EFFECT OF MASTECTOMY ON BODY IMAGE ADAPTATION FOR ELDERLY WOMEN

Basma Shamel Amin, BSN[1], Eman Shokry Abd Allah, PhD[2], and Naeima Mohammed Elsayed, PhD[3]

ABSTRACT:

The study aimed to assess the effect of mastectomy on body image adaptation for elderly women. So, descriptive exploratory design was adopted to carry out this study. The study was conducted at the oncology day clinic at the out-patient building at Zagazig University Hospital. The study's sample was selected purposively which was composed of 140 elderly. The study used two tools; a structure interview questionnaire which was composed of two parts, and Adaptation of body image after breast cancer Questionnaire [BIBCQ SCALE]. Study results revealed that, three quarters of the elderly women (75.0%) have unsatisfactory total domains of adaptation of body image after breast cancer, but one quarter of them (25.0%) have satisfactory adaptation of body image. Statistically significant relations were found between the studied elderly women's total adaptation of body image after breast cancer and their type of mastectomy. Training programs for elderly women should be applied in the study setting for improving their knowledge, coping techniques and awareness about breast cancer and mastectomy is recommended.

Keywords : Mastectomy, Body Image , Elderly.

[1]Demonstrator of Gerontological Nursing, Faculty of Nursing, Zagazig University, Egypt
[2] Professor of Community Health Nursing and Gerontological Nursing, Gerontological Nursing Department, Faculty of Nursing, Zagazig University, Egypt
[3]Assistant professor of Obstetrics and Gynecological Nursing, Faculty of Nursing, Zagazig University, Egypt.

Corresponding author: Basma Shamel Amin,   **E-mail:** ohana9173@gmail.com

I. Introduction

Breast cancer is the most common cancer type in women. In 2018, approximately 2.1 million women worldwide were diagnosed with breast cancer. The incidence of breast cancer has been increasing throughout the world and in Egypt, breast cancer is the most common malignancy in women, accounting for 38.8% of cancers in population, with the estimated number of breast cancer cases nearly 22,700 in 2020 and forecasted to be approximately 46,000 in 2050. It is estimated that the breast cancer mortality rate is around 11%, being the second cause of cancer-related mortality after liver cancer **(Alorabi and Elghazawy, 2021).**

A mastectomy is a surgical procedure involving the removal of all or part of the breast. Mastectomy classifies into partial, simple, modified-radical, and radical. Other variations in terminology or technique include skin-sparing mastectomy and nipple-areolar sparing mastectomy, which are techniques that often accompany breast reconstruction **(Goethals & Rose, 2022).**

However, Mastectomy is an important treatment method in BC, it has a deep and stable negative impact on a woman because, mastectomy as a treatment option, can result in a sense of mutilation and diminished self-worth and may threaten perceptions of femininity. Body image of a woman includes the symbolic meaning and importance of her breasts. The more she values her breasts, more devastating effects of having a mastectomy can be. Cutting off/amputating one or both breasts was associated with several problems in women such as loss of femininity, fertility, charm and sexuality,

fear of recurrence **(Türk and Yılmaz, 2018).**

Body image is a combination of the thoughts and feelings that a person has about his body; Body image may range between positive and negative experiences, and one person may feel at different times positive or negative or a combination of both. Body image is influenced by internal (e.g. personality) and external (e.g. social environment) factors. Positive body image is related to body satisfaction and acceptance, while negative body image is related to dissatisfaction and wanting one's body to be different **(Brazier, 2022).**

Body image encompasses one's body-related self-perceptions, attitudes, and behaviors, and body image concerns are one of the most common psychosocial issues experienced by breast cancer survivors, also, Poor body image has been linked to depression, sexual concerns, and psychological distress in breast cancer survivors **(An et al., 2022).**

II. Literature Review

Mastectomy (complete removal of the tissue of the breast) is one option for the surgical treatment of breast cancer and the only surgical option for breast cancer risk reduction **(Jatoi & Kemp, 2021).** According to **El-Hattab, &Asfour (2018),** breast cancer is the most frequent malignant tumor in women worldwide. The incidence and mortality rates among females vary among countries but are steadily increasing worldwide. Ancient Egyptians were the first to note breast cancer more than 3,500 years ago. Both the Edwin Smith and George Ebers papyri contain descriptions of conditions that are consistent with modern descriptions of breast cancer.

