OBJECTIVE
Early screening methods are very important in reducing morbidity and mortality, especially in breast cancer (BC) and cervical cancer (CC). This study aims to investigate the sociodemographic factors associated with utilization of BC and CC screening methods among women in Turkey.

METHODS
The data were used from the Turkey Health Survey conducted by Turkish Statistical Institute in 2014. We included 8606 women aged 25 and over in the study. The utilization of early screening methods (breast self-examination [BSE], mammography, or Pap smear [PS] test) was the dependent variable. Chi-square test was used to assess the association between sociodemographic factors and utilization of early screening methods.

RESULTS
As a result of the analysis, it was found that 46.5% of the women practiced BSE, 32.4% and 35.4% had mammography screening and PS test at least once, respectively. The results also indicated that there were statistically significant associations between sociodemographic factors such as age, marital status, education and income level, having chronic diseases, consulting a family physician, health status, and utilization of early screening methods.

CONCLUSION
Improving access to early screening methods is of great importance in reducing mortality and morbidity related to BC and CC. It is believed that certain enhancements, such as increasing women’s awareness about cancer screening, should become widespread to increase the number of women using these methods.

Keywords: Breast cancer; cervical cancer; screening methods; Turkey.

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Introduction
Cancer, which is expected to cause 24.1 million new cases and 13 million deaths by 2040, is an important public health problem worldwide, including Turkey. Among cancer types, breast cancer (BC) is the most common cancer in women in almost all countries worldwide. In 2018, approximately 2.1 million new cases and 630,000 deaths occurred due to BC. With about 570,000 new cases and 312,000 deaths reported in 2018, cervical cancer (CC) is the fourth most common cancer among women worldwide. In Turkey, BC, which is the most common female cancer type, constitutes 24.4% of cancers. The age-standardized incidence rate of BC is estimated to be 45.6 (per 100,000) in 2018.[1] CC is the 13th most common cancer
type among women for all age ranges and fourth for women aged 15-44 in Turkey. The age-standardized incidence rate of CC is estimated to be 4.8 in 2018 (per 100,000).[2]

Early screening methods are particularly effective in reducing morbidity and mortality associated with these two cancer types.[3,4] According to the World Health Organization,[5] the only BC screening method that has proved to be effective is mammography screening (MS). Recommendations for MS vary by country. For example, while MS is recommended for women aged 40 and over every 1 or 2 years in Greece, it is recommended for women aged 50-74 every 2 years in Israel.[6] According to national standards in Turkey, MS is recommended for women aged 40-69 every 2 years.[7] However, population-wide implementation of MS is limited due to the lack of infrastructure and trained workforce in developing countries. Hence, breast self-examination (BSE) is advocated in view of its cost-effectiveness in these countries.[8] Although there are debates about BSE, it is still involved in screening programs in many countries.[9] For example, in Turkey, BSE is recommended for women since the 20s for raising awareness about their own health.[7] It is stated that the diagnosis of BC is much less common in women under the age of 40.[10] However, in Turkey, it is seen that 40.4% of women diagnosed with BC are between the ages of 25-49.[11] BC diagnosis in younger women can have a greater impact than older counterparts due to its tendency to appear at a later stage, to be more aggressive and have a worse prognosis.[10] Hence, younger women also need to practice BSE or perform MS in Turkey.

In the diagnosis of CC, Pap smear (PS) test is a commonly used cost-effective method.[12] There are different recommendations about when to start PS screening. For example, PS is recommended for women aged 25-65 every 3 years in France and Israel.[6] According to national standards in Turkey, PS is recommended for women aged 30-65 every 3 years.[7] On the other hand, many jurisdictions recommend that CC screenings begin when a woman becomes sexually active, regardless of age.[13] Considering that the mean age at first marriage is 25s for women in Turkey,[14] it is also important to screen younger women.

