RESULTS

Presentation and Analysis of Data

The aim of the present study was to identify the informational needs and concerns among women with breast cancer after surgery. The study sample consisted of 200 adult women who had undergone modified radical mastectomy or breast conserving surgery.

To fulfill the aim of the study, the collected data was analyzed, tabulated and presented in the following order: **First Part** is devoted to represent the analyzed data that are related to sociodemographic variables (table 1) and illness related data (table 2), (figures 1, & 2). **Second Part** deals with the analyzed data that are related to informational needs regarding to disease, investigative tests, treatment modalities, physical needs, and psychosocial needs, as well as their concerns regarding to the effect of disease and treatment (tables 3-9), (figure 3). **Third Part** is concerned with the analyzed data that are related to relationship of total scores of informational needs and concerns with (sociodemographic, and illness related data (tables 10, 11, 12, & 13). As well, relationship between presence of comorbidities and concerns about financial status, type of surgical intervention and concerns about the effect on body image, In addition to relations between age and concerns about the effect on relation with husband (tables 14, 15, & 16). As well as coefficient correlation between total concerns and total informational needs (table 17).

Part I: Sociodemographic and Illness Related Data of the Studied Group

Table :-(1) Frequency and percentage distribution of the studied group according to their characteristics (n=200).

Frequency / Socio Demographic Data	No	%
*** Age (in years)**		
20-<30	10	5.0
30-<40	46	23.0
40-<50	55	27.5
50-<60	54	27.0
60-<70	35	17.5
- Mean ± SD **- Range**	**47.10± 11.03** **25-65 y**	
*** Marital status:**		
Single	4	2.0
Married	140	70.0
Widow	48	24.0
Divorced	8	4.0
*** Offspring:**		
1-3	101	51.5
>3	95	48.5
- Mean ± SD	**3.46± 1.24**	
*** Residence:**		
Rural	59	29.5
Urban	141	70.5
*** Education:**		
Illiterate	57	28.5
Read & write	40	20.0
Primary education	29	14.5
Moderate education	51	25.5
Higher education	23	11.5
*** Occupation:**		
Housewife	162	81.0
Student	10	5.0
Employee	20	10.0
Free work	8	4.0
*** Income:**		
Insufficient	119	59.5
Sufficient	81	40.5

As shown in table (1), the sociodemographic data of the present study among women included age, marital status, offspring, residence, education, occupation, and income. As regards age, more than half (54.5%) of the studied group were within age group of (40-< 60 years with a mean age of 47.10± 11.03 years (range 25-65y). Concerning marital status, more than two thirds (70.0%) of the studied group were married, nearly half of the subjects (51.5%) had from 1-3 children with a mean number of 3.46 ± 1.24 and more than two thirds (70.5%) were living in urban areas. As for education and occupation, more than one fourth (28.5%) of the studied group were illiterate and the majority (81.0%) were housewives, as well as almost three fifths of the studied subjects (59.5%) had insufficient income.

Table (2): Frequency and percentage distribution of illness-related data of the studied subjects (n=200).

Frequency **Illness- Related Data**	**No**	**%**
* **Comorbidities:**		
No	138	69.0
Yes	62	31.0
* **Incidence of menopause:**		
No	109	54.5
Yes	91	45.5
* **Past experience with other women with the same disease:**		
No	161	80.5
Yes	39	19.5
* **Nature of patient complaints for the first time**		
Pain in breast	1	0.5
Breast mass	143	71.5
Discharge from nipple	1	0.5
Mass & pain	36	18.0
Mass & nipple discharge	19	9.5
Time since diagnosis:		
<2 months	93	46.5
2-<4 months	67	33.5
4-<6 months	28	14.0
6 months -<1 year	10	5.0
1 year or more	2	1.0
- Mean ± SD	**64.50± 57.92**	
***Disease stage at time of diagnosis:**		
Stage 0 (DCIS) & stage I	38	19.0
Stage II	114	57.0
Stage III	48	24.0
* **Type of surgical intervention:**		
Breast conserving surgery (BCS)	50	25.0
Modified radical mastectomy (MRM)	150	75.0
* **Period of hospitalization**		
< week	158	79.0
Week and more	42	21.0

Table (2): Reveals that, more than two thirds, and more than half (69.0% & 54.5%) of the studied group were having neither comorbidities nor incidence of menopause, respectively as well as the majority (80.5%) had no past experience with women with the same disease. However, approximating two thirds (71.5%) were presented with breast mass, and around half of the studied group (46.5 & 57.5%), the time elapsed since their diagnosis was less than two months and were diagnosed in the second stage, respectively. Moreover around two thirds of the sample (75.0% & 79.0%), had undergone modified radical mastectomy and the period of hospitalization was less than one week.

