Perceived Social Support and its Relation with Mental Adjustment among Women Diagnosed with Breast Cancer

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Abstract

Women with breast cancer experienced many problems in various aspects of their lives, that they use active approaches which can result in improving their psychosocial adaptation to the disease. Social support buffers the harmful impacts of cancer. ***Aim of the study*:** was to evaluate perceived social support and its relation with mental adjustment among women diagnosed with breast cancer ***Subject*:** 85 women with breast cancer as a convenient sample from both inpatient and outpatient services of oncology Department of Tanta University Hospital was included. ***Study design***: a descriptive correlation research design was utilized. ***Tools* of the *Study*: Tool 1:** Perceived Social support scale, include 2 parts: **Part one**: Socio-demographic Characteristics and Clinical Information. **Part two**: Perceived Social support scale. **Tool 2**: Mental Adjustment to Cancer Scale. ***Results*:** majority 74.1% women had moderate social support while one third 25.9% of them had high social support. The majority 78.8% of women had adapted in fighting spirit subscale of positive adaptation. But two thirds 68.2% of them had not adapted in anxious preoccupation, hopelessness /helplessness, and avoidance subscales of negative adaptation subscales while 31.8% of them had adapted. ***Conclusion***: perceived social support dimensions were not statistically significant correlated with mental adjustment to cancer dimensions. Also perceived social support dimensions with positive & negative mental adjustment to cancer dimensions. While breast cancer severity & degree was statistically significant related with positive mental adjustment dimensions. ***Recommendations***: women showing negative psychological responses to cancer need to psychiatric intervention during cancer treatment.

Key words: Breast Cancer, Mental Adjustment, Social Support

Introduction

One of the most feared and a dreaded disease is cancer that the individuals expose nowadays. This unhappiness is not defensible, since maximum malignancies are preventable or can identified and healed primarily sufficient to reach a treatment. A tumor identification is a difficult and probably painful experience, and although once positive cure, the cancer identification and management may remain to be a cause of significant suffering [1].

The most common disease around the world presently is breast cancer and nearly leads to deaths. Cancer led to suffering and disturbs person adaptation from the pre-identification time to the final incurable time. Also, breast cancer has numerous harmful results on person's wellbeing. Breast cancer women hurt by complications produced from operation, chemotherapy, radiotherapy and hormonal treatment, along with family and work life problems, and they are unclear around upcoming, which have harmful impacts on their bodily and psychosocial health [2].

Fighters of sarcoma and their relatives face numerous illness-related real and expressive difficulties, e. g. worries from relapse and somatic problems. As the spouse, helpers, and other health care providers considered significant individuals have the potential to provide belonging, tangible, emotional, appraisal social support countering difficult things of the illness. A decreased social support has been related to disease-related load and lower value of life or distress [3]. Increased social support levels have been related to confident results, such as improved overall health status, increased life value, and better adjustment to a cancer diagnosis, as well as fewer psychosocial problems. High societal sustenance is related to lower risk recurrence [4].

Shared support denotes to the mental and physical assets delivered by a social link to assist individual handle stress. This social support come in different forms sometimes might include assisting somebody with many regular jobs when they are unpleasant or presenting economic assistance when they need. It includes providing guidance to associates when they are fronting a problematic condition. And sometimes it simply contains presenting concern, compassion for valued persons in requirement [5]. In previous researches, societal sustenance was also known as an important issue easing tumor patients' mental suffering and identified as interactive associations which guard persons from the harmful impact of tension, and is believed to conserve the individual by enhancing behavioral adjustment for tension or other dangers to health, as tumor [6].

Sustenance expected by a woman is possibly affecting her capability to find and practice associated data, control her feelings, and take serious healing choices. To improve the appreciative part of social sustenance in easing the managing energies of cancer person [7].

The concept of apparent shared sustenance is measured big real instrument for handling with life difficulties. It is measured as an element of one's faith scheme that marks a person harder yet in the circumstances that are painful in natural surroundings. Apparent shared sustenance denotes to probable existing societal sustenance that may result from various grounds of the person's environment they joined to such as family, friends, teachers, and community. [3]

Heavy shared support, lower invasive ideas, and escaping beforehand cure correlated to healthier adaptation one month afterward cure, and shared support shortage was

related to increased despair, worry and lesser value of life. Hopefulness provoked shared support and lowered depression. In advanced phases of illness development, social sustenance seemed to be improved [8].

Societal sustenance shows a significant part in a cancer patient lifetime, it recognized as apparent security, loving, help and respect the person obtains from surroundings. The occurrence or lack of societal sustenance can be an important source inducing the growth of cancer. Societal sustenance contributing to accepting and appreciating themselves, in the intervening time, there is somebody who esteems and concerns for them [9].

