



Attitudes of Married Muslim Women Regarding Family Planning Methods During the COVID-19 Pandemic in Western Turkey

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Abstract

COVID-19 had negative effects upon family planning. Women cannot visit health-care facilities because of a fear of curfew-related sanctions or exposure to COVID-19. It is seen that religious beliefs are influential especially in terms of family planning method preference and having abortions. This study was conducted to determine the attitudes of married Muslim women regarding family planning methods during the COVID-19 pandemic period. The descriptive and cross-sectional study was conducted with 611 married Muslim women who presented to the family planning outpatient clinic of a public hospital in Western Turkey between 1 September 2020 and 1 March 2021. The mean Family Planning Attitude Scale score of the women was found to be 137.53 ± 27.11 . It was observed that, as the mean age of the women increased, their family planning attitudes were more positive, and as their number of pregnancies, abortions and living children increased, their attitudes were more negative ($p < 0.05$). Women do not want to get pregnant during the pandemic process. This is because the effects of COVID-19 on both themselves and the baby to be born are not known, which worries women. Therefore, in order to transform positive attitudes regarding family planning into behavior, it is recommended to provide effective training and consultancy services during the pandemic period.

Keywords Family planning · Attitude · Pandemic · COVID-19

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Introduction

Family planning (FP) is a health service available in Western Turkey that contributes positively to mother and child health by preventing excessive fertility and unwanted pregnancies, and it plays an important role in increasing the health level of society. Due to the inadequate use of contraceptive methods, if the number of births increase, or unwanted pregnancies occur, various health and social problems may arise for both the mother and the baby (Akın et al., 2015; Erenel et al., 2011; Kocaöz et al., 2013). Therefore, providing FP services effectively contributes to the health of women, children's health, and the community's health (Gabalci & Terzioğlu, 2010; Oltuluoğlu & Başer, 2012).

FP services were legalized in Turkey in 1965, and their use has become widespread across the country to enable individuals to make conscious and free decisions about their fertility by providing the FP services they need. Although services related to reliable FP methods are available in Turkey, the rate of women who cannot reach the contraceptive method they need, or may use a contraceptive method that is not effective, is quite high (Karadağ et al., 2013; Gözükarar et al., 2015; Eryılmaz & Ege, 2016). According to the Turkey Demographic and Health Survey (TDHS) data of 2018, 97% of women of reproductive age know at least one modern contraceptive method, 49% use a modern method, and 21% use a traditional method (TDHS 2018). Reproduction and the continuation of lineage is promoted in Islam, while abortion is prohibited due to its involvement of terminating the life of the fetus.

Factors that constitute a barrier to the effective implementation of FP services in the world in general and in Turkey may be categorized as barriers regarding the operation of the service, barriers regarding education and society-based barriers (Kutlu et al., 2014). Barriers regarding the operation of FP services originate from the laws, policies and programs about the provision of the service (lack of a sufficient number of healthcare personnel who will provide the FP service, insufficient allocation of the financial resources of the country for FP activities and failure to act collaboratively about the issue) (Mao, 2007; Apay & Pasinlioğlu, 2008). Other factors that affect the use of FP include value judgments, beliefs and conditions in society, the socioeconomic level of the family, the status of the man and the woman in the family and society, the place of the child in the family and society, the attitudes and behaviors of the man and the woman toward birth and religious beliefs (Karabulutlu & Ersöz, 2017; Öner, 2019). It is seen that religious beliefs are influential especially in terms of FP method preference (Akın, 2018) and having abortions (Şahin et al., 2002). For example, in their study conducted in the USA, Jones and Kost (2007) reported that women who stated that they do not belong to any religion had higher abortion rates (Jones & Kost, 2007). In another study in the USA, Fehring and Ohlendorf (2007) stated that women who said religion had an important place in their lives, went to church regularly and had traditional attitudes about religion had a lower tendency to have abortions (Fehring & Ohlendorf, 2007). In a study conducted in the province of Van in Turkey, one of the reasons why women did not use FP methods was identified as that they thought it was a sin (Şahin et al., 2002).

