

PREVALENCE, ASSOCIATED FACTORS, AND RELATIONSHIP TO HEALTH RELATED QUALITY OF LIFE OF URINARY INCONTINENCE IN WOMEN WITH BREAST CANCER

Hypothesis / aims of study

Previous studies showed that urinary incontinence could be a concern for women diagnosed with breast cancer. Studies of urinary incontinence among individuals with breast cancer are limited. This gap supports that more research on urinary incontinence among this specific population is needed. This study investigated the prevalence, associated factors, and relationship to health related quality of life (HRQL) of urinary incontinence in a sample of women with breast cancer.

Study design, materials and methods

This study was a cross-sectional, questionnaire survey. Two hundred Taiwanese women with breast cancer were recruited from one hospital. We collected information about each woman's individual characteristics, lower urinary tract symptoms, and HRQL (SF-36) by using a structured questionnaire. Descriptive statistics were used to demonstrate the distribution of collected information. Chi-squared tests and a multivariate logistic regression were used to identify factors associated with urinary incontinence. Student's *t* test was used to compare the mean HRQL scores for women with and without urinary incontinence.

Results

Of the 200 women, 41 (20.5%) experienced urinary incontinence. Chi-squared tests revealed that women who had a body mass index ≥ 25.0 Kg/m² (31.9% vs. 17.0%, $p = 0.027$), who had given birth ≥ 3 times (34.5% vs. 14.2%, $p = 0.005$), or who self-perceived urgency (39.1% vs. 18.1%, $p = 0.027$)/intermittent stream (38.5% vs. 14.8%, $p = 0.015$)/urinary frequency (35.4% vs. 15.8%, $p = 0.003$)/weak urinary stream (34.2% vs. 17.3%, $p = 0.020$) were more likely to have experienced urinary incontinence than those who were in the other groups. Two significant factors associated with urinary incontinence ($p < 0.05$) were identified by a multivariate logistic regression. Women who had given birth ≥ 3 times (OR = 2.85, 95% CI = 1.37, 5.94, $p = 0.005$), or who self-perceived urinary frequency (OR = 2.82, 95% CI = 1.33, 5.99, $p = 0.007$) had a higher odds of experiencing urinary incontinence than those who were in the other groups. Women with urinary incontinence had lower mean HRQL scores than women without urinary incontinence at the mental component summary HRQL (45.7 vs. 49.5, $p = 0.045$) and one HRQL aspect (role limitation caused by emotional problems: 48.0 vs. 49.8, $p = 0.038$).

Interpretation of results

Urinary incontinence was common in women diagnosed with breast cancer, and urinary incontinence might have a negative effect on women's mental related HRQL.

Concluding message

While the beneficial effects of non-drug lifestyle management and behavioral interventions on urinary incontinence have been reported, identifying associated factors is helpful in developing adequate intervention to improve symptom management and optimize HRQL for women with breast cancer.

References

1. Donovan, K. A., Boyington, A. R., Ismail-Khan, R. & Wyman, J. F. (2012). Urinary symptoms in breast cancer: a systematic review. *Cancer*, 118(3), 582-593.
2. Hsieh, C.I., Lung, A.L., Chang, L.I., Sampsel, C.M., Lin, C.C., & Liao, Y. M. (2013). Prevalence, associated factors, and relationship to quality of life of lower urinary tract symptoms: A cross-sectional, questionnaire survey of cancer patients. *International Journal of Clinical Practice*, 67(6), 566-575

Disclosures

Funding: This research received no specific grant from any agency in the public, commercial, or not-for-profit sectors **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Mackay Memorial Hospital-TamShui Branch, New Taipei City, Taiwan **Helsinki:** Yes **Informed Consent:** Yes