The existence of helpful interactive associations has the probability of affecting health of cancer fighters, and it appears to be an important modifier of hopeful and progressive feeling. Societal sustenance has continuously been identified as a dominant firearm for handling with the encounters and life hassles. It has been reflected as a powerful strength for preserving wellbeing in all world societies [10].

The properties of social sustenance had quantified by researchers on mental welfare and additional results. Societal sustenance has been originated to defense the harmful impact of cancer. It has also been related to greater life value. Psychological sustenance repressed low managing approaches and was so connected with adaptations. It was also linked to low suffering. Generally, Psychological sustenance was the kind of sustenance greatest preferred and greatest intensely associated with adaptations [11].

Breast sarcoma is related to enormous psychological problems that patient need to manage through managing approaches, which can disturb cure results and persistence degrees of breast tumor [12].

The adjustment concept denotes to mental procedures that happen in terminated period, which considers the societal environment of knowledge involvement of individual, and adjusting to various alterations which need to result from the illness and its management. The managing approaches with the identification of tumor are related to the course of mental adaptation for tumor in the extended time. Optimism and practice of positive managing approaches such as fighting spirit or difficult resolving, recognizing welfares in the understanding and communicating feelings related to cancer are all linked to larger mental adaptation and better quality of life**. Watson et al,1993** established the psychological adaptation to tumor measure to quantity intellectual and conduct reactions of cancer suffering patients [13].

The implied supposition lies in managing will replicate a stable attitudinal or communicative patterns in the persons challenged with an identification of cancer. In psychological adaptation, the intellectual and conduct reactions for tumor are interpreted as composed by appraisal, consisting in the person's perception of cancer consequences, thoughts and behaviors to reduce the danger of illness [14].

Folkman’s and Lazarus’ concept of stress management can be utilized as psychological adaptation for tumor, According **to Watson and Greer (1993),** psychological adaptation is recognized as “the intellectual and behavioral reactions the person does to the identification of tumor”. Psychological adaptation and managing have been recognized as a significant influence for mental condition of patients with tumor [15].

Adjusting kinds are the individual intellectual or conduct energies to cope with the difficulties of a traumatic condition.

While the efficacy of adjusting approaches used by persons detected with cancer differs through conditions and must not be expected early adjusting managing kinds (e.g., struggling soul, looking for sustenance) are totally related to ideal adaptation, while negative adaptation styles (e.g., powerlessness- desperateness, worried uneasiness, avoidance) stay linked by reduced psychological results [16].

Psychological adaptation involves appraisal, in term of how the person recognizes the consequences of sarcoma & the resultant responses and what persons thinks, and does toward decreasing threat posed by the disease. Adaptation reaction such as struggling soul, labeled as "an extremely hopeful approach, associated with exploration of large data for breast tumor", have been stated to be useful, while replies as deserted- desperateness, when persons stay empty of optimism and understand themselves as extremely sick, expressed a harmful influence on psychological wellbeing [15].

Since tumor is a serious illness of life, influenced persons' psychological adaptation to their illness broadly measured [16]. Adaptation to tumor indicates that coping through cognitive and behavioral avoidance is detrimental to adjustment [17].

The study aim

To evaluate the perceived social support and its relation with mental adjustment among women diagnosed with breast cancer

Questions of this research

- What is the level of social support among women diagnosed with breast cancer?
- What is the level of mental adjustment among women diagnosed with breast cancer?
- What is the relation of perceived social support with mental adjustment among women diagnosed with breast cancer?

Study subjects and method:

The design of study

The design used for this study is a descriptive correlation research

The study setting:

The study was conducted on oncology department at both inpatient and outpatient services of at Tanta university hospital which is belonging to Ministry of High Education.

Subjects

The study included a convenient sample of 85 women. Epi-Info software statistical package determined study sample number. Sample size calculation criteria were as follows: 95% self-confidence level and predictable result is 70% with border of mistake: 5% the sample size based on the formerly stated standards should be N >80. Sample size chased from the above setting conferring to the following:

Inclusion criteria

1- Women diagnosed with breast cancer

2- Willingness of women to participate in the study.

3- Communication ability of women to participate in the study

The criteria excluded

1-Patients who had mental disorder.

2-Patients who were mentally retarded or other co-morbidities

Tools:

Tool 1: Perceived Social support scale, include 2 parts:

Part 1: **Socio-demographic Data and Medical Evidence Interview Schedule**.

