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Do female urinary incontinence subtypes have different effects on the sexual life of couples?

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ABSTRACT
Female urine incontinence (UI) has negative impact on couple's sexual life. The aim of this study was to assess sexual function of females and their partners in the presence of female UI and identifying the effect of different types of UI on variable sexual domains. This is a comparative cross-sectional study, where 75 sexually active females with UI (patients’ group) and 75 age and gender healthy volunteers serving as a control group were enrolled in this study. After urodynamic evaluation, incontinent patients were subdivided into three groups urgent (UUI), stress (SUI), and mixed (MUI). Female Function Index Questionnaire was filled out by all participants and International Index of Erectile Function was filled out by their partners. This study showed that UI in females has a negative impact of sexual life of couples. UUI was related to orgasmic dysfunction and dissatisfaction in females, while their partners suffered from less sexual functions in all sexual domains except in erectile function domain which was more noted in partners of women with SUI. Lubrication was dramatically decreased in SUI group. We concluded that different types of female UI have different impact on sexual domains of females and their partners.

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KEYWORDS
Female urinary incontinence; female sexual function; stress urinary incontinence; urgent urinary incontinence; mixed urinary incontinence

Introduction
The study of female sexuality is very different from male sexuality. Prevalence studies on female sexual dysfunction estimate the existence of sexual disturbances in 39–45% of sexually active women (Castagna, Montorsi, & Salonia, 2015). Urinary incontinence (UI) is more common among women than men. An estimated 30% of females aged 30–60 are thought to suffer from UI, compared to 1.5–5% of men. It negatively impacts not only women’s quality of life in term of psychological, and social but also their sexual function (Moore, 2010).

Two main types are described: stress urinary incontinence, in which urine leaks in association with physical exertion, and urgency urinary incontinence, in which urine

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leaks in association with a sudden compelling desire to void. Women who experience both symptoms are considered as having mixed urinary incontinence (Aoki et al., 2017).

Although there is a growing evidence that sexual and urinary problems are often comorbid and possibly synergistic in women (Chen, Sweet, & Shindel, 2013), studies showed very different results, probably due to the great variability of investigation methods as well as there is no scientific knowledge about the effects of UI on sexual functioning of the male partners (Fatton, de Tayrac, & Costa, 2014).

So, the aim of this study was to assess sexual function of females and their partners in the presence of female UI and identifying the effect of different types of UI on variable sexual domains.

**Patients and methods**

This is a comparative cross sectional study, where 75 sexually active females with UI (patients’ group) and 75 age and gender healthy volunteers serving as a control group were enrolled in this study. Husbands of participants of both groups were invited to participate. They were recruited from outpatient clinics of Urology and Obstetrics and Gynaecology departments. After taking the approval of the Ethics Committee, the aim of the study was explained to all participants and a written informed consent was taken.

After urodynamic evaluation, incontinent patients were subdivided into three groups: urgent urinary incontinence (UUI), stress urinary incontinence (SUI), and mixed urinary incontinence (MUI).

Only premenopausal sexually active females and their husbands were enrolled in this study unless they have any of the following items which might affect sexual function in both sexes: having a chronic disease (hypertension, diabetes, cardiac diseases, renal diseases, or hepatic diseases) or autoimmune disease or neoplasia or taking any medication (hormones or phosphodiesterase inhibitors). Pregnant females or those taking antidepressants or anxiolytics medication, or on contraceptive pills were excluded from the study. Females with neurogenic cause of urine incontinence, vaginal or uterine prolapse, any type of vaginal fistula were also excluded.

Assessment of UI included a detailed history (urologic, medical, and surgical), physical examination to exclude neurologic conditions (abdominal, vaginal, and pelvic), routine urological assessment (urine analysis and culture), noninvasive investigations (uroflowmetry, post void residual urine volume determination), and urodynamic evaluation.

All participants were interviewed for demographic data (age, educational level, residence) duration of marriage, number of children, and for females, mode of delivery and obstetric and gynecological history. Additionally, incontinent females were asked to fill out some questions to evaluate the effect of urine leakage during intercourse.

