

Original Article

# Health-related Problems and Lived Experiences of Breast Cancer Survivors: A Mixed-Methods Study

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## ABSTRACT

**Objectives:** This study aimed to explore breast cancer (BC) survivors' health-related problems and lived experiences.

**Materials and Methods:** The current study employed a convergent mixed-methods design. It enrolled 115 patients and collected data using validated questionnaires to assess their health problems. Qualitative data were gathered through in-depth interviews.

**Results:** The mean age of survivors was  $49.35 \pm 8.66$  years. Problems reported in the descending order were fatigue, sexual dysfunction (decreased libido, painful sexual intercourse and vaginal dryness) and lymphoedema with shoulder stiffness, respectively. Qualitative analysis revealed themes related to post-diagnosis reactions, spirituality, misconceptions, disturbed body image, economic impact and need for help in household chores.

**Conclusion:** A substantial number of BC survivors had multiple health problems. Our study emphasises the importance of holistic survivorship care, involving nurses in post-treatment support and addressing societal discrimination and psychosocial concerns to enhance their quality of life.

**Keywords:** Breast cancer, Experiences, Health problems, Survivorship

## INTRODUCTION

Breast cancer (BC) is the leading cause of morbidity and mortality amongst women worldwide. According to the National Cancer Institute, around 7.2% of deaths from cancer were caused by BC.<sup>[1]</sup> In India, it is estimated that one in every 28 women is at risk of developing BC<sup>[2]</sup> as compared to one in every eight women in Europe and the USA.<sup>[3]</sup> In Indian women, BC is the most common cancer, followed by cervical, uterine and ovarian cancer.<sup>[4]</sup>

A majority of BC cases are managed with surgery followed by adjuvant treatment such as chemotherapy, radiotherapy and targeted and hormonal therapy to treat residual micro-metastatic disease.<sup>[5]</sup> Various studies have shown that patients treated with adjuvant therapies might experience physical and psychological problems. Breast surgery, mainly mastectomy, is often associated with a disturbance in body image. This can lead to negative psychological effects, such as impacting self-esteem and quality of life (QOL).<sup>[6]</sup> Chemotherapy and radiotherapy cause weight loss, vomiting, weakness, hair

loss, skin discolourations, shoulder stiffness, arm oedema and cognitive dysfunction that disturb their daily activities.<sup>[7]</sup> On the other hand, after completion of the treatment, BC patients with oestrogen receptor-positive cancer are treated with systemic hormonal therapy, which further leads to hot flushes, muscular cramps, joint stiffness, joint pains and a loss of libido<sup>[8]</sup> which can be distressing for the patients. Furthermore, treatment causes sexual and fertility issues, such as decreased sexual desire, avoidance of sexual intimacy, irregular menstruation and disturbance in ovarian functions leading to infertility.<sup>[9]</sup>

In India, BC patients face new challenges when their treatment is completed. Life for survivors is never the same again, whether physically, cognitively or socially. The 1<sup>st</sup> year after therapy has been reported to be the most difficult.<sup>[10]</sup> A study reported that BC survivors often experience fatigue, neuropathy and cognitive impairment as a result of treatment-related side effects. The most prevalent survivorship issues were fatigue (60%), shoulder stiffness (59.6%), body/joint

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pain (63.5%), menopause (73.3%) and loss of sexual desire (60%).<sup>[11]</sup> It is vital to have a thorough understanding of the issues faced by BC survivors to provide post-treatment care effectively. The assessment of problems can serve as a basis for modifying follow-up care. The experiences and health problems of BC survivors in India remain underreported and inadequately studied. Hence, this study assessed lived experiences and health problems seen in BC survivors after the completion of their cancer treatment.

## MATERIALS AND METHODS

### Study design

A convergent design of a mixed-methods approach was adopted for this study. A convergent mixed method design, also known as a triangulation design, was used to obtain different but complementary data about the concept under study.<sup>[12]</sup> Both quantitative and qualitative data were collected simultaneously and with the same priority. The first quantitative data were collected regarding health problems faced by the patients. It was followed by qualitative data regarding the experiences of the patients. However, the data from the quantitative method were neither analysed nor interpreted to inform the qualitative approach. Thus, the sequencing of data collection was concurrent. In this study design, both quantitative and qualitative data were given equal status. The findings from both quantitative and qualitative methods were integrated at the interpretation stage.

### Study setting and participants

The study was conducted at a selected tertiary care facility in Northern India from January 2021 to December 2022. A total of 100 participants were enrolled using a convenient sampling method for the quantitative study and purposive selection for focus group discussions.