Despite evidence that early screening methods reduces morbidity and mortality, BSE practice rates, mammography, and PS performing rates are quite low in Turkey.[15-17] In addition to determining the rates, it is also very important to identify related factors. The previous studies conducted for this purpose have investigated the situation at a provincial level in Turkey.[3,15,17] Not only to ascertain probable fields of intervention that may lead to an increase in screening rates but also to track down women across the country who insufficiently use these methods, it is of essential importance determining factors associated with the utilization of these methods.

Materials and Methods

Study Design
The aim of this study is to investigate the utilization of early diagnosis methods for BC and CC by women in Turkey based on several factors. In this context, the study investigates the BSE practice rates, mammography, and PS performing rates and further determines whether there is a difference in these rates with respect to several personal features. This study utilized data from Turkish Statistical Institute (TURKSTAT)’s [18] Turkey Health Survey 2014 by obtaining necessary permissions from the relevant institution. This study, which is a secondary analysis of the data from Turkey Health Survey 2014, does not require ethical approval for research on human/animal subjects.

Turkey Health Survey has been conducted by the TURKSTAT every 2 years since 2008 to ascertain the general health profile of the population. The geographical scope of the Turkey Health Survey 2014 constitutes all households residing in settlements within the borders of the Republic of Turkey. The soldiers, people who stay permanently in dormitories, prisons, hospitals, nursing homes, etc., were excluded. The sample size was calculated to do estimations on the base of total of Turkey and the required total sample size was found to be 9740 households. The survey was concluded with 8634 households out of 9740 households. TURKSTAT reached 26,075 individuals representing the entire population of the country by face-to-face interviews.[18] Although early screening methods are recommended for specific age groups, considering that approximately half of women diagnosed with BC are between the ages of 25 and 49[11] and the mean age at first marriage is 25s for women in Turkey,[14] we excluded male participants and women between 0 and 24 years of age. After excluding, the final sample of this research includes 8606 women aged 25 and over.

Study Variables
The dependent variables of this study were utilization of BSE, mammography, and PS tests. For the evalua-
tion of these variables, the participants were asked three questions: (i) “How often do you practice BSE?” (ii) “When was the last time you had a MS?” and (iii) “When was the last time you had a PS test?” Those who responded negatively to these questions were classified under “never practiced” for question (i) and “never performed” for the questions (ii) and (iii).

Variables defined in literature that were associated with the utilization of early screening methods by women for BC and CC, which included age,[17,19] marital status,[15] education level,[15,20] income level,[17] health coverage status,[19] consulting with a family physician,[19,21,22] having chronic diseases,[23] body mass index (BMI),[24] and health status,[25] were integrated into the present study as independent variables.

In this context, while marital status and availability of health coverage were evaluated in two categories, the variables of education and income level and age were evaluated in four and five categories, respectively. The chronic disease variable was evaluated based on incidence; in other words, an individual diagnosed with one of 19 different chronic diseases within the past 12 months was categorized as “having a chronic disease.” The evaluation of the variable of consulting with a family physician was based on the service received: Those who had received at least one health-related service from a family physician over the past 12 months were categorized under “yes.” The variable of BMI was evaluated using calculations made on the basis of parameters such as the height and weight of participants, whereby they were categorized into four categories, namely, underweight (<18.49 kg/m²), normal range (18.5-24.99 kg/m²), overweight (25-29.99 kg/m²), and obese (>30 kg/m²). To evaluate the variable of general health status, the question “How is your health in general?” was posed to participants, and the findings were categorized into two groups, “good” and “bad.”

Analysis of Data
The data obtained in the Turkey Health Survey 2014 were analyzed through descriptive statistics (frequency and percentage) and besides Chi-square test to ascertain whether the practices of early screening methods for cancer by women showed a difference with respect to their personal features. SPSS (Version 23.0) program was used to process the related analysis. The alpha level was accepted as 0.05 in statistical tests.

