

Fertility Awareness and Affecting Factors in Married Women of Reproductive Age: A Descriptive Study

Üreme Çağındaki Evli Kadınlarda Fertilitate Farkındalığı ve Etkileyen Faktörler: Tanımlayıcı Bir Çalışma

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ABSTRACT Objective: Determining the level of fertility awareness among women of reproductive age can contribute to improving reproductive health and pregnancy outcomes. This study aimed to determine the level of fertility awareness and the factors affecting it among married women of reproductive age. **Material and Methods:** The study was a descriptive correlational study. The study included 363 married women of reproductive age. Data were collected through online survey using the participant information form and the Fertility Awareness Scale. Descriptive statistics such as number, percentage, mean and standard deviation, independent-samples t-test, one-way analysis of variance, Pearson correlation and Linear regression test were used in statistical analyses. **Results:** The mean age of the respondents was 34.86±7.65 years. Within the scope of the study, women's fertility awareness score was determined as 25.54±7.47, which is at a moderate level. A significant negative correlation was found between total fertility awareness score and age ($r=-0.104$, $p<0.05$), body mass index ($r=-0.112$, $p<0.05$), and duration of marriage ($r=-0.157$, $p<0.001$). The woman's education at university or higher, using a modern family planning method, not exercising, and having three or more pregnancies are the predictors that explain 14.4% of the fertility awareness score. **Conclusion:** Fertility awareness is an important component of sexual and reproductive health. Addressing fertility awareness shows that interventions to increase fertility awareness targeting women with low education and economic levels and a high number of pregnancies are necessary to achieve sustainable development goals three and five.

ÖZET Amaç: Üreme çağındaki kadınlar arasında fertilitate farkındalığının belirlenmesi, üreme sağlığı ve gebelik sonuçlarının iyileştirilmesine katkı sağlayabilir. Bu çalışma, üreme çağındaki evli kadınlarda fertilitate farkındalığı ve etkileyen faktörlerin belirlenmesi amacıyla yapılmıştır. **Gereç ve Yöntemler:** Çalışma, tanımlayıcı ilişkisel türdedir. Çalışmaya üreme çağında olan 363 evli kadın dâhil edilmiştir. Veriler, katılımcı bilgi formu ve Fertilitate Farkındalığı Ölçeği kullanılarak çevrim içi anket yoluyla toplanmıştır. Verilerin değerlendirilmesinde sayı, yüzde, ortalama ve standart sapma gibi tanımlayıcı istatistikler, bağımsız örneklem t-testi, tek yönlü varyans analizi, Pearson korelasyon ve Lineer regresyon testi kullanılmıştır. **Bulgular:** Katılımcıların ortalama yaşı 34,86±7,65 yıldır. Çalışma kapsamında kadınların fertilitate farkındalık puanı 25,54±7,47 olarak belirlenmiş olup, orta düzeydedir. Fertilitate farkındalığı toplam puanı ile yaş ($r=-0,104$, $p<0,05$), beden kitle indeksi ($r=-0,112$, $p<0,05$) ve evlilik süresi ($r=-0,157$, $p<0,001$) arasında anlamlı negatif korelasyon bulunmuştur. Kadının üniversite ve üzeri eğitimi, modern aile planlaması yöntemi kullanması, egzersiz yapmaması ve 3 ve üzerinde gebeliğe sahip olması fertilitate farkındalığı puanının %14,4'ünü açıklayan yordayıcılarıdır. **Sonuç:** Fertilitate farkındalığı cinsel sağlık ve üreme sağlığının önemli bir bileşenidir. Fertilitate farkındalığının ele alınması Sürdürülebilir Kalkınma Hedefi 3 ve 5 hedeflerine ulaşmak için eğitim ve ekonomik düzeyi düşük, gebelik sayısı fazla olan kadınları hedef alan fertilitate farkındalığını artırmaya yönelik müdahalelerin gerekli olduğunu göstermektedir.

