

Factors Influencing the Prevalence of Urinary Incontinence in Women and its Impact on Sexual Quality of Life

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ABSTRACT

Objective: This study aimed to determine the prevalence of urinary incontinence (UI) in women aged 18 years and over, identify factors influencing UI, and explore its relationship with sexual quality of life.

Materials and Methods: This cross-sectional study involved 780 women. Sociodemographic Data Form, the International Consultation on Incontinence Questionnaire - Short Form (ICIQ-SF), and the Sexual Quality of Life - Female (SQOL-F) were utilized.

Results: The mean age of the women was 37.2±10.8 years, with 76.7% being married. The prevalence rates were 29.2% for any UI, 12.3% for stress urinary incontinence (SUI), 7.8% for urge urinary incontinence (UUI), and 9.1% for mixed urinary incontinence (MUI). A higher incidence of UI was observed in women who were older, had a higher Body Mass Index (BMI), lower education levels, lower monthly income, were unemployed, suffered from chronic diseases, were married, had children, had a family history of UI, and had a history of giving birth to macrosomic babies. The presence of UI was 2.6 times higher ($p=0.004$) in women aged 50–64, 5.9 times higher ($p<0.001$) in women with a family history of UI, and 2.2 times higher ($p=0.018$) in women who had one child. The mean SQOL-F scale score for sexually active women was 84.3±19.2. Women with any UI had a lower SQOL-F scale mean score ($p=0.002$), indicating a negative impact of UI on the SQOL-F scale score ($p=0.006$).

Conclusion: UI was found to be a common health problem among women, particularly in the older age groups, and it adversely affects sexual quality of life.

Keywords: Prevalence, quality of life, sexual health, urinary incontinence, women.



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INTRODUCTION

Urinary incontinence (UI) is a common public health issue affecting adult women worldwide.¹ The prevalence of women's UI varies significantly across different studies due to different definitions and population sampling methods.² It has been reported that the UI prevalence worldwide ranges from 15% to 69%.^{1,3,4} Recent studies in Türkiye report a prevalence of UI between 20.9% and 44.8%.^{5–9}

Numerous risk factors for UI have been identified, with increasing age being one of the most significant. Consequently, as the average age of the population increases, the prevalence of UI in women is also expected to rise in the future.²

Previous studies have found that the emergence of UI symptoms affects women's quality of life, specifically impacting their mental health and social interactions.^{10,11} In fact, it has been determined that many women suffering from this condition are not fully satisfied with their sexual lives.¹² Treatment of UI has been shown to improve quality of life, partly by improving sexual function. However, there are few studies on this subject, and more evidence is needed before drawing consistent conclusions.¹²

Women are likely to avoid seeking help from health institutions, considering UI as a stigma.¹³ Addressing the urinary problem can improve women's sexual function and overall quality of life.¹³ Therefore, it is crucial to determine the prevalence of this issue in society and understand its impact on women's sexual lives. This understanding will help provide more qualified health services and improve women's living standards. In the present study, we aimed to determine the prevalence of UI in women aged 18 years and older, explore the factors affecting UI, and its relationship with sexual quality of life.

MATERIALS AND METHODS

Study Design and Setting

This cross-sectional study was conducted with women aged 18 and over in the Sivas city center between January 2022 and December 2022. Sivas is located in the Central Anatolia Region of Türkiye. According to the 2021 data from the Turkish Statistical Institute, the female population aged 18 and over in the Sivas city center was estimated to be 141,813. The minimum sample size was calculated as 529 using the OpenEpi (Version 3) program, based on the following parameters: N=141,813, effect value $d=4\%$, confidence interval=95%, $p=33\%$. Given that recent studies in Türkiye have reported UI prevalence rates ranging from 20.9% to 44.8%, we set the p -value at 33%.⁵⁻⁹ Sample selection was conducted among the population registered at Family Health Centers (FHCs) in the city center to reach the targeted study population. It was decided to select half of the FHCs in the city center, amounting to 11 out of 22. The selection was done in a pattern (e.g., 1, 3, 5, etc.). Then, treating each of these selected FHCs as a separate stratum, the minimum number of participants required from each FHC for our sample was established. This was done by calculating the relevant population at each FHC and then determining their proportionate contribution to the overall sample size. Women over the age of 18 who visited FHCs for any reason and were able to understand and respond to the

study questions were involved in the study. Exclusion criteria included women under 18 years of age, those with cognitive impairments that precluded them from answering the questions (especially those aged 65 and over), women with mental and motor disabilities, pregnant women, those who had a urinary tract infection in the last month, and those with a history of pelvic surgery (excluding incontinence surgery), pelvic radiation, or urological and gynecological malignancies.

