ANALYSIS OF URINARY INCONTINENCE AND DEPRESSION AMONG YOUNG WOMEN

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SUMMARY

Urinary incontinence has a negative impact on a health related quality of life, and it contributes to depression. Depression is a serious illness affecting health, family and professional activity of many people in all sectors of society. Both conditions concern young women. Following study presents depression among young women suffering urinary incontinence. There are various aspects of the young women's comorbid depression and urinary incontinence, mentioned in the present literature: coexistence of depression and urinary incontinence, area of postpartum period, associated sexual dysfunction, and impact on the professional sphere. To conclude, it should be highlighted that the problem of urinary incontinence and depression affects not only elderly, as it would be suspected, but on a large scale also young women and there is a strong need of the further prevention and investigation these coexisting diseases.

Key words: urinary incontinence - depression - mental disorders - young women

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Introduction

According the International Continence Society, urinary incontinence is any involuntary leakage of urine. Three primary subtypes of UI were identified: urgency UI (UUI), stress UI (SUI), and mixed UI (MUI; both UUI and SUI). UUI is defined as involuntary loss of urine associated with urgency; SUI is defined as involuntary loss of urine associated with effort, physical exertion, sneezing, or coughing; and MUI is defined as involuntary loss of urine associated with urgency and with effort, exertion, sneezing, or coughing (Abrams et al. 2003, Haylen et al. 2010).

Urinary incontinence affects even 55% of all women (Thom 1998), and 6-16% of young ones (Mishra et al. 2015). UI has a negative impact on health related quality of life (Melville et al. 2002) and it contributes to depression. Depression is a serious illness disturbing health, family and professional life of many people from all sectors of society. It also concerns young woman (Bansal et al. 2015). A lot has been written in the literature on aspects of life, mental problems of elderly and postmenopausal women with urinary incontinence, and relatively few of these young ones. As it turns out they represent a significant percentage of the society.

Aim

Our aim was to analyze the various aspects of the young women's comorbid depression and urinary incontinence, mentioned in the present literature.

Coexistence of depression and urinary incontinence

Urinary incontinence occurs not only in terms of elderly women. Young women (20-44 years old) suffering urinary incontinence are likely to be more depressed and significantly higher to commit self-harm than the older patients (Goldacre et al. 2007). Goldacre et al. proved in their study the evidence of depression at least 5 years before admission for urinary incontinence, what leads to the question which condition is the prior one (2007). According to the cohort study including the group nearly 6500 female at the age of 22-27 years old, it affects 6,8% of them. What is more the significantly higher percentage of respondents (27% vs 22%) with depressive symptoms (Center for Epidemiologic Studies Depression Scale CESD-10 score ≥ 10) or the history of depression (28% vs 23%) developed urinary incontinence symptoms in the following years (Mishra et al. 2015). It should be mentioned that urinary incontinence occurs as well in the group of nulligravid women, with the incidence of 12.6%. Its consequences are not related only to physical symptoms, they include adverse effects on behavior and psychological well-being (O'Halloran et al. 2012).

Area of postpartum

Urinary incontinence is a problem reaching even 34.3% of women at three months (Wilson et al. 1996) and 20.7% at six months postpartum (Wesnes et al. 2017). Maternal emotional wellbeing and physical health during recovery in the postnatal period has important implications for clinical practice, as urinary incontinence is associated with significantly increased odds of depression at six to seven months after child-birth (Brown & Lumley 2000). In 2007, in the cross-sectional study "Postpartum depression, urge urinary incontinence, and overactive bladder syndrome: is there an association?" there was found a correlation between postpartum depression (via Edinburgh Postpartum

Depression Scale - EPDS score) and symptoms of urge incontinence (Urge Incontinence Quality of Life Impact URGE-IQ score) (Hullfish et al. 2007). The multivariable analysis of Sword et al. identified urinary incontinence among 11 other predictor variables for postpartum depression (2011). Moreover, in the group of 1413 women aged on average 29.5 years old, at the time of 4 months postpartum, prevalence of depressive symptoms (EPDS score ≥ 10) was higher in women with, than without urinary incontinence (15.9% vs 22.1%), as well as the consumption of antidepressants was more frequent at the time of 4 and 12 months postpartum (Fritel et al. 2016). The state of sexual functions and postpartum depression in terms of women undergoing operative vaginal delivery seems to be following topic of interest. Although this kind of delivery was not associated with an increase in with symptoms of postpartum depression at 6 months, the study assessed sexual functions with the Pelvic Organ Prolapse Urinary Incontinence Sexual Questionnaire (PISQ-12), which include also the urinary incontinence aspect. In this study PISQ-12 score was significantly lower depending on the present postpartum depression, what indicates worse female sexual functions (Ducarme et al. 2017).

Sexual dysfunction

Depression is the one of significant factors determining female sexual dysfunction, linked to urinary incontinence. Young female (average 38.3 years old) experiencing sexual dysfunction had much higher (24%) percentage of Beck Depression score >17, providing the result of moderate or severe depressive symptoms, in comparison to these without the disfunction (3.1%). In the same study, the relationship of occurrence depression among women with UI was analogous -22.5% vs 13% (Cayan et al. 2016). "Women who have sex with women" - WSW - population was also interviewed. The final study population consisted of 1,566 adult WSW with mean age 34.6 years old ± 10.4 . Stress urinary incontinence in the group 18-30 years old was equal to 9.6% and in the group 31-40 years old - 23.7%. Furthermore, stress UI symptoms were associated with sexual bother. 44.5% of participants reported a history or current diagnosis of depression. In terms of stress UI and depression correlation not was found (Sturm et al. 2014).

Impact on the professional sphere

Among Australian nurses suffering UI at the mean age 47.4 \pm 11.6 years old, enduring depression was equal to 26%, what was significantly higher than in the group without UI – 15.9%. In the group <29 years old the incidence of incontinence was equal to 5%, and in the following 30-44 years old group – 21.8% with domination of moderate UI. It proves that urinary incontinence and depression are actually present in young female nurses and midwives and this condition may affect their future employment (Pierce et al. 2017).

Symptoms of urinary incontinence are also prevalent and troublesome for young and middle-aged women army veterans (average 38.7 years old). In the study linking incontinence and depression, 19.7% of them reported urgency/mixed UI, and 18.9% stress UI. As a result it was presented that depression is more common in women with UI, however it was not individually associated with UI symptoms (Bradley et al. 2012).

Conclusions

The problem of urinary incontinence and depression affects not only elderly, as it would be suspected, but on a large scale also young women. There is a strong need of the further prevention and investigation these coexisting diseases.

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Contribution of individual authors:

- Study conception and design, acquisition, analysis and interpretation of data: Kinga Tyrała-Seweryn, Mariusz Seweryn;
- Drafting of manuscript: Kinga Tyrała-Seweryn, Mariusz Seweryn, Krzysztof Krysta; Critical revision: Krzysztof Krysta.

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