It included demographic data as age in years, wedded condition, habitation, education levels, work condition, economic status and religion. **Medical Evidence** included schedule of follow up (3 months, 6 months, one year, other), duration of illness, onset of illness,

Part **2: Perceived Social support scale:** Interpersonal support evaluation list shortened version **Cohen, S., & Hoberman, H. (1983)** [18]**,** it include 12-items quantity social support perceptions. This measure is a shortened version of the original ISEL (40 items; Cohen & Hoberman, 1983). This questionnaire has three diverse subscales planned to quantity three subitems of perceived social support. These subitems are:

1.) Appraisal Support subscale include: Items 2, 4, 6, 11

2.) Belonging Support subscale include: Items 1, 5, 7, 9

3.) Tangible Support subscale include: Items, 3, 8, 10, 12

For each subitem is scored by 4 items on a 4-point score fluctuating from "Definitely True" to "Definitely False".

Social Support Scoring: The reverses scored are items of: 1, 2, 7, 8, 11, 12. All scores are kept continuous.

Scoring system: from each total score the minimum and maximum score can be acquired is 12 and 48 in that order, and 4 & 16 in that order for each subscale and A score of:

- 12–16 is poor perceived social support.
- 17–32 as moderate social support.
- 33–48 as high perceived social support.

Tool 2: Mental Adjustment to Cancer Scale (MAC): it was developed by **Watson et al, (1988)** [19]**,** and include a 40 element quantity the psychological (Coping) responses that cancer patients can exhibit to adapting to the diagnosis and treatment of their illness. The responses esteemed by 4 point likert scale ; Definitely does not apply to me (1), Does not apply to me (2) , Applies to me (3) , Definitely applies to me (4). By adding up the answer of the assigned item for each subscale to calculation of its score.

A questionnaire of self-rating which could be administered. Five dimensions are measured by the MAC scale:

1-Fighting Spirit (FS; 16 items) characterized by a determination to fight the illness and the adoption of an optimistic attitude.

2-Anxious Preoccupation (AP; 9 items) characterized by constant preoccupation with cancer and feelings of devastation, anxiety, fear, and apprehension.

3- Helplessness/Hopelessness (HH; 6 items) characterized by feelings of giving up and engulfment by knowledge of the diagnosis and a pessimistic attitude.

4-Fatalism (FA; 8 items) where the patient puts herself in the hands of God, while she takes 1 day at a time and,

5- Avoidance/Denial (AV; 1 item) where the patient distracts herself and avoids thinking about the illness.

Scoring system:

By adding up the answers of the assigned items for each subscale to calculation of its score.

This score was converted into a percent score, and classified into the following two categories:

-Positive mental adjustment: fighting spirits 16-64

< 50% Not adapted (16-39)

≥ 50% Adapted (40-64)

-Negative mental adjustment: Anxious Preoccupation, Helplessness/Hopelessness, Fatalism, Avoidance /Denial 24-96

<50% adapted (24-59)

≥ 50% not adapted (60-96)

Methods

The following steps were accomplished to this study:-

1. The oncology directors of the department at Tanta University Hospital received official letter from the dean of the faculty of

nursing to give their consent for gathering of the data.

2. Ethical considerations

- The agreement of Scientific Research Ethical Committee of the Faculty of Nursing at Tanta University was obtained.
- After explanation the purpose of the study to women, informed consent was obtained from them.
- Privacy of women was being respected and confidentiality of data and women were being assured about this.
- The right of women was respected to withdraw during the data collection period at any time.
- Women were not exposed to harm or pain during the study.

3- Internal validity of the study tools (I part 2, II) were tested by five experts in psychiatric nursing and translated into Arabic language by the researchers. Therefore required corrections were carried out.

4- Using Cronbach's alpha test for reliability of study tools was found to be 0,912 and 0,873 in that order for tool 2, tool 3 which signified greatly reliable tools.

5- Identifying the barriers and problems for tools, and testing the clarity for it by a pilot study was conducted on 10% of women with breast cancer **before conducting the actual study** and accordingly the necessary modification were done.

6- Actual study of data collection:

- The women' records reviewed by the researcher and selected according to the inclusion criteria by getting their approval to carry out the research from the appropriate authorities.
- Women informed by the researcher to the nature of the study, and invite them to participate in the study and gathering the information over interview by face to face contact with each woman to evaluate the social support, and the mental adjustment levels.
- The women met the researcher within range of three to four days per week, the number of the women every day range from 2 to 6 women and the time needed to collect the data sheet ranged from 30 to 45 minute conferring to the condition of women tolerability to answer the questions. The duration of data collection was five months, starting from 1st March to the end of Jun 2022.