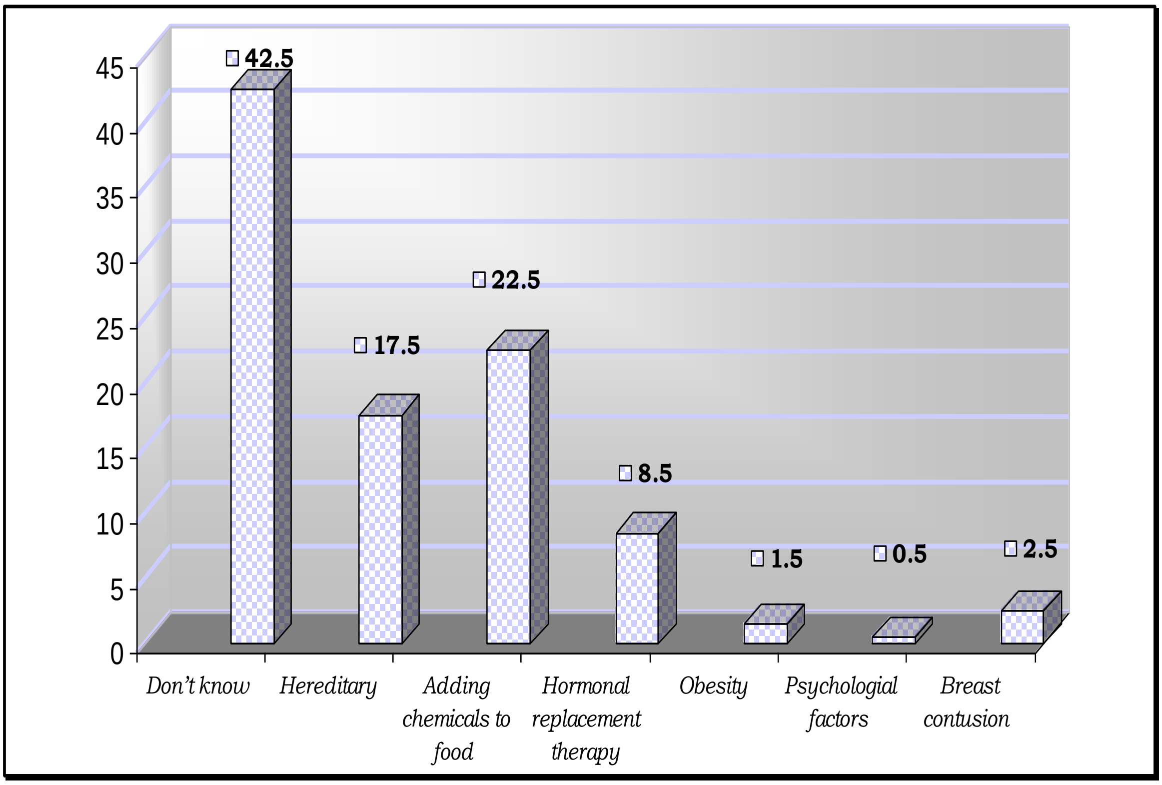

Figure (1): Percentage distribution of the studied group according to their interpretation for causes of incidence of breast cancer

Figure (1): Displays percentage distribution of the study group according to their interpretation for breast cancer causes. It illustrates that more than two fifths of patients (42.5%) did not know about the cause for breast cancer incidence, while minorities (1.5 & 0.5%) thought that it was caused due to obesity and psychological factors, respectively.

