





Influence of urinary incontinence on the quality of life in primary health elderly patients

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ABSTRACT

Considering the current aging population, geriatric syndromes become the focus of the most prevalent health problems among the elderly. In this context, urinary incontinence (UI) is increasingly being addressed due to its potential to affect the quality of life and autonomy of these individuals. The present study aimed to verify the influence of UI on the quality of life of elderly individuals in a Family Health Strategy in Belém/PA. It was cross-sectional, descriptive, and quantitative research. Interviews were conducted with 70 elderly individuals, who were asked about sociodemographic and comorbidity data through the application of the ICIQ-SF (International Short Form Incontinence Consultation Questionnaire). There was a UI prevalence of 44% among the elderly, predominantly in women (81%). The characteristics of this urinary loss were predominantly infrequent loss (once a week or less) and a small amount. Regarding quality of life, groups were found to have a moderate-mild impact, similar to previous studies. Moreover, many elderly individuals did not report an impact on their quality of life despite the loss of urine, indicating compliance with the established condition, which is related to a naturalization process discussed in other research. The conclusion is that there is a high impact on the quality of life and prevalence of UI in the area.

Keywords: Health of the elderly, Urinary incontinence, Quality of life.

INTRODUCTION

In the midst of a natural and international process of population aging, which characterizes the demographic transition of countries, Brazil has a group of elderly people that is expected to increase fifteen times between 1950 and 2025, according to projections by the World Health Organization (WHO)¹.

Since the elderly population has a high frequency of polymorbidities and the consequent use of various medications, they require a consolidation of the true concept of health, which is advocated by the WHO itself. This concept recognizes that true health is not simply the absence of pathogenesis but rather a guarantee of quality of life, particularly as the elderly undergo their natural process of senescence².

Because of this, the discussion about the independence and autonomy of the elderly has become important. From their perception, independence is the elderly's greatest concern, specifically their functional capacity related to activities of daily living for maintaining their health, which can help reduce difficulties for

their families and communities. This concept aligns with the WHO's active aging³. In this context, the harmonious performance of the "functional domains" in the elderly stands out, including mobility, which is defined as the capacity for individual displacement and includes sphincter continence⁴.

However, when the proper functions of each domain are lost, it can lead to geriatric syndromes, including urinary incontinence. Sphincter continence is considered a basic vegetative function and is more difficult to lose compared to other actions in an independent daily routine since it is not strictly connected to the individual's learning process⁵.

Thus, continence plays a vital role in maintaining the functionality of the elderly, and any impairment of it can negatively impact their social participation due to its effects on individual mobility⁴. However, despite its importance, urinary incontinence is often neglected in clinical practice. It is important to emphasize that UI is not a natural aspect of the aging process⁵.

Furthermore, the prevalence of urinary incontinence is high, ranging from 30% to 60%

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depending on the age group and level of frailty in the elderly, and can also be influenced by the use of medications and comorbidities⁵. Incontinence is defined as the involuntary occurrence of urination that is frequent enough to cause social or health problems. It is considered a problem that can lead to depression, low self-esteem, withdrawal from social activities, and even intimate relationships. In addition, it can generate clinical repercussions such as falls, fractures, skin infections, and pressure ulcers⁶.

In summary, the loss of voiding control can lead to greater insecurity in the elderly and limit their social contact due to embarrassment, potentially resulting in isolation⁴. Because of that, family care is crucial for promoting integration and preserving their affective bonds to prevent social isolation³.

Regardless, many elderly people interpret this situation, which directly affects their quality of life, psycho-social aspects, and functional capacity, as a problem arising from the aging process. Furthermore, the fact that the condition is often not even mentioned spontaneously in clinical consultations indirectly affects the improvement of a treatable condition that could bring many benefits for them⁷.

Therefore, it is crucial for health professionals to be aware of this new reality and be prepared to understand better and treat the illnesses of the elderly. Functional capacity is emerging as a paradigm of health, and it has been proposed as a public initiative by the National Health Policy for the Elderly (PNSPI) in Brazil, which is part of the Unified Health System (*Sistema Único de Saúde – SUS*). This policy should be implemented in basic health units by members of the Family Health Strategy (*Estratégia Saúde da Família – ESF*), the primary care organizational model in Brazil. The goals of maintaining independence and autonomy for as long as possible necessarily include continence⁸.

