

Associations of selected lower urinary tract symptoms with biographical context in patients of a day hospital for neurotic disorders

Michał Skalski¹, Jerzy A. Sobański², Tomasz Gołąbek³,
Agata Świerkosz¹, Katarzyna Klasa⁴, Mikołaj Przydacz³,
Krzysztof Rutkowski², Edyta Dembińska², Michał Mielimąka²,
Katarzyna Cyranka², Piotr L. Chłosta³, Dominika Dudek⁵

¹Department of Adult Psychiatry, University Hospital in Krakow

²Department of Psychotherapy, Jagiellonian University Medical College

³Department of Urology, Jagiellonian University Medical College

⁴Department of Psychotherapy, University Hospital in Krakow

⁵Department of Affective Disorders, Chair of Psychiatry, Jagiellonian University Medical College

Summary

Aim. To assess the correlation of subjectively estimated biographical context and lower urinary tract symptoms reported by patients with neurotic and personality disorders.

Methods. This was a retrospective analysis of the biographical context of co-existence of urinary frequency and urinary incontinence reported by 3,929 patients in a day hospital for treatment of neurotic disorders. The symptom checklists KO “0” were completed by patients prior to any treatment.

Results. Urinary frequency reported by patients in a day hospital for treatment of neurotic disorders was associated with the difficulties from their childhood and adolescence (i.e. with perception of inferiority with regard to one’s family and among siblings, parents’ low education level), as well as the disparities in terms of sexual education and troubled relationships.

Conclusions. In the studied group of patients with neurotic and personality disorders, selected lower urinary tract symptoms were associated with adverse life circumstances from childhood and adolescence (which can show the tendency towards regression and protracted character to experience of family’s dysfunction due to feeling of being neglected or abandoned), as well as, to a larger or a smaller degree, their consequences – dysfunctions in adulthood, relationship/marriage, functioning at work and dealing with finances. These associations indicated the probable significance of experiencing these aspects of life in patients, not only

in day hospitals or psychiatric hospitals which reported “pseudo-urological complaints”, but also in at least part of urological patients – going to hospitals due to neurotic disorders, particularly those occurring in a somatic form.

Key words: neurotic disorders, urological complaints, life-context

Introduction

Urological symptoms associated with neurotic disorders are well known and have been used by the clinicians and researchers for decades – as long as the term “neurotic bladder” [1] has been used, the term “shy bladder” [2–4] is a more recent one (and more prevalent on the border of psychiatry and urology), and it is similar to an “overactive bladder” [5]. All of these terms personalize the bladder – these descriptions should rather refer to patients [6]. It seems more logical to use the term “psychogenic urinary dysfunction” – (PUD) [7].

It has been known for a number of years that urological symptoms (in particular lower urinary tract symptoms – LUTS), irrespectively of their causes (at least partially psychological [8, 9]), were strongly associated (and are most likely bidirectional [10]) with the occurrence of anxiety disorders and/or depression [11–13] and they influence the quality of life in patients affected by them [14–18]. Significant numbers of these disorders are treated using cognitive-behavioral psychotherapy or by the dynamic psychotherapy and the pharmacological treatment. The largest possibilities for psychotherapy (in particular but not exclusively the psychodynamic one), constituting its basis – the etiopathogenesis theory and psychopathology, are provided by understanding and symbolical interpretations, usually made individually, “tailored” for particular patients and referring to their lives, including various traumatic and non-traumatic events prevalent among the psychiatric (yet not only psychiatric) patients [19, 20]. These events are prevalent in the contexts of the first occurrence of particular symptoms and their clusters [6]. Of course, not all of them are unique – clinical experience allows to explain their meaning also known as common knowledge: blushing – embarrassment, clenched fists – anger. Though more difficult associations are found e.g., insult – dysphagia, desire – the feeling of sweating etc. Particularly valuable, however, difficult to conduct are the studies not only depicting the co-existence but also probable causation of stressful life events [20]. There have not been many studies referring to pseudourological symptoms [21–23].

Impaired sexual life and dysfunctional relationship which occur frequently in the clinical context (as well as for gynecological symptoms such as vaginal discharges, inflammations, irritations, etc.) were found while analyzing the existing reports and clinical experience with lower urinary tract symptoms. These symptoms can act as a (subconscious or conscious) “justification of a sexual intercourse refusal” (similar to “headaches” in common understanding) or they can express painful, unresolved and unconscious mental conflict. Pseudourological symptoms can restrict the freedom of movement as in agoraphobia, inhibit separation-individualization processes (“prevent”:

the young adults from leaving the family home, literally and symbolically, leaving the relationship, leaving a partner), they can emphasize the regression or symbolize “excessive pressure of unsatisfied needs” (as in common language “push for something” or an “urge”). They are sometimes also associated with poor gender identification [24] and with the features such as hostility, irritability, depression and dysphoria [22, 25] and tendencies to somatization and “neuroticism” [26].

It is easier to make the assumption about the regression process, rebellion etc. in case of micturition, and about the state of fear or sudden anxiety in case of the symptom such as urgent urination. In the studies it is easier to state what is urinary frequency or micturition from the urological or epidemiological point of view and in what kind of mechanism they occur (with which states – anxiety or depression [11] these symptoms coexist), yet it is more difficult to show the psychosocial circumstances, biographical contexts (not only the group of psychiatric symptoms) they are correlated with. However, there was an exception in the form of in-depth knowledge on micturition in pediatrics and child psychiatry, where the exploration screening of psychological factors seemed to be routine for a number of years [27, 28].

Above-mentioned aspects of a personality profile [22, 25, 26] seem to be associated with the results of urological treatment as well [29].

The aim of the study was to contribute to bridge the gap with respect to patients diagnosed with neurotic, behavioral and personality disorders and at the same time to report psychogenic functional disorders of the lower urinary tract, also called pseudourological in this study.

Aim

The aim of the study was to assess the correlation between urinary frequency or urinary incontinence reported by patients and their biographical context.

Material and methods

The Biography Survey [30] completed before the psychiatric treatment by patients of a day hospital for neurotic disorders between 1980 and 2002 was used as the source of information about stressful situations referring to various aspects of patients' life (childhood, adolescence, psychosexual development, relationship or marriage, well-being and the ability to cope with professional work). Decision about psychiatric treatment [31] was based on 2 psychiatric assessments, a psychological consultation and several symptom and personality checklists allowing to exclude e.g., schizophrenic, affective, exogenous or pseudoneurotic disorders or a serious somatic disease, including clinical manifestations of urological disorders. Information on the occurrence and severity of symptom was delivered using completed symptom checklists KO “0” of J. Aleksandrowicz [32–34] completed prior to the treatment.

