

## BACKGROUND

Lipomodelling offers an adjunct to breast reconstruction for management of secondary contour deformities using a simple, safe, effective treatment with low morbidity. With the advent of pre-pectoral implant reconstruction, lipomodelling may be used as a secondary treatment to improve cosmetic appearance. There is some evidence to suggest that satisfaction with cosmetic outcome of some procedures may decline over time, particularly following adjuvant treatment and it is important that we are able to collect this information in order to counsel future patients appropriately and improve our practice. BREAST-Q is a validated, highly reliable patient reported outcome measure used widely for breast reconstruction

## OBJECTIVE

The aim of the study was to assess patient satisfaction and quality of life following lipomodelling in implant-based breast reconstruction using BREAST-Q to evaluate service and identify ways of improving patient care.

## METHOD

This retrospective study collected BREAST-Q questionnaires from breast cancer patients undergoing lipomodelling following implant-based breast reconstruction surgery between 2016 and 2019. Patients were contacted by phone, invited to participate and BREAST-Q questionnaire sent by post. The BREAST-Q was given post-operatively to measure patient outcome measures using quality of life domains – psychosocial well-being, sexual well-being, physical well-being and satisfaction domains - Rasch Transformed Score was calculated for each domain.

## RESULTS

BREAST-Q questionnaires were returned by 41 women (58.6%). The mean participant age was 49.7 years (age range 36-78) and the mean time from lipomodelling surgery was 21 months (range 3-44 months). The average number of lipomodelling procedures was 1.3. Only 27% had bilateral lipomodelling after implant-based reconstruction while 83% had unilateral lipomodelling. 20 patients underwent adjunctive radiotherapy.

## RESULTS

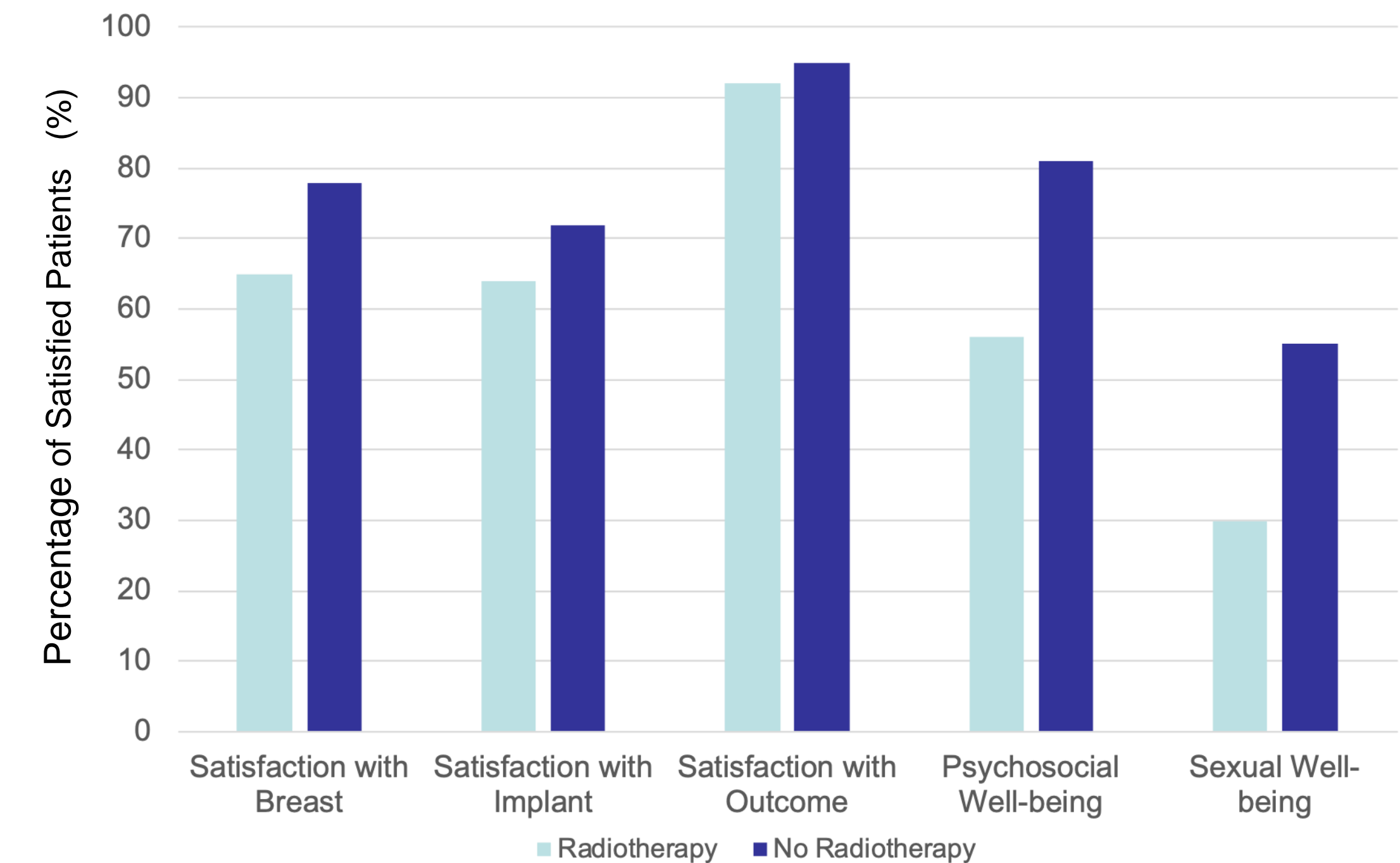
Table 1 summarises the results for all domains of the BREAST-Q - the results are analogous to other published literature. In all domains except sexual well-being patients were generally satisfied with this technique. In the satisfaction with breasts domain, patients were most satisfied with the shape, feel, size and softness of their reconstructed breasts. Patients reported the highest satisfaction with their breasts when clothed (95%). The lowest scores were reported in breast symmetry. The lowest score reported was for sexual wellbeing - median 47 (35-66). Only 29% of women reported feeling sexually attractive unclothed with 50% feeling sexually attractive clothed.

