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## Prevalence of urinary incontinence and perception of impact on quality of life in institutionalized elderly

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### ABSTRACT

#### OBJECTIVE

Identify the prevalence of urinary incontinence (UI) and perception of impact on quality of life in institutionalized elderly.

#### METHODS

Observational, descriptive study, with a qualitative approach carried out through data collection, with the application of a questionnaire composed of Subject Characterization and application of the International Consultation on Incontinence Questionnaire - Short Form (ICIQ-SF). Sample of 37 elderly people aged 60 or over, integrated mental and cognitive health and residents of Long-Term Care Institutions in the South Zone of the city of São Paulo. The data were submitted to descriptive analysis.

#### RESULTS

The average age of the elderly was 80 years, 33 women and 4 men. Of these, UI complaints are present in 26 elderly people (22 women and 4 men), reinforcing that UI is present in both sexes. In the ICIQ\_SF score, it is observed that urinary loss compromises the quality of life of most of those who report this symptom (n = 17).

#### CONCLUSIONS

A high prevalence of Urinary Incontinence was found in institutionalized elderly people with severe impairment in the subjects' quality of life.

#### DESCRIPTORS

Elderly. Institutionalized Seniors, Urinary incontinence.

### RESUMO

#### OBJETIVO

Identificar a prevalência de incontinência urinária (IU) e percepção de impacto na qualidade de vida em idosos institucionalizados.

#### MÉTODOS

Estudo observacional, descritivo, com abordagem qualitativa realizado por meio de coleta de dados, com aplicação de questionário composto por Caracterização do Sujeito e aplicação do International Consultation on Incontinence Questionnaire - Short Form (ICIQ-SF). Amostra de 37 idosos com 60 anos ou mais, saúde mental e cognitiva integrada e moradores de Instituições de Longa Permanência na Zona Sul do município de São Paulo. Os dados foram submetidos à análise descritiva.

#### RESULTADOS

A idade média dos idosos foi de 80 anos, sendo 33 mulheres e 4 homens. Desses, a queixa de IU está presente em 26 idosos (22 mulheres e 4 homens), reforçando que a IU está presente nos dois sexos. No escore do ICIQ\_SF, observa-se que a perda urinária compromete a qualidade de vida da maioria dos que relatam esse sintoma (n=17).

## CONCLUSÃO

Encontrou-se uma elevada prevalência de Incontinência Urinária em idosos institucionalizados com comprometimento severo na qualidade de vida dos sujeitos.

## DESCRITORES

Idosos. Idosos Institucionalizados. Incontinência Urinária.

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## INTRODUCTION

Urinary incontinence (UI) is defined by the International Continence Society as any involuntary loss of urine through the urethra and, since 1998, it is considered a disease<sup>1</sup>. It can be classified as stress urinary incontinence (SUI) when there is loss of urine after an exertion, sneezing or coughing; urge incontinence (UI), when the patient has a sudden and hardly postponable urge to urinate, described as urine loss accompanied or preceded by an emergency; and mixed urinary incontinence (MUI), which is the association of stress and urgency incontinence<sup>2-3</sup>.

It is a condition that can affect any stage of life, but with data that point to an increased incidence due to increasing age<sup>3-4</sup>, with higher prevalence and recurrence in women, related to many factors, including multiple pregnancies, child-births vaginal, menopause, obesity, smoking and gynecological or abdominal surgeries<sup>2-5</sup>.

The etiology in relation to UI is multifactorial, ranging from neurological disorders and predisposing diseases such as diabetes mellitus and multiple sclerosis<sup>6</sup>. During aging, this condition is related to the physiological process with functional and structural changes, and therefore with greater vulnerability to diseases, directly influencing dysfunctions in the lower urinary tract<sup>7</sup> as well as the weakness of the pelvic floor, the atrophy of muscles and tissues<sup>3-8</sup>, or because of surgical intervention<sup>4</sup>.

In general, UI is associated with a significant decline in the subject's quality of life, leading to social isolation, low self-esteem, psychological, social, physical, economic, and depressive implications directly interfering in well-being<sup>5-9</sup>. In addition, with the growing increase in the number of elderly people, according to IBGE<sup>10</sup> and with the difficulties that families report to take care of them at home, due to the insertion of women, main caregivers, in the job market; new family arrangements; decrease in the number of its members, it is observed as an alternative the referral of these elderly to Long Term Care Institutions, which, in principle, supply the needs of housing and care for the elderly<sup>11</sup>.

According to the Brazilian Society of Geriatrics and Gerontology (SBGG), in relation to the health of the elderly, institutions must indicate the health resources available to each resident, at all levels of care, whether public or private, as well as references, if applicable. It is necessary and provide for comprehensive health care for the elderly, addressing the aspects of promotion, protection, and prevention, in other words, attention is needed in all areas of health for the elderly<sup>12</sup>.

