# The effect of demographic characteristics of patients applying to the urology outpatient clinic on urinary incontinence awareness and attitudes

Üroloji polikliniğine başvuran hastaların demografik özelliklerinin üriner inkontinans farkındalığı ve tutumlarına etkisi

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Posted date:19.12.2023 Acceptance date:26.12.2023

#### **Abstract**

**Purpose:** This study was conducted to determine the effect of demographic characteristics of patients applying to the urology outpatient clinic on urinary incontinence awareness and attitudes.

**Materials and methods:** The data of this descriptive and cross-sectional study were collected between 07/09/2023-08/10/2023 with Personal Information Form, Urinary Incontinence Awareness Attitude Scale data collection tools from 180 people who applied to urology outpatient clinic by face-to-face interview method. Data were analyzed with the SPSS 25.0 package program. In all analyses, p < 0.05 was considered statistically significant.

**Results:** In the factors that prevent the scale from being accepted as a health problem sub-dimension, educational status increases the scores; Educational status and frequency of caffeine&tea consumption had a decreasing effect on scores in the health motivation sub-dimension; In the coping with incontinence sub-dimension, being male lowers the scores, while education level, presence of a chronic disease and having undergone surgery increase the scores; In the restriction sub-dimension, it was found that age, marital status, place of residence, presence of chronic disease and frequency of changing underwear had a decreasing effect on scores. In the sub-dimension of fear of urinary incontinence, it was found that gender, marital status, and frequency of changing underwear had a decreasing effect.

**Conclusion:** Male are more likely to accept urinary incontinence as a health problem. The factors that prevent adults from accepting it as a health problem and the sub-dimensions of coping with urinary incontinence are good. It was determined that the health motivation sub-dimension and the fear of urination sub-dimension of the patients who applied to the urology outpatient clinic were at a weak level, and the restriction sub-dimension was at a medium level.

Keywords: Adult, attitudes, awareness, urinary incontinence.

Durmus Iskender M, Gul S. The effect of demographic characteristics of patients applying to the urology outpatient clinic on urinary incontinence awareness and attitudes. Pam Med J 2024;17:143-157.

## Öz

**Amaç:** Bu çalışma üroloji polikliniğine başvuran hastaların demografik özelliklerinin üriner inkontinans farkındalığına ve tutumlarına etkisini belirlemek amacıyla yapılmıştır.

**Gereç ve yöntem:** Tanımlayıcı ve kesitsel türde olan bu çalışmanın verileri 07/09/2023-08/10/2023 tarihleri arasında Kişisel Bilgi Formu ve Üriner İnkontinansla Farkındalık Tutum Ölçeği veri toplama araçları ile Üroloji polikliniğe başvuran 180 kişiden yüz yüze görüşme metodu ile toplanmıştır. Veriler SPSS 25.0 paket programıyla analiz edilmiştir. Tüm analizlerde *p*<0,05 istatistiksel olarak anlamlı kabul edilmiştir.

**Bulgular:** Ölçeğin sağlık sorunu olarak kabulünü engelleyen faktörler alt boyutunda eğitim durumunun puanları yükseltici olduğu; sağlık motivasyonu alt boyutunda eğitim durumu ve kafein-çay tüketimi sıklığının puanları düşürücü etki ettiği; inkontinansla başetme alt boyutunda erkek olmanın puanları düşürücü, eğitim durumu, kronik hastalık varlığı ve ameliyat geçirmiş olma durumunun puanları yükseltici olduğu; kısıtlanma alt boyutunda yaş, medeni durum, yaşanılan yer, kronik hastalık varlığı ve iç çamaşır değiştirme sıklığının puanları düşürücü etki gösterdiği bulunmuştur. İdrar kaçırma korkusu alt boyutunda ise cinsiyetin, medeni durumun ve iç çamaşır değiştirme sıklığının düşürücü etki ettiği bulunmuştur.

**Sonuç:** Erkeklerin üriner inkontinansı sağlık sorunu olarak kabullenmeleri daha yüksektir. Araştırma kapsamındaki yetişkin bireylerin, sağlık sorunu olarak kabulünü engelleyen faktörler, üriner inkontinans ile başetme alt boyutları iyi düzeydedir. Üroloji polikliniğine başvuran hastaların, sağlık motivasyonu alt boyutu ve ve idrar korkusu yaşama alt boyutu kötü düzeyde, kısıtlama alt boyutu orta düzeyde olduğu bulunmuştur.

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Anahtar kelimeler: Yetişkin, farkındalık, tutumlar, üriner inkontinans.

Durmuş İskender M, Gül S. Üroloji polikliniğine başvuran hastaların demografik özelliklerinin üriner inkontinans farkındalığı ve tutumlarına etkisi. Pam Tıp Derg 2024;17:143-157.

#### Introduction

Urinary Incontinence (UI) is defined as the complaint of involuntary urine leakage [1]. It significantly impacts individuals' physical and mental health, disrupts their work lives, and leads to social isolation [2]. While UI affects both genders, it is more common in women. In men, it often results from damage to incontinence mechanisms during prostate cancer surgery or radiotherapy, or due to an enlarged prostate. In women, it is associated with dysfunction of the bladder or pelvic floor muscles during pregnancy, childbirth, or menopause [3].