### Inclusion criteria

The eligibility criteria were patients diagnosed with BC stage I, II or IIIA and who had completed the treatment at least 3 months before the study.

### Exclusion criteria

Patients who had a history of recurrent diseases at the time of the survey, had a history of hospitalisation within the last 1 month before data collection, with metastatic disease, had severe cognitive or psychiatric difficulties and severely ill women unable to give interviews were excluded from the study.

### Sample size

The sample size was calculated using the formula,  $n = Z^2P(1-P)/d$ .<sup>[2,13]</sup> At a 95% confidence interval, anticipated physical problems amongst BC survivors of 50%, and a precision of 10%, the calculated sample size was

100 for the quantitative phase. For the qualitative phase, another 15 patients were recruited until the data saturation was attained. Hence, a total of 115 patients were taken for the present study.

### Ethical consideration

The study was conducted after getting approval from the Institutional Ethics Committee (vide No: INT/IEC/2018/000148). A detailed explanation regarding the purpose of the study was provided to the participants before obtaining informed consent. Participation in the study was entirely voluntary, and they were also assured of confidentiality.

### Tools for data collection

The research instrument consisted of demographic and treatment-related variables. The health problems were assessed with the validated health problems sheet, and lived experiences were recorded in the audio recorder using a validated interview guide.

#### *Tool I: Sociodemographic and clinical profile sheet*

It comprised a sociodemographic and clinical datasheet, with sociodemographic variables such as age, gender, residence, type of family, education and occupation. The clinical profile of the patients included diagnosis, clinical stage, chemotherapy, radiation therapy and surgery.

#### *Tool II: Problem assessment questionnaires*

This self-developed validated questionnaire included the common problems experienced by the patients after completing the treatment regimen, such as fatigue, arm pain, shoulder stiffness, lymphoedema, vasomotor symptoms and sexual problems. The patient has to tick yes if they experience the problem or no for not experience it.

#### *Tool III: Interview guide*

In this process, the researcher and the participants interact with each other, conducting interviews, and open-ended questions related to health problems were included in the tool to explore their experiences. Similar sets of questions were asked to each participant, but the order was not strictly similar; flexibility was adopted to maintain the flow of conversation and to explore unanticipated experiences. A total of 14 questions (four opening and 10 follow-up questions) were included in the interview.

#### *Audio recorder*

The audio recording of the interview was done for each subject using an audio recorder. A separate room free from the noisy area in the hospital was taken for conducting an interview. The audio recorder of a mobile phone was used for recording the interview, which had already been checked for the quality of the voice.

### Data collection procedure

The patients coming for follow-up visits were screened, and informed written consent was taken. All eligible patients were interviewed by the investigator using the purposive sampling technique. The information related to the demographic data was collected from the interview, whereas the clinical data related to the stage and treatment modalities of cancer were taken from the patient's medical records. The patients who could read the questions were given a questionnaire to be filled out by themselves, which took around 15–20 min. The rest of the patients received help to fill out the questionnaire. These participants underwent interviews, and the researcher recorded their answers after reading the items to them. The responses were directly registered without any change by the researcher. In-depth interviews were conducted in a room where there was no disturbance. The interviews were conducted right after they consulted with the doctor. All interviews were recorded, and permission to audio record the interview was also obtained from the participants. Notes were taken immediately after the completion of the interview. Each interview lasted for 30–60 min.

### Data management and statistical analysis

#### For quantitative data

Data were entered into the Excel 2017 programme. A codebook for the digitisation of the categorical data (nominal and ordinal) was created and then exported to the Statistical Package for the Social Sciences software. Frequencies and percentages were calculated for categorical data.

#### For qualitative data

- After the interview was over, the investigator immediately listened to the audio recording to make sure the interview was recorded, to ensure the accuracy of the recording and then wrote the notes about the interview
- Each audio recording was marked with numbers ranging from P01 to P15. All recordings were secured and password-protected on the investigator's computer. The audio recordings of interviews were deleted from the audio recorder when transcription and translation were completed
- The interviews were conducted in the Hindi and Punjabi languages, spoken by the patients. The interviews were translated into English by the investigator and checked by an English professional. A second investigator reviewed the translation for accuracy, meaning and consistency. All the translated interviews were back-translated into the original language to minimise the data loss
- The paper and pen method was used to analyse the qualitative data. All transcribed data were analysed using the constant comparative method with thematic

analysis. A theme depicts the different highlights of an element over the dataset. A subtheme is categorised under the theme with a concept similar to its parent theme, yet focuses on one remarkable, concrete element. The recorded interviews were transcribed verbatim and analysed using Colaizzi's steps of data analysis.<sup>[14]</sup>

## RESULTS

### Demographic and clinical characteristics

Table 1 shows demographic and clinical characteristics of the patients. The mean age was  $49.35 \pm 8.66$  years (mean  $\pm$  Standard deviation). The majority (77%) of subjects were in the <50 years of age group. Most of the participants (84%) were married. A total of 36% of the respondents had completed formal education, while 22% were illiterate. Most of the respondents (85%) were housewives.