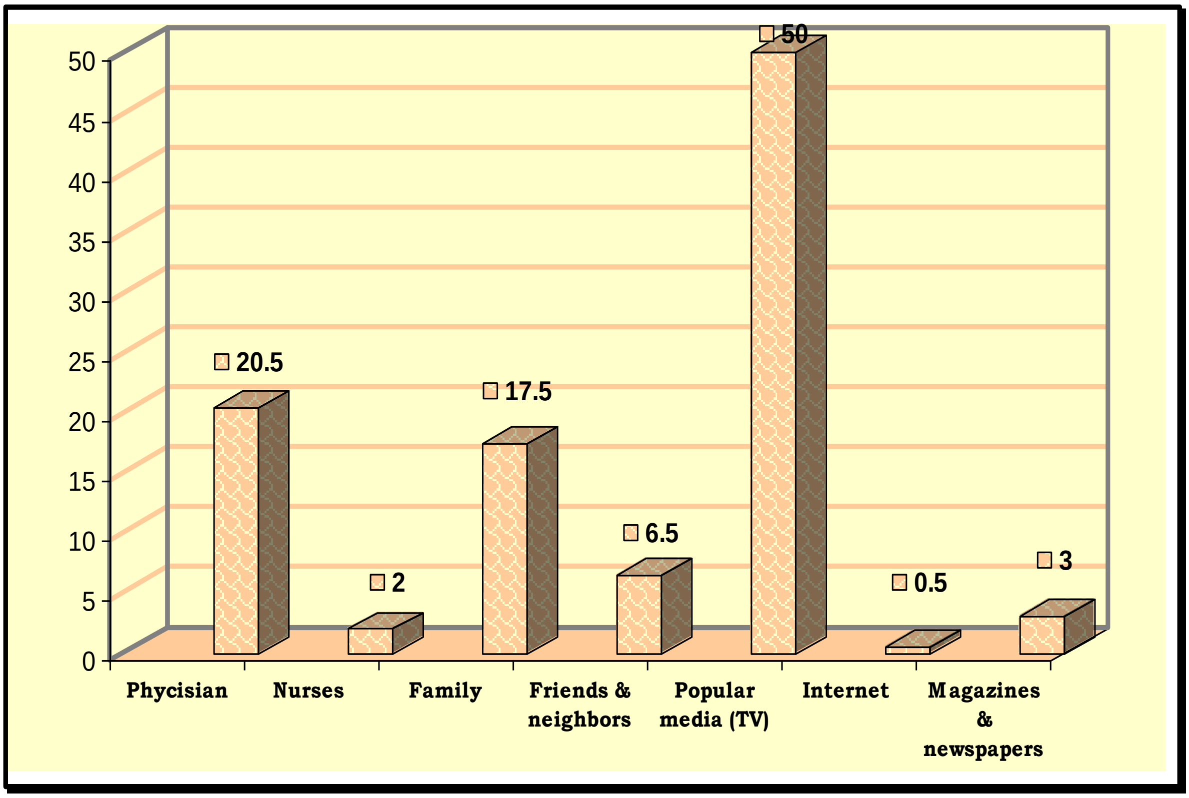

Figure (2): Percentage distribution of the studied group according to information sources mentioned most often as very important

Figure (2): Displays percentage distribution of the study group according to their source of information. It illustrates that one half of patients (50%), received their information about breast cancer from the popular media (TV), while a minority of them (0.5%) used the internet as an information source.

Part II: Informational Needs and Concerns Regarding to the Effect of Disease and Treatment of the Studied Group after Surgery

- Research question (1): What are the informational needs among women with breast cancer after surgery? The analyses used to answer this question were percentage means (Table 3).

Table (3): Percentage means of the informational needs among breast cancer patients after surgery (n = 200 patients).

Total Scores of Informational Needs	*Mean ± SD*	*Actual range*	*Total Score*	*Percentage of Total*
Disease	21.59 ± 9.19	9- 44	45	48.0
Investigation	14.85 ± 6.02	8-35	40	37.1
Treatment	42.82 ±16.01	16-80	80	53.5
Physical needs	34.13 ± 9.67	11-55	55	62.0
Psychosocial needs	21.46 ± 1.90	18-29	40	53.5
Total	134.84 ± 38.22	65-220	260	51.8

It can be noticed from table (3), that the percentages of the total score in the areas of greatest informational needs for the studied group, were about physical needs (62.0%) as well as an equal percentage of 53.5% for treatment and psychosocial needs, while their lowest informational needs were about investigative tests (37.1%).

Table (4): Informational needs of the studied group regarding to nature of disease, its process and prognosis (n=200).

Items	**Disease**					
	Low		**Average**		**High**	
	No	**%**	**No**	**%**	**No**	**%**
If my illness is hereditary	136	68.0	34	17.0	30	15.0
If it is known what causes breast cancer	74	37.0	67	33.5	59	29.5
How breast cancer acts in the body?	134	67.0	33	16.5	33	16.5
How the illness may affect my life over the next few months?	73	36.5	60	30.0	67	33.5
How the illness may affect my life in the future?	128	64.0	21	10.5	51	25.5
If there is cancer anywhere else in my body	89	44.5	48	24.0	63	31.5
If the breast cancer will come back	48	24.0	32	16.0	120	60.0
How to know if the cancer has come back?	38	19.0	49	24.5	113	56.5
The medical name for my type of breast cancer	189	94.5	9	4.5	2	1.0
Total	**138**	**69.0**	**36**	**18.0**	**26**	**13.0**

This table reveals that, most of the studied group (94.5%) gave less importance to know the medical name for their type of breast cancer, while three fifths and more than half of studied group (60.0%, & 56.5%) were highly in need to know if the breast cancer will come back and how to know if the cancer has come back, respectively.

