ELSEVIER

Contents lists available at ScienceDirect

# European Journal of Obstetrics & Gynecology and Reproductive Biology

journal homepage: www.elsevier.com/locate/ejogrb



# Prevalence of sexual dysfunction and urinary incontinence and associated risk factors in Turkish women



Selahittin Çayan <sup>a,\*</sup>, Önder Yaman <sup>b</sup>, İrfan Orhan <sup>c</sup>, Mustafa Usta <sup>d</sup>, Murad Başar <sup>e</sup>, Sefa Resim <sup>f</sup>, Ramazan Aşcı <sup>g</sup>, Bilal Gümüş <sup>h</sup>, Ateş Kadıoğlu <sup>i</sup>

- <sup>a</sup> Department of Urology, University of Mersin School of Medicine, Mersin, Turkey
- <sup>b</sup> Department of Urology, University of Ankara School of Medicine, Ankara, Turkey
- <sup>c</sup> Department of Urology, University of Fırat School of Medicine, Elazığ, Turkey
- <sup>d</sup> Department of Urology, Akdeniz University School of Medicine, Antalya, Turkey
- <sup>e</sup> Department of Urology, Memorial Private Hospital, Andrology Section, Istanbul, Turkey
- <sup>f</sup> Sütçüimam University School of Medicine, Department of Urology, Kahramanmaraş, Turkey
- g Department of Urology, Ondokuzmayıs University School of Medicine, Samsun, Turkey
- <sup>h</sup> Department of Urology, Celal Bayar University School of Medicine, Manisa, Turkey
- <sup>i</sup> Department of Urology, University of Istanbul, Istanbul Faculty of Medicine, Andrology Section, Istanbul, Turkey

### ARTICLE INFO

# Article history: Received 3 November 2015 Received in revised form 22 May 2016 Accepted 28 June 2016

Keywords:
Sexual dysfunctions
Urinary incontinence
Female
Prevalence

### ABSTRACT

Objectives: Female sexual dysfunction (FSD) and urinary incontinence (UI) are associated risk factors that might cause each other. No study has investigated prevalence of FSD and UI in the same population. The aims of the study were to investigate the prevalence of FSD and UI and associated risk factors in the same population.

Study design: : The study included 1217 women in 20 provinces, representing the geographical regions of Turkey. Women aged ≥18 years with active sexual life in the last 6 months were enrolled. FSD, overactive bladder, UI, depression, and sexual distress were investigated using validated scales. Risk factors that might predict FSD and UI were determined in the same population.

Results: The prevalence of FSD and UI was 52.5% and 14.6%, respectively. Comparing the women with and without FSD, those with FSD were older, had higher body mass index (BMI), less physical exercise, older spouses, lower educational level, and lower rates of smoking and alcohol consumption. The rates of women in menopause and those with a spouse/partner having erection problem and the rates of UI, depression, and sexual distress were higher in the FSD group. Age of spouse, low educational level, not smoking, not consuming alcohol, menopause, not giving consent to spouse/partner to use sexual performance-enhancing drugs when necessary, depression, and sexual distress were the significant risk factors for FSD. Of the women with UI, 56% had overactive bladder symptoms, 32% had stress UI, and 12% had mixed type UI. Comparing the women with and without UI, those with UI were older, had higher BMI, lower educational level, and older spouses. The rate of menopausal women and the rates of FSD, depression, and sexual distress were higher in the UI group. Menopause and FSD were the significant risk factors for UI.

*Conclusions*: This is the first study to investigate prevalence of FSD and UI in the same population. UI deteriorates sexual functions of women. Therefore, both conditions should be assessed when women complain of either sexual or urinary problems.

© 2016 Elsevier Ireland Ltd. All rights reserved.

# Introduction

Female sexual dysfunction (FSD) is a common problem and unfavorably influences the quality of life. FSD is defined as the persistent/recurring decrease in sexual desire or arousal, the difficulty/inability to achieve an orgasm, and/or the feeling of pain during sexual intercourse [1]. It has been reported that one of the

<sup>\*</sup> Corresponding author at: Department of Urology, University of Mersin School of Medicine 33343, Mersin, Turkey. Fax: +90 324 337 4311. E-mail address: selcayan@mersin.edu.tr (S. Çayan).

sexual problems could be encountered in about 40-45% of adult females at any time of life [1]. Complex interaction of many genetic, biological, psychological, social and cultural factors plays a role in the etiology of FSD [2]. Pelvic floor dysfunction, which may appear at any time of life, can also lead to problems such as pelvic organ prolapse, dysfunctional bowel disorders, urinary tract infections, urinary incontinence (UI), and sexual dysfunction [3]. UI is a commonly seen problem, and is associated with advanced age and stress, major depression, decreased quality of life, and sexual dysfunction [4]. There is a two-sided interaction between FSD and UI. Stress UI is negatively associated with all aspects of FSD (sexual interest, desire, arousal, lubrication, and orgasm) and positively correlated with dyspareunia and vaginismus [5]. Since these problems are not verbalized as they cause embarrassment in the majority of populations, they may remain underdiagnosed and undertreated. Data on their prevalence in general population are also limited. No study has investigated prevalence of FSD and UI in the same population. Knowing the prevalence of FSD and UI would facilitate to understand the burden caused by these problems on the population. Besides, identifying the risk factors that might cause FSD and UI will provide development of preventable strategies to enhance women's quality of life.