Keywords: Awareness; fertility; reproductive; women

Anahtar Kelimeler: Farkındalık; fertilitate; üreme; kadın

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Fertility is a fundamental factor that influences the demographic structure and population dynamics of a society. However, modern lifestyles, technological advances and social changes have made a comprehensive understanding of fertility difficult and have led to incomplete or inaccurate information about women.¹ In particular, factors such as women's education levels, career expectations, health habits and social norms influence their fertility decisions. This leads to an increase in the age of parenthood and a decrease in the number of children in families.² Therefore, it is important for women to have accurate information about fertility and to develop an awareness of this issue, not only for their own health, but also for society's overall fertility levels and population policies.

Most factors that negatively affect fertility are preventable. These factors include age, obesity, inadequate exercise, stress, smoking, consumption of alcohol and caffeinated beverages, environmental factors, failure to undergo regular health checks, high-risk sexual behaviors, contraceptive use, sexually transmitted infections, and conditions of the reproductive system.³⁻⁵ In the meta-analysis study, it was found that the infertility rate of women who smoke was 1.85 times higher than that of non-smokers.⁶ Another study reported that obesity in women adversely affected reproductive health, whereas low-carbohydrate diet and calorie restriction improved fertility.^{7,8} Awareness of these factors can influence women's fertility and lifestyle choices.⁹ Previous studies have shown that women of reproductive age have low to moderate levels of fertility awareness.^{1,10-13} A study conducted with women of reproductive age found that one-third of women did not know about the adverse impact of sexually transmitted infections, obesity, or irregular menstruation, and one-fifth did not know about the negative effect of age on fertility.¹⁴

Identifying the level of fertility awareness among women of reproductive age can contribute to improving reproductive health and pregnancy outcomes. Such an assessment can help individuals make more informed decisions about fertility and reproduction. For healthcare professionals, it can help create more personalized treatment plans for fertility

issues. In addition, such awareness can be an important resource for women to protect their reproductive health and plan future pregnancies.⁹ This evaluation is critical in providing personalized counseling on fertility and reproductive matters. This study aimed to determine the level of fertility awareness and the factors affecting it among married women of reproductive age.

MATERIAL AND METHODS

RESEARCH DESIGN AND SETTINGS

This is a descriptive and correlational study conducted electronically using Google Forms (Google LLC, Mountain View, California, USA).

SAMPLING AND PARTICIPANTS

The study focused on women of reproductive age living in Türkiye between May and August 2023 who had access to the internet. The participants were women aged 18-49 who could read and write Turkish and had internet access. The study excluded pregnant women, those diagnosed with infertility and undergoing treatment for it, women diagnosed with menopause, and those who had undergone hysterectomy and tubal ligation. The sample size of 360 participants was calculated using a 95% confidence level, 95% test power, 0.194 effect size, and t-test.¹³ The study was completed with 363 women.

Instruments

Data were collected using a Questionnaire Form and the Fertility Awareness Scale (FAS).

Questionnaire Form

The Questionnaire Form consisted of 31 questions about women's sociodemographic characteristics, obstetric characteristics, and lifestyle behaviors.

FAS

FAS was developed by Özşahin and Aksoy to determine fertility awareness among women aged 18-49 years.¹³ The five-point Likert-type scale consists of 19 items and two subscales: Physical Awareness and Cognitive Awareness. None of the items is reverse-scored. The minimum and maximum total scores are 19 and 95. Domain scores range from 10 to 50 for

physical awareness and 9 to 45 for cognitive awareness. A higher total FAS score indicates a higher level of fertility awareness. The total score is divided into 3 categories: a score of 19-43 indicates a low level of fertility awareness, 44-69 indicates a moderate level of awareness, and 70-95 indicates a high level of awareness.¹³ The present study found a Cronbach's alpha reliability coefficient of 0.921 for the physical awareness domain, 0.819 for the cognitive awareness domain, and 0.929 for the entire scale.