To assess female and male sexual functions, participants and their husbands were asked to fill out an Arabic validated version questionnaire of Female Sexual Function Index (FSFI) and International Index of Erectile Function (IIEF) respectively (Anis, Gheit, Saied, & Al_Kherbash, 2011).
The FSFI is a validated 19-item, self-administered, screening questionnaire that measures the aspects of female sexual function in six domains (desire, arousal, lubrication, orgasm, satisfaction, and pain) (Rosen et al., 2000).

The IIEF is a validated brief self-administered 15-item questionnaire that evaluate five domains in male sexual function (erectile and orgasmic function, sexual desire, intercourse and overall satisfaction) (Rosen et al., 1997).

**Sample size calculation**

MedCalc software version 16.1 ([©1993–2016 MedCals Software, www.medcalc.org](http://www.medcalc.org)) was used to calculate the requires sample size using the percentages of sexual dysfunction among females with UI in comparison with controls according to another study (Doğan, Vural, & Akyüz, 2017).

- Level of significance (type I error) = 0.05
- Type II error (1-level of power) = 0.2
- Proportion of FSD in patients = 61.7%
- Proportion of sample size in group 1/group2 = 1:1

So, the least sample size was 67 subjects in each group, but we increased it to 75 in each group for more accuracy.

**Statistical analysis**

The collected data were tabulated and analyzed using SPSS version 16 software (SPSS Inc., Chicago, ILL Company). Categorical data were presented as number and percentages while quantitative data were expressed as mean ± standard deviation and range. Chi square test ($\chi^2$) was used to analyze categorical variables. Quantitative data were tested for normality using Shapiro-Wilks test, assuming normality at $p > .05$, using Student “t,” if normally distributed, or Man–Whitney U-test, Kruskal–Wallis test and Spearman’s correlation coefficient (rho) if not normally distributed. The accepted level of significance in this work was stated as $p < .05$.

**Results**

Seventy-five urinary incontinent women and their partners were included in this case control study. The mean age of cases and control was 36.0 ± 8.7 and 34.1 ± 8.5 years, respectively. There was no significant difference between both groups regarding age, residence, educational level, and duration of marriage ($p > .05$). Normal vaginal delivery was the most common mode of delivery in patients’ group (80.6%) versus control (36%).

After urodynamic evaluation, three subtypes were identified. UUI was the dominating type (64%) followed by SUI (25.3%) and MUI (10.7%).

Table 1 explains that 68 patients (90.7%) experienced urine leakage during coitus, while 14.6% of patients with UUI had no leakage during sexual activity. Incontinence was mostly seen during vaginal penetration in patients with SUI (89.5%) and MUI (62.5%), while those with UUI (77.08%) had incontinence during orgasm. All patients
felt shy either because their husbands noticed their incontinence (90.7%) or due to their micturition desire (9.3%), causing both partners to end coitus. Sexual abstinence was experienced by those having UUI (10.4%) and SUI (26.32%) and all of them (100%) noticed lowered coital frequency after being incontinent.

The total FSFI score was ≤26.55 in all patients (100%), indicating sexual dysfunction compared to 45.3% in the control group. Moreover, all sexual domains and total FSFI were significantly decreased in cases group compared to control (p < .05, Table 2). Table 3 demonstrates that subtypes of UI significantly affect (p < .05) three

