

Psychometric Properties of EORTC QLQ-BR45 among Ethiopian Breast Cancer Patients

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Abstract:

The European Organization for Research and Treatment of Cancer (EORTC) QLQ-BR23 was one of the first disease-specific questionnaires developed in 1996 to assess quality of life of breast cancer patients. However, since 1996 major advances have been made on breast cancer diagnosis and treatment. Therefore, the original breast cancer module (BR23) was supplemented with an additional 22 items and updated to EORTC QLQ BR45. This study aimed to examine the validity and reliability of EORTC QLQ BR45. Two hundred forty-eight breast cancer patients included in this study and filled QLQ BR45 and QLQ C30. The internal reliability, test-retest reliability, content, concurrent, convergent, divergent, and clinical validity of the tool were examined. It was evaluated by Cronbach's α coefficient and Pearson's correlation coefficient, standardized response mean residual (SRMR), comparative fit index(CFI), t-test, and root mean square error of approximation (RMSEA). All items were marked as relevant and the I-CVI score ranged from 0.83 to 1. The Cronbach's α coefficients of all domains are 0.80. All subscales met the minimal standards of reliability except arm symptoms scale (0.66). The test-retest reliability coefficient of all domains is 0.77. Seven out of twelve hypothesized scales have correlations ($r > 0.40$) between QLQ BR45 and QLQ-C30 scales. Multi-trait scaling analysis showed the item-scale correlations exceeded the 0.40 criterion for item-convergent validity for eleven of the twelve hypothesized scales. Correlation coefficients between an item and its own subscale were significantly higher than the coefficients with the other subscales. EORTC QLQ-BR45 has good reliability and validity and can be used to measure QoL of breast cancer patients in Ethiopia.

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Biography

Mr. Mikiyas Amare is a 2nd year Ph.D. student in Oncology Nursing at Zhengzhou University, School of Nursing and Health in China. I have graduated bachelor of science in Nursing at Debre berhan university and masters degree in Adult Health Nursing at Addis Ababa University, Ethiopia with a very great distinction. I have published more than 11 papers in reputed journals and currently I am an assistant professor. I have served for