

# Attitudes Towards Family Planning of Women in the Early Postpartum Period and Effecting Factors – A Secondary Publication

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**Abstract:** *Objective:* To determine the attitudes of women in the early postpartum period towards family planning and the factors affecting them. *Method:* The sample of the cross-sectional study consisted of 243 women in the postpartum clinics of a public hospital. Data for the study were collected between June and July 2022. *Results:* The average age of women was  $28.17 \pm 5.42$  years, and the average number of children was  $3.51 \pm 0.89$ . In addition, 46.5% of women were illiterate and 73.7% want children again. The mean score of the women's family planning attitude scale was  $90.8 \pm 8.10$ . The family planning attitude scale average scores of women with higher education levels, living in the city center, and having their pregnancy follow-up done in a private hospital were higher. It was determined that the mean score of the scale was lower for women with a higher age at their own age, spouse's age, age at marriage and first gestational age, and women who want to have children again ( $P < 0.05$ ). *Conclusion:* The research showed that women's attitudes towards family planning in the early postpartum period were positive, but not at the desired level.

**Keywords:** Postpartum period; Women; Family planning; Attitude

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## 1. Introduction

In developing countries, maternal and infant mortality rates remain high due to high fertility, risky pregnancies, and complicated childbirths. The World Health Organization (WHO) reports that 810 women die every day, and 295,000 women die annually due to pregnancy and childbirth. In 2017, it was stated that the maternal mortality rate in developing countries remained high at 462 per one hundred thousand live births, while it decreased to 11 per one hundred thousand live births in developed countries<sup>[1]</sup>. In Turkey, according to the Ministry of Health's data for 2018, the maternal mortality rate is slightly higher than in developed countries at 13.6 per one hundred thousand live births<sup>[2]</sup>.

To reduce maternal mortality, it is a priority to provide continuous and quality family planning (FP), antenatal care, safe delivery, and postnatal care services to all women in need. However, an estimated 214 million women of reproductive age worldwide have unmet family planning needs. Furthermore, the use of

modern FP methods is not at the desired level in many parts of the world. According to the latest estimates, the usage of modern FP methods among married women aged 15–49 in developing countries increased from 55.0% to 57.1% between 2000 and 2019 <sup>[3]</sup>. The situation is no different in Turkey. According to the Turkey Demographic and Health Survey (TDHS) 2018 data, only 49% of married women currently use modern FP methods. Additionally, the unmet need for family planning, which was 6% in the 2013 TDHS, doubled to 12% in the 2018 results <sup>[4]</sup>. Several factors influence the use of FP methods, including lack of access to methods, limited method choice, inadequate service quality, fear of side effects, societal expectations, and negative influences of religion and culture <sup>[3,5,6]</sup>. The effective delivery of FP services requires identifying the factors that influence the use of FP methods.

The postpartum period is a good opportunity for conscious family planning and providing services to individuals in this regard. This period is noted as a time when women have a high desire to use FP methods <sup>[7]</sup>. Due to the variation in fertility and resumption of sexual activity after childbirth among individuals, FP counseling is recommended not at the postpartum six-week check-up but rather during the antenatal period or before postpartum discharge, or as soon as possible <sup>[8-10]</sup>. Thus, women must decide on the FP method they will use before being discharged from the hospital to prevent unplanned or unwanted pregnancies.

Especially in the culture of the Eastern regions of Turkey, having children holds great importance for the continuation of the lineage. According to the 2021 data from the Turkish Statistical Institute, Şanlıurfa, where the research was conducted, is a province with the highest fertility rate (total fertility rate of 3.81) and high maternal-infant mortality rates <sup>[11]</sup>. In a region with high fertility, conducting studies on factors that affect the access to and provision of family planning services and planning appropriate interventions will significantly contribute to the protection of maternal and infant health.

This study aims to determine the attitudes of women towards family planning in the early postpartum period and the factors influencing them in the province with the highest fertility rate in Turkey.

## **2. Materials and methods**

### **2.1. Study type**

The research is of cross-sectional type.

### **2.2. Location and date of conducting the research**

The research was conducted in the postpartum clinics of an education and research hospital located in the city center of Şanlıurfa between June and July 2022. The reason for selecting this hospital as the research site is that it is the hospital where the highest number of deliveries is performed annually in Şanlıurfa, and it serves individuals from all socio-economic backgrounds. According to hospital data, the total number of deliveries in this hospital in 2021 was recorded as 26,714.