In Egypt, breast cancer is the most common cancer among women, representing 18.9% of total cancer cases (35.1% in women and 2.2% in men) among the Egypt National Cancer Institute (NCI) series of 10,556 patients during the year 2017, with an age-adjusted rate of 49.6 per 100,000 population **(Elatar, 2019).**

In a mastectomy, women experience entire breast removal, thereby resulting in a permanent change in their appearance. In this regard, besides the complications arising from the illness, breast cancer and its treatment have repercussions caused by the total or partial mutilation of the breast, often resulting in problems associated with body image (BI), self-acceptance, sexuality and quality of life (QoL) **(Türk KE, Yılmaz M, 2018).**

As a definition, BI does not only refer to aesthetical appearance; since a more extensive overview, it is the mental representation of women's outer appearance, with relevant changes during and after cancer **(Sebri and Pravettoni, 2023).** In addition, it is strongly affected by the overall self-image, which is conceptualized as the match between multiple self-images (i.e., current, ideal, and social self-images) **(Li et al., 2020).**

Negative body image can inevitably affect mood of the woman and her interpersonal relationships, lead to social stigmatization, and consequently social isolation. Also, body image disturbance following treatment of cancer may be associated with a variety of changes that can have a significant impact on quality of life (QoL) (e.g., psychological distress, anxiety, reduced physical health, sexual dysfunction). Therefore, perception of body image can be seen as a potentially key determinant of QoL; Because of all these reasons, all women have concerns regarding body image and QoL as a result of mastectomy and, the impact continues for many years even after successful treatment. Therefore, it is important to recognize range of bodily changes in a woman after mastectomy that can affect her bio-psychosocial functioning. But, those women had never discussed these concerns with their healthcare professionals **(Levkovich, 2021).**

III. Method

1) *Study Design and Ethical Considerations*

A descriptive research design was utilized to conduct the current study from the beginning of November 2022 up to the end of April 2023. The study was conducted at the oncology day clinic at the out-patient building and department at Zagazig University Hospital. The study was approved by the Research Ethics Committee at the Faculty of Nursing, Zagazig University. An oral consent for participation was obtained from each elderly women who a greet oparticipate in the study after a full explanation of the aim of the study before on ducting the interview. Participants were allowed to refuse the participation, and they were notified that they could withdraw at any stage of the data collection interviews; also, they were assured that the information would be confidential and used for the research purpose only. The investigator assured maintaining anonymity and confidentiality of the subjects' data. There searcher's phone number and all possible communication methods were identified to

Eur. Chem. Bull. **2023**, *12(Special Issue 9), 2774-2788*

2776

the participants to return at any time for any explanation.

2) Sample

A purposive sample composed of 140 elderly aged 60 years or above, independent in performing their daily and instrumental activities, agree to participate in the study, had total or partial mastectomy, had unilateral or bilateral mastectomy and able to communicate was selected for the recruitment of this study.

3) Sample Size Calculation

Assuming the frequency of disrupted body image was 36.6% vs 14.3% in inadequate literacy vs enough literacy **(Jafari et al., 2018).** At 80% power and 95% CI, the estimated sample was 140 subjects open epi. The sample was selected according to the following eligibility criteria:

4) Tools of Data Collection

Three tools were used to collect the necessary data as the following: -

Tool (I): Structure interview questionnaire (Appendix I): A structured interview questionnaire format was developed by the investigator after reviewing the lasted related literatures to collect the necessary data for achieving the study objectives, it included 2 parts:

- **Part(1): Demographic characteristics:** It was composed of 9 items included age, level of education, marital status, previous occupation, residence and income.

- **Part (2): Health profile of the studied elderly women:** It composes of past medical history questions regarding comorbidities as (hypertension, diabetes...others), in addition to the current medical data for mastectomy as

(duration of mastectomy, type of mastectomy, regimen of chemotherapy treatment.

Tool II: Adaptation of body image after breast cancer Questionnaire [BIBCQ SCALE]; This tool was adopted by **(Ghaffari et al., 2020)**; It consists of 45 items and an additional 6 items addressed to women who are not missing a breast due to lack of surgery or successful conservation/reconstruction surgery (lumpectomy – L items); and 2 items addressed to women who after the surgery are missing one or both breasts (mastectomy – M items). The questionnaire assesses the long-term impact of the breast cancer on the woman's body image .The 6 subscales vary in the number of items included ,where: Vulnerability has 11 general items and 1 L item; Body stigma has 11 general items and4 L and 1 M items; Limitations has 8 general items; Body concerns has 6 general items; Transparency has5 general items and 1 M item; and Arm concerns has4 items and 1 L specific item.