### Table 1. Description of sexual relationships in patients group according to their type of UI.

<table>
<thead>
<tr>
<th>Variable</th>
<th>UUI No. = 48 (%)</th>
<th>SU1 No. = 19 (%)</th>
<th>MJU No. = 8 (%)</th>
<th>Total No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you leak urine during sexual activity?</td>
<td>Yes</td>
<td>41/48 (85.4%)</td>
<td>19/19 (100%)</td>
<td>8/8 (100%)</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>7/48 (14.6%)</td>
<td>0/19 (0%)</td>
<td>0/8 (100%)</td>
</tr>
<tr>
<td>At which stage of sexual activity do you leak urine?</td>
<td>Vaginal penetration</td>
<td>0/48 (0%)</td>
<td>17/19 (89.5%)</td>
<td>5/8 (62.5%)</td>
</tr>
<tr>
<td></td>
<td>Orgasm</td>
<td>37/48 (77.08%)</td>
<td>2/19 (10.53%)</td>
<td>3/8 (37.5%)</td>
</tr>
<tr>
<td></td>
<td>End of coitus</td>
<td>4/48 (8.33%)</td>
<td>0/19 (0%)</td>
<td>0/8 (100.0%)</td>
</tr>
<tr>
<td>How do you feel after leaking urine during sexual activity?</td>
<td>Shy</td>
<td>48/48 (100%)</td>
<td>19/19 (100%)</td>
<td>8/8 (100%)</td>
</tr>
<tr>
<td>How do you deal with this condition (UI urine during sexual activity)?</td>
<td>End coitus due to leakage of urine</td>
<td>41/48 (85.42%)</td>
<td>19/19 (100%)</td>
<td>8/8 (100%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7/48 (14.59%)</td>
<td>0 (0%)</td>
<td>0/8 (0%)</td>
</tr>
<tr>
<td>Does your husband recognize your incontinence during sexual activity?</td>
<td>Yes</td>
<td>41/48 (85.42%)</td>
<td>19/19 (100%)</td>
<td>8/8 (100.0%)</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>7/48 (14.59%)</td>
<td>0/19 (0%)</td>
<td>0/8 (0%)</td>
</tr>
<tr>
<td>How does your husband react towards your condition (UI urine during sexual activity)?</td>
<td>End the coitus</td>
<td>48/48 (100%)</td>
<td>19/19 (100%)</td>
<td>8/8 (13.3%)</td>
</tr>
<tr>
<td></td>
<td>Don’t care</td>
<td>0/48 (0%)</td>
<td>0/19 (0%)</td>
<td>0/8 (100%)</td>
</tr>
<tr>
<td>Did your incontinence cause sexual abstinence during any time of your married life?</td>
<td>Yes</td>
<td>5/48 (10.4%)</td>
<td>5/19 (26.32%)</td>
<td>0/8 (0.0%)</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>43/48 (89.58%)</td>
<td>14/19 (73.68%)</td>
<td>8/8 (100%)</td>
</tr>
<tr>
<td>Comparing to your past coital frequency (before UI)</td>
<td>Less than before</td>
<td>48/48 (100%)</td>
<td>19/19 (100%)</td>
<td>8/8 (100%)</td>
</tr>
<tr>
<td></td>
<td>More than before</td>
<td>0/48 (0%)</td>
<td>0/19 (0%)</td>
<td>0/8 (0%)</td>
</tr>
<tr>
<td></td>
<td>The same as before</td>
<td>0/48 (0%)</td>
<td>0/19 (0%)</td>
<td>0/8 (100%)</td>
</tr>
</tbody>
</table>

### Table 2. Sexual functions of the studied group according to FSFI.

<table>
<thead>
<tr>
<th>Patients group (N = 75)</th>
<th>Control group (N = 75)</th>
<th>95% CI of the mean difference</th>
<th>Z test</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desire domain</td>
<td>Mean ± SD</td>
<td>Range</td>
<td>Mean ± SD</td>
<td>Range</td>
</tr>
<tr>
<td></td>
<td>3.4 ± 1.1</td>
<td>1.2–4.8</td>
<td>4.0 ± 0.9</td>
<td>1.2–6</td>
</tr>
<tr>
<td>Arousal domain</td>
<td>3.5 ± 0.8</td>
<td>2.4–4.5</td>
<td>3.9 ± 0.8</td>
<td>2.1–5.7</td>
</tr>
<tr>
<td>Lubrication domain</td>
<td>3.2 ± 0.7</td>
<td>1.2–4.5</td>
<td>4.8 ± 0.8</td>
<td>3.3–6.0</td>
</tr>
<tr>
<td>Orgasm domain</td>
<td>2.9 ± 0.7</td>
<td>2.4–4.8</td>
<td>4.4 ± 0.8</td>
<td>2.0–6.0</td>
</tr>
<tr>
<td>Satisfaction domain</td>
<td>3.4 ± 0.6</td>
<td>2.4–4.8</td>
<td>4.6 ± 1.0</td>
<td>1.2–6.0</td>
</tr>
<tr>
<td>Pain domain</td>
<td>4.1 ± 1.2</td>
<td>1.2–6</td>
<td>2.75 ± 1.17</td>
<td>1.2–4.8</td>
</tr>
<tr>
<td>Total FSFI</td>
<td>20.4 ± 2.89</td>
<td>14.8–25.9</td>
<td>24.7 ± 2.7</td>
<td>18.7–32.2</td>
</tr>
</tbody>
</table>

FSFI: Female Sexual Function Index; CI: confidence interval.
*Significant difference p < .05.
**High significant difference p < .001.