Analysis of the statistical data

SPSS software were using to organize, tabulate data collections statistically analyzed using statistical computer package version 26.For numerical data, the range, mean and standard deviation were calculated. The relation between variables was calculated by Pearson's correlation coefficient (r). For categorical variables, the number and percentage were calculated. Variances between categories of each variable were statistically analyzed using chi square test (X2). The level of significance was adopted at $p < 0.05$

Table 1 clarifies distribution of the studied women according to their sociodemographic characteristics. Concerning women age; the majority (60%) of women aged more than 45 years, (34.1%) of them aged 35 to less than 45 years and 5.9% of them aged less than 25 to less than 35 years. In relation to the residence; above half (51,8%) of them were living in urban while (48.2%) of them were living in rural community.

In regarding to marital status, most (94.1%) of them were wedded and 5.9 % of them were widowed, (35.3%) of women were illiterate while the 28.2% of them had college graduate. and only 9.4% had postgraduate education. Regarding work condition; three quarter of studied women (62.4%) had not working and one quarter

(37.6%) of them had working. In concerning to income, **58.8% of them** had adequate income while 41.2% of them had inadequate income.

Table 2 shows the percent distribution of the studied breast cancer women according to their medical history characteristics. Regarding breast cancer (Tumour) severity stages 32.9% of women had stage II and only 2.4% of them had stage IV. In concerning to time since diagnosis 56.5% of women had one year and more diagnosed with breast cancer. While 23.5% of them had <6 months, and only 5.9% of them had 10–<12 months. 71.8 % of women exposed to mastectomy, and 28.2% of them exposed to Lumpectomy.

Regarding to received adjuvant chemotherapy 85.9% of women received adjuvant chemotherapy. And 14.5% received adjuvant radiotherapy. Regarding past history of family to breast cancer 88.2% had no family history to breast cancer but 11.8% of them had family history to breast cancer.

Figure1 presents the percent distribution of women diagnosed with breast cancer according to their perceived social support level. It shows that the majority (74.1%) of women had moderate social support while **nearly** one third (25.9%) of them had high social support.

Figure 2 presents the distribution of women diagnosed with breast cancer according to their mental adjustment to cancer. The majority (78.8%) of women had adapted in fighting spirit subscale of positive adaptation while 21.2% of them had not adapted. but more than two thirds (68.2%) of them had not adapted in anxious preoccupation, hopelessness /helplessness, and avoidance subscales of negative adaptation subscales while 31.8% of them had adapted.

Table 3 show the correlation between perceived social support dimensions of the studied women diagnosed with breast cancer and their mental adjustment to cancer (MAC) dimensions.as perceived social supports dimensions was not related statically significant with mental adjustment to cancer dimensions at p: 0.581. And also perceived social support dimensions were not related statically significant with positive and negative dimensions of mental adjustment to cancer at p: 0.144, p: 0.774 respectively.

Table 4 presents the effect of the medical history women with breast cancer on their positive & negative mental adjustment to cancer (MAC) score as breast cancer severity & degree was statistically significant related with positive mental adjustment at p: 0.032. And there was no statistically significant relation with the other items of medical history and positive mental adjustment.

Concerning time since diagnosis a statistically significant relation was found between it and negative mental adjustment to cancer at p: 0.043, also type of surgery was a statistically significant related with negative mental adjustment to cancer at p: 0.040.

Table 5 shows the effect of the socio–demographic characteristics of the studied women with breast cancer on their social support score. Marital status was positively significant related with social support at p: 0.002, the educational level was positively significant related with social support at p: 0.003. Also occupation was positively significant related with social support at p: 0.001.

Table 6 shows the effect of the socio–demographic characteristics of the studied women with breast cancer on their mental adjustment to cancer (MAC) score. The

income was positively significant related with mental adjustment to cancer at p: 0.030. But mental adjustment to cancer was not significantly related with the rest of sociodemographic characteristics.

Table (1): Percent distribution of the studied women diagnosed with breast cancer according to their socio–demographic characteristics.

Characteristics	The studied women (n=85)	
	N	**%**
Age (in years)		
- 25-<35	5	5.9
- 35-<45	29	34.1
- ≥ 45	51	60.0
Residence		
- Rural	41	48.2
- Urban	44	51.8
Marital status		
- Married	80	94.1
- Widow	5	5.9
Educational level		
- Illiterate	30	35.3
- Primary & essential school	7	8.2
- Secondary school	16	18.8
- College graduate	24	28.2
- Postgraduate education	8	9.4
Income		
- Enough	50	58.8
- Not enough	35	41.2
Occupation		
- Work	32	37.6
- Not work	53	62.4

Table (2): Percent distribution of the studied women diagnosed with breast cancer according to their medical history characteristics.