Table (5): Informational needs of the studied group regarding to diagnostic tests and procedures after surgery (n=200).

Items	**Investigative tests**					
	Low		**Average**		**High**	
	No	**%**	**No**	**%**	**No**	**%**
How I will feel during the tests?	157	78.5	31	15.5	12	6.0
How the tests (e.g., X-ray, bone scans) are done?	190	95.0	4	2.0	6	3.0
The reasons my doctor suggests certain tests	183	91.5	11	5.5	6	3.0
How to prepare for the tests?	191	95.5	7	3.5	2	1.0
Why they need to test my blood?	172	86.0	17	8.5	11	5.5
What the results of blood tests mean?	76	38.0	52	26.0	72	36.0
How I will feel after the tests?	130	65.0	36	18.0	34	17.0
When to have mammogram?	115	57.5	46	23.0	39	19.5
Total	**178**	**89.0**	**20**	**10.0**	**2**	**1.0**

This table reveals that, most of the studied group (95.5% & 95.0%) gave less importance to know how to prepare for the tests and how the tests (e.g., X-ray, bone scans) are done, while it is obvious that more than one third (36.0%) were highly in need to know about what the results of blood tests mean.

Table (6): Informational needs of the studied group regarding to treatment modalities after surgery (n=200).

Items	Treatment					
	Low		Average		High	
	No	%	No	%	No	%
What types of treatment are available?	66	33.0	85	42.5	49	24.5
Who to talk with if I hear about treatments other than radiation or chemotherapy?	138	69.0	43	21.5	19	9.5
Why the doctor suggested this treatment plan for me?	155	77.5	28	14.0	17	8.5
How my treatment is done?	107	53.5	69	34.5	24	12.0
How to prepare for my treatment?	153	76.5	31	15.5	16	8.0
Who I should call if I have questions while I'm still getting treatment?	125	62.5	56	28.0	19	9.5
The possible side effects of my treatment	62	31.0	58	29.0	80	40.0
If there are ways to prevent treatment side effects	75	37.5	53	26.5	72	36.0
If I have side effects, how to deal with them	67	33.5	56	28.0	77	38.5
What side effects I should report to the doctor/ nurse?	65	32.5	57	28.5	78	39.0
If I am prone to infection because of my treatment	93	46.5	57	28.5	50	25.0
How long I will be receiving treatment?	45	22.5	74	37.0	81	40.5
How I will feel after my treatment?	30	15.0	49	24.5	121	60.5
How the treatment works against the cancer?	97	48.5	34	17.0	69	34.5
If the treatment will alter the way that I look	65	32.5	53	26.5	82	41.0
Who I should call if I have questions after all the treatments are over	98	49.0	72	36.0	30	15.0
Total	**123**	**61.5**	**47**	**23.5**	**30**	**15.0**

This table demonstrates that more than three quarters (77.5%) expressed less importance for them to know why the doctor suggested this treatment plan for them. However, it is obvious that more than three fifths (60.5%) were highly in need to know how they will feel after treatment.

Table (7): Informational needs of the studied group regarding to the physical needs after surgery (n=200).

Items	Physical needs					
	Low		Average		High	
	No	%	No	%	No	%
How to care for my wound or incision?	13	6.5	55	27.5	132	66.0
How long my wound or incision will take to heal?	17	8.5	59	29.5	124	62.0
If I can take a bath or shower	12	6.0	58	29.0	130	65.0
If I can wear a brassiere	112	56.0	37	18.5	51	25.0
If I can continue my usual hobbies and sports	184	92.0	11	5.5	5	2.5
If there are special arm exercises to do	58	29.0	53	26.5	89	44.5
If I can continue my usual social activities	54	27.0	66	33.0	80	40.0
Where to examine my breasts?	57	28.5	61	30.5	82	41.0
Which foods I can or cannot eat?	121	60.5	43	21.5	36	18.0
If I am going to need help taking care of myself	37	18.5	58	29.0	105	52.5
If there are any physical things I should not do	22	11.0	68	34.0	110	55.0
Total	**83**	**41.5**	**71**	**35.5**	**46**	**23.0**

This table reveals that, most (92.0%) of the studied group mentioned that it was slightly important to know if they can continue their usual hobbies and sports, while it is obvious that almost two thirds (66.0%) were highly in need to know how to care for their wound or incision.