Scoring system: The scale has a 3-stepLikert-response format ranges from (1) strongly disagree to (3) strongly agree. The total scores were measured as followed:

- **Satisfactory for scores ≥ 60**
- **Unsatisfactory for scores < 60**

The researchers read all questions of the tools to the participants and record their answers. The Tools were revised by three experts in the field of gerontological nursing, community health nursing, and community health medicine at Zagazig University. The panel reviewed the tool content for relevance, clarity, comprehensiveness, and understandability.

Eur. Chem. Bull. **2023**, *12(Special Issue 9), 2774-2788*

2777

IV. Pilot Study

Before performing the main study, a pilot study was carried out on 6 elderly from the study setting, constituting about 10% of the calculated sample for the main study. They were selected randomly and were later excluded from the main study sample of research work to assure stability of the answers. The purposes of the pilot were to test the questions for any obscurity and to assess the practicability and feasibility of using the structured interview questionnaire sheet for the elderly. It also helped the researcher to determine the time needed for filling out the forms, which turned to be 20 to 30 minutes. The tools were finalized after doing necessary modifications according to the pilot study results.

V. Statistical Analysis

Data collected from the studied sample was revised, coded and entered using Personal Computer (PC). Computerized data entry and statistical analysis were fulfilled using the Statistical Package for Social Sciences (SPSS) version 22. Data were presented using descriptive statistics in the form of frequencies, percentages and Mean SD. Chi-square to assess the relations between variables and their characteristics. A correlation coefficient "Pearson correlation" is a numerical measure of some type of correlation, meaning a statistical relationship between two variables. Linear regression is a linear approach for modelling the relationship between a scalar response and one or more explanatory variables.

VI. Results

Table 1 shows that more than half of the studied elderly women (52.9%,54.3%)

ranges in age between 60 to less than 69 years old; with mean SD= 69.35±3.49 years. Also, more than half of them (53.6%, 57.2%) are married. As well, nearly two thirds of them (63.6%) didn't work previously. In addition, most of them (82.1%) have insufficient monthly income. Besides, most of them (92.1%, respectively) live with their relatives and family members are responsible for their care.

Table 2 illustrates that all of the studied elderly women (100.0%) suffer from any other health problems. As well, about two fifth of them (40.8%, respectively) experienced symptoms of the disease and were diagnosed more than 3 years ago. Also, more than two fifth of them (42.1%) were diagnosed as stage II breast cancer. In addition, less than one tenth of them (8.6%) have family history of cancer and their kinship degree is grandmother among more than two fifth of them (41.7%).

Table 3 reveals that less than one tenth of the studied elderly women (8.6%) have family history for mastectomy and their kinship degree is grandmother among more than two fifth of them (41.7%). Besides, more than half of them (58.6%, 55.7%, 55.0%) have bilateral mastectomy, their surgery was partial and experienced mastectomy 1 – 3 years ago, respectively. As well, nearly three quarters of them (73.6%) check and follow up regularly, and more than three quarters of them (78.6%) do it every two weeks. most of them (88.6%) have therapy session after surgery and more than half of them (54.0%) take chemotherapy. Moreover, nearly half of them (47.6%) come every 3 weeks to hospital for therapy.

(table 4) displays that most of the studied

elderly women (82.1%) have unsatisfactory adaptation of body image as regard body stigma with mean 25.02±4.97. Moreover, three quarters of them (75.0%) have unsatisfactory total domains of adaptation of body image after breast cancer with mean 76.83±14.2.

(Table 5) reflects that there is a highly statistically significant relation between the studied elderly women's total adaptation of body image after breast cancer and their marital status at (p< 0.01). In addition, there is a statistically significant relation with their age, educational level and previous working at (p < 0.05). Moreover, there is no statistically significant relation with their monthly income and Living with at (p > 0.05).

As noticed in table 6, indicates that there is a highly statistically significant relation between the studied elderly women's total adaptation of body image after breast cancer and their type of mastectomy, type of surgery and follow up at (p< 0.01). In addition, there is a statistically significant relation with their family history and therapy after surgery at (p < 0.05).