DATA ANALYSIS

Study data were analyzed using IBM SPSS V29 (Chicago, USA). Descriptive statistics were presented in percentage, mean and standard deviation, and median, minimum, and maximum values. The values were checked for normality of distribution for the groups using skewness and kurtosis values in the range of ± 1.5 .¹⁵ Data analysis was performed using an independent samples t-test, one-way analysis of variance, and the Pearson correlation test. Factors affecting fertility awareness were identified using multivariate linear regression (stepwise method). Independent variables included the following: educational status (for both woman and husband), income status, chronic diseases, smoking, gravidity, parity and desired number of children, use of family planning methods, diet, and exercise. Categorical independent variables were converted into dummy variables. Statistical significance was set at $p < 0.05$.

ETHICS

The study obtained ethical approval from the Health Sciences Scientific Research Ethics Committee of Necmettin Erbakan University (date: May 3, 2023; no: 427). Before answering the survey questions, respondents read the consent form on the first page displayed in the electronic environment, where they were informed about the purpose and method of the study. Respondents who read the consent form and checked "Yes" for the statement "I have been informed about the research. I agree to participate" could proceed with answering the web survey. The Google Form incorporated standardizations to ensure that women could respond only once. The study was carried out adhering to the principles delineated in the Declaration of Helsinki.

RESULTS

The sociodemographic characteristics of the 363 women who participated in the survey are presented in [Table 1](#). The mean age of the respondents was 34.86 ± 7.65 years (minimum: 19-maximum: 49), the mean body mass index (BMI) was 25.68 ± 4.49 , and the mean duration of marriage was 23.99 ± 4.19 years. Of the respondents, 72.5% had a bachelor's degree or higher, 62.3% were employed, and 15.2% had chronic diseases. Also, 27.5% had 3 or more pregnancies, 35.5% had 2 children, and 55.6% used modern family planning methods ([Table 2](#)). Finally, 20.7% smoked, 51.8% never exercised, 51.5% had a balanced diet, and 34.7% had a carbohydrate-based diet ([Table 3](#)).

Women who responded to the survey were found to have a moderate level of fertility awareness. The study also found that mean scores on the physical and cognitive awareness domain, as well as the total score for the FAS, exhibited statistically significant differences depending on the educational status of the couples, gravidity, use of family planning methods, and diet ($p < 0.05$). Bonferroni post-hoc analysis was performed to determine the sources of the difference; the mean score was higher among couples who used a modern family planning method and had a bachelor's degree or above, while the mean score on the physical and cognitive awareness domain, as well as the total score for the FAS were found to be lower among women who had three or more pregnancies and had a carbohydrate-based diet ([Table 1](#), [Table 2](#), [Table 3](#)).

Correlation analysis showed that the total FAS score had a significant negative correlation with age ($r = -0.104$, $p < 0.05$), BMI ($r = -0.112$, $p < 0.05$), and duration of marriage ($r = -0.157$, $p < 0.001$). The physical awareness domain score was positively and negatively correlated with age ($r = 0.119$, $p < 0.05$) and BMI ($r = -0.167$, $p < 0.001$), respectively. The cognitive awareness domain score had a negative correlation with BMI ($r = -0.114$, $p < 0.05$) and duration of marriage ($r = -0.133$, $p < 0.05$) ([Table 4](#)).

The regression model examining the relationship between the total FAS score and the variables yielded statistically significant results ($F = 14.970$; $p < 0.001$)

TABLE 1: Comparison of women's sociodemographic characteristics and Fertility Awareness Scale score averages (n=363).

