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## Effect of Mastectomy on Quality of Life for Elderly Women

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### Abstract

**Background:** Mastectomy 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. **Aim of the study:** Was to assess the effect of mastectomy on quality of life for elderly women. **Subjects and Methods; Research design:** Descriptive design was adopted to carry out this study. **Setting:** The study was conducted at the oncology day clinic at the out patient building at zagazig university hospital. **Subjects:** A purposive sample of 140 elderly subjects who fulfilled the study inclusion criteria. **Tools of data collection:** Two tools were used include; **Tool I:** A structured interview questionnaire; it was composed of two parts, **Tool II:** The European Organization for Research and Treatment of cancer [EORTC] QLQC30/+ BR45) which composed of two parts. **Results:** The study shows that there is a highly statistically significant relation between the studied elderly women's quality-of-life related total EORTC QLQC-30 and their educational level. In addition, there is a statistically significant relation with their age. Meanwhile, there is a highly statistically significant relation between the studied elderly women's quality-of-life related total [EORTC] QLQ-BR45 and their educational level. In addition; there is a statistically significant relation with their age. **Conclusion:** The study can be concluded that more than half of the studied elderly women had moderate total quality of life, one quarter of them had low quality of life while about two fifth of them had high quality of life; after mastectomy. **Recommendations:** More similar studies and researches should be done among other ages, and also among other patients with mastectomy.

**Key words:** Elderly, Women, Mastectomy, Quality of Life.

### Introduction:

Mastectomy, the primary treatment for breast cancer, produces irreversible, permanent, and visible changes in women's breasts, which symbolize femininity, sexual attraction, and motherhood. Systemic treatments, including chemotherapy or radiotherapy to prevent recurrence and metastasis, also result in physical changes, such as alopecia and skin damage <sup>(1)</sup>.

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 <sup>(2)</sup>. The decision of mastectomy though appears straightforward; it has a huge psychological impact on quality of life

(QOL). Mastectomy represents a deep burden for elderly women with breast cancer. Very little is known about the psychological consequences over time and the QOL of elderly women so treated, with or without breast reconstruction (BR) <sup>(3)</sup>.

The breast is considered the pride of motherhood, femininity, a symbol of sexuality, and attractiveness. Mastectomy leads to loss of breast and physical disfigurement. The adjuvant treatment adds to hair loss, initiation of menopause, and vaginal dryness. These changes lead to isolation from social and personal relations due to feelings of incompleteness as a female, so negatively affected the quality of life of those elderly women <sup>(4)</sup>.

In the recent years, health-related quality of life has gained special interest, which is associated with a holistic approach to the cancer

patient. Because of the systematic increase in cancer morbidity, the assessment of quality of life has become an important part of management of cancer patients. WHO defines quality of life as "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns". In medical science, quality of life assessment is based on evaluating the problems related to the disease itself as well as to the applied treatment in terms of changes in physical, mental and social functioning, and subjective well-being<sup>(5)</sup>.

The decision of mastectomy though appears straightforward; it has a huge psychological impact on quality of life (QOL). Mastectomy represents a deep burden for elderly women with breast cancer. Very little is known about the psychological consequences over time and the QOL of elderly women so treated, with or without breast reconstruction (BR)<sup>(6)</sup>.

Nurses play a vital role in providing care to the elderly women patients, including those with breast cancer and mastectomy. With the increasing number of those patients, hospitals need to provide quality nursing care, which in turn would increase patient satisfaction. Moreover, nurses' role has extended from just providing physical care to educating elderly women, teaching, and counseling. Hence, nurses having these skills can also facilitate patients to develop a variety of coping strategies, thereby bringing more sense of contentment to the clients<sup>(7)</sup>.

Nurses in oncology and surgical departments are essential members of the interdisciplinary team in prevention and the management of elderly women post mastectomy. They are involved in cancer rehabilitation and providing comprehensive assessment and early intervention, coordinating appropriate referrals to interdisciplinary team members for management<sup>(8)</sup>.

Nurses should educate elderly women with mastectomy to follow self-care regimen recommendations include performing daily skin care, wearing gloves during activities to prevent skin breaks, preventing injury in the affected side, preventing muscle strain, and promoting lymph drainage<sup>(9)</sup>.

