

# Assessment of urinary incontinence in the women in Eastern Turkey

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## Abstract

**Introduction and hypothesis** The aims of the present study were to determine the types of UI among women visiting the urology department, to identify the potential risk factors associated with each type of UI, and to identify healthcare-seeking behaviors of affected women in our region.

**Methods** The data of 617 community-dwelling women, who were at least 18 years of age or older and who presented with a complaint of UI ongoing over a year, and those without UI, who were admitted for any other reason, from June 2010 to April 2012, were evaluated.

**Results** Mean age was 51.29 years (range 18–110 years); median parity was 3.54 (range 0–11) and 88.2 % of the women were married. Mean BMI was 28.01 kg/m<sup>2</sup>. Very few women (18.5 %) accepted UI as a disease and searched for medical help by themselves; however, the remaining women (81.5 %) were brought or directed for evaluation by someone else. Stress UI was reported by 43 women (10.5 %), urge UI and mixed UI were noted by 153 (37.5 %) and 212 (52 %) women respectively.

**Conclusions** The most frequent type of UI was mixed UI in our region. Age, BMI, multiparity, and hypertension were identified to have a different importance for each type of UI, but diabetes mellitus, birth trauma, gynecological surgery, lumbar disc hernia (LDH), and multiple sclerosis (MS) were the other important related factors. However, a small number of patients accepted UI as a disease and searched for therapy.

This reveals that the public should be informed in detail about female UI in developing countries.

**Keywords** Female urinary incontinence · Potential risk factors · Urinary incontinence types

## Introduction

Urinary incontinence (UI) is a prominent and distressing problem, which may have a violent impact on the quality of life. The International Continence Society and the International Urogynecological Association defined UI as the “involuntary loss of urine that is a social or hygienic problem” [1]. Any disturbance in the harmony of the pelvic floor and neurological structures may be responsible for the pathophysiology of the disease [2]. There are differences between the results of prevalence studies (ranging from 38 to 78 %) owing to the variety of definitions of the disease and the patients’ approaches [3–5]. Various studies have indicated that females with UI were frequently associated with age, low educational level, menopause, and multiparity [5–7]. Osteoarthritis, peptic ulcer disease, cardiac disease, obesity, and diabetes mellitus were found to be other related diseases [8, 9].

A woman with UI has both physical and social problems. Walking around, social interactions, and sexual activity may be restricted or avoided completely. Moreover, the UI causes a certain problem for Muslim women during praying [10, 11], which requires cleanliness of body, clothing, and place. On the other hand, praying includes physical activity of the body, which can be an additional predisposing factor for stress incontinence. Therefore, UI and related conditions may be particularly important in Turkey. These studies related to females with UI in different populations provide us with quantification of the problem and healthcare needs [12]. The

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