The prevalence of UI tends to increase until middle age, stabilizes or decreases between 50 and 70 and then rises again in advanced age. The uptick in UI among the elderly may be linked to increased rates of idiopathic detrusor activity and risk factors such as diabetes, limited mobility, and medication use [4].

Due to stigma or the perception that UI is 'normal' in some societies, there are low rates of reporting, potentially leading to an underestimation of its actual prevalence [2]. Those affected by UI often deny or conceal the condition [5]. Reasons for not seeking medical attention include insufficient information about treatment options, embarrassment, considering UI symptoms as a natural age-related condition, fear of surgery, busy doctor schedules, economic constraints, and neglect by healthcare providers [6, 7]. Neglectful attitudes result in negative consequences such as psychosocial and physical restraint, social isolation, loss of self-confidence, anxiety, depression, impaired sexual life, and decreased physical activity [5].

Furthermore, individuals' denial, concealment, and unwillingness to acknowledge their incontinence problem reduce the likelihood of successful intervention, leading to either no treatment or delayed treatment [8]. The effectiveness of treatment depends on identifying the underlying causes of UI as early as possible,

emphasizing the need for careful evaluation of these causes [2]. Understanding community attitudes and thoughts about UI can reshape approaches to the condition. Early diagnosis and treatment can alleviate the financial burden on the country by destignatizing UI [9].

In conclusion, this study aims to assess the impact of urinary incontinence awareness and attitudes among patients attending the urology outpatient clinic. It is anticipated that this study will contribute valuable insights to the literature on this subject in our country.

# Research question

What are adults' awareness and attitudes about urinary incontinence?

# Materials and methods

## Purpose and type of study

This study is both descriptive and crosssectional, and its main purpose is to evaluate the effect of demographic characteristics of patients applying to the urology outpatient clinic on Urinary Incontinence Awareness and Attitudes.

# Population and sample of the study

The study encompassed all patients admitted to the urology outpatient clinic at a training and research hospital in the western Black Sea region. The sample size was determined through a power analysis program. Referring to a previous study [10], the correlation between scales of self-esteem and factors that prevented the acceptance of the urinary incontinence scale as a health problem was found to have a low effect size (r=-0.187). Assuming a similar effect size for the relationship under investigation, it was calculated that a sample size of at least 172 individuals would provide 80% power at a 95% confidence level. Data was collected between 07/09/2023-08/10/2023. During the data collection period, 370 patients applied to the outpatient clinic, 142 patients were not included in the study because they did not meet the inclusion criteria and 48 patients did not agree to participate in the study. Criteria for inclusion in the research are: Applying to the urology outpatient clinic as a patient, 2) Being 18 years of age or older, 4) Having no problem communicating, and 5) Accepting to participate in the research. Exclusion criteria: 1) The current situation of the patient who applied to the outpatient clinic is not suitable for communication (aggressive, unconsciousness, orientation problem). The study was ultimately conducted with 180 patients who met the inclusion criteria.

# **Data collection tools**

Data were collected from the Personal Information Form and Urinary Incontinence Awareness Attitude Scale data collection tools by face-to-face interview method from people who applied to the urology outpatient clinic. The data were collected by the researcher using the Personal Information Form and Urinary Incontinence Awareness Attitude Scale data collection tools from people who applied to the Urology outpatient clinic by face-to-face interview method. The questions in the data collection tools were asked of the participants and filled in by the researcher. Data collection took an average of 15 minutes.

**Personal information form:** This form, prepared by the researcher in line with the relevant literature, includes 11 questions regarding the patients' descriptive characteristics, age, marital status, educational status, place of residence, fluid intake, and micturition characteristics. The form was filled out face to-face by the researchers [7, 9-12]. The form was filled in face-to-face by the researchers

Urinary incontinence awareness attitude scale (URINAS): The scale under consideration was developed and adapted by Aydın Avci et al. [11] in 2022. Comprising 5 sub-dimensions and 26 items, this 5-point Likert-type scale was utilized in the study. The instrument does not generate a cumulative score; it is scored based on subdimension scores as follows: (1) factors that prevent acceptance of UI as a health problem (minimum score 8, maximum score 40); (2) health motivation (minimum score 5, maximum

score 25); (3) coping with UI (minimum score 6, maximum score 30); (4) restriction related to UI (minimum score 3, maximum score 15); and (5) fear related to UI (minimum score 4, maximum score 20). The internal consistency of the URINAS was evaluated using the Cronbach α for each subdimension. The Cronbach  $\alpha$  values for the scale's 5 subdimensions vary between 0.60 and 0.92. In this study, the factors that prevent it from being accepted as a health problem subdimension are Cronbach's alpha value: 0.84, health motivation: 0.80, coping with urinary incontinence: 0.83, restriction: 0.79, fear of urinary incontinence: 0.72. Factors that prevent it from being accepted as a health problem, the sub-dimensions of restriction and fear of urinary incontinence include negative perceptions, while the sub-dimensions of health motivation and coping with urinary incontinence include positive perceptions. Factors that prevent it from being accepted as a health problem, restriction, and fear of urinary incontinence subscales indicate that high scores indicate that the effect is greater. Interpretation of the incontinence awareness and attitude scale is made as poor, moderate or good according to the median score. It is crucial to emphasize that the required permissions were secured for utilizing the scale.

