
Impact of Urinary Incontinence on Quality of Life - Literature Review

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Abstract

Introduction. Urinary incontinence is the uncontrolled outflow of urine at the age of a person's life when it should be under voluntary control. It occurs in both sexes but is more common in women. Incontinence is a major social, medical and hygienic problem. Quality of life is seriously threatened when incontinence occurs and limits the individual's daily functioning.

Aim. To identify the impact of urinary incontinence on the quality of life by reviewing research papers and professional literature.

Methods. The study was focused on the analysis of data on the quality of life of patients diagnosed with urinary incontinence. Articles published between 2017 and 2022 that were recognized as relevant for the investigation were used. Seven articles were selected for investigation.

Results. The results are shown in two steps. The first step consisted of finding suitable, high-quality research papers. The second step was the analysis of the relevant papers.

Conclusion. Urinary incontinence is proven to have a great effect on the quality of life and brings with it a number of mental problems such as loss of self-esteem, feelings of discomfort, insecurity, withdrawal and depression. It is important to recognize urinary incontinence on time and implement appropriate treatment methods in order to maintain a level of quality of life that is acceptable for the individual.

Introduction

We define uncontrolled or involuntary urination as urinary incontinence (UI) (1). Incontinence occurs in people of both sexes, but it is more common in women. It mostly manifests itself in old age, but this is not necessary. When we talk about risk factors, we include "bad lifestyle habits" such as the consumption of strong drinks, tobacco products, caffeinated drinks and insufficient exercise (2). The most important cause of UI in the elderly is urinary tract infection, certain associated diseases, increased body weight, cognitive state and drugs (non-steroidal anti-inflammatory drugs and tricyclic antidepressants, alpha blockers, diuretics, anticholinergics, calcium channel blockers, etc.), and they are also among the main risk factors for urinary incontinence (2,3). UI can be divided into acute, which is most often caused by infections, and chronic, which is caused by persistent complaints. Depending on the cause, it can be reversible or irreversible. Reversible incontinence is a transient type of incontinence (for example incontinence in pregnancy). Irreversible or permanent incontinence is a type of incontinence in which there is no possibility of recovery, and the intent is to prevent infections and focus on quality of life (4). Research has shown that UI affects millions of adults around the world (3). A study conducted in Taiyuan aimed to determine whether certain factors influence the development of stress incontinence in women. 4004 valid questionnaires were collected as part of the study. The prevalence of SUI in adult women in Taiyuan was 33.5%. Univariate analysis and multivariate logistic regression analysis proved that place of residence, smoking, body mass index, diet, number of births, mode of birth, dystocia, menopause, oral contraceptives, urinary tract infection, faster emptying of the bladder, suppression and retention of urine are risk factors for stress incontinence in adult women in Taiyuan (5). Studies in Japan show a prevalence of UI in the male population of 3 to 10%, which increases with age. In the male population, urge incontinence is more common in 40 to 80% of cases, followed by the mixed type of incontinence in a percentage of 10 to 30%, and stress incontinence in a percentage of less than 10% (6). Quality of life is defined as an individual's perception of personal position in life, in the context of the culture and value system in which the person lives, and in relation to goals, expectations, standards and concerns (7). Previous studies have shown that women with UI have a lower estimated

quality of life than women without UI, and quality of life decreases with UI severity. Reasons for not seeking help include relatively low expectations of treatment efficacy and embarrassment due to the social stigma associated with UI. In addition, many women believe that UI is inevitable with age and that nothing can be done to improve the symptoms of the disease. Therefore, new and easily available treatment methods are needed, as well as timely education (8). Health-related quality of life is an important aspect in evaluating the results of urinary incontinence treatment. The questionnaires that are applied should be relevant and validated and are expected to provide reliable information from clinical practice and be easily applicable. Questionnaires used to assess health-related quality of life related to urinary incontinence are King's Health Questionnaire (KHQ) and the International Incontinence Questionnaire - Short Form (ICIQ-SF) (9). Taking into account the relevance and complexity of UI, the study asked how UI affects the quality of life. The goal was to answer the question by reviewing articles and professional literature to assess how UI affects the quality of life.

Methods

The search was focused on research articles which are connected with the quality of life of patients diagnosed with urinary incontinence. Data collection took place in the period from August 2017 to September 2022 through the portal SAGE Journals, BMC Women's Health, SciELO Brasil, Aging Clinical and Experimental Research and Revista Enfermagem UERJ. We used keywords such as quality of life and UI. These terms were searched in databases using the Boolean logical operator and cross-examined as title words and abstract. For the precision of the study and in order to define the sample, the following relevant criteria were included: complete articles published on the portals SAGE Journals, BMC Women's Health, SciELO Brasil, Aging Clinical and Experimental Research and Revista Enfermagem UERJ between 2017 and 2022; articles related to the subject of the study; articles that answered the study question; and articles entirely available in English. Articles that were not relevant, not within the scope of our study or were duplicated during the search were excluded.

