

Quality of Life Evaluation Using Questionnaires in Breast Cancer Patients after Surgery: A Systematic Review

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Abstract

Introduction: breast cancer continues to dominate as the most frequently diagnosed malignancy among women globally, with surgery playing a key role in treatment. Despite advances in disease management and improved survival, the impact on patients' quality of life (QoL) remains an important issue. This review aims to synthesize evidence on QoL outcomes, focusing on patient-reported outcomes following different types of breast cancer surgery.

Methods: A systematic search was performed in PubMed, Scopus, and Web of Science from January 2022 until May 2025 to identify English-language publications on breast cancer QoL using validated PROMS. Seventeen studies met the inclusion criteria and were reviewed independently by two authors.

Results: The EORTC QLQ-C30 and BR23 instruments demonstrated superior body image and emotional functioning following breast-conserving surgery. However, 40 to 60% of patients undergoing mastectomy without reconstruction reported persistent sexual dysfunction. SF-36 and FACT-B indicated improvements in physical and mental health post-reconstruction, although 31% of mastectomy patients remained below functional thresholds. BREAST-Q revealed higher satisfaction and better psychosocial well-being in autologous reconstruction compared to implant-based reconstruction. Oncoplastic breast surgery was associated with significantly higher mean BREAST-Q breast-conserving treatment (BCT) scores compared to conventional wide local excision, with patients in the oncoplastic group reporting approximately 90% mean satisfaction with breast appearance versus 75% in the conventional group.

Conclusions: Breast-conserving surgery or reconstruction after mastectomy improves quality of life compared to mastectomy alone. Oncoplastic breast surgery significantly enhances body image relative to conventional wide local excision (BCT). Autologous breast reconstruction is associated with greater patient satisfaction but carries a higher risk of complications compared to implant-based reconstruction.

Keywords: breast cancer, quality of life, questionnaire, breast surgery, post-surgical outcomes