Discussion

Concerning demographic characteristics, Numerous studies have described the impact of age on Body Image Adaptation and For Elderly Women. The result of the current study revealed that more than half of the studied elderly women ranges in age between 60 to less than 69 years old; with mean SD= 69.35±3.49 years. Similarly to these finding; **Fortunato et al., (2021)** reported in their study at the Breast Unit of San Giovanni-Addolorata Hospital in Rome that the median age of their subjects was 63 years.

This finding disagreed with **Zhang et al., (2020)** in their study which conducted in China; as they reported that the mean age for their participants was 50.69±6.49. Also, disagreed with **Singhania et al., (2020)** in their Indian study; as they said that the overall mean age of study participants was found to be 53.65 ± 5.11 years.

Also, the present results found that more than half of the studied elderly women lived in rural areas. From the researcher's point of view; this finding might attributed to the setting of data collection in Zagazig city at El-Sharkia governorate which characterized by its agricultural nature and most of its cities are rural areas.

This result disagreed with **Mehaseb et al., (2018)** in their Egyptian study that conducted in Benha University as they mentioned that more than two third of their studied sample live in urban area and only one quarter live in rural area.

Regarding the marital status; the current study reported that more than half of them were married. Similar to that finding, **El Sayed and Ewees, (2021)** found in their Egyptian study that most of their studied subjects were married. This finding disagreed with **Abd-Elraziek et al., (2021)** who stated that less than half of their subjects were married and the others were among divorced or widow status.

Concerning to the level of education of the studied elderly; the current study reported that more than half of the studied elderly women have secondary education while minority of them are have primary education, are illiterate and can read and write. From the researcher's point of view; this finding could be due to their old ages; and also might be explained by the present

study's results of residence; as the present study said that more than half of the studied sample were from rural areas in which people as, most people didn't care for the educational level of their female children, especially in past times.

This finding matched with study done by **Pačarićet al., (2018)**; As they mentioned that half of their patients ($n = 49$, 48.5%) had completed secondary education. On the contrary, a study done by **Noaman et al. (2019)**; the study mentioned that nearly half of selected sample were not educated (cannot read and write).

In relation to the studied sample's job; the current study revealed that more than two third of the studied elderly women were not working. From the researcher view; These results might be despite economic conditions, there are other motives that drive women to not work, which is mothers takes care of her home and her children, therefore they didn't work especially in rural cities.

Similar to those findings, **Shahin et al., (2022)** reported in their study that done in Egypt that nearly more than half of breast cancer women57.5% were housewives and not working. In similar to this results, Abasi et al., (2020) in their study which done in Iran mentioned more than half (52.2%)of their studied women as housewives. Additionally, this finding agreed with **Kong et al., (2019)** in their Chinese study among middle-aged Chinese women.

Regarding the income; the present study illustrated that the majority of the studied elderly had insufficient monthly income, and all of them were living with their family. From the researcher's point of view; those findings could be explained by

our current results as the current results reviewed that more than two thirds of the studied women weren't working and didn't have occupation and also might be attributed to the hard economic status in country recently. Additionally, the all studied elderly women were living in their family because of Egyptian traditions in agricultural environments in which the parents must be cared by their sons and live with them in houses especially mothers.

This finding agreed with an Egyptian study done by **Atta et al., (2022)** which represented that the majority of the elderly women had insufficient monthly income. Additionally, this finding agreed with study done by **Chauhan et al., (2022),** in India which represented that their studied elderly were living with family. On other hand, the preset finding disagreed with the research published by **Yusoff et al., (2022);** who stated that their subjects reported that their monthly income was sufficient of essential need.

Considering the history of chronic diseases; the current study findings revealed that that all of the studied elderly women (100.0%) suffer from any other health problems and most of them (82.1%, 87.9%, 92.1%) have Arthritis, Osteoporosis and GIT diseases, respectively. From the researcher's point of view; this results could be explained by their aging, because of the reduction in physiological and physical functions associated with aging.

Those findings were in the same line with **Abd-Elraziek et al., (2021)** in Egypt who clarified that the most prevalent chronic diseases among their studied sample were GIT diseases and arthritis. Additionally, a study published by

Azzolino et al., (2019) in Italy demonstrated that most common diseases were arthritis. Also, **Darjani et al., (2013)** in Iran agreed with the present study as they found that the most common comorbidities of elderly subjects were Osteoporosis and diabetes mellitus.