For that reason, this study aims to evaluate the impact of urinary incontinence on the quality of life of elderly patients enrolled in the São Joaquim Family Health Strategy in Belém/PA, which may reflect a local situation that is representative of a global trend.

Moreover, this research seeks to determine the prevalence of urinary incontinence among the elderly in the São Joaquim Family Health Strategy.

MATERIALS AND METHODS

This is a descriptive, quantitative, cross-sectional study conducted according to the ethical

principles outlined in the Declaration of Helsinki and the Nuremberg Code, respecting the Norms for Research Involving Human Beings (Res. CNS 466/12) established by the National Health Council. The study received approval from the Human Research Ethics Committee at the University of the State of Pará (UEPA) under CAAE number 91074418.2.0000.5174. Prior to data collection, researchers obtained informed consent from each participant using a Free and Informed Consent Form (TCLE).

Technical information, data collect and casuistic

The researchers conducted interviews with 70 elderly individuals who were receiving care at the São Joaquim Family Health Strategy using a questionnaire called ICIQ-SF (International Consultation On Incontinence Questionnaire – Short Form). The questionnaire was used to gather information from the participants, filling questions related to their sociodemographic data (by their numerical identification) such as gender, age, and education, as well as their current health data, any existing comorbidities, including a previous diagnosis of urinary incontinence. It is important to note that the researchers added the last two items (education and current health data) to the original questionnaire, which had already been translated and validated into Portuguese by Tamanini et al.⁹ (Figure 1).

Considered simple and self-administered, it is a questionnaire that assesses the impact of urinary incontinence on the individual's quality of life and measures the severity of the urinary loss. It consists of four questions that address the frequency (question 5), severity (question 6), and auto-perceived impact (question 7) of urinary incontinence¹⁰.

Specifically, the question about the frequency of urinary loss is answered based on the elderly person's opinion and can vary from "never" to "once a week or less", and so on. Similarly, the severity is conveyed through the amount of urine at each loss, perceived as "none", "little", "medium", or "large". The individual's perception of the consequences of urinary loss in their daily life is measured on a scale of 0 to 10, where 0 means "no interference" and 10 means "very much interference".

It is important to highlight that the answers to questions 5, 6 and 7 have a score, which, when added together, indicates the impact of the symptom on the patient's life. The score is based on Ros et

al.'s method, with a maximum value of 21. This sum implies a worse quality of life, establishing an inverse proportion relationship: the higher the SCORE, the worse the quality of life¹¹.

In addition, the questionnaire has eight self-diagnosis items that are related to the causes or situations experienced by patients¹⁰, characterized by the exposure of options in which there is urinary leakage, such as physical exertion, coughing, or before reaching the bathroom.

The interviews were conducted between October and November 2018, both at the health unit itself and during home visits carried out with the Community Health Agents, local professionals related to the health unit. In the process, the researchers

split up and personally interviewed the 70 elderly people in the sample, applying the questionnaire by reading the questions to the respective participants and clarifying any doubts about the protocol.

The criteria to consider an individual continent is when they answer "never", "none", or "does not interfere" in questions 5, 6, and 7. An incontinent person scores differently from 0, meaning the elderly person who responds to any of the questions in the questionnaire in a different way than previously mentioned, in order to explain an existing condition. That such criteria were also used by Carvalho et al.¹².

Although simple, many seniors showed difficulty in fully understanding the questionnaire, especially regarding question 7 about the impact on

5. How often do you leak urine? (mark one answer)

- 0 Never
- 1 1 time a week or less
- 2 2 or 3 times a week
- 3 Once a day
- 4 Several times a day
- 5 All the time

6. We would like to know how much urine you think you lose (mark one answer)

- 0 None
- 2 Small amount
- 4 Moderate amount
- 6 Large amount

7. In general, how much does your leaking urine interfere with your daily life? Please circle a number between 0 (does not interfere) and 10 (interferes a lot):

0	1	2	3	4	5	6	7	8	9	10
Does not interfere										Interferes a lot

ICIQ Score: sum of results 3 + 4 + 5 = _____

8. When do you lose urine? (Please mark all that apply to you)

- Never
- I lose before reaching the bathroom
- I lose it when I cough or sneeze
- I lose when I'm sleeping
- I lose when I'm doing physical activities
- I lose it when I'm done peeing and I'm getting dressed
- I lose for no obvious reason
- I lose all the time

FIGURE 1. Section dedicated to the analysis of urinary incontinence from ICIQ-SF. Source: Research tool.

quality of life, according to their individual perception, and the existence of incontinence symptoms in the last month. To alleviate this problem, the researchers provided a better explanation of the questions to obtain the most reliable answers.