#### **Significance of the Study:**

Breast cancer is the most common malignancy in females. It accounts for 32% of cancer in women, representing 15% of deaths per year worldwide. A significant increase in breast cancer incidence was evident among women aged 50 years and older, and the highest incidence among women aged 70 years and older<sup>(10)</sup>.

Several treatment modalities may be used for the treatment of breast cancer, depending on the individual women's preferences and medical situation. Surgical treatment is done mainly through either mastectomy or breast conserving surgery. Mastectomy is surgical removal of all or part of the breast and sometimes associated lymph nodes and muscles. 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) and quality of life (QOL); so the current study was carried out to assess the effect of mastectomy on body image and quality of life for elderly women.

#### **Aim of the study:**

##### **The aim of the study was:**

To assess the effect of mastectomy on quality of life for elderly women.

#### **Research question:**

What the effect of mastectomy on quality of life for elderly women?

**Subjects and Methods:****Research design:**

A descriptive design was used to carry out this study.

**Study Setting:**

The study was carried out at the oncology day clinic at the outpatient building at Zagazig University Hospital.

**Study Subjects:**

Purposive sample composed of (140) elderly women with mastectomy aged 60 years or above. Independent in performing their daily and instrumental activities, agreeing to participate in the study, being able to communicate was selected in the recruitment of this study having total or partial mastectomy and having unilateral or bilateral mastectomy.

**Tools for data collection:**

In order to fulfill the objectives of the study two tools were used to collect necessary data:

**Tool 1: A Structured interview questionnaire:** A structured interview questionnaire format was developed by the investigator after reviewing the latest related literatures to collect the necessary data for achieving the study objectives, it included 2 parts:

- **Part (1): Demographic characteristics:** It was composed of 8 items included age, level of education, marital status, previous occupation, residence and income...etc.
- **Part (2): Health profile of the studied elderly women:** It composes of past medical history questions regarding comorbidities as (hypertension, diabetes, kidney diseases...others), questions about the history of cancer such as diagnosis, stage of cancer, time of diagnosis, family history with cancer; in addition to the current medical data for mastectomy as (duration of mastectomy, type of mastectomy, regimen of chemotherapy treatment, follow up times and regimen, type of management after surgery).

**Tool II: The European Organization for Research and Treatment of Cancer [EORTC] QLQC30/+ BR45);** this tool composed of two parts:

- **Part one: The European Organization for Research and Treatment of cancer) EORTC QLQC-30);** which was adopted by Aaronson et al. <sup>(11)</sup>, and composed of 30-items general cancer HRQOL patient-reported instrument with subscales representing functioning (physical, role, emotional, cognitive, social), symptoms (fatigue, nausea and vomiting, pain, dyspnea, insomnia, appetite loss, constipation, diarrhea, financial difficulties), and global health items. Each subscale has multiple items, except for six single-item symptom subscales. Each item has four response categories from 1 “not at all” to 4 “very much”. The global health items are rated from 1 “very poor” to 7 “excellent”.
- **Part two: The European Organization for Research and Treatment of cancer [EORTC] QLQ-BR45:** This was adopted by Bjelic et al. <sup>(12)</sup>. It is a breast cancer-specific module, updated in 2020 from the BR-23 originally developed in 1996 with new (italicized) functioning and symptom scales to reflect current treatments. The BR45 has five functioning sub-scales (body image, future perspective, sexual functioning, sexual enjoyment, breast satisfaction), and seven symptom subscales (arm, breast, endocrine therapy, skin mucositis, endocrine sexual symptoms, systemic therapy side effects, and upset by hair loss). It also has three open-ended items to capture additional symptoms or problems not addressed by the previous items. All BR45 items have the same four response options as the QLQ-C30.

**Scoring system:**

The responses to those items were measured in all questions on four Likert scale from 1 “not at all” to 4 “very much”. The global health items are rated from 1 “very poor” to 7 “excellent”.

Total scores were measured as followed:

- High for  $\geq 75$
- Moderate for  $\geq 60$  to  $<75$
- Low for  $< 60$

**Content Validity and Reliability:**

The tools were tested for content validity by a panel of three experts from the faculty of Nursing, Zagazig University (one professor and one assistant professor of obstetrics and gynecological nursing) and (one professor of community health medicine from faculty of medicine, Zagazig University). They reviewed the tools for face and content validations through ascertaining, clarity, relevance, comprehensiveness, and understandability. The tools were modified according to their comments and suggestions.

