

## Original Research Article

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# A study of quality of life among patients undergoing mastectomy for malignant breast lesions

Apoorv Shastri<sup>1\*</sup>, Manoj Agarwal<sup>1</sup>, Hardik Patel<sup>1</sup>, Avantika Sharma<sup>2</sup>

<sup>1</sup>Department of General Surgery, Rabindranath Tagore Medical College, Udaipur, Rajasthan, India

<sup>2</sup>Department of Obstetrics and Gynaecology, Sawai Mansingh Medical College, Jaipur, Rajasthan, India

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**\*Correspondence:**

Dr. Apoorv Shastri,

E-mail: [apoorv2910@gmail.com](mailto:apoorv2910@gmail.com)

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## ABSTRACT

**Background:** To evaluate quality of life of females after mastectomy and factors affecting the same, in various domains of life, and to assess whether a policy of mastectomy is practical or pragmatic in the scenario of low socioeconomic status prevalent in our region.

**Methods:** Two hundred and forty post-operative mastectomized patients were clinically examined and subjected to a questionnaire designed by WHOQOL-BREF along with an ethically cleared questionnaire prepared according to the local prevailing conditions and Quality of Life was evaluated.

**Results:** 52% patients reported no change in body image, only 2% patients reported depression. The total score of the quality of life was good for 40% of the patients with score of 96-130, followed by 55% with moderate 61-95 and only 5% patients with poor with score of <60.

**Conclusions:** In developing countries like India where, there are no proper facilities for advanced haematological and radiological investigations, there is a severe lack of compliance between doctor and patient and there are no facilities for adjuvant and neo-adjuvant treatment, surgeons are forced to choose mastectomy as the surgery of choice for malignant breast lesions.

**Keywords:** Body image, Depression, Physical health, Post-mastectomy, Quality of life

## INTRODUCTION

Breast cancer is the most common cancer in women in India.<sup>1</sup> The incidence of breast cancer in India, as reported in the National Cancer Registry Program, Indian Council of Medical Research, varied from 23 to 32 per 100,000 women.<sup>2</sup> Breast is an emotional symbol of a woman's pride and personality, including sexuality, motherhood, self-image and self-esteem. Any threat to breast is to shake the very core of her mind and feminine orientation. Mastectomy in women causes extreme mental stress leading to many emotional disorders, such as anxiety, tension, depression, grief, anger, hopelessness, helplessness, and a high degree of passivity. Patients after mastectomy also receive radiation therapy and/ or

chemotherapy plus systemic hormonal therapy for breast cancer treatment depending on stage and estrogen receptor status at diagnosis. Long-term consequences of therapy include painful and often debilitating lymph edema due to surgery or radiation therapy.<sup>3</sup> Therefore, it is critical for health care professionals to become familiar with the impact of a breast cancer diagnosis and its treatment on patient's QoL.

So, this study was done to evaluate the quality of life among patients operated for breast cancer at a tertiary care hospital and factors affecting the same, in various domains of life i.e. physical, social, environmental and psychological and to assess whether a policy of breast

conservation is practical or pragmatic in the scenario of low socioeconomic status prevalent in our region.

## METHODS

This was a hospital based descriptive, correlational, retrospective plus prospective study done in the department of general surgery, Rabindranath Tagore medical college, Udaipur, India, over a period of one year. Ethical committee approval was taken for the study. After applying inclusion and exclusion criteria, two hundred forty patients who had undergone mastectomy for breast malignancies at R.N.T. Medical College, Udaipur and who had been operated at some other institution and presented for further follow up treatment were included in the study. Male patients with breast cancer, patients with multiple malignancies or malignancies other than breast carcinoma, patients with chronic psychological disorders and patients on any type of psychotropic drugs or regime were excluded from the study.

Data collection was done regarding the demographic profile of the patient. Detailed history and clinical examination of the patient including local examination of the mastectomy scar and surrounding muscles and chest wall was done. Postoperative chest x-ray and abdominal sonography was done. Two questionnaires were used, first one was a self-prepared, ethically cleared 21-item questionnaire, designed according to the locally prevailing conditions for evaluating the quality of life of the patient after mastectomy and second one was a 26-item WHOQOL-BREF questionnaire to evaluate the quality of life of the patient after mastectomy.

## RESULTS

The following observations were made in present study. Quality of physical health was good for 39% of patients, average for 46% of patients and poor for 15% of patients. Quality of psychological health was good for 31% of patients, average for 48% of patients and poor for 18% of patients. Quality of environmental health was good for 18% of patients, average for 42% of patients and poor for 60% of patients. Quality of social relationships was good for 33% of patients, average for 32% of patients and poor for 35% of patients (Table 1).