Data collection tools were completed by the researchers through face-to-face interactions with the participants. Each researcher visited one of the 11 designated FHCs at least once a week to collect study data over a period of one year. This study did not utilize any external funding sources. Since the researchers were not employed by the FHCs, a one-year period was selected for data collection. Out of the 797 women reached, 17 (2.1%) who did not meet the inclusion criteria were excluded from the study.

All participants were well-informed about the study and provided their written informed consent. The study adhered to the ethical guidelines of the Declaration of Helsinki. Ethical approval was obtained from Sivas Cumhuriyet University's Non-invasive Clinical Research Board (publication number: 2021-11/19, approval date: 17.11.2021). Institutional permission was granted by the provincial health directorate (Decision no: 2022/01, Date: 04.01.2022).

Data Collection

For data collection, the Sociodemographic Data Form, the International Consultation on Incontinence Questionnaire - Short Form (ICIQ-SF), and the Sexual Quality of Life - Female (SQOL-F) were utilized.

The Sociodemographic Data Form comprised 24 questions encompassing age, weight, height, education status, employment status, monthly income, presence of chronic diseases, marital status, number of children, presence of UI, family history of UI, recent urinary tract infections, pregnancy status, and specific questions for those who have given birth or who have complaints of UI. Participants' weights and heights were self-reported. Body Mass Index (BMI) was calculated by dividing the body weight in kilograms (kg) by the square of their height in meters ($BMI=kg/m^2$). Macrosomia was defined as having a fetus weighing over 4,000 grams, difficult birth as conditions prolonging the duration of birth and complicating the process of childbirth, and episiotomy as a surgical incision made during childbirth to widen the vaginal opening, thereby facilitating birth.

The ICIQ-SF, developed by Avery et al.,¹⁴ assesses UI and its impact on quality of life. Cetinel et al.¹⁵ conducted the validity and reliability study for the Turkish version. To determine the

type of UI, responses such as “I leak urine while coughing, sneezing” and “I leak while moving or doing sports” were classified as stress urinary incontinence (SUI), whereas “I leak urine before I can reach the toilet” was defined as urge urinary incontinence (UUI). The presence of both types was categorized as mixed urinary incontinence (MUI).¹⁵ The ICIQ-SF score is evaluated across four severity levels: mild (1–5), moderate (6–12), severe (13–18), and very severe (19–21). Scores ranging from 0 to 21 can be obtained from the scale, with higher scores indicating a greater impact of UI on quality of life. The Chronbach’s alpha value for this scale was found to be 0.71.¹⁵

The SQOL-F scale, validated and found reliable by Symonds et al.,¹⁶ is used to evaluate sexual quality of life. This scale is a six-point Likert type, easy to apply, and can be self-administered. It consists of 18 items, with a scoring system ranging from 1 to 6 points for each item. Consequently, the total score range that can be obtained from the scale is between 18 and 108.¹⁶ An increase in the scale score indicates an improvement in the quality of sexual life.¹⁶ Tuğut et al.¹⁷ conducted a validity and reliability study for the Turkish version and found the Cronbach’s alpha value to be 0.83.