The reliability of the items of tools was assessed using Cronbach's alpha test. Its result was 0.910 for total eortc QLQC-30, 0.928 was the result for total eortc QLQ-BR45 and 0.877 was the result for total adaptation of body image. This indicate an accept reliability of tool.

**Field work:**

Once permission was granted to proceed with the study, the researcher started to prepare a schedule for collecting the data. The researcher first introduced herself and explained the purpose of the research briefly to all patients in the study settings. Informed consent was obtained to participate after simple and clear explanation of the purpose of the study. Each patient was interviewed individually in the unit using the interview form. The researcher reads each item of the questionnaire slowly and clearly to be well understood. The time consumed for completing the

interview with each subject, and to fill the questionnaire form, ranged from 30 to 40 minutes. The fieldwork was carried out within six months, starting from the beginning of November 2022 up to the end of April 2023. The researcher allocated four days weekly from 9 am to 2 pm.

**Pilot study:**

A pilot study was carried out on 10% (14 women) of the study subjects to test applicability, feasibility, practicability of the tools, and then the necessary modifications were done according to the results of pilot study. This sample was excluded of the total sample.

**Administration and Ethical consideration:**

Official permission for data collection was obtained by submission of official letters issued from the Dean of the Faculty of Nursing at Zagazig University to the head of Zagazig University Hospitals. Moreover, the researcher visited the study setting, met with the head of university hospitals, explained to her the study aims and the importance of the study and its procedures, and asked for her cooperation.

The study protocol was approved by the Research Ethics Committee at the Faculty of Nursing, Zagazig University. Written informed consent for participation was obtained from each elderly who agree to participate in the study after a full explanation of the aim of the study before conducting 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 the participants to return at any time for any explanation.

**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, Mean and 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.

**Significance of the results:**

- Highly significant at p-value < 0.01.
- Statistically significant was considered at p-value < 0.05.
- Non-significant at p-value  $\geq$  0.05.

**Results:****Part I: Demographic characteristics of the studied elderly women:**

**Table (1):** Among 140 studied elderly, shows that 52.9% & 54.3% respectively of the studied elderly women ranges in age between 60- 69 years old; with mean age of  $69.35 \pm 3.49$  years and living in urban areas, respectively. Also, 53.6% are married. As well, 63.6% didn't work previously. In addition, 82.1% have insufficient monthly income. Besides, 92.1% respectively live with their relatives and family members are responsible for their care.

**Figure (1):** Represents that 57.2% of the studied elderly women have secondary education while 0.70% can read and write.

**Part II: Health history of the studied elderly women:**

**Table (2):** Shows that 100.0% of the studied elderly women suffered from chronic diseases and GIT diseases were the most common diseases in 92.1% of them. Followed by 87.9% & 82.1% of them have osteoporosis and arthritis, respectively. As well, 40.8% were diagnosed with breast cancer more than 3 years ago. Also, 42.1% of them were diagnosed as stage II breast cancer. In addition 8.6% of elderly women have family history of cancer and 41.7% of them were grandmother.

**Part III: The European Organization for Research and Treatment of Cancer [EORTC] QLQC30/+ BR45)**

**Table (3):** Indicates that 52.1% of the studied elderly women have moderate quality of life as regard total functioning scales with mean  $42.46 \pm 8.51$ . Furthermore, 53.6% of them have moderate quality of life as regard total symptoms scales with mean  $39.66 \pm 8.42$ . In addition, 54.3% of them have moderate total quality of life with mean  $88.44 \pm 18.13$ .

**Table (4):** Explains distribution of the studied elderly women according to quality of life related to total domains of [EORTC] QLQ-BR45 and represents that 59.3% of the studied elderly women have moderate quality of life as regard skin mycosis scale followed by endocrine therapy scale & arm symptoms scale 56.4%, 46.4%, respectively. Besides, 47.9% of them have moderate total quality of life with mean  $124.99 \pm 26.8$ .

**Discussion:**

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 self-acceptance, sexuality and quality of life [QOL] (Faria et al. <sup>(13)</sup>). In parallel with the rapid rise in breast cancer

incidence, there is also a noticeable rise in the number of patients who experience persistent negative body image cognition after breast cancer surgery<sup>(14)</sup>.

