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MANAGEMENT OF PATIENTS WITH URINARY INCONTINENCE IN SENIOR AGE

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SUMMARY

Objectives: Urinary incontinence is an extremely stressful and often debilitating disease, increasing morbidity in society. The aim of the work is to point out the problems of the management of incontinent patients – seniors in the context of their quality of life as well as treatment costs to find ways to make the widest possible public awareness of the fact that in most cases incontinence is solvable in terms of improving the quality of life.

Methods: The group consisted of 100 patients with urinary incontinence who were treated with conservative medical procedures at the urological outpatient clinic of the Railway Hospital in Košice. The research was conducted in the period from September 2018 to February 2019. The extended standardized Urinary Incontinence Quality of Life Measure (I-QOL) questionnaire was used to evaluate the quality of life. The SPSS program – version 16.0 was used for statistical analysis of the file and hypotheses, and the chi-square test and the McNemar test for analysis of non-parametric data distribution.

Results: The average value of the total social I-QOL score was 14.15 ± 5.03, which means that this area contributes significantly to the reduction of the quality of life. The average value of the total I-QOL score of the group studied was 63.86 ± 19.29, which indicates that urinary incontinence has a significant impact on the quality of life of seniors. Respondents considered the frequent urge to urinate and the absence of a toilet in a reachable place to be a negative factor. Feeling of the state of a certain form of inferiority and obsession was the most serious. Patients expressed approximately equal concerns about feeling out of control of their bladder and concerns about urinating as well as concerns about worsening incontinence due to aging.

Conclusion: Based on the presented results, participants achieved the highest average score in the psychological domain of quality of life (27.81 ± 7.54) and the lowest in the social domain (14.15 ± 5.03). Social support programmes aimed at reducing stigma and enhancing social engagement for individuals dealing with incontinence could help improve the social quality of life. Physical health interventions, such as pelvic floor exercises could support physical well-being.

Key words: urinary incontinence, quality of life, conservative treatment

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INTRODUCTION

Urinary incontinence in the elderly is a serious socio-medical problem that affects a significant part of the population. In the reproductive population, the female-to-male incontinence ratio is 3:1, and this ratio changes in the aging population. The proportion of male incontinence is increasing. After the age of 80, the ratio of incontinence in women and men equalizes. The prevalence of urinary incontinence in the world reaches an average of 35–40% in the senior population (1). In people over 65 years of age, the prevalence of urinary incontinence in the home environment is 10–30%. However, the stated numbers are probably higher, due to the shyness of the older population to talk about their problems with incontinence. We have much more accurate numbers from the elderly population living in nursing homes or other social facilities, where the percentage of the problem with incontinence is up to 43–65%. The proportion of urgent incontinence prevails, the proportion of stress incontinence tends to stagnate (2).

The annual cost of treatment and management of incontinence in the USA is estimated 26.3 billion dollars; in the Federal Republic of Germany approximately 1 billion euros are spent annually on incontinence devices alone; and the expenditure on incontinence management in Austria is identical to the amount of expenditure allocated to the transplant programme (3). In Slovakia, the volume of prescribed incontinence aids is approximately EUR 2.6 million per month (4).

The impact of urine leakage is so serious for incontinent persons that it requires a professional and interdisciplinary approach not only by a doctor, but also by other medical personnel (5). The inability to hold urine significantly contributes to the reduction of the quality of life of people with incontinence. Urinary incontinence is an extremely stressful and often disabling disease, increasing morbidity in society. It affects all areas of social life – psychological, physical, social, and sexual, as well as in employment and in the household (6).

The aim of the work is to evaluate the quality of life of patients suffering from urinary incontinence in three dimensions – physical, psychological and social, we also determined the level of knowledge and awareness of patients about the issue of urinary incontinence.

MATERIALS AND METHODS

In selecting the sample, we used the purposive sampling method. The group consisted of patients with urinary incontinence who were treated with conservative medical procedures at the urology clinic of the Railway Hospital in Košice; 100 responses were received, while 95 completed questionnaires were returned, representing a 95% response rate. The research was carried out between September 2018 and February 2019.