### **2.3. Population and sample of the research**

The population of the research consisted of women hospitalized in postpartum clinics. To calculate the sample size, a pilot study was conducted with 30 women hospitalized in these clinics, and based on the results of the pilot study, the standard deviation of attitude scores obtained was 11.91, the margin of error was 1.5, and the required sample size at a 95% confidence level was calculated to be 243.

Inclusion criteria for the sample:

- (1) Being 18 years of age or older,
- (2) Being able to communicate in Turkish,

- (3) Not having any psychiatric illness,
- (4) Having given birth vaginally or by cesarean section,
- (5) Volunteering to participate in the research.

## 2.4. Data collection

The data of the research were collected using a Data Collection Form prepared by reviewing the literature <sup>[12-16]</sup>, and the Postpartum Family Planning Attitude Scale through face-to-face interviews. The interviews were conducted within the first 24 hours postpartum. A suitable environment was provided for women to comfortably answer questions, and the interviews were conducted outside of visiting hours. Each interview lasted approximately 15–20 minutes.

## 2.5. Personal information form

It consists of a total of 29 questions, including 13 questions about the socio-demographic characteristics of women (age, income status, place of residence, educational level, employment status, presence of social security, family type, etc.); 12 questions about pregnancy and childbirth-related characteristics (age at first pregnancy, number of pregnancies, number of living children, whether prenatal care was received, mode of previous pregnancy termination, etc.); and four questions about family planning-related characteristics.

## 2.6. Postpartum Family Planning Attitude Scale (PFPAS)

The scale, developed by Varol *et al.* <sup>[17]</sup>, consists of six sub-dimensions (Items 1-3 “Perceived Risk”; Items 4-6 “Perceived Severity”; Items 7-10 “Perceived Benefits”; Items 11-18 “Perceived Barriers”; Items 19-23 “Cue to Action”; Items 24-27 “Self-Efficacy”) and a total of 27 items. The scale items include statements measuring attitudes towards birth spacing, contraceptive methods, access to services, and external factors influencing FP attitude. Sixteen of the items in the scale (items 2, 3, 4, 5, 7, 8, 9, 10, 20, 21, 22, 23, 24, 25, 26, 27) are positive, and eleven items (items 1, 6, 11, 12, 13, 14, 15, 16, 17, 18, 19) are negative expressions. Negative statements in the scale were reverse-coded. The Likert-type scale items are rated from 1 to 5. In positive statements, the rating scale is as follows: 1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, and 5 = strongly agree; while in negative statements, the scale is: 5 = strongly disagree, 4 = disagree, 3 = undecided, 2 = agree, and 1 = strongly agree. The minimum score that can be obtained from the scale is 27, and the maximum score is 135. As the score obtained from the scale increases, the positive attitude towards FP also increases. It has been stated that the scale explains 57.2% of the total variance and has a Cronbach’s  $\alpha$  coefficient of 0.878 in the explanatory factor analysis of PFPAS. In this study, the Cronbach’s  $\alpha$  coefficient of the scale is 0.750.

## 2.7. Ethical aspect of the research

To conduct the research, written permission for scale usage was obtained from the authors of the scale, from the hospital where the research was conducted, from the university’s ethics committee (dated 09.05.2022 and numbered HRU/22.09.26), and from the provincial health directorate. All stages of the research were conducted in accordance with the principles of the Helsinki Declaration, and informed consent was obtained from the women participating in the research.

## 2.8. Data analysis

The data obtained in the research were analyzed by the researchers using the SPSS for Windows 20.0 statistical package program. In the evaluation of the data, percentage, mean, standard deviation from descriptive statistics; *t*-test for comparison of two groups (participant’s and spouse’s employment status, economic status, family

type, desire for another child, mode of delivery, appropriateness of child's gender expectation, place where prenatal care was received); one-way analysis of variance (ANOVA) for comparison of three or more groups (participant's and spouse's educational status, language spoken most at home, place of residence); Pearson correlation analysis for relationships between dependent-independent variables in groups conforming to normal distribution for ordinal data (participant's and spouse's age, age at marriage, total years of marriage, age at first pregnancy); and Spearman's correlation analysis for ordinal data not conforming to normal distribution (total number of pregnancies, number of living children, number of male children, number of female children, number of unplanned/unwanted pregnancies, number of miscarriages) were used. The findings were interpreted at a significance level of  $P < 0.05$  with a 95% confidence interval. The dependent variable of the research is the total score obtained from PFPAS by women. The independent variables of the research are the socio-demographic and obstetric characteristics of women, and the characteristics related to family planning.