So, the aim of this study was to assess the effect of mastectomy on quality of life for elderly women.

**Concerning demographic characteristics**, it is clear from the results of the current study that more than half of the studied elderly women ranges in age between 60 to less than 69 years old; with mean $\pm$ SD= 69.35 $\pm$ 3.49 years. Similarly to these finding; for **Fortunato et al.**<sup>(15)</sup> 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.**<sup>(16)</sup> in their study which conducted in China; as they reported that the mean age for their participants was 50.69 $\pm$ 6.49. Also, it disagreed with **Singhania et al.**<sup>(17)</sup> in their Indian study; as they said that the overall mean age of study participants was found to be 53.65  $\pm$  5.11 years.

**Concerning the residence**; 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.**<sup>(18)</sup> 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**<sup>(19)</sup> found in their Egyptian study that most of their studied subjects were married.

This finding disagreed with **Abd-Elraziq et al.**<sup>(20)</sup> 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 **Pačarić et al.**<sup>(21)</sup> 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.**<sup>(22)</sup> who 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.**<sup>(23)</sup> reported in their study that done in Egypt that nearly more than half of breast cancer women 57.5% were housewives and not working. In similar to this results, **Abasi et al.**<sup>(24)</sup>, 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.** <sup>(25)</sup>, 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.** <sup>(26)</sup>, which represented that the majority of the elderly women had insufficient monthly income. Additionally, this finding agreed with study done by **Chauhan et al.** <sup>(27)</sup> 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.** <sup>(28)</sup>, who stated that their subjects reported that their monthly income was sufficient of essential need.

**In terms of medical history,** the current study discovered 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-Elraziq et al.** <sup>(20)</sup> 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.** <sup>(29)</sup> in Italy demonstrated that most common diseases were arthritis. Also, **Darjani et al.** <sup>(30)</sup> 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.** <sup>(26)</sup> found in their Egyptian research that majority of the selected breast cancer elderly women had no family history regarding breast cancer. Additionally, this current result was similar to the results of **Salime and Srour** <sup>(31)</sup>, 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.** <sup>(32)</sup> who reported that most participants had family history of breast cancer. On the same line, **Hashem et al.** <sup>(33)</sup> 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 and Srour** <sup>(31)</sup> 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** <sup>(10)</sup> 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.** <sup>(32)</sup> who reported that most participants were at early stage (II). On contrary with this finding; **Musarezaie and Zargham-Boroujeni** <sup>(34)</sup> 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.** <sup>(23)</sup> 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 to Distribution of the studied elderly women according to quality of life related to total domains of EORTC QLQC-30;** the present study showed -in total- that more than half of the studied elderly women (52.1%) have moderate quality of life as regard total functioning scales with mean  $42.46 \pm 8.51$ .

The present study was similar to those finding of **Musarezaie, and Zargham-Boroujeni** <sup>(34)</sup> who said that the QOL for more than half of their patients was moderate regarding all aspects. Overall mean QOL was moderate (58.48%) in the studied subjects with regard to the four dimensions. Additionally, **Ahmed et al.** <sup>(35)</sup> added in their Egyptian research that half of their subjects had fair level of QOL and the mastectomy did not have significant effect on sexual life, cosmetic appearance, mood, self-satisfaction, and quality of life.

On other hand; the current results disagreed with an Egyptian study done in Sohage university about quality of life among elderly women with breast cancer who received chemotherapy by **Atta et al.** <sup>(26)</sup> in which they mentioned that more than half of their studied women had poor QOL, more than one-third of them had fair QOL, and a minority had good QOL. Additionally, this current finding disagreed with **Kuliński and Kosno** <sup>(10)</sup> who reported in their clinical and social study about Quality of life in women after mastectomy that the majority of study patients who underwent breast reconstruction believed that the procedure had a significant positive influence on their everyday life.

Also, those results weren't similar to the results of **Ahmed et al.** <sup>(35)</sup> in their Egyptian research in El-Beheira Governorate, Egypt, in which they said that more than half of their studied women (56.0%) had poor quality of life with mastectomy surgery. Additionally, those present results disagreed with **Abebe et al.** <sup>(36)</sup> in their researches in which they revealed that the mean score was 48.3, based on EORTC QLQ-C30 global health status/QOL scale for the study patients was, which is low compared to a study in Poland which showed a mean score of 68.33 and 84.23, one month and one year after mastectomy, respectively.