The United Nations Population Fund (UNFPA) points to 2030 as the deadline to achieve its goal of ending the unmet need for family planning, which is one of the Sustainable Development Goals. However, it reports that COVID-19 has negative effects on ending the unmet need for family planning. It is reported that healthcare professionals working in the clinic may not have time to provide family planning services or have personal protective equipment to safely provide services since they are busy with the COVID-19 response, and many health institutions either stop or limit the provision of their services. Besides, women cannot go to healthcare facilities because of fear of curfews or exposure to COVID-19. Additionally, there are problems in procuring contraceptive methods in many underdeveloped countries, and it is estimated that the existing resources will run out of stocks in about 6 months. This means a lack of contraceptive methods, lack of access to healthcare personnel or healthcare providers, women not being able to use their preferred contraceptive method, the possibility of using a less effective short-term method instead or giving up birth control methods altogether (UNFPA, 2020). It is estimated that approximately 47 million women in 114 low- and middle-income countries will not be able to use modern contraceptives for 6 months due to restrictions brought about by COVID-19. An additional 7 million unwanted pregnancies are expected if these restrictions persist (if they persist for 6 months, and there are major service disruptions due to COVID-19) (Sumner et al., 2020).

Epidemics and pandemics disrupt health systems resources and services that would normally be provided routinely, or preventative services are diverted to emergency services required to manage the pandemic. The World Health Organization reported in August 2020 that 68% of countries faced disruptions in family and contraceptive services, and 32% experienced disruptions in antiretroviral treatments (WHO, 2020). The virus has impacted economies, health systems and virtually every aspect of the lives of individuals globally. Disparities in affected populations have been exposed, with minorities being disproportionately affected, highlighting differences in health risk factors, health system access, work environments and ability to quarantine (Lokot & Avolyan, 2020).

During the pandemic period, it is thought that many unknowns about the course of the disease and long-term stay at home due to curfews may have an effect on people's attitudes toward family planning methods. Based on all these, this study aimed to determine the attitudes of married Muslim women regarding family planning methods during the COVID-19 pandemic process.

Methods

This descriptive and cross-sectional study was conducted with 611 married Muslim women who presented to the family planning outpatient clinic of a public hospital in Western Turkey between 1 September 2020 and 1 March 2021.

The population of the study consisted of 1050 married Muslim women who visited the outpatient clinic between the data collection dates. It was desired to include the entire population without choosing a sample, but the study was completed with

611 married Muslim women because there were women who did not want to participate in the study. In this study, using the “G*Power-3.1.9.7” program, the power of the study was calculated after data collection with an error rate of 0.05. Accordingly, the power of the study was 0.89 with an alpha value of 0.05 and an effect size of 0.44.

The sample included women who were married, and 18 years old or older and voluntarily agreed to participate in the study. Single women were excluded. The data were collected by the researchers using the face-to-face interview technique, and responding to the surveys took 15–20 min for each participant.

Data Collection Tools

The data were obtained by a demographic information questionnaire and the Family Planning Attitude Scale. The demographic information questionnaire included questions about the introductory characteristics of the participants and their use of family planning methods.

The Family Planning Attitude Scale was developed by Örsal and Kubilay (2007) to measure individuals’ attitudes regarding family planning. This scale is a 34-item, 5-point Likert-type (1: strongly disagree; 5: strongly agree) self-assessment scale. The scale has three subscales as attitudes toward methods (12 items), attitudes toward pregnancy (8 items) and attitudes of society toward family planning (14 items). By adding all item scores in each subscale, the subscale total score is calculated, whereas the total score of the scale is calculated by adding the total subscale scores. The lowest and highest possible scores in the scale are 34 and 170. Higher scores indicate more positive attitudes toward family planning. The Cronbach’s alpha value of the scale was reported as 0.90 (Örsal & Kubilay, 2007). In this study, the Cronbach’s alpha coefficient of the scale was found to be 0.96.

Data Analysis

The data were analyzed using the Statistical Package for Social Sciences (SPSS) for Windows 22.0 program. Kolmogorov–Smirnov test was employed to test whether the numerical variables were normally distributed, and it was ascertained that some variables were not normally distributed. Mean, standard deviation, median, minimum, maximum, frequency and ratio values, Kruskal–Wallis test, *t*-test, ANOVA and Spearman’s correlation analysis were used for the descriptive statistics of the data.

Ethical Aspect of the Research

The written approval and permissions necessary for conducting the research and collecting the data were obtained from the Scientific Research and Publications

Ethics Committee (on 19/08/2020 No: 4) of a university and the hospital where the research took place.

