

Urinary incontinence: quality of life and psychological aspects

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Abstract

The objective of this study was to evaluate the impact of female urinary incontinence (UI) on quality of life. The method of research is based on a literature search on PubMed, Cochrane library and relevant articles from 1977 to 2012. Forty-eight works were found. Literature showed that UI affects a large percentage of the aged out patients. Women experience UI because of many reasons such as childbirth, menopause and previous gynaecologic surgery. Incontinence is to be treated as it impacts physiological and psychological aspects of patient's life. Treatments include medical, physical (rehabilitation) and surgical approaches. Measures for assessment are made up by specific and non-specific questionnaires. Evaluation of female incontinence must take into account patients with and without medical treatment.

Every sort of therapy has to consider the psychological impact too. In current literature depression, anxiety, shame and decreed self-efficacy resulted as the most important factors involving women with UI.

Introduction

Urinary incontinence (UI), according to the International Continence Society (ICS) is a *complaint of any involuntary leakage of urine*,¹ and a common health problem for women. There are lots of different kinds of urinary incontinence, including stress, urge, mixed, and overflow incontinence. Stress incontinence (SUI) is involuntary leakage from effort, exertion, sneezing or coughing. It is usually linked to an increased urethral mobility or intrinsic sphincter deficiency. Urge UI is involuntary leakage accompanied or immediately preceded by urgency, and it usually indicates detrusor overactivity. Mixed incontinence (MUI) is the complaint of involuntary leakage associated with urgency and physical stress. A less common type of urinary incontinence is overflow incontinence, which is associated

with overdistension of the bladder usually caused by obstruction (severe pelvic organ prolapse) or a neurological condition (spinal cord injury).²

SUI increases with age. 17-55% of old women report having experienced urinary incontinence, compared with 12-42% of middle age.³ Women experience SUI because of many reasons such as pregnancy and previous gynaecologic surgery. SUI is often associated with obesity as well. Lots of factors are either inevitable (aging) or socially desirable (vaginal delivery).⁴⁻⁶ Consequently SUI is considered as a normal condition.⁷ Furthermore, owing to embarrassment and shame SUI exists as a *condition of silence*.⁸⁻¹⁰ Moreover SUI might have serious consequences such as depression, anxiety and low quality of life.¹¹

Method of research

A literature research has been carried on in the main databases (e.g. PubMed, Cochrane library) and relevant articles from 1977 to 2012 were selected.

Exploring the theoretical definitions of UI in current literature, this article analyzes the multifaceted physiological and psychological issues involved in the examined pathology, as well as the instruments used for the assessment of quality of life (QoL).

Results

Forty-eight works were found. Women with UI are more likely to report a poorer quality of life. Shame triggered by leakage and odor can impair a woman's ability to participate in everyday activities, social life, sexual performance and lead to relational troubles.¹²⁻¹⁵ Many women struggling with SUI do not report their symptoms to their physicians and often keep the associated inconvenience and discomfort for many years, possibly because they are embarrassed. Others are not worried about their condition to seek treatment.¹⁶

Shame,¹⁷ depression and anxiety have been suggested to co-occur in incontinent women.¹⁸ Various researchers have found a relation between incontinence and depression.^{19,20} It is not clear if the incontinence causes depression or vice versa. However, it is clear that a relationship exists. Bandura²¹ claimed that depression will occur when either self-efficacy (the belief a person has in his or her ability to perform specific behaviors) or outcome expectancy is low. Depression is described as *an alteration in mood ranging from a mild sadness to overwhelming despair. It is characterized by feelings of sadness, emptiness, dissatis-*

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*faction, lowered self-esteem, inactivity, and self-depreciation.*²² Depression may be elicited by personal perception of cognition,²³ negative events and physiological states. Depression takes place when a person doesn't feel able to control the outcome of an action (external locus of control). This perception affects the choice of activities to *engage in* and the invested effort. Self-evaluation of events is often biased by those with low self-efficacy, consequently depression is likely to occur when outcome expectancy is high and performance expectation is low.²⁴ The effect of self-efficacy on QoL has been investigated in several studies of health related behaviors. Self-efficacy and quality of life are positively whereas depression and self-efficacy are negatively related. Moreover, Leanza and Passanisi²⁵ found that stress and low negative affective self-efficacy happen among women suffering from SUI. This might suggest the idea that distress and scarce self-efficacy might not only be the predictors but also a consequence of this urogynaecological pathology. Since all the types of incontinence (SUI, UI and MUI) highly affect QoL, behavioral techniques and rehabilitation of the pelvic floor are strongly recommended.²⁶ In addition, Swati *et al.*²⁷ found that tension-free vaginal tape procedure significantly improves the overall sex lives of women with SUI: orgasm incontinence, penetration incontinence, post-coital infections, anxiety and avoidance of sex are all reduced. Symptoms and impact of incontinence have to be properly assessed and recorded before and after therapy.²⁸ Among the various health related quality of life measures used in literature, two kinds of instruments are available: specific and non specific questionnaires.

The most used specific questionnaires include the following: the Urinary

Incontinence Short Form (ICIQ), the Bristol Female Lower Urinary Tract Symptoms Questionnaire (BFLUTS), the King's Health Questionnaire (KHQ), the Incontinence Impact Questionnaire (IIQ), the Urinary Incontinence Severity Score (UISS), the Urinary Incontinence Specific Quality of Life Instrument (I-QOL, ICIQ-UIQOL) and the Geriatric Self-Efficacy index for Urinary Incontinence (GSE-UI).