Medical history	The studied women (n=85)	
	N	%
1-Breast cancer (Tumour) severity stages		
- stage I	24	28.2
- stage II	28	**32.9**
- stage III	16	18.8
- stage IV	2	**2.4**
- Unclassified	15	17.6
2-Time since diagnosis (In months)		
- <6	20	23.5
- 6–<10	12	14.1
- 10–<12	5	**5.9**
- One year and more	48	**56.5**
3- Type of surgery		
- Lumpectomy	24	**28.2**
- Mastectomy	61	**71.8**
4- Received adjuvant chemotherapy		
- Yes	73	**85.9**
- No	12	14.1
5- Received adjuvant radiotherapy		
- Yes	41	48.2
- No	44	**51.8**
6-Family history of breast cancer		
- Nil	75	**88.2**
- First/second degree relative	10	11.8

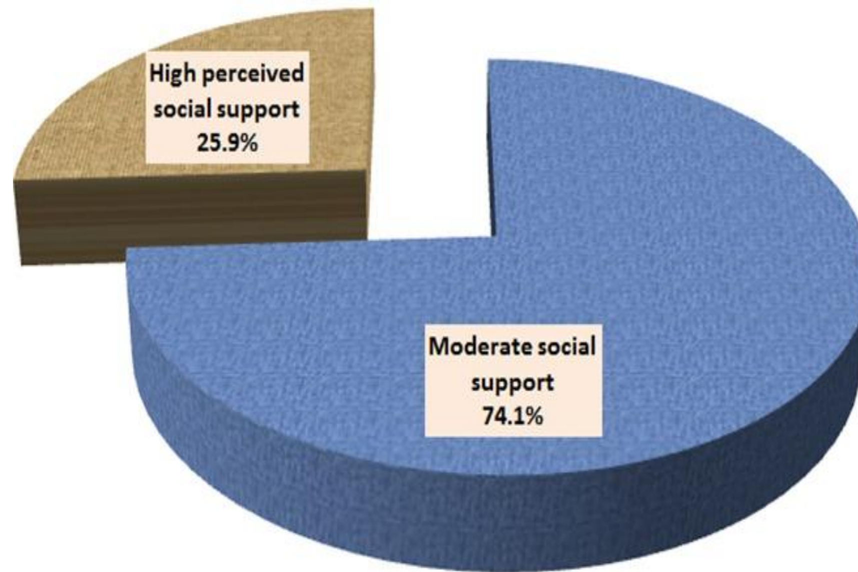

Figure (1): Percent distribution of the studied women diagnosed with breast cancer according to their perceived social support level

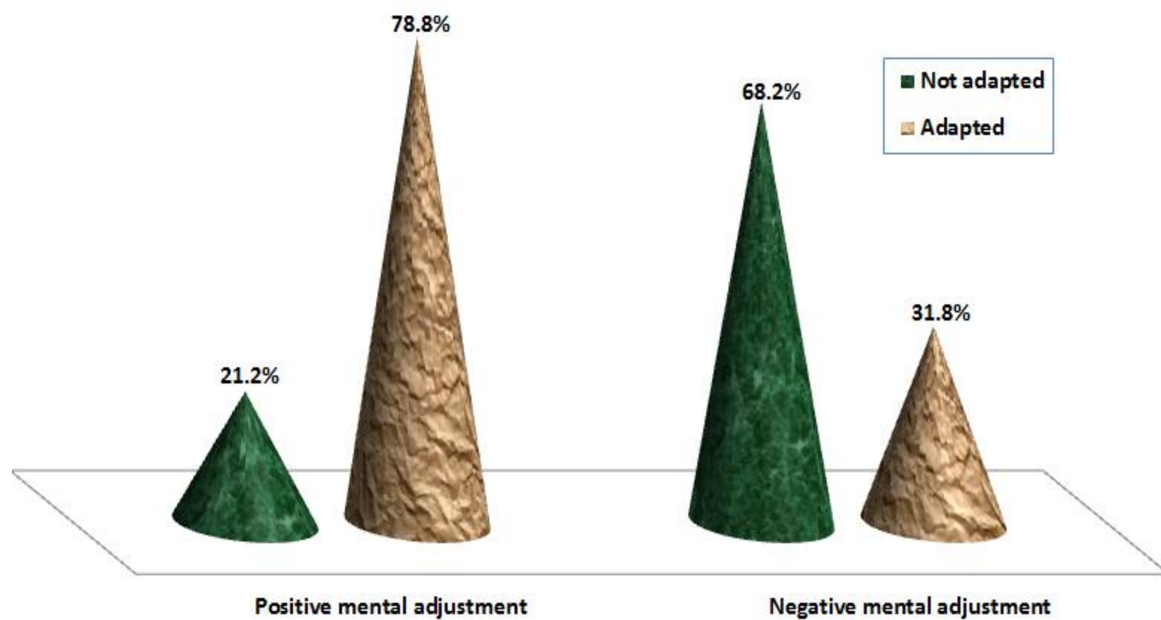

Figure (2): Percent distribution of the studied women diagnosed with breast cancer according to their mental adjustment to cancer

Table (3): Correlation between perceived social support dimensions of the studied women diagnosed with breast cancer and their mental adjustment to cancer (MAC) dimensions.