**Table 1: Health parameters as calculated amongst the patients studied.**

Health parameters	Number of patients	Percentage
<b>Physical health score</b>		
(>80)	92	39%
(50-80)	112	46%
(<50)	36	15%
<b>Psychological health score</b>		
Good (>80)	80	31%
Average (50-80)	116	48%

Poor (<50)	44	18%
<b>Social relationship score</b>		
Good (>80)	80	33%
Average (50-80)	76	32%
Poor (<50)	84	35%
<b>Environmental health score</b>		
Good (>80)	44	18%
Average (50-80)	100	42%
Poor (<50)	96	40%
Total	240	

Quality of life as perceived by the patients studied was good for 65% of patients, average for 12% of patients and poor for 23% of patients. Satisfaction of health achieved as perceived by patients studied was good for 65% of patients, average for 18% of patients and poor for 17% of patients (Table 2).

**Table 2: Health parameters as perceived by the patients studied.**

Health parameters	Number of patients	Percentage
<b>Quality of life</b>		
Good (4-5)	156	65%
Average (3)	28	12%
Poor (1-2)	56	23%
<b>Health satisfaction</b>		
Good (4-5)	156	65%
Average (3)	44	18%
Poor (1-2)	40	17%
Total	240	

The total score of quality of life after mastectomy according to the questions answered in all the four domains of life i.e. physical, social, psychological and environmental by the total two forty patients examined was good for 40% of the patients followed by 55% with moderate and was poor for only 5% of the patients (Table 3).

**Table 3: Quality of life according to the total score.**

Total score of quality of life	Number of patients	Percentage
Good (96-130)	96	40%
Moderate (61-95)	132	55%
Poor (<60)	12	5%
Total	240	

## DISCUSSION

In present study quality of physical health was good for 39% of patients, average for 46% of patients and poor for 15% of patients. In similar studies it has been reported that only 20% women were happy with their post mastectomy quality of physical health and the quality of physical health was average for 58.8% of patients and

good for 25% of patients while was poor for 13.8% of patients 3, while in another the mean score for physical functioning was found to be 86.39%.<sup>4</sup> In this study quality of psychological health was good for 31% of patients, average for 48% of patients and poor for 18% of patients while in another study it has been reported to be average for 55.5% of patients and good for 19.4% of patients while was poor for 25% of patients.<sup>3</sup>

Quality of environmental health was good for 18% of patients, average for 42% of patients and poor for 60% of patients in present study. Quality of social relationships was good for 33% of patients, average for 32% of patients and poor for 35% of patients in this study while in another study quality of social relationships was average for 41.8% of patients and good for 19.4% of patients while was poor for 38.8% of patients.<sup>3</sup> Quality of life as perceived by the patients studied was good for 65% of patients, average for 12% of patients and poor for 23% of patients while in another study 61% patients had quality of life as good while 13% had average and 9% had poor quality of life.<sup>3</sup>

Satisfaction of health achieved as perceived by patients studied was good for 65% of patients, average for 18% of patients and poor for 17% of patients. In similar study 63% of patients were satisfied by their health quality while 19% of patients thought that they have average quality of health status and 16% of patients complained of having poor quality of life.<sup>3</sup> The total score of Quality of Life after mastectomy according to the questions answered in all the four domains of life i.e. physical, social, psychological and environmental by the total 60 patients examined was good for 40% of the patients followed by 55% with moderate and was poor for only 5% of the patients.

It was observed that out of the four domains studied, the social domain of the patient's life who has undergone mastectomy was the poorest. This indicates that the financial condition of the patient, physical safety and security that the patient experiences in her surroundings were affected to the maximum level; poor accessibility, quality of health care provided to the patient, less opportunities given for acquiring new information and skills were the reason for overall decline in the quality of life.

While out of all the domains studied, the least affected domain was the physical health domain which shows that the capacity to carry out activities of daily living, amount of energy or fatigue experienced by the patient, mobility, pain and discomfort, proper sleep and work capacity were least affected by the surgical procedure and resulted in an overall good to moderate quality of life. In another study the impact of breast cancer and mastectomy on the QoL

of mastectomized women was especially seen on the social aspects of their lives and the quality of life was affected negatively in patients with mastectomy in terms of body image but the overall quality of life was not affected significantly.<sup>5</sup> It has also been reported that the mean score for the global health status for breast cancer patients was  $64.92 \pm 11.42$ . The best functional outcomes were found for the cognitive and social functioning subscales and emotional functioning scored the lowest.<sup>6</sup>

## CONCLUSION

In developing countries like India where, there are no proper facilities for advanced haematological and radiological investigations, there is a severe lack of compliance between doctor and patient and there are no facilities for adjuvant and neo-adjuvant treatment, surgeons are forced to choose mastectomy as the surgery of choice for malignant breast lesions.

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