Permission for the research was received from the Kastamonu University Clinical Research Ethics Committee Additionally, written permission was obtained from Kastamonu Training and Research Hospital, the institution where the study was conducted. The purpose and method of the study and the voluntary nature of participation were explained verbally, and in writing by the researcher, and written informed consent was obtained from the patients who agreed to participate in the study. All articles of the Declaration of Helsinki Principles were complied with throughout the study.

### **Data analysis**

The data were analyzed using the SPSS 25.0 software package (IBM SPSS Statistics 25, Armonk, NY: IBM Corp.). Continuous variables were presented as mean, standard deviation, median, interquartile range (IQR), and minimum-maximum values, while categorical variables

were expressed as numbers and percentages. Univariate and multivariate Linear Regression analyses were employed to identify the risk factors influencing the dependent variable. Throughout all analyses, a significance level of p<0.05 was considered statistically significant.

# Results

Of the individuals who participated in the study, 38.9% (n=70) were female and 61.1% (n=110) were male. 37.8% of the participants were between 60-69 years of age, 82.2% (n=148) were married, 47.2% were primary school graduates, and 37.2% lived in the city center. 96.7% of the participants consumed caffeine&tea, and 63.9% had chronic diseases. Of those with chronic diseases, 36.5% had diabetes and hypertension. The proportion of participants who have had surgery before is 17.2%. 61.3% of the previous surgeries were prostate surgeries (Table 1).

Among the sub-dimensions of the urinary incontinence awareness scale of the patients participating in the study, the factors that prevent it from being accepted as a health problem sub-dimension total score average is 32.23±6.16, health motivation sub-dimension total score average is 10.33±3.45, coping with urinary incontinence sub-dimension total score average is 19.8±5.63, restriction sub-dimension total score average is 9.01±3.59. Their mean total score was 10.36±3.06, fear of urinary incontinence subscale total score mean was 10.46±3.96 (Table 2).

When the factors that prevent the patients included in the study from accepting urinary incontinence awareness scale as a health problem are examined; First of all, as a result of the univariate examinations, as a result of the multivariate model established using factors that have a significant effect, it was seen that only being female had a decreasing effect on the scores preventing the acceptance of gender as a health problem (Table 3).

When the health motivation sub-dimension of the urinary incontinence awareness scale

of the patients included in the research is examined, first of all, as a result of the univariate examinations and as a result of the multivariate model established using factors that have a significant effect, it was seen that only the increase in educational status had a decreasing effect on health motivation scores (Table 4).

When the incontinence coping sub-dimension of the urinary incontinence awareness scale of the patients included in the study is examined, as a result of the multivariate model established using the factors that have a significant effect, it was seen that the increase in education level, the presence of a chronic disease and having undergone surgery had an increasing effect on the coping with incontinence scores (Table 5).

When the restriction sub-dimension of the urinary incontinence awareness scale of the patients included in the study is examined, first of all, as a result of the univariate examinations and as a result of the multivariate model established using factors that have a significant effect, it was seen that only the increase in educational status had an increasing effect on the restriction scores (Table 6).

When the fear of urinary incontinence sub-dimension of the urinary incontinence awareness scale of the patients included in the study is examined, as a result of the multivariate model established using factors that have a significant effect as a result of the univariate examinations, it was seen that the increase in educational status had an increasing effect on the fear of urinary incontinence scores and the decrease in the frequency of changing underwear had a decreasing effect on the fear of urinary incontinence scores (Table 7).

When the total score of the urinary incontinence awareness scale of the patients included in the research is examined, as a result of the multivariate model established using factors that have a significant effect as a result of the univariate examinations, it was seen that being male had a decreasing effect on the total score, and increasing the education level had an increasing effect on the total score (Table 8).

Table 1. Descriptive characteristics of the participants

|                        |                         | n   | %    |
|------------------------|-------------------------|-----|------|
| Condon                 | Female                  | 70  | 38.9 |
| Gender                 | Male                    | 110 | 61.1 |
|                        | 40-49                   | 19  | 10.6 |
|                        | 50-59                   | 39  | 21.7 |
| Age                    | 60-69                   | 68  | 37.8 |
|                        | 70-79                   | 48  | 26.7 |
|                        | 80-89                   | 6   | 3.3  |
|                        | Married                 | 148 | 82.2 |
| Manifest adadus        | Single                  | 2   | 1.1  |
| Marital status         | Separated from his wife | 1   | .6   |
|                        | His wife passed away    | 29  | 16.1 |
|                        | Literate                | 24  | 13.3 |
|                        | Primary school          | 85  | 47.2 |
| Educational Status     | Middle school           | 19  | 10.6 |
|                        | High school             | 43  | 23.9 |
|                        | University              | 9   | 5.0  |
|                        | Вау                     | 51  | 28.3 |
| Living place           | District                | 62  | 34.4 |
|                        | Town center             | 67  | 37.2 |
| 0-#-!0.T               | Yes                     | 174 | 96.7 |
| Caffeine&Tea           | No                      | 6   | 3.3  |
|                        | 1 glass                 | 8   | 4.6  |
|                        | 3 glasses               | 51  | 29.3 |
| If yes, tea and coffee | 6 glasses               | 46  | 26.4 |
|                        | 9 glasses               | 44  | 25.3 |
|                        | 15 glasses              | 25  | 14.4 |
| Alaskalilas            | Yes                     | 16  | 8.9  |
| Alcohol Use            | No                      | 164 | 91.1 |
| EV Al1-1               | 1 double per day        | 14  | 87.5 |
| f Yes, Alcohol         | 2 doubles a day         | 2   | 12.5 |
| <b>O</b>               | Yes                     | 52  | 28.9 |
| Cigarette              | No                      | 128 | 71.1 |