The ICIQ Short Form is a four-item instrument aimed at assessing the symptoms of UI and their impact on the quality of life of men and women.²⁹ The first three items are scored and the fourth is an unscored self-diagnostic item. Scoring ranges from 0 to 21 for a summed score for the first three items; a higher score indicates worse symptoms/higher impact on QoL. The ICIQ short form for incontinence has recently been subject to considerable psychometric testing. A developmental version of the questionnaire was produced following systematic literature review. This questionnaire is available in 38 languages.

BFLUTS³⁰ [also known as ICI Questionnaire-Female Lower Urinary Tract Symptoms (ICIQ-FLUTS)] was created in the United Kingdom to assess the impact of female UI and other lower urinary tract symptoms on QoL. This questionnaire was developed from the longer questionnaire covering the occurrence and bother of some symptoms relating to incontinence and other lower urinary tract symptoms for women. This measure is available in 10 languages. A scored short form of the questionnaire is also available.

KHQ³¹ was developed at King's College Hospital in London as part of a large longitudinal study on quality of life. The questionnaire is made of three parts. The first section contains two items measuring general health and overall health related to urinary symptoms. The second section includes 19 questions divided into seven factors related to QoL: incontinence impact, role limitations, physical limitations, social limitations, personal relationships, emotions, sleep and energy, severity coping measures, general health perception, and symptom severity. The third section of the questionnaire consists of 11 questions measuring the bother or impact of urinary symptoms on QoL. High scores indicate a worse quality of life. This instrument is available in 45 languages.

IIQ³² was developed in the United States to assess the psychosocial impact of urinary incontinence in women and consists of 30 items. Scores are obtained overall or for four subscales: physical activity, travel, social relationships, and emotional health. The IIQ has been found to have good psychometric properties across a range of studies. There is also a short form of the IIQ, the IIQ-7, which consists of seven questions with the same psychomet-

ric characteristics of the long form. Both questionnaires are available in English and Turkish.

UISS³³ was developed by the Finnish Gynecological Society's urogynecologic working group in 1992, and consists of 10 items divided into 3 clusters; social interactions, physical activities and sexual function, with a visual analogue scale for subjective burden of incontinence on a 100 mm scale. It has been widely used in clinical practice.

I-QOL, ICIQ-UIQOL^{34,35} is a 22-item measure developed to assess the quality of life of women with UI. The instrument consists of three subscale: avoidance and limiting behaviors, psychosocial impacts, and social embarrassment. Responses for all items are scored on a 5-point scale where a higher score indicates better quality of life. This questionnaire is available in 35 languages.

GSE-UI³⁶ is a new instrument to measure one of the psychological factors potentially underlying continence statuses: confidence or self-efficacy for preventing unwanted urine loss. Self-efficacy, the belief a person has in his or her ability to perform specific behaviors, has been shown to be an important factor for improving outcomes in other geriatric conditions, such as falls.³⁷

The non-specific questionnaires include the locus of control of behavior (LCB), the stress psychological measure (MSP) and the perceived negative affective self-efficacy scale (PNASES).

LCB³⁸ was applied for the assessment of incontinence. This questionnaire consists of 17 items with a rating scale ranging from 0 to 5. Seven items (1, 5, 7, 8, 13, 15, and 16) are aimed at assessing the inner control, whereas the others refer to the external control. The indicative value of the 17 answers consists into the sum of the items score over the external control plus the inverted scores (5=0 - 0=5) of the questions relevant to the inner control.

MSP is a 49 item-questionnaire self-report developed by Tessier *et al.*³⁹ (*Measure du Stress Psychologique*, University Laval of Quebec), and adapted to an Italian sample by Di Nuovo, Rispoli and Genta.⁴⁰ Scoring includes an overall score and 6 clusters of items: i) loss of control and irritability (11-22-32-35-36-46); ii) psycho-physiological sensation (16-25-34-40); iii) sense of effort and confusion (33-37-41-42); iv) depressive anxiety (6-13-15-29); v) pains and physical problems (12-14-28); vi) hyperactivity and accelerated behaviors (26-44-45).

PNASES⁴¹ is an 8 item measure, developed by Caprara *et al.*, describing circumstances in which people may experience frustration and discouragement. Perceived self-efficacy^{42,43} is concerned with people's confidence in their capacities to cope with events that affect their

lives, showing high control.

Self-efficacy has been shown to be an important factor for improving QoL and reducing stress. As UI commonly occurs in many old women, identification of pathology, both clinically and psychologically, may help to reduce stress and other negative consequences avoiding the increasing number of healthcare visits annually.^{25,44}

When UI is properly treated with physical, psychological and surgical approaches, patients might change the expectation of life. Further fore it happens when women are able to face rather than avoid the problem.⁴⁵⁻⁴⁷

Conclusions

Although a number of UI measures exist, there is substantial evidence that they are rarely used in clinical practice.⁴⁸ It is essential that the warning signs of UI and their psychological impact may be properly assessed. The most evident (overt) and, above all, the most hidden (covert) symptoms, negatively affect QoL regarding physical, psychological problems and interfere with both sexual and social life.

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