

Skierkowska Natalia, Prylińska Monika, Husejko Jakub, Wysocka Oktawia, Gajos Małgorzata, Bieniek Daria, Topka Weronika, Leśniak Zuzanna, Olszewski Bogusz, Kędziora-Kornatowska Kornelia. Sexuality in men with urinary incontinence - summary of current knowledge. *Journal of Education, Health and Sport*. 2018;8(9):32-42. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1324015> <http://ojs.ukw.edu.pl/index.php/johs/article/view/5732>

The journal has had 7 points in Ministry of Science and Higher Education parametric evaluation. Part b item 1223 (26/01/2017).
1223 Journal of Education, Health and Sport eissn 2391-8306 7

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The authors declare that there is no conflict of interests regarding the publication of this paper.

Received: 20.06.2018. Revised: 28.07.2018. Accepted: 31.07.2018.

Sexuality in men with urinary incontinence - summary of current knowledge

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Abstract

Background: The problem of urinary incontinence is facing an increasing population of people. The problem of incontinence is troublesome for both women and men. Incontinence decreases the quality of sexual life. Men struggling with incontinence often have problems with erection and ejaculation.

Materials and methods: Analysis of articles in the EBSCO and Google Scholar database using keywords: sexuality, incontinence, men,

Results: Urinary incontinence affects both women and men. There are no specific criteria with which this ailment can be diagnosed. Therefore it is impossible to determine how frequent urinary incontinence actually is. It is estimated that it can affect 4-8% of the population around the World. The problem becomes more and more severe, as the number of

affected patients grows each year. The urinary incontinence among men leads to sexual dysfunction, which causes various issues in private, professional and social life of such patients. Sexual dysfunction in male patients can lead to lower quality of life, what has a negative influence on their closest family and friends. Urinary incontinence in male patients can be treated pharmacologically or surgically. Only in case the non-invasive treatment fails, more radical methods are perused.

Conclusions: Urinary incontinence more often affects women than men. It is a very embarrassing ailment, nevertheless patients under a proper treatment regain not only psychological but also sexual satisfaction. Urinary incontinence should not be a taboo topic, also among men patients. More research is needed to improve treatment program and support of such patients.

Key words: sexuality, incontinence, men.

Introduction

Incontinence is a shameful problem. It is often concealed for years, it works with age and is included in the basic problems of the 21st century, which along with extending the life of the population will proceed. Urinary incontinence (UI) is a significant social problem which, according to estimates, affects 50% of people over 70 years of age. But it does not only affect older people but more and more often younger people, both women and men. Epidemiology of urinary incontinence in men is not sufficiently well researched. The ratio of men to women with UI is 1:2 [1]. Based on the definition of the WHO World Health Organization, urinary incontinence is a voluntary urine leak. UI worsens the quality of life of the patient, causes physical and mental suffering, causes discomfort, loss of self-confidence and shame. It significantly affects functioning in society, bringing with it the need to change life and interests, which limits social life [2]. Apart from the etiology of the male UI, understanding the problem is necessary to help the sufferers find their place in society [3], but

also to reduce the costs of treatment, which were estimated in the USA at 2% of the cost of health care.

Aetiology and pathogenesis of urinary incontinence in men.

Urinary incontinence is a disease that significantly worsens the quality of life of people affected. Although this problem affects women more often, many men also suffer from it. One of the types of urinary incontinence is stress incontinence (SUI). It involves uncontrolled urine leakage when there is an increase in intra-abdominal pressure during sneezing, coughing, lifting heavy objects, sexual activity and laughter. In the case of men, this problem usually arises after surgery in the pelvic area, for example after radical prostatectomy (removal of the prostate gland). Such treatment often causes weakness of the sphincter, dysfunction and changes in the axis of the urethra, e.g. narrowing or reduction of its length, which in turn leads to disorders in urination by the patient. In rare cases, the cause of SUI can be neurological disease or pelvic injuries [4,5].

The problem of urinary incontinence strongly affects various aspects of human life, including sexual activity. In people struggling with this disease, there is often fear of urine leakage during sexual intercourse, which significantly reduces the quality of sexual life [6]. Patients suffering from urinary incontinence often also have problems with erection, ejaculation and the severity of these problems depends on the patient's advanced age and the severity of urinary incontinence. Therefore, the satisfaction of intercourse and sexual desire decreases in these people, which is a significant problem for people suffering from stress incontinence [7].