### 3. Results

The average age of women is  $28.17 \pm 5.42$  years. 62.1% of women have not completed any level of education, and 78.6% of them use a language other than Turkish at home (48.6% Arabic, 30.0% Kurdish). 96.7% of women do not work, but all of them (100.0%) have social security. 92.2% of women perceive their income level as "moderate". 46.9% of women live in the city center, and 23.5% live in extended families. The average age of women's spouses is  $31.38 \pm 5.85$  years. 9.5% of spouses have not completed any level of education, while 72.4% have completed only primary education. 94.7% of spouses work in a job that generates income.

The average age at first marriage for women is  $20.0 \pm 2.8$  years, and the average total duration of marriage is  $8.1 \pm 5.3$  years. The average age at first pregnancy for women is  $20.6 \pm 2.9$  years, and the average total number of pregnancies is  $4.2 \pm 2.4$ . The average number of living children for women is  $3.5 \pm 1.8$ , with an average of  $1.6 \pm 1.2$  daughters and  $1.9 \pm 1.2$  sons. 73.7% of women want to have more children. 20.2% of women have experienced at least one unplanned pregnancy, and 40.7% have experienced at least one miscarriage. All women (100.0%) received prenatal care during their last pregnancy, and 53.5% gave birth by cesarean section. Regarding the gender of the last child, 52.7% of women have a male child, and 11.9% stated that the gender of their child did not match their expectations.

81.1% of women have never received FP counseling before. Among those who received counseling (18.9%), all of them (100.0%) reported receiving it from nurses. None of the women received FP counseling during their last pregnancy. 56.4% of women used FP methods before pregnancy. Withdrawal (32.5%) and oral contraceptives (11.9%) were the most commonly used methods. 86.8% of women plan to use FP methods again after childbirth, with the most preferred methods being IUD (18.5%), oral contraceptives (14.8%), and withdrawal (14.8%). 31.7% of women have not yet decided which method to use. Reasons cited by women who do not intend to use any FP method after childbirth (13.2%) include wanting more children (9.9%) and believing that breastfeeding prevents pregnancy (1.6%).

The average score of women on the PFPAS is  $90.8 \pm 8.10$ . The average PFPAS score is higher for women with higher education levels and those living in the city center, and this difference is statistically significant ( $P < 0.05$ ). However, there is no statistically significant difference in the PFPAS score of women regarding their spouse's education level, the language spoken most at home, their own and their spouse's employment status, economic status, and family type ( $P > 0.05$ ; **Table 1**).

**Table 1.** Distribution of some socio-demographic characteristics of women according to PFPAS score

Socio-demographic characteristics	Mean scale score		
	Mean $\pm$ S.D.	Statistical analysis	<i>P</i>
Education status			
Illiterate	88.84 $\pm$ 7.48		
Literate	91.60 $\pm$ 9.71	4.973 <sup>a</sup>	0.002
Primary education**	93.05 $\pm$ 7.78		
Secondary education	93.28 $\pm$ 4.34		
Spouse education status			
Illiterate	90.00 $\pm$ 4.24		
Literate	86.90 $\pm$ 7.97		
Primary education	90.61 $\pm$ 7.96	3.622 <sup>a</sup>	0.007
Secondary education	94.72 $\pm$ 7.39		
University and above	89.28 $\pm$ 10.16		
Most spoken language at home			
Turkish**	96.40 $\pm$ 6.84		
Kurdish	95.32 $\pm$ 5.85	15.788 <sup>a</sup>	0.000
Arabic	88.13 $\pm$ 7.26		
Place of residence			
City center**	93.09 $\pm$ 6.78		
District	89.66 $\pm$ 7.55	8.975 <sup>a</sup>	0.000
Village	88.42 $\pm$ 9.35		
Employment status			
Yes	92.12 $\pm$ 8.21		
No	90.83 $\pm$ 8.11	0.442 <sup>b</sup>	0.659
Economic situation			
Middle	90.96 $\pm$ 7.98		
Bad	89.77 $\pm$ 9.68	-0.597 <sup>b</sup>	0.551
Family type			
Nuclear family	91.08 $\pm$ 7.73		
Extended family	90.19 $\pm$ 9.23	0.727 <sup>b</sup>	0.468
Spouse employment status			
Yes	90.93 $\pm$ 8.12		
No	89.84 $\pm$ 7.93	0.470 <sup>b</sup>	0.638
Total	90.80 $\pm$ 8.10		

