

Medical and psychosocial overactive bladder

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AUTHORS' CONTRIBUTION: (A) Study Design · (B) Data Collection · (C) Statistical Analysis · (D) Data Interpretation · (E) Manuscript Preparation · (F) Literature Search · (G) Funds Collection

SUMMARY

Introduction. Statistical data show that in Poland, 2.9 million (17.8%) women are affected by this disease. During the menopause symptoms of an overactive bladder occur in 50-70% of women. Overactive bladder syndrome is a problem not only in medical terms but also in social terms leading to a significant reduction in the quality of life of women.

Material and methods. The survey included a group of 116 women aged 18-84 years suffering from overactive bladder syndrome. The research tool was the original questionnaire containing 23 questions about the problems being the subject of research at work. The questionnaire used a standardized SF36 scale for quality of life assessment. Statistical analysis of the data was performed using Microsoft Office Excel. The Chi-quadrant statistical test was used to verify the hypotheses

Results. 50.9% of the surveyed women were aged 31-45. 39.7% of women reported a continuous feeling of full bladder, 22.4% day and night pollakiuria. There was an urgency in 19.8% of the women. For 16.4% OAB was a factor limiting to a very large extent activities requiring energy (running, physical work), for 12.9% of everyday activities.

Conclusion. The vast majority of overactive bladder syndrome affects women of childbearing age. Symptoms of overactive bladder syndrome significantly hinder functioning and negatively affect interpersonal relationships with other people. There is a need to educate society about the overactive bladder.

Key words: overactivbladder syndrome; OAB; medical problems; psychosocial problems

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INTRODUCTION

According to American and Western European sources, the overactive bladder (OAB) is a condition known as a social disease. It affects 16.5%-16.6% of adults. Statistical data show that 2.9 million (17.8%) women are affected in Poland. The number of people affected by overactive bladder symptoms is expected to increase from year to year [1].

In the menopausal period, symptoms of the overactive bladder occur in 50-70% of women [2]. Young people who start sexual intercourse more and more early are thus at risk of urogenital infections, which in turn predisposes to the occurrence of overactive bladder symptoms in the future. Other factors predisposing to the occurrence of this disease are: number of pregnancies and births, number of sexual partners, social-economic conditions, past operations within the genitourinary system.

The overactive bladder affects many women who are not sufficiently diagnosed correctly. It is a problem not only in the medical but also in the social aspect leading to a significant decrease in women's quality of life. The implementation of appropriate treatment methods greatly improves women's quality of life.

AIM

The aim of the work was to assess medical and psychosocial problems in women with overactive bladder and their impact on the quality of life, and to determine the age range of women with the most common overactive bladder syndrome, as well as the related health and social functioning difficulties.

MATERIAL AND METHODS

The survey covered a group of 116 women aged 18-84 with an overactive bladder. The research tool was the author's questionnaire containing 23 questions about the problems being the subject of the study. The questions were categorized, closed and open allowing for free speech.

The questionnaire used a standardized SF36 scale for quality of life assessment. The questionnaire was published on the website www.surveio.com. Pilot studies preceding the relevant research were conducted. Statistical analysis of the data was performed using Microsoft Office Excel. To verify the hypotheses set out in the study, the Chi-quadrant statistical test was used.

RESULTS

116 women took part in the study. Women aged 18-30 constituted 25% of the surveyed, those aged 31-45 - 50.9%, while those over 45 - 24.1%. Higher education was declared by 49.1% of the surveyed women, secondary ed-

ucation - 34.5%, vocational education - 5.2% and primary education - 11.2%. Most of the women surveyed (60.3%) lived in cities with more than 100 thousand inhabitants (Tab.1.).

Table 2 presents the level of knowledge of the examined group of women about medical problems and psychosocial ones related to overactive bladder. 19.8% (n=23) of women do not know the essence of the disease, the remaining 80.2% (n=93) had knowledge in this area, of which the most frequent (77.4%) answer concerned the problem of continuous urinary urgency. The most frequent answers were those related to the problem of continuous urinary urgency (8.6%), frequent urinary urgency (6.5%) and nerve hypersensitivity to the sphincter muscle and bladder displacement (7.5%).