### Problems experienced by BC survivors

Problems with the decreasing frequency were fatigue, sexual dysfunction (decreased libido, painful sexual intercourse and vaginal dryness) and lymphoedema with shoulder stiffness, respectively. Numbness on the affected side was reported by 40% of participants. More than 40% of the participants reported trouble in concentration (43%), followed by disturbed body image (30%) and pain at the operated site (26%), respectively [Figure 1].

### Qualitative survey

During the analysis, 8 themes and 15 subthemes were identified and depicted in Figure 2.

#### Post-diagnosis reaction

##### Feeling of fear and worry

The diagnosis of cancer was often a traumatic experience for the patients, characterised by fear, confusion and uncertainty about the future. Many participants reported feeling overwhelmed and scared upon receiving their diagnosis. For example, one participant shared:

*'Patient said that the name of the cancer makes the person feel that her death is standing in front of her, giving her tension and stress in life. The feeling that her children are not settled yet in their lives makes her feel more down.'* (Participant no 2).

Key themes: The themes and sub-themes that emerged under the problems of BC survivors are represented below in Figure 2.

##### Fear of abandoning the children

After receiving the news of cancer, they worry about their children's future as the illness has the potential to be severe. For example, one participant shared:

*'The patient feels tense and worried about the fate of her daughter's life, as she is too young, and after her death, who will take responsibility for her daughter's marriage?'* (participant

**Table 1:** Demographic and clinical characteristics of the participants (n=100).

Variables	%
Age at time of survey (years)	
<50	77
More than 50	23
Mean±SD	49.35±8.66 years (Range 31–65)
Educational status	
Illiterate	22
Middle level	13
10 <sup>th</sup> level	36
12 <sup>th</sup> and above	29
Marital status	
Married	84
Widow	16
Type of family	
Nuclear	78
Joint	22
Habitant	
Rural	52
Urban	48
Monthly family income	
<10,000	62
>10,000	38
Occupation	
Housewife	85
Working	15
Time since diagnosis (years)	
1–5	70
6–10	21
11–15	06
>16	03
Disease stage	
IA	01
IIA	36
IIB	29
IIIA	34
Menopausal status	
Premenopausal	20
Post-menopausal	61
Chemo-pausal	19.5
Body mass index (kg/m <sup>2</sup> )	
Underweight (18.5)	05
Normal weight (18.5–22.9)	10
Overweight (23–24.9)	24
Pre-obese (25–29.9)	47

(Contd...)

**Table 1:** (Continued).

Variables	%
Obese (>30)	14
Chemotherapy (n=90)	
5-Fluorouracil+ Adriamycin+ Cyclophosphamide+ Taxane	63
5-Fluorouracil+ Epirubicin+ Cyclophosphamide+ Taxane	30
Paclitaxel+trastuzumab	05
Cyclophosphamide+Methotrexate+5- Fluorouracil	02
Radiotherapy (n=92)	
35Gy/40Gy/15#/3 weeks/2 weeks	60
35Gy/40Gy/16#/3 weeks/4 weeks	30
34Gy/10#/2 weeks	10
SD: Standard deviation, IA: Breast cancer (BC) stage 1, IIA, IIB: BC stage 2, IIIA: BC stage 3	

no 6). Some patients also verbalised that they beg for some more time from God so that they can settle their children in their lives, as their children are very young.

### **Spirituality and misconception**

#### *Trust in god*

The study findings demonstrated that BC significantly affects spiritual beliefs such as the hope of life, firm belief in destiny and trust in divine decisions. From the participant's point of view, 'after the diagnosis of cancer, she started believing in God more. After the operation, when her reports came back normal with no tumor, her trust in God deepened, which she couldn't express in words. Everyone has to die 1 day, but she felt lucky that she survived and fought with the disease.' (Participant 5)

#### *Anger in god*

These patients often have negative feelings after knowing that they have cancer. As it is, the normal phenomenon for any negative experience that exhibits denial and anger.