Selection and description of participants

The research included elderly individuals aged 60 and above, without any discrimination based on race, religion, gender, or socioeconomic status, who had the cognitive ability to comprehend the questions in the questionnaire and were registered in the São Joaquim Family Health Strategy during the research.

Those with cognitive impairment that could affect their understanding of the questions in the protocol were excluded from the study, as well as those who refused to participate.

Data analysis methodology

The data were analyzed using descriptive statistics, primarily through the use of graphs and tables to present the results in a clear manner. These were created using the Microsoft Office Excel 2016 software.

RESULTS

The research included 70 participants, with 30% being men and 70% women, as shown in Table I. In terms of education, the majority (66%) had incomplete primary education, followed by 19% who were illiterate and 8% with higher education. In terms of age, the largest group of participants (40%) fell within the 70-79-year-old age group, followed by 39% in the 60-69-year-old age group, 17% in the 80-89-year-old age group, and 4% were between 90-100 years old. The most frequent comorbidities were systemic arterial hypertension and type 2 diabetes.

In the survey, a prevalence of urinary incontinence was found in 44% of the elderly participants (Table I). Concerning individuals with urinary loss, there was also a predominance of females, representing most of the elderly affected by the problem (81%). Males constituted 19% of this sample.

In addition, the assessment of the quality of life is becoming increasingly important in healthcare

research as it takes into account the individual's perception of their disease, in addition to biological processes. For this purpose, the ICIQ-SF questionnaire provides 3 questions and a SCORE. Regarding frequency, it was found that the majority (64%) of elderly participants experienced urinary loss once a week or less (Graph 1), and with respect to the amount of urine lost, most (68%) reported a loss of a small amount, while 19% lost a moderate amount and 13% lost a large amount (Graph 2).

Among the affected elderly, the ICIQ-SF SCORE, which represents the impact of incontinence on quality of life based on the instrument's questions, revealed consequences classified as very severe in 3%, severe in 23%, moderate in 35% and mild in 39% of them (Graphic 3).

TABLE I

Demographic and clinical characteristics of the elderly participants in the research.

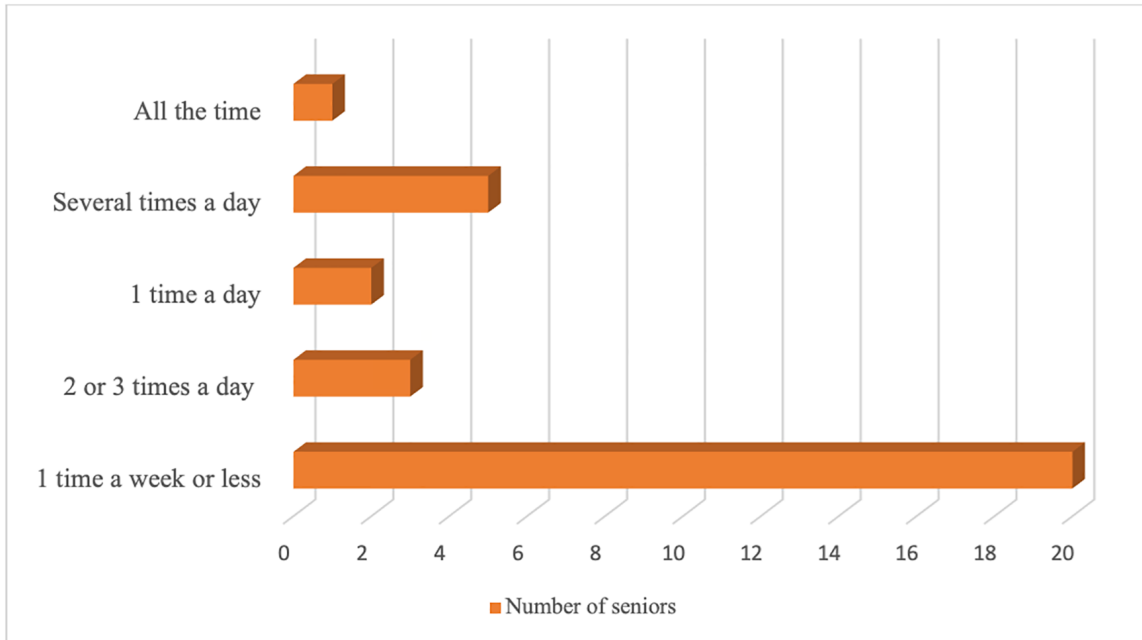
Characteristics		N	(%)
Sex	F	49	70
	M	21	30
Age	60-69	27	39
	70-79	28	40
	80-89	12	17
	90 or +	3	4
Scholarship	Illiterate	13	19
	Elementary School	46	66
	High School	6	7
	Higher Education	5	8
Diseases	None	15	*
	Hypertension	46	*
	Diabetes	11	*
	Comorbidity	28	*
Urinary Loss	Yes	31	44
	No	39	56
Urinary Loss	Yes	25	36
Female	No	24	34
Urinary Loss	Yes	6	9
	No	15	21

