

## PREVALENCE OF URINARY INCONTINENCE AND PELVIC ORGAN PROLAPSE SYMPTOMS IN PRE- AND POST-MENOPAUSAL WOMEN.

### Hypothesis / aims of study

The objective is to estimate the prevalence of urinary incontinence and pelvic organ prolapse in pre- and post-menopausal women in the United States (U.S) from 2005-2012.

### Study design, materials and methods

Analyzed data from the National Health and Nutritional Examination Survey (NHANES) from 2005-2006, 2007-2008, 2009-2010, and 2011-2012. 9803 women of age 13 and older were included; 4899 were pre-menopausal and 4904 were post-menopausal. Pre-menopausal women were less than 51 years old who reported menstrual periods in the last twelve months. Post-menopausal women either reported being in natural menopause or surgical menopause. Urinary incontinence (UI) was defined as experiencing urinary leakage "less than once a month" or more. Pelvic organ prolapse (POP) was defined as an affirmative response to "experience bulging in the vaginal area". Parity, body mass index (BMI) class, race and ethnicity, diabetes status, and smoking status were analyzed as potential risk factors for UI and POP. Analyses included Chi-square analysis and multi-variable logistic regression models with odds ratios (OR) and 95% confidence intervals (95% CI).

### Results

The prevalence of UI and POP in pre-menopausal women were 31.1% and 2.1% respectively; and in post-menopausal women, 47.8 and 4.6%, respectively. Higher BMI class, greater parity, and diabetes were associated with both UI and POP. Smoking and white race were associated with UI while Hispanic race was associated with POP. Although the rate of UI and POP was lowest in the 2005-2006 survey at 36.9% and 2.8%, respectively; the rate of UI and POP in U.S. women decreased from 42.1% to 39.1% and 4.2% to 3.0%, respectively, from 2007 to 2012 ( $p= 0.002$  and  $0.032$ , respectively).

### Interpretation of results

Although still common, and higher in post-menopausal women, the prevalence of UI and POP in U.S. women slightly decreased from 2007 to 2012.

### Concluding message

Prospective, controlled studies will be helpful in elucidating the factors contributing to the decrease in prevalence of UI and POP in U.S. women.

### Disclosures

**Funding:** None. **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** University of Arizona IRB committee **Helsinki:** Yes **Informed Consent:** Yes