

## PREVALENCE AND SEVERITY OF UNDIAGNOSED URINARY INCONTINENCE, IN WOMEN SEEKING CARE IN GYNAECOLOGICAL CLINICS. HOW IDENTIFY WHICH ONES WANT TO BE STUDIED AND TREATED?.

### Hypothesis / aims of study

Urinary incontinence (UI) is a highly prevalent condition in women. Many women with UI do not directly report the symptoms to their nurses or doctors, when they are seeking medical care for gynaecological health problems. Most health care professionals, in general gynaecology practice, do not assess bladder control in their patients. Efforts need to be made, by health professionals, for to identify patients with UI.

The aims of the study were : 1. To evaluate the prevalence and severity of UI in women attending general gynecological practices by a validated self-reported specific questionnaire. 2.To assess the factors associated to the willingness of the women, who not directly have reported their UI, to undergo further study and treatment, when their UI symptoms have been detected by the health professionals.

### Study design, materials and methods

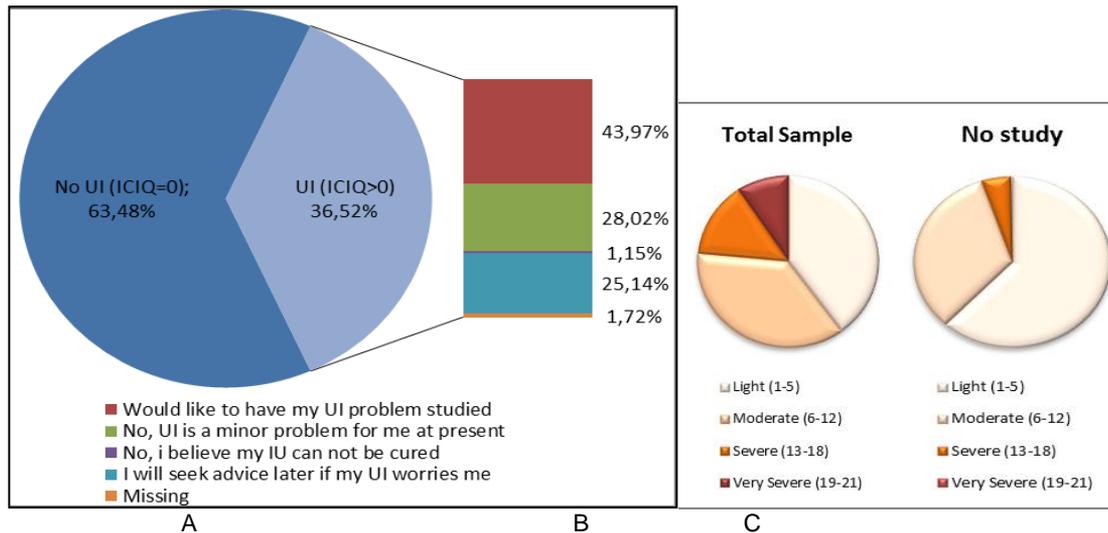
Non-interventional multicenter cross-sectional study in women >18 years , that were seeking care for any gynaecological problem at 9 different general gynaecological clinics. Inclusion in this study was considered for women who had a scheduled visit, for gynaecological care, except pregnancy and postpartum. Women who accepted to participate, signed an informed consent and were consecutively recruited. International Consultation on Incontinence Questionnaire-Urinary Incontinence short form (ICIQ-UI-SF) was used for to detect women with symptoms of UI. When the ICIQ-UI-SF score was >0, the women were considered to have UI and the possibility to initiate a process of diagnosis and treatment for UI was offered to all these women. The decision to follow this process was solely at the discretion of patient. When women answered they do not want to be further studied about their UI problem, they answered other questions about the reason of doing that. Baseline demographic information and medical and obstetric history, was collected at this inclusion visit and also information about other lower urinary tract symptoms (LUTS) and symptoms of pelvic organ prolapse (POP), were collected using the Epidemiology of Prolapse and Incontinence Questionnaire (EPIQ).