\* row percentage, \*\* group making a difference, <sup>a</sup> ANOVA test, <sup>b</sup> *t*-test

The PFPAS score of women who received prenatal care at a private hospital is higher compared to those who received care at other institutions, and this difference is statistically significant ( $P < 0.05$ ). However, there is no statistically significant difference in the PFPAS score of women regarding their desire to have more children, mode

of last childbirth, and the correspondence of the child's gender to expectations ( $P > 0.05$ ; **Table 2**).

**Table 2.** Distribution of some obstetric characteristics of women according to PFPAS score

Obstetric features	Mean scale score		
	Mean $\pm$ S.D.	<i>t</i>	<i>P</i>
Wanting a child again			
Yes	90.15 $\pm$ 7.71	-2.356	0.019
No	92.90 $\pm$ 8.85		
Place of pregnancy follow-up-ASM			
Yes	90.96 $\pm$ 8.05	0.953	0.342
No	88.00 $\pm$ 9.74		
Place of pregnancy follow-up – State hospital			
Yes	90.87 $\pm$ 8.10	0.00 $\pm$ 0.00	
No	0.00 $\pm$ 0.00		
Place of pregnancy follow-up – Private hospital			
Yes	92.75 $\pm$ 8.63	3.472	0.001
No	89.21 $\pm$ 7.24		
Place of pregnancy follow-up – University hospital			
Yes	94.50 $\pm$ 9.19	0.634	0.527
No	90.84 $\pm$ 8.10		
Previous mode of delivery			
Normal	90.17 $\pm$ 7.72	-1.256	0.210
Cesarean section	91.48 $\pm$ 8.39		
Conformity of the child's gender to expectations			
Yes	90.51 $\pm$ 7.89	-1.904	0.058
No	93.55 $\pm$ 9.23		
Total	90.8 $\pm$ 8.10		

\* row percentage, \*\* group making a difference

There is a low-level negative relationship between women's age, total years of marriage, age at first pregnancy, number of living children, number of unplanned/unwanted pregnancies, miscarriages, and the PFPAS score ( $P > 0.01$ ). However, there is no statistically significant difference in the PFPAS score regarding the spouse's age, age at marriage, and total number of pregnancies ( $P > 0.05$ ; **Table 3**).

**Table 3.** Correlation of some demographic and obstetric characteristics of women with PFPAS scores

Demographic and obstetric characteristics	Scale score		
	<i>n</i>	<i>r</i>	<i>P</i>
Age	243	-0.143	0.126
Age of spouse	243	-0.100	0.119
Age at marriage	243	-0.132	0.040

**Table 3 (Continue)**

Demographic and obstetric characteristics	Scale score		
	<i>n</i>	<i>r</i>	<i>P</i>
Total years of marriage	243	-0.062	0.333
Age at first pregnancy	243	-0.176	0.006
	<i>n</i>	<i>rho</i>	<i>P</i>
Total number of pregnancies	243	-0.019	0.767
Number of living children	243	-0.017	0.792
Girl	243	-0.089	0.166
Male	243	0.047	0.462
Number of unplanned/unintended pregnancies	243	0.122	0.057
Number of miscarriages	243	-0.122	0.058
Scale total	243	1	

#### 4. Discussion

In this study, conducted to investigate the attitudes towards family planning and influencing factors of women in the early postpartum period in Şanlıurfa, where fertility rates are highest in Turkey, it was determined that women have low levels of education and the majority do not work. About half of the women live in the city center, while approximately a quarter continue the tradition of extended families in rural areas. Considering that socio-demographic and cultural characteristics are significant factors affecting access to and utilization of health services, it can be said that the population studied is a disadvantaged group.