(100%) felt shy either because their husbands noticed their incontinence (90.7%) or due to their micturition desire (9.3%), causing both partners to end coitus. Sexual abstinence was experienced by those having UUI (10.4%) and SUI (26.32%) and all of them (100%) noticed lowered coital frequency after being incontinent.

The total FSFI score was ≤26.55 in all patients (100%), indicating sexual dysfunction compared to 45.3% in the control group. Moreover, all sexual domains and total FSFI were significantly decreased in cases group compared to control (p < .05, Table 2). Table 3 demonstrates that subtypes of UI significantly affect (p < .05) three
Table 3. Sexual domains and total FSFI among patients group according to type of incontinence.

<table>
<thead>
<tr>
<th></th>
<th>SUI (n = 19)</th>
<th>UUI (n = 48)</th>
<th>MUI (n = 8)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean ± SD</td>
<td>95% CI of</td>
<td>Mean ± SD</td>
<td>95% CI of</td>
</tr>
<tr>
<td>Desire domain</td>
<td>3.4 ± 1.4</td>
<td>2.7–4.1</td>
<td>3.3 ± 1.0</td>
<td>3.0–3.6</td>
</tr>
<tr>
<td>Arousal domain</td>
<td>3.6 ± 0.7</td>
<td>3.3–4.0</td>
<td>3.4 ± 0.8</td>
<td>3.2–3.7</td>
</tr>
<tr>
<td>Lubrication domain</td>
<td>2.6 ± 0.3</td>
<td>2.5–2.7</td>
<td>3.5 ± 0.6†</td>
<td>3.3–3.6</td>
</tr>
<tr>
<td>Orgasm domain</td>
<td>3.6 ± 1.2</td>
<td>3.3-3.9</td>
<td>2.6 ± 0.3‡</td>
<td>2.5–2.7</td>
</tr>
<tr>
<td>Satisfaction domain</td>
<td>3.5 ± 0.4</td>
<td>3.3–3.7</td>
<td>3.3 ± 0.7†</td>
<td>3.1–3.5</td>
</tr>
<tr>
<td>Pain domain</td>
<td>4.5 ± 0.9</td>
<td>4.2–5.0</td>
<td>3.9 ± 1.3</td>
<td>3.5–4.2</td>
</tr>
<tr>
<td>Total FSFI</td>
<td>21.2 ± 2.8</td>
<td>20.0–22.7</td>
<td>20.0 ± 2.6</td>
<td>19.1–20.7</td>
</tr>
</tbody>
</table>

FSFI: Female Sexual Function Index; SUI: Stress Urinary Incontinence; UUI: Urgent Urinary Incontinence; MUI: Mixed Urinary Incontinence; KW: Kruskal-Wallis test; CI: Confidence interval.

† Significant in comparison with SUI.
‡ Significant in comparison with MUI.
Significant difference p < .05.
High significant difference p < .001.

Table 4. Sexual function among partners of female with different types of urine incontinence.

<table>
<thead>
<tr>
<th></th>
<th>SUI (n = 19)</th>
<th>UUI (n = 48)</th>
<th>MUI (n = 8)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean ± SD</td>
<td>95% CI of</td>
<td>Mean ± SD</td>
<td>95% CI of</td>
</tr>
<tr>
<td>Erectile function</td>
<td>17.4 ± 3.9</td>
<td>15.5–19.3</td>
<td>17.6 ± 4.4</td>
<td>16.4–19.0</td>
</tr>
<tr>
<td>Orgasmic domain</td>
<td>8.4 ± 0.5</td>
<td>8.1–8.6</td>
<td>6.5 ± 0.7</td>
<td>6.3–6.7</td>
</tr>
<tr>
<td>Sexual desire domain</td>
<td>7.8 ± 0.4</td>
<td>7.6–8.0</td>
<td>5.8 ± 1.0†</td>
<td>5.4–6.1</td>
</tr>
<tr>
<td>Intercourse satisfaction</td>
<td>7.3 ± 0.8</td>
<td>6.9–7.7</td>
<td>5.9 ± 1.7‡</td>
<td>5.4–6.4</td>
</tr>
<tr>
<td>Overall satisfaction</td>
<td>6.7 ± 1.8</td>
<td>5.8–7.6</td>
<td>2.9 ± 2.2‡</td>
<td>2.2–3.5</td>
</tr>
<tr>
<td>Total score</td>
<td>47.5 ± 4.4</td>
<td>45.4–50.0</td>
<td>38.6 ± 7.5†</td>
<td>36.5–40.9</td>
</tr>
</tbody>
</table>

IIEF: International Index of erectile Function; SUI: Stress Urinary Incontinence; UUI: Urgent Urinary Incontinence; MUI: Mixed Urinary Incontinence; KW: Kruskal-Wallis test; CI: confidence interval.