MAC Dimensions	Perceived social support dimensions							
	1.Belonging support		2.Appraisal support		3.Tangible support		Total social Support	
	R	P	R	P	r	P	r	P
Positive mental score **1-Fighting spirit**	-0.145	0.185	-0.055	0.616	-0.123	0.261	-0.160	0.144
Negative mental score	-0.001	0.991	0.022	0.842	-0.029	0.792	-0.003	0.979
2-Anxious preoccupation	0.080	0.467	0.130	0.237	0.122	0.264	0.172	0.115
3-Hopeless	-0.110	0.315	-0.027	0.810	-0.005	0.964	-0.067	0.541
4-Fatalism **5-Avoidance**	-0.193	0.077	0.071	0.521	0.176	0.108	0.043	0.694
Total Negative mental score	-0.034	0.760	0.045	0.682	0.041	0.706	0.032	0.774
Total MAC score	-0.095	0.388	0.001	0.995	-0.036	0.744	-0.061	0.581

r: Pearson' correlation coefficient
(*) Significant at level P<0.05

Table(4): Effect of the medical history characteristics of the studied women diagnosed with breast cancer on their positive and negative mental adjustment to cancer (MAC) score

Medical history	Positive mental Adjustment	F/t P	Negative mental adjustment	F/t P
1-Breast cancer severity/degree/stage				
- stage I	47.04±6.48	**2.793**	64.13±9.80	0.855
- stage II	42.39±7.25	**0.032***	62.93±7.91	0.495
- stage III	38.00±10.38		57.81±8.49	
- stage IV	43.50±0.71		70.50±0.71	
- Unclassified	38.27±16.34		63.73±24.41	
2-Time since diagnosis (In months)				
- <6	44.10±6.25	0.883	66.95±9.05	**2.842**
- 6–<10	38.08±12.95	0.454	53.92±14.56	**0.043***
- 10–<12	43.00±2.74		65.40±6.31	
- One year and more	42.31±11.23		62.71±13.47	
3- Type of surgery				
- Lumpectomy	43.38±11.12	0.454	58.08±9.47	**4.334**
- Mastectomy	41.70±9.94	0.502	64.41±13.63	**0.040***
4-Received adjuvant chemotherapy				
- Yes	42.15±10.76	0.003	62.44±13.77	0.106
- No	42.33±6.64	0.955	63.75±4.58	0.745

5- Received adjuvant radiotherapy				
- Yes	42.20±12.64	0.000	63.98±15.68	0.874
- No	42.16±7.52	0.987	61.36±9.55	0.353
6-Family history of breast cancer				
- Nil	41.75±10.57	1.123	62.71±13.57	0.026
- First/second degree relative	45.40±7.01	0.292	62.00±5.38	0.871

(*) Significant at level P<0.05

Table (5): Effect of the socio–demographic characteristics of the studied women diagnosed with breast cancer on their social support score

Characteristics	Social support	F/t P
Age (in years)		
- 25-<35	31.00±1.23	0.555
- 35-<45	31.86±4.66	0.576
- ≥ 45	30.94±3.38	
Residence		
- Rural	31.80±3.89	1.666
- Urban	30.75±3.64	0.200
Marital status		
- Married	31.03±3.66	**5.481**
- Widow	35.00±4.18	**0.022***
Educational level		
- Illiterate	33.07±4.26	
- Primary & essential school	31.71±2.87	**4.417**
- Secondary school	31.38±3.36	**0.003***
- College graduate	29.13±2.86	
- Postgraduate education	30.25±2.66	
Income		
- Enough	30.94±3.78	0.862
- Not enough	31.71±3.79	0.356
Occupation		
- Work	29.50±3.18	**12.651**
- Not work	32.32±3.74	**0.001***

(*) Significant at level P<0.05

Table (6): Effect of the socio–demographic characteristics of the studied women diagnosed with breast cancer on their mental adjustment to cancer (MAC) score