Epidemiology

The prevalence of urinary incontinence is difficult to determine because there are no clear guidelines or criteria allowing to recognise urinary incontinence. Everyone agrees about the fact that it occurs more often among women. With increasing age, the difference between the sexes decreases and even disappears. According to data collected and presented during 6. International Consultation on Incontinence The estimated problem of urinary incontinence in the entire population is at the level 4-8% [8] . In developed countries, the problem of urinary

incontinence concerns 6% of the population. Over the years, there is a tendency of increased percentage of people affected by incontinence. Available data indicate that in 2008 the problem of urinary incontinence was affecting 346 million people, in 2013 this number raised to 383 million people [9]. It is estimated that currently 420 million people are affected by this problem, including 300 million women and 120 million men. It is estimated that this problem affects approximately 2.5 million people. Because of the difficulty in accurate identification and diagnosing the UI, exact figures are not available, hence only estimated numbers are given. The European Association of Urology (EAU) reports that 5-69% of women and 1-39% of men report at least one incident of incontinence or loss of urine over a period of 12 months. This problem affects twice as often women than men, which is the result of natural births, menopause, anatomy of the urinary tract. Urinary incontinence episodes occur in approximately 10% of the population of all adult women [9].

Attention should also be paid to the problem of urinary incontinence in men after radical prostatectomy, this problem may affect from 2 to even 57% of men [9]. The problem of incontinence concerns 30% of women before menopause and up to 60% after menopause. It is determined that every 3-4 women in the world are affected by this problem. It is worth noting that the incidence of stress urinary incontinence increases with age and is more common in postmenopausal women. Increasing the risk of urinary incontinence is also the high Body Mass Index, the number of pregnancies and the type of childbirth [10].

Due to the fact that the problem of urinary incontinence affects so many people around the world, in addition in recent years, you can see the increase in the number of new cases affected by this disease, seek a solution on how to prevent it and improve the quality of life of sick people and a troublesome problem that often prevents everyday functioning and also affects the sphere of interpersonal and psychological contacts of people affected by this disadvantage.

Impact on economy and society

The occurrence of urgency urinary incontinence and related sexual dysfunction in men is a problem with a significant economic and social burden. The economic costs, estimated by the literature analysis of Coyne, Karin S., et al., which concern only urinary

incontinence, indicate the importance of the problem. According to them, the estimation should take into account such aspects as: direct costs (diagnosis, treatment, etc.), indirect costs (such as loss of job) or the need to treat comorbidities. Taking into account these factors, the cost was estimated at USD 65.9 billion for 2007 (in the United States alone). At the same time, a steady increase in costs related to urinary incontinence is expected, and in 2020 is expected to amount to USD 82.6 billion [11]. These numbers prove how important the ailment described is for economics. Expenses related to erectile dysfunction, which is an important element of sexual dysfunction in men with incontinence, should also be considered. According to a study conducted in Dover (USA), in which 100,000 people with the disorder mentioned participated, the cost of a full 3-year therapy is on average as much as USD 33,244.792 [12]. These data indicate that the disorder in question is an economic challenge both for society and for individual patients.

Problems related to sexual dysfunction in people with incontinence are not limited to financial considerations, but also to private, professional and social life. Of particular importance here is the effect on sexual partners. According to a study conducted by Lim et al., sexual dysfunctions in people with incontinence negatively influenced the partner's sexual abilities. While examining 66 pairs, such ailments as lower satisfaction or higher avoidance behavior were described among the partners of people with the ailments discussed [13]. These disorders affect not only sex life, but also broadly understood difficulties in social functioning. This is perfectly illustrated by the results of a survey conducted by Dunn et al. on 1768 people, including 789 men. According to them, the appearance of sexual dysfunction in the form of erectile dysfunction was very often associated with anxiety, which impaired the performance of many everyday activities (including professional) and hindered the establishment of interpersonal relationships. This condition should be taken into account when developing the treatment method [14].

Attention should also be paid to those aspects of social life that have a positive effect on the process of treatment of urinary incontinence, and thus the sexual disorders in question. The currently occurring fashion for health, and social motivations to maintain adequate body weight are excellent conditions to fight obesity, which is one of the diseases associated with urinary incontinence. The significance of this issue is evidenced by the Look AHEAD study, which attempts to explain how weight loss affects the

problem of incontinence. There were examined 1910 men, proving that intense dietary interventions and the associated rapid weight loss are much more effective in reducing urinary incontinence than slower slimming processes [15]. This is twofold: firstly, the currently fashionable maintaining a correct body weight has a positive effect on the prevention of the aforementioned ailments. Secondly, even better results can be achieved using the most intense methods of weight reduction. This information may be useful in planning the therapy of people with sexual disorders associated with incontinence.

Disorders which accompany UI

The EpiLUTS analysis showed a relationship between body mass index (BMI) and urinary incontinence (UI) in women and men ≥ 40 from the United States, Great Britain and Sweden. The study included 10,070 men and 13,178 women. Obesity rates were the highest among with mixed urinary incontinence (MUI), both in men and women, and urgency urinary incontinence (UUI) or urgency and other UI (UUI+OI), just in men. In conclusion, BMI is associated with a higher risk of urinary incontinence. BMI ≥ 30 , that is obese people according to the WHO definition, were associated with the general user interface as well as MUI (women) and UUI + OI (men) [16].

