Background:
Urogenital symptoms, including urinary incontinence and frequency, commonly affect women of reproductive age and negatively impact quality of life. Such urinary symptoms are among the top 10 problems reported to primary care providers by women. In a cross-sectional study of 900 reproductive-aged women veterans, we found 2 of 3 reported urinary leakage. In fact, 25% reported at least weekly stress urinary incontinence and 10% at least weekly urgency urinary incontinence, higher rates than expected from studies of similar aged women in the general population. Depression and post-traumatic stress disorder (PTSD) were also common, each affecting about 1 in 3 women. Women veterans who reported urgency urinary incontinence, but not stress urinary incontinence, were more likely to have depression and PTSD compared to women with no urinary incontinence. We hypothesize that the high prevalence of urgency urinary incontinence in women veterans in our preliminary study is related to their high rates of depression and PTSD.

Objective(s):
There are two specific objectives.
- Define the prevalence and 1-year incidence and remission rates of urogenital symptoms, especially urgency urinary incontinence and urinary frequency, in a representative population of Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn (OEF/OIF/OND) women veterans.
- Identify the impact of depression and PTSD symptoms, a history of sexual assault, and deployment-related factors on the prevalence and 1-year incidence of urogenital symptoms, especially urgency urinary incontinence and urinary frequency.

Methods:
This is a 1-year prospective, longitudinal study in 2,127 women OEF/OIF/OND veterans from diverse racial/ethnic backgrounds and geographic areas. Participants will include women veterans who completed regular military or Reserve/National Guard service including a war zone deployment within the past 2 years. Women veterans meeting these criteria will be identified using the Defense Manpower Data Center and recruited by telephone. Data collection will include telephone interviews performed at enrollment and 1 year later. The interview will include a detailed assessment of urogenital symptoms, depression and PTSD symptoms, other mental and physical health conditions, socio-demographic variables, sexual trauma and deployment-related factors. Current and past evaluation and treatment for urogenital and mental health disorders will also be identified. Statistical analyses (descriptive statistics and multivariable regression analyses) will be performed.

Findings:
Data collection via telephone interviews is underway. There are no current findings to report.
**Status:**
Baseline and 1 year follow-up interviews are in progress. As of June 2012, 3485 women have been contacted and asked to participate, and 1751 (50.2%) have been enrolled. 94% of those enrolled have completed the full baseline interview. Analyses of baseline data are underway and will be completed Fall 2012.

**Impact:**
This longitudinal, epidemiologic study of OEF/OIF/OND women veterans will define the prevalence and natural history of urogenital symptoms and their association with depression and PTSD symptoms, a history of sexual assault, and deployment factors. This study will identify quality of life impact related to urogenital symptoms in OEF/OIF/OND women returnees and will improve understanding of the association between these symptoms and mental health disorders, increasingly recognized as significant causes of morbidity in this growing population of veterans. We will disseminate our findings to VA and non-VA care providers, especially gynecologists and other clinicians who commonly see reproductive-age women veterans. By educating clinicians to prevalent and bothersome urogenital symptoms and the impact of deployment- and military-related risk factors including depression, PTSD and sexual trauma, we aim to increase screening and treatment of both urogynecologic and mental health problems in veterans.

**Publications:**
- **Conference Presentations**
  - Bradley CS. Panel Presentation: Women's Health Breakout Session. Presented at: VA Office of Rural Health / Veterans Rural Health Central Region Biannual Meeting; 2011 Sep 13; Iowa City, IA.

- **HSR&D Article**

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