Table (8): Informational needs of the studied group regarding to the psychosocial needs after surgery (n=200).

Items	psychosocial needs					
	Low		Average		High	
	No	%	No	%	No	%
If there are groups where I can talk with other people with breast cancer	185	92.5	9	4.5	6	3.0
Where I can get help to deal with my feelings about my illness?	47	23.5	140	70.0	13	6.5
What to do if I become concerned about dying?	90	45.0	96	48.0	24	12.0
How to talk to family/friends about my illness	41	20.5	115	57.5	44	22.0
Where I can get help if I have problems feeling as attractive as I did before?	121	60.5	49	24.5	30	15.0
Where my family can go if they need help dealing with my illness?	100	50.0	74	37.0	26	13.0
If there will be changes in the usual things I can do with and for my family	5	2.5	82	41.0	113	56.5
What to do if I feel uncomfortable in social situations?	77	38.5	110	55.0	13	6.5
Total	**193**	**96.5**	**7**	**3.5**	**0**	**0.0**

This table shows that most (92.5%) of the studied group considered that there was a slight need for them to know if there are groups where they can talk with other people with breast cancer, while it is obvious that more than half (56.5%) of the subjects were highly in need to know if there will be changes in the usual things they can do with and for their family.

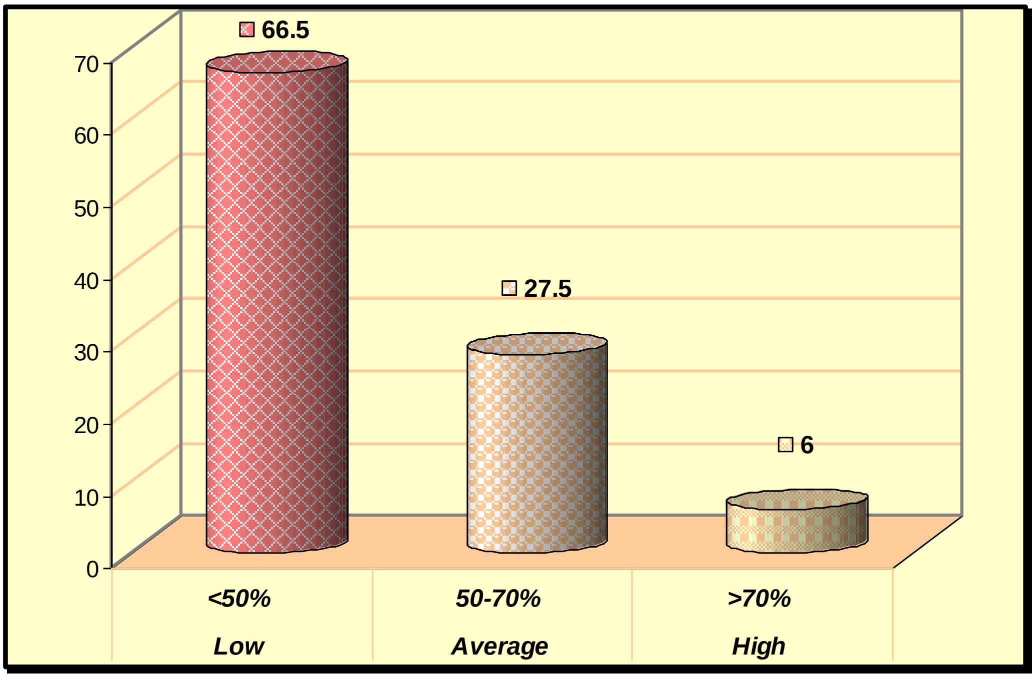

Figure (3): Total score of informational needs of the studied group after surgery.

It is obvious that, two thirds (66.5%) of women with breast cancer had low informational needs regarding to the disease, investigative tests, treatment, physical needs, and psychosocial needs, while a minority of (6.0 %) had high informational needs regarding to them.

- Research question (2): What are the concerns among women with breast cancer after surgery? The analyses used to answer this question were percentage distribution of concerns (Table 9).

Table (9): Percentage distribution of concerns among the studied group regarding to the effect of illness and treatment (n=200).