**Table 1.** Descriptive characteristics of the participants (Continue)

|   |                   | n   | %    |
|---|-------------------|-----|------|
|   | Every week        | 2   | 1.1  |
|   | Once in a month   | 10  | 5.6  |
| Frequency of admission to urology outpatient clinic | Once in 3 months  | 35  | 19.4 |
|   | Once in a year    | 84  | 46.7 |
|   | First time        | 49  | 27.2 |
| Duranta of Ohmaria Biana                            | Yes               | 115 | 63.9 |
| Presence of Chronic Disease                         | No                | 65  | 36.1 |
| Olemenia Diagram                                    | Yes               | 115 | 63.9 |
| Chronic Disease                                     | No                | 65  | 36.1 |
| Outsurations  | Yes               | 31  | 17.2 |
| Operation   | No                | 149 | 82.8 |
|   | Prostate          | 19  | 61.3 |
| Surgery If yes                                      | Kidney stone      | 10  | 32.3 |
|   | Bladder           | 2   | 6.5  |
|   | Every day         | 66  | 36.7 |
| Hadanisan   | Once every 3 days | 70  | 38.9 |
| Underwear   | Once a week       | 43  | 23.9 |
|   | Every 15 days     | 1   | 0.6  |

n: Number of individuals, %: Percentage

**Table 2.** Women's awareness scale for coping with urinary incontinence scores and cronbach alpha values

|  | Mean±SD     | Med (IQR)     | Min-max | Cronbach Alpha |
|--|-------------|---------------|---------|----------------|
| *Factors that prevent acceptance as a health problem | 32.23±6.16  | 32 (29-37.75) | 14-40   | 0.842          |
| *Health motivation                                   | 10.33±3.45  | 11 (8-12)     | 5-21    | 0.802          |
| *Coping with urinary incontinence                    | 19.8±5.63   | 19 (15-24)    | 6-30    | 0.834          |
| *Restriction   | 9.01±3.59   | 9 (6-12)      | 3-15    | 0.794          |
| *Fear of urination                                   | 10.46±3.96  | 10 (8-13.75)  | 4-20    | 0.721          |
| Total Score  | 81.82±12.69 | 82 (74-90)    | 46-112  | 0.8            |

SD: Standart Deviation, Min-max: Minimum-maximum

Table 3. Comparison of some descriptive characteristics of women and factors preventing their acceptance as a health problem sub-dimension average scores

|                       |  |           |        | Univariate |                 |                 |           | 2      | Multivariate |                 |                 |
|-----------------------|--|-----------|--------|------------|-----------------|-----------------|-----------|--------|--------------|-----------------|-----------------|
|                       |  | Std. Beta |        | d          | 95% CI<br>Lower | 95% CI<br>Upper | Std. Beta |        | d            | 95% CI<br>Lower | 95% CI<br>Upper |
|                       | Gender                                   | -0.246    | -3.393 | 0.001*     | -4.915          | -1.3            | -0.217    | -2.639 | *600.0       | -4.783          | -0.69           |
|                       | Age                                      | -0.184    | -2.504 | 0.013*     | -1.998          | -0.237          | -0.16     | -1.918 | 0.057        | -1.97           | 0.028           |
|                       | Marital status                           | -0.211    | -2.881 | 0.004*     | -5.718          | -1.069          | -0.078    | -0.995 | 0.321        | -3.741          | 1.233           |
|                       | Educational status                       | 0.317     | 4.458  | 0.0001*    | 0.958           | 2.48            | 0.162     | 1.918  | 0.057        | -0.025          | 1.785           |
|                       | Living place                             | -0.13     | -1.755 | 0.081      | -3.523          | 0.207           | 1         |        |              |                 | 1               |
| Factors that          | Frequency of visiting the urology clinic | 0.074     | 0.993  | 0.322      | -0.509          | 1.539           |           |        |              |                 | 1               |
| prevent<br>acceptance | Caffeine & Tea consumption               | 0.123     | 1.649  | 0.101      | -0.826          | 9.228           |           |        |              |                 | 1               |
| as a health           | Caffeine & Tea consumption frequency     | 0.101     | 1.327  | 0.186      | -0.262          | 1.34            |           |        |              |                 | 1               |
|                       | Alcohol use                              | 0.004     | 0.057  | 0.954      | -3.102          | 3.288           |           |        |              |                 | 1               |
|                       | Frequency of alcohol use                 | 0.021     | 0.08   | 0.937      | -9.168          | 9.882           |           |        |              |                 | 1               |
|                       | Smoking                                  | 0.088     | 1.179  | 0.24       | -0.804          | 3.192           |           |        |              |                 | 1               |
|                       | Presence of chronic disease              | -0.108    | -1.444 | 0.15       | -3.259          | 0.505           | ı         |        |              |                 | ı               |
|                       | Operation                                | 0.053     | 0.702  | 0.484      | -1.55           | 3.26            | ı         |        |              |                 | ı               |
|                       | Underwear                                | -0.078    | -1.037 | 0.301      | -1.765          | 0.549           | ı         | ı      | ı            | ı               |                 |