Completing the questionnaire was voluntary and anonymous. The initial part of the questionnaire included questions regarding the demographic data of the respondents (age, education, marital status, and place of residence). We used the standardized questionnaire Urinary Incontinence Quality of Life Measure (I-QOL). The I-QOL quality of life questionnaire consisted of 22 questions focusing on the areas where urinary leakage causes the patients the most problems. It contained the physical I-QOL score (8 questions – No. 1–4, 10, 11, 13 and 20), the psychological I-QOL score (9 questions – No. 5–7, 9, 15–17, 21 and 22), and the social I-QOL score (5 questions – No. 8, 12, 14, 18 and 19), as well as the total I-QOL score (all 22 questions). The I-QOL questionnaire evaluates the quality of life for urinary incontinence on a scale of 0 (worst quality of life) to 100 (best quality of life). We expanded this questionnaire with additional questions that determine the subjective perception of the quality of life (questions No. 1 and 2) and awareness of the problem of urinary incontinence (questions No. 3–6) (Table 1).

We used the SPSS program version 16.0 for the statistical analysis of the file and for the verification of the hypotheses, the Chi-square test and the McNemar test were used for non-parametric data distribution.

RESULTS

The number of respondents in the studied group consisted of 95 patients with urinary incontinence, treated with outpatient conservative therapy. According to the age of the respondents, the largest number of patients were represented in the group of 71–75 years: 36 (37.8%), the second largest group consisted of respondents aged 76–80, 26 (27.4%). There were 19 (20%) respondents aged 80 and over, and the least represented respondents were in the 65–70 age group: 14 (14.8%) (Table 2).

According to gender, there were more women represented: 75 (78.9%) and 20 (21.1%) men. In the examined group according to marital status, the most represented respondents were married: 39 (41%), the group of divorced respondents consisted of 15 (15.8%) patients, 38 (40%) patients were widowed, and 3 (3.2%) respondents were single (Table 2).

According to the place of residence, 57 (60%) respondents lived at home, the other 38 (40%) patients in some type of social service facility. Table 2 shows the demographic data of the respondents, i.e., age, gender, marital status, and place of residence.

Table 1. *Quality of life assessment questionnaire for urinary incontinence*

Statement
1. I worry that I won’t make it to the bathroom in time.
2. I worry about coughing or sneezing because I have difficulty with urine or leakage of urine.
3. I have to get up carefully when I’m sitting because I have difficulty with urine or leakage of urine.
4. I worry if the toilets are in unfamiliar places.
5. I feel depressed – sick because I have difficulty urinating or leaking urine.
6. If I leave home for a long period of time, I don’t feel free, because I have difficulty urinating or leaking urine.
7. I feel inferior because my difficulty urinating or leakage prevents me from doing what I want.
8. I worry that I smell like urine to others.
9. I always think about my urinary difficulty or leakage.
10. It is important for me to go to the toilet often.
11. It is important for me to plan everything in advance because I have difficulty with urination or leakage of urine.
12. It bothers me that my difficulty urinating or leaking urine worsen with aging.
13. I have trouble sleeping well at night because of mine difficulty urinating or leakage of urine.
14. I worry about the embarrassment or humiliation of having difficulty urinating or leaking urine.
15. My difficulty urinating or leaking urine causes me that I don’t feel like a healthy person.
16. My difficulty urinating or leaking urine makes me feel helpless.
17. I enjoy life less because I have difficulty urinating or leaking urine.
18. I’m afraid I’ll pee (incontinence).
19. I feel like I have no control over my bladder.
20. I have to watch what I drink and how much, because I have difficulty urinating or leakage of urine.
21. My difficulty urinating or leaking urine limits me in choosing clothes.
22. I worry about intercourse because I have difficulties with urine or leakage of urine.

Answer options: 1 – strongly; 2 – very; 3 – moderately; 4 – somewhat; 5 – not at all

Table 2. *Demographic data of the respondents (N = 95)*

Demographic data	n	%
Age		
65–70	14	14.8
71–75	36	37.8
76–80	26	27.4
> 80	19	20.0
Gender		
Women	75	78.9
Men	20	21.1
Marital status		
Single	3	3.2
Married	39	41.0
Divorced	15	15.8
Widowed	38	40.0
Residence		
Social service facility	38	40
Home environment	57	60

The average value of the total social I-QOL score was 14.15 ± 5.03, which means that this area contributes significantly to the reduction of the quality of life. The average value of the total I-QOL score of the group studied was 63.86 ± 19.29, which indicates that urinary incontinence has a significant impact on the quality of life of seniors.