Strengths and Limitations of Study

There is no study in the literature examining the attitudes of women toward family planning during the COVID-19 pandemic period. The strength of this study is the lack of a study with a large sample investigating attitudes toward family planning in Turkey. For this reason, the results may be generalized to women in Turkish society. As a limitation, since the family planning attitudes of the women who were included in this study in the period when there was no pandemic were not known, these attitudes could not be compared based on the changes that occurred during the pandemic process.

Results

The demographic characteristics of the women included in the study are shown in Table 1. The mean age of the women was found as 34.1 ± 8.58 (min: 20, max: 50), and the mean age of their husbands was 37.44 ± 8.93 (min: 20, max: 65). 66.6% of the women and 63.7% of their husbands had university or higher education levels. It was determined that 84.5% of the women had social security. The mean number of pregnancies of women was 2.02 ± 1.71 (min:0, max:10); The mean number of miscarriages was 0.333 ± 0.787 (min:0, max:8), the mean number of abortions was 0.248 ± 0.589 (min:0, max:6), and the mean number of living children was 1.643 ± 1.428 (min:0, max:10) (Table 1).

Table 1 Participant demographic characteristics

Variables		<i>n</i>	%
Mean age of the women/year		34.1 ± 8.58 (min: 20, max: 49)	
Mean age of the husbands/year		37.44 ± 8.93 (min: 20, max: 65)	
Mean number of pregnancies		2.02 ± 1.71 (min:0, maks:10)	
Mean number of miscarriage		0.333 ± 0.787 (min:0, maks:8)	
Mean number of abortion		0.248 ± 0.589 (min:0, maks:6)	
Mean number of living children		1.643 ± 1.428 (min:0, maks:10)	
Educational level of the women	Primary education	117	19.1
	High school	87	14.2
	University and above	407	66.6
Educational level of the husbands	Primary education	99	16.2
	High school	123	20.1
	University and above	390	63.7
Social security	Yes	516	84.5
	No	95	15.5
	Total	611	100.0

Table 2 Distribution of women by their obstetric and family planning characteristics

Variables		<i>n</i>	%
Family planning methods known	Knows all methods	239	39.1
	Knows at least 1 method	345	56.5
	Does not know any method	27	4.4
Being afraid of getting pregnant in the pandemic period	Afraid	178	29.1
	Not afraid	381	62.4
	Not sure	52	8.5
Considering having an abortion if she gets pregnant in the pandemic period	Yes	48	7.9
	No	489	80.0
	Not sure	74	12.1
	Total	611	100.0

The demographic, obstetric and family planning characteristics of the women who were included in the study are shown in Table 2. 4.4% of the women stated that they did not know any family planning method, 62.4% stated that they were not afraid of getting pregnant in the pandemic period, and 80% stated that if they became pregnant, they would not have abortion.

The mean scale scores of the women are shown in Table 3. The overall scale mean score of all participants was found as 137.53 ± 27.11 . The mean score of the participants in the “attitudes toward methods” subscale was found as 39.26 ± 9.19 , the mean score in the “attitudes toward pregnancy” subscale was found as 39.01 ± 9.21 , and their mean score in the “attitudes of society toward family planning” subscale was found as 59.26 ± 9.34 .

The results of the comparison of the mean scale scores of the participants based on their characteristics related to obstetrics and family planning are presented in Table 4. A significant difference was found in the mean scale scores of the women based on their opinion on the family planning method they know, their status of fear of getting pregnant and their status of thinking about having an abortion in the case of becoming pregnant ($p < 0.05$). It was determined that the women who stated that they knew all family planning methods and those who were not afraid of becoming pregnant had more positive family planning attitudes. It was observed that the participants who stated that they would not have an abortion in the case of pregnancy had more negative family planning attitudes.

Table 3 Mean Scale Scores

Subscales and total scale	Mean	SD	min	max
Attitudes toward methods	39.26	9.19	12	60
Attitudes toward pregnancy	39.01	9.21	8	40
Attitudes of society toward family planning	59.26	9.34	14	70
Family planning attitude Scale Total	137.53	27.11	34	170

A weak positive correlation was found between the mean age of the women and their mean scale score, and a weak negative correlation was found between their mean scale score and their numbers of pregnancies, miscarriages and living children ($p < 0.05$) (Table 5). It was observed that, as the mean age of the women increased, their family planning attitudes were more positive, and as their numbers of pregnancies, miscarriages and living children increased, their attitudes were more negative.