Linear Regression Analysis; \*p<0.05 statistically significant effect; std.beta: Standardized beta coefficient; C.I: Confidence Interval

Table 4. Comparison of some descriptive characteristics of women and health motivation sub-dimension average scores

|            |  |           |        | Univariate | fe              |                 |           |        | Multivariate | Φ               |                 |
|------------|--|-----------|--------|------------|-----------------|-----------------|-----------|--------|--------------|-----------------|-----------------|
|            |  | Std. Beta |        | d          | 95% CI<br>Lower | 95% CI<br>Upper | Std. Beta |        | ф            | 95% CI<br>Lower | 95% CI<br>Upper |
|            | Gender                                   | 0.029     | 0.383  | 0.702      | -0.842          | 1.247           |           |        |              |                 |                 |
|            | Age                                      | 0.259     | 3.572  | 0.0001*    | 0.393           | 1.362           | 0.148     | 1.9    | 0.059        | -0.02           | 1.032           |
|            | Marital status                           | 0.267     | 3.701  | 0.0001*    | 1.123           | 3.691           | 0.127     | 1.601  | 0.111        | -0.269          | 2.582           |
|            | Educational status                       | -0.298    | -4.158 | 0.0001*    | -1.333          | -0.475          | -0.191    | -2.538 | 0.012*       | -1.02           | -0.127          |
|            | Living place                             | 0.115     | 1.539  | 0.126      | -0.23           | 1.863           |           |        |              |                 | 1               |
|            | Frequency of visiting the urology clinic | -0.098    | -1.319 | 0.189      | -0.955          | 0.19            |           |        |              |                 |                 |
| Health     | Caffeine & Tea consumption               | -0.108    | -1.448 | 0.15       | -4.89           | 0.752           |           |        |              |                 |                 |
| Motivation | Caffeine & Tea consumption frequency     | -0.245    | -3.315 | 0.001*     | -1.175          | -0.298          | -0.142    | -1.928 | 0.056        | -0.865          | 0.01            |
|            | Alcohol use                              | -0.093    | -1.241 | 0.216      | -2.902          | 0.661           |           |        |              |                 |                 |
|            | Frequency of alcohol use                 | -0.389    | -1.578 | 0.137      | -11.291         | 1.719           | 1         |        |              | 1               | 1               |
|            | Smoking                                  | -0.044    | -0.586 | 0.558      | -1.456          | 0.789           | 1         |        |              | 1               | 1               |
|            | Presence of chronic disease              | 0.11      | 1.473  | 0.143      | -0.267          | 1.841           | 1         |        |              | 1               | 1               |
|            | Operation                                | 0.033     | 0.437  | 0.662      | -1.049          | 1.647           | 1         |        |              | 1               | 1               |
|            | Underwear                                | 0.117     | 1.577  | 0.117      | -0.13           | 1.161           | ı         |        |              |                 |                 |
|            |  |           |        |            |                 |                 |           |        |              |                 |                 |

Linear Regression Analysis; \*p<0.05 statistically significant effect; std.beta: Standardized beta coefficient; C.I: Confidence Interval

Table 5. Comparison of some descriptive characteristics of women and mean scores of the sub-dimension of coping with *incontinence* 