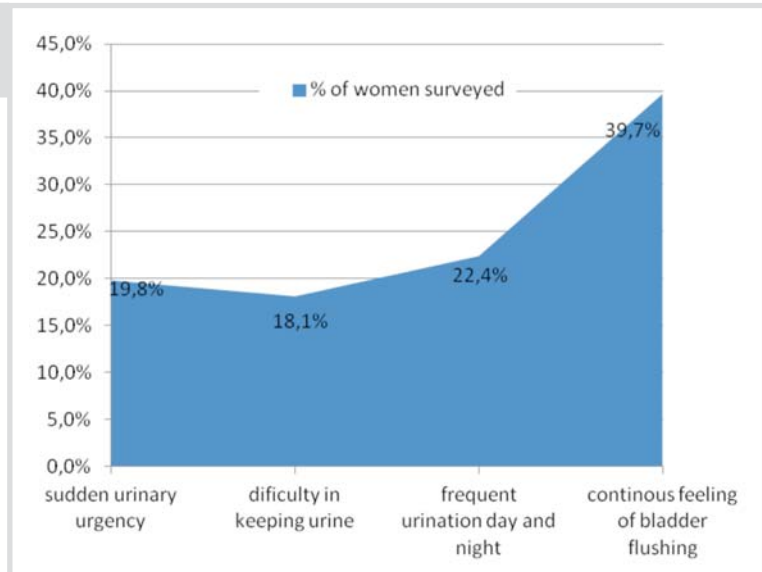
Tab.1. Statistical analysis of the age distribution of women

Age distribution of woman (years)	Descriptive statistics			
	n	\bar{x}	VarX	SD
Group audited	116	39	115,76	11

Tab.2. Level of knowledge of the examined women about OAB

Do you know the term overactive bladder? If so, do you know the essence of the condition?		
No 19,8% (n=23)		
Yes 80,2% (n=93)	Constant feeling of urge to urinate	77,4% (n=72)
	The pressure on the bladder both by day and by night	8,6% (n=8)
	frequently	6,5% (n=6)
	Nerve hypersensitivity to the sphincter muscle and the bladder wiper	7,5% (n=7)

Fig.1. The most frequently reported symptoms from the overactive bladder by the women surveyed



Symptoms that hinder functioning to a large extent and negatively affect the relationship with other people are presented in Figure 1.

Among the factors that may predispose to the occurrence of supra-creative bladder syndrome, the women surveyed most frequently reported: urinary tract infections (81%), bladder cancer (43%), 3. and more births by natural forces (42.2%), bladder stones (37.1%), gynaecological (including aesthetic) procedures within the urogenital system (35.3%). From „others”: pelvic floor muscle weakness, physical work in an upright position, carrying, natural births of newborn babies with body weight >4000 g, periopausal period (15.5%) (tab.3.).

Figure 2. presents an overall assessment of the health condition of the surveyed women. 6% (n=7) of respondents describe their health as excellent, 16.4% (n=19) as very good, 29.3% (n=34) as good. Satisfactory as well as

unsatisfactory state of health was declared equally 24.1% (n=28).

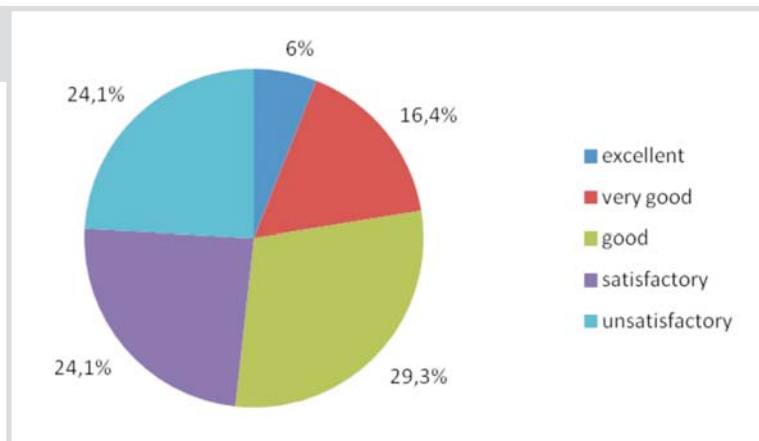
The symptoms from the overactive bladder affect the daily activities of the women. Tables 4. and 5. lists the activities performed by women and the degree of restriction in these activities. Climbing several floors of stairs (25.9%), lifting or carrying shopping (21.6%), walking longer than 1 km (24.2%) were a big difficulty. Activities such as bending and kneeling (55.2%) and bathing or dressing (51.7%) were less difficult. A large percentage of the women surveyed (83.6%) declared that the health condition resulting from OAB had the greatest negative impact on worse than expected well-being. 59.7% of the respondents stated limitations in the type of work or other activities in the relationship with overactive bladder. The necessity to shorten the time of work or other activities concerned 48.3% of the respondents, while the occurrence of difficulties in the per-

Tab.3. The state of knowledge of the examined women regarding risk factors for OAB

Dysfunctions/diseases/problems that may increase the risk of an overactive bladder	% of responses
Bladder cancer	43% (n=50)
Urinary tract infections	81% (n=94)
Urinary bladder stones	37,1% (n=43)
Urinary retention after mycosis	33,6% (n=39)
To undergo 3 and more births by the forces of nature	42,2% (n=49)
Gynaecological (including aesthetic) procedures within the genitourinary system	35,3% (n=41)
Veneral diseases	19,8% (n=23)
Genital prolapse	21,6% (n=25)
Other (pelvic floor muscle weakness, physical work, standing, carrying, natural births of newborns >4000 g, menopause period)	15,5% (n=18)

*repeated choice of answers by respondents

Fig.2. Health assessment in the opinion of the examined women



formed work was declared by 37.9% of women (Tab.4.).