The first part of the questionnaire was aimed at evaluating three areas of quality of life, physical, psychological and social. In the physical dimension of quality of life, we monitored individual items, which included questions No. 1–4, 10, 11, 13 and 20 relating to physical health. Respondents answered each question with one of the following options: strongly, very, moderately, somewhat, not at all.

By analysing the data, we found that the average value of the total physical score was 21.89 (± 7.54), while the minimum attainable value was 8 and the maximum was 40 (Table 3). The physical dimension of quality of life assesses physical status and functioning as a consequence of disease and treatment. The patients were most worried about not being able to go to the toilet in time (n = 83), and they were also worried about the severity of urine leakage when coughing or sneezing (n = 65). They considered the frequent urge to urinate (n = 61) and the absence of a toilet in a reachable place to be a negative factor (n = 55). They were somewhat less troubled by sleep difficulties related to urinary disorders (n = 35).

In the second area, we monitored and evaluated the psychological dimension of quality of life. In this area, we investigated the impact of urinary leakage, i.e., physical illness, on the overall psychological state of patients with urinary incontinence. Based on the statistical processing of the data, we came to the conclusion that the average value of the total psychological score is 27.81 (± 7.54) with a minimum attainable value of 9 and a maximum of 45 (Table 3). The psychological dimension of the quality of life deals with the emotional evaluation of a given situation, psychological state, subjective well-being, and emotional functioning. Patients rated almost all questions in this dimension as moderate. They consider the state of a certain form of inferiority and obsession to be the most serious (n = 76), which in some cases leads to depression. In this area, they worried the least about intercourse (n = 8).

Table 3. *Quality of Life I-QOL (N = 95)*

Quality of Life I-QOL	Mean	SD	Min.	Max.
Physical I-QOL score	21.89	7.54	8	40
Psychological I-QOL score	27.81	7.54	9	45
Social I-QOL score	14.15	5.03	5	25

I-QOL – Urinary Incontinence Quality of Life Measure

The third monitored area was the social dimension of the quality of life, which represents social functioning. We asked respondents in this section what effect urinary incontinence has on the degree of social exclusion. Through statistical processing of the data, we found that the average value of the total social score is 14.15 (± 5.03) with a minimum attainable value of 5 and a maximum of 25 (Table 3). Respondents expressed approximately equal concerns about feeling out of control of their bladder (n = 64) and concerns about urinating (n = 67), as well as concerns about worsening incontinence due to aging (n = 69). They were somewhat less troubled by embarrassment and humiliation (n = 49). They are least bothered by the sense of smell (n = 37).

DISCUSSION

According to health definition created by the World Health Organization (WHO), researchers have been putting more attention to health-related quality of life. Since many years the number of publications analysing different aspects of diagnosis and treatment of urinary incontinence and quality of life of people suffering from it has been growing. The subjective estimation of the quality of life of urinary incontinent patient depends on many factors, including experiencing different symptoms, physical agility, professional activity, awareness of life with an illness, social position, and social support obtained. Urinary incontinence affects life activity, state of mind, and sexual behaviour. Embarrassment and/or negative self-perception in this context appears, as well as distance to professional, social and even family life (7, 8). The majority of symptoms concerning urinary incontinence can be evaluated on the basis of questionnaires analysing symptoms and evaluating the quality of life. Quality of life is a very capacious and equivocal definition because it touches upon all possible aspects of life which ordinary people evaluate constantly due to their general tendency to valuate everything concerning them. The term “urinary incontinence” is perceived by patient as a stigmatizing notion (1, 9, 10).

The majority of studies concerning urinary incontinence touches upon the medical aspect of the disease – anatomical structure, need of operation, physical condition (6, 11–13). In modern medicine more attention is devoted to the necessity of using unified, objective methods of taking history by means of questionnaires completed by patients on their own. It is supposed to improve the effects of treatment of the lower urinary system. It was decided that to analyse fully the symptoms of urinary incontinence patients should complete questionnaires which are truthful and reproducible. After translation to a particular language the questionnaire should be estimated in terms of its suitability in the particular population, as symptoms influencing quality of life depend, among others, on cultural factors (4, 14, 15).