Statistical Analysis

The dependent variable of the study was the presence of UI. Independent variables included age, BMI, education level, employment status, family monthly income, presence of any chronic disease, marital status, family history of UI, SQOL-F score, and fertility characteristics of the women. Data were evaluated using IBM Statistical Package for the Social Sciences (SPSS) version 22.0. Skewness and kurtosis coefficients were calculated to assess the suitability of numerical data for normal distribution. Since the skewness and kurtosis values for the numerical data in the study were between -1 and +1,¹⁸ and the Kolmogorov-Smirnov test result was $p > 0.05$, the data were considered to have a normal distribution. Independent sample t-tests, F tests (Analysis of Variance (ANOVA)), Pearson correlation analysis, and binary logistic regression analysis were used. The results of the correlation analysis were categorized as follows: a correlation coefficient (r) ≤ 0.5 indicated weak correlation, while $0.5 < r < 1$ indicated high correlation.¹⁹ In the regression analysis, parameters that were significant in univariate analyses were included in the regression models. To examine the relationship between macrosomia, SQOL-F, and the presence of UI, two separate regression models were created, one excluding nulliparous women and the other excluding sexually inactive women. Reliability analyses of the scales were conducted, revealing Cronbach’s alpha values of 0.80 for ICIQ-SF and 0.83 for SQOL-F. A p-value of < 0.05 was considered statistically significant.

RESULTS

Sociodemographic and Fertility-Related Characteristics of Women

The study was completed with 780 women. Of these, 46.5% were between the ages of 35 and 49. The mean age of the women was 37.2 ± 10.8 years. The mean BMI of the women was 25.5 ± 4.9 kg/m². A total of 77.1% had a high school education or higher, 71.4% were employed, and 76.7% were married and sexually active. Additionally, 22.1% had a chronic disease, and 30.6% had a family history of UI (Table 1). Among the women participating in the study, 67.8% had at least one child. The rates of those with a history of difficult delivery, episiotomy, and macrosomia were 10.0%, 30.4%, and 18.3%, respectively (Table 2).

Women’s Characteristics Related to UI Prevalence, UI Types, and ICIQ-SF Scale

The overall prevalence of UI was 29.2%. Specifically, the prevalence of SUI was 12.3%, UUI was 7.8%, and MUI was 9.1% (Table 1). Among the women, 49.6% had experienced UI for one year or less. A total of 71.9% of the women had not consulted a doctor for UI, and 64.5% did not use any treatment method for UI. Among the 58.0% of women who sought any treatment, a slight satisfaction with the treatment method was reported. The mean ICIQ-SF total score was 6.9 ± 4.3 , with 49.1% of women experiencing mild severity of UI. The frequency of UI was once a week or less in 58.8% of women, and the amount of urine leakage was small in 81.6% of them (Table 3).

Factors Affecting the Prevalence of UI in Women

Women with any UI had a higher mean age ($p < 0.001$) and BMI ($p < 0.001$), but a lower mean monthly income ($p = 0.023$). Those aged 65 and over ($p < 0.001$), who were literate or at most secondary school graduates ($p < 0.001$), unemployed ($p < 0.001$), had any chronic disease ($p = 0.009$), were married ($p = 0.037$), or had a family member with UI ($p < 0.001$) experienced more UI (Table 1). The presence of UI was lower in women without children ($p < 0.001$). UI was more prevalent in those with a history of macrosomic delivery ($p = 0.014$) (Table 2). Table 4 presents binary logistic regression models estimating factors affecting UI presence. In the first model (multivariate, $n = 780$), the constant was $p < 0.001$, model $p < 0.001$, Cox & Snell $R^2 = 0.188$, and Hosmer-Lemeshow test $p = 0.669$. In the second model (multivariate, $n = 529$), the constant was $p < 0.001$, model $p < 0.001$, Cox & Snell $R^2 = 0.207$, and Hosmer-Lemeshow test $p = 0.879$. In the third model (multivariate, $n = 598$), the constant was $p < 0.001$, model $p = 0.002$, Cox & Snell $R^2 = 0.182$, and Hosmer-Lemeshow test $p = 0.875$. Hosmer-Lemeshow test results ($p > 0.05$) indicated a good fit between the model and the data. The presence of UI in women was found to be 2.6 times higher ($p = 0.004$) in those aged 50–64, 5.9 times