Source: Research tool.

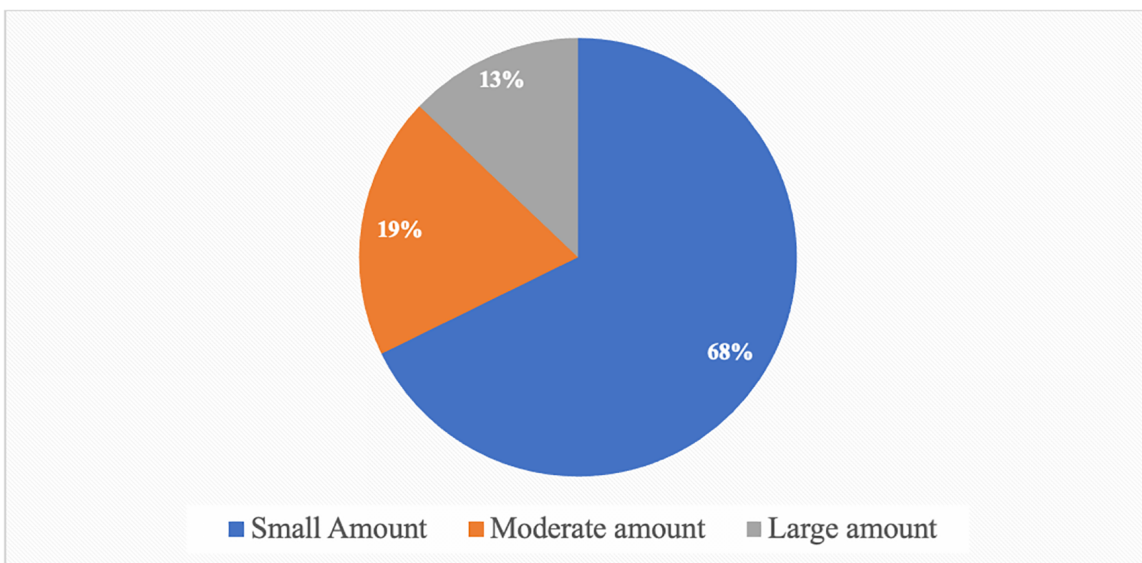
*Data that is included in more than one participant.

