# The Relationship Between Women's Health Literacy and COVID-19 Phobia:
# A Family Health Center Example in Turkey*

## Kadınların Sağlık Okuryazarlığı ile Koronavirüs Fobisi Arasındaki İlişki:
## Bir Aile Sağlığı Merkezi Örneği

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**ABSTRACT**

**Objective:** Women parents' health literacy levels make it easier to understand the requirements and preventative measures during a pandemic. The aim of this study is to reveal the relationship and factors affecting women's fear of COVID-19 and health literacy.

**Methods:** In this cross-sectional descriptive study, Personal Information Form, COVID-19 Phobia Scale (C19P-S), and Turkish Health Literacy Scale 32 (THLS 32) were used to gather data. The sample consisted of 161 women who applied to a family health center. Analysis of the data was done with frequency, percentage, mean, standard deviation, and minimum-maximum values. The suitability of variables to normal distribution was tested with Shapiro-wilks and Kolmogorov-Smirnov tests. For variables not conforming to normal distribution, nonparametric statistical tests were used using Q1: First quarter Q3: Third quarter and Median values. Mann-Whitney u and Kruskal-Wallis tests were used.

**Results:** Participants' average age was 35.79 ± 7.76. The health literacy total score is 64.93 ± 20.18 and COVID-19 Phobia Scale total score is 52.27 ± 13.13. No significant correlation was found between health literacy and COVID-19 phobia total scores.

**Conclusion:** The COVID-19 phobia and health literacy levels were found to be moderate. A significant correlation was found between COVID-19 Phobia Scale total score and the fear caused by the news, frequent change in treatment and the negative effects of staying at home. Also, a significant correlation was found between THLS total score and participants' education level and following health related news.

**Keywords:** COVID-19, Phobia, Health Literacy, Women.

**ÖZ**

**Amaç:** Kadınların sağlık okuryazarlık düzeyi pandemi önlemlerini ve gereklerini anlamada kolaylık sağlamaktadır. Bu çalışmanın amacı kadın ebeveynlerin COVID-19 korkusu ve sağlık okuryazarlığı arasındaki ilişkiyi ve etkileyen faktörleri ortaya koymaktır.

**Yöntem:** Kesitsel tanımlayıcı olarak planlanan çalışmada katılımcı özellikleri belirleme formu, Koronavirüs 19 Fobisi Ölçeği, Türkiye Sağlık Okuryazarlığı Ölçeği 32 kullanıldı. Araştırmanın örneklemini bir bölgedeki aile sağlığı merkezine başvuran 161 kadın ebeveyn oluşturdu. Verilerin değerlendirilmesinde frekans, yüzde, ortalama ve standart sapma ve minimum-maksimum değerleri kullanıldı. Shaprio-wilks ve Kolmogorov-Smirnov testleri Q1: Birinci çeyrek Q3: Üçüncü çeyrek ve Medyan değerleri, Mann-Whitney u testi, Kruskal-Wallis testi ve Ki-kare testi kullanıldı.

**Bulgular:** Katılımcıların yaş ortalaması 35.79±7.76'dır. Ebeveynlerin Sağlık Okuryazarlığı Ölçeği toplam puanı 64,93±20,18 Koronavirüs Fobisi Ölçeği toplam puanı 52,27±13,13'dır. Sağlık okuryazarlığı toplam puanı ve Koronavirüs Fobisi Ölçeği toplam puanı arasında anlamlı ilişki bulunmadı.

**Sonuç:** Katılımcıların koronavirüs fobisi ve sağlık okuryazarlığı düzeylerinin orta olduğu saptandı. Haberlerin korku yaratma durumu, tedavinin sık değişimi ve evde oturmanın getirebileceği olumsuz etkiler ile Koronavirüs fobisi toplam puanı; eğitim durumu ve sağlık haberlerini takip etme durumu ile sağlık okuryazarlığı ölçeği toplam puanı arasında anlamlı ilişki bulundu.