Items	Concerns					
	Low		Moderate		High	
	No	%	No	%	No	%
The disease (what is it? is it better?)	85	42.5	63	31.5	52	26.0
Feeling after surgery (pain & inability to move arm)	54	27.0	70	35.0	76	38.0
Coping with treatment	77	38.5	70	35.0	53	26.5
Feeling different from others	114	57.0	45	22.5	59	20.5
Feeling upset	83	41.5	70	35.0	47	23.5
Inability to complete social role as a mother	46	23.0	76	38.0	78	39.0
Feeling towards self	113	56.5	50	25.0	37	18.5
Looking at the surgical site	114	57.0	47	23.5	39	19.5
Effect on relation with husband	121	60.5	36	18.0	43	21.5
Effect on relation with others	136	68.0	36	18.0	28	14.0
Changing clothes in front of husband	125	62.5	33	16.5	42	21.0
Worry about job	170	85.0	6	3.0	24	12.0
Financial status	112	56.0	39	19.5	49	24.5
Religious needs	101	50.5	50	25.0	49	24.5
Not receiving adequate support from others	150	75.0	32	16.0	18	9.0
Total	**152**	**76.0**	**16**	**8.0**	**32**	**16.0**

This table reveals that majority (85.0%) of the studied group expressed that they were rarely worried about their job, while it is obvious that slightly less than two fifths (39.0%) were highly worried about their inability to complete their social role as mothers besides, their Feeling after surgery regarding to (pain & inability to move arm).

Part III: Relationship between Total Scores of Informational Needs and Total Concerns with Sociodemographic, and Illness Related Data.

Table (10): Relation between total informational needs of women with breast cancer after surgery and their sociodemographic characteristics (n=200).

Socio-Demographic Data	Total Informational Needs Score								Chi-square	
	< 50%		50 - 70%		>70%		Total		X^2	P value
	Low		Average		High					
	No	%	No	%	No	%	No	%		
Age									50.405	<0.001**
20-<30	4	40.0	4	40.0	2	20.0	10	100.0		
30-<40	16	34.8	26	56.5	4	8.7	46	100.0		
40-<50	33	60.0	17	30.9	5	9.1	55	100.0		
50-<60	47	87.0	6	11.1	1	1.9	54	100.0		
≥ 60	33	94.3	2	5.7	0	0.0	35	100.0		
Marital status									14.100	0.001**
Unmarried	51	85.0	6	10.0	3	5.0	60	100.0		
Married	82	58.6	49	35.0	9	6.4	140	100.0		
Offspring									22.931	<0.001**
1-3	56	55.4	37	36.7	8	7.9	101	100.0		
> 3	77	81.1	15	15.8	3	3.1	95	100.0		
Residence									11.856	0.003*
Rural	49	83.1	10	16.9	0	0.0	59	100.0		
Urban	84	59.6.	45	31.9	12	8.5	141	100.0		
Education									85.535	<0.001**
Illiterate	56	98.2	1	1.8	0	0.0	57	100.0		
Read & write	35	87.5	5	12.5	0	0.0	40	100.0		
Primary	19	65.5	10	34.5	0	0.0	29	100.0		
Secondary	20	39.2	24	47.1	7	13.7	51	100.0		
High	3	13.0	15	65.3	5	21.7	23	100.0		
Occupation									69.481	<0.001**
House wife	50	30.9	60	37.0	52	32.1	162	100.0		
Student	5	50.0	4	40.0	1	10.0	10	100.0		
Employee	5	25.0	10	50.0	5	25.0	20	100.0		
Free work	6	75.0	2	25.0	0	0.0	8	100.0		
Income									29.728	<0.001**
Insufficient	97	81.5	18	15.1	4	3.4	119	100.0		
Sufficient	36	44.4	37	45.7	8	9.9	81	100.0		

* = Statistically significant at ≤0.05
** = Highly statistically significant at ≤0.001

As presented in table (10), most of the studied group (94.3%, 85.0%, & 98.2%) were having low informational needs especially those who aged 60 years or more, were unmarried and were illiterate, respectively. However, around one third of the group (32.1%) were housewives and had high informational needs. This table shows that there is a highly statistically significant relation ($p \leq 0.001$) between total informational needs and sociodemographic characteristics such as age, marital status, offspring, education, occupation, and income. It also reveals that there is a statistically significant relation ($p= 0.003$) with residence.

Table (11): Relationship between total informational needs and illness related data (n=200).