Discussion

In this study, which was conducted to determine the attitudes of women regarding family planning and the factors affecting these attitudes in the COVID-19 pandemic period, the mean score obtained by the women in the Family Planning Attitude Scale was 137.53 ± 27.11 (Table 3). The highest score that can be obtained from the scale is 170, and higher scores indicate more positive family planning attitudes. This result showed that the women who were included in this study had positive attitudes toward family planning. Although it is not possible to say whether there had been a change in their attitudes after the pandemic, since the family planning attitudes of the women included in the study were not previously known, the results of the study demonstrated that the women attached importance to the use of family planning methods during the pandemic period. In the literature, there are similar results to those in this study. The mean FMAS scores of different samples were found as 120.11 ± 13.8 by Ayaz and Efe (2009), as 130.72 ± 26.10 by Tezel et al. (2015), as 114.11 ± 0.91 by Apay et al. (2010) and as 124.20 ± 27.34 by Gözükarar et al. (2015) (Ayaz & Efe, 2009; Tezel et al., 2015; Apay et al., 2010; Gözükarar et al., 2015). These results have suggested that the family planning attitudes of the women became more positive in comparison with their pre-pandemic attitudes. It is thought that women do not want to get pregnant in this period, because the effects of COVID-19 on both the mother and the baby are not completely known yet.

It was determined that the women who stated that they knew all family planning methods and those who were not afraid of becoming pregnant had more positive family planning attitudes (Table 4). These results suggested that the knowledge of the women was reflected positively on their attitudes, and therefore, they did not have fear of pregnancy. Similar to the finding of this study, in the study conducted by Ayaz and Efe (2009) with married women, it was determined that women who heard about and used any family planning method had significantly higher scores in the Family Planning Attitude Scale (Ayaz & Efe, 2009). In another study, it was reported that couples who received method counseling and considered using effective family planning had more positive family planning attitudes (Bilgin et al., 2019). In a study conducted with refugee women, it was found that the attitudes of women who did not use family planning methods and those who did not receive support from their husbands for family planning were more negative (Dikmen et al., 2019). Another study revealed that the attitudes of those who had information about family planning methods among couples who had experienced an earthquake and had to leave their homes were more positive (Upadhyay et al., 2017). Juma et al. (2015) reported that those who knew about family planning methods had more positive family planning

Table 4 Comparison of mean scale scores by the characteristics of the women for obstetrics and family planning

Variables	n	Attitudes toward methods Mean ± SD	Attitudes toward pregnancy Mean ± SD	Attitudes of the society toward family planning Mean ± SD	Family planning attitude Scale Mean ± SD
<i>Family planning methods known</i>					
Knows all methods ^a	239	38.56 ± 9.01	37.45 ± 9.65	59.65 ± 9.88	143.89 ± 24.27
Knows at least 1 method ^b	345	36.44 ± 9.34	35.25 ± 9.45	56.25 ± 9.41	135.53 ± 26.46
Does not know any method ^c	27	32.21 ± 9.22	33.15 ± 9.05	50.32 ± 9.64	108.40 ± 35.72
Test p		KW: 33.455 p: 0.001 a > b > c	KW: 34.578 p: 0.005 a > b > c	KW: 41.843 p: 0.011 a > b > c	KW: 42.698 p: 0.000 a > b > c
<i>Being afraid of getting pregnant in the pandemic period</i>					
Yes ^a	178	37.22 ± 9.45	34.65 ± 9.23	54.12 ± 9.34	132.61 ± 29.09
No ^b	381	39.96 ± 9.91	38.44 ± 9.67	59.99 ± 9.45	140.56 ± 24.91
Not sure ^c	52	30.24 ± 9.56	32.34 ± 9.44	52.32 ± 9.78	132.19 ± 32.39
Test p		F: 7.289 p: 0.021 b > a, c	F: 5.478 p: 0.005 b > a, c	F: 4.267 p: 0.008 b > a, c	F: 6.428 p: 0.002 b > a, c
<i>Considering having an abortion if she gets pregnant in the pandemic period</i>					
Yes ^a	48	37.76 ± 9.45	38.85 ± 9.35	58.16 ± 9.58	141.10 ± 26.40
No ^b	489	31.11 ± 9.52	32.52 ± 9.15	51.23 ± 9.14	136.13 ± 27.50
Not sure ^c	74	35.34 ± 9.74	34.7 ± 9.54	55.15 ± 9.21	144.48 ± 23.83
Test p		F: 4.122 p: 0.021 b < a, c	F: 5.322 p: 0.017 b < a, c	F: 3.256 p: 0.032 b < a, c	F: 3.532 p: 0.030 b < a, c

