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# PREVALENCE OF URINARY INCONTINENCE IN OLD WOMEN FROM IXTENCO, TLAXCALA: A COMPARISON BETWEEN ICIQ-SF AND THE 1 HOUR PAD TEST.

#### Hypothesis / aims of study

Urinary incontinence (UI) is a common problem in old women and the prevalence rate rises with advancing age. Most research about urinary incontinence has focused almost exclusively on white women in first graded countries. As a result, we still ignore whether the specific characteristics identified in those populations can be generalized to more diverse populations like our own. In Mexico there are few studies that determine the prevalence of urinary incontinence in women but none made in rural areas. Ixtenco is a non-urban community with a rural lifestyle and for this purpose we used two evaluating instruments to know the prevalence of UI in women of Ixtenco, Tlaxcala (México).

## Study design, materials and methods

A cross sectional study was conducted in 134 women from Ixtenco (45-95 years of age), Tlaxcala. The instruments were: ICIQ-SF (International Continence Questionnaire in his Short Form), and the 1-hour pad test. The sample was represented by women that came voluntary to the Health Clinic of Ixtenco and both instruments (a validated questionnaire and the pad test as a quantitative method) were applied by medical staff. The UI was also classified by reported symptoms in the ICIQ-SF as stress, urge and mixed type.

## Results

The prevalence of UI in women of Ixtenco with the ICIQ-SF was 50.37% and incremented with the 1-hour pad test to 71%. The age group 76-85 had the highest prevalence for both instruments (Fig. 1 and 2). The types of UI were as follows: mixed urinary incontinence with 50.37%, stress urinary incontinence with 38.8%, and urge urinary incontinence with 8.95%.

AGE GROUP	ICIQ-SF		1 HOUR PAD TEST	
years (n)	UI	Without UI	UI	Without UI
45-55 (26) 56-65 (44) 66-75 (39) 76-85 (19) 85-95 (6)	<b>69.2%</b> (18) <b>56.8%</b> (25) <b>15.3%</b> (6) <b>63.2%</b> (12) <b>50.0%</b> (3)	<b>30.7</b> % (8) <b>43.1</b> % (19) <b>84.6</b> % (33) <b>36.8</b> % (7) <b>50.</b> 0% (3)	<b>57.6</b> % (15) <b>65.9</b> % (29) <b>76.9</b> % (30) <b>89.5</b> % (17) <b>66.6</b> % (4)	<b>42.3%</b> (11) <b>34.1%</b> (15) <b>23.0%</b> (9) <b>10.5%</b> (2) <b>33.3%</b> (2)

Table1.Prevalence of UI with the ICIQ-SF and the 1 hour pad test

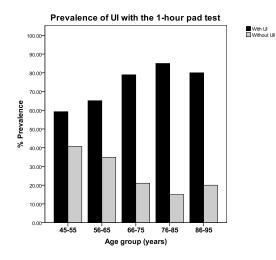
## Interpretation of results

UI is of high prevalence in old women of Ixtenco. The noted variation of prevalence between age groups 76-85 and 85-95 could be due to the number of subjects assigned to each one. Compared to other epidemiologic studies concluded in Mexican women from urban areas, the prevalence rates obtained in Ixtenco were above for most of the groups studied. The highest prevalence in older women from an urban environment was 71.4% and 66.7% respectively, in contrast with 89.5% obtained as the highest prevalence in the group age 76-85 Ixtenco. The women seeking medical aid in the Health Clinic of Ixtenco have no means of having an alternative in private medical practice or other institutions; they come from low-income families where agriculture and commerce are the first activities reported. This cultural context may explain the differences in prevalence rates between the ICIQ-SF questionnaire and the 1-hour pad test; probably due to the women's choice of not reporting their real condition.

## Concluding message

This study demonstrates that as age increases also the prevalence for urinary incontinence in this non-urban Mexican group of women. It is important to measure the prevalence of UI in particular groups, access to this information can lead us to implement more suitable treatments. In addition, it is indispensable to take into consideration the socioeconomic status and the specific characteristics of the studied group to preview all possible outcomes. Many epidemiological studies use questionnaires to estimate the prevalence of urinary incontinence and relay on the fact that those answers are true; as a developing country with certain cultural differences, the topic of urine loss demonstrated that women from Ixtenco were reluctant to respond openly to the questionnaire. We expected similar prevalence results for the ICIQ-SF and the 1-hour pad test, however we found that as age increased, the response for positive urine loss was denied by many women; as established in the 1-hour pad test.

Figure 1. Prevalence of UI by age group with the 1-hour pad test. Figure 2. Prevalence of UI by age group with the ICIQ-SF.



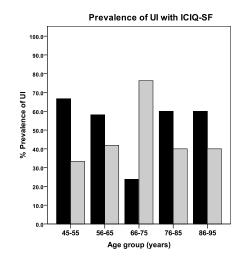
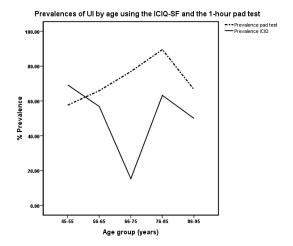


Figure 3. Comparative prevalences of UI with the ICIQ-SF and the 1-hour pad test



## References

- 1. Am Geriatr Soc (2003) 51;1-7
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- 3. Int Urogynecol J (2004) 15;111-116

Specify source of funding or grant	PTC F-PROMEP-38/Rev-03	
Is this a clinical trial?	No	
What were the subjects in the study?	HUMAN	
Was this study approved by an ethics committee?	Yes	
Specify Name of Ethics Committee	Autonomus University of Tlaxcala Bioethics Committee	
Was the Declaration of Helsinki followed?	Yes	
Was informed consent obtained from the patients?	Yes	