The present study aims to investigate the prevalence of FSD and UI and associated risk factors in Turkish women. For this purpose, the assessments were performed using validated questionnaires in a sample representative of Turkish population.

### Methods

# Sample and procedure

The present study was carried out in 20 provinces that would represent the geographical regions of Turkey. Totally 1217 women aged ≥18 years with active sexual life in the last 6 months were enrolled. Stratified random sampling was used and the quantitative phase of the study was performed within the scope of rules determined prior to the study. The survey was carried out via faceto-face interview at the participants' home and/or workplace. The study design was approved by the Central Ethics Committee, consisting of the members from the Turkish Ministry of Health and University of Mersin School of Medicine. An informed consent was obtained from all women, included in the study.

# Main outcome measures

A questionnaire was applied to investigate the demographic characteristics of the participants such as age, body mass index (BMI), education, marital status, and smoking as well as their menstrual cycle or menopausal status and their opinions regarding their own and partners' sexual functions. In addition, the participants were investigated regarding the presence of FSD and overactive bladder (OAB), frequency of UI, and depression and sexual distress statuses using validated scales.

Female sexual functions were evaluated with the Female sexual function index (FSFI) [6,7]. The FSFI consists of 19 questions (rated from 0 to 5) and 6 domains including desire, arousal, lubrication, orgasm, satisfaction, and pain. In order to calculate the individual domain score, the scores of individual questions comprising the domain are summed and multiplied by the factor specific to the relevant domain. The total score is calculated by adding the scores of the six domains. The total score of the scale is ranged from 2.0 to 36.0, with higher scores indicating a lesser degree of sexual dysfunction.

Urinary incontinence was evaluated using the Overactive bladder questionnaire-short form (OABq-SF) for OAB and the International Consultation on incontinence questionnaire-short form (ICIQ-SF) for stress UI. The OABq-SF consists of 8 questions and a score of  $\geq$ 8 indicates presence of OAB. The ICIQ-SF asks the participants to answer the questions considering the last 4 weeks. The total score of the form is 21, with higher scores indicating frequent UI [8].

The Beck depression inventory (Beck-D) contains 21 questions, the lowest point being 0 and the highest point being 3 for each question. The total score of all answers is assessed as follows: 0–9 points: minimal depressive symptoms, 10–16 points: mild depressive symptoms, 17–29 points: moderate depressive symptoms, 30–63 points: severe depressive symptoms [9,10].

The Female Sexual Distress Scale-Revised (FSDS-R), which provides a measure of sexual distress, contains 13 questions, each rated from 0 to 4. The total score ranges from 0 to 52; the higher the score, the higher the level of sexual distress. A score of  $\geq$ 11 effectively distinguishes between women with and without FSD [11].

# Statistical analyses

Data were analyzed using the Predictive Analytics Software (PASW) Statistics version 18.0 for Windows (SPSS Inc., Chicago, IL, USA). Descriptive statistics were performed. In comparison of two independent groups, Mann–Whitney U test was used for nonnormally distributed numerical variables. For categorical variables, multiple and two group comparisons were performed using Chisquare test statistics or Fisher's exact test, where appropriate. Logistic regression analysis was used to determine the risk factors. Level of statistical significance was set at p < 0.05. In predicting sexual dysfunction, the receiver operating characteristics (ROC) analysis was performed to determine the cut-off values for total FSFI score and for the score of each domain.

# Results

General characteristics of the women included in the present study are demonstrated in Table 1. The cut-off value for the FSFI in predicting sexual dysfunction was determined by ROC analysis as  $\leq$ 27.3. The cut-off values for the domains were as follows:  $\leq$ 3.9 for desire,  $\leq$ 4.35 for arousal,  $\leq$ 4.35 for lubrication,  $\leq$ 4.20 for orgasm,  $\leq$ 4.60 for satisfaction, and  $\leq$ 4.60 for pain.

**Table 1**General characteristics of the subjects.

Characteristics	
Age, year	$38.26 \pm 12.70$
Body mass index groups	
Underweight	71 (5.8)
Normal	631 (51.8)
Overweight	360 (29.6)
Obese	155 (12.7)
Marital status	
Married	1008 (82.8)
Not married	209 (17.2)
Educational status	
Illiterate-literate	18 (1.5)
Primary school	379 (31.1)
Secondary school	150 (12.3)
High school	446 (36.6)
University and above	224 (18.4)
Smoking	525 (43.1)
Alcohol consumption	182 (15.0)
Physical exercise	308 (25.3)
Menopausal status	246 (20.2)
Irregular menstrual cycle	110 (9.0)

Data are presented as mean  $\pm$  standard deviation or number (%), where appropriate.

# Download English Version:

# https://daneshyari.com/en/article/6172797

Download Persian Version:

https://daneshyari.com/article/6172797

<u>Daneshyari.com</u>