† Significant in comparison with SUI.
‡ Significant in comparison with MUI.
Significant difference p < .05.
High significant difference p < .001.

Patients with UUI had significantly (p < .05) the lowest mean value of orgasm (CI = 2.5–2.7) when compared to those with MUI (CI = 2.7–4.1) and SUI (CI = 3.3–3.9). Also, satisfaction domain score (CI = 3.1–3.5) was mostly affected in females with UUI with a significant difference when compared to females with SUI (CI = 3.3–3.7) (p < .05). Meanwhile, SUI patients showed a significant decrease in the mean score of lubrication (CI = 2.5–2.7) when compared to their counterparts with UUI (CI = 3.3–3.6) or MUI (CI = 1.9–3.7) (p < .05).

Although age showed a significant negative correlation (r = –0.215, p = .01) to total FSFI score; it showed insignificant correlation to all other sexual domains (desire = 0.106, p = .38; arousal = –0.052, p = .66; lubrication = 0.135, p = .27; orgasm = 0.027, p = .83; satisfaction = 0.013, p = .91; pain = 0.026, p = .75). Duration of marriage, residence, level of education and mode of delivery showed no significant effect to all studied sexual domains (p > .05).
We next compared sexual functions between partners of females with and without UI. The formers showed a significant decreased in all sexual domains (erectile ≤ 0.001, orgasmic = 0.002, desire ≤ 0.001, sexual ≤ 0.001 and overall satisfaction ≤ 0.001 as well as total score ≤ 0.001) according to IIEF when compared to the latter. Finally, we compared between the effect of different types of female UI on their partners sexual life. Partners of females with UUI had significantly more sexual dysfunction than the other two types (SUI, MUI) in five sexual domains (orgasmic ≤ 0.001, desire ≤ 0.001, sexual ≤ 0.001 and overall satisfaction = 0.02 as well as total score ≤ 0.001, Table 4).

Duration of marriage and residence showed no significant correlation to all male sexual domains (p > .05).

**Discussion**

Because sexual function is complex and involves interaction of many factors, including emotional connection, body image, intact physical response, and partner sexual function, this study aimed to assess sexual function of females and their partners in the presence of female UI and identifying the difference among the studied sexual domains according to different types of UI.

Seventy-five urinary incontinent women and their partners were included in this case control study. The mean age of cases and control was 36.0 ± 8.7 and 34.1 ± 8.5 years respectively. Normal vaginal delivery was the most common mode of delivery in patients’ group versus control in this study and in Gyhagen, Bullarbo, Nielsen, and Milsom (2013) study.

In the current study, UUI was the dominating type followed by SUI and MUI. This was consistent and inconsistent with Su, Sun, and Jiann (2015) and Aoki et al. (2017) studies respectively. This discrepancy is due to different age groups in each study as previously stated by Ghafouri et al. (2014) that UUI was predominant in women aged <40 years, SUI in those aged <70 years and MUI in those aged 40–70 years.

Coital urinary incontinence (CUI) is the involuntary leakage of urine during sexual intercourse and it occurs either during penetration or with orgasm (Gray, Li, Campbell, Jha, & Radley, 2018). The current study and other studies (Illiano et al., 2018; Pastor, 2013) found that UI during penetration is usually seen in cases of SUI while those with UUI will usually leak urine at orgasm, while those with MUI will leak urine according to the predominating type.

Our participants with predominantly stress or urgent type UI were more likely to report experiencing sexual abstinence and all our participants had a lower frequency of sexual intercourse. Visser, de Bock, Berger, and Dekker, (2014) also reported that UI patients admitted that fear of incontinence or fear of embarrassment are the most frequent reason for not being sexually active.