Results
The descriptive findings show that 52.3% of the women who participated in the study were aged 45 and over. While, of these women, 77% were married, 51.2% were primary school graduates, and 53.5% had an income of 1550₺ and below. As for the health coverage status, 94.3% had health coverage. A total of 75.6% of the participating women had a chronic disease, and 87.6% visited a family physician for consultation at least once over the past 12 months. A total of 64.3% of the participants were classified as overweight or obese based on their BMI. With regard to their health status, 55.4% expressed having bad health. The results also indicated that while 46.5% of the women practiced BSE, 32.4% and 35.4% had MS and PS tests at least once, respectively (Table 1).

Table 2 reveals that the participants in the age groups of 35-44 (51.8%) and 45-54 (53.3%) practiced BSE more frequently than those in other age groups; the rate of BSE practice was lowest in women aged 65 and over (29.5%). The study also found that the practice of BSE among married women (48.6%) was higher than among single women (39.4%). This higher utilization rate was also seen among the following: Those with an undergraduate and/or a graduate degree (61.8%), those with an income of 3181₺ and over (60.9%), those who visited a family physician at least once for consultation (48.1%), those who were overweight (46.8%) or obese (48.2%), and those with a good health status (50.4%).

Table 3 reveals that the participants in the age groups of 45-54 (49.0%) and 55-64 (48.4%) had MS more than those in other age groups. The table also shows that married women had MS at a higher rate (33.2%) than single participants (29.6%). This higher utilization rate was also seen among the following: Those with primary education (34.7%), those with an income of 3181₺ and over (39.2%), those having health coverage (32.9%), those with a chronic disease (35.8%), those who consulted with a family physician at least once (33.5%), those who were overweight (34.7%) or obese (39.5%), those with bad health status (37.7%), and those who practiced BSE (46.8%).

Table 4 reveals that the participants in the age groups of 35-44 (39.3%) and 45-54 (46.5%) had a higher rate of PS tests than those in other age groups; this rate was lowest in women aged 65 and over (23.1%). The study findings further indicate that married women had a higher rate of PS tests (38.4%) than single participants (25.1%). This higher utilization rate of PS tests was also
seen among the following: Those with an undergraduate and/or graduate degree (46.8%), those with an income of 3181₺ and over (51.2%), those with health coverage (35.7%), those with a chronic disease (37.0%), those who consulted with a family physician at least once (36.4%), those who were overweight (36.7%) or obese (37.8%), and those with bad health status (37.0%).

Table 1  Descriptive characteristics of the participants

|                  | n   | %   |
|------------------|-----|-----|
| **Age**          |     |     |
| 25-34            | 2003| 23.3|
| 35-44            | 2102| 24.4|
| 45-54            | 1791| 20.8|
| 55-64            | 1325| 15.4|
| 65+              | 1385| 16.1|
| **Marital status**|     |     |
| Married          | 6630| 77.0|
| Single           | 1976| 23.0|
| **Education level**|     |     |
| No education     | 2173| 25.2|
| Primary school   | 4424| 51.2|
| High school and/or 2-year degree | 1329| 15.4|
| Undergraduate and/or graduate degree | 680 | 7.9|
| **Income level**|     |     |
| 0-1550₺          | 4603| 53.5|
| 1551-2170₺       | 1349| 15.7|
| 2171-3180₺       | 1357| 15.8|
| ≥3181₺           | 1297| 15.1|
| **Health coverage status** |     |     |
| Have             | 8114| 94.3|
| Not have         | 492 | 5.7|
| **Having a chronic disease** |     |     |
| Have             | 6503| 75.6|
| Not have         | 2103| 24.4|
| **Consulting with a family physician** |     |     |
| Yes              | 7535| 87.6|
| No               | 1071| 12.4|
| **Body mass index** |     |     |
| Underweight      | 192 | 2.2 |
| Normal range     | 2878| 33.4|
| Overweight       | 2946| 34.2|
| Obese            | 2590| 30.1|
| **Health status** |     |     |
| Good             | 3834| 44.6|
| Bad              | 4772| 55.4|
| **Breast self-examination** |     |     |
| Practice         | 3998| 46.5|
| Not practice     | 4608| 53.5|
| **Mammography** |     |     |
| Performed        | 2787| 32.4|
| Not performed    | 5819| 67.6|
| **Pap smear**   |     |     |
| Performed        | 3044| 35.4|
| Not performed    | 5562| 64.6|
| **Total**        | 8606| 100 |