Characteristics	Mental adjustment to cancer (MAC)	F/t P
Age (in years)		
- 25-<35	104.00±3.32	1.515
- 35-<45	110.03±9.14	0.226
- ≥ 45	101.90±24.82	
Residence		
- Rural	104.68±17.64	0.003
- Urban	104.91±22.60	0.959
Marital status		
- Married	105.14±20.58	0.375
- Widow	99.40±14.03	0.542
Educational level		
- Illiterate	105.93±18.70	
- Primary & essential school	102.86±4.60	1.069
- Secondary school	97.94±27.82	0.377
- College graduate	110.25±21.22	
- Postgraduate education	99.63±7.80	
Income		
- Enough	108.76±8.35	**4.863**
- Not enough	99.14±29.25	**0.030***
Occupation		
- Work	106.50±21.27	0.359
- Not work	103.77±19.73	0.551

(*) Significant at level $P<0.05$

Discussion

Women's relationships with others stressed by diagnosis of advanced breast cancer and, they do not receive the social support they need**.** Support provided to patients from their treating team, family members, friends and fighters of breast cancer are required to assist them manages such feelings to facilitate their emotional permanence as they direct their cancer course. Moreover, a women's relationship with her spouse/partner can be negatively affected explained by variations in mood or negative perceptions about themselves they often link their appearance of body to their awareness of attractiveness which can impact sexual relationships after the identification of, and treatment [20, 21].

Social sustenance may make optimistic impact to the health of breast cancer women. It enables women to manage with their disease better and gain a positive point of view on their medical condition and to physically and psychologically adapt, and have enhanced value of life. Social support offers cancer patients with precaution and concern, and helps them to handle their fear and anxiety after the

illness and to alleviate the difficulties they face during the various stages of the illness [22-24].

Thoughts of death emerged from cancer in person awareness, resulting in feelings of pessimistic, powerlessness, and unhappiness. This can decrease one's capacity to manage, leading to important rising in the psychological meaning level and affecting various procedures of exploring the atmosphere and inner feeling condition practiced by women [25].

Social support also affects how patients adjust with cancer raising hopefulness, encouraging and enhancing positive coping skills. Cancer women choice coping approaches such as looking for societal sustenance, resolving issues, denying, and helpful thoughts. Patients who seek social support get emotional understanding from others, ask for help and advice [26]. this study aimed to evaluate the social support and its relation with mental adjustment among women diagnosed with breast cancer.

The present findings indicated that greatest women with breast cancer had moderate level of societal sustenance this may be due to women with breast cancer feels very close to her partner may be engrossed with her spouse's worry for the disease and trying to adjust with the illness and its suffering as a mean to secure their-self from psychological suffering and they felt appraisal and tangible support from their families and relatives is importantly to receive societal sustenance that they need to care for themselves during treatment. This is in same line with **Romdhane, 2022** stated that breast cancer women reporting equally the uppermost and the lowermost post traumatic growth were had societal sustenance higher levels and consequences confirm to the important role of social linkages and societal sustenance in creating helpful mental practices and possible in protecting harmful consequences afterward breast tumor [27].

Also the results are in the same line with **Mahmood and Amen, 2022.** The finding of present study indicated that the breast cancer patients in **those** who perceived higher social support showed better global health status [28].

The present results denoted that societal sustenance related significantly to demographic variables; marital status, educational levels, occupation, as people with higher educational levels had a better understanding of themselves, illness, people around them, and their support although one quarter of them were illiterate and other quarter had college education. This might be understood that the feeling of belonging by women from societal sustenance from their families. In addition, women with breast cancer are regularly requiring support of people to face the adverse action of illness. This is in same line with **Horwood, Anglim 2019**,who indicated that social support related significantly with educational level [29].

This finding is not in line with the results of **Lv XQ, Wang BQ, Tong, et al 2022. And, McLaughlin 2014, their studies** demonstrated that social support is related to income level [30,31]**. Also, Jadidi, Ameri, 2022** showed that social support not significantly related with all demographic variables, except the place of residence [32]. Moreover, the findings of **Ebid, and Assy,2020,** indicates that level of social support for breast cancer patients had no statistically significant difference related to the variables of age, education and therapy period [33].

In addition Results of **Denewer, Farouk 2011,** also show that residence places not statistically significant differ from the social sustenance total score. Also stated that social support does not vary in Egyptian patients with breast cancer according to any of the socio-demographic variables examined [34].

The current results found that social support not significantly related with psychological adjustment among women of breast cancer. This could be due to that social sustenance initiate to minimize the danger of mental suffering in cancer women. Hence, the women appear to be optimistic because of great social sustenance they obtain as the culture of Egypt characterized by more love and psychological sustenance women had from their relatives and family. Social sustenance received by women in their connection characterized by admiration and worth for their capabilities and expertise and by estimation to their information.