Assessment of urological symptoms was based on two variables within the symptom checklist KO “0”: (in full: “132. *Frequent need to urinate*” and “111. *Urinary incontinence, for example, bed wetting*”). The instructions specified time of onset as the period of 7 days preceding the study and provided the scale for patient’s subjective assessment of the severity of symptoms as “0-a-b-c”, where “0” meant “symptom did not occur”, “a” – “symptom occurred, but was only slightly severe”, “b” – “symptom was moderately severe”, “c” – “symptom was extremely severe”. This is why it is not possible to determine precisely whether patients’ responses depicted day or night urinary frequency or both types of urinary frequency. It was also impossible to determine whether urinary incontinence was accompanied by urinary incontinence or whether it was rather stress urinary incontinence or completely involuntary day or night urination.

Most of 3,929 studied patients were diagnosed with one of neurotic disorders or a personality disorder and secondarily occurring neurotic disorder (information about selected socio-demographic features of the studied group was included in the Results section in Table 1). Data obtained from a routine diagnostic screening was used after consent was obtained from the patients. The data was stored and analyzed anonymously (Bioethics Committee consent no. 122.6120.80.2015). Odds ratios (ORs) for the coexistence of values of nominal variable (one or more than one biographical context and symptom) were calculated using logistic regression method [35–44] for coexistence of one or more variables. Correlations between the variables in measurement scale were calculated using Spearman’s method. The package STATISTICA PL (Statsoft. pl) version no. 12 was used.

Table 1. Severity of neurotic symptoms, types of disorders according to the ICD-10 and socio-demographic features of the studied patients

	Women (n = 2,582)	Men (n = 1,347)
Diagnosis* (main):		
F44/45 Dissociative/conversion or somatoform disorders	29%	25%
F60 Specific personality disorders	23%	29%
F40/F41 Anxiety disorders	17%	16%
F48 Neurasthenia	7%	14%
F34 Dysthymia	7%	5%
F50 Eating disorders	5%	0%
F42 Obsessive-compulsive disorders	2%	2%
F43 Response to severe stress, and adjustment disorders	1%	2%
Unidentified	9%	8%
Global symptom level: M ± SD (Median)	394 ± 152 (387)	349 ± 151 (336)
Age: M ± SD (Median)	33 ± 9 (33)	32 ± 9 (28)

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Education		
Lack/primary	9%	12%
Secondary (including students)	57%	56%
Higher	34%	32%
Employed	59%	70%
Unemployed	41%	30%
Pensioners	10%	7%
Students	23%	24%
Stable relationship/marriage	43%	47%
Unstable relationship/marriage	26%	21%
Single	31%	32%
No sexual intercourses	40%	35%
Sexual intercourses	60%	65%
Longer relationship	55%	53%
Fleeting, coincidental	3%	7%
Coincidental and longer	2%	5%

*Main diagnoses (primary) were coded into the ICD-10 on the basis of the overview of medical history and the analysis of the equivalence in the past and current classification systems

Results

Results of univariate and multivariate logistic regression analyses

Calculations were made (following a work of Jerlock [45]) in two stages. In the first stage, the correlations between each of two symptoms and biographical variables were tested in the univariate analyses separately in the groups of men and women, and in the second stage, several biographical variables, which significantly correlated with a symptom in univariate analyses, were added into the multivariate analyses. The best fitted models were chosen using stage elimination of variables of the weakest fit to the model. Then the multivariate analyses were repeated for the same input variables in women or men in two age groups – before and over the age of 40, repeating the elimination of variables using the best group of variables. Therefore, in the subsequent tables, the results of the univariate analyses were presented from the left and in the next column the results of multivariate analyses. The results of analyses for urinary frequency were presented in Tables 2–5, and for urinary incontinence in Tables 6–9. The results of multivariate logistic regression analyses – stemming from several variables distinguished in univariate analyses – for the occurrence of urinary frequency in the group of women (in total and in subgroups according to age) are presented in Table 2, in group of men – in Table 3, for extremely severe symptoms in the group of

women – Table 4, in the group of men – Table 5. In each table revealed factors were divided into those associated with family of origin, the period of patients' childhood and adolescence, as well as their psychosexual development, situation in a relationship/marriage, including the history of its origin, professional and financial situation and functioning outside the relationship as well as other variables related to the age group of the studied patients (the latter variables were not included into the analyses of subgroups in people before/over the age of 40).

Urinary frequency

Table 2. The results of logistic regression analyses for urinary frequency in the group of women

Type of analyses:	Univariate	Multivariate		
Group:	Whole group of women (n = 2,582)	Whole group of women (n = 2,582)	Women aged 18–40 (n = 2,006)	Women aged > 40 (n = 576)
Parameters of the best model	not applicable	$\chi^2 = 78.96$ $p < 0.0001$	$\chi^2 = 63.76$ $p < 0.0001$	$\chi^2 = 14.69$ $p < 0.05$
Family of origin, childhood and adolescence				
Fathers aged 20 or younger at the time of patient's birth	*2.19 (1.12; 4.29)	*2.03 (1.03; 4.00)	deleted	ns
Her mother did not complete primary education	***1.92 (1.44; 2.57)	***1.85 (1.38; 2.48)	***1.87 (1.29; 2.71)	*1.89 (1.15; 3.09)
Her father did not complete primary education	***1.87 (1.26; 2.78)	deleted	deleted	deleted
In the childhood the biggest influence – another person	*1.80 (1.05; 3.07)	*1.84 (1.07; 3.16)	*1.76 (1.01; 3.09)	ns
As a child she felt father's hostility	***1.71 (1.22; 2.41)	**1.59 (1.13; 2.25)	*1.64 (1.11; 2.42)	ns
Situation in a relationship				
She hates her partner	*2.60 (1.13; 5.96)	deleted	ns	deleted
She assumes that her partner hates her	*2.29 (1.11; 4.72)	*2.11 (1.01; 4.39)	*2.60 (1.06; 6.38)	deleted

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Marriage concluded under constraint and pressure	*1.92 (1.03; 3.56)	ns	*2.32 (1.11; 4.84)	deleted
She drinks very often, at least once a week	*1.74 (1.04; 2.92)	ns	*1.81 (1.04; 3.17)	deleted
Her partner drinks a lot, at least once a week	*1.54 (1.08; 2.18)	deleted	deleted	ns
Professional and financial situation and functioning outside a relationship				
She does not cope with work despite reliefs and support	**2.44 (1.29; 4.60)	*2.18 (1.14; 4.15)	*2.59 (1.23; 5.47)	deleted
Very bad material conditions in the recent period	***1.72 (1.31; 2.26)	***1.54 (1.16; 2.03)	**1.58 (1.13; 2.23)	ns
Deteriorating position at work	*1.56 (1.09; 2.23)	deleted	*1.68 (1.04; 2.72)	ns
Other variables				
Aged 46–50	***1.73 (1.26; 2.36)	***1.58 (1.15; 2.18)	not applicable	not applicable

ORs with values of 95% confidence interval were presented, statistical significance was marked: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.005$. Lack of statistical significance was marked ns. The variables were deleted in previously described procedures of gradual creation on the best regression model.