Illness Related Data	**Total Informational Needs Score**								**Chi-square**	
	< 50%		**50 - 70%**		**>70%**		**Total**			
	Low		**Average**		**High**				X^2	**P value**
	No	**%**	**No**	**%**	**No**	**%**	**No**	**%**		
Presence of family history										
No	115	71.4	38	23.6	8	5.0	161	100.0	**9.039**	0.011*
Yes	18	46.2	17	43.5	4	10.3	39	100.0		
Time since diagnosis										
< 2 months	45	48.4	37	39.8	11	11.8	93	100.0	**27.956**	<0.001**
2 months or more	88	82.2	18	16.9	1	0.9	107	100.0		
Disease stage at diagnosis										
Stage 0 (DCIS) & stage I	21	55.3	14	36.8	3	7.9	38	100.0	**3.168**	0.530 $^{n.s}$
Stage II	77	67.5	30	26.4	7	6.1	114	100.0		
Stage III	35	72.9	11	22.9	2	4.2	48	100.0		
Type of surgery										
BCS	25	50.0	20	40.0	5	10.0	50	100.0	**8.295**	0.016 *
MRM	108	72.0	35	23.3	7	4.7	150	100.0		
Period of hospitalization										
<week	107	67.7	43	27.2	8	5.1	158	100.0	**1.291**	0.524 $^{n.s}$
Week and more	26	61.9	12	28.6	4	9.5	42	100.0		
Information source										
Health care team (physician and nurse)	30	66.7	13	28.8	2	4.5	45	100.0	**17.643**	0.001**
Interpersonal source (family, friends, & neighbors)	23	47.9	16	33.3	9	18.8	48	100.0		
Media **printed** as newspapers and magazines & **electronic** as TV & internet	75	70.1	26	24.3	6	5.6	107	100.0		

n.s = Not statistically significant * = statistically significant at ≤0.05
** = Highly statistically significant at ≤0.001

Table (11):

It is clear that, the highest percent of the studied group (82.2%) were diagnosed since 2 months or more were having low informational needs, while 18.8% revealed that their information about the disease were gained from surrounding personnel as family, neighbors and friends. There is a highly statistically significant relation (p =<0.001, p =0.001) between total of informational needs and time since diagnosis and source of information. It also shows that there are statistically significant relations (p=0.011 & 0.016) with presence of family history and type of surgery, respectively. However, there are no significant relations (p= 0.530 & 0.524) with disease stage at diagnosis and period of hospitalization, respectively.

Table (12): Relationship between general total of concerns and sociodemographic data (n=200).

Socio-Demographic Data	Total Concerns Score								Chi-square	
	< 50%		50 - 70%		>70%		Total		X^2	P-value
	Less worried		Moderately worried		Highly worried					
	No	%	No	%	No	%	No	%		
Age									45.737	<0.001**
20-<30	8	80.0	2	20.0	0	0.0	10	100.0		
30-<40	26	56.5	5	10.9	15	32.6	46	100.0		
40-<50	32	58.2	7	12.7	16	29.1	55	100.0		
50-<60	51	94.4	2	3.7	1	1.9	54	100.0		
≥ 60	35	100.0	0	0.0	0	0.0	35	100.0		
Marital status									14.054	0.003*
Un married	55	91.7	4	6.6	1	1.7	60	100.0		
Married	97	69.3	12	8.5	31	22.2	140	100.0		
Education									43.606	<0.001**
Illiterate	54	94.7	3	5.3	0	0.0	57	100.0		
Read &write	35	87.5	2	5.0	3	7.5	40	100.0		
Primary edu	20	69.0	1	3.4	8	27.6	29	100.0		
Secondary	27	52.9	9	17.7	15	29.4	51	100.0		
High edu	16	69.6	1	4.3	6	26.1	23	100.0		
Occupation									16.464	<0.001**
House wife	42	25.9	45	27.8	75	46.3	162	100.0		
Student	4	40.0	3	30.0	3	30.0	10	100.0		
employee	12	60.0	1	5.0	7	35.0	20	100.0		
Free work	5	62.5	2	25.0	1	12.5	8	100.0		
Income									11.516	0.009*
insuffecient	98	82.4	9	7.5	12	10.1	119	100.0		
Sufficient	54	66.7	7	8.6	20	24.7	81	100.0		

* = Statistically significant at ≤0.05

** = Highly statistically significant at ≤0.001

Table (12):

This table demonstrates that, all the studied group (100.0 %) were less worried about the effect of disease and treatment, especially those who were aged 60 years or more, while more than two fifths (46.3%) were housewives and highly worried after surgery. The same table denotes that, there are highly statistically significant relations (p <0.001) between concerns and women's age, educational level and occupation as well as a statistically significant relations (P= 0.003 & 0.009) with marital status and income, respectively.

Table (13): Relationship between total score of concerns about the effect of disease and treatment and illness related data (n=200).