'As the patient verbalised that she had done some sins in her past birth, as a result of which she has been punished with this deadly disease 'Cancer' by the god. Sometimes, she doesn't want to live and wants to quit life, but due to her children, she has to live and tolerate all the pains of life.' (Participant 13)

### **Economic impact**

#### *Financial problem*

BC had caused unemployment, anticipated job loss, saved money for their children and borrowed money for treatment. 'One participant expressed that my husband works in a private company, so there is a financial problem that puts the family in a dilemma of whether to spend money on the patient's medicines and treatment or save it for their daughter's

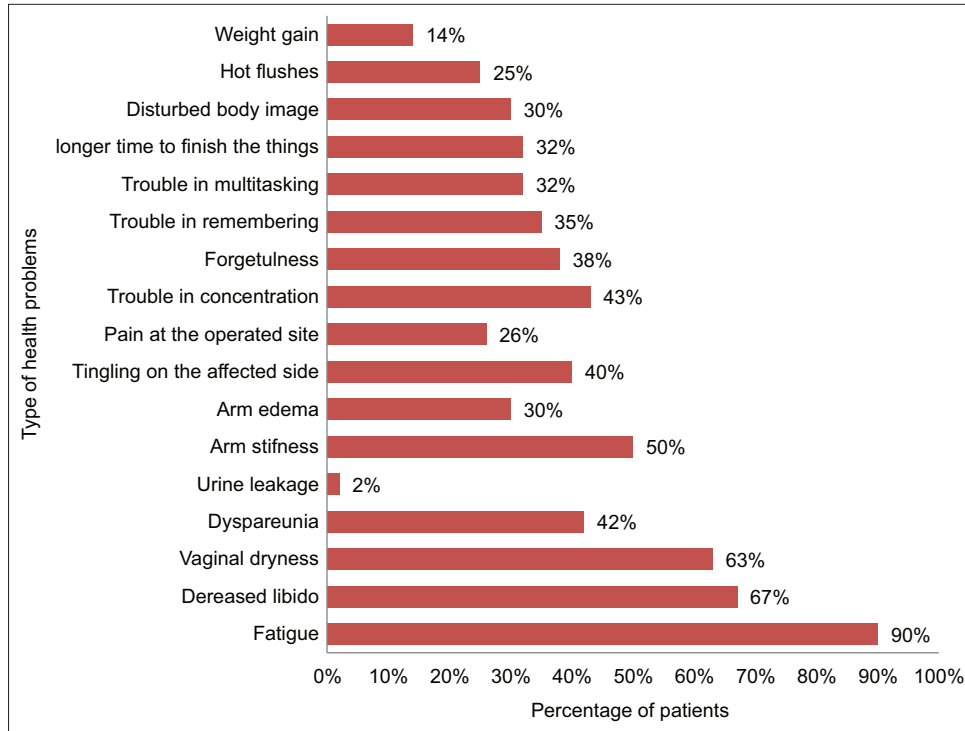


Figure 1: Health problems among the patients.

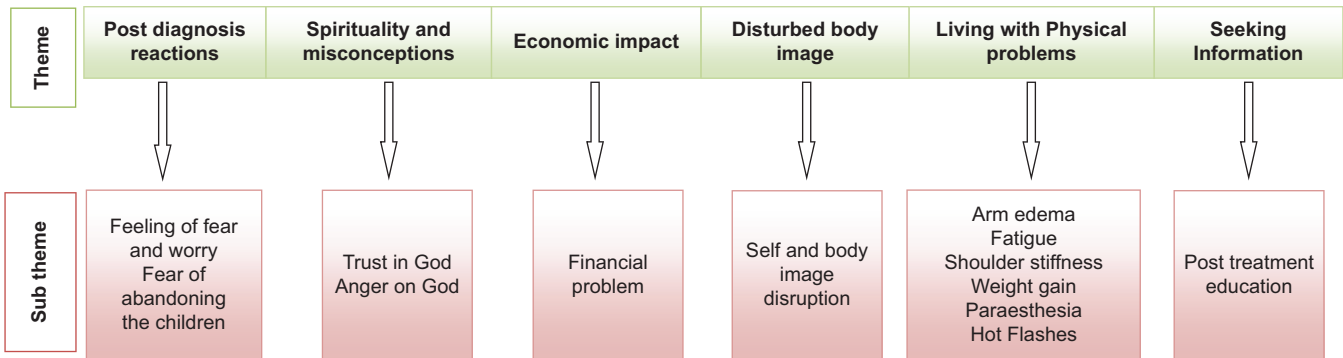


Figure 2: Themes and sub-themes codes for all participants.