**Anahtar Kelimeler:** COVID-19, Fobi, Sağlık Okuryazarlığı, Kadın.

**Introduction**

On a global scale, the COVID-19 pandemic causes people to change their lives and habits, thus cause many physiological, psychosocial and economic problems. In controlling the process, it is important to inform the society correctly and adequately, to carry out health services without interruption and to control the process without creating an atmosphere of fear and panic. In minimizing disease and disease-related deaths during the pandemic, the public should be educated correctly and these trainings should lead to behavioral change. Therefore, it is important for the society to be able to read, perceive, understand and carry out health knowledge correctly.[1-4]

Uncertainties in the fight against COVID-19, its threats to human life, lack of clear information about it, lack of definitive results of preventive and therapeutic methods, restrictions and changes in family dynamics have caused widespread anxiety and fear.[5-8] In the study of Schimmenti et al. in 2020 identified four fear areas related to coronavirus: (1) fear for the body, (2) worry about significant others (3) fear of not knowing, and (4) fear of inactivity.[9] The most effective way to reduce panic, anxiety and fear during epidemics is for the society to reach and understand the right information to protect itself.[1]

In the Dictionary of Health Promotion, health literacy was defined as "*the cognitive and social skills that identify individuals' ability and motivation to entrance, understand and use information in a way that promotes and maintains good health*".[10] Limited health literacy leads to lack of information and wrong practices regarding protection and promotion of health; problems related to benefiting from health protection and promotion services; inadequate self-care; difficulty in controlling diseases and increase in hospitalizations.[11-13]

During the COVID-19 pandemic, the fact that the statements and information made by official institutions and health professionals were not understood by the target audience caused difficulties in the implementation of the actions.[14] In the studies conducted to determine health literacy during the COVID-19 pandemic, low health literacy has been associated with non-compliance with treatment and medical regimes, difficulties in care, high healthcare costs, increased risk of hospitalizations and death, and inability to access information.[1,14-16] During the pandemic, women experience serious fear and anxiety for themselves and their family members due to serious changes in daily life, restrictions, quarantine practices, uncertainties [17-19] and "stay at home" approaches. Health literacy is essential for women to stay healthy during the pandemic.

**Material and Methods**

**Ethical Considerations**

Written permission was obtained from the Mersin University Clinical Research Ethics Committee (dated 05.08.2020 and number: 2020/563), from the Ministry of Health (2020-07-28T21_01_13), and from Family Health Center (on 17.08.2020) the where the study was conducted.

**Study Design**

This cross-sectional descriptive research was conducted to determine the relationship between health literacy and Covid-19 phobia of women visiting a Family Health Center in rural Turkey.

**Selection and Description of Participant**

The study was conducted at a family health center in a rural city in southern Turkey that has 3 doctors, 3 nurses/midwives and one attendant. The women who met the containment criteria were included in the

study. Considering the roles of women at home, it was deemed appropriate to include women in the sample of the study.

The universe of the study was composed of 350 women who were registered in a Family Health Center in city in Turkey. The data were collected between 01.09.2020 - 01.12.2020.

The sample of the study was calculated to be minimum of 52 women, in order to have statistically a significant moderate level relationship (0.50) between the two scales used, Type I error as 0.01 and the power of the test as 90%. The sample of the study included 161 women registered with the relevant family health center who were at least 18 years old, have at least one child and agreed to participate in the study. Since mostly mothers go to the health center, the sample consisted of females.

### Data Collection Forms

**Personal Information Form:** After scanning literature, this form consisting of 15 questions was prepared to determine the demographic characteristics of the participants and to collect information about receiving health services during the COVID-19 pandemic. [11,13]

**COVID-19 Phobia Scale (C19P-S):** This 5-grade Likert-type self-assessment scale was developed to measure the phobia that can develop against the coronavirus. There are four sub-dimensions; psychological, psycho-somatic, social and economic. Higher scores indicate higher phobia.[20] In our study, the total score average of the C19P-S was 52.27and Cronbach's α reliability coefficient was 0.896.

**Turkish Health Literacy Scale 32 (THLS 32):** This scale was developed in 2016. The score that can be obtained from the 32-item four-point Likert-type scale ranges between 0-128. The index is obtained by calculating the formula index = (mean-1) x [50/3] which is also classified into four categories. The categories are inadequate health literacy (0-25 points), problematic-limited health literacy (>25-33), adequate health literacy (> 33-42 points), and excellent health literacy (> 42-50 points).[21] In our study, the THLS 32 total score mean was 64.93 and the Cronbach's α reliability coefficient was 0.957.

### Application of the Data Collection Form

The data were collected by the researchers after obtaining permission from the women who met the inclusion standard and agreed to join in the study by sending them the online data collection form. It took about 15-20 minutes to complete the form.