Characteristics	n (%)	Bodily awareness subdimension	Cognitive awareness subdimension	Fertility Awareness Scale total score
Education				
Primary secondary school	39 (10.7)	26.31±10.51 ^b	20.82±5.78 ^b	47.13±15.3 ^c
High school	61 (16.8)	31.84±11.03 ^a	24.11±7.93 ^{ab}	55.95±17.86 ^b
University and above	263 (72.5)	36.17±9.89 ^a	26.57±7.28 ^a	62.74±16.01 ^a
Test value		18.304	85.620	17.836
<i>p value</i> ¹		<0.001	<0.001	<0.001
Working status				
Not working	137 (37.7)	32.69±11.03	25.08±7.99	57.77±18.06
Working	226 (62.3)	35.41±10.27	25.82±7.14	61.23±16.23
Test value		-2.379	-0.918	-1.839
<i>p value</i> ²		0.018	0.359	0.067
Education of the spouse				
Primary secondary school	41 (11.3)	27.46±11.28 ^b	21.22±7.72 ^b	48.68±17.91 ^b
High school	77 (21.2)	33.65±10.36 ^a	25.78±7.1 ^a	59.43±16.38 ^a
University and above	245 (67.5)	35.77±10.16 ^a	26.19±7.33 ^a	61.96±16.35 ^a
Test value		11.586	8.136	11.362
<i>p value</i> ¹		<0.001	<0.001	<0.001
Perceived economic status				
Poor	54 (14.9)	32.44±11.89	23.44±7.95 ^a	55.89±18.89 ^a
Medium	224 (61.7)	33.94±10.57	25.48±7.49 ^b	59.42±16.87 ^b
Good	85 (23.4)	36.76±9.63	27.05±6.83 ^a	63.81±15.46 ^a
Test value		3.264	3.924	3.902
<i>p value</i> ¹		0.039	0.021	0.021
Chronic illness				
No	308 (84.8)	34.59±10.45	25.69±7.33	60.28±16.63
Yes	55 (15.2)	33.22±11.61	24.73±8.26	57.95±19.03
Test value		0.880	0.878	0.936
<i>p value</i> ²		0.380	0.380	0.350

¹One-way analysis of variance; ²Independent samples t-test, mean±standard deviation; a-c: There is no difference between groups with the same letter for each measurement.

(Table 5). An increase of one unit in education is associated with an 8.058-point increase in fertility awareness ($p<0.001$). An increase of one unit, in modern family planning methods leads to a 7.678-point increase in fertility awareness ($p<0.001$). Lack of exercise and a gravidity of three or above lead to a decrease in the fertility awareness score ($\beta=-5.783$, $p<0.001$; $\beta=-5.167$, $p<0.001$, respectively). Women's education (bachelor's and above), use of modern family planning methods, lack of exercise, and gravidity of 3 or more account for 14.4% of the fertility awareness score.

DISCUSSION

The present study sought to determine the level of fertility awareness and factors affecting it among

married women of reproductive age. The respondents were found to have a moderate level of fertility awareness. The mean fertility awareness score differs depending on educational status, economic status, gravidity, family planning methods, smoking, diet, and exercise. Women's education (bachelor's and above), use of a modern family planning method, lack of exercise, and a gravidity of three or more account for 14.4% of the fertility awareness score.

Fertility awareness enables women to be informed about reproductive health and the fertility process, to know when their fertile time begins and when it ends.⁵ The survey results show that the respondents had a moderate level of fertility awareness, which is consistent with the results of previous studies.^{11,12} Similarly, a systematic review found low to

TABLE 2: Comparison of women's obstetric characteristics and Fertility Awareness Scale mean scores (n=363).

