

# Evaluation of Factors in Women's Decisions Regarding Breast Surgery

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## Abstract:-

**Objective:** The study sought to offer insightful perspectives into the complex decision-making process regarding breast nodules. The research was conducted with the intention of advancing our knowledge of patient preferences and assisting healthcare professionals in providing patient-centered care, individualized treatment plans, and effective communication to maximize patient satisfaction and wellbeing.

**Methods:** From January 2023 to June 2023, this cross-sectional study, carried out at a general surgery opd/ward MMC-MTI, sought to explore surgical preferences for breast nodules among breast carcinoma patients undergoing mastectomy and to identify factors influencing these decisions. 42 patients in all were enrolled, 8 of them selected breast nodule surgery while 34 did not. The decision-making process was influenced by a number of issues, such as worry about recurrence, worries about time-consuming surgical procedures, and disregard for body image, financial limitations, and previous unsuccessful reconstructive results.

**Results:** 28 patients had right-sided disease, 13 had left-sided cancer, and 1 had bilateral involvement, according to disease features. Furthermore, 25 individuals had N0 disease, while 17 had N1 disease, according to nodal staging. 8 patients decided to undergo breast reconstruction while 34 patients decided to forgo PMBR.

**Conclusion:** This study provides insightful information about the complex decision-making process involving

**breast nodules surgery in individuals with breast cancer. The identified characteristics give healthcare professionals a framework on which to build strategies that guarantee patients receive educated and individualized care, thereby improving patient happiness and quality of life in general.**

**Keywords:-** Breast, Tumor, Surgery, Lymph Node, Reconstruction, Aesthetic.

## I. INTRODUCTION

Breast cancer is the most common cancer in women and the second most common cancer worldwide. Surgery has been a mainstay and primary modality in the management of breast cancer. As there have been improvements in the early detection and treatment of breast cancer, there have also been improvements in the techniques used for breast reconstruction after mastectomy. Post-mastectomy breast reconstruction (PMBR) is an elective treatment option that is associated with improved psychosocial well-being and quality of life. The cosmetic outcome of BR is superior to mastectomy. Studies have shown that BR is oncologically safe as local recurrence incidence following BR is comparable to that after mastectomy.

There is a tendency for demand to increase due to improvements in reconstructive treatments and an increase in the number of women having risk-reducing mastectomy procedures<sup>1-2</sup>. Clinical studies have been carried out to

evaluate the effectiveness of breast reconstruction, compare various approaches, and give patients with information about their treatment options<sup>3</sup>. Patients who undergo a mastectomy for breast cancer frequently express negative feelings about their body image, sexuality, and general quality of life following the loss of one or both breasts, as has been well-documented in the literature<sup>8-10</sup>.

The surgical technique employed for breast nodule surgery and reconstruction, radiation therapy side effects, and asymmetry related to size or shape may all have an impact on a patient's happiness with the surgical results in addition to socioeconomic considerations, ethnicity, and medical expertise. Regardless of whether they are offered locally by the service, patients should be informed of all viable choices for breast reconstruction. It's interesting to note that patient satisfaction with surgical outcomes may differ from attending physicians' perceptions, with patients expressing higher levels of pleasure than doctor's do<sup>16</sup>. Despite all the available resources and improved plastic surgery techniques and options few patients who have had a mastectomy undergo breast reconstruction. It suggests that there remain unexplained factors that influence receipt of PMBR.

## II. METHODOLOGY

The study was carried out in mardan medical complex surgical ward/opd. The research was conducted between January and June of 2023. It made advantage of non-probability sampling. This indicates that participants were chosen based on specified criteria rather than at random. Patients who satisfied certain requirements were included in the study. They had to be between the ages of 20 and 60, have a mastectomy scheduled as part of their breast cancer therapy, and have a histological diagnosis of carcinoma breast. Patients with connective tissue diseases and metastatic disease were not allowed to participate in the trial. 42 people in all were enrolled in the trial. The patients who were enrolled underwent rigorous evaluations, and their cases were addressed in multidisciplinary sessions. This entailed a group of medical experts debating the best course of action for each patient. A discussion session was invited for patients for whom mastectomy was regarded a safe oncological treatment. Options for immediate or delayed breast reconstruction were explored during this session. Patients were directed and helped in making an informed decision after receiving useful information on breast reconstruction. The study's mixed-methods approach included the BREAST-Q questionnaire in addition to in-depth qualitative interviews. To investigate several aspects that might have influenced the patients' decisions on breast reconstruction, a semi-structured qualitative interview guide was created. The first author conducted all of the interviews, which each lasted about 30 minutes. The BREAST-Q questionnaire, which likely contained standardized items aimed at gauging participants' satisfaction with and quality of life following breast reconstruction, was given to participants. The study complied

with ethical norms and guidelines thanks to permission from an ethical committee. All of the participating women gave both oral and written informed consent, demonstrating that they were aware of the investigative nature of the study. Overall, this methodology presents a thorough strategy for comprehending the elements that affect patients with breast cancer who are having mastectomy decisions regarding the decision-making process and options for breast reconstruction. The purpose of the study was to shed light on patient perceptions and to identify the factors influencing their decision of not to opt for reconstruction despite all the available options.