Figure 3 shows the impact of health and emotional problems resulting from the overactive bladder on daily activities, contacts with family, friends, neighbors or other social groups

during the last month. For 14.7% (n=17) of the women surveyed, the hyperactive bladder had no effect on social contacts, in 22.4% (n=26) of women it rarely affected emotional life, and in 47.4% (n=55) sometimes. A large impact was declared by 9.5% (n=11), while a very

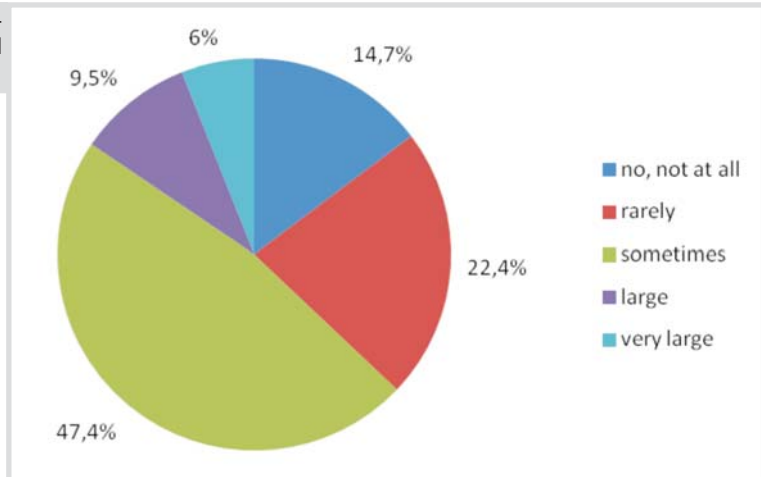
Tab.4. The OAB as a factor limiting everyday activities

	Very	A little	I am not limited at all
Energy-intensive activities such as running, weightlifting and participation in committed sports	16,4% (n=19)	57,7% (n=67)	25,9% (n=30)
Activities of moderate difficulty such as moving the table, vacuuming, bowling or golfing	12,9% (n=15)	58,6% (n=68)	28,5% (n=33)
Lifting or carrying out purchases	21,6% (n=25)	51,7% (n=60)	26,7% (n=31)
Covering several floors of stairs	25,9% (n=30)	30,2% (n=35)	43,9% (n=51)
Covering one floor of stairs	18,1% (n=21)	29,3% (n=34)	52,6% (n=61)
Leaning or kneeling	17,2% (n=20)	27,6% (n=32)	55,2% (n=64)
Walk longer than 1 km	24,2% (n=28)	35,3% (n=41)	40,5% (n=47)
Bathing or getting dressed	11,2% (n=13)	37,1% (n=43)	51,7% (n=60)

Tab.5. Limitations resulting from OAB in the professional life of the respondents

	Yes	No
The need to reduce working time or other activities	48,3% (n=56)	51,7% (n=60)
Worse than expected well-being	83,6% (n=97)	16,4% (n=19)
Limitation in type of work or other activities	59,5% (n=69)	40,5% (n=47)
Obstruction of work or other activities	37,9% (n=44)	62,1% (n=72)

Fig.3. The impact of health problems related to OAB on the social life of the examined women



large impact of OAB on social life was reported by 6% (n=7) of respondents.

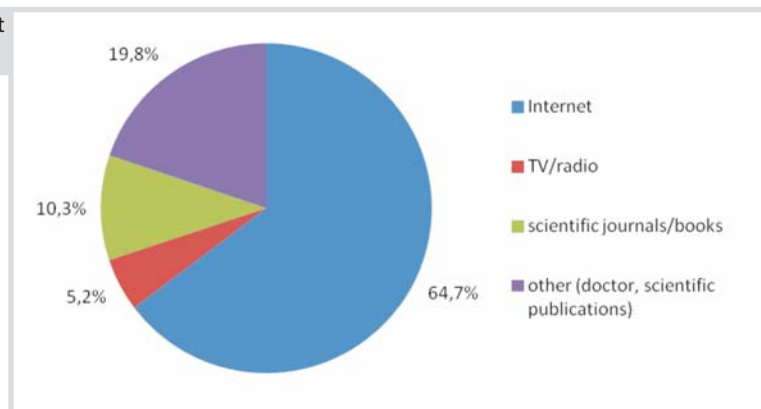
The main source of knowledge about the overactive bladder for 64.7% of the women surveyed was the Internet. 19.8% of the knowledge was obtained from doctors and scientific publications. The remaining 10.3% used scientific journals and books, while 5.2% used TV and radio (Fig. 4).