As results from Table 2, urinary frequency in women is the most apparently and significantly correlated with several biographical events: the assumption that her partner hates the patient (OR in univariate analysis 2.29, in multivariate analyses in the whole group of women 2.11. in the group of patients before the age of 40, in the group of patients over the age of 40 the correlation was not statistically significant), with the feeling of inability to cope with work despite support (similarly, in the whole group and in the group of women before the age of 40, OR coefficient was above 2.18), with mother's not completed primary education (OR about 1.90, irrespective of the subgroup which the analysis referred to). Moreover, in the group of women before the age of 40 the symptom significantly correlated with the strongest influence of another person from outside a family (OR = 1.71), with the feeling of father's hostility (OR aprox. 1.80), concluding marriage under constraint or pressure (OR = 2.32), bad material conditions at that moment (OR = 1.81), and deteriorating position at work (OR = 1.68), as well as with using alcohol by the patient (OR = 1.81). Moreover, within the whole group, belonging to the age group between 45 and 60 year olds was associated with higher risk of the discussed complaints (OR = 1.58).

Table 3. Results of logistic regression analyses for extremely severe urinary frequency in the group of women

Type of analysis:	Univariate	Multivariate		
Group:	Whole group of women (n = 2,582)	Whole group of women (n = 2,582)	Women aged 18–40 (n = 2,006)	Women aged > 40 (n = 576)
Parameters of the best model:	not applicable	$\chi^2 = 57.65$ $p < 0.0001$	$\chi^2 = 62.61$ $p < 0.0001$	$\chi^2 = 15.84$ $p < 0.05$
Family of origin, childhood and adolescence				
Her mother drunk alcohol very often, at least once a week	**2.51 (1.28; 4.89)	*2.35 (1.18; 4.66)	*2.33 (1.13; 4.82)	ns
Very frequent objections to teachers	*2.36 (1.18; 4.72)	*2.20 (1.08; 4.49)	deleted	ns
Her mother did not care for her school results	*1.70 (1.03; 2.80)	deleted	*1.89 (1.08; 3.30)	ns
During the school years learning did not go well	*1.54 (1.04; 2.28)	deleted	deleted	deleted
Family of origin considered as worse than others families	*1.53 (1.03; 2.29)	deleted	deleted	deleted
Considered as worse than a sibling	***1.51 (1.14; 1.99)	*1.37 (1.04; 1.83)	ns	deleted
Punished for masturbation during childhood	*1.67 (1.07; 2.63)	*1.60 (1.01; 2.54)	*1.94 (1.16; 3.26)	deleted
Lack of sexual awareness before the age of 18	***1.55 (1.19; 2.02)	deleted	deleted	*1.77 (1.06; 2.98)
Situation in a relationship				
She feels resentment towards her partner	*1.53 (1.04; 2.26)	deleted	deleted	deleted
Marriage concluded under constraint and pressure	***2.67 (1.36; 5.23)	*2.43 (1.03; 4.19)	*2.68 (1.24; 5.81)	deleted
She drinks very often., at least once a week	**2.28 (1.26; 4.12)	ns	***2.66 (1.42; 5.01)	deleted

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Her partner drinks very often, at least once a week	***1.97 (1.28; 3.02)	*1.76 (1.12; 2.74)	deleted	*2.42 (1.03; 5.70)
Police interventions during arguments with a partner	*1.71 (1.10; 2.67)	deleted	deleted	deleted
Professional and financial situation and functioning outside a relationship				
Very bad material conditions in the recent period	**1.63 (1.15; 2.32)	deleted	*1.67 (1.09; 2.56)	ns
Deteriorating position at work	***1.99 (1.29; 3.08)	**1.85 (1.19; 2.88)	*1.84 (1.04; 3.24)	ns
She has no interests	***1.66 (1.25; 2.20)	***1.69 (1.27; 2.25)	***1.78 (1.27; 2.49)	ns
Current job does not interest her	***1.66 (1.18; 2.33)	deleted	deleted	deleted

ORs with values of 95% confidence interval were presented, statistical significance was marked * $p < 0.05$; ** $p < 0.01$; *** $p < 0.005$. Lack of statistical significance was marked ns. The variables were deleted in previously described procedures of gradual creation on the best regression model.

Table 3 shows that extremely severe urinary frequency in women was apparently associated with concluding marriage under constraint or pressure (OR in the whole group and in women before the age of 40 was 2.43–2.67), abusing alcohol by patient’s mother (OR = 2.33–2.51) and punishing for masturbation or sexual play in their childhood (OR = 1.60–1.94) as well as with abusing alcohol by patient (OR = 2.66 in group of women before the age of 40). Other statistically significant correlations for the group of women before the age of 40 related to bad material conditions (OR = 1.67), deteriorating position at work (OR = 1.89), lack of interests (OR = 1.78), patient’s mother’s lack of interest in patient’s school results (OR = 1.89). Table 3 also shows that in the group of women over the age of 40, the correlation between extremely severe urinary frequency with present alcohol abuse by partner (OR = 2.42) and the influence of unsatisfactory sexual education before the age of 18 (OR = 1.77) was significant.

Table 4. Results of logistic regression analyses for urinary frequency in the group of men

Type of analysis:	Univariate	Multivariate		
Group:	Whole group of men (n = 1,347)	Whole group of men (n = 1,347)	Men aged 18–40 (n = 1,095)	Men aged > 40 (n = 252)
Parameters for the best model:	not applicable	$\chi^2 = 83.93$ $p < 0.0001$	$\chi^2 = 58.22$ $p < 0.0001$	$\chi^2 = 28.67$ $p < 0.0005$
Family of origin, childhood and adolescence				