|                        |  |           |        | Univariate |                 |                 |           | 2        | Multivariate | te              |                 |
|------------------------|--|-----------|--------|------------|-----------------|-----------------|-----------|----------|--------------|-----------------|-----------------|
|                        |  | Std. Beta |        | d          | 95% CI<br>Lower | 95% CI<br>Upper | Std. Beta | <b>-</b> | ď            | 95% CI<br>Lower | 95% CI<br>Upper |
|                        | Gender                                   | -0.23     | -3.147 | 0.002*     | -4.298          | -0.985          | -0.094    | -1.19    | 0.236        | -2.888          | 0.715           |
|                        | Age                                      | -0.003    | -0.044 | 0.965      | -0.836          | 0.799           | ı         |          |              |                 | 1               |
|                        | Marital status                           | -0.038    | -0.505 | 0.614      | -2.724          | 1.614           | ı         |          |              |                 | ı               |
|                        | Educational status                       | 0.209     | 2.857  | 0.005*     | 0.32            | 1.752           | 0.202     | 2.578    | 0.011*       | 0.235           | 1.768           |
|                        | Living place                             | -0.023    | -0.312 | 0.756      | -1.987          | 1.445           | ı         |          |              |                 | ı               |
|                        | Frequency of visiting the urology clinic | -0.019    | -0.26  | 0.795      | -1.06           | 0.813           | 1         |          |              |                 | 1               |
| Coping With            | Caffeine & Tea consumption               | 0.049     | 0.648  | 0.518      | -3.1            | 6.134           | 1         |          |              |                 | 1               |
| ormary<br>Incontinence | Caffeine & Tea consumption frequency     | -0.015    | -0.2   | 0.841      | -0.826          | 0.674           | 1         |          |              |                 | 1               |
|                        | Alcohol use                              | 0.126     | 1.694  | 0.092      | -0.409          | 5.376           | 1         |          |              |                 | 1               |
|                        | Frequency of alcohol use                 | -0.177    | -0.672 | 0.513      | -9.286          | 4.858           | 1         |          |              |                 | 1               |
|                        | Smoking                                  | 0.018     | 0.245  | 0.807      | -1.603          | 2.058           | 1         |          |              |                 | 1               |
|                        | Presence of chronic disease              | 0.167     | 2.26   | 0.025*     | 0.247           | 3.654           | 0.168     | 2.304    | 0.022*       | 0.282           | 3.654           |
|                        | Operation                                | 0.223     | 3.059  | 0.003*     | 1.178           | 5.462           | 0.191     | 2.661    | *600.0       | 0.734           | 4.95            |
|                        | Underwear                                | -0.036    | -0.476 | 0.635      | -1.313          | 0.803           |           |          | -            |                 |                 |

Linear Regression Analysis; \*p<0.05 statistically significant effect; std.beta: Standardized beta coefficient; C.I: Confidence Interval

Table 6. Comparison of some descriptive characteristics of women and constraint sub-dimension mean scores

|             |  |           |        | Univariate | <b>a</b>        |                 |           |        | Multivariate | te              |                 |
|-------------|--|-----------|--------|------------|-----------------|-----------------|-----------|--------|--------------|-----------------|-----------------|
|             |  | Std. Beta | t      | р          | 95% CI<br>Lower | 95% CI<br>Upper | Std. Beta | t      | р            | 95% CI<br>Lower | 95% CI<br>Upper |
|             | Gender                                   | -0.132    | -1.771 | 0.078      | -2.046          | 0.111           | ı         |        | ı            | ı               | ı               |
|             | Age                                      | -0.229    | -3.137 | 0.002*     | -1.317          | -0.3            | -0.037    | -0.436 | 0.663        | -0.728          | 0.464           |
|             | Marital status                           | -0.26     | -3.595 | 0.0001*    | -3.778          | 1.7             | -0.135    | -1.716 | 0.088        | -2.715          | 0.19            |
|             | Educational status                       | 0.305     | 4.28   | 0.0001*    | 0.521           | 1.412           | 0.208     | 2.622  | 0.01*        | 0.163           | 1.155           |
|             | Living place                             | -0.185    | -2.508 | 0.013*     | -2.448          | -0.292          | -0.066    | -0.877 | 0.382        | -1.587          | 0.611           |
|             | Frequency of visiting the urology clinic | 0.026     | 0.352  | 0.725      | -0.492          | 0.705           |           |        |              | ı               |                 |
|             | Caffeine & Tea consumption               | 0.018     | 0.234  | 0.815      | -2.603          | 3.304           | 1         |        |              | ı               | ı               |
| Restriction | Caffeine & Tea consumption frequency     | 0.111     | 1.463  | 0.145      | -0.123          | 0.828           |           |        |              | 1               |                 |
|             | Alcohol use                              | 0.049     | 0.648  | 0.518      | -1.25           | 2.472           |           |        |              | 1               | ı               |
|             | Frequency of alcohol use                 | -0.495    | -2.13  | 0.051      | -10.179         | 0.036           |           |        |              | ı               | 1               |
|             | Smoking                                  | 990'0-    | -0.882 | 0.379      | -1.689          | 0.646           | 1         |        |              |                 | 1               |
|             | Presence of chronic disease              | -0.157    | -2.12  | 0.035*     | -2.261          | -0.081          | -0.049    | -0.647 | 0.518        | -1.49           | 0.754           |
|             | Operation                                | -0.066    | -0.888 | 0.376      | -2.031          | 0.771           |           |        |              | ı               | ı               |
|             | Underwear                                | -0.211    | -2.885 | 0.004*     | -1.628          | -0.306          | -0.139    | -1.835 | 0.068        | -1.317          | 0.048           |

Linear Regression Analysis; \*p<0.05 statistically significant effect; std.beta: Standardized beta coefficient; C.I. Confidence Interval