All incontinent females in this study had a score of ≤26.55 indicating sexual dysfunction regardless to incontinence type. On analyzing the subscales all sexual domains and total FSFI in the present study were significantly lowered in UI group compared to control group, and this was endorsed by other studies (Duralde &
Rowen, 2017; Doğan et al., 2017). On the other hand, Visser et al. (2014) reported that UI was a reason for not having sex only in 5% of their cases. This difference is most probably because they did not exclude sexually inactive patients as well as they enrolled older females than other studies.

Three sexual domains (orgasm, lubrication, and satisfaction) were significantly affected according to the type of incontinence in this study. All sexual domains and total score of FSFI were mostly affected in the UUI group except for lubrication, which was dramatically decreased in SUI group. Contradicting results were reported concerning effect of different types of UI on female sexuality. The type which had the greatest impact on female sexuality was suggested to be UUI by others (Moore, 2010; Nilsson, Lalos, Lindkvist, and Lalos, 2011), while MUI was suggested by Karbage et al. (2016) and Duralde and Rowen (2017) studies. Inconsistent results were also reported regarding the consequences of each type on different types of sexual domains. Although, females with UUI revealed to have decreased sexual lubrication and pain in Su et al. (2015) study, whereas Doğan et al. (2017) noted that dissatisfaction was the most affected domain. Meanwhile, Caruso et al. (2017) found that women with MUI and UUI had more orgasmic disorder than those with SUI, and women with MUI and SUI had mainly lower sexual desire than those with UUI. These discrepancies might be due to methodological differences (Caruso et al., 2017; Doğan et al., 2017; Duralde & Rowen, 2017; Karbage et al., 2016) or because they did not exclude sexually inactive females from the study (Su et al., 2015) or due to small sample size (Caruso et al., 2017) or because they defined UI subtypes without urodynamic evaluation (Su et al., 2015) or due to lack of control group (Sutherst & Brown, 1980).

Partners of female with UI showed a significant decreased in all sexual domains compared to their counterparts (control group). This was agreed and disagreed by Keles, Caliskan, Gokce, and Gunes (2016) and Nilsson et al. (2011) studies, respectively. The latter concluded that most women with urinary leakage during sexual activities considered this as a problem, but most of their partners did not. This oddness is most probably due to different methodological methods as we used FSFI and IIEF questionnaires to women with UI and their partners respectively while they used a questionnaire regarding relationship and sexual life and gave it to both.

Comparing between different types of UI according to different sexual domains in partners of incontinent females revealed that partners of females with UUI had a significant sexual dysfunction in all sexual domains except for erectile dysfunction as it was most prevalent among partners of females with SUI. To the best of our knowledge, we are the first study to compare between different types of female UI to find out which type is more likely to influence sexual functions of their male partners. Lim, Liong, Leong, Khan, and Yuen (2016) and Bekker et al. (2010) reported that partners of females with SUI had more problems with erectile dysfunction, less satisfaction and lower frequency of sexual intercourse. The current study and another one (Bekker et al., 2010), found a significant difference in overall male sexual satisfaction indicating that other types of female UI may have different impacts on male sexual function.

Age was the only factors which showed a significant negative correlation to total FSFI score in our study as well as in other studies (Lim et al., 2016; Visser et al., 2014).
Our study had some limitations, as we did not evaluate woman’s and their husband hormonal status. The studied population had a low income and/or more than half had episiotomy and these factors are known to affect woman’s sexual life. We also believe using a validated questionnaire to measure sexual functions in both partners and defining UI subtypes after urodynamic evaluation strengthen the results of our study.

**Conclusion and recommendation**

Impaired sexual function was confirmed in females with UI and their partners when compared to control. Although SUI had a negative impact on couples’ sexual life more than MUI according to FSFI and IIEF scores, UUI had the greatest impact on couples’ sexual life. UUI was related to orgasmic dysfunction and dissatisfaction in females, while their partners suffered from less sexual functions in all sexual domains except in erectile function domain which was more noted in partners of women with SUI. Lubrication was dramatically decreased in SUI group.

It is important to provide adequate psychological counseling in order to evaluate the impact of symptoms on psychological and sexual well-being of the affected women and their partners and try to restore or maintain their sexual wellbeing. Amount of urine leakage and its frequency in each type of UI should be detected to assess severity of each type in further studies.

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**Disclosure statement**

The authors declare no conflict of interest.

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