Illness related Data	**Total Score of Concerns**								**Chi-square**	
	< **50%**		**50 - 70%**		>**70%**		**Total**			
	Less worried		**Moderately worried**		**Highly worried**				X^2	**P-value**
	No	**%**	**No**	**%**	**No**	**%**	**No**	**%**		
Incidence of menopause									**23.644**	<0.001**
No	69	63.3	13	12.0	27	24.7	109	100.0		
Yes	83	91.2	3	3.3	5	5.5	91	100.0		
Presence of family history									**14.979**	0.001**
No	13	81.4	11	6.8	19	11.8	161	100.0		
Yes	21	53.8	5	12.9	13	33.3	39	100.0		
Stage of breast cancer									**13.922**	0.021*
Stage 0 (DCIS) & stage I	25	65.8	2	5.3	11	28.9	38	100.0		
Stage II	81	71.1	11	9.6	22	19.3	114	100.0		
Stage III	34	70.8	5	10.4	9	18.8	48	100.0		

* = Statistically significant at ≤0.05
** = Highly statistically significant at ≤0.001

This table demonstrates that, most of the studied group (91.2%) were postmenopausal and had less anxiety level after surgery, while 33.3% were highly worried regarding to the effect of disease and treatment after surgery as a result of presence of previous family history. There are highly statistically significant relations (p<0.001, p =0.001) between concerns and incidence of menopause, and previous family history, respectively. As well, a statistically significant relation (p =0.021) was found with stage of disease.

Table (14): Relationship between presence of comorbidities and concerns about financial status (n=200).

Presence of comorbidities	**Concerns about Financial Status**								**Chi-square**	
	less worried		**Moderately worried**		**Highly worried**		**Total**		**X^2**	**P-value**
	No	**%**	**No**	**%**	**No**	**%**	**No**	**%**		
No	96	69.5	23	16.7	19	13.8	138	100.0	45.721	<0.001**
Yes	16	25.8	16	25.8	30	48.4	62	100.0		

** = Highly statistically significant at ≤0.001

It is evident that, more than two thirds (69.5%) of women who had no previous comorbidities were less worried about the effect on financial status (treatment costs), while less than half (48.4%) of women who had positive comorbidities were highly worried about financial status. There is a highly statistically significant difference (p = < 0.001) between both those who had comorbidities and those who had not.

Table (15): Relationship between type of surgical intervention and concerns of feeling different from others (n=200).

Type of Surgical Intervention	Concerns of Body Image								Chi-square	
	Less worried		Moderately worried		Highly worried		Total		X^2	P-value
	No	%	No	%	No	%	No	%		
BCS	35	70.0	13	26.0	2	4.0	50	100.0	13.352	0.010**
MRM	79	52.7	32	21.3	39	26.0	150	100.0		

BCS: Breast Conserving Surgery
MRM: Modified Radical Mastectomy

** = Highly statistically significant at ≤0.001

This table (15) denotes that, more than two thirds (70.0%) of women who had undergone breast conserving surgery were less worried about their body image. On the other hand, slightly more than quarter (26.0%) of women who had undergone modified radical mastectomy were highly worried about their body image. There is a statistically significant difference (p=0.010) between BCS and MRM regarding to body image.

Table (16): Relationship between age and concerns of the effect on relation with husband (n=200).

Age	Concerns of Effect on Relation with Husband								Chi-square	
	Less worried		Moderately worried		Highly worried		Total		X^2	P-value
	No	%	No	%	No	%	No	%		
20-<30	6	60.0	2	20.0	2	20.0	10	100.0	**24.143**	0.001**
30-<40	19	41.3	9	19.6	18	39.1	46	100.0		
40-<50	25	45.4	9	16.4	21	38.2	55	100.0		
50-<60	40	74.0	12	22.2	2	3.8	54	100.0		
≥ 60	31	88.6	4	11.4	0	0.0	35	100.0		

** = Highly statistically significant at ≤0.001

This table (16) shows that the majority (88.6%) of women aged 60 years and more were less worried regarding to the effect of disease and treatment on relation with their husbands, while about more than one third (39.1%) of women aged 30 to less than forty years were highly worried. There is a highly statistically significant difference (p = < 0.001) between different age groups.

Table (17) : Correlation between total concerns and informational needs among studied women with breast cancer after surgery (n=200).

r-\ p values variable	*Total concerns*	
	r	*p*
Total informational needs	0.733	<0.001**

** = Highly statistically significant at ≤0.01

Weak = indicates (r < 0.5)

Fair = indicates (r = 0.5)

Good = indicates (r > 0.5-0.75)

Very good = indicates (r >0.75)

This table clears that there is positive (good) correlation between total concerns and total informational needs for the studied women with breast cancer after surgery, with p-value <0.001, i.e., the higher the concerns, the higher the informational needs.