Table 7. Comparison of some descriptive characteristics of women and fear of urinary incontinence subscale score means

|           |  |           |        | Univariate |                 |                 |           | Ē      | Multivariate |                 |                 |
|-----------|--|-----------|--------|------------|-----------------|-----------------|-----------|--------|--------------|-----------------|-----------------|
|           |  | Std. Beta |        | ď          | 95% CI<br>Lower | 95% CI<br>Upper | Std. Beta |        | ۵            | 95% CI<br>Lower | 95% CI<br>Upper |
|           | Gender                                   | -0.17     | -2.303 | 0.022*     | -2.556          | -0.197          | -0.159    | -1.872 | 0.063        | -2.631          | 0.07            |
|           | Age                                      | -0.124    | -1.665 | 0.098      | -1.052          | 0.089           |           |        |              |                 |                 |
|           | Marital status                           | -0.172    | -2.323 | 0.021*     | -3.274          | -0.266          | -0.062    | -0.796 | 0.427        | -2.258          | 96.0            |
|           | Educational status                       | 0.305     | 4.278  | 0.0001*    | 0.573           | 1.554           | 0.217     | 2.617  | 0.01*        | 0.185           | 1.324           |
|           | Living place                             | -0.08     | -1.071 | 0.286      | -1.857          | 0.55            | 1         |        |              |                 |                 |
|           | Frequency of visiting the urology clinic | 0.083     | 1.117  | 0.266      | -0.285          | 1.028           |           |        |              |                 |                 |
| Fear of   | Caffeine & Tea consumption               | -0.041    | -0.552 | 0.582      | -4.157          | 2.341           |           |        |              |                 |                 |
| Urination | Caffeine & Tea consumption frequency     | 0.163     | 2.173  | 0.031*     | 0.052           | 1.084           | 0.098     | 1.323  | 0.188        | -0.167          | 0.847           |
|           | Alcohol use                              | 0.053     | 0.708  | 0.48       | -1.313          | 2.783           |           |        |              |                 |                 |
|           | Frequency of alcohol use                 | -0.051    | -0.189 | 0.852      | -5.281          | 4.424           |           |        |              |                 |                 |
|           | Smoking                                  | 0.072     | 0.969  | 0.334      | -0.654          | 1.915           |           |        |              |                 |                 |
|           | Presence of chronic disease              | -0.089    | -1.193 | 0.234      | -1.942          | 0.479           |           |        |              |                 |                 |
|           | Operation                                | -0.027    | -0.354 | 0.723      | -1.823          | 1.268           |           |        |              |                 |                 |
|           | Underwear                                | -0.175    | -2.372 | 0.019*     | -1.615          | -0.148          | -0.185    | -2.331 | 0.021*       | -1.725          | -0.143          |

Linear Regression Analysis; \*p<0.05 statistically significant effect; std.beta: Standardized beta coefficient; C.I. Confidence Interval

Table 8. Comparison of some descriptive characteristics of women and total score means of the urinary incontinence awareness scale

|             |  |           |        | Univariate |                 |                 |           | _      | Multivariate | e e             |                 |
|-------------|--|-----------|--------|------------|-----------------|-----------------|-----------|--------|--------------|-----------------|-----------------|
|             |  | Std. Beta | t      | р          | 95% CI<br>Lower | 95% CI<br>Upper | Std. Beta | t      | ď            | 95% CI<br>Lower | 95% CI<br>Upper |
|             | Gender                                   | -0.304    | -4.258 | 0.0001*    | -11.548         | -4.234          | -0.205    | -2.74  | *200.0       | -9.16           | -1.489          |
|             | Age                                      | -0.124    | -1.67  | 0.097      | -3.378          | 0.282           | ı         | ı      |              | ı               | ı               |
|             | Marital status                           | -0.174    | -2.354 | 0.02*      | -10.572         | -0.93           | -0.076    | -1.039 | 0.3          | -7.324          | 2.273           |
|             | Educational status                       | 0.348     | 4.946  | 0.0001*    | 2.332           | 5.429           | 0.244     | 3.073  | 0.002*       | 0.973           | 4.466           |
|             | Living place                             | -0.12     | -1.61  | 0.109      | -6.98           | 0.708           | ı         |        |              |                 | ı               |
|             | Frequency of visiting the urology clinic | 0.034     | 0.456  | 0.649      | -1.624          | 2.6             | 1         |        |              |                 | 1               |
| Total Boint | Caffeine & Tea consumption               | 0.044     | 0.586  | 0.559      | -7.324          | 13.508          | 1         |        |              |                 | 1               |
|             | Caffeine & Tea consumption frequency     | 0.058     | 0.766  | 0.445      | -1.019          | 2.312           | 1         |        |              |                 | 1               |
|             | Alcohol use                              | 0.063     | 0.842  | 0.401      | -3.762          | 9.365           | 1         |        |              |                 | 1               |
|             | Frequency of alcohol use                 | -0.405    | -1.66  | 0.119      | -27.836         | 3.551           | 1         |        |              |                 | 1               |
|             | Smoking                                  | 0.043     | 0.572  | 0.568      | -2.929          | 5.322           | 1         |        |              |                 | ı               |
|             | Presence of chronic disease              | -0.021    | -0.275 | 0.784      | -4.439          | 3.352           | 1         |        |              |                 | ı               |
|             | Operation                                | 0.106     | 1.428  | 0.155      | -1.362          | 8.495           |           |        |              |                 | 1               |
|             | Underwear                                | -0.136    | -1.831 | 0.069      | -4.562          | 0.17            | -         | -      |              | ı               |                 |

