

BOWEL CONTROL IN BLACK AND WHITE COMMUNITY DWELLING WOMEN

Hypothesis / aims of study

To determine the prevalence of bowel accidents and associated risk factors in community dwelling Black and White women.

Study design, materials and methods

As part of a cross-sectional, epidemiologic study of urinary incontinence prevalence among Black and White women ages 35-64 years, households were selected at random using telephone records from geographic areas of known racial composition in southeast xxx. There were 2,814 women (1,923 Black and 891 White) who completed a 20-minute, 137-item telephone interview. Race was determined by self-assignment. As part of this interview, participants were asked: "In the past year, have you ever lost control over your stools or bowel movements; that is, have you had any bowel accidents?" Women who responded "Yes" were considered to have experienced bowel accidents (BA). Age, urinary incontinence (UI), BMI, menopausal status, number of bowel movements (BM) per week, and parity were also assessed. Comparisons of variables by BA status and race were conducted using Chi square analyses and t-tests.

Results

Results: The overall prevalence of BA was 14%. White women were nearly two times more likely to report BA than Black women (20% v. 11%; $p < .001$). Women with BA were more likely to be older (mean age: 50.57 v. 48.97; $p < .001$), post-menopausal (61% v. 48%; $p < .001$), and have higher BMI (31.50 v. 29.56 kg/m²; $p < .001$) than women without BA. These differences were also present within each racial group (see table). Overall, women with BA were also two times more likely to report UI (40% v. 18%; $p < .001$) and have more bowel movements per week (8.79 v. 7.54; $p = .004$) than women without BA. When analyzed separately, both Black women and White women, with urinary incontinence were significantly more likely to complain of BA. However the mean number of bowel movements per week was not significant (see table). Nulliparous and parous women were equally likely to have BA (14% v. 14%; $p = .734$).

Interpretation of results

This is the first study to evaluate bowel function in community dwelling women with a

	Black N=1,923 Overall BA 11%			White N=891 Overall BA 20%		
	No BA	BA	p	No BA	BA	p
UI N (%)	225 (13%)	56 (26%)	.001	196(28%)	101 (57%)	.001
Post-Menop. N (%)	848 (50%)	138 (63%)	.001	316 (44%)	103 (58%)	.003
Mean # BM/wk. (SD)	7.3 (7.2)	8.3 (6.7)	.057	8.1 (9.2)	9.40 (9.4)	.089
Mean Age yrs. (SD)	49.2 (8.0)	50.6 (8.1)	.012	48.5 (8.3)	50.5 (8.0)	.003
Mean BMI kg/m² (SD)	30.4 (6.8)	32.1 (7.0)	.001	27.7 (7.1)	30.8 (8.1)	.001

substantial sample of Black women. Other symptoms and conditions related to pelvic floor function have been found to be more common in White women as compared to Black women. Bowel control appear to follow a similar trend, in that Black women were half as likely to report symptoms compared to white women. For both Black and White women, other symptoms of pelvic floor dysfunction, such as urinary incontinence, and known risk factors for other pelvic floor dysfunctions such as increasing age and BMI were associated with bowel

accidents. Parity was not associated with bowel accidents. This would imply that there may be a racial predisposition that would predispose or protect a woman from developing bowel control problems. Modifiable factors influencing bowel control problems include BMI.

Concluding message

Bowel accidents are more prevalent in White women than in Black women. Bowel accidents increase with age, BMI, menopause, and presence of urinary incontinence, but is not increased in parous women.

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