*1 USD=2.188₺ in 2014

Discussion

This study aimed to investigate the utilization of early screening methods (BSE, MS, and PS tests) for BC and CCs by women aged 25 years and above living in Turkey from a perspective based on several factors. The results indicate that while 46.5% of women practice BSE, 32.4% have undergone MS and 35.4% have taken a PS test at least once. Previous research performed in several provinces in Turkey has found that BSE practice rates vary between 27.7% and 66.5%, MS vary between 7.3% and 55.9%, and PS tests vary between 23.7% and 55.9%.[15-17,26,27]

The results demonstrated that married, middle-aged women who had an undergraduate and/or graduate degree with an income of 3181₺ and over, who received health-care services from a family physician at least once, whose BMI was classified as overweight or obese, and who expressed having a good health status practiced a higher rate of BSE than did others. These results concerning BSE practice are similar to findings of previous research.[17,20,21,25] Women with lower education are less knowledgeable about health risks and less informed about screening. For this reason, it is expected finding that woman with higher education levels are more likely to apply to BSE. It is observed that the possibility of using screening methods is low in cases where access to health services is limited.[20]

In Turkey, the high of access to primary health care and having information and follow-up program about BC screening methods in primary health-care services is seen important factor that increases BSE.

The results concerning women’s rates of utilization of MS show that married, middle-aged women, with primary level education, an income of 3181₺ and over, who had health coverage, who had received health-care services from a family physician at least once, whose BMI was classified as overweight or obese, and who expressed having a good health status practiced a higher rate of MS than others. These results concerning BSE practice are similar to findings of previous research.[4,22,24] Having health insurance is one of the important factors affecting the benefit of women from health services,[15] and studies show that uninsured women are less likely to have MS and PS compared to insured women due to their high cost.[28] For this rea-
son, it can be said that women with health insurance have a high rate of MS. Due to the impact of cancer screening program in primary health-care services in Turkey, visiting the family doctor is one of the factors that increase the use of MS.

The results concerning women’s rates of utilization of PS tests show that married women in the 45-54 age group, with a higher level of education, an income of 3181₺ and over, health coverage status, having a chronic disease, who had received health-care services from a family physician at least once, whose BMI was classified as overweight or obese, and who expressed having bad health status, had a higher rate of PS tests than others. These results correspond to the findings of previous research.[15,19,23,24] Woman having a chronic disease, whose BMI was classified as overweight or obese, and who expressed having bad health status needs for doctor consultation. This may indicate that women with more medical conditions are more likely to visit doctors and therefore more likely to be screened. It is observed that women whose BMI was classified as overweight or obese have high rates of using screening methods (SBE, MS, and PS tests) than others. Obese individuals consume more fat, and excessive intake of any kind of fat increases the risk of cancer formation. [29] For this reason, it is expected finding that woman with high BMI have a higher rate of testing than others.

The results of this study appear that self-reported good health was positively associated with BSE practice but negatively associated with utilization of mammog-