Characteristics	n (%)	Bodily awareness subdimension	Cognitive awareness subdimension	Fertility Awareness Scale total score
Number of pregnancies				
0	69 (19.0)	34.25±10.37 ^{ab}	25.83±6.98 ^{ab}	60.07±16.09 ^{ab}
1	77 (21.2)	36.55±11.1 ^b	26.4±7.95 ^{ab}	62.95±18.08 ^b
2	117 (32.2)	34.95±10.53 ^{ab}	26.44±7.47 ^b	61.39±17.01 ^{ab}
3 and above	100 (27.5)	32.14±10.29 ^a	23.63±7.16 ^a	55.77±16.2 ^a
Test value		2.698	3.183	3.149
<i>p value</i> ¹		0.046	0.024	0.025
Number of living children				
0	75 (20.7)	34.65±10.14	25.75±6.61	60.4±15.55
1	88 (24.2)	35.85±11.09	25.68±8.28	61.53±18.31
2	129 (35.5)	34.39±10.75	25.98±7.37	60.36±17.11
3	71 (19.6)	32.25±10.2	24.37±7.49	56.62±16.52
Test value		1.533	0.759	1.207
<i>p value</i> ¹		0.206	0.518	0.307
Desired number of children				
1	51 (14.0)	33.06±10.33	25.51±7.56	58.57±16.94
2	209 (57.6)	34.74±11.04	25.36±7.47	60.1±17.33
3	103 (28.4)	34.31±9.97	25.92±7.48	60.23±16.49
Test value		0.512	0.193	0.189
<i>p value</i> ¹		0.599	0.825	0.828
Unplanned pregnancy				
No	327 (90.1)	34.67±10.65	25.8±7.45	60.47±17.03
Yes	36 (9.9)	31.75±10.24	23.19±7.32	54.94±16.15
Test value		1.567	1.995	1.857
<i>p value</i> ²		0.118	0.047	0.064
History of gynecological surgery				
No	321 (88.4)	34.52±10.68	25.64±7.6	60.16±17.17
Yes	42 (11.6)	33.33±10.32	24.81±6.44	58.14±15.77
Test value		0.678	0.676	0.721
<i>p value</i> ²		0.498	0.500	0.471
Family planning methods				
No method used	93 (25.6)	30.3±11.45 ^b	24.14±7.91 ^a	54.44±18.48 ^a
Modern method	202 (55.6)	36.62±9.62 ^{ab}	26.7±7.08 ^b	63.32±15.56 ^b
Traditional method	68 (18.7)	33.29±10.65 ^{ab}	24.03±7.5 ^a	57.32±16.83 ^a
Test value		149.485	5.588	10.152
<i>p value</i> ¹		<0.001	0.004	<0.001

¹One-way analysis of variance; ²Independent samples t-test, mean±standard deviation; a-b: There is no difference between groups with the same letter for each measurement.

moderate levels of fertility awareness among individuals of reproductive age.¹ A lack of awareness of fertility can lead to women missing their fertile period or having difficulties getting pregnant after their period. High fertility awareness plays a key role in using an effective contraception method and pregnancy planning.¹⁶ This gives individuals the opportunity to understand their fertility cycle and the timing of ovulation. This helps to make a more informed

choice of contraceptive methods and minimize the risks during the fertile period.

Fertility awareness is a dynamic concept that covers several components, including sociodemographic, obstetric, and lifestyle factors.¹⁷⁻¹⁹ The present study found that fertility awareness decreased with advancing age. Lack of fertility awareness is the main reason for the rising childbearing age and infertility rate.¹² Women may postpone their fertility

TABLE 3: Comparison of women's general life characteristics and Fertility Awareness Scale score averages (n=363).

Characteristics	n (%)	Bodily awareness subdimension	Cognitive awareness subdimension	Fertility Awareness Scale total score
Smoking				
No	288 (79.3)	34.82±10.42	26.1±7.48	60.92±16.88
Yes	75 (20.7)	32.68±11.3	23.4±7.08	56.08±17.04
Test value		1.558	2.815	2.209
<i>p value</i> ²		0.120	0.005	0.028
Alcohol use				
No	348 (95.9)	34.24±10.6	25.57±7.46	59.81±16.97
Yes	15 (4.1)	37.6±11.11	24.87±8.06	62.47±18.14
Test value		-1.199	0.357	-0.591
<i>p value</i> ²		0.231	0.721	0.555
Dietary patterns				
Carbohydrate heavy diet	126 (34.7)	32.75±10.76 ^b	32.75±10.76 ^b	32.75±10.76 ^b
Protein-heavy diet	28 (7.7)	39.0±8.59 ^a	39.0±8.59 ^{ab}	39.0±8.59 ^{ab}
Vegetable-based diet	22 (6.1)	33.5±11.97 ^{ab}	33.5±11.97 ^{ab}	33.5±11.97 ^{ab}
Balanced diet	187 (51.5)	34.89±10.48 ^{ab}	34.89±10.48 ^a	34.89±10.48 ^a
Test value		2.986	4.412	3.448
<i>p value</i> ¹		0.031	0.005	0.017
Exercise frequency				
None	188 (51.8)	33.6±10.51	23.89±7.18 ^b	57.49±16.62 ^a
2 times a month	39 (10.7)	34.74±11.08	26.56±8.06 ^{ab}	61.31±17.79 ^a
1 time per week	60 (16.5)	36.77±10.34	27.43±6.99 ^a	64.2±16.39 ^a
3 times a week	56 (15.4)	35.61±10.72	28.16±7.37 ^a	63.77±17.08 ^a
Everyday	20 (5.5)	30.4±10.54	26.1±7.55 ^{ab}	56.5±17.39 ^a
Test value		1.927	5.450	2.957
<i>p value</i> ¹		0.105	<0.001	0.020