marriage, as both are equally important.’ (Participant no 6) Another participant also mentioned that ‘her son has borrowed money from many people for her treatment. Whenever she comes for follow-up, the person who comes along with her for follow-up, she has to pay him too.’ (Participant no 4)

**Disturbed body image**

*Self and body image disruption*

These survivors often deal with disrupted body image and physical appearance. After surgery, many experience altered body physique, alopecia, visible scars on their bodies, discrimination from society and hurtful comments. These changes can lead to lower self-esteem and feelings of embarrassment due to altered body appearance. Few participants describe such an instance:

‘The patient feels hesitant and unwilling to go outside and meet people, as she feels embarrassed about her disturbed body image. Her husband’s job demands that he meet new people, so he asks the patient to come along with him, but she is unwilling to go.’ (Participant no 14)

‘The patient feels that she has lost her old personality after the disease. Whenever she sees her face, she feels that her face has changed drastically from the original one.’ (Participant no 2)

‘Earlier patient used to have long hair and he always used to make a bun, but now she has short hair. People ask her whether she has undergone a haircut; if so, then that’s good, as she is getting modern. So replies that yes, she underwent a haircut, but never tells them it is due to her breast surgery.’ (Participant no 10)

### **Living with physical problems**

Participants reported a range of physical symptoms such as arm oedema, fatigue, shoulder stiffness, weight gain, paraesthesia and hot flashes. These symptoms significantly impacted their daily functioning. Many participants expressed these problems as

*'The patient reported that her hand is getting swollen and tight. There is a feeling of heaviness in her hand, and swelling increases after doing some work.'* (Participant No. 9)

*'The patient said that after doing some work, she should eat something as she needs energy. After eating and resting for a while, she feels better.'* (Participant No. 13)

*'The patient said that she is unable to put clothes on by herself due to the stiffness of her muscles, so her son helps her with that. She can take things from the lower shelf of the cupboard, but can't from the upper shelf.'* (Participant No. 7)

*'The patient said that she has gained weight, and she has to work hard to lose it. She walks, eats specific things, and drinks a lot of water to lose weight, but after so much hard work, she has reduced very little.'* (Participant No. 15)

*'The patient feels numbness in her fingertips. While cutting vegetables, they slip off her hand, and she is unable to cut them quickly.'* (Participant No. 4)

*'The patient feels extra heat and is unable to tolerate warmth in a hot environment. She perspires in the cold season, also. Like today morning, it was cold, when I was going to the kitchen, I started sweating. During the night, she has to remove the blanket also.'* (Participant No. 8)

### **Seeking information**

#### *Post-treatment education*

Participants generally expressed trust and appreciation for their healthcare providers. Many valued the support and guidance received from doctors and other healthcare professionals. Two of the participants stated, *'The Patient asked if this problem affects the kidney? Patient heard that due to this disease kidneys fail instantly.'* *'Another patient asked what to do as she had to go to the washroom again and again after every ½ h, and she is unable to control the urge.'* (Participant No. 5)

### **Needs help with household chores**

#### *Daily work in the house*

BC significantly affected participants' daily activities and household chores. *'The patient reported that she can perform daily household work but is not able to do work that requires energy, like opening a nut. She is unable to open any object that is completely closed.'* (Participant No. 12)

### **Altered sexuality**

#### *Disturbed sexual life*

BC survivors have expressed concerns about marriage, including denial and uncertainty about the future. One

patient verbalised that *'her husband usually asks her to have sex, but she avoids it due to the fear that the disease will spread to her husband through sexual intercourse.'* (Participant no 3)

## **DISCUSSION**

A mixed-methods design was used in the study to explore the physical problems and experiences of BC survivors. We found that the women who have completed BC treatment successfully would face at least one of the problems. A study reported that after the completion of primary treatment, cancer patients experienced multiple symptoms, with a mean number of 6.8 symptoms per patient.<sup>[15]</sup> Another study conducted by Cheng *et al.* reported that patients experienced more than 10 symptoms in nearly half of the patients (47%).<sup>[16]</sup>

In the current study, the most common reported physical problems were fatigue (90%), lack of interest in sex (67%), painful intercourse (42%), vaginal dryness (63%) and cognitive problems (forgetfulness [38%], shoulder stiffness [50%] and lymphoedema [30%]). This is congruent with the previously published study by Sapkota *et al.*<sup>[17]</sup> where they found that common physical problems encountered by the BCS were tiredness (61%), lack of energy (57%), forgetfulness (57%) and lack of interest in sex (52%). Janz *et al.* also found that fatigue (81.7%), breast symptoms (72.1%), sleep disturbance (57%) and arm symptoms (55.6%) were the main symptoms experienced after completion of the primary treatment.<sup>[15]</sup>