Table 1. Distribution of some characteristics of women according to UI presence

| | Total | No UI | Any UI | |
|--|----------------|----------------|--|---------|
| Participants (n, %) | 780, 100.0 | 552, 70.8 | 228, 29.2 (Stress UI=96, 12.3 Urge UI=61, 7.8 Mixed UI=71, 9.1) | |
| Age (years) (Mean±SD) | 37.2±10.8 | 35.7±10.5 | 40.6±10.9 | p<0.001 |
| Age groups (years) (n, %) | | | | p<0.001 |
| 18–34 | 313, 40.1 | 253, 80.8 | 60, 19.2 | |
| 35–49 | 363, 46.5 | 245, 67.5 | 118, 32.5 | |
| 50–64 | 96, 12.3 | 50, 52.1 | 46, 47.9 | |
| ≥65 | 8, 1.1 | 4, 50.0 | 4, 50.0 | |
| BMI (Mean±SD) | 25.5±4.9 | 24.9±4.8 | 26.9±5.1 | p<0.001 |
| Educational status (n, %) | | | | p<0.001 |
| Illiterate | 13, 1.7 | 10, 76.9 | 3, 23.1 | |
| Literate/secondary school | 165, 21.2 | 94, 57.0 | 71, 43.0 | |
| High school and above | 602, 77.1 | 448, 74.4 | 154, 25.6 | |
| Working status in any job (n, %) | | | | p<0.001 |
| No (housewife) | 223, 28.6 | 137, 61.4 | 86, 38.6 | |
| Yes | 557, 71.4 | 415, 74.5 | 142, 25.5 | |
| Family's monthly income (Mean±SD) (TL) | 10824.4±7912.7 | 11239.2±7822.9 | 9820.2±8054.9 | p=0.023 |
| Presence of any chronic disease (n, %) | | | | p=0.009 |
| No | 608, 77.9 | 444, 73.0 | 164, 27.0 | |
| Yes | 172, 22.1 | 108, 62.8 | 64, 37.2 | |
| Marital status (n, %) | | | | p=0.037 |
| Single/widowed | 182, 23.3 | 140, 76.9 | 42, 23.1 | |
| Married (sexually active) | 598, 76.7 | 412, 68.9 | 186, 31.1 | |
| Presence of UI in the family (n, %) | | | | p<0.001 |
| No | 541, 69.4 | 439, 81.1 | 102, 18.9 | |
| Yes | 239, 30.6 | 113, 47.3 | 126, 52.7 | |
| SQOL-F score (Mean±SD)* | 84.3±19.2 | 85.9±18.9 | 80.7±19.4 | p=0.002 |

SD: Standard deviation; UI: Urinary incontinence; BMI: Body Mass Index; SQOL-F: Sexual Quality of Life-Female; TL: Turkish Lira; *: Sexually inactive women were not included.

higher ($p<0.001$) in those with a family history of UI, and 2.2 times higher ($p=0.018$) in those who had one child. High BMI ($p=0.046$) and a history of macrosomic delivery ($p=0.045$) were also factors that increased the presence of UI, albeit to a limited extent (Table 4).

The Relationship Between the Presence of UI and Sexual Quality of Life in Women

The mean score of the SQOL-F scale for sexually active women was 84.3 ± 19.2 . The SQOL-F mean score for women

with any UI was lower ($p=0.002$) (Table 1). In this study, the SQOL-F scale mean scores of sexually active and women with UI did not differ significantly in terms of UI type, duration, severity, frequency, and amount ($p>0.05$ for all, with a minimum value of 0.086). No correlation was found between ICIQ-SF scale and SQOL-F scale scores ($r=-0.110$, $p=0.136$). Logistic regression analysis showed that the presence of UI affected the SQOL-F scale score [adjusted odds ratio (ORa) (95% Confidence Interval (CI)) = 0.98 (0.97–0.99), $p=0.006$] (Table 4).