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The repetition of a school year more than twice	*3.88 (1.04; 14.42)	deleted	ns	deleted
The repetition of a school year twice	*1.91 (1.10; 3.32)	*1.83 (1.04; 3.26)	ns	deleted
Considered as worse than a sibling	**1.64 (1.16; 2.32)	*1.56 (1.09; 2.24)	*1.60 (1.06; 2.41)	ns
Living in an orphanage or at a boarding school	3.44 (0.91; 13.06)	ns	deleted	deleted
Mother's nervousness during his illnesses in his childhood	*2.76 (1.24; 6.14)	*2.89 (1.27; 6.58)	*2.65 (1.15; 6.11)	deleted
Absent mother	*3.24 (1.01; 10.38)	deleted	ns	deleted
Separation from mother before the age of 5	*1.67 (1.02; 2.76)	deleted	deleted	deleted
Punished for masturbation in his childhood	*1.76 (1.08; 2.86)	*1.67 (1.01; 2.77)	ns	ns
Situation in a relationship				
Marriage concluded due to obligations	***2.19 (1.29; 3.72)	ns	deleted	*3.04 (1.07; 8.62)
No conversation with a partner during conflicts	***2.06 (1.47; 2.88)	***1.86 (1.31; 2.63)	*1.61 (1.08; 2.41)	***3.31 (1.49; 7.33)
Mainly women-partner seeking for a relationship	*1.51 (1.10; 2.08)	deleted	*1.48 (1.01; 2.17)	ns
Professional and financial situation and functioning outside a relationship				
Able to cope due to reliefs and support	*1.86 (1.12; 3.08)	*1.87 (1.11; 3.16)	*2.12 (1.17; 3.83)	deleted
Very bad material conditions in the recent period	**1.84 (1.20; 2.80)	**1.79 (1.16; 2.77)	ns	*2.83 (1.03; 7.74)
Deteriorating position at work	**1.95 (1.21; 3.14)	deleted	ns	deleted
Priority of community activity	**2.22 (1.24; 3.96)	**2.22 (1.22; 4.04)	ns	ns
Work on a management position	*1.60 (1.08; 2.36)	ns	ns	deleted

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Other variables				
Aged 41–45	**1.66 (1.16; 2.39)	*1.55 (1.06; 2.26)	not applicable	not applicable
Aged 46–50	***1.95 (1.23; 3.11)	*1.67 (1.03; 2.71)	not applicable	not applicable

ORs with values of 95% confidence interval were presented, statistical significance was marked * $p < 0.05$; ** $p < 0.01$; *** $p < 0.005$. Lack of statistical significance was marked ns. The variables were deleted in previously described procedures of gradual creation on the best regression model.

In group of men in the period preceding hospital treatment, significant correlation was found between urinary frequency and mother's nervousness during patient's illness in childhood (in the whole group of men and in a subgroup before the age of 40, $OR \geq 2.65$) (Table 4). Similar correlation was found between urinary frequency and inability to cope with work in adulthood – coping only due to reliefs and help ($OR = 1.86–2.12$). Table 4 shows that concluding marriage due to obligations towards a partner was a significant factor, particularly in men over the age of 40 ($OR = 3.31$). It seems interesting that urinary frequency (in a whole group of men) was associated with getting punishment for masturbation and sexual play in their childhood ($OR = 1.67$), repeating the school year twice ($OR = 1.83$), as well as with the age 41–45 and 46–50 ($OR \geq 1.55$) and social activities in adulthood ($OR = 2.22$).

Table 5. Results of logistic regression analysis for severe symptom of urinary frequency in the group of men

Type of analyses:	Univariate	Multivariate		
Group:	Whole group of men (n = 1,347)	Whole group of men (n = 1,347)	Men aged 18–40 (n = 1,095)	Men aged > 40 (n = 252)
Parameters for the best model:	not applicable	$\chi^2 = 53.29$ $p < 0.0001$	$\chi^2 = 27.16$ $p < 0.0005$	$\chi^2 = 15.84$ $p < 0.05$
Family of origin, childhood and adolescence				
The strongest influence in childhood – a tutor	*3.38 (1.08; 10.55)	deleted	deleted	deleted
Very frequent objections to teachers	*2.67 (1.26; 5.67)	ns	deleted	ns
Repetition of a school year twice	*2.24 (1.06; 4.71)	*2.21 (1.01; 4.87)	deleted	*5.83 (1.04; 32.59)
Family of origin considered as worse than others families	*1.93 (1.01; 3.69)	deleted	deleted	deleted
Living in an orphanage or at a boarding school	**6.31 (1.82; 21.90)	deleted	***12.51 (1.01; 44.43)	deleted
Completely sexually unaware before the age of 18	*1.72 (1.14; 2.61)	ns	deleted	ns

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Situation in a relationship				
Concluding marriage under constraint or pressure	*4.10 (1.07; 15.68)	deleted	deleted	*21.42 (1.81; 415.3)
Marriage due to obligations towards a partner	*2.21 (1.09; 4.47)	ns	deleted	deleted
Family and friends wanted to create a relationship	**4.90 (1.48; 16.17)	*4.08 (1.14; 14.62)	ns	deleted
Professional and financial situation and functioning outside a relationship				
Able to cope due to relief and help	*2.31 (1.17; 4.55)	*2.11 (1.04; 4.28)	ns	deleted
Very bad material conditions in the recent period	*2.16 (1.20; 3.89)	*2.17 (1.15; 4.11)	*2.11 (1.01; 4.43)	ns
Material conditions below average in the recent period	*1.67 (1.09; 2.55)	ns	ns	deleted
Deteriorating position at work	***3.58 (2.00; 6.39)	*2.05 (1.09; 3.89)	deleted	***5.17 (1.80; 14.82)
Other variables				
He hardly coped with difficulties with discipline of military service	*2.05 (1.18; 3.58)	*1.85 (1.03; 3.33)	*2.10 (1.09; 4.03)	deleted

ORs with values of 95% confidence interval were presented, statistical significance was marked * $p < 0.05$; ** $p < 0.01$; *** $p < 0.005$. Lack of statistical significance was marked ns. The variables were deleted in previously described procedures of gradual creation on the best regression model.

Table 5 shows that severe urinary frequency in men was significantly related to very bad material conditions (OR approx. 2.10 in the whole group and in the subgroup of men before the age of 40) and difficulties in coping with military service discipline (OR approx. 1.85–2.10). Particularly in group of men over the age of 40, severe urination frequency was related to deteriorating position at work (in this subgroup OR was up to 5.17), as well as with repeating a school year twice in patients' childhood (OR = 5.83) and marriage concluded under constraint or pressure (OR = 21.42 – where wide confidence interval showed only a marginal subgroup), living in an orphanage/boarding school in patient's childhood (OR = 12.51). Only in the whole group of men (the largest group), the discussed symptom was significantly correlated with concluding marriage or starting a relationship under the influence of family/friends (OR = 4.08) and coping with work only due to relief and help.

Urinary incontinence

Results of multivariate logistic regression analysis – stemming from a set of variables found in univariate analyses – for the occurrence of urinary incontinence (question 111) in the group of women (in the whole group and in subgroups divided by age) were presented in Table 6, in the group of men – in Table 7, for extremely severe symptom in the group of women – in Table 8, and in group of men – in Table 9.