In the study, it was found that the age at first marriage and first pregnancy for women is lower than the Turkish average <sup>[4]</sup>. In Turkey, marriage marks the beginning of a socially accepted period for childbirth. Therefore, the age at first marriage is an important factor in the onset of fertility. Women who marry at an early age tend to become pregnant earlier, remain at risk of pregnancy for a longer period, and generally have more births. Consistent with this information, the average total number of pregnancies and living children for women is higher than the Turkish average <sup>[4]</sup>. The majority of women intend to have more children. Additionally, the majority have never received FP counseling before, and their pre-pregnancy FP usage levels are lower than the Turkish average. The high incidence of early marriage, early pregnancy, and non-use of FP methods among women leads to a high number of children as well as adverse pregnancy outcomes, as expected. Indeed, the incidence of unplanned pregnancies and spontaneous abortions among women is quite high compared to the Turkish average <sup>[4]</sup>. These findings are important as they indicate that the studied population, considering its socio-demographic and obstetric characteristics, is at high risk of unplanned pregnancies and may need FP counseling services.

In the study, it was found that the average PFPAS score of women ( $90.8 \pm 8.10$ ) is higher than the scale score average. Accordingly, it can be said that women exhibit a positive attitude towards FP. Although no study using a measurement tool specific to the postpartum period could be found in the literature, there are many studies evaluating FP attitudes in women in general, and in these studies, the scores women receive from the Family Planning Attitude Scale (FPAS) vary greatly. These scores; were reported as  $130.72 \pm 26.10$  in study by Tezel *et al.* <sup>[5]</sup>,  $117.632 \pm 11.12$  in the study by Eryılmaz and Ege <sup>[12]</sup>, and  $81.30 \pm 17.34$  in the study by Egelioglu Cetişli *et al.* <sup>[14]</sup>. This situation may be related to the fact that the studies were conducted with women

from different regions and different sample groups in our country. When studies conducted in the regions where the research was conducted are examined, it is seen that the FPAS scores of women are similar to the PFPAS score obtained from this study [18,19].

In the study, it was found that the average PFPAS score of women with higher education levels is higher. Similarly, in studies where FP attitudes are evaluated with the FPAS score in the literature, it is stated that the average score of women with higher education levels is higher [15,20-23]. Education level is one of the main social determinants affecting both the attitudes and behaviors related to birth control in the postpartum period and generally in women. The increase in education level is an important factor that facilitates women's access to information and their use of that information, empowering them to control their fertility.

In the study, it was found that the average PFPAS score of women who speak Turkish most at home is higher than those who speak Arabic and Kurdish. Language proficiency is an important tool for accessing and utilizing information. Indeed, it is noted in the literature that the language used can be a barrier to accessing healthcare both before and after childbirth, which can also negatively affect FP utilization [24,25].

In the study, it was found that women living in the city center have a higher average PFPAS score. This may be due to easier access to healthcare services and information for women living in urban areas. Indeed, it is stated in the literature that the place of residence is a factor affecting access to and utilization of healthcare services [26,27].

In the study, it was found that women who received prenatal care at a private hospital had a higher average PFPAS score. It is thought that this result may be related to the likelihood that women receiving services from private hospitals have a higher socioeconomic status.

In the study, it was observed that as women's age, total years of marriage, age at first pregnancy, number of living children, unplanned pregnancies, and spontaneous abortions increase, there is a slight decrease in the average PFPAS scores. These findings may suggest either that women have not yet reached their desired number of children or that they have experienced adverse pregnancy outcomes due to poor FP usage levels.

As a result of this study, it was determined that women's attitudes towards family planning in the early postpartum period are positive and that education, mother tongue, place of residence, and place of service utilization affect attitudes towards FP. For women's attitudes towards family planning to translate into behavior, it is recommended to plan and implement family planning education and counseling services taking into account socio-demographic characteristics.

## **Disclosure statement**

The authors declare no conflict of interest.

## **Authors' contributions**

Conceptualization: Zeliha Turan, Fatma Koruk

Investigation: Zeliha Turan, Fatma Koruk

Methodology: Zeliha Turan

Formal analysis: Fatma Koruk

Writing – original draft: Zeliha Turan, Fatma Koruk

Writing – review & editing: Zeliha Turan, Fatma Koruk



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