Table 2. Distribution of fertility characteristics of women according to UI presence

| | Total | No UI | Any UI | |
|-------------------------------|------------|-----------|-----------|---------------------|
| Participants (n, %) | 780, 100.0 | 552, 70.8 | 228, 29.2 | |
| Number of children (n, %) | | | | |
| 0 | 251, 32.2 | 206, 82.1 | 45, 17.9 | |
| 1 | 116, 14.9 | 76, 65.5 | 40, 34.5 | $\chi^2=26.891$ |
| 2 | 243, 31.2 | 168, 69.1 | 75, 30.9 | $p<0.001$ |
| ≥3 | 170, 21.8 | 102, 60.0 | 68, 40.0 | |
| Last birth type (n, %) | | | | |
| Nulliparous | 251, 32.2 | 206, 82.1 | 45, 17.9 | $\chi^2=25.147$ |
| Vaginal | 246, 31.5 | 153, 62.2 | 93, 37.8 | $p<0.001$ |
| Cesarean | 283, 36.3 | 193, 68.2 | 90, 31.8 | |
| Age at first birth (Mean±SD)* | 23.5±4.6 | 23.6±4.5 | 23.2±4.9 | t=0.910 p=0.363 |
| Age at last birth (Mean±SD)* | 29.9±4.8 | 29.7±4.7 | 30.4±4.9 | t=-1.613 p=0.107 |
| Difficult birth (n, %)* | | | | |
| No | 476, 90.0 | 317, 66.6 | 159, 33.4 | $\chi^2=2.473$ |
| Yes | 53, 10.0 | 29, 54.7 | 24, 45.3 | p=0.116 |
| Episiotomy (n, %)* | | | | |
| No | 368, 69.6 | 243, 66.0 | 125, 34.0 | $\chi^2=0.210$ |
| Yes | 161, 30.4 | 103, 64.0 | 58, 36.0 | p=0.647 |
| Macrosomia (n, %)* | | | | |
| No | 432, 81.7 | 293, 67.8 | 139, 32.2 | $\chi^2=6.086$ |
| Yes | 97, 18.3 | 53, 54.6 | 44, 45.4 | p=0.014 |

SD: Standard deviation; UI: Urinary incontinence. *Nulliparous women were not included.

DISCUSSION

In this study conducted in an urban area of the Central Anatolian Region of Türkiye, UI was identified in approximately one out of every three women over the age of 18. The most common type of UI was SUI, followed by MUI and UUI, respectively. A study conducted in Germany and Denmark reported that the prevalence of UI in women over 18 years of age was 48.3% and 46.4%, respectively, with SUI being more commonly observed (24.5%) than other types.²⁰ The prevalence of UI found in the current study (29.2%) aligns with data reported from other countries and with data from Türkiye (20.9–44.8%).^{5–9} SUI is the most frequently observed type in some studies from Türkiye, as well as in the current study and studies from other countries.^{20,21} However, there are also studies where MUI was more frequently detected.^{5,6} It has been determined that the fertility characteristics of women, especially the number of children, can influence the type of UI.²² Since such fertility

characteristics may vary across different geographical regions, the prevalence of UI types may also differ.

In the present study, several factors were found to increase the presence of UI in women. These included advanced age, high BMI, low education level, low average monthly income, unemployment, presence of any chronic disease, being married and having children, having a family history of UI, and a history of macrosomic delivery. In this study, the most significant factor affecting UI presence, with an approximately six-fold increase, was a family history of UI. Prior research has indicated that family history plays a crucial role in the risk of UI.²³ Specifically, having a first-degree relative with SUI elevates an individual's risk of developing the same condition.²³ It has also been reported in similar studies that the risk of developing UI increases as the mean age of women increases.^{3,21} As observed in this study, UI prevalence was found to be lower in women who had never had children, according to a study.²¹ A high BMI has been identified as

Table 3. Distribution of women’s characteristics related to UI and ICIQ-SF scores (n=228)

