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EXTENDED ABSTRACT

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'Let's Get This Off Our Chest': Should Patients Referred for Post-Mastectomy Breast Reconstruction Undergo a Preoperative Psychosocial Assessment?

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Background

Previous research has sustained the important role of breast reconstruction after breast cancer mastectomy. However, recent studies suggested that quality of life (QoL) improvements after this procedure are not as expected since, for some patients, QoL after breast reconstruction was unchanged, worse, or similar to the QoL of women with mastectomy alone [1, 2]. Previous research has focused on the role of surgical and clinical variables as possible risk factors, such as the patients' body mass index, the presence of other physical comorbidities, prior radiotherapy, type of reconstruction (immediate vs delayed, implant-based or flap surgery), and cancer stage [3]. However, the assessment of surgical and clinical-related variables is no longer sufficient to understand the multidimensional construct of QoL which includes a combination of physical, psychological, social, and spiritual domains. Therefore, understanding if and which psychosocial factors are more likely to affect QoL after breast reconstruction is of great clinical importance to help prevent post-reconstruction adjustment problems and decisional regret. Deepening this knowledge is extremely important for clinical practice in oncology settings as it will allow clinicians to empirically decide on the need to implement new pre-reconstruction psychosocial interventions to promote QoL after breast reconstruction. The aim of this systematic review is to explore the psychosocial factors affecting QoL after post-mastectomy breast reconstruction in women with breast cancer by considering patients' self-reported outcome measures (PROMs).

Methods

The search was performed from March 29 to April 19, 2019, on the following databases: PsycInfo; Web of Science Core Collection (all databases included). The studies were included if they identified post-mastectomy psychosocial factors affecting self-reported QoL after breast reconstruction, in women with breast cancer.

Results

One hundred and twenty-two records were identified. Eligibility assessment was performed independently by two authors (HS and SC), with an interrater agreement of 97.7%. Discrepancies were solved by consulting a third author (JA). To this end, only nine studies assessed the influence of psychosocial variables for QoL after breast reconstruction. Critical appraisal of these studies was performed independently by two authors (HS and SC) using the Joanna Briggs Institute Checklists for Cross-sectional and for Cohort Studies, with an inter-rater agreement of 93.2%. Discrepancies were solved by consulting a third author (MGP). Most studies (56.8%) did not adjust for possible confounding factors, which is likely to introduce bias. Hereafter, those nine studies were included for qualitative synthesis. This study comprised a total of 3.437 women, who were on average 50.4 years old at study enrollment. Most of them underwent immediate reconstruction (61.2%). Patients were assessed on average 17.2 months after reconstruction. The overall results identified a collection of eight empirically-based psychosocial variables associated with several domains of quality of life: (i) pre-reconstruction QoL (k = 3 studies), (ii) depression (k = 2), (iii) personality (k = 2), (iv) satisfaction with the aesthetic outcome (k = 2), (v) type of decision making process (paternalized by the clinician, informed and shared decision) (k = 2), (vi) perceptions about scaring (k = 1), (vii)

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sexual well-being (k = 1), and (viii) interpersonal problems (k = 1). All these variables reached statistical significance ($p<.05$) at least in one of the included studies. Available data allowed the calculation of the predictive value of some of these variables through the calculation of odds ratios (OD). In this sense, depression (OR = 10.38), harm avoidance (a personality characteristic) (OR = 4.43), paternalistic decision-making (OR = 4.12), and interpersonal problems such as being vindictive and/or self-centred (OR = 2.14) predicted worse QoL after post-mastectomy breast reconstruction, with a medium to large OR.

Conclusion

This study goes beyond surgical and clinical factors of morbidity and uses PROMs to scope wider issues that influence QoL, particularly preoperative psychosocial factors. The results suggested that several modifiable factors such as pre-reconstruction QoL, depression, sexual and interpersonal problems, as well as the decision-making approach adopted by the clinician, predicted worse post-reconstruction QoL in this population. These findings highlight the need to consider the development of a preoperative psychosocial assessment in order to identify possible vulnerability factors for worse QoL in women who are referred for breast reconstruction, a practice that has not been considered in these settings. Preoperative psychosocial assessments are already a routine practice in other clinical settings such as bariatric surgery, organ transplantation, and other cosmetic surgeries. Prior to breast reconstruction, a psychosocial assessment will allow psychologists to identify patients at risk for lower QoL as well as patients that are most likely to benefit (or not) from breast reconstruction. The psychological assessment can also identify which patients may benefit from a pre-reconstruction psychosocial intervention to improve disease adjustment and to prevent future post-reconstruction QoL issues. Despite its contributions, this study has one important limitation that should be acknowledged: the limited number of studies on the topic and therefore the number of papers included in this systematic review. Therefore, more studies are needed, which highlights the relevance of the conclusions of this review for clinical practice in oncological contexts.

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