KW: Kruskal–Wallis test; F: ANOVA

Table 5 Correlation between mean scale scores and numerical variables

Variables	Family Planning Attitude Scale total score
<i>Mean age of the woman</i>	
r_s	0.128
p	0.002
<i>Mean number of pregnancies</i>	
r_s	-0.117
p	0.004
<i>Mean number of miscarriages</i>	
r_s	-0.099
p	0.014
<i>Mean number of abortions</i>	
r_s	0.020
p	0.628
<i>Mean number of living children</i>	
r_s	-0.166
p	0.000

r_s : Spearman's correlation

attitudes (Juma et al., 2015). Studies conducted in different samples have provided results that were in line with the findings of this study.

In this study, it was determined that the participants who stated that they would not have an abortion in the case of pregnancy had more negative family planning attitudes (Table 4). These results showed that the family planning attitudes of women with insufficient knowledge of methods and those with a fatalistic approach are more negative. Religion is highly influential in a fatalistic approach. Although statements about different views are included in the holy books of different religions, in fact, all religions encourage the reproduction of families. The absolute stance in Islam regarding this issue is that one shall not kill. On the other hand, Islamic law scholars and clergy state that protection from pregnancy is not prohibited in Islam (Akin, 2018). It is seen that, in Turkey, perceptions toward abortion in their immediate environment and how they consider abortion based on their religious beliefs may become influential on women's decisions about getting an abortion in the case that they have an unwanted pregnancy (Çavlin et al., 2014). Öner (2019) found that the scores of women who got pregnant unintentionally were lower than women who became pregnant willingly (Öner, 2019). Unlike the findings of the study, Lindberg et al. (2020) reported that women know that pandemic brings economic difficulties and therefore, they postpone childbearing or want to have fewer children (Lindberg et al., 2020).

As a result of this study, a weak positive correlation was found between the mean age of the women and their mean scale score, and a weak negative correlation was found between their mean scale score and their numbers of pregnancies, miscarriages and living children ($p < 0.05$) (Table 5). It was observed that, as the mean age of the women increased, their family planning attitudes were more

positive, and as the numbers of their pregnancies, miscarriages and living children increased, their attitudes were more negative. In the study by Gözükara et al. (2015), the family planning attitudes of women with high numbers of pregnancies, living children and miscarriages were found to be more negative (Gözükara et al., 2015). In the study by Tezel et al. (2015), family planning attitudes were found to become more negative as the number of births and the number of living children increased (Tezel et al., 2015). Apay et al. (2010) found that, as the number of pregnancies, living children and miscarriages increased, the family planning attitudes of women were more negative (Apay et al., 2010). Dikmen et al. (2019) identified a weak negative relationship between the number of living children and family planning attitudes (Dikmen et al., 2019). In the 2018 TDHS report, it was stated that the rate of using FP methods for women with children is higher than those without children (TDHS 2018). These results were similar to the findings of this study.

Conclusion

As a result of the findings obtained in this study, the attitudes of the married women regarding family planning during the pandemic period were positive but not on the desired level. It was found that the more their good practices about family planning increased, the more positive their attitudes became. Due to the limited number of studies on the effects of the SARS-CoV-2 virus on the pregnancy, birth and postpartum processes, the following recommendations may be made to prevent unwanted pregnancies that may occur especially during the pandemic period.

- In order to transform the positive attitudes of women regarding FP into behavior, it is recommended to provide effective online training and consultancy services during the pandemic period,
- and provide and maintain easy and free access to family planning services for accessibility to contraceptive methods and to meet the unmet need for family planning.

Authors Contribution Our individual contributions to the paper were as follows: Conceptualization was contributed by NAD, KDB, Methodology was contributed by NAD, KDB, Validation was contributed by KDB, Formal Analysis was contributed by KDB, NAD, Investigation was contributed by KDB, NAD, Resources were contributed by NAD, KDB, Data Curation was contributed by KDB, NAD, Writing—Original Draft Preparation, was contributed by KDB, NAD, Writing—Review and Editing, was contributed by NAD, KDB, Visualization was contributed by KDB, Supervision was contributed by KDB, and Project Administration was contributed by NAD.

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Declarations

Conflict of interest The authors report no actual or potential conflicts of interest.

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