**Conclusion:**

**Based on the results of the present study and answered research question; the study can be concluded that** more than half of the studied elderly women had moderate total quality of life, one quarter of them had low quality of life while about two fifth of them had high quality of life; after mastectomy. . Furthermore, there were highly significant statistical positive correlations between the studied elderly women's total European organization for research and treatment of cancer (EORTC QLQC-30), total European organization for research and treatment of cancer [EORTC]QLQ-BR45 at ( $p < 0.01$ ).

**Recommendations:**

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

- Training programs for elderly women with mastectomy should be applied in the study setting for improving their knowledge, coping techniques and awareness about breast cancer and mastectomy.
- Replicate the study on a larger group selected from different geographical areas in Egypt to obtain more generalized findings in relation to current study.
- Further studies are needed to implement and measure the effect of mastectomy education programs in improving quality of life and body image adaptation among elderly women with mastectomy.

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

Personal information	N	%
<b>Age</b>		
60-69	74	52.9
70-79	57	40.7
≥80	9	6.4
$\bar{x}$ S.D	<b>69.35±3.49</b>	
<b>Residence</b>		
Rural	64	45.7
Urban	76	54.3
<b>Marital status</b>		
Single	22	15.7
Married	75	53.6
Divorced	8	5.7
Widowed	35	25.0
<b>Educational level</b>		
Illiterate	2	1.4
Reads & writes	1	0.7
Primary education	8	5.7
Preparatory education	21	15.0
Secondary Education	80	57.2
University Education	28	20.0
<b>Previous working</b>		
Working	51	36.4
Not working	89	63.6
<b>Monthly income</b>		
Sufficient	18	12.9
Not sufficient	115	82.1
Sufficient and save	7	5.0
<b>Living with</b>		
Alone	11	7.9
Relative	129	92.1
<b>Responsible for your care</b>		
Myself	11	7.9
Family member	129	92.1

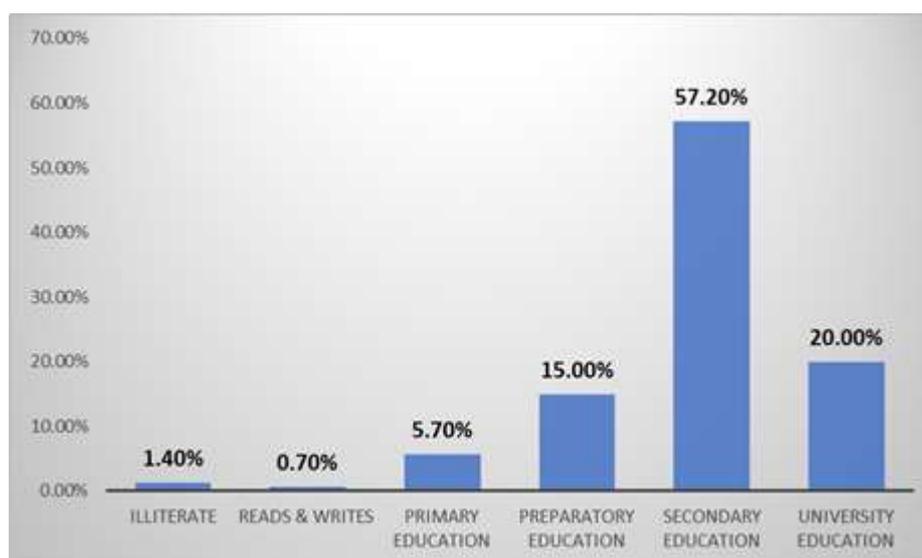


Figure (1): Distribution of the studied elderly women according to their educational level (n= 140)