Although, from a simple objective analysis resulting from the SCORE, it is important to emphasize the relationship between the SCORE and the personal analysis of the interference of urine loss in an individual's quality of life. Many elderly participants in the study, despite reporting incontinence on the

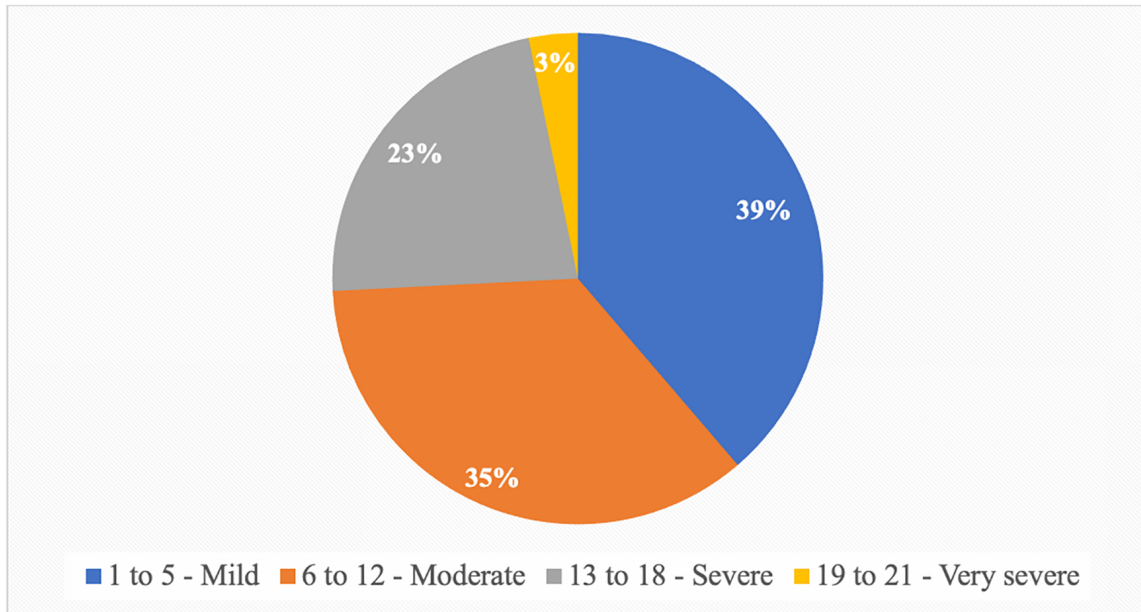
questionnaire, did not describe any impact on their quality of life. In fact, about 35% of the individuals classified as incontinent stated that the degree of interference in their life would be zero in question 7 (Graphic 4).



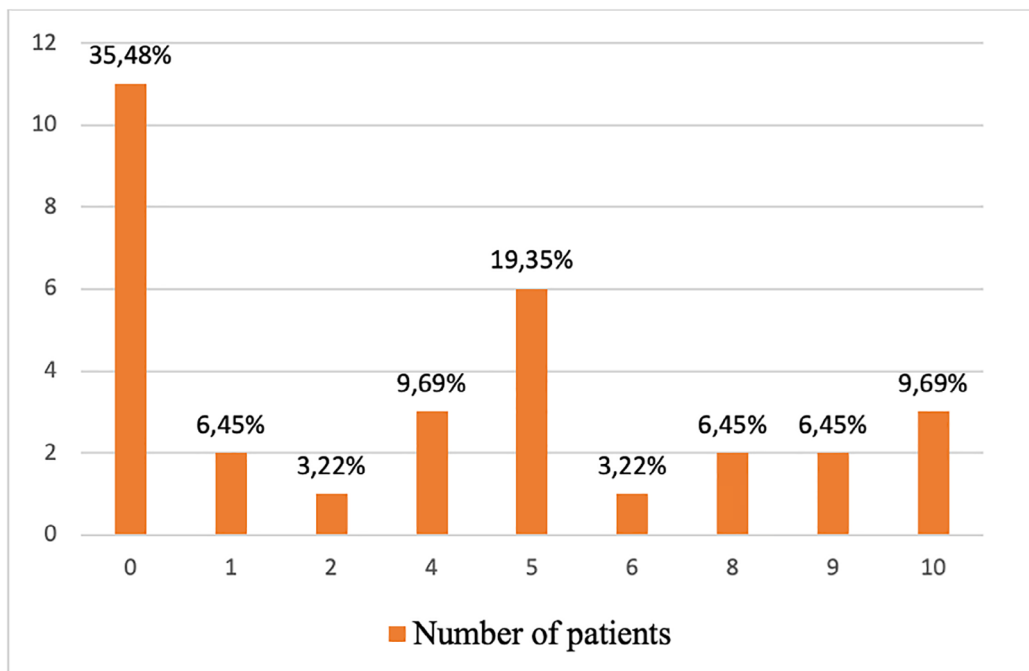
GRAPHIC 1. Frequency of urinary loss in the elderly with urinary incontinence present in the research. Source: Research tool.