The identification of signs and symptoms related to Urinary Incontinence in institutionalized elderly people can generate changes in the approach of these individuals, with more guidance regarding personal care and hygiene. In addition to

motivating specific prevention and intervention actions within the institution<sup>13</sup>. Therefore, the Institutions are responsible for promoting the quality of life of their elderly, and it is up to them to offer efficient multiprofessional assistance<sup>11-13</sup>.

Therefore, the objective of the study was: To identify the prevalence of UI signs and symptoms in institutionalized elderly people and the impact on their quality of life.

## METHODS

This is an observational, descriptive research, with a qualitative approach carried out through data collection, with the application of a questionnaire consisting of a first part of Subject Characterization, containing personal data, such as sex, age, pre-existing diseases, physical activities and health perception and a second part with the application of the International Consultation on Incontinence Questionnaire - Short Form (ICIQ-SF), composed of five questions that assess the signs and symptoms of UI and the impact of urinary loss on quality of life. The ICIQ-SF was validated for the Portuguese language in 2004 by José Tadeu Nunes Tamanini, Miriam Dambros, Carlos Arturo Levi D'Ancona, Paulo César Rodrigues Palma and Nelson Rodrigues Netto Jr<sup>14</sup>.

The study population consisted of elderly, over 60 years old of both sexes, with mental and cognitive health, living in Long-Term Care Institutions in the South Zone of the city of São Paulo. After the authorization of the institutions, the questionnaire was applied individually, in a comfortable environment, a willing patient, with reading the informed consent form, the reason for the research, and after the decision of the elderly person to be interviewed, it was carried out between 10 and 15 minutes. The survey was conducted between February and May 2018.

The data were analyzed, part A - characterization of the subject in a qualitative and quantitative way in relation to the variables genders, age, received or treatment for UI. And the score of part B - ICIQ-SF was analyzed by the sum of the scores of the three questions (frequency of urinary loss, the volume of the loss and how much it interferes in the patient's life, according to her own impressions), this sum results in a final score ranging from 0 to 21, the higher the score the worse the quality of life.

The project was submitted to and approved by the CAEE Ethics Committee 67969917.7.0000.0081.

## RESULTS

Participated in this study, 37 elderly, over 60 years old, with full mental and cognitive health and residents of four Perma-

ment Institutions of different socioeconomic level in different locations in the South Zone of the city of São Paulo. Characterization data for the subjects are shown in Table 1.

Table 1. Characterization of institutionalized elderly (n=37)

Variable		
Sex	Woman	n = 33
	Man	n = 4
Age	Minimum	63 age
	Maximum	97 age
	Average	80,64 age
Pre-existing diseases	Arterial Hypertension	n = 15
	Arthritis	n = 6
	Depression	n = 6
	Cholesterol	n = 4
	Diabetes	n = 3
	Heart disease	n = 2
	Labirintite	n = 2
	Asthma	n = 1
	Arritima	n = 1
	Osteoporosis	n = 1
	Hepatitis B	n = 1
	Hypothyroidism	n = 1
	No reports preexisting disease	n = 8
	Health self-assessment	Excellent
Good health		n = 24
Bad		n = 2
Terrible		n = 4

In the question about whether they practiced any physical activity at some point in their lives before institutionalization, 10 elderly people mentioned that they practiced some form of physical activity. From the moment they started living at the Long-Term Care Institution, 20 elderly people mentioned doing some physical activity proposed by the Institution.

The ICIQ SHORT-FORM score is the result of the sum of questions 3, 4 and 5. The higher the score, the greater the negative impact on quality of life, the sum varies from 0 to 21. Since 0 there is no impact on life and 10 or more generates a very serious impact. The sum and impact are analyzed as follows: (0) no impact, (1 to 3) mild impact, (4 to 6) moderate impact, (7 to 9) severe impact and, (10 or more) the impact is very serious.

Regarding the interference that urinary incontinence causes in the quality of life (QOL) of the elderly, it was observed that the ICIQ-SF score of the incontinent elderly (n = 26, 22 women and 4 men), ranged from 7 -19, being that the higher the score, the worse the quality of life. The data collected in this study have the following profile (Table 2).

Table 2. ICIQ profile (n=26)..

Subject	Sex*	Loss of urine	Quantity	Interference in quality of live	ICIQ Score
1	1	1	4	4	9
2	1	2	2	5	9
3	1	3	2	2	7
4	1	2	2	4	7
5	1	2	2	3	7
6	1	1	2	7	10
7	1	3	6	10	19
8	1	2	2	6	10
9	1	5	4	8	17
10	2	4	6	8	18
11	1	4	4	7	15
12	1	2	2	9	13
13	1	4	6	6	16
14	2	4	4	4	12
15	1	3	2	5	10
16	1	5	4	7	16
17	1	1	2	3	6
18	1	1	2	4	7
19	2	4	2	5	11
20	1	1	2	4	7
21	1	1	2	8	11
22	1	4	2	9	15
23	1	4	4	9	17
24	2	1	2	9	12
25	1	4	4	9	17
26	1	4	2	2	8

\*Sex 1- Woman 2- Man

## DISCUSSION

For the beginning of data collection, all subjects were properly oriented and informed of what was involved, clarifying any doubts. They were given the option of the interviewer himself to mark the questions and although illiteracy was reported by only 10 respondents, all of them chose to only answer and not write / answer.

