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# URINARY INCONTINENCE: THE IMPACT ON THE QUALITY OF LIFE

## Urinary incontinence: the impact on the quality of life

### Abstract

Quality of life (QoL) assessment represents an emerging focus in the health area since it use can complement clinical practice and optimize resources. Urinary incontinence is a common consequence in the oncologic pathology of the prostate that severely affects QoL. A descriptive, analytical and longitudinal study was conducted with the participation of oncological patients from the ambulatory urology department of an oncology hospital unit of the North of Portugal. The sample, obtained through convenience non-probabilistic sampling between October 2015 and July 2016, included 60 patients. The ICIQ-SF was used. The impact on QoL was classified as: zero (0), no impact; from 1 to 3, slight impact; 4 to 6, moderate; from 7 to 9, severe; and, of 10 or more, very serious.

Urinary incontinence had a moderate impact on the perception of QoL of patients in M0 and M1. It was observed that as the symptoms decreased, the patients' perception of QoL increased and M3 and M6 had a slight impact.

**KEYWORDS:** QUALITY OF LIFE; PROSTATE CANCER, URINARY INCONTINENCE.

### INTRODUCTION

The concept of quality of life (QoL) has great significance in the area of health, because the number of people living with chronic diseases is increasing.<sup>(1)</sup>

According to WHO (1995), QoL is "the individual's perception of their insertion in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns."<sup>(2)</sup> From a broad and dynamic subjective concept<sup>(3)</sup>, various terms have been used in the literature to define QoL, such as well-being<sup>(4)</sup> the degree to which people enjoy the possibilities of

their lives, the perception of life satisfaction.<sup>(5)</sup> According to Noronha et al. (2016) the broad dimension of health and its relationship with various positive and negative aspects of life allow different forms of assessment, leading individuals with the same morbidity to manifest different levels of health and well-being, physical and emotional.<sup>(6)</sup> In view of the multidimensionality of QoL, the concept of Health Related Quality of Life (HRQoL) emerged, Quality of life assessment represents an emerging focus in the health area since its use can complement clinical practice and optimize resources.<sup>(6)</sup> Since cancer is a disease with a

high morbidity and mortality rate, it is important to take into account in global care not only survival, but also quality of life.<sup>(7)</sup>

Health-related quality of life assessment (HRQoL) provides information on overall health status, signs and symptoms, psychological and social conditions.<sup>(7)</sup>

Prostate cancer and its treatments can affect quality of life; however, the effects differ throughout the disease stage, time and type of treatment. It is diagnosed increasingly early, so the results of survival are increasingly favorable. The basis of selection of treatments has changed, taking into account the quality of life.<sup>(8) (9)</sup>

Urinary incontinence (UI) is one of the most common consequence of prostate cancer and severely affects quality of life.<sup>(10)</sup>

Urinary incontinence is defined as involuntary loss of urine of sufficient gravity to be a health and social problem. Although UI is not a life threatening condition, it can bring about changes in individuals' lifestyles in relation to their sense of well-being.<sup>(11)</sup>

Although most patients regain urinary continence at least one year after surgery, many continue to report the presence of this symptom.<sup>(12)</sup>

Urinary incontinence has a major social and emotional impact on both the patient and the family, and is therefore a significant source of reduced quality of life (QoL) in patients with prostate cancer.<sup>(10)</sup>

## AIM

To identify the evolution of the impact of urinary incontinence on the QoL of the patient with oncologic pathology of the prostate.

## METHODS

A descriptive, analytical and longitudinal study in an hospital in the

north of Portugal. Sample, not probabilistic for convenience, consisting of 60 patients. Data collection performed from October 2015 to July 2016, in the first medical consultation after diagnosis (M0) and one month (M1), three months (M3) and six months (M6) after treatment. The assessment moments match with the follow-up consultations recommended by the institution. The ICIQ-SF was used in order to assess changes in quality of life in patients with urinary incontinence. The impact on QoL was classified as: zero (0), no impact; from 1 to 3,

TABLE 1

### CHARACTERIZATION (N = 60)

	N	%
<b>AGE</b>		
45 a 54	3	5,0
55 a 64	17	28,3
65 a 74	22	36,7
75 a 84	11	18,3
85 and more	7	11,7
<b>LITERARY QUALIFICATIONS</b>		
Without qualifications	12	20,0
Up to 12 years of schooling	32	53,3
Higher education Ensino Superior	16	26,7
<b>PROFESION</b>		
Retired	32	53,3
Unemployed	1	1,7
Representatives of the legislature	1	1,7
Workers in personal protective services	5	8,3
Plant and machine operators	4	6,7
Skilled workers in industry, construction	3	5,0
Farmers and skilled agricultural workers	3	5,0
Specialists in Intellectual and Scientific Activities	10	16,7
Middle level technicians and professions	1	1,7
<b>MARITAL STATUS</b>		
Single	5	8,3
Married	41	68,3
Divorced	4	6,7
Widower	10	16,7

slight impact; 4 to 6, moderate; from 7 to 9, severe; and, of 10 or more, very serious.<sup>(13)</sup>

Data was analyzed using SPSS® (Statistical Package for the Social Sciences) version 25.0 for Windows. All ethical-legal considerations were respected. The voluntary nature of the participation is emphasized and a declaration of informed consent has been signed by each participant. This research was approved by the board of directors of the institution and the Ethics Committee (Opinion N.º 107/014).