## III. RESULTS

Here's an analysis of the results and tables illustrating the surgical preferences and factors affecting the decision for breast nodule surgery and reconstruction among the studied patients:

Table 1: surgical preferences and factors affecting decision for breast reconstruction

Surgical preferences	No of patients	
Breast surgery & reconstruction	8	
No breast surgery & reconstruction	34	
Factors affecting decision for number of breast nodule surgery & reconstruction		
Fear of recurrence	5	
Long surgical procedure	4	
Lack of concern regarding body image	9	
Financial issues	10	
Unsatisfactory reconstruction results	6 (lack of trust)	

Table 2: disease characteristics

characteristics	Number of patients
Right sided	28
Left sided	13
Bilateral	1
Nodal stage no	25

## IV. DISCUSSION

Breast reconstruction is an increasingly common choice for women diagnosed with early stage breast cancer undergoing mastectomy. Breast surgery & reconstruction after mastectomy is oncological safe and is associated with high satisfaction and improved psychosocial outcomes. There are many reconstructive methods available, using either autologous tissue or implants, each with its unique set of indications, contraindications, advantages, disadvantages and complications. Despite the potential psychological benefits of breast reconstruction, few patients who have had a

mastectomy undergo breast reconstruction. The goal of this study was to identify the different factors that negatively influenced the likelihood of reconstruction in the women of our population. We chose a mixed approach to explore the perspectives of women who declined PMBR.

The research and tables that were presented provided insight into the patients' surgical preferences for breast surgery nodule & reconstruction (BSN&R) and the variables that affected their choice. The findings show that just 8 of the 42 patients who were studied—or 19% of the total—opted for breast reconstruction, whereas the majority—34 patients—selected not to have BSN&R. This substantial difference in tastes highlights the difficult nature of the decision-making process involving breast reconstruction. It's interesting that the decision of not to opt breast reconstruction was influenced by a variety of different, complex considerations.

This study found that women' perceptions about whether BSN&R affected cancer recurrence was an important factor in deciding on BR. Five patients stated that their decision not to get breast reconstruction was significantly influenced by their fear of recurrence .If women think BSN&R may affect breast cancer recurrence or delay in finding a recurrence, BSN&R decisions may be delayed or abandoned. This demonstrates the significant influence cancer-related worries can have on individuals' treatment decisions. As relapse is the greatest health risk for cancer patients and the most important concern of the cancer patients in general, false perceptions and fears about cancer recurrence can interfere with effective decision-making or cause anxiety even after deciding to undergo BR. Thus, patients must be updated to make informed decisions about their BR without any misunderstanding of BR surgery.

Study found that the concerns about length of the surgical procedure, late recovery and risks of complications were raised by 4 individuals. However this concern was not a major criterion for deciding of not undergoing BSN&R in this study as compared to previous studies.

A significant proportion of patients (9) identified lack of body image concern as a contributing factor. This finding emphasizes the intricacy of body image problems among breast cancer patients and implies that not everyone gives breast reconstruction priority during their medical journey.

The study results also showed that BSN&R decisions were affected by the patient's financial resources, consistent with many findings that household income or having private insurance affects the rate of BSN&R. 10 patients cited money concerns as a deterrent from choosing breast reconstruction. This emphasizes how crucial it is to remove financial obstacles that can prevent patients from accessing certain treatment alternatives.

Six patients expressed dissatisfaction with the outcomes of breast reconstructions, which they blamed on a lack of faith in the plastic surgeon's capacity to provide the desired post-reconstruction breast form. This suggests that perceived negative experience with plastic surgery could be a deterrent to PMBR. Previous research has demonstrated an association between rates of reconstruction and between-surgeon variation and our results provide evidence supporting that. This highlights the significance of developing trust and effective communication between patients and healthcare professionals. These findings can be used to implement physician-level interventions that promote trust and consistency.

The distribution of patients according to their disease features offers insightful information about the patient group being studied. Mastectomies are more frequently performed when patients are more involved in decision-making and are under more stress due to the disease's diagnosis, which explains the systemic global rise in the procedure's use<sup>20-21</sup>. The various treatment modalities used in the cohort of patients under study are illustrated by the surgical methods and therapy sequences. For patients who face a high risk of unacceptable cosmetic deformity following standard breast-conserving surgery, oncoplastic surgery offers a valuable new alternative to mastectomy and reconstruction, achieving two increasingly crucial goals of contemporary breast cancer treatment: psychological well-being and good quality of life<sup>21-22</sup>.

In summary, the study showed that BSN&R decision is not easy for most women, requiring significant psychosocial energy over a long time. This study, in particular, found that concern of body image, recurrence considerations, financial support l resources, and plastic surgeon' trust and confirmation as key criteria in the process of BSN&R decisions. The results of the study suggest that breast surgeons and oncology professionals need to pay attention to these five important criteria when providing education and counseling to help women make their best decision on BSN&R.

## V. CONCLUSION

The analysis and data give a thorough summary of the surgical preferences, deciding factors, disease features, and treatment modalities in the patient group under study. The findings highlight the complex decision-making involved in breast cancer therapy and the demand for individualized, patient-centered care that takes into account medical, psychological, economical, and aesthetic factors. These observations help us comprehend the difficulties and factors that patients must take into account when deciding on important treatments for breast cancer.

## LIMITATION

Our comprehension of this complicated decision-making process may be further improved by future study using larger, more diverse samples and a longitudinal approach.

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