

DEPRESSIVE SYMPTOMS AND QUALITY OF LIFE IN ELDERLY PEOPLE WITH URINARY INCONTINENCE WHO RECEIVE PUBLIC HEALTH BASIC ASSISTANCE: A POPULATION-BASED CROSS-SECTIONAL STUDY

Hypothesis / aims of study

The prevalence of Urinary Incontinence (UI) increases with advancing age, being one of the major health problems that affect the elderly population. UI may negatively affect the quality of life (QoL), physical health and mental health of the patients {1}. Depression is the most common psychiatric disorder among the elderly and, together with dementia, is considered to be a major cause of low quality of life in this population. This study aims to evaluate the relationship between UI, the presence of depressive symptoms and the quality of life among an elderly population who receive assistance from the Public Health System in Recife, Brazil.

Study design, materials and methods

A cross-sectional, population-based study was conducted. The starting point used to select participants was the Pernambuco cohort study, in which the target population was elderly people (more than 60 years old) who live in Recife, the capital of the state (Brazilian northeast). After approval by the Institutional Ethics Committee, the definition of the selected households was obtained through a multistage cluster sampling technique with random drawings. The first stage required a random selection of 30 Basic Health Public Units (BHPU) from 148 in the municipality (primary sampling units). In the second stage, a random selection of community health agents (CHA) from the BHPU selected in the first stage was also performed. Within each BHPU, 01 CHA was chosen (secondary sampling units). In the third stage, the households were visited by each CHA in a random order, and the questionnaires were generated if it was determined that at least one elderly individual lived in the home. The respondents who fulfilled the selection criteria were personally interviewed using ICIQ-SF (International Consultation on Incontinence Questionnaire – Short Form) to evaluate the presence of UI and to define the types of UI and CASP-19 (Control, Autonomy, Self-realisation and Pleasure Questionnaire) to assess the general quality of life of the participants. Other diagnostic tools were also used: ISI (Incontinence Severity Index) to evaluate the UI severity, GDS5 (Geriatric Depression Scale) to assess the presence of depressive symptoms and AD8 (Ascertaining Dementia Interview) to evaluate potential cognitive decline among the participants. Student's t test, an analysis of variance (ANOVA) and the chi-square test were used to assess the differences between groups of subjects. Multivariate linear regression and multivariate logistic regression were used to determine the association between the explanatory variables and the controls and to estimate the relative risk, respectively. All of the tests were applied with 95% confidence, adopting a significance level of 5% ($\alpha < 0.05$).

Results

A total of 536 individuals participated in this study by completing the questionnaires. The sample consisted primarily of women (76.7%). Most of the participants had a low level of education (93.9%). Comorbidities were reported in 88.1% of the cases, and arterial hypertension was the most prevalent disease (75.3%). There was no difference between the continent and incontinent individuals with regard to the presence of these comorbidities, smoking history, alcohol consumption and physical activity. The mean score of the CASP-19 for the general population was 32.9 ± 7.5 . There was a high prevalence of individuals with probable depression (293, 54.7%) and signs of cognitive impairment (187, 34.9%). Urinary incontinence was reported by 222 (41.4%) of the individuals surveyed. More female participants reported UI (45% vs. 29.6%, $p=0.003$). The patients with UI were older than the continent individuals (73.8 ± 7.7 vs. 72.2 ± 7.3 years, respectively, $p = 0.01$). Among the elderly incontinent, 92 (41.4%), 54 (24.3%), 45 (20.3%) and 31 (14%) had urge incontinence, mixed incontinence, stress incontinence and other types, respectively. A poor quality of life was associated with severe urinary leakage ($p=0.02$), the presence of depression ($p<0.0001$), and cognitive impairment ($p<0.0001$). Analysing the various types of incontinence, the patients who reported "other types" of urinary loss also reported a poorer QoL ($p=0.001$). We also found that the female elderly patients with severe urinary incontinence are more likely to develop depression. Regarding the type of UI, this increased risk was observed in patients with MUI and who reported other types of urinary loss (Table 1).

Table 1: Association of the risk of depression with urinary incontinence and other characteristics of the Individual.

GDS-5	Odds Ratio	P value	Odds Ratio	P value
ISI	1.35	0.001		
ISI (stress incontinence)			1.26	0.20
ISI (urge incontinence)			1.29	0.06
ISI (mixed incontinence)			1.40	0.02
ISI (other types)			1.45	0.03
AD-8 score	1.19	0.38	1.18	0.40
Gender (female=0/male=1)	0.43	0.000	0.43	0.000
Age	0.99	0.27	0.99	0.26

Education level (illiterate=0/literate=1)	0.89	0.43	0.89	0.43
Smoking	1.45	0.19	1.44	0.20
Diabetes	1.28	0.26	1.28	0.26
Hypertension	0.94	0.75	0.93	0.74
Osteoarticular disorders*	1.04	0.91	1.03	0.94

* Spinal diseases, osteoporosis, joint disease/arthritis.

Interpretation of results

UI was a common disorder among the elderly population studied. The severity of urinary loss was associated with a compromised general quality of life of the population, along with depressive symptoms and cognitive decline. In addition, mixed urinary incontinence and severe cases of urinary incontinence that could not be classified as stress, urge or mixed incontinence also showed a greater risk of developing depressive symptoms. Similar results were described by other authors {2}.

Concluding message

Elderly health care public policy should consider UI to represent an important health condition that should be treated to decrease the risk of developing depressive symptoms and to improve the quality of life in geriatric populations.

References

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2. Felde G, Bjelland I, Hunskaar S. Anxiety and depression associated with incontinence in middle-aged women: a large Norwegian cross-sectional study. *Int Urogynecol J* 2012;23:299-306.

Disclosures

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