TABLE 2

TYPE OF TREATMENT		
	N	%
Surgical	18	30,0
Non-surgical	27	45,0
Surgical and non-surgical	15	25,0
<b>Total</b>	<b>60</b>	<b>100.0</b>

TABLE 3

INTERNAL CONSISTENCY	
Alpha de Cronbach	Avery (2004)
,877	.950

TABLE 4

EVOLUTION OF ICIQ VALUES				
	Minimum	Máximum	Mean	Standard deviation
M0	0	17	4,68	5,79
M1	0	17	5,62	6,26
M3	0	17	3,53	5,40
M6	0	15	2,58	4,92

**RESULTS**

The sample consisted of 60 men with a mean age of 69.8 years (SD = 9.8 years), ranging from a minimum of 51 years to a maximum of 90 years. The majority are in the 65-74 age group (36.7%), are married (68.3%), have up to 12 years of schooling (53.3%) and are in a retirement situation (53.3%). **Table 1.** Almost half of the sample underwent a non-surgical treatment (45%) 30% to a surgery. **Table 2.**

Regarding the internal consistency of the instrument used, and as in Avery et al (2004), the exploratory factorial analysis of ICIQ items confirmed the existence of a single robust factor accounting for 91.2% of the total variance. The internal consistency obtained with Cronbach's alpha coefficient was .877 (good). **Table 3.**

In Table 4 and Figure 1 we can see

the evolution of ICIQ values in the 4 evaluation moments. The differences are statistically significant,  $F(3, 177) = 3,240, p = .023$ . The paired comparison test indicates that the differences between the initial assessment and the 6th month assessment ( $p = .044$ ) and the 1st month assessment and the 6th month evaluation ( $p = .010$ ) are statistically significant. **Table 4 - Figure 1.**

**DISCUSSION**

In prostate cancer, age is an important risk factor, since both incidence and mortality increase significantly after age 50.

The mean age of study participants is 69.8 years; 36.7% of the participants are in the age range of 65-74 years, older than 50 years, corroborating with the observation that age

was a factor significant risk for the sample studied.

Regarding the type of treatment, 45% of our sample performed non-surgical treatment (radiotherapy, chemotherapy, hormone therapy or brachytherapy). The same happens in the Oraá study (2017), where 42% of the sample also performed non-surgical treatment. In this study we did not find statistically significant differences when we related the type of treatment and the urinary incontinence. In the study by Chien et al (2017), changes were found depending on the type of treatment selected. (14)

Regarding the impact of the QoL perception of the patients in this study, they had a moderate impact on M0 and M1, and as the symptomatology decreased, the patients' QoL perception increased, with M3 and M6 having a mild impact. which shows that urinary function worsened in the first month after surgery, and showed improvement in the following 12 months.

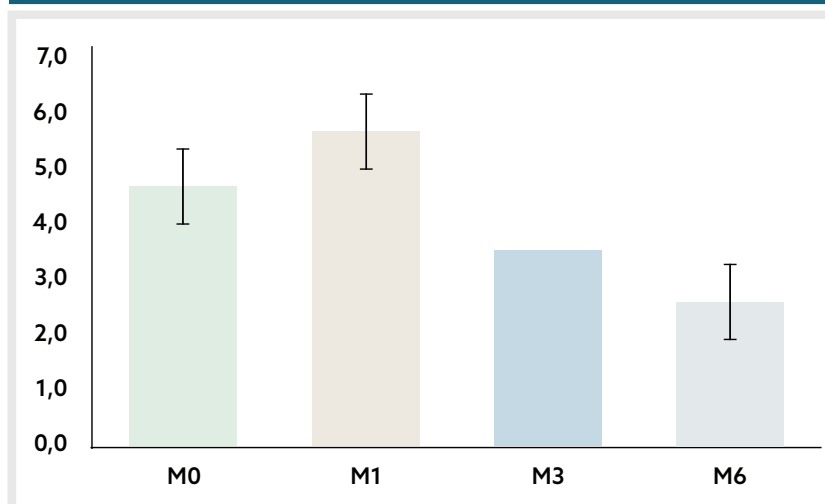
A study by Chien et al. (2017) reports that the results of urinary incontinence reduced for surgical surgical patients improving slightly at 24 months after treatment. However, the 24 month urinary recovery for surgical patients was significantly worse than for other types of treatment, wich is contrary to the results of our study.

**CONCLUSIONS**

Urinary incontinence has negative implications for both the patient and his or her family, especially on emotional, sexual and social issues, especially the psychic suffering they cause. Studies shows (4), (8), (9) that the impact on quality of life is greatest in the first month after treatment and depending on the type of treatment selected the recovery may be more or less slow. Patients with prostate cancer may experience changes in urinary function with different levels of impact

FIGURE 1

## EVOLUTION OF ICIQ VALUE



on their quality of life. It is critical that nurses identify these changes so that they can implement more effective interventions. The study has some limitations regarding the sample size. With a larger sample larger we could, probably, have obtained more marked responses in this domain. On the other hand, data collection proved to be complex due to the dynamics of the institution, which led to the loss of patients able to participate. It is proposed that further longitudinal studies be conducted to monitor the impact of urinary incontinence on the quality of life of prostate cancer patients taking into account the type of treatment. ▽



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