### Data Analysis

STATISTICA 13.0 was used for data entry and analysis. Analysis of categorical and descriptive data was done with frequency, percentage, mean, standard deviation, and minimum-maximum values. The suitability of variables to normal distribution was evaluated with Shapiro-wilks and Kolmogorov-Smirnov tests. For variables not conforming to normal distribution, nonparametric statistical tests were used using Q1: First quarter Q3: Third quarter and Median values. Mann-Whitney u test was used for two-group comparisons. The Kruskal-Wallis test was used for groups with more than two groups. Chi-square test was used for variables in a categorical structure. The significance value (p value) was set at 0.05 for all tests.

### Results

All of the participants were women; average age was 35.79 ± 7.76. 35.3% had two; 30.1% three; 18.7% had four or more children; and 16.2% had one child. 80.2% of the participants had nuclear; 18% extended; 1.7% single parent families. 63.6% of women were housewives; 16.8% civil servants; 18.5% workers and 1.2% retired. 36.7% of the women are literate/primary school; 24.3% secondary school; 17.2% high school;

21.3% university graduates and have post graduate education. 47.0% of the participants had income equal to expenses; 39.2% income less than expenses, 13.9% income more than expenses.

89% of the women do not have a chronic disease; and 86.5% stated their spouses / children do not have chronic diseases. 41.9% visit family health centers bimonthly; 28.5% once a month; 16.3% as needed.

While 97.1% of the participants and their families were not positive for COVID-19, 53.5% were afraid of the reaction from their relatives if they were diagnosed with COVID-19. 38.0% of the participants received information about COVID-19 from social media, 36.8% from TV / radio, and 14.0% from health professionals.

85.5% of the participants follow health-related news; 78.5% stated news about the COVID-19 pandemic increases their fear of the disease; 75.6% stated the frequent change of health information about the treatment process during COVID-19 pandemic creates fear; 61% stated staying at home during the COVID-19 pandemic created the fear of getting physical and psychological health problems. Also, 51.4% of the participants postponed their examination / treatment and 40.7% did not seek health service during the COVID-19.

In this study, there was no significant relationship between the participants' THLS 32 total score and the COVID-19 Phobia Scale (C19P-S) total score (r = 0.028, p> 0.05). A statistically significant difference was found between family type and economic sub-dimension of C19P-S (p = 0.020). No statistically significant difference was found between sub-dimensions and C19P-S total score and the following; occupation, number of children, educational status, income status, chronic disease status, chronic disease status of spouse or child, family members being diagnosed with coronavirus, fear of coronavirus diagnosis, following health-related news, delaying routine examinations/treatment and not seeking healthcare services due to the epidemic due to the epidemic (p> 0.05; *Table 1*).

A statistically significant difference was found in terms of the frequency of visiting the family health center (p = 0.030) and the availability of information about Coronavirus (p = 0.031) and the psychological sub-dimension of C19P-S (*Table 1*).

A statistically significant difference was found between the news increasing the fear of the disease and in terms of C19P-S psychological sub-dimension, social sub-dimension and C19P-S total score (p<0.05). There is a statistically significant difference between the fear caused by the frequently changing treatment information, C19P-S psychological sub-dimension, social sub-dimension, economic subscale and C19P-S total score (p<0.05; *Table 1*).

A statistically significant difference was found between staying at home creating fear of health problems and the psychological sub-dimension of C19P-S (p <0.001), somatic sub-dimension (p = 0.014), economic sub-dimension (p <0.001) and C19P-S total score (p <0.001) (*Table 1*).