| Table 2  Factors associated with practice BSE |
|----------------|----------------|----------------|------------------|
| Variables       | Practice        | Not practice   | χ²/p             |
|                 | (n=3998) | %       | (n=4608) | %       |          |
| Age             |           |       |           |           |
| 25-34           | 921   | 46.0  | 1082   | 54.0  | χ²=219.101 |
| 35-44           | 1088  | 51.8  | 1014   | 48.2  | p<0.001   |
| 45-54           | 955   | 53.3  | 836    | 46.7  |
| 55-64           | 626   | 47.2  | 699    | 52.8  |
| 65+             | 408   | 29.5  | 977    | 70.5  |
| Marital status  |           |       |           |           |
| Married         | 3219  | 48.6  | 3411   | 51.4  | χ²=51.002 |
| Single          | 779   | 39.4  | 1197   | 60.6  | p<0.001   |
| Education level |           |       |           |           |
| No education    | 550   | 25.3  | 1623   | 74.7  | χ²=581.876 |
| Primary school  | 2229  | 50.4  | 2195   | 49.6  | p<0.001   |
| High school and/or 2-year degree | 799 | 60.1 | 530 | 39.9 |
| Undergraduate and/or graduate degree | 420 | 61.8 | 260 | 38.2 |
| Income level*   |           |       |           |           |
| 0-1550₺         | 1799  | 39.1  | 2804   | 60.9  | χ²=249.666 |
| 1551-2170₺      | 671   | 49.7  | 678    | 50.3  | p<0.001   |
| 2171-3180₺      | 738   | 54.4  | 619    | 45.6  |
| ≥3181₺          | 790   | 60.9  | 507    | 39.1  |
| Consulting with a family physician |           |       |           |           |
| Yes             | 3621  | 48.1  | 3914   | 51.9  | χ²=62.296  |
| No              | 377   | 35.2  | 694    | 64.8  | p<0.001   |
| Body mass index |           |       |           |           |
| Underweight     | 80    | 41.7  | 112    | 58.3  | χ²=8.834  |
| Normal range    | 1292  | 44.9  | 1586   | 55.1  | p<0.05    |
| Overweight      | 1378  | 46.8  | 1568   | 53.2  |
| Obese           | 1248  | 48.2  | 1342   | 51.8  |
| Health status   |           |       |           |           |
| Good            | 1932  | 50.4  | 1902   | 49.6  | χ²=43.048  |
| Bad             | 2066  | 43.3  | 2706   | 56.7  | p<0.001   |

*1 USD=2.188₺ in 2014. BSE: Breast self-examination
This situation can be explained by the trend, need, and possibility factors in the health services usage behavior model developed by Andersen. People who evaluate their perceived health status as good and therefore do not feel any discomfort prefer BSE method without going to a health institution, however, when there is a deterioration in health, people can use health services to use screening methods to find out where this problem is caused.

**Limitations of the Study**

This study has several limitations. First of all, this study was carried out using the data of Turkey Health Survey 2014 and there could be other factors that might be as-

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### Table 3  Factors associated with having mammography