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

Items	N	%
<b>Suffer from any other health problems</b>		
Yes	140	100.0
No	0	0
<b>*If yes, what is it</b>		
Hypertension	29	20.7
Diabetes mellitus	73	52.1
Heart diseases	5	3.6
Renal diseases	17	12.1
Respiratory disease	3	2.1
Arthritis	115	82.1
Liver diseases	69	49.3
Osteoporosis	123	87.9
Anemia	110	78.6
GIT diseases	129	92.1
<b>Time experiencing symptoms of the disease</b>		
<1 year	38	27.1
1-3 years	45	32.1
>3 years	57	40.8
<b>The timing of cancer diagnosis</b>		
<1 year	38	27.1
1-3 years	45	32.1
>3 years	57	40.8
<b>Stage at diagnosis of breast cancer</b>		
Stage I	42	30.0
Stage II	59	42.1
Stage III	19	13.6
Stage IV	20	14.3
<b>Family history of cancer</b>		
Yes	12	8.6
No	128	91.4
<b>If yes" what is the kinship degree n=12</b>		
Mother	4	33.3
Aunt	3	25.0
Grandmother	5	41.7

**Table (3): Distribution of the studied elderly women according to quality of life related to total domains of EORTC QLQC-30 (n= 140)**

Items	Mean/SD	High		Moderate		Low	
		No	%	No	%	No	%
Global health status	6.32±1.20	32	22.9	79	56.4	29	20.7
<b>Functional scales</b>							
Physical functioning	14.65±2.17	29	20.7	86	61.4	25	17.9
Role functioning	4.91±0.86	26	18.6	68	48.5	46	32.9
Emotional functioning	13.05±3.52	25	17.9	77	55.0	38	27.1
Cognitive functioning	4.12±0.95	28	20.0	70	50.0	42	30.0
Social functioning	5.73±1.01	46	35.0	65	46.3	29	20.7
<b>Total functioning scales</b>	<b>42.46±8.51</b>	<b>31</b>	<b>22.2</b>	<b>73</b>	<b>52.1</b>	<b>36</b>	<b>25.7</b>
<b>Symptoms scales</b>							
Fatigue	10.25±2.84	22	15.7	75	53.6	43	30.7
Nausea and vomiting	5.37±0.77	19	13.6	81	57.9	40	28.6
Pain	6.15±1.30	5	3.6	84	60.0	51	36.4
Dyspnea	2.38±0.24	33	23.6	68	48.5	39	27.9
Insomnia	2.01±0.67	28	20.0	70	50.0	42	30.0
Appetite loss	3.75±0.71	18	12.9	75	53.6	47	33.6
Constipation	3.10±0.46	41	29.3	64	45.7	35	25.0
Diarrhea	3.04±0.85	35	25.0	73	52.1	32	22.9
Financial difficulties	3.61±0.58	18	12.9	80	57.1	42	30.0
<b>Total symptoms scales</b>	<b>39.66±8.42</b>	<b>24</b>	<b>17.1</b>	<b>75</b>	<b>53.6</b>	<b>41</b>	<b>29.3</b>
<b>Total</b>	<b>88.44±18.13</b>	<b>29</b>	<b>20.7</b>	<b>76</b>	<b>54.3</b>	<b>35</b>	<b>25.0</b>

**Table (4): Distribution of the studied elderly women according to quality of life related to total domains of [EORTC] QLQ-BR45 (n= 140)**

Items	Mean/SD	High		Moderate		Low	
		No	%	No	%	No	%
Endocrine therapy scale	24.33±5.11	34	24.3	79	56.4	27	19.3
Skin mycosis scale	15.48±2.86	27	19.3	83	59.3	30	21.4
Endocrine sexual scale	11.09±3.52	14	10.0	77	55.0	49	35.0
Breast satisfaction scale	6.56±1.75	10	7.1	56	40.0	74	52.9
Systematic therapy side effects	23.03±5.96	21	15.0	60	42.9	59	42.1
Body image	11.82±2.17	3	2.1	70	50.0	67	47.9
Arm symptom scale	8.65±1.05	19	13.6	79	56.4	42	30.0
Breast symptom	10.78±2.15	6	4.3	69	49.3	65	46.4
Sexual functioning	7.13±1.02	4	2.9	66	47.1	70	50.0
Upset by hair loss	3.77±0.97	0	0	38	27.1	102	72.9
Future perspective	2.35±0.24	13	9.3	65	46.4	62	44.3
<b>Total</b>	<b>124.99±26.8</b>	<b>14</b>	<b>10.0</b>	<b>67</b>	<b>47.9</b>	<b>59</b>	<b>42.1</b>

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