Regarding elderly women according to their present medical history; the present study reveals that the majority of the studied elderly women (91.4%) had no family history for mastectomy. Similar to those results **Atta et al., (2022)** found in their Egyptian research that majority of the selected breast cancer elderly women had no family history regarding breast cancer. Additionally, this current results was similar to the results of **Salime & Srour, (2022)** in their Egyptian educational study as they reported that the majority of their studied subjects experienced negative family history to their cancer.

On other hand, this study disagreed with (**Maleki et al., (2021)** who reported that most participants had family history of breast cancer. On the same line, **Hashem et al., (2020)** showed that the majority of the study subjects had a positive family history of breast cancer with first degree relation (mother).

Regarding time have you been experiencing mastectomy; the current results showed that more than half of studied elderly women, their surgery was partial and experienced mastectomy 1 – 3 years ago. From the researcher point of view after one year from diagnosis of breast cancer subjects start thinking about their body image, self-esteem and sexual activity so they search to solve their problems in order to deal with her children, husband and

surrounding people. In contrast immediately after diagnosis of breast cancer they were shocked, and may provoke psychological challenges such as depression, anger, uncertainty about the future, hopelessness, fear of recurrence of cancer, fear of separation from relatives, fear of pain, low self-esteem, body image impairment, anxiety of not being loved or shown interest, and fear of death and they refuse any advice and education. Also from researcher opinion that breast cancer subjects who diagnosed more than one to three years ago were coped with their disease

This current results wasn't in similar with **Salime & Srour, (2022**) in their Egyptian educational study as they reported that their studied subjects experienced their disease about less than one year. Also, this current finding disagreed with **Kuliński and Kosno (2021);** who reported in their clinical and social study that slightly more than one third of their subjects experienced mastectomy 6 – 10 years ago.

Concerning the stage of breast cancer for the studied elderly women; the present results revealed that more than two fifth of the elderly women were diagnosed as stage II breast cancer. This study agreed with (**Maleki et al., (2021)** who reported that most participants were at early stage (II). On contrary with this finding; **Musarezaie, and Zargham-Boroujeni, (2018**) in a study done in Iran reported that the majority of their study subjects were at stage III of breast cancer (50%).

Regarding Type of mastectomy of the studied women; the present results revealed that more than half of the elderly women had bilateral mastectomy, and their

surgery was partial. These results agreed with **Shahin et al., (2021),** in their research that done in Menoufia University in Oncology Institute, Egypt, in which they said that more than half of the studied subjects (51.72%) underwent partial mastectomy.

Concerning total domains of adaptation of body image after breast cancer for the studied elderly women; the current study revealed that that most of the studied elderly women (82.1%) have unsatisfactory adaptation of body image as regard body stigma with mean 25.02±4.97. Moreover, three quarters of them (75.0%) have unsatisfactory total domains of adaptation of body image after breast cancer with mean 76.83±14.2. From the view of the researcher those results could be explained by the negative effect of breast cancer treatment on body image due to surgery scars, weight loss or gain, skin changes, hair loss or regrowth can change the way in which women feel about their bodies.Some subjects develop lymphedema (swelling)after surgery or radiotherapy to lymph nodes in the armpit; so all of those changes might affect the women view about their body images negatively and made the unsatisfactory.

Similar to these current results; **Abdel-Naby et al., (2022)** said in their Egyptian study at Benha Univeristy that their women were unsatisfactory about their body images after mastectomy. Also, these findings are supported by **Boing et al., (2020)** in their Study protocol for a randomized clinical trial, and also supported by the results which mentioned by **Bazira et al., (2022), Atta et al., (2022)** in their studies.

The current study indicated a highly statistically significant relation between the studied elderly women's total adaptation of body image after breast cancer and their type of mastectomy, type of surgery and follow up at (p< 0.01). From the researcher's point of view, those results could be explained as in the absence of breast tissue, patients' femininity is undermined, generating a sense of shame and affecting their body image cognition, and these negative feeling increase if the surgery was bilateral type. Additionally, the removal of the entire breast causes loss of symmetry, an obvious change in physical appearance particularly because they are out of the individual's control can therefore adversely impact upon body image, feelings of femininity, sexuality and sense of self, especially women with a high expectation of physical beauty. This explanation is supported by the view of **Rosenberg et al., (2020)** that pointed out that body image cognition was an impression of the body formed by self-observation and others' evaluations .Female breast cancer patients are particularly susceptible to body image disturbances in response to the breast deficiency caused by breast surgery, especially in the first year after the operation.