The distribution of women with/without UI and that of the willingness or not to be further studied was assessed. Associations of the willingness to be studied with categorical variables were studied using chi square test, and with continuous variables by means of the Student T test (normal distribution) or Mann-Whitney test (not normal distribution). The significance level was  $p<0.05$ . Multiple regression models were built to predict the willingness to be studied using the variables that were found to show bivariate association. Analysis of a cut-point score for ICIQ-UI-SF based on the positive predictive values obtained, was performed to assess a clinical meaningful threshold above which the majority of women wanted to receive treatment.

### Results

Data for 1906 women were analysed. Mean age (SD) was 46.13 (13.63) years, with a mean number of vaginal deliveries of 2.11 (1.28) and 32.5% with menopause. **Figure 1A** shows distribution of women with UI /without UI, and the distribution of women with UI, according to their willingness to be further studied. Incontinent women presented a significantly higher mean age than continent women [49.40 (12.73) years vs 44.26 (13.78),  $p<0.001$ ]. Of the 696 women identified with UI, only 44% wanted to undergo further studies for diagnosis and treatment **Figure 1A**. Severity of UI symptoms was associated to willingness to be further studied ( $p<0.001$ ). Women with UI who wanted to have their UI studied had similar age to those who did not ( $p=0.348$ ), but presented significantly higher mean score in ICIQ-SF [9.97(4.50) vs 5.57 (3.33),  $p<0.001$ ]. Analysis of ICIQ-UI-SF score revealed that above a cut-point of 13 points, 84 % of women are willing to receive treatment.

**Figure 1. A-**Women with/without urinary incontinence and the distribution of incontinent women according to the willingness of to be studied and treated. **B.** Distribution according the severity ranges of ICIQ-UI-SF score, in the total sample. **C.** Distribution according the severity of UI in women who did not want to have their UI problem studied.



Willingness to be studied was further associated with leak frequency ( $p < 0.001$ , Cramer's  $V = 0.4186$ ), leak quantity ( $p < 0.001$ , Cramer's  $V = 0.2815$ ) and bother ( $5.94$  vs  $3.01$ ,  $p < 0.001$ ) (ICIQ-IU-SF items 1 to 3, respectively). No association was found with other low urinary tract symptoms (LUTS) detected with EPIQ questionnaire, like nocturia ( $p = 0.280$ ) or urinary frequency ( $0.147$ ), but association was found for symptom of vaginal bulge prolapse ( $p < 0.001$ , Cramer's  $V = 0.156$ ) according to item 35 of the EPIQ. **Table 1** shows the logistic regression model of best performance ( $R^2 = 0.186$ ) for the prediction of willingness to be studied using the variables which had previously shown bivariate association.

**Table 1.** Logistic regression model for the prediction of willingness to be studied

	Coef.	Std.Err	z	P> z	[95% Conf. Interval]	
ICIQ item1	0,3519429	0,0918807	3,83	0	0,1718601	0,5320258
ICIQ item3	0,274398	0,0379916	7,22	0	0,1999358	0,3488602
EPIQ Item 35	0,6183137	0,2910916	2,12	0,034	0,0477846	1,188843
Constant	-1,712756	0,1947744	-8,79	0	-2,094507	-1,331005

**Interpretation of results**

Nearly fifty per cent of women seeking medical care for gynaecological health problems, admit to have symptoms of UI, when they answer a validated self-reported specific questionnaire, in most of them, these symptom were light or moderate. Of all women identified with symptoms of UI, more than half, did not want to undergo further studies for diagnosis and treatment study because they considered their UI to be a minor problem and UI do not worries them. Severity of symptoms, higher leak frequency, leak quantity and bother together with the presence of prolapse, were associated with the willingness to be studied. The majority of undiagnosed women, who had a severe or very severe UI according with the ICQ-IU-SF( above 13 points) wanted to be treated.

**Concluding message**

Although UI symptoms are highly prevalent in women attending general gynaecological clinics seeking care for different gynaecological problems, only a low percentage of women identified with UI symptoms, want to undergo the process of diagnosis and treatment. However, in the context of a general gynaecological practice, women with severe or very severe UI symptoms, previously undiagnosed, majority of them are prone to start a process of diagnosis and treatment of their problem of UI.

**Disclosures**

**Funding:** Supported by a grant from the "Agencia d'informació, Avaluació i Qualitat en Salut". Generalitat de Catalunya.  
**Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Comité Ético de Investigación del Hospital Clinic.Barcelona **Helsinki:** Yes **Informed Consent:** Yes