Table 6. Results of logistic regression analyses for the occurrence of urinary incontinence in the group of women

Type of analyses:	Univariate	Multivariate		
Group:	Whole group of women (n = 2,582)	Whole group of women (n = 2,582)	Women aged 18–40 (n = 2,006)	Women aged > 40 (n = 576)
Parameters of the best model:	not applicable	$\chi^2 = 85.39$ $p < 0.0001$	$\chi^2 = 69.33$ $p < 0.0001$	$\chi^2 = 23.65$ $p < 0.005$
Family of origin, childhood and adolescence				
Change of residence before the age of 18 – from village to village	***4.04 (1.99; 8.19)	***4.36 (2.06; 9.23)	***3.58 (1.54; 8.31)	*5.25 (1.01; 27.59)
At school she felt that she was not liked	***2.22 (1.40; 3.52)	*1.89 (1.14; 3.14)	ns	deleted
Worse material conditions in childhood	*1.79 (1.24; 2.57)	deleted	deleted	deleted
At school she was usually ruled by others	***1.83 (1.22; 2.74)	deleted	*1.68 (1.02; 2.77)	deleted
Her mother did not care for her school results	**2.41 (1.29; 4.52)	deleted	ns	deleted
She was considered as worse than a sibling	**1.69 (1.14; 2.50)	deleted	deleted	deleted
She belonged to the least pretty at school	**1.73 (1.14; 2.63)	deleted	deleted	deleted
Her father was nervous during her illness in her childhood	*2.06 (1.15; 3.68)	deleted	deleted	deleted
Her mother did not complete primary education	*1.72 (1.03; 2.89)	*1.95 (1.11; 3.41)	deleted	deleted
Mother's primary education	*1.54 (1.08; 2.20)	**1.68 (1.14; 2.48)	***2.03 (1.31; 3.13)	deleted
Living with father's new family	*4.12 (1.16; 14.65)	*3.78 (1.01; 14.27)	***11.33 (2.48; 51.89)	deleted
As a child she felt she is neutral for her mother	*1.75 (1.09; 2.81)	deleted	deleted	deleted

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She belonged to the least diligent in the class	*1.74 (1.06; 2.85)	deleted	deleted	ns
Six or more sibling	*1.90 (1.06; 3.39)	deleted	deleted	deleted
Family of origin was persecuted	*2.52 (1.05; 6.02)	deleted	deleted	ns
First sexual intercourse at the age of 14–16	*1.95 (1.09; 3.47)	deleted	ns	deleted
First sexual intercourse after the age of 35	**35.65 (3.21; 396.06)	***41.76 (3.30; 528.03)	deleted	ns
Situation in a relationship				
She hates her spouse, partner	*3.12 (1.06; 9.15)	deleted	deleted	deleted
Her spouse, partner is neutral for her	**2.21 (1.23; 3.95)	deleted	deleted	ns
Her partner, spouse hates her	*3.11 (1.18; 8.16)	*2.83 (1.02; 7.87)	deleted	deleted
Marriage concluded due to willingness to become independent	*1.91 (1.03; 3.56)	deleted	ns	deleted
Marriage concluded due to financial reasons	*5.37 (1.46; 19.74)	*4.33 (1.05; 17.91)	deleted	deleted
Fleeting, coincidental sexual intercourses	**2.63 (1.32; 5.22)	**2.59 (1.27; 5.28)	*2.37 (1.04; 5.40)	deleted
Divorced	**1.96 (1.21; 3.19)	*1.85 (1.11; 3.08)	deleted	**2.99 (1.38; 6.45)
She lives with a partner/spouse with his family	*1.96 (1.14; 3.39)	***2.27 (1.29; 4.02)	deleted	***8.51 (2.44; 29.69)
Professional and financial situation and functioning outside family				
Deteriorating position at work	*2.05 (1.12; 3.74)	deleted	deleted	deleted
Very bad material conditions in the recent period	*1.84 (1.14; 3.00)	deleted	*2.01 (1.11; 3.65)	deleted
She has no interests	**1.72 (1.15; 2.57)	deleted	deleted	deleted
She has nobody to meet with in her free time	***2.74 (1.72; 4.37)	*1.82 (1.09; 3.04)	*1.98 (1.10; 3.58)	deleted
Other variables				
Aged 46–50	***2.17 (1.29; 3.65)	*1.80 (1.03; 3.13)	not applicable	not applicable

ORs with values of 95% confidence interval were presented, statistical significance was marked * $p < 0.05$; ** $p < 0.01$; *** $p < 0.005$. Lack of statistical significance was marked ns. The variables were deleted in previously described procedures of gradual creation on the best regression model.

As shown in Table 6, in the group of women irrespective of age, moving from one small village to another was associated with the occurrence of urinary incontinence

in their adulthood (OR = 3.58–5.25). Other circumstances related to this symptom in the group of women before the age of 40 was lack of people/friends close to her (OR approx. 2.0), very bad material conditions (OR approx. 2.0), fleeting, coincidental sexual intercourses (OR \geq 2.37), patient's mother's primary education (OR approx. 2.0), living with father's new family (OR = 3.78–11.3 only small number of such patients).

In the group of women over the age of 40 particularly noticeable association was found in relation to the divorced women (in the whole group OR = 1.85–1.96, in a subgroup over the age of 40 – 8.51) and women living with a partner and his family. Strong correlation with concluding marriage due to financial reasons (OR \geq 4.33), the feeling that a partner hates the patient (OR = 2.83), very late sexual initiation – after the age of 35 (very high OR with wide confidence interval indicates only on a marginal number of such women) and with being disliked by peers in the period of school (OR = 2.22) was found only in the whole group of women. Moreover, higher risk of this symptom was found in the subgroup of women aged 46–50.

Table 7. Results of logistic regression analyses for severe urinary incontinence in the group of women

Type of analyses:	Univariate	Multivariate		
Group:	Whole group of women (n = 2,582)	Whole group of women (n = 2,582)	Women aged 18–40 (n = 2,006)	Women aged > 40 (n = 576)
Parameters of the best model:	not applicable	$\chi^2 = 41.50$ p < 0.0001	$\chi^2 = 33.95$ p < 0.0001	$\chi^2 = 9.51$ p < 0.05
Family of origin, childhood and adolescence				
At school she was usually ruled by other people	**3.22 (1.41; 7.35)	*2.71 (1.14; 6.47)	*2.78 (1.01; 7.63)	deleted
Mother's primary education	*2.49 (1.13; 5.49)	deleted	deleted	deleted
Father's primary education	**2.90 (1.29; 6.50)	deleted	ns	deleted
During the school years learning did not go well	*3.15 (1.17; 8.49)	deleted	deleted	deleted
Mother's age – giving birth to a child before the age of 20	*2.78 (1.03; 7.48)	*3.25 (1.17; 9.02)	*3.46 (1.07; 11.22)	deleted
Rather unwanted sexual initiation	*2.77 (1.21; 6.30)	ns	*3.33 (1.25; 8.86)	ns
First sexual intercourse after the age of 35	***53.23 (4.66; 607.6)	*39.91 (2.00; 795.5)	deleted	deleted
Situation in a relationship				
A spouse, partner is neutral for her	*3.61 (1.22; 10.69)	*3.18 (1.04; 9.76)	deleted	ns
Professional and financial situation and functioning outside a relationship				