Similar to those results; **Liu et al., (2022)** found in their research on body image cognition, social support and illness perception in breast cancer patients with different surgical methods that there were highly statistically significant relations among their studied subjects total adaptation of body image and their type of mastectomy at (p< 0.01); as they said that compared with the MRM group and the RM group, the NSM group scored lower on

three subscales of the BIBCQ: body stigma (BSS; $p < 0.01$), body concerns (BCS; $p < 0.01$), transparency (TS; $p < 0.01$), and the total score ($p < 0.01$). The NSM group had the highest score of the SSRS ($p < 0.01$) and the lowest score of the BIPQ ($p < 0.05$).

Conclusion

Based on the results of the present study; the study can be concluded that three quarters of the studied elderly women had unsatisfactory total domains of adaptation of body image after breast cancer, but one quarter of them had satisfactory adaptation of body image.

Recommendations

Based on the study findings, the following recommendations can be deduced:

- More similar studies and researches should be done among other ages and also among other patients with mastectomy.
- Training programs for elderly women with mastectomy should be applied in the study setting.
- Replicate the study on a larger group; selected from different geographical areas in Egypt to obtain more generalized findings in relation to current study.

- Establishing more breast cancer clinics and teams in addition to providing educational programs will be of great benefit and can be regarded as solutions to spread the awareness. This may help increase the chance of breast cancer cases to receive a better and more efficient treatment.

- Develop continuing in- service training programs for nurses who work in departments which related to breast cancer and mastectomy procedure about the assessment of mastectomy patients, signs and symptoms of breast cancer, complication of mastectomy to carried out with those patients.

- Establish a multidisciplinary team for breast cancer management and survey including a nurse, doctor, health educator team.

- Training programs for elderly women should be applied in the study setting for improving their knowledge, coping techniques and awareness about breast cancer and mastectomy

Table (1): Distribution of the studied elderly women according to their personal information (n= 140).

Personal information	N	%
Age		
60-69	74	52.9
70-79	57	40.7
≥80	9	6.4
$\bar{x}$ **S.D 69.35±3.49**		
Marital status		
Single	22	15.7
Married	75	53.6
Divorced	8	5.7
Widowed	35	25.0

Previous working		
Working	51	36.4
Not working	89	63.6
Monthly income		
Sufficient	18	12.9
Not sufficient	115	82.1
Sufficient and save	7	5.0
Living with		
Alone	11	7.9
Relative	129	92.1
Responsible for your care		
Myself	11	7.9
Family member	129	92.1

Table (2): Distribution of the studied elderly women according to their past medical history (n= 140).

Items	N	%
Suffer from any other health problems		
Yes	140	100.0
No	0	0
Time experiencing symptoms of the disease		
<1 year	38	27.1
1-3 years	45	32.1
>3 years	57	40.8
The timing of cancer diagnosis		
<1 year	38	27.1
1-3 years	45	32.1
>3 years	57	40.8
Stage at diagnosis of breast cancer		
Stage I	42	30.0
Stage II	59	42.1
Stage III	19	13.6
Stage IV	20	14.3
Family history of cancer		
Yes	12	8.6
No	128	91.4
If yes'' what is the kinship degree n=12		
Mother	4	33.3
Aunt	3	25.0
Grandmother	5	41.7

*Eur. Chem. Bull. **2023**, 12(Special Issue 9), 2774-2788*

2784

Table (3): Distribution of the studied elderly women according to their present medical history (n= 140).

Data about mastectomy	N	%
Family history for mastectomy		
Yes	12	8.6
No	128	91.4
If yes'' what is the kinship degree n=12		
Mother	4	33.3
Aunt	3	25.0
Grandmother	5	41.7
Type of mastectomy		
Unilateral	58	41.4
Bilateral	82	58.6
The surgery is		
Total	62	44.3
Partial	78	55.7
Time have you been experiencing mastectomy		
<1 year	29	20.7
1-3 years	77	55.0
>3 years	34	24.3
Periodic detection and follow up		
Check regularly and follow up		
Yes	103	73.6
No	37	26.4
If yes'' Do you continue follow up every n=103		
Two weeks	81	78.6
Per month	12	11.7
When a problem or complaint occurs	10	9.7
There is therapy session after surgery		
Yes	124	88.6
No	16	11.4
If yes type of therapy n=124		
Chemotherapy	67	54.0
Radiation	35	28.3
Hormonal	22	17.7
Number of times that you come to hospital for therapy n=124		
Two weeks	13	10.5
Three weeks	59	47.6
Four weeks	52	41.9

Table (4): Distribution of the studied elderly women according to their total domains of adaptation of body image after breast cancer (n=140).