¹One-way analysis of variance; ²Independent samples t-test, mean±standard deviation; a-b: There is no difference between groups with the same letter for each measurement.

TABLE 4: Correlation analysis results.

Dimensions	$\bar{X}\pm SD$	Median (Minimum-Maximum)	1	2	3	4	5	6
1. Age	34.86±7.65	35 (19-49)	1.000					
2. BMI	25.68±4.49	25 (16.5-44.6)	0.264**	1.000				
3. Marriage duration	23.99±4.19	24 (14-44)	0.840**	0.267**	1.000			
4. Age at first pregnancy	20.17±10.47	24 (0-40)	0.440**	0.226**	0.190**	1.000		
5. Bodily awareness subdimension	59.92±17	62 (19-95)	-0.127*	-0.106*	-0.157**	0.030	1.000	
6. Cognitive awareness subdimension	34.38±10.63	37 (10-50)	-0.090	-0.120*	-0.167**	0.008	0.757**	1.000
7. Fertility Awareness Scale total score	25.54±7.47	25 (9-45)	-0.119*	-0.119*	-0.133*	0.022	0.958**	0.913**

p*<0.05; *p*<0.001; SD: Standard deviation; BMI: Body mass index.

plans for reasons such as career, financial concerns or emotional readiness.² Therefore, women may not be aware that their fertility decreases as they age, leading to difficulties when they want to conceive. At the same time, the fact that women who marry at a young age fulfill the desire to have children as they get older may be another reason for declining fertility awareness. Unlike our findings, previous studies

reported that fertility awareness increases with advancing age.^{14,20,21} This may require a closer examination of the various factors and social dynamics that influence fertility awareness.

Results from the present and previous studies show that education affects fertility awareness.^{1,17-19} Women with higher levels of education may seek more information on fertility, which may contribute

TABLE 5: Linear regression (stepwise) results according to Fertility Awareness Scale Total score.

	β^1 (%95 CI)	SE	β^2	t value	p value	Zero-order	Partial	Variance inflation factor
(Constant)	54.231 (50.294: 58.167)	2.002		27.094	<0.001			
Education								
(Ref=University and above)	8.058 (4.317: 11.799)	1.902	0.212	4.236	<0.001	0.269	0.218	1.059
Family planning methods								
(Ref=Modern method)	7.678 (4.316: 11.039)	1.709	0.225	4.492	<0.001	0.224	0.231	1.057
Exercise								
(Ref=None)	-5.783 (-9.056: -2.51)	1.664	-0.170	-3.475	<0.001	-0.149	-0.181	1.014
Number of pregnancies								
(Ref=3 and above)	-5.167 (-8.881: -1.453)	1.889	-0.136	-2.736	0.007	-0.151	-0.143	1.044

β^1 : Unstandardized coefficient; β^2 : Standardized coefficient; F=16.193; p<0.001; Adjusted R2=0.144; Durbin Watson=1.890.

to awareness. Higher levels of education lead to a better overall self-awareness of personal health through increased health literacy and make health services more accessible.²² Also, women who perceived their economic status as good were found to have higher fertility awareness. The study by Özşahin and Altıparmak also supports our findings.²³ Economically strong women can allocate more resources to planning for the future, have easier access to health services and increase their awareness of reproductive health. This can also be explained by the fact that economically secure women tend to plan and manage childbearing or other fertility-related decisions more consciously.

