difficult or decreases. Anytime a woman is reached, the use of family planning methods should be evaluated as an opportunity to evaluate her knowledge and attitudes. For this purpose, midwives can also use online methods to examine women's concerns and family planning attitudes, especially during epidemic periods.

Limitations of the Research: The research data were collected online, it can be thought that women with a higher socio-economic level were reached. Therefore, it cannot be generalized to all women.

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