

IMPACT OF URINARY INCONTINENCE ON QUALITY OF LIFE, AMONG WOMEN WITH PREVIOUS MULTIPLE CHILDBIRTH

Aims of Study

To determine the impact of urinary incontinence on quality of life among women with a previous multiple pregnancy and childbirth ('mothers of multiples') using the Incontinence Impact Questionnaire (IIQ) and Urogenital Distress Inventory (UDI), and to assess the validity of these two survey tools for quantifying incontinence impact within this female population.

Methods

The Evanston-Northwestern Mothers of Multiples Survey identified a high prevalence of urinary incontinence among 733 women with a history of multiple pregnancy and delivery, including stress urinary incontinence in 45.5%, urge incontinence in 27.3%, and mixed incontinence in 22.9% of respondents. 'Long form' IIQ and UDI surveys were administered, to evaluate the impact of pelvic floor symptoms on quality of life within this population.

Results

The UDI was fully completed by 722 women (98.4%) and IIQ by 700 women (95.4%), with a median age of 37 years (22-75). The mean total score for the IIQ was 4.3 (SD 9.8, 0-50), and the mean total score for the UDI was 8.2 (SD 7.9, 0-50). Women reporting stress urinary incontinence had significantly higher total UDI scores (12.3 vs. 4.7, $p=0.0001$), and IIQ scores (6.9 vs. 1.9, $p=0.0001$) compared to those without stress leakage; stress-incontinent women reported significantly higher mean scores for 18 of 19 items on the UDI, and 27 of 29 items on the IIQ. Women with urge incontinence had markedly higher total UDI scores (14.9 vs. 5.7, $p=0.0001$), and IIQ scores (9.4 vs. 2.2, $p=0.0001$) compared to those without urge leakage; among them, significantly higher scores were reported for all 48 of 48 items comprising the two surveys ($p=0.0001$). Mixed incontinence (stress and urge) conferred a similar negative effect on the UDI (15.1 vs. 6.2, $p=0.0001$) and IIQ (9.3 vs. 2.7, $p=0.0001$). Increasing age was associated with higher scores on the IIQ ($p=0.01$) and UDI ($p=0.059$), as were menopause ($p=0.0001$) and previous incontinence surgery ($p=0.0001$). However, after controlling for these covariates using a multivariate regression model, both stress ($p=0.0001$) and urge urinary incontinence ($p=0.0001$) remained strongly predictive of less favorable quality of life scores for both the UDI and IIQ. Finally, both surveys demonstrated good internal consistency, with reliability coefficients of 0.89 for the UDI and 0.97 for the IIQ. For each pelvic floor symptom, there was a strong positive relationship with total score for both the IIQ and UDI – indicating that both surveys provided a reliable measure of the underlying dimensions of urogenital distress and incontinence impact.

Conclusions

Among 'mothers of multiples', both urge and stress urinary incontinence have a strong and consistently negative impact on quality of life, evident at a relatively young age (median 37 yrs), according to both the Incontinence Impact Questionnaire and Urogenital Distress Inventory. Moreover, both the IIQ and UDI provide valid measures of the impact of urinary incontinence within this highly symptomatic female population. These findings reinforce the need to identify modifiable risk factors predisposing to incontinence, and effective strategies for primary prevention.