Fatigue associated with cancer is a subjective symptom that is experienced by nearly all cancer patients; however, BC survivors have more issues compared to other cancers. In the present study, almost all the patients suffered from fatigue (90%), which could be due to the treatment (chemotherapy and radiotherapy) they had received. Similarly, scientific literature reported that almost every patient had fatigue, with a prevalence of up to 99%.<sup>[18]</sup> An increase in pro-inflammatory cytokines, dysregulation of the hypothalamic-pituitary-adrenal axis, disruption of circadian rhythms, muscle loss, and cancer wasting are all proposed ways by which cancer treatment might produce fatigue.<sup>[19]</sup>

The breast plays a major role in body image, sexual life and femininity. Sexuality is an essential and basic need of humans that can be impaired during and after cancer treatment. Cancer therapy can have deteriorating effects on the sexual health of patients due to changes in body image, fertility and physical conditions such as fatigue and weakness, leading to sexual dysfunction.<sup>[20]</sup> In the present study, participants presented with problems related to sexual desire (67%), pain during and after the sexual act (42%) and vaginal dryness (63%). With chemotherapy-induced menopause, most of the patients experienced pain or discomfort during intercourse, due to a lack of lubrication during penetration and sexual intercourse. This could be due to 20% having

chemo-pause, and 60% of the women were post-menopausal in the present study. A qualitative aspect of the current study also found that women who were menopausal had more difficulty engaging in sexual activity due to pain and vaginal dryness. A systematic review by Chang *et al.*<sup>[21]</sup> showed a reduced frequency of sexual activity in women after treatment. Furthermore, difficulties in sexual life, consisting of post-treatment disturbances in body image and feelings of unattractiveness, seem to be highly prevalent amongst BC survivors.<sup>[22]</sup> In the current study, participants expressed a sense of loss of identity following their illness, with one stating that when she looked at her face, she felt that it had changed drastically from how it once was. Our results are in line with a study on Nigerian women after mastectomy, demonstrating that surgery had a remarkable influence on women's perceptions of femininity and reduced their sexual function.<sup>[9]</sup>

After completion of treatment, many patients suffer from serious complaints in their arms and shoulders, such as decreased joint mobility, muscle strength, pain and lymphoedema, leading to limitations in activities of daily living (ADL).<sup>[23]</sup> In the present study, patients reported arm/shoulder stiffness (50%), lymphoedema (30%) and numbness/tingling sensation on the affected arm (40%). Other studies also restricted shoulder movements, decreased upper extremity strength and impaired shoulder function.<sup>[24]</sup> A qualitative aspect of this study offers insight into patients' experiences, as many verbalised that impaired shoulder function hindered their ability to perform ADLs, such as combing their hair, lifting jars from upper cabinets, hanging clothes to dry and applying soap to their back. A study conducted amongst BC patients following treatment also found that limitations in shoulder movement also interfered with daily activities, including reaching behind the head to wash or comb hair and reaching items high on a shelf.<sup>[21]</sup>

Patients also reported that after the treatment, they felt ants crawling on their arm and at the operated site. They felt numbness in their fingertips. While cutting vegetables, they slip out of their hands and are unable to cut them quickly. This may be due to the neurological disturbances following BC treatment that result in nerve damage due to surgery or radiation exposure, neuropathy due to chemotherapy or perhaps lymphoedema. The women with lymphoedema showed reduced sensation in the arm, which may be the result of intercostobrachial or other nerve damage during axillary node dissection, leading to subsequent loss of sensory function.<sup>[25]</sup>

In this study, we also found that 14% of the patients had a body mass index above 30 kg/m<sup>2</sup> and thus would be considered to be obese. The patient also verbalised that they have gained weight, and they have to work hard to lose it. They walk, eat specific things and drink a lot of water to lose weight, but after so much effort, they have lost very

little weight. These findings are in agreement with the previous study in which obesity and weight gain, along with a lack of physical activity, were reported in BC patients.<sup>[26]</sup> These findings suggest that weight management can be an important part of rehabilitation following BC treatment to help prevent and control lymphoedema as well as reduce the risk of cancer recurrence and the development of other chronic diseases.