GRAPHIC 2. Quantity of urinary loss by the elderly with urinary incontinence present in the research. Source: Research tool.



GRAPHIC 3. SCORE of impact on the quality of life in elderly people with urinary incontinence present in the research. Source: Research tool.



GRAPHIC 4. Perception of the elderly participants (in the research) related to the Interference in the Quality of Life generated by Incontinence - Scale from 0 to 10 - Question 7 of the ICIQ-SF. Source: Research tool.

DISCUSSION

The research results from the São Joaquim Family Health Strategy reflect the Brazilian context,

influenced by the aging process of the population¹ and the underdiagnosis of urinary incontinence (UI) in society¹¹. During the data collection process, the study identified this occurrence in the population. Many seniors

reported not discussing the subject with professionals, despite the longitudinal follow-up of the health unit. The causes of this behavior are associated with the research by Ros et al., where the main reasons cited were shame, the belief that there is no treatment available, or the belief that UI is a natural process of aging¹¹.

Most of the participants in the study were female, and it is believed that this situation occurs due to the greater demand for health services by women¹³. The prevalence of incontinence in the elderly was around 44%, which is slightly higher than that found in other studies on incontinence¹⁴.

In his study, Marques et al.¹⁵ identified factors related to a higher prevalence of UI, among them lower education levels described as 0 to 4 years of study. These findings are consistent with the sample in the present research, which has a predominance of individuals with little access to formal education. This fact is linked to the lack of information and the consequent deficit of awareness about health problems during aging and their possible treatments.

Among these incontinent elderly, women were also the majority (81%), and this prevalence corroborates the association of UI with the female gender in a marked way¹⁶. However, that differs from other prevalence estimates, such as those by Cavalcante et al.¹⁷, in which only 47.1% of women complained of UI. Even so, such data also reflect a high prevalence, which can be attributed to greater susceptibility to the problem arising from the physiological processes of aging and events that occur during life, such as childbirth^{18,19}.

Regarding the quality of life, in terms of frequency, most individuals lose urine once a week or less, a loss that is not so frequent but which is the average occurrence according to the study by Ros et al.¹¹.

Concerning the amount of urine lost, the discrepancies with the literature were greater since the number of elderly people who reported moderate and large loss was greater in comparison with the literature²⁰.

More than half of the elderly participants (61%) in this study experienced a severe-moderate impact on their quality of life, as assessed through the ICIQ-SF SCORE. These findings are consistent with the impacts reported in previous studies^{10,21}. However, the fact that some participants did not report any impact on their quality of life despite being objectively classified as incontinent is consistent

with the idea proposed by Padilha et al.²². They suggest that this lack of reporting may be due to a naturalization process of urinary incontinence, where the elderly perceive it as a normal part of aging and have developed coping mechanisms to deal with it²¹.

CONCLUSION

In regards to the study's objectives, it was found that approximately half of the elderly participants experienced some degree of urinary loss, and that this had a significant impact on their quality of life, ranging from moderate to severe. However, there was difficulty in accurately measuring the degree of interference due to the subjective nature of perception. It was also noted that many participants who scored above 0 on the ICIQ-SF questionnaire did not feel any disturbance in their daily lives, possibly due to the normalization of urinary incontinence in the elderly population.

Therefore, it is crucial to investigate this geriatric syndrome more thoroughly in health services, both in consultations and home care, in order to identify and treat cases promptly, improving the quality of life for elderly individuals assisted by the São Joaquim Family Health Strategy.

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Author's Contribution:

Livia Gomes Limonge, Roberta Mayumi Gonçalves Shinkai, Caio de Araújo Corrêa Formigosa and Monaliza dos Santos Pessoa contributed to the conception and design of the study, the analysis of the results and the writing of the article, based on the current literature. All authors approved the final version to be published and are responsible for all aspects of the work, including ensuring its accuracy and integrity.

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