Items	Mean/SD	Satisfactory		Unsatisfactory	
		No	%	No	%
Vulnerability	14.39±3.45	38	27.1	102	72.9
Body stigma	25.02±4.97	25	17.9	115	**82.1**
Limitation	11.71±2.15	39	27.9	101	72.1
Body concerns	9.55±1.67	31	22.1	109	77.9
Transparency	8.49±1.05	37	26.4	103	73.6
Arm concerns	7.67±0.91	40	28.6	100	71.4
Total	**76.83±14.2**	**35**	**25.0**	**105**	**75.0**

Table (5): Relationship between socio-demographic characteristics of studied elderly women and their total adaptation of body image after breast cancer (n=140).

Items		Total adaptation of body image after breast cancer				X^2	P-Value
		Satisfactory N=35		Unsatisfactory N=105			
		N	%	N	%		
Age	60-69	23	65.7	51	48.6	9.105	0.024*
	70-79	10	28.6	47	44.8		
	≥80	2	5.7	7	6.6		
Marital status	Single	19	54.3	3	2.9	22.16	.002**
	Married	5	14.3	70	66.7		
	Divorced	4	11.4	4	3.8		
	Widowed	7	20.0	28	26.6		
Educational level	Illiterate	1	2.9	1	0.9	10.25	0.040*
	Reads and writes	0	0	1	0.9		
	Primary education	2	5.7	6	5.7		
	Preparatory education	5	14.3	16	15.3		
	Secondary Education	7	20.0	73	69.6		
	University Education	20	57.1	8	7.6		
Previous working	Working	27	77.1	24	22.9	9.829	0.043*
	Not working	8	22.9	81	77.1		
Monthly income	Sufficient	7	20.0	11	10.5	2.936	.230
	Not sufficient	26	74.3	89	84.7		
	Sufficient and save	2	5.7	5	4.8		
Living with	Alone	5	14.3	6	5.7	4.003	.406
	Relative	30	85.7	99	94.3		

REFERENCES

1. **Abdel-Naby, Z., Zaki, R., and Ahmed, F. (2022):** Effect of Psycho-educational Nursing Program on Body Image, Self-esteem and Quality of Sexual Life among Women with Breast Cancer. Journal of Nursing Science - Benha University. 3(1):19-45.

2. **Abd-Elraziek, E., Mahmoud, S., &Abd El-Fatah, S. (2021):** Otago Exercise Program (OEP): A Golden Technique on Health Status and Risk of Falls among Older Adults with Chronic Diseases. Egyptian Journal of Health Care. 12(1): 84-104.

3. **Alorabi, M., and Elghazawy, H. (2021):** Cancer Control in Egypt: Investing in Health. Online article. Available at: https://ascopost.com/issues/march-25-2021/cancer-control-in-egypt/. Accessed on, [April, 08, 2023 at 09:26 A.M].

4. **An, J., Zhou, K., Li, M., and Li, X. (2022):** Assessing the relationship between body image and quality of life among rural and urban breast cancer survivors in China. J of BMC Women's Health. 22(1):61.

5. **Atta, F., Rizk, S., and Hegazy, M. (2022):** Quality of life among elderly women with breast cancer who received chemotherapy at Sohag Cancer Institute, Sohag Governorate. Egypt Nurs J. 19(1):237-52.

6. **Azzolino, D., Damanti, S., Bertagnoli, L., Lucchi, T., and Cesari, M. (2019):**Sarcopenia and swallowing disorders in older people. J of Aging Clinical and Experimental Research. 31:799–805.

7. **Bazira, P., Ellis, H., and Mahadevan, V. (2022):** Anatomy and physiology of the breast. J of Surgery (Oxford). 40(2): 79-83.

8. **Bazira, P., Ellis, H., and Mahadevan, V. (2022):** Anatomy and physiology of the breast. J of Surgery (Oxford). 40(2): 79-83.

9. **Boing, L., do Bem , T., Vieira, M., Pereira, G., Moratelli, J., Sperandio, F., Bergmann, A., Dias, M.&Guimarães, A.(2020):** Pilates and dance to patients with breast cancer undergoing treatment: Study protocol for a randomized clinical trial. J of BMC Women's Health. 15(8):8-41.