**Table 1.** Comparison of COVID-19 Phobia Scale (C19P-S) scores and Characteristics of the Participants

| Characteristics of Participants | | COVID-19 Phobia Scale (C19P-S) | | | | |
|---|---|---|---|---|---|---|
| | | Psychological Sub-dimension | Psycho somatic Sub-dimension | Social Sub-dimension | Economic Sub-dimension | C19P-S Total score |
| **Family type** | | | | | | |
| **Nuclear family** | [Q1:Q3] Median | [15,00:23,00] 18,00 | [8,00:12,00] 10,00 | [10,00:17,00] 14,00 | [7,00:10,00,]8,00 | [42.00:60.00]52.00 |
| **Extended family** | [Q1:Q3] Median | [13,00:27,50] 20,50 | [8,00:11,50] 10,00 | [10,00:17,00] 15,00 | [8,00:12,00]9,00 | [41.00:63.00]58.00 |
| **Single parent family** | [Q1:Q3] Median | [18,00:23,50] 21,00 | [10,50:11,50] 11,00 | [14,50:20,00] 17,00 | [10,50:13,50] 12,00 | [53.50:68.50]61.00 |
| **Test statistics* / p** | | 2,439 / 0,295 | 1,015 / 0,602 | 1,533 / 0,465 | 7,806 / **0,020** | 3,580 / 0,167 |
| **Frequency of family health center visit** | | | | | | |
| **Bimonthly** | [Q1:Q3] Median | [14,00:22,00] 17,00 | [7,00:12,00] 10,00 | [10,50:16,00] 13,00 | [7,00:11,00] 8,00 | [40.50:60.00] 48.50 |
| **Once a month** | [Q1:Q3] Median | [14,00:23,00] 18,00 | [8,00:11,00] 9,00 | [10,00:18,00] 15,00 | [6,00:11,00] 8,00 | [42.00:60.00] 52.00 |
| **Twice a month** | [Q1:Q3] Median | [19,00:24,50] 23,00 | [9,00:13,00] 10,00 | [14,50:19,00] 15,00 | [7,50:9,50] 9,00 | [54.00:60.50] 58.00 |
| **Once a week** | [Q1:Q3] Median | [22,50:28,50] 27,00 | [10,50:13,00] 11,00 | [16,50:21,50] 18,00 | [12,50:15,00] 14,00 | [68.50:73.00] 73.00 |
| **As needed** | [Q1:Q3] Median | [15,00:20,00] 17,00 | [7,00:11,00] 10,00 | [11,00:15,00] 14,00 | [8,00:12,00] 8,00 | [42.00:55.00] 48.00 |
| **Test statistics* / p** | | 8,949 / **0,030** | 3,350 /0,341 | 4,749 / 0,191 | 3,968 /0,265 | 7,238 / 0,065 |
| **Source of information about COVID-19** | | | | | | |
| **Health Personnel** | [Q1:Q3] Median | [15,00:23,00] 17,00 | [8,00:10,00] 10,00 | [11,00:16,00] 14,00 | [7,00:10,00] 8,00 | [43.00:58.00] 55.00 |
| **Social Media** | [Q1:Q3]Median | [16,00:23,00] 18,50 | [8,00:13,00] 10,00 | [11,00:18,00] 15,00 | [7,00:12,00] 9,00 | [42.00:60.00] 54.00 |
| **TV/ radio** | [Q1:Q3] Median | [14,00:23,00] 18,00 | [7,00:11,00] 10,00 | [11,00:16,00] 13,00 | [7,00:10,00] 8,00 | [41.00:60.00] 51.00 |
| **Test statistics* / p** | | 10,609 / **0,031** | 3,145 /0,534 | 4,377 / 0,357 | 4,040 /0,401 | 8,186 / 0,085 |
| **Increased fear of the disease due to news about COVID-19 pandemic** | | | | | | |
| **Yes** | [Q1:Q3] Median | [16,00:24,00] 20,00 | [8,00:12,00] 10,00 | [11,00:19,00]15,00 | [7,00:12,00] 8,00 | [44.00:61.00] 55.00 |
| **No** | [Q1:Q3] Median | [13,00:18,00] 16,00 | [7,00:11,00] 10,00 | [10,00:15,00] 11,00 | [7,00:9,00] 8,00 | [39.00:50.00] 43.00 |
| **Test statistics** / p** | | -4,518 /**<0,001** | -,521 / 0,602 | -3,849 / **<0,001** | -1,870 / 0,062 | -3,899 / **<0,001** |
| **Fear as a result of frequently changing treatment information during the COVID-19 pandemic** | | | | | | |
| **Yes** | [Q1:Q3] Median | [16,00:24,00] 20,00 | [8,00:12,00] 10,00 | [12,00:19,00] 15,00 | [7,00:12,00] 8,00 | [16,00:24,00] 20,00 |
| **No** | [Q1:Q3] Median | [12,00:18,00] 14,00 | [7,00:11,00] 10,00 | [10,00:13,00] 11,00 | [6,50:9,00] 8,00 | [12,00:18,00] 14,00 |
| **Test statistics** / p** | | -5,300 / **<0,001** | -1,335 / 0,182 | -4,904 / **<0,001** | -2,162 / **0,031** | -5,300 / **<0,001** |
| **Fear of psychological and physical health problems due to staying at home during the COVID-19 Pandemic** | | | | | | |
| **Yes** | [Q1:Q3] Median | [16,00:24,00] 20,00 | [8,50:12,00] 10,00 | [12,50:19,00] 15,00 | [7,00:11,00] 8,00 | [47.50:61.00] 54.00 |
| **No** | [Q1:Q3] Median | [13,00:19,00] 16,00 | [7,00:10,00] 9,00 | [10,00:15,00] 11,00 | [7,00:10,00] 8,00 | [38.00:58.00] 48.00 |
| **Test statistics** / p** | | -4,254 / **<0,001** | -2,466 / **0,014** | -4,457 / **<0,001** | -1,201 / 0,230 | -4,267 / **<0,001** |