| | n | % |
|--|---------|------|
| Characteristics related to UI | | |
| UI duration (years) | | |
| ≤1 | 113 | 49.6 |
| 2-4 | 54 | 23.7 |
| 5-7 | 25 | 11.0 |
| >7 | 36 | 15.8 |
| Consulting a doctor for UI | | |
| No | 164 | 71.9 |
| Yes | 64 | 28.1 |
| The treatment method used for UI | | |
| 1. No Treatment | 147 | 64.5 |
| 2. Prescription drug | 37 | 16.2 |
| 3. Surgery | 3 | 1.3 |
| 4. Self-treatment (e.g. herbal remedies, exercise, low fluid intake, etc.) | 31 | 13.6 |
| Combination of 2 and 3 | 4 | 1.8 |
| Combination of 2 and 4 | 6 | 2.6 |
| Satisfaction with any treatment received* | | |
| Never satisfied | 20 | 24.7 |
| Slightly satisfied | 47 | 58.0 |
| Very satisfied | 14 | 17.3 |
| Data related to ICIQ-SF | | |
| Total score (Mean±SD) | 6.9±4.3 | |
| Severity | | |
| Slight (1–5) | 112 | 49.1 |
| Moderate (6–12) | 90 | 39.5 |
| Severe (13–18) | 22 | 9.6 |
| Very severe (19–21) | 4 | 1.8 |
| Frequency of urine leakage | | |
| Once a week or less | 134 | 58.8 |
| Twice to three times a week | 44 | 19.3 |
| Once a day | 15 | 6.6 |
| Several times a day | 17 | 7.5 |
| All the time | 18 | 7.9 |
| Amount of urine leaked | | |
| Small | 186 | 81.6 |
| Moderate | 33 | 14.5 |
| Large | 9 | 3.9 |

UI: Urinary incontinence; ICIQ-SF: International Consultation on Incontinence Questionnaire - Short Form; SD: Standard deviation; *: n=81.

a risk factor for UI in many studies.^{3,20,21} Since BMI can be modified, current BMI has been determined as the most important determinant for UI.²⁴ As found in the present study, it has been reported that incontinence rates increase with the baby’s birth weight in women who deliver vaginally.²⁴ The presence of any chronic illness has also been found as a risk factor in other studies.^{5,20} In our study, we found that the prevalence of UI was higher in married (sexually active) women, but we did not find a statistically significant result regarding this in the regression analysis. The emergence of such a result in the analysis may be due to the multivariate nature of the analysis, that is, other factors that could affect the presence of UI were also considered.

The relationship between sexual dysfunction and UI is multifactorial, and the physical and psychological effects of UI are quite substantial. Women with UI may experience reduced libido and vaginal lubrication, pain during sexual intercourse, fear of coital UI, decreased sexual desire, and anxiety.²⁵ In the current study, it was observed that the sexual life quality of women with UI was worse than that of women without UI. However, no significant difference was found in the sexual quality of life according to the type, duration, severity, frequency, and amount of UI. In a study conducted in Brazil, Gomes et al.²⁶ reported a high prevalence of sexual dysfunction in women with UI, similar to our findings, and they found no significant difference between sexual dysfunction and UI types. As a matter of fact, some studies have suggested that the mere incident of urine leakage, regardless of the type, can already have an effect on sexual function.^{27,28} A recent study conducted in Türkiye found that lower urinary tract symptoms in women negatively affect both sexual life and quality of life.²⁹ It has been observed that SUI affects sexual function in women, particularly due to urine leakage during penetration.²⁵ Although no significant relationship was found in the current study, it has been reported that the severity of UI and the length of its duration may adversely affect sexuality questionnaire scores.²⁶ On the other hand, the relationship between ICIQ-SF scores and sexual quality of life scores was observed to be negative but not significant in the current study, whereas it was found to be negative but significant in another study.²⁶ These results indicate that the presence of UI in women adversely affects their sexual life in any case.

The limitations of the present study include relying solely on a questionnaire to determine the presence of UI and the sexual quality of life, the possibility of women feeling embarrassed when answering sensitive questions, and lower accessibility of women over the age of 65 compared to other age groups (which may be because the study was conducted with women who applied to FHCs). Additionally, since the study was conducted with a limited number of women in one province of Türkiye, the results cannot be generalized to the entire