| Variables                         | Performed (n=2787) | Not performed (n=5819) | \( \chi^2/p \) |
|-----------------------------------|--------------------|------------------------|-----------------|
|                                  | \( n \) | %     | \( n \) | %     | \( \chi^2 \) | \( p \) |
| Age                              |        |       |        |       |                 |      |
| 25-34                            | 293    | 14.6  | 710    | 85.4  | \( \chi^2=709.606 \) | \( p<0.001 \) |
| 35-44                            | 544    | 25.9  | 1558   | 74.1  | \( p<0.001 \) |
| 45-54                            | 877    | 49.0  | 914    | 51.0  | \( p<0.001 \) |
| 55-64                            | 641    | 48.4  | 684    | 51.6  | \( p<0.001 \) |
| 65+                              | 432    | 31.2  | 953    | 68.8  | \( p<0.001 \) |
| Marital status                   |        |       |        |       |                 |      |
| Married                          | 2203   | 33.2  | 4427   | 66.8  | \( \chi^2=9.380 \) | \( p=0.002 \) |
| Single                           | 584    | 29.6  | 1392   | 70.4  | \( p<0.001 \) |
| Education level                  |        |       |        |       |                 |      |
| No education                     | 612    | 28.2  | 1561   | 71.8  | \( \chi^2=34.618 \) | \( p<0.001 \) |
| Primary school                   | 1537   | 34.7  | 2887   | 65.3  | \( p<0.001 \) |
| High school and/or 2-year degree | 445    | 33.5  | 884    | 66.5  | \( p<0.001 \) |
| Undergraduate and/or graduate degree | 193   | 28.4  | 487    | 71.6  | \( p<0.001 \) |
| Income level*                     |        |       |        |       |                 |      |
| 0-1550₺                          | 1324   | 28.8  | 3279   | 71.2  | \( \chi^2=68.760 \) | \( p<0.001 \) |
| 1551-2170₺                       | 454    | 33.7  | 895    | 66.3  | \( p<0.001 \) |
| 2171-3180₺                       | 500    | 36.8  | 857    | 63.2  | \( p<0.001 \) |
| ≥3181₺                           | 509    | 39.2  | 788    | 60.8  | \( p<0.001 \) |
| Health coverage status            |        |       |        |       |                 |      |
| Have                             | 2668   | 32.9  | 5446   | 67.1  | \( \chi^2=16.014 \) | \( p<0.001 \) |
| Not have                         | 119    | 24.2  | 373    | 75.8  | \( p<0.001 \) |
| Having a chronic disease          |        |       |        |       |                 |      |
| Have                             | 2328   | 35.8  | 4175   | 64.2  | \( \chi^2=141.691 \) | \( p<0.001 \) |
| Not have                         | 459    | 21.8  | 1644   | 78.2  | \( p<0.001 \) |
| Consulting with a family physician |       |       |        |       |                 |      |
| Yes                              | 2521   | 33.5  | 5014   | 66.5  | \( \chi^2=31.825 \) | \( p<0.001 \) |
| No                               | 266    | 24.8  | 805    | 75.2  | \( p<0.001 \) |
| Body mass index                  |        |       |        |       |                 |      |
| Underweight                      | 40     | 20.8  | 152    | 79.2  | \( \chi^2=163.115 \) | \( p<0.001 \) |
| Normal range                     | 702    | 24.4  | 2176   | 75.6  | \( p<0.001 \) |
| Overweight                       | 1021   | 34.7  | 1925   | 65.3  | \( p<0.001 \) |
| Obese                            | 1024   | 39.5  | 1566   | 60.5  | \( p<0.001 \) |
| Health status                    |        |       |        |       |                 |      |
| Good                             | 986    | 25.7  | 2848   | 74.3  | \( \chi^2=140.361 \) | \( p<0.001 \) |
| Bad                              | 1801   | 37.7  | 2971   | 62.3  | \( p<0.001 \) |
| BSE                              |        |       |        |       |                 |      |
| Yes                              | 1870   | 46.8  | 2128   | 53.2  | \( \chi^2=706.009 \) | \( p<0.001 \) |
| No                               | 917    | 19.9  | 3691   | 80.1  | \( p<0.001 \) |

*1 USD=2.188₺ in 2014. BSE: Breast self-examination
associated with the use of early screening methods, such as living in rural or urban area, knowledge about cancer screening. These variables may also be included in future studies. Data on use of early screening methods were self-reported, which might lead to underreporting.

**Conclusion**

The study investigates the BSE practice rates, mammography, and PS performing rates and it is found that the low number of women using screening methods is alarming and suggests that awareness about screening should be increased. Further the study determines whether there is a difference in these rates with respect to several personal features. It is found that there is a relationship between certain personal features of women - such as age, marital status, education and income level, health coverage status, having a chronic disease, having consulted a family physician, and health status - and their utilization of early screening methods for BC.