The present study showed that around half of the BCSs had cognitive impairment after the treatment. Our results are in line with the previous study conducted by Boscher *et al.*, which reported that about 50% of BCSs had current cognitive complaints.<sup>[27]</sup> Chemotherapy used for BC, such as 5-fluorouracil, can cross the blood-brain barrier and cause a direct neurotoxic effect in the brain by damaging neurons or glial cells, causing ischaemic nerve damage and reducing hippocampal cells.<sup>[28]</sup>

In-depth interviews with the patients brought out some important findings, such as fear of the disease, treatment and recurrence. This fear is expressed because of the lethal nature of the disease and the stress it may cause in patients. These findings were consistent with previous published studies.<sup>[29,30]</sup> The spiritual aspect has played a major role in the treatment of BC survivors. Participants have stated that they began to believe in God more after the cancer diagnosis. After the operation, when their reports came normal with no tumour, their trust in God deepened, which they could not express in words. Everyone has to die 1 day, but they felt lucky that she survived and fought the disease. Similar findings were also reported in previous studies.<sup>[16,30,31]</sup> In the present study, survivors believe that they contracted the disease because of their last birth sins; as a result, she has been punished with this deadly disease, Cancer, by God. Sometimes, she does not want to live and wants to quit life, but due to her children, she has to live and tolerate all the pains of life.

### Limitations of the study

The present study has limitations in terms of the convenient selection of the participants, and single centric study, which limits the generalisability of the findings. Despite its limitations, this study sheds light on the issues faced by BC survivors in developing countries such as India. This is the first mixed-methods study on BC survivors in India. Clinicians and nurses can use the findings of this study to focus on these symptoms and incorporate them in their assessments of clients during follow-up visits. It may be beneficial for nurses to plan for ongoing psychological care for survivors after treatment is completed.

### CONCLUSION

A substantial number of BC survivors experienced multiple physical problems following the completion of their primary treatment, with fatigue, sexual dysfunction and lymphoedema being the most commonly reported. The

qualitative findings provided deeper insight into the lived experiences of survivors, revealing challenges related to body image, societal stigma and disruptions in sexual life. These issues significantly affected their overall well-being. Notably, the level of satisfaction with individualised nursing care played a critical role in shaping their recovery and QoL. These findings underscore the importance of comprehensive, patient-centred support for BC survivors to address both physical and psychosocial needs.

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**Ethical approval:** The research/study was approved by the Institutional Review Board at the Institutional Ethics Committee, approval number IT/IEC/2018/000148, dated 21st January 2018.

**Declaration of patient consent:** The authors certify that they have obtained all appropriate patient consent forms. In the form, the patients have given their consent for their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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## REFERENCES