Our study confirm that urinary incontinence evokes the feeling of shame and psychological discomfort. The interviewees admitted that symptoms occurrence affects their state of mind, does not allow to feel happy and satisfied in everyday life. It is confirmed by other authors (2, 12, 16). Melotti et al. put the attention to emotions accompanying patients when struggling with urinary incontinence (16). Patients admit shame (25.6%), anger and sadness (17.4% each), and even fear (16.3%). Malmsten et al. confirm that urinary incontinence influences patient's mind causing strong discomfort (17). Their study shows that 66.6% of patients examined feel fear of clothes soaking, 65% feel shame and 16.7% feel fear of lack of control over urination. Urinary incontinent patients admit that their condition constitutes significant difficulty in everyday life, as well as in effective professional activity. Vereecken showed that 90% of urinary incontinent patients examined admitted that urinary bladder disorders seriously limit their life activity (18). Lukacz et al. noted negative influence of urinary incontinence on professional activity in 46% of women examined (12). This discomfort makes professional activity more difficult and disorganized due to frequent urination. In 95% of the studied cases they showed limitations and/or difficulties concerning social life. Among interviewees, 56% of them took part in social meetings only few times a year while 34% few times a month. Our study showed that discomfort caused by urinary incontinence affects physiological state and well-being of patients.

Quality of life depends also on the level of support provided by the society, family and friends and the level of satisfaction from this relation. In our study with the use of I-QOL questionnaire, we found that urinary incontinent patients had significantly lower average results of subjective quality of life evaluation in the physical, psychological, social, and environmental aspects. Soliman et al. showed lower quality of life either in the family aspect (the change of family lifestyle, home budget strain due to treatment and personal hygiene provision), professional aspect (professional plans change, professional life limitation, resignation from work), and social aspect (less social interactions, alienation) (19). In the study carried out by Breakwell and Walker, it was confirmed that in urinary incontinent patients, their condition implies lower satisfaction from life in every analysed aspect, meaning, physical activity, emotional condition, everyday work, social activity, pain felt, health changes, general evaluation of health, social support, and quality of life (20). Herzog et al. showed that among patients with urinary incontinence over 50 years of age except for tendency to alienate in the society (avoiding family and social contacts) and lowered professional activity, there is a tendency to suffer from emotional disorders (feeling of fear and shame of clothes soaking) (14).

Recently, new knowledge has emerged about the aetiopathogenesis of continence disorders in seniors, which as a result expands the possibilities of effective therapy. From the point of view of the treatment approach, it is necessary to avoid exaggerated expectations as well as therapeutic nihilism. The fact that with the use of adequate therapeutic procedures it is possible to achieve full continence in approximately 20% of patients and to improve continence in the other 40% should be a sufficient argument for dealing with incontinence in the elderly.

CONCLUSION

Based on the presented results, it can be concluded that in the assessment of quality of life related to incontinence using the I-QOL questionnaire participants achieved the highest average score in the psychological domain of quality of life and the lowest in the social domain. These findings indicate that the condition may significantly impact the perception of psychological well-being, which is relatively higher in this sample compared to social engagement and physical aspects of quality of life. The standard deviations indicate considerable variability among participants, suggesting that the impact of incontinence on quality of life is highly individualized.

To address these disparities in the future, targeted interventions should be considered. Social support programmes aimed at reducing stigma and enhancing social engagement for individuals dealing with incontinence could help improve the social quality of life. Physical health interventions, such as pelvic floor exercises and access to incontinence management products, could support physical well-being. Additionally, providing mental health resources, such as counselling and support groups, may help sustain or further improve the psychological well-being observed in the sample. A holistic approach integrating physical, social and psychological support would likely yield the most substantial improvements in overall quality of life for individuals experiencing incontinence.

However, the basic prerequisite for successful treatment and prevention is first of all the broad interdisciplinary cooperation of doctors from all involved fields, physiotherapists, secondary medical staff, nursing staff, and also the family environment of seniors.

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Conflicts of Interest

None declared

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