Supportive Care Needs in Relation to Psychological Distress Level among Women under Treatment for Breast Cancer

Asmaa Ali elsayed [(1)], **Amany Sobhy Sorour** [(2)], **Amany Rashad Aboel-Seoud** [(3)] **& Abbas Mahmoud Sarhan** [(4)]

[(1)]*Demonstrator - community health nursing department-,Faculty of nursing- Zagazig university,* [(2)] *Assistant prof. of community health nursing- Faculty of nursing- Zagazig university* [(3)] *prof. of community medicine- Faculty of medicine -Zagazig university,* [(4)] *Prof .of oncology medicine- Faculty of medicine- Zagazig university,*

Abstract

Background: Assessment of supportive needs is the requirement to plan supportive care program for cancer patients. **The aim of the study:** was to highlight the supportive care needs in relation to psychological distress level among women under treatment for breast cancer. **Subjects & methods: Research design:** A cross - sectional descriptive design was used. **Setting:** The oncology clinics in Zagazig University Hospitals. **Subjects:** 200 women were recruited. **Tools of data collection:** Three tools were used for data collection: 1) Demographic data and medical history. 2) The Supportive Care Needs Survey- short form questionnaire, which covers five domains of needs (physical and daily living, health system and information, psychological, patient care and support and sexuality domains. 3) Distress thermometer scale. **Results**: Results revealed that the highest affected domain was in physical and daily living domain followed by health system and information. On the other hand, the lowest domain was in sexual domain. Patients had moderate to severe distress (74%), younger participants had more unmet needs in all domains and high level of psychological distress.. **Conclusion:** A highly statistically significant positive correlation was found between psychological distress level and total unmet needs. **Recommendations:