

RACIAL CHARACTERISTICS OF WOMEN UNDERGOING SURGERY FOR STRESS URINARY INCONTINENCE IN THE UNITED STATES

Hypothesis / aims of study

To describe and compare the prevalence, demographics, and complications of surgery for stress urinary incontinence (SUI) across races in the United States.

Study design, materials and methods

Data from the 2003 U.S. Census and the 2003 National Hospital Discharge Survey (NHDS) were used. The Statistical Package for the Social Sciences (SPSS) was used to weight, stratify, and analyze the NHDS patient sample in order to determine the total number of SUI specific surgeries as well as numbers by race and geographic region. Using these data, we also compared demographic characteristics, morbidity, and mortality across races.

Results

A total of 129,778 women underwent surgery for SUI in the U.S. in 2003, for a rate of 11.6 surgeries per 10,000 women (95% CI 9.7-13.5 per 10,000). Sixty-seven percent of all SUI procedures were performed in white women, while 3.4% were performed in black women, 3.2% in women of other races, and 26.8% in women in whom race was not stated. By race, the rates (per 10,000, with 95% CI) of SUI surgery were: 9.5 (7.4, 11.6) in white women, 3.2 (0, 8.5) in black women, and 5.9 (0, 13.3) in women of other races. By geographic region, surgical rates (per 10,000) for white and black women, respectively, ranged from 15.0 vs. 3.5 in the South to 9.5 vs. 2.6 in the West, 5.9 vs. 2.6 in the Northeast, and 4.8 vs. 2.9 in the Midwest. Concomitant surgery for pelvic organ prolapse was performed in 64.8%, 46.0%, 60.1%, and 63.5% of women of white, black, other, and unstated races. Mean patient age (SD) in years was 54.0 (13.6), 50.0 (10.0), 52.3 (16.1), and 56.4 (13.5) for women of white, black, other, and not stated races. Mean length of stay (SD) in days for white, black, and other women was 2.2 (1.3), 4.6 (5.5), and 2.8 (1.0) days, and it was 2.2 (1.1) days in women whose race was not stated. Among women undergoing SUI surgery, 27.4% of black women were on public assistance, as compared to 5.8% of white women, 4.8% of women of other races, and 5.1% of women of unstated race. Complications occurred in 16.2% of white women, 14.9% of black women, 32.1% of women of other races, and 24.3% of women in whom race was not stated. Mortality associated with SUI surgery was uncommon for all races, with an overall rate of .03%.

Interpretation of results

Racial disparities between black and white women undergoing SUI surgery in the U.S. were noted, with black women undergoing SUI surgery at 1/3 the rate of white women. Although complication rates were similar among white and black women, black women had a longer mean hospital stay and were over 4 times more likely to be on public assistance. It is possible that these differences in surgical rates reflect racial differences in the prevalence of SUI. However, as suggested by geographic differences in rates of SUI surgery for white and black women, they may also reflect racial differences in patients' understanding and report of symptoms, physicians' ascertainment of symptoms and practice patterns, access to care, insurance coverage, and socioeconomic status.

Concluding message

In comparing white and black women in the United States in the year 2003, there appear to be racial disparities in the rates of surgery for SUI. The precise nature of these racial disparities is unclear, but is an important subject which requires further study.

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