Table 4. Binary logistic regression models estimating factors affecting UI presence

| | UI presence (Ref C=No) | |
|---|--------------------------|------------------|
| | OR _a (95% CI) | p |
| Model 1 (multivariate, n=780) | | |
| Age groups (years) (Ref C=18–34) | | |
| 35–49 | 1.61 (0.98–2.63) | 0.059 |
| 50–64 | 2.64 (1.36–5.14) | 0.004 |
| ≥65 | 4.22 (0.84–21.18) | 0.081 |
| BMI | 1.04 (1.01–1.08) | 0.046 |
| Educational status (Ref C=Illiterate) | | |
| Literate/secondary school | 4.42 (0.98–19.95) | 0.054 |
| High school and above | 3.57 (0.79–16.24) | 0.099 |
| Working status in any job (Ref C=No) | | |
| Yes | 0.73 (0.49–1.10) | 0.134 |
| Family's monthly income | 1.01 (0.09–1.02) | 0.079 |
| Presence of any chronic disease (Ref C=No) | | |
| Yes | 1.14 (0.75–1.73) | 0.540 |
| Marital status (Ref C=Single/widowed) | | |
| Married | 0.86 (0.52–1.41) | 0.538 |
| Presence of UI in the family (Ref C=No) | | |
| Yes | 5.96 (4.14–8.59) | <0.001 |
| Number of children (Ref C=0) | | |
| 1 | 2.20 (1.15–4.22) | 0.018 |
| 2 | 1.53 (0.81–2.90) | 0.188 |
| ≥3 | 1.77 (0.91–3.41) | 0.091 |
| Last birth type (Ref C=Nulliparous- Cesarean) | | |
| Vaginal | 1.13 (0.74–1.72) | 0.572 |
| Model 2 (Multivariate, n=529) | | |
| Macrosomia (Ref C=No)* | | |
| Yes | 1.70 (1.01–2.85) | 0.045 |
| Model 3 (Multivariate, n=598) | | |
| SQOL-F score** | 0.98 (0.97–0.99) | 0.006 |

UI: Urinary incontinence; BMI: Body Mass Index; SQOL-F: Sexual Quality of Life-Female; OR_a: Adjusted odds ratio; CI: Confidence interval; Ref C: Reference category; *: Nulliparous women were not included; **: Sexually inactive women were not included.

population. On the other hand, there have been a limited number of studies investigating UI and the quality of sexual life in Türkiye.^{28,30} The studies were conducted with patients who visited hospital departments such as urogynecology outpatient clinics for UI complaints.^{28,30} The fact that our study was conducted in a country like Türkiye, where discussing sexual issues is considered private, and with a sample selected from the general population, made the applicability

of the study difficult. However, the completion of the study despite these complicating factors is one of its strengths and distinguishes it from other studies.

CONCLUSION

In conclusion, the presence of UI was found in approximately one out of every three women who participated in the study. The most common type of UI was SUI, followed by MUI and UUI, respectively.

Most of the women did not consult a doctor for their UI, and the majority did not use any treatment method. According to the ICIQ-SF scale, most women experienced mild to moderate UI severity, with the frequency of UI occurring once a week or less, and typically involving small amounts of urine leakage. It was found that the prevalence of UI was higher in women who were older, had a higher BMI, had lower levels of education, had lower average monthly incomes, were unemployed, had chronic diseases, were married, had children, had a family history of UI, or had a history of macrosomic birth. Women with UI reported a poorer sexual quality of life. Considering that UI adversely affects sexual quality of life, it is important to address and minimize the identified risk factors for UI. Since the current study involved women who applied to FHCs, it is essential for family physicians to be well-informed about the risk factors for UI and ensure early diagnosis in women, aiming to prevent any negative impact on their quality of life.

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Ethics Committee Approval: The Sivas Cumhuriyet University Clinical Research Ethics Committee granted approval for this study (date: 17.11.2021, number: 2021-11/19).

Informed Consent: Written informed consent was obtained from patients who participated in this study.

Author Contributions: Concept – İA; Design – İA, EK; Supervision – İA, EK, ÖH, NEK; Resource – İA, EK, ÖH, NEK; Materials – İA, EK, ÖH, NEK; Data Collection and/or Processing – İA, EK, ÖH, NEK; Analysis and/or Interpretation – İA, EK, ÖH, NEK; Literature Search – İA, EK, ÖH, NEK; Writing – İA, EK, ÖH, NEK; Critical Reviews – İA, EK, ÖH, NEK.

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