There is a statistically significant difference between THLS 32 sub-dimensions and age (p = 0.049). As a result of paired comparisons, this significant difference is between insufficient health literacy and problematic limited health literacy (p =0.029). There is a statistically significant difference between THLS 32 sub-dimension and age (p = 0.049). This difference stems from the participants between the problematic-limited health literacy subdimension and the inadequate health literacy subdimension.

A statistically significant difference was found between educational groups and THLS 32 total score (p = 0.011). Also, there is a statistically significant difference between the groups in following health-related news and THLS 32 total score (p <0.001). There is no statistically significant difference between THLS 32 total score and the other characteristics of the participants (p> 0.05; *Table 2*).

**Table 2.** Comparison of the Participants' Characteristics and Turkish Health Literacy Scale 32 (THLS 32) Total Scores

| | THLS 32 Total score M±SD | Test Statistics p value |
|---|---|---|
| **Characteristics of Participants** | | |
| **Educational Status** | | |
| Literate/Elementary | 62.56 ± 16.81 | |
| Middle School | 61.80 ± 19.62 | F=3,393 |
| High School | 61.41 ± 17.73 | **p=0,011*** |
| University | 75.88 ± 25.82 | |
| **Following health related news** | | |
| Yes | 62.66 ± 18.68 | T test=-3.742 |
| No | 78.40 ± 23.70 | **p<0.001**** |

** Two independent groups t-test, * One-Way Analysis of Variance, M±SD: median ±standard deviation

**Discussion**

The coronavirus phobia (M ± SD: 52.27 ±13,13) score of the participants in this study was found to be moderate. In the literature, 35.7% of the participants had a high level of fear related to COVID-19, with women having advanced coronavirus fear than men.[22-24] This situation may be due to the excessive burden of women as a parent and other roles within the family. In this study, the average coronavirus fear score of mothers with one child was found to be higher than the others. It is important for health professionals to support mothers in terms of eliminating their fears during the pandemic process.

In this study, women's' total THLS 32 score (M ± SD: 64.93 ±20,18) leads to moderate health literacy. In a different study the participants' health literacy level was sufficient.[25] Advanced health literacy is important in mobilizing individuals and the society for emergencies in a correct, effective and rapid manner during the pandemic.[26] In this context, it is important to ensure that correct and sufficient health literacy is understood by all individuals in protection from COVID-19.[26,27] During the pandemic, parents' having adequate health literacy will guide them in avoiding risky behaviors, understanding social responsibility recommendations, and applying the precautions and restrictions in case of fear and panic. In line with these results, training programs should be planned to increase the awareness of mothers during the pandemic.

In this study, economic sub-dimension of C19P-S anxiety was found to be higher in single parent families. During the pandemic, changes in the global economy such as resignations and flexible work hours have caused families to have financial difficulties. Also, psychological, somatic, and social subscale fear levels were higher in single-parent families than others in this study. In this study, the basic fear in a single parent family is economic, in extended families psychological fear is in the fore. During the pandemic, the diversity in the different family dynamics may lead to different fear and anxiety problems.