- National Cancer Institute. Cancer of the Breast (Female) - Cancer Stat Facts. SEER. Available from: <https://seer.cancer.gov/statfacts/html/breast.html> [Last accessed on 2022 Mar 21].
- National Cancer Registry Programme. Cancer Statistics. India Against Cancer. Available from: <http://cancerindia.org.in/cancer-statistics> [Last accessed on 2022 Mar 21].
- Jemal A, Bray F, Center MM, Ferlay J, Ward E, Forman D. Global cancer statistics. *CA Cancer J Clin* 2011;61:69-90.
- Mathur P, Sathishkumar K, Chaturvedi M, Das P, Sudarshan KL, Santhappan S, et al. Cancer Statistics, 2020: Report from national cancer registry programme, India. *JCO Glob Oncol* 2020;6:1063-75.
- Bhattacharyya GS, Doval DC, Desai CJ, Chaturvedi H, Sharma S, Somashekhar S, et al. Overview of breast cancer and implications of overtreatment of early-stage breast cancer: An Indian perspective. *JCO Glob Oncol* 2020;6:789-98.
- Weingarden H, Laky ZE, Ladis I, Austen WG, Wilhelm S. Body image after mastectomy scale: A new measure of body image behaviors and beliefs in women following mastectomy. *J Womens Health (Larchmt)* 2022;31:47-54.
- Iddrisu M, Aziato L, Dedey F. Psychological and physical effects of breast cancer diagnosis and treatment on young Ghanaian women: A qualitative study. *BMC Psychiatry* 2020;20:353.
- Huang YJ, Huang TW, Lin FH, Chung CH, Tsao CH, Chien WC. Radiation therapy for invasive breast cancer increases the risk of second primary lung cancer: A nationwide population-based cohort analysis. *J Thorac Oncol* 2017;12:782-90.
- Barthakur MS, Sharma MP, Chaturvedi SK, Manjunath SK. Body image and sexuality in women survivors of breast cancer in India: Qualitative findings. *Indian J Palliat Care* 2017;23:13-7.
- Kaur N, Gupta A, Sharma AK, Jain A. Survivorship issues as determinants of quality of life after breast cancer treatment: Report from a limited resource setting. *Breast* 2018;41:120-6.
- D'Souza RB, Ghose JD, Nag SM. Breast cancer survivorship in India. *Indian J Med Res* 2021;154:177-9.
- Fetters MD, Curry LA, Creswell JW. Achieving integration in mixed methods designs-principles and practices. *Health Serv Res* 2013;48:2134-56.
- Ahmed SK. How to choose a sampling technique and determine sample size for research: A simplified guide for researchers. *Oral Oncol Rep* 2024;12:100662.
- Sanders C. Application of Colaizzi's Method: Interpretation of an auditable decision trail by a novice researcher. *Contemp Nurse* 2003;14:292-302.
- Janz NK, Mujahid M, Chung LK, Lantz PM, Hawley ST, Morrow M, et al. Symptom experience and quality of life of women following breast cancer treatment. *J Womens Health (Larchmt)* 2007;16:1348-61.
- Cheng KK, Devi RD, Wong WH, Koh C. Perceived symptoms and the supportive care needs of breast cancer survivors six months to five years post-treatment period. *Eur J Oncol Nurs* 2014;18:3-9.
- Sapkota A, Shrestha S, Sedhain A, Koirala S, Kafle P. Problems of breast cancer survivors living in an urban area of Nepal. *Asia Pac J Oncol Nurs* 2016;3:289-96.
- Stasi R, Abriani L, Beccaglia P, Terzoli E, Amadori S. Cancer-related fatigue: evolving concepts in evaluation and treatment. *Cancer* 2003;98:1786-801.
- Hsiao CP, Daly B, Saligan LN. The etiology and management of radiotherapy-induced fatigue. *Expert Rev Qual Life Cancer Care* 2016;1:323-8.
- Pinto AC. Sexuality and breast cancer: Prime time for young patients. *J Thorac Dis* 2013;5:S81-6.
- Chang YC, Chang SR, Chiu SC. Sexual problems of patients with breast cancer after treatment: A systematic review. *Cancer Nurs* 2019;42:418-25.
- Boquiren VM, Esplen MJ, Wong J, Toner B, Warner E, Malik N. Sexual functioning in breast cancer survivors experiencing body image disturbance. *Psychooncology* 2016;25:66-76.
- Tsai RJ, Dennis LK, Lynch CF, Snetelaar LG, Zamba GK, Scott-Conner C. The risk of developing arm lymphedema among breast cancer survivors: A meta-analysis of treatment factors. *Ann Surg Oncol* 2009;16:1959-72.
- Yang EJ, Park WB, Seo KS, Kim SW, Heo CY, Lim JY. Longitudinal change of treatment-related upper limb dysfunction and its impact on late dysfunction in breast cancer survivors: A prospective cohort study. *J Surg Oncol* 2010;101:84-91.
- Smoot B, Wong J, Cooper B, Wanek L, Topp K, Byl N, et al. Upper extremity impairments in women with or without lymphedema following breast cancer treatment. *J Cancer Surviv* 2010;4:167-78.
- Cortesi L, Sebastiani F, Iannone A, Marcheselli L, Venturelli M, Piombino C, et al. Lifestyle intervention on body weight and physical activity in patients with breast cancer can reduce the risk of death in obese women: The EMILI study. *Cancers (Basel)* 2020;12:1709.
- Boscher C, Joly F, Clarisse B, Humbert X, Grellard JM, Binarelli G, et al. Perceived cognitive impairment in breast cancer survivors and its relationships with psychological factors. *Cancers (Basel)* 2020;12:3000.
- Van der Willik KD, Koppelmans V, Hauptmann M, Compter A, Ikram MA, Schagen SB. Inflammation markers and cognitive performance in breast cancer survivors 20 years after completion of chemotherapy: A cohort study. *Breast Cancer Res* 2018;20:135.
- Loh S, Packer T, Yip C, Low W. Perceived barriers to self-management in Malaysian women with breast cancer. *Asia Pac J Public Health* 2007;19:52-7.
- Ashing-Giwa KT, Padilla G, Tejero J, Kraemer J, Wright K, Coscarelli A, et al. Understanding the breast cancer experience of women: A qualitative study of African American, Asian American, Latina and Caucasian Cancer Survivors. *Psychooncology* 2004;13:408-28.
- Patel-Kerai G, Harcourt D, Rumsey N, Naqvi H. Exploring the lived experience of breast cancer diagnosis and treatment amongst Gujarati speaking Indian Women. *Divers Equal Health Care* 2015;12:9-17.

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