Table 1. Tabular presentation of the relevant papers

1. FINDING ARTICLES	SAGE Journals n=10	n=70
	BMC Women`s Health n=20	
	SciELO Brasil n=15	
	Aging Clinical and Experimental Research n=10	
	Revista Enfermagem UERJ n=15	
2. ANALYSIS OF ARTICLES	Articles selected due to their titles and abstracts n=30	
	Articles selected for full reading n=15	
3. CONCLUSION	Articles selected for review n=7	

Results

During the search, we initially recorded a total of 70 articles, 10 in SAGE Journals, 20 in BMC Women`s Health, 15 in SciELO Brasil, 10 in Aging Clinical and Experimental Research and 15 in Revista Enfermagem UERJ. After additional evaluation and taking into account our goal, 30 articles were selected. 15 articles were selected for analysis and reading, and relevant articles were analyzed in detail according to the year of publication, title, method and results. Seven articles answered the study question.

The results of scientific research conducted in France, Germany, Great Britain and the USA show that UI directly affects the quality of life, which then negatively affects mental health, especially in women aged 45-60 (8-11,14). Further research is necessary for a better understanding of pharmacological and non-pharmacological interventions that can improve the

patient`s quality of life (10).

Considering the environmental factors and the strong influence of UI on the quality of life, studies suggest that it is necessary to analyze the quality of life through special questionnaires. Questionnaires must be validated, sensitive and provide real insight into the quality of life (13).

Types of urinary incontinence and their impact on quality of life

There was 556 women who participated in the research conducted in a urogynecology clinic in Brazil. Mixed UI was identified as the most common type (n=348/62.6%), followed by stress incontinence (n=173/31.1%) and urgent incontinence (n=35/6.3%) (12). Women with mixed incontinence had a greater impact on general (SF-36) and specific (KHQ and ICIQ-SF) quality of life compared to others ($p < 0.05$). In the assessment of sexual function (PISQ-12) there was no difference between the groups ($p = 0.28$) (12).

Table 2. Description of selected articles

Title/Year	Journal	Method	Main Results
1. The Impact of Urinary Incontinence on Quality of Life in Those Receiving Home Care Services, 2018. (3)	SAGE Journals	Cross-sectional study	It was determined that UI evaluated with the ICIQ-SF scale in those receiving home care negatively affected their quality of life.
2. Quality of life in women with urinary incontinence seeking care using e-health, 2021. (8)	BMC Women's Health	Data analysis	QoL was affected more by UUI/MUI than by SUI, it was affected most by the severity of leakage in this population.
3. Profile and quality of life of women in pelvic floor rehabilitation, 2018. (9)	SCIELO Brazil	Observational, analytical, and cross-sectional study	The type of UI and changes in sexual activity affect the HRQoL.
4. Urinary incontinence and quality of life: a systematic review and metaanalysis, 2021. (10)	Aging Clinical and Experimental Research	Data analysis	UI is associated with a poor QoL, with a strong level of certainty.
5. Female urinary incontinence and sexuality, 2017. (11)	SciELO Brasil	Data analysis	The presence of urinary incontinence is associated to stigma, fear, embarrassment and shame related to clinical condition, with repercussion on self-esteem and disturbance of personal, social and sexual life.
6. Impact of urinary incontinence types on women's quality of life, 2017. (12)	SciELO Brasil	Cross-sectional study	All types of urinary incontinence interfere with the general and specific quality of life, but women with mixed urinary incontinence are the most affected.
7. Urinary incontinence and quality of life, 2020. (13)	Revista Enfermagem UERJ	Data analysis	The negative impact of UI on women's quality of life has been proven, due to physical, sexual, professional and social limitations and feelings such as shame, lack of control, weakness, insecurity, suffering and guilt.

A study conducted in Japan shows that stress incontinence and urgent incontinence are associated with general impairment of female sexual function in a mild degree. Only urgent incontinence is associated with sexual difficulties in specific domains including vaginal wetting and pain during intercourse. Questionnaires were distributed to 2,159 female employees of two hospitals in Japan, of whom 883 were sexually active (15). Stress incontinence is the most common type of incontinence in women. Weakening of the pelvic muscles and urinary sphincter muscles can occur due to multiple vaginal births or pelvic surgery. Only 25-30% of women decide to seek medical help (2). Stress incontinence in the male population occurs after surgical procedures, for example, if a part of the bladder or the upper part of the urethra is injured during prostate surgery. During daily activities such as coughing, running, jumping, etc., signs such as involuntary leakage of urine appear. In 5% of operated patients, stress incontinence is temporary, while in a smaller percentage (less than 5%) it is unfortunately permanent (2). Patients with UI use absorbent pads or pull-up pants and other aids, but in certain conditions, dermatitis may appear, which is also associated with reduced quality of life.