The higher incidence of women (33 women) in the interview sample is justified by the fact that in Brazil, according to IBGE<sup>10</sup>, women live, on average, almost seven years longer than men (79.1 years compared to 71,9). This configuration is relatively typical since women have a longer survival, mainly because they take better care of their own health, they seek medical assistance and tests more frequently than men<sup>11</sup>.

When questioning whether the elderly practiced any physical activity before institutionalization, it was noted that this practice was not so common. Of the 37 elderly, only 10 practiced activity, such as walking to work, "gymnastics", gym, dancing, cycling and / or running. According to the World Health Organization (WHO) "health is a state of complete physical, mental and social well-being, and it does not consist only of the absence of disease or illness" 12 studies show that the regular practice of physical activities in old age has revealed itself as a determining factor regarding maintaining the quality of life and well-being of the elderly, in addition, most elderly people already show interest in staying healthier, active and independent at this stage of life<sup>15</sup>.

When asked if the Institution provides any activity, there was a difference in responses, some elderly people from the same institution reported that activities were offered, and others stated that no physical activity was available.

Regarding the activities they practice, 19 elderly people report practicing walking, and the majority also declared to practice exercises such as stretching and dancing. Only one institution, which in addition to monitoring and routine activities, also carries out recreational and recreational activities such as crafts, theater, reading, pool and chess games, senior dance. In this institution, most elderly people do one or more activities.

Pre-existing diseases are common in this age group. Systemic arterial hypertension (n = 15), arthritis (n = 6) and depression (n = 6) were the most frequent diseases. Of this sample, three subjects reported not having any disease. Regarding the care of pre-existing patients, they mention the use of control medication and only three elderly people undergo specific treatment (physiotherapy), which are related to the area of orthopedics.

Regarding the perception of their own health, the elderly self-rated themselves, mostly as having good health (n = 24) and the minority considered poor health (n = 4). At this point, it is worth mentioning how the perception can be influenced by the subject's mental state and not necessarily by his real health status<sup>10</sup>.

Many elderly people with UI signs and symptoms (n = 26) were noted, with 17 of them having a score equal to or above 10, which characterizes that UI generates a very serious impact on life. And this fact seems to be aggravated by the ignorance of the elderly regarding that urinary incontinence is a disease and not a consequence of aging. No elderly person mentioned receiving any type of guidance / treatment for the symptoms of urinary loss.

As for the question of when to lose urine, most lose before they get to the bathroom, loss while coughing or sneezing, loss while sleeping and loss for no obvious reason. Some answered more than one option.

Despite the prevalence and recurrence of UI being higher in women, of the four men who participated in this study, all reported UI, none of whom reported prostate cancer. Only one elderly person mentioned that his UI started after treat-

ment for Hypothyroidism. Although most elderly people are bored with UI, most consider it normal because of their age and would not undergo any treatment (surgical or physical) depending on their age.

Urinary incontinence is associated with an important decline in the subject's quality of life, directly interfering with well-being<sup>4,6</sup>. However, in this study, only one elderly woman observed a direct relationship between depression and UI, because as she needs attention and care, the family does not have time to take care, leading them to stay at the institution. In the other mentioned cases of depression, it was not possible to find a relationship with UI. What is observed is social isolation, that is, some elderly women report that they do not participate in certain social activities, as they feel constrained by the risk of urinary leakage. Reinforcing that isolation is one of the signs of UI strongly linked to depression<sup>2,6</sup>.

It is worth mentioning that, despite presenting the symptom of urine loss, the subjects are unaware of the UI as a disease and its possibilities of treatment or prevention. Likewise, in none of the institutions is UI prevented or treated, the elderly only receive care with hygiene and diaper change - teaching diaper change itself is a resource that can give more autonomy to the patient.

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Although the Brazilian Society of Geriatrics and Gerontology (SBGG), inform that the institutions must provide comprehensive care to the health of the elderly in all aspects, from the four institutions only in one the presence of a multidisciplinary team such as Physiotherapist, Occupational Therapist, Nurses, Nursing Assistants, Nutritionists, caregivers and specialized medical assistance. In the others, Physiotherapy is offered only privately and only in one, the presence of a Nurse was found. The care and maintenance of the elderly is done by caregivers and cooks.

## CONCLUSION

The data observed in this study show a high prevalence of Urinary Incontinence in institutionalized elderly, a fact consistent with what the literature emphasizes. And, despite being a known reality, it is observed that the Long-Term Institutions are not adequate to care for this common picture among the elderly.

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