In this study, fear of coronavirus was found to be higher in all sub-dimensions for those visiting the health center once a week. The psychological dimension mean scores of those who access information about the coronavirus from social media were found to be higher. According to studies conducted, the easiest way to reach information about the coronavirus is the internet.[28-30] In a study, 90% of the participants preferred to receive service from the emergency departments instead of going to the family doctor. The basic approach should be to go to the family doctor first.[23] Instead of crowded hospital environments, receiving health services primarily from primary care doctor is an approach that will relieve healthcare personnel and the health system and prevent infections.[28] In the study in which the women evaluated the pandemic, the participants emphasized that they questioned the meaning of life, experienced anxiety caused by uncertainty, evaluated the process as "temporary", and prioritized social isolation.[17]

In this study, the mean scores of those who think that the news about coronavirus increase fear was higher. Regular and excessive checks during the coronavirus pandemic, increased infectivity and losses, increased social responsibilities, and frequent sharing of international and national sanctions with the whole world are important factors in increasing the level of fear.[23] In a study, almost half of the participants stated that they feared COVID-19 would result in devastating deaths in the country.[31] Results of our study and literature review reveal that the news about the coronavirus increase fear and cause psychological problems.

In this study, the coronavirus scale sub-dimension and total mean scores of parents who are afraid of the frequent change of treatment protocols were found to be higher especially in the early stages of the pandemic. During the pandemic, which is a different and unknown experience for the whole humanity

causing serious numbers of deaths, the application of different drug protocols is an element that can increase the fear of the disease.

In this study, a statistically significant difference was found between the women's fear of being at home causing physical and psychologic health problems during the COVID-19 pandemic and the psychological, somatic, economic subscale of C19P-S and the C19P-S total score (p <0.001). In the study of Doshi et al. in 2020 stated that psychological factors are important during the pandemic, and limitation of movement causes panic and fear and negatively affects people's psychology. One of the important measures in preventing the spread of disease during the pandemic is social isolation.[22] Despite its positive effect in reducing the number of new cases, quarantine negatively affects the psychological well-being of families.[19] In this process, staying at home leads to changes in daily life activities, the psychosocial and economic dimensions of staying home negatively affect people.

In this study, THLS 32 total score of women who do not follow health-related news were higher. 90.3% of mothers follow health news and they were in the insufficient health literacy sub-group. In the study, who stated they had sufficient knowledge about coronavirus, had average health literacy scores.[28] Studies have found that good health literacy is effective in preventing coronavirus-induced depression, fear, and improving quality of life.[26,28,29,32-35] The interdisciplinary approach to improving health literacy is even more impaortant during a pandemic.[32,33,35,36] In a study, a significant difference was found in terms of having sufficient information about COVID-19 and watching daily news during the COVID-19 process of participants with better health literacy.[25] Reliable news about health contributes to people's adaptation to the new situation without feeling afraid. In this context, reaching and interpreting reliable information is important during the pandemic.

In this study, among the problematic-limited health literacy and insufficient health literacy sub-dimensions of THLS 32, literacy score increases as age increases. In a study conducted in Germany, no significant relationship was found between age and health literacy.[28] In the study of Xu et al. in 2020 reported that the health literacy level is low among the elderly.[34] In the studies, a significant relationship was found between the age variable.[3,25] In the literature, literacy levels decrease as the age increases.

In this study, THLS 32 total score average of the women with a high level of education was found to be higher; approximately one third of the university graduates were in the sufficient health literacy group. Similar to our results, in the study of Bakan and Yıldız in 2019, the average health literacy scale score was higher in high school and university graduates.[11] In a study emphasized that those who are educated in or work in the field of health have high health literacy skills.[32] These differences are due to the fact that the level of education is an element that facilitates accessing, understanding and evaluating information on health-related issues.

**Conclusion and Recommendations**

Participants' levels of COVID-19 fear was moderate and no significant relationship was found between health literacy and fear of COVID-19. A statistically significant correlation was found between participants' age, family type, education, visiting the family health center once a week, following health related news, increased fear due to news about the COVID-19 pandemic and health literacy and fear of COVID-19. Community awareness should be increased to follow up-to-date information about the pandemic on official websites. The high level of health literacy of women will help in protecting and improving health. It will be easy for health professionals to understand the information given. It will contribute to the process without being exposed to the disease or to overcome it more easily. Studies should be conducted in larger populations and action plans should be prepared to improve the health literacy levels.

## Limitations of the Study

The limitation of the study is that it was conducted with women registered to a family health center in Turkey's southern province.

## Acknowledgement

## Author contributions

Rana Can Özdemir: Study conception and design, data analysis and interpretation, drafting of the article, critical revision of the article.

Meryem Türkan Işık: Study conception and design, data analysis and interpretation, drafting of the article, critical revision of the article.

Sadık Nazik: Study conception and design, data collection, critical revision of the article.

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