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Deteriorating position at work	*3.67 (1.24; 10.87)	deleted	ns	deleted
She has no interests	***4.85 (2.20; 10.70)	***4.16 (1.84; 9.42)	*3.54 (1.31; 9.58)	ns
She has nobody to meet with in her free time	***4.84 (2.00; 11.75)	deleted	ns	*6.64 (1.27; 34.69)
Other variables				
Aged 46–50	***4.46 (1.76; 11.33)	***4.67 (1.43; 10.47)	not applicable	not applicable

ORs with values of 95% confidence interval were presented, statistical significance was marked * $p < 0.05$; ** $p < 0.01$; *** $p < 0.005$. Lack of statistical significance was marked ns. The variables were deleted in previously described procedures of gradual creation on the best regression model.

Table 7 shows that extremely severe urinary incontinence was associated, particularly in the group of women before the age of 40, with lack of patient's interests (OR = 3.54–4.85), being dominated (“ruled”) by peers in the period of school (OR approx. 2.7), age of mother – below 20 when giving birth to a patient/child (OR ≥ 2.78), rather unwanted sexual initiation (OR ≥ 2.77). Moreover, in the group of women before the age of 40, loneliness (a patient “has nobody to meet with”) was associated with extremely severe urinary incontinence (high OR = 6.64). In the whole (undivided) group of women the sense of neutrality of her husband or partner (OR ≥ 3.18), age group 46–50 (OR = 4.67) and sexual initiation after the age of 35 (OR = 39.91, in only a small subgroup) was associated with the discussed symptom.

Table 8. Results of logistic regression analysis for urinary incontinence in the group of men

Type of analyses:	Univariate	Multivariate		
Group:	Whole group of men (n = 1,347)	Whole group of men (n = 1,347)	Men aged 18–40 (n = 1,095)	Men aged > 40 (n = 2,52)
Parameters of the best model:	not applicable	$\chi^2 = 55.55$ $p < 0.0001$	$\chi^2 = 58.08$ $p < 0.0001$	$\chi^2 = 21.03$ $p < 0.0005$
Family of origin, childhood and adolescence				
He belonged to the least handsome at school	*2.01 (1.01; 4.00)	deleted	ns	deleted
Mother's nervousness during patient's illnesses in childhood	**4.32 (1.44; 12.94)	deleted	ns	deleted
Father's primary education	***2.51 (1.42; 4.43)	***2.53 (1.40; 4.60)	***3.09 (1.63; 5.86)	deleted
Family of origin considered as worse than others families	*2.47 (1.08; 5.67)	deleted	deleted	**27.96 (2.21; 353.8)
Mother's age – giving birth to a child at/before the age of 20	*2.59 (1.18; 5.69)	ns	ns	*26.02 (1.10; 617.2)

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Father ruled at a family home	*1.80 (1.03; 3.15)	deleted	ns	deleted
Father drank alcohol very often, at least once a week	***2.80 (1.50; 5.20)	**2.45 (1.26; 4.76)	*2.22 (1.07; 4.59)	deleted
He felt his father's hostility when being a child	*3.05 (1.25; 7.46)	deleted	deleted	deleted
Mother's neutrality in his difficulties	*2.32 (1.19; 4.52)	*2.12 (1.05; 4.28)	ns	*15.95 (1.20; 2.12.2)
One of sibling has the biggest influence in his childhood	***5.99 (2.36; 15.21)	***4.39 (1.57; 12.28)	*3.41 (1.10; 19.57)	deleted
Rather bad relation between his parents	*1.94 (1.10; 3.43)	deleted	deleted	deleted
He was punished for masturbation in his childhood	***3.53 (1.60; 7.82)	*3.38 (1.45; 7.88)	***3.77 (1.54; 9.23)	deleted
First sexual intercourse in the form of rape	*8.42 (1.66; 42.79)	deleted	deleted	deleted
First sexual intercourse over the age of 35	*12.42 (1.11; 139.50)	*21.87 (1.54; 310.5)	*45.69 (2.42; 861.1)	deleted
Situation in a relationship				
Current relationship/marriage considered as fleeting	*3.82 (1.10; 13.30)	deleted	deleted	deleted
No conversation with a partner during conflicts	*2.25 (1.16; 4.38)	*2.12 (1.05; 4.30)	ns	35.91 (2.19; 589.4)
He often drinks alcohol, on any occasion	*1.92 (1.08; 3.41)	ns	*2.00 (1.05; 3.81)	deleted
Professional and financial situation and functioning outside a relationship				
He copes due to reliefs and help	*2.67 (1.10; 6.51)	*2.61 (1.02; 6.71)	*3.10 (1.14; 8.42)	deleted

ORs with values of 95% confidence interval were presented, statistical significance was marked * $p < 0.05$; ** $p < 0.01$; *** $p < 0.005$. Lack of statistical significance was marked ns. The variables were deleted in previously described procedures of gradual creation on the best regression model.

Table 8 shows that in men before the age of 40, urinary incontinence was related to coping at work only due to reliefs and help (OR 2.61–3.10), abusing alcohol by patient's father (OR ≥ 2.22), father's primary education (OR approx. 2.51–3.09), the strongest influence of a sibling in their childhood (OR ≥ 3.41 in the whole group OR was even higher), getting punishment for masturbation and sexual play (OR 3.38–3.77) and very late sexual initiation (OR 12.42–45.69 in only a small number of patients).

In the group of men after the age of 40, association of micturition with lack of conversation in conflicts with a partner (OR in the whole group ≥ 2.12 and in group over the age of 40, 35.91), feeling of inferiority related to the family of origin (OR = 27.96 – very few cases), mother's young age while giving birth to a child – before the age of 20 (OR > 26 – very few cases) and mother's neutrality in patient's difficulties in his childhood (OR = 15.95).