About half of the respondents used a modern family planning method, which was found to be associated with the fertility awareness level. The fertility awareness score was 7.678 units higher among women who used a modern family planning method compared to women who did not use any modern family planning method or used a traditional method. These results are in line with previous studies that found that fertility awareness was associated with the use of a family planning method and male condom use.^{17,24} A lack of fertility awareness can lead to unwanted pregnancies. The present study found that gravidity of 3 or more led to a 5.167-unit decrease in fertility awareness. Women's use of family planning methods can affect the number of children they have.²⁵ The results of the current study align with the finding that parity is closely associated with the use of family planning methods. Also, parity may indi-

cate the success of family planning methods and the level of fertility awareness.

Lifestyle habits are closely linked to reproductive health. The study found that women who smoked had lower fertility awareness scores. Smoking significantly reduces the chances of conception by impairing ovarian function and depleting ovarian reserves.²⁶ The risk of infertility has been reported to be 1.85 times higher among women who smoke compared to non-smokers.⁶ The present study also found that women with carbohydrate-based diets had lower fertility awareness scores, and this was also negatively associated with BMI. Nutrition plays a key role in modifying fertility outcomes in women of reproductive age. A fertility-enhancing diet includes an abundance of unsaturated fats and vegetables, while poor fertility outcomes are associated with diets high in saturated fats and sugar.²⁷ Furthermore, women who are obese and underweight take a longer time to conceive and are at higher risk for infertility.²⁷⁻²⁹ Obesity is associated with both nutrition and physical inactivity. Regular exercise affects women's general health, increases insulin sensitivity, improves ovarian function, and may increase the chance of conception.²⁶ In the present study, exercise status among women was found to be associated with fertility awareness; lack of exercise caused a 5.783-unit decrease in the fertility awareness level. Exercise at various durations and frequencies affects fertility.³⁰ Xie et al., reported in a meta-analysis that moderate and physical activity levels reduced the risk of infertility.³¹ Previous studies have reported that excessive

physical activity may have an adverse effect on reproductive functions in infertile individuals and recommended moderate regular exercise. On the other hand, a sedentary lifestyle in women has been associated with reduced fertility.³² This aligns with the recent study, which discovered that the impact of lifestyle on fertility extends to fertility awareness. Habits such as not smoking, a healthy diet and regular exercise have a positive effect on fertility and support an individual's reproductive health. This information raises awareness of the importance of fertility and increases the chances of a healthy pregnancy and a healthy baby by adopting healthy lifestyle habits.

This study has some limitations. Firstly, the study was descriptive, which precluded investigation of causality. This limitation was controlled using regression analysis. Secondly, the online collection of data resulted in the inclusion of respondents with internet access and high levels of education. Lastly, the data obtained from the research only reflects the characteristics of the sample group and therefore cannot be generalized.

CONCLUSION

Fertility awareness is an important component of sexual and reproductive health. The survey found a moderate level of fertility awareness among women of reproductive age. Addressing fertility awareness is an

important part of achieving Sustainable Development Goals 3 and 5. For women to achieve optimal fertility health, health professionals should determine the level of fertility awareness and its influencing factors. The results of the study demonstrate the need for interventions to improve fertility awareness among women with low educational and economic status, as well as among multigravida women.

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Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: Sibel Kıyak, Hamide Ayyör, Nuriye Yaldız; **Design:** Sibel Kıyak, Hamide Ayyör, Nuriye Yaldız; **Control/Supervision:** Sibel Kıyak; **Data Collection and/or Processing:** Sibel Kıyak, Hamide Ayyör, Nuriye Yaldız; **Analysis and/or Interpretation:** Sibel Kıyak; **Literature Review:** Sibel Kıyak, Hamide Ayyör, Nuriye Yaldız; **Writing the Article:** Sibel Kıyak, Hamide Ayyör, Nuriye Yaldız; **Critical Review:** Hamide Ayyör.

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