Obesity and erectile dysfunction are identified with UI disorders. It is associated with an increased incidence of benign prostatic hyperplasia. And then with later complaints of the lower urinary tract in men. Male sex often complains about erection problems. Obesity and the incidence and severity of erectile dysfunction are closely related. Preliminary studies say that the harmful effects of obesity and the severity of urological disease are reversible. Weight reduction restores sexual function in men and women [17].

The LIM, Renly, et al. analysis, in which 66 couples with stress urinary incontinence (SUI) took part, involved sexually active women aged at least 21 with or without SUI and their partners. In women with SUI, there were:

- Lower general sexual function,
- Lower frequency of sexual intercourse,
- Less sexual satisfaction,

- Higher avoidance behavior.

Problems of female partners with SUI:

- Erectile dysfunction,
- Less sexual satisfaction,
- Lower frequency of sexual intercourse.

Stress urinary incontinence in women affects their partners sexual function, these couples were characterized by a worse general sexual experience [18].

In conclusion, SUI is negatively associated not only with particular patient quality of life and sexual functions, but also with those partner sexual functions. Treatment of UI and other accompanying diseases (like obesity) is related with significant improvement of quality of life, sexual functions and general satisfaction.

How to prevent and treat UI?

Several methods are used in the treatment of male urinary incontinence. The most commonly used are surgical treatment, pharmacological treatment, non-invasive treatment as well as instrumental methods. Which method should be chosen depends on the symptoms. As a standard, it starts with conservative treatment, then goes on to more advanced methods unless previously applied. Conservative treatment consists of: change of lifestyle, including increasing daily physical activity, weight reduction and modification of previously used pharmacotherapy, as well as treatment of constipation, limitation of liquid and caffeine intake, electric and magnetic stimulation and training of pelvic floor muscles [19].

Among the methods of invasive treatment of urinary incontinence in men are: external occlusive devices, in the case of patients with stress urinary incontinence, intraoral occlusion devices, which aim to prevent the narrowing of the urethra, due to mechanical reasons, and protect against uncontrolled urine leakage, external devices collectors, such as the leg bag, used in patients with limited mobility and with severe stress UI and urinary incontinence, but they increase the risk of urinary tract infections, the last of the invasive methods are infusion

catheters, which are used in chronically immobilized patients, with a high risk of pressure ulcers and urinary tract infections [20].

If the above-mentioned methods prove to be ineffective, then the patient can be qualified for surgical treatment. The most commonly used are periarticular injections with sealing material to close the urethra, however, the improvement is short-lived and there is a requirement for multiple injections, an artificial urethral sphincter, which is used with moderately strong IU, but using it involves many complications [19].

When it comes to risk factors, men are less likely to suffer from urinary incontinence compared to women. Others include prostate disorders, age, hormonal changes (in men over 80 years of age), genetic factors, as well as comorbidities. The most frequently mentioned are: Parkinson's disease, Alzheimer's disease, type I diabetes, stroke or spinal cord. Risks also include lifestyle, in this category there is smoking, a diet that causes constipation, obesity, urinary tract infections and taking certain medications [21].

Conclusions

Urinary incontinence is a problem which occurs more and more frequently nowadays in population worldwide. The causes of this phenomenon include, inter alia, the ageing of population, unhealthy lifestyle and diet resulting in higher risks of obesity and constipation, prostate disorders and the ensuing surgeries in the pelvic area. A significant number of the abovementioned factors can be treated by using conservative methods which do not encumber the patient with invasive and surgical treatment used otherwise. The current fashion promoting healthy everyday habits and social motivation to maintain adequate body weight supports standard therapy. However, due to the fact that no clear criteria allowing the recognition of urinary incontinence exist, the diagnose and appropriate treatment are difficult to select. The issue discussed in the article presents the urgent need for professional establishment of guidelines for urinary incontinence.

More than half of the population over 70 years of age suffer from urinary incontinence, with an increasing number of younger patients facing the same problem. Studies on the urinary incontinence in population directly indicate higher prevalence of the disease in women rather than in men. Nevertheless, the problem affects both sexes in the area

of their sexuality as it lowers the satisfaction and raises the avoidance of sexual intercourse by both partners because of the fear of urine leakage. In case of patients with long-lasting SUI it is likely to cause social dysfunctioning and worsen the quality of life of those affected. Therefore, more research is needed in order to improve the diagnosing process and treatment methods.

The importance of the problem of urinary incontinence impacts also on economy, due to higher costs of therapy of urinary incontinence, which are expected to continue to rise. The process of a prompt and direct diagnose would surely result in lowering the costs of treatment.

This embarrassing ailment, without proper healing, affects both the sexuality and psyche of the patients. Half as many men as women face the problem of urinary incontinence, but it is necessary to work out solutions aiming at the improvement of quality of life of all patients. Acknowledging the case as important in medical, social and economic aspects should result in further research advancing the current diagnose process and choice of therapy.

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