10. **Chauhan, S., Kumar, S., Bharti, R., & Patel, R. (2022):** Prevalence and determinants of activity of daily living and instrumental activity of daily living among elderly in India. J of BMC geriatrics. 22(1): 1-10.

11. **Darjani, A., Mohtasham-Amiri, Z., Amini, K., Golchai, J., SadreEshkevari, S., &Alizade, N. (2013):** Skin disorders among elder patients in a referral center in Northern Iran. J of Dermatology research and practice. 12(5): 1-15.

12. **El Sayed, R., &Ewees, A. (2021):** Effect of Shaker Exercise on Dysphagia Level among Patients with Cerebral Vascular Stroke. Egyptian Journal of Health Care. 12(1): 1-19.

13. **Fortunato, L., Loreti, A., Cortese, G., Spallone, D., Toto, V., Cavaliere, F., Farina, M., and Pallara, T. (2021):** Regret and Quality of Life After Mastectomy With or Without

Reconstruction. J of Clinical Breast Cancer. 21(3): 162-169.

14. **Ghaffari, F., Ghahramanian, A., Zamanzadeh, V., Onyeka, T. C., Davoodi,A., Mazaheri, E., &Asghari-Jafarabadi, M. (2020):** Patient-centred communication for women with breast cancer: Relation to body image perception. Journal of Clinical Nursing. 29(23-24): 4674-4684.

15. **Goethals, A., & Rose, J. (2022):** Mastectomy. Online article. Available at: https://www.ncbi.nlm.nih. gov/books/ NBK538212/ Accessed on, [April, 08, 2023 at 11:20 A.M].

16. **Hashem, E. , Mohammed, Z. , Sayed, S. &Ayoub, M. (2020**): Effect of Educational Nursing Program on Performance and Self-efficacy of Females Undergoing Mastectomy. Assiut Scientific Nursing Journal.8(21): 74-83.

17. **Jafari, M., Lamiyan, M., &Hajizadeh, E. (2018):** Relationship between Health Literacy and Special Quality of Life and Body Image in Women Undergone Mastectomy in Reproductive Age. Health Education and Health Promotion. 6(3): 109-115.

18. **Levkovich, I. (2021):** Coping strategies and their impact on emotional distress and fatigue among breast cancer survivors: A cross-sectional survey. J of Cancer. 27(1): 83–89.

19. **Li, H., Li, J., Wang, X., Lin, S., Yang, W., Cai, H., &Feng, X. (2022):**Systematic review and meta-analysis of the efficacy and safety of psychological intervention nursing on the quality of life of breast cancer patients. J of Gland Surg. 11(5):882-889.

20. **Maleki, M., Mardani, A., Ghafourifard, M.,&Vaismorad, M.(2021):** Qualitative exploration of sexual life among breast cancer survivors at reproductive age. J of BMC Women's Health . 21(1): 56-70.

21. **Rosenberg, S. M., Dominici, L. S., Gelber, S., Poorvu, P. D., Ruddy, K. J.,& Wong, J. S. (2020):** Association of Breast Cancer Surgery with quality of life and psychosocial well-being in young breast cancer survivors. JAMA Surg. 155(1):1035–1042.

22. **Salime, R., &Srour, O. (2022):** The Effect of Structured Training Program on Health Needs and Practices of Women Undergoing Modified Radical Mastectomy.International Egyptian Journal of Nursing Sciences and Research (IEJNSR). 58(7):96-121.

23. **Shahin, M., Gaafar, H., and Alqersh, D. (2021):** Effect of Nursing Counseling Guided by BETTER Model on Sexuality, Marital Satisfaction, and Psychological Status among Breast Cancer Women. Egyptian Journal of Health Care. 12 (2): 1-15.

24. **Türk, K., and Yılmaz, M. (2018):**The Effect on Quality of Life and Body Image of Mastectomy Among Breast Cancer Survivors. Eur J Breast Health. 14(4): 205–210.doi: 10.5152/ejbh.2018.3875.

25. **Yousef, S., El-Deeb, H., and Rady, S. (2022):** Effect of Swallowing Training Rehabilitation Program on Severity of Dysphagia and Swallowing Trial among Patients with Cerebrovascular Stroke. Egyptian Journal of Health Care. 11(3): 510-512.