Impact of urinary incontinence on the quality of life

Urinary incontinence can be associated with a number of risk factors. Specific risk factors are related to gender, age, presence of dementia and mobility. Furthermore, food intake, mobility and treatment with diuretics can also affect diuresis and therefore the occurrence of urinary incontinence. All of the above factors are associated with a poor quality of life in patients (10). UI has an impact on all aspects of an individual's life. It leads to a very unpleasant and stressful experience. Women feel impure and state that they feel that something is wrong with them, for which they sometimes feel guilty. These feelings often result in social isolation, depression, low self-esteem, anxiety, and failure to fulfil daily obligations (11). UI affects the individual in several dimensions: the physical, emotional, psychological, social and sexual spheres of life are affected. The severity of the symptoms depends on the type of incontinence

and the amount of urine that comes out. The environment also has a significant impact on the quality of life of an individual with UI (13). Although it is assumed that there is a high probability of an influence of UI on sex life, the studies present very different results due to the great variability of research methods. UI is associated with sexual problems in women. Fear of unpleasant odor and leakage of urine during coitus are associated with a change in self-image and self-esteem, and are responsible for the low frequency of sexual activity among incontinent women. In the elderly population, the appearance of UI has a negative impact on sexuality. Several papers have studied the relationship between different types of urinary incontinence and sexuality (11). Furthermore, as far as daily tasks are concerned, most problems are associated with those activities that require physical effort and lifting loads due to urine leakage. Such activities are thereby avoided. Furthermore, frequent trips to the toilet limit the individual in a professional sense due to the frequent need to interrupt work. Additional research has looked at the link between depression and UI. UI and depression disproportionately affect women and are associated with social stigma. Comorbid depression can increase a woman's feeling of discomfort due to incontinence and lead to shame and social isolation (16).

The role of the nurse in UI

The role of the nurse in the treatment of UI is significant. The nurse makes a nursing diagnosis, assesses the patient's condition, then plans health care, implements interventions and evaluates the patient's condition. Studies have shown that a nurse with higher and higher education can provide clinical care for people with UI and provide behavioral therapy. Due to the potential complexity of the problem, especially in the case of elderly patients, medical cooperation and an interdisciplinary approach enable a comprehensive treatment. The findings of this study confirm the significant role of the nurse in the recognition and therapy of UI (17). In addition to providing care for patients with UI, they also conduct research with the aim of better understanding the condition and improving the quality of life for newly diagnosed patients.

Conclusion

It has been proven that UI greatly affects the quality of life of both women and men. Urinary incontinence can be associated with several factors, some of which are gender, age, presence of dementia and mobility status. Furthermore, food intake and diuretic therapy can also affect diuresis and therefore the occurrence of UI. Incontinence is a major social, medical and hygienic problem, and in patients it causes a reduced quality of life, which manifests itself as a loss of self-esteem, feelings of discomfort, insecurity, withdrawal and depression.

A literature search was conducted and only articles that were available entirely in English were included. The conclusion is that UI undoubtedly affects the quality of life of women and men, and early diagnosis and a holistic approach to the patient are needed. It is important to work to preserve and improve the quality of an individual's life. It is recommended to carry out a qualitative study on understanding the impact of urinary incontinence on the quality of life of women and men, and it should be extended to the general population.

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UTJECAJ URINARNE INKONTINENCIJE NA KVALITETU ŽIVOTA

Sažetak

Uvod. Inkontinencija urina je nekontrolirano otjecanje urina u dobi čovjekova života kada bi trebalo biti pod voljnom kontrolom, pojavljuje se kod oba spola, no češća je kod žena. Inkontinencija je veliki socijalni, medicinski i higijenski problem. Kvaliteta života ozbiljno je ugrožena pri pojavi inkontinencije te ograničava pojedinca u svakodnevnom funkcioniranju.

Cilj. Identificirati utjecaj urinarne inkontinencije na kvalitetu života pregledom istraživačkih radova te stručne literature.

Metode. Istraživanje je bilo usmjereno na analizu podataka o kvaliteti života pacijenata s dijagnozom urinarne inkontinencije. Korišteni su članci objavljeni od 2017. do 2022. koji su bili prepoznati kao relevantni članci za rad. Za analizu je izabrano sedam članaka.

Rezultati. Rezultati su provedeni u dva koraka. Prvi se korak sastojao od pronalaska odgovarajućih, kvalitetnih istraživačkih radova. Drugi je korak bio analiza relevantnih radova.

Zaključak. Urinarna inkontinencija dokazano uvelike utječe na kvalitetu života te sa sobom nosi niz mentalnih problema poput gubitka samopoštovanja, osjećaja nelagode, nesigurnosti, povlačenja i depresije. Važno je na vrijeme prepoznati urinarnu inkontinenciju te provesti odgovarajuće metode liječenja kako bi se zadržala razina kvalitete života koja je prihvatljiva za pojedinca.

Ključne riječi: medicinska sestra, pacijent, kvaliteta života, urinarna inkontinencija