### Table 4  Factors associated with having Pap smear test

| Variables                          | Performed (n=3044) | Not performed (n=5562) | \( \chi^2/p \) |
|-----------------------------------|--------------------|------------------------|----------------|
|                                   | n  | %  | n  | %  |                |                |
| **Age**                           |    |    |    |    |                |                |
| 25-34                             | 565| 28.2| 1438| 71.8| \( \chi^2=250.118 \) | p<0.001 |
| 35-44                             | 827| 39.3| 1275| 60.7|                |                |
| 45-54                             | 832| 46.5| 959 | 53.5|                |                |
| 55-64                             | 500| 37.7| 825 | 62.3|                |                |
| 65+                               | 320| 23.1| 1065| 76.9|                |                |
| **Marital status**                |    |    |    |    |                |                |
| Married                           | 2549| 38.4| 4081| 61.6| \( \chi^2=119.500 \) | p<0.001 |
| Single                            | 495 | 25.1| 1481| 74.9|                |                |
| **Education level**               |    |    |    |    |                |                |
| No education                      | 482| 22.2| 1691| 77.8| \( \chi^2=259.803 \) | p<0.001 |
| Primary school                    | 1653| 37.4| 2771| 62.6|                |                |
| High school and/or 2-year degree  | 591 | 44.5| 738 | 55.5|                |                |
| Undergraduate and/or graduate degree | 318| 46.8| 362 | 53.2|                |                |
| **Income level**                  |    |    |    |    |                |                |
| 0-1550₺                           | 1294| 28.1| 3309| 71.9| \( \chi^2=277.200 \) | p<0.001 |
| 1551-2170₺                        | 523 | 38.8| 826 | 61.2|                |                |
| 2171-3180₺                        | 563 | 41.5| 794 | 58.5|                |                |
| ≥3181₺                            | 664 | 51.2| 633 | 48.8|                |                |
| **Health coverage status**        |    |    |    |    |                |                |
| Have                              | 2898| 35.7| 5216| 64.3| \( \chi^2=7.406 \) | p=0.007 |
| Not have                          | 146 | 29.7| 346 | 70.3|                |                |
| **Having a chronic disease**      |    |    |    |    |                |                |
| Have                              | 2409| 37.0| 4094| 63.0| \( \chi^2=32.613 \) | p<0.001 |
| Not have                          | 635 | 30.2| 1468| 69.8|                |                |
| **Consulting with a family physician** |    |    |    |    |                |                |
| Yes                               | 2741| 36.4| 4794| 63.6| \( \chi^2=26.818 \) | p<0.001 |
| No                                | 303 | 28.3| 768 | 71.7|                |                |
| **Body mass index**               |    |    |    |    |                |                |
| Underweight                       | 57 | 29.7| 135 | 70.3| \( \chi^2=25.120 \) | p<0.001 |
| Normal range                      | 925 | 32.1| 1953| 67.9|                |                |
| Overweight                        | 1082| 36.7| 1864| 63.3|                |                |
| Obese                             | 980 | 37.8| 1610| 62.2|                |                |
| **Health status**                 |    |    |    |    |                |                |
| Good                              | 1279| 33.4| 2555| 66.6| \( \chi^2=12.235 \) | p<0.001 |
| Bad                               | 1765| 37.0| 3007| 63.0|                |                |

*1 USD=2.188₺ in 2014
and CC. The results of the study suggest that certain improvements should be made in various fields to allow intervention to increase the utilization rates of early screening methods of women. The study found that women who consult a family physician have higher rates in terms of utilization of early screening methods. However, the lack of an obligatory referral system in Turkey prompts people to directly apply to hospitals. In this respect, it is believed that the provision of information and guidance concerning screening methods by family physicians is of great importance to educate women about cancer screening. It can be said that the results can be generalized across the country, as the research data are obtained from a sample of women across the country.

Acknowledgments: The authors thank Turkish Statistical Institute for giving necessary permissions to use the data of Turkey Health Survey 2014.

The authors also thank Hacettepe University Technopolis Technology Transfer Center for editing the study in English.

Peer-review: Externally peer-reviewed.

Conflict of Interest: All authors declared no conflict of interest.

Ethics Committee Approval: This study was carried out over existing data and it does not require any human/animal subjects to acquire an ethical approval.

Financial Support: This study has received no financial support.

Authorship contributions: Concept – D.Ü., S.K., İ.B., O.I., Ö.U.; Design – D.Ü., S.K., İ.B., O.I., Ö.U.; Supervision – D.Ü., S.K., İ.B., O.I., Ö.U.; Funding – None; Materials – None; Data collection and/or processing – D.Ü., S.K., İ.B.; Data analysis and/or interpretation – D.Ü., S.K., İ.B., O.I., Ö.U.; Literature search – D.Ü., S.K., İ.B.; Writing – D.Ü., S.K., İ.B., Ö.U.; Critical review – D.Ü., S.K., İ.B., O.I., Ö.U.

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