Linear Regression Analysis; \*p<0.05 statistically significant effect; std.beta: Standardized beta coefficient; C.I.: Confidence Interval

#### **Discussion**

Urinary incontinence is a physical health problem, but it also causes emotional and social problems. As its prevalence increases with age, incontinence is seen as a natural ageing process. In the literature, it has been reported that men are more likely to seek treatment for urinary incontinence than women [12-14]. In this study, being a female caused a low score in the factors preventing the acceptance of urinary incontinence as a health problem sub-dimension of the urinary incontinence awareness scale. Low scores in this dimension indicate that individuals do not accept urinary incontinence as a health problem. Similar to our study [15], in a study conducted with women, it was determined that although urinary incontinence reduces the quality of life, very few women accepted this condition as a health problem and applied to health services. Due to the reasons such as being perceived as a natural consequence of ageing/childbirth or embarrassment, women usually apply to health institutions late or not at all. In addition, only a tiny proportion of diagnosed women receive effective treatment [3, 16, 17]. This result of the study is thought to be due to the high prevalence of urinary incontinence in women and the fact that it is seen as a natural consequence of ageing and childbirth.

Health motivation is the general intention and desire to create the necessary behaviours to maintain and improve health [18]. In this study, the scores obtained from the health motivation sub-dimension of the urinary incontinence awareness scale were lower in those with higher education levels. A lower score in the health motivation sub-dimension indicates better health motivation. In a study [19] conducted with elderly patients, it was found that patients with primary school graduates had higher health motivation than illiterate patients. Previous studies have indicated that health awareness, health-seeking behaviour, and motivation increase as the level of education increases [20-22]. The results of this study are similar to the literature in this respect.

In this study, the scores obtained from the sub-dimensions of the urinary incontinence awareness scale, restriction, and fear of urinary incontinence sub-dimensions were higher in those with higher education levels.

High scores from the restriction and urinary incontinence sub-dimensions indicate no fear of restriction and urinary incontinence. In the study conducted by Bulgak and Aydın Avcı (2022), it was found that the fear of urinary incontinence and restriction scores of those who graduated from primary school were higher than those who were illiterate. This result of the study is likely because the increase in health literacy as the educational level increases awareness and decreases the fear of restriction and urinary incontinence [19].

In this study, the score obtained from the coping with urinary incontinence sub-dimension of the urinary incontinence awareness scale was higher in participants who had surgery and in participants with chronic disease. High scores on the sub-dimensions of coping with urinary incontinence indicate that dealing with urinary incontinence is not good. When the literature was examined, it was stated that urinary incontinence was higher in those with chronic disease [23, 24]. This result is thought to be because treatment and costs of chronic diseases are prioritized, and urinary incontinence is seen as a natural consequence of ageing.

In this study, the score obtained from the fear of urinary incontinence sub-dimension of the urinary incontinence awareness scale was lower in participants whose frequency of changing underwear decreased. Low scores from the urinary incontinence sub-dimensions indicate that fear of urinary incontinence is experienced. The frequency of changing underwear increases in patients with urinary incontinence. In the literature, carrying and changing underwear are among the methods of coping with urinary incontinence [25-28]. This study result suggests that the fear of urinary incontinence decreases in patients with urinary incontinence by being more cautious against the possibility of urinary incontinence.

In conclusion, males are more likely to accept urinary incontinence as a health problem. The factors that prevent adults from accepting it as a health problem and the sub-dimensions of coping with urinary incontinence are at a good level. It was determined that the health motivation sub-dimension and the fear of urination sub-dimension of the patients who applied to the urology outpatient clinic were at a weak level, and the restriction sub-

dimension was at a medium level. Awareness should be raised that urinary incontinence is not a natural process and early admission to the clinic can accelerate the recovery process. Patients applying to health institutions should be questioned whether they have urinary incontinence complaints, and patients with complaints should be informed about non-pharmacological and pharmacological methods.

The limitation of the research is that it was conducted in a single center in the surrounding area. Another limitation is that the data was collected by face-to-face interview method. Additionally, the high average age of the patients can be considered a limitation. The reliability of the data is limited to the answers given by the patients. Another limitation is the lack of observation-based findings in the study. Despite all these limitations, it is thought that the study can contribute to future research by clarifying the effect of urinary incontinence awareness on attitudes with an updated scale.

**Conflict of interest:** The authors declare that they have no conflict of interest.

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**Consent of publication:** Additional informed consent was obtained from all individual participants for whom identifying information is included in this article.

**Acknowledgments:** The authors would like to thank participants in this study.

**Ethics committee approval:** Permission was obtained from Kastamonu University Cilinical Research Ethics Committee (date: 22/02/2023, decision no: 2023-KAEK-15).

#### **Author contributions**

M.D.I. is responsible for creating the idea and design of the study, managing the study, and analyzing the data. S.G. is responsible for preparing ethics committee documents, collecting data and entering them into SPSS. M.D.I. and S.G. are responsible for article writing, most of which is M.D.I. Authors are responsible for working together to create a format suitable for the journal.