For 75.9% (n=88) of the women surveyed, the existing treatment is satisfactory and greatly improves the quality of life. In 24.1% (n=28) of the surveyed women the treatment applied did not improve their quality of life (Fig. 5).

DISCUSSION

The symptoms of the hyperreactive bladder have a huge impact on the quality of physical and mental health of women. Our own research confirms that the problem of the overactive bladder affects not only postmenopausal women but also a significant percentage of young women in the reproductive and premenopausal period. Nearly half of the women (43.1%) show symptoms of the hyperactive bladder affect their physical and emotional health. Turner et al. evaluated the level of anxiety and depression in women with hyperactive bladder

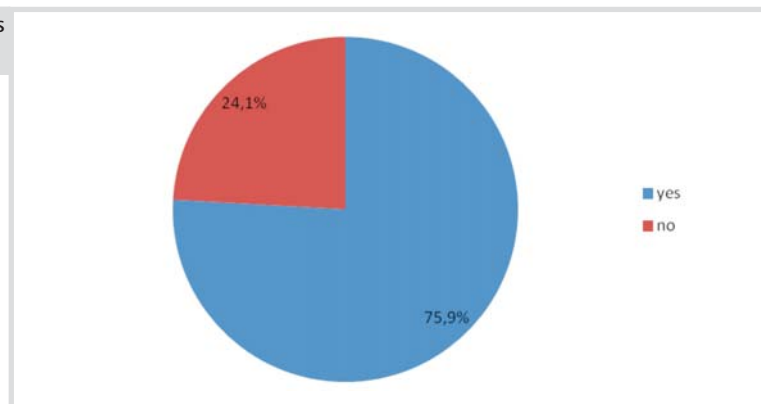
Fig.4. Sources of knowledge about the overactive bladder



Tab.6. Methods of treatment of OAB in the examined women

		Treatment methods
Pharmacological treatment		61,2% (n=71)
Surgical treatment		1,7% (n=2)
Other	Physiotherapy with osteopathy elements	22,4% (n=26)
	Symptomatic treatment	7,8% (n=9)
	During diagnosis	1,7% (n=2)
	No treatment was undertaken	5,2% (n=6)

Fig.5. Treatment of OAB symptoms and satisfaction of sick women



symptoms. It was shown that the level of anxiety was present in 56.6% of the subjects, while depression in 37.6% [3]. According to Bidzan, the symptoms of OAB, including urinary incontinence and the related anxiety in everyday life, have an enormous impact on the patient's psyche [4].

In their own research, half of the women surveyed (51.7%) reported that the discomfort associated with frequent use of the toilet to a small extent interferes with their professional and domestic work. Different results are presented by Radziszewski et al. who stated that in 2/3 of the patients the quality of life deteriorated significantly with the intensified symptoms of bladder hyperactivity. The authors emphasize that this situation results from the fact that in case of bladder hyperreactivity, it is not known when a sudden push on the bladder and with it urine leakage occurs. Patients feel this as reduced control over their own body, which is the main factor significantly impairing the quality of life [5].

In a study by Derewiecki et al., the women surveyed declared that episodes of incontinence appeared most frequently during such exercise activities as: carrying (41%), sneezing (31%) and laughter (12%) [3]. In our study, the most frequently reported activities causing limitations in activity were: walking several floors of stairs (25.9%), walking longer than 1 km (24.2%), lifting or carrying shopping (21.6%), climbing one floor of stairs (18.1%), bending or kneeling (17.2%).

Analyzing the own research using the SF36 quality of life assessment scale, it was noted that most of the women surveyed assessed their current health condition as good - 29.3% and

satisfactory - 24.1%. Half of the examined women (51.7%) felt a small degree of discomfort due to frequent use of the toilet during the last month. The results may result from the fact that 75.9% of the examined women declared that the treatment of overactive bladder symptoms applied so far is satisfactory. Stadnicka et al., using the King's Health questionnaire, found a correlation between the influence of OAB symptoms on the general condition of the respondents. They showed a significant relationship between age and the influence of urinary tract symptoms on the overall health assessment of the subjects. The general health assessment included daily household duties, physical activity, travel, social contacts, relations with a partner, sexual life, and possible sleep disorders and self-assessment [6,7].

In the light of the literature it can be assumed that the symptoms of bladder hyperactivity may create and cause withdrawal of patients from social life by limiting contacts with family and friends. However, own research has confirmed that rapid diagnosis of the disease and subsequent appropriate treatment have a significant impact on the quality of life of the patients later on.

CONCLUSION

The vast majority of overactive bladder syndrome affects women of childbearing age. Symptoms of overactive bladder syndrome significantly hinder functioning and negatively affect interpersonal relationships with other people. There is a need to educate society about the overactive bladder.

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