Domain	Number of patient replies to domain (n)	Median (IQR)	Mean (SD)
Satisfaction with breast	41	58 (48-71)	59 (17)
Satisfaction with implant	39	6 (4-8)	6 (2)
Satisfaction with outcome	41	17 (15-18)	16 (3)
Psychosocial wellbeing	41	64 (52-80)	68 (19)
Sexual wellbeing	34	47 (35-66)	49 (26)
Physical wellbeing	41	74 (64-87)	76 (16)
Satisfaction information	41	77 (67-91)	78 (16)
Satisfaction surgeon	41	100 (100-100)	97 (8)
Satisfaction medical team	41	100 (100-100)	93 (16)
Satisfaction office staff	41	100 (100-100)	94 (14)

**Table 1:** Results for BREAST-Q Lipomodelling in Implant Based Reconstruction

No link was identified between patient satisfaction and age, number of lipomodelling sessions or time from surgery. Patients who had bilateral lipomodelling appeared to be more satisfied with their breast(s) than those who underwent unilateral lipomodelling. For bilateral lipomodelling, 26% more patients were satisfied with the symmetry of their breasts and 17% more patients were satisfied with how equal in size their breasts were. Patients who underwent adjunctive radiotherapy were less satisfied with their breasts compared to those who did not. They also reported lower psychosocial and sexual well-being (Figure 1). Statistical analysis of this data could not be performed due to the small sample of patients.

## RESULTS



**Figure 1:** Comparison of patient satisfaction between women who underwent adjunctive radiotherapy and those who did not

## CONCLUSION

Lipomodelling improves overall satisfaction, psychosocial and physical well being but it does not appear to impact sexual well being. Patients were highly satisfied with their health care providers Data from this study will inform a larger prospective study into this topic and direct further patient support in low scoring domains.

## REFERENCES

- <sup>1</sup>Kanchwala SK, Glatt BS, Conant EF, Bucky LP. Autologous fat grafting to the reconstructed breast: The management of acquired contour deformities. *Plast Reconstr Surg*. 2009;124(2):409–18.
- <sup>2</sup>Liliav B, Patel P, Jacobson AK. Prepectoral breast reconstruction: A technical algorithm. *Plast Reconstr Surg - Glob Open*. 2019;7(2):1–7
- <sup>3</sup>Liu LQ, Branford OA, Mehigan S. BREAST-Q measurement of the patient perspective in oncoplastic breast surgery: A systematic review. *Plast Reconstr Surg - Glob Open*. 2018;6(8):1–8