However, Tilaki et al,2022, found that social sustenance linked, who said social sustenance linked with healthier mental adaptation and fewer mental indicators and recognized as a protective factor against unhappy affect and health results [35]. Also **Holland & Holahan 2010**, in their research found that perceived social sustenance linked with confident adaptation [36]. **A study done by Romdhane2022, indicated** the necessity of societal linkages and social sustenance in creating helpful mental practices and possible in protecting harmful consequences afterward breast tumor [27]. In addition the study of **Benson et al 2020,** stated that there was a relation between support source and managing approaches among breast cancer women. Extra elements of societal sustenance motivate women to accept a managing approach more than women with fewer elements of societal sustenance [37]. Another study done by Rizalar 2014,found that their results found that societal sustenance for breast cancer women had impact on their psychosocial adaptation to disease [38].

Struggling soul is described by hopeful outlook to one's capability to adapt with the disease. Following to small scores of worry & despair, persons described by struggling soul like to identify the disease as an encounter. The current study find that breast cancer severity & degree statistical significantly related with positive mental adjustment (fighting spirit) that explained by ability of women to struggle for adherence by treatment to cancer and think it is probable to use many controller for the disease, this is agree with **Czerw2015,** who reported that strongest fighting spirit manifested by patients with the shortest duration of disease [39]. This is in converse to **Tomi 2019,** who reporting no statistical association between cancer stage and adjustment [26].

Hopelessness/helplessness and preoccupation with anxiety refer a managing patterns considered as increased ranks of worry and unhappiness, beside the thought of reduced controller over the medical viewpoint, desperateness, and worried concern seem to be the greatest important signs of mental suffering and negative adaptation. This study illustrated that time since diagnosis statistically significant related with negative mental adjustment to cancer. This is due to fear, anxiety and hopelessness feeling women exposed during time of diagnosis belief the presence of difficult efforts to exercise somewhat regulation for the disease, and

mental characteristics of the understanding of taking a dangerous disease.

The present results show that the type of surgery statistically significant related with negative mental adjustment to breast cancer, as diagnosis & type of surgery affect women **psychosocially and the** relationship with their families, the capacity to adapt to the tumor practice is affected by therapeutic managements, and by interpersonal and intrapsychic features of the person.

The study findings illustrated that income statistically significant related with mental adjustment to cancer. As the financial source and family income influences on the women treatment for their disease by a large degree which result to some negative thinking lead to distress. This is consistent with **Ashraf et al 2018,** who found that the descriptive characteristics of the participants differ significantly with their total scores in the psychosocial adjustment to illness scale in terms of educational status, occupation, place of residence, income level and type of operation. **Also,** they detected that higher social support scores come with those who had high school graduates and employed with a high economic status [40].

The results is inconsistent with **Mishra and, Saranath,2019**, noted that coping not significantly associated and demographic characteristics in breast cancer patients [41]. Also study of **Benson et al 2020**, said that coping strategies adopted by women with breast cancer were associated with age, marital status, and employment status and higher age has no influence on active coping [37].

Conclusion

It was concluded from the results that majority of women had moderate societal sustenance while one quarter of them had high social support**.** Majority of women had adapted to cancer in fighting spirit subscale of positive mental adjustment while little of them had not adapted. But two thirds of them had not adapted in anxious preoccupation, hopelessness /helplessness, and avoidance subscales of negative adjustment subscales while one third of them of them had adapted.

From observation that perceived social support dimensions statically significant correlated with mental adjustment to cancer dimensions. Social supports dimensions not statically significant related with positive & negative dimensions of mental adjustment to cancer**,** while breast cancer severity & degree statically significant correlated with positive mental adjustment. Concerning time since diagnosis it was significantly related with negative mental adjustment to cancer, and also type of surgery significantly related with negative mental adjustment to cancer.

Recommendations

1.Breast cancer patients need a psycho-educational support program to enjoy better emotional, functional and social/family well-being at the time since diagnosed with cancer.

2. Further researches recommend for stigma of cancer and, psychological encounters, and the impacts on breast cancer. Also it is essential to more discovering sustenance net accessible women at all stages of disease.

3. The needed studies for appraising necessity of assessment of mental adjustment though formation of management and rehabilitation.

4. Psychological intervention for women with breast cancer afterward diagnosis and through surgery time and after it to enhance their psychological coping.

5. Patients showing negative psychological responses to cancer needed psychiatric intervention during cancer treatment.

6. The psychological and clinical intervention studies are necessary required aiming to increase adaptive variables e.g., feeling of rationality, receiving and decreasing misadjusting e.g., unhappiness, and rejection.

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