Table 9. Results of logistic regression analysis for extremely severe urinary incontinence in the group of men

Type of analyses:	Univariate	Multivariate		
Group:	Whole group of men (n = 1,347)	Whole group of men (n = 1,347)	Men aged 18–40 (n = 1,095)	Men aged > 40 (n = 252)
Parameters of the best model:	not applicable	$\chi^2 = 36.27$ $p < 0.0001$	$\chi^2 = 37.08$ $p < 0.0001$	Unable to create model
Family of origin, childhood and adolescence				
Living with his mother, temporarily with his father	***38.11 (3.92; 370.3)	deleted	ns	---
Family of origin was persecuted	*8.97 (1.05; 76.28)	*28.50 (1.83; 443.7)	*25.47 (1.51; 429.9)	
Family of origin considered as worse than other families	***9.57 (2.24; 40.82)	**10.00 (1.84; 54.32)	*8.09 (1.40; 46.63)	
He frequently objected to teachers	*4.79 (1.13; 20.28)	ns	ns	
Father seen as sharp-tempered	*7.02 (1.41; 34.97)	*6.72 (1.20; 37.80)	*5.75 (1.01; 33.07)	
Father attacked a patient in difficulties	*5.70 (1.35; 24.01)	deleted	deleted	
Mother's neutrality in patient's difficulties	*4.62 (1.09; 19.53)	*7.73 (1.42; 37.80)	*8.81 (1.50; 51.64)	
Punished for masturbation or sexual play during his childhood	*6.23 (1.23; 31.49)	ns	ns	
Situation in a relationship				
No conversation with a partner during conflicts	*4.48 (1.06; 18.97)	deleted	deleted	----
He lives with a partner/wife with her family	***11.40 (2.81; 46.27)	***19.04 (3.59; 101.1)	***15.42 (2.80; 84.93)	

ORs with values of 95% confidence interval were presented, statistical significance was marked * $p < 0.05$; ** $p < 0.01$; *** $p < 0.005$. Lack of statistical significance was marked ns. Impossible analysis was marked '---' no answer 'c' in the subgroup of patients. The variables were deleted in previously described procedures of gradual creation on the best regression model.

It results from Table 9 that in men, particularly in the group before the age of 40, extremely severe involuntary urination was associated with perceiving father as sharp-tempered (OR ≥ 5.75), mother as neutral in patient's difficulties (OR = 4.62–8.81), persecuting patient's family of origin (OR = 8.97–25.47), living with a partner/wife with her family (OR = 11.40–15.42 – in only a small number of patients). In the group of men over the age of 40 answers in symptom checklist did not indicate the occurrence of extremely severe symptom.

Gynecological risk factors in women

Correlation of the occurrence of urinary frequency and urinary incontinence with relevant data from the Biography Survey were analyzed separately only in the group of women. It was done using correlation analysis (using a numeral character of these variables) with the information referring to the number of labors (none, one, two, three and more) and the presence of complications arising out of pregnancies and labors reported in an interview. There were no significant correlations found in these terms, however, for the ordered severity of both symptoms there were found statistically significant, yet very weak correlations – for urinary frequency and not getting pregnant/inability to get pregnant (code 0) versus getting pregnant with normal course of pregnancy (code 1) or with abnormal (code 2) course of pregnancy ($R = 0.21$; $p < 0.0001$), similar results were obtained for urinary incontinence ($R = 0.22$; $p < 0.0001$). Weaker, but significant correlations were found for a higher number of labors (codes: 0, 1, 2, 3-and-more) and urinary frequency ($R = 0.16$; $p < 0.0001$), and for urinary incontinence ($R = 0.08$; $p < 0.0005$). Complicated labors (code 1) turned out to be weakly but significantly correlated with both symptoms ($R = 0.1$; $p < 0.0001$ and $R = 0.07$; $p < 0.0005$, respectively).

Discussion

The concurrence of psychological factors in etiopathogenesis of several lower urinary tract symptoms is not in doubt [9, 46], and their omitting has been described as an example of a serious mistake that can be harmful to a patient – i.e., an unnecessary surgery [23, 47, 48]. Opposite phenomenon – neglecting the exclusion of organic urological symptoms even with the occurrence of serious mental disorders – is also harmful [7].

Psychotherapy is known for eliminating pseudourological complaints in at least some patients (e.g., [49]). Moreover, ineffectiveness of common urological treatment in some of patients seems to be associated with the occurrence (integrity) of neurotic traits [50].

Instruction and variables in the form of symptom checklist KO“0”diagnostics preceding psychotherapy, resulted in limitation of available information about urological

complaints to two symptoms – urinary frequency in patient’s subjective estimation and urinary incontinence e.g., bedwetting, where the symptoms, according to the symptom checklist, were related to the severe ones and were occurring in a seven-day period prior to the study. No data in the current patient’s medical history overview allowed for verification of objective overall health of more than 3 thousand patients studied in terms of urinary tract, except for general knowledge about their good overall health and classification of their complaints as psychogenic, which resulted in their hospitalization in day hospital for neurotic disorders.

Correlation between symptoms and the collective demographical variables such as age, social or professional group seems to be less significant for psychopathology and psychotherapy of neurotic disorders. However, due to the variety of symptoms depending on gender and varying most likely in relation to different ways of experiencing one’s own physicality, it seems necessary to analyze symptoms in groups of women and men, respectively, as in this study.

In the studied patients of a day hospital who were not somatically affected, all (well-documented in literature) burdens of somatic diseases (from cancers and recovery after cancer treatment to benign prostatic hyperplasia), except implications after high-risk pregnancies and labors [51], and to a certain extent age and physiology of menopause [52, 53], were less significant and had a marginal role in the group of somatic complaints.

The age limit of 40, used in the analyses of biographical context’s correlations with urinary frequency and urinary incontinence reported by patients with neurotic and personality disorders, was established due to observations referring to common physiological conditions such as the onset of hormonal changes [53, 54], the age limit in psychological experiencing the age of “forty” and co-existence of LUTS, as well as dysfunctions [55] associated with them.

The association of number of labors, high-risk labors and pregnancies with urological complaints in women seems to be related to a biological nature. This correlation is not a precipitation, but it also refers to extremely severe symptoms rather than to the mere occurrence of studied symptoms. Moreover, although correlation’s coefficients were significant, they were weak.

Family’s of origin poverty and lower educational status of patients’ parents (probably determining lower level of patients’ health awareness and the occurrence of urological complaints, also resulting in experiencing lower urinary tract symptoms [56–58], can be seen as a second factor of “general medical” character found in the study.

The results of this study indicate the assumption that abusing alcohol by patients’ parents and burden with alcohol abuse, as well as parent’s hostility or family breakdown have a traumatizing impact on patients and are associated with regression resulting in problems with urinary continence even in their adulthood. It is worth mentioning that it is currently impossible to determine – what is likely – that the symptom has been

lasting since patient's childhood. Family's of origin persecution – a highly traumatic situation, was found as another factor related to urinary incontinence (its occurrence in women and extremely severe urinary incontinence in men). The relationship between symptoms and the strongest influence of “a sibling” or “another person” rather than a parent in patient's childhood shows a family's of origin dysfunction.

Co-existence of anxiety disorders (panic attacks, agoraphobia, several compulsions), depressive disorders and sexual dysfunctions with LUTS has been documented in many reports [11, 59, 60], some of them associate micturition disorders with phobias (particularly with social phobia [3, 4], similarly, coexistence of LUTS with stress-related disorders such as ASD and PTSD [4], PTSD [61, 62] and with traumatic events [63], particularly with psychosexual traumas (e.g., rapes) [5, 64–66]. The obtained results seem to show the probability of indirect correlation of traumas and sexual dysfunctions, as well as “urological” symptoms related to them with conflicts in a current relationship and with separation difficulties, patients' tendency to “urethral regression”, which was presented in literature in 1986 [21].

Sexual relationship dysfunctions in women with LUTS have been described as systemically existing in couples – in which man frequently suffers from erectile dysfunctions [67]. These dysfunctions can be, therefore, strongly associated with sexual dysfunctions and can also have common background in the form of traumatic sexual experiences in the past (e.g., [36–40, 68]).

The associations of pseudourological symptoms with sexuality and relationship dysfunctions in the studied group proved to be “discrete”. They did not reveal themselves in direct analyses of the variables in the Biography Survey describing rare/poor or unsuccessful sexual life (e.g., [39, 40]) – but it revealed the information about dysfunctional reasons of starting a relationship e.g., due to constraint or pressure, financial reasons, obligations, asymmetry in seeking a relationship, willingness to become independent, as well as hatred, reluctance or neutrality towards a partner, feeling that a partner hates the patient, abusing alcohol by both of partners, passive-aggressive problem solving (by silence and insults), not separating from one's family (living with a partner and his/her family). Fleeting and coincidental sexual intercourses seemed to be associated with higher probability of urinary incontinence in women, which might suggest the symbolic sexual arousal. However, in the group of men the same symptom was associated with treating patient's marriage/relationship as fleeting.

Urological complaints were clearly associated with punishment for masturbation or sexual play (in general and severely extreme micturition in men, urinary frequency also in men, extremely severe urinary frequency in women), as well as with very late sexual initiation – after the age of 35 (in general, occurrence and extremely severe urinary incontinence in women; occurrence of micturition in men). Moreover, traumatic influence of violence or pressure during first sexual intercourses shows the association of urinary incontinence with “rather” unwanted sexual initiation (extremely

severe urinary incontinence in women) or rape during initiation (occurrence of urinary incontinence in men). All above-mentioned observations show significant influence of risk factors for sexual dysfunctions' occurrence and relationship dysfunctions on urological symptoms' pathogenesis, also those described for the cohort of patients with neurotic and personality disorders [35–40]. These observations were advocated by the association of urological complaints with genital organs symptoms and discomfort related to masturbation in women [60].

Another significant aspect of both urological and pseudourological complaints is patient's embarrassment [69] and stigma, described by other authors as related to the visibility of symptoms, and what is important, not necessarily the urinary incontinence – the embarrassment is related even to urinary frequency, which might be, according to Elstad et al. [70], associated with dirt in women patients' opinion, and in the group of men patients – with erectile dysfunctions. The association of urinary incontinence with the feeling of lack of close relations (“she has nobody to meet with in her free time”), which can be a result of the feeling of rejection or the sense of loneliness due to this symptom and/or avoiding social situations by women patients shows the influence of stigma in this study, particularly in women before the age of 40. Similar explanations come for the association of showing patient's surrender to peers' domination (“at school they were ruled by others”) – the obtained results did not clarify whether micturition had its onset in patient's childhood or during the school period, but it is very probable in the light of other studies [50, 55]. This, in turn, allows for the assumption about poor, “not practiced” social skills of these patients and, accordingly, the mechanism of “vicious circle” – avoidance and self-stigma.

Lack of answer “c” denoting severely extreme urinary incontinence in the group of men before the age of 40 can show that their subjective feeling/sense of burden decreased for some reason e.g., due to classifying patients' complaints as associated with their age or due to classifying them as the symptom of prostatic hyperplasia, which was consistent with Glover's et al. [69] opinion that LUTS are alarming depending on their subjective way of experiencing and when perceived as restricting patient's social functioning.

However, very bad material conditions, deteriorating position at work or inability to cope with work – most likely due to adequate fear in a difficult life situation – were significantly (symbolically?) associated with the occurrence and extremely severe urinary frequency, irrespective of gender (in women and in men). Similar associations were found for urinary incontinence in women – also with the feeling of loneliness and lack of interests. These associations with lack of interests can show an aspect of depressiveness or depressive reaction to a stigma and the restriction of patient's functioning due to micturition, or can show a patient's withdrawal due to a stigma/rejection (as mentioned above, in the analyses there were no variables of the Biography Survey describing poor or unsuccessful sexual life; e.g., [39, 40]).

Basing the study on common questionnaires may cause the limitation of generalizing the obtained results (associated with the selected group of patients submitting themselves to a psychotherapeutic treatment in a day hospital in the period of 22 years, retrospective analysis, short and conventional contents of symptom checklist's variables and the Biography Survey, cognitive and emotional deformations of the studied group memories etc.), but at the same time allows for practical reference of the results to medical and psychological interview relating to patients' life events and circumstances. It also allows for focusing the attention of medical specialists facing a number of psychogenic symptoms from the group of urological complaints on patient's biographical context and his/her current situation, taking into account sex-adjusted and age-adjusted differences. Further, well-designed studies using more specific tools and clinical control groups from the untreated/healthy cohorts are planned.

Conclusions

1. The circumstances significantly associated with urological complaints – urinary frequency and urinary incontinence were found both in the whole studied group as well as in its subgroups divided by gender and age (before and over the age of 40).
2. In terms of memories referring to the family of origin, upbringing and psychosexual development, the associations referred e.g., to the young age of patient's mother at the time of a giving birth to a patient, family's of origin instability or dysfunction, lack of sexual awareness or punishment for masturbation, socialization difficulties in school environment.
3. In terms of relationship or a marriage onset and its functioning, the found circumstances included improper motivation for concluding a marriage and current dysfunctions, including passive-aggressive, "silent" style of solving conflicts.
4. In terms of professional, financial and functional situation outside a relationship, the associations of the analyzed symptoms with the feeling of shortage and inability to cope with professional work, as well as loneliness and lack of interests were found.
5. Psychosocial context related to family's of origin functioning, a relationship/marriage and financial and professional situation, associated with the occurrence and with a severity of the pseudourological symptoms, shows the probability of targeting the research in the course of an interview and psychotherapeutic interventions.
6. Results indicating the increased likelihood of urological complaints in part of women patients of a psychotherapeutic unit of a day hospital, probably as a result of high-risk pregnancies or labors, have the practical clinical significance – they encourage to further complement of the interview and prospective implementation of non-psychotherapeutic procedures.

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Address: Jerzy A. Sobański
Unit for Diagnostics of Neurotic and Behavioral Disorders
Department of Psychotherapy
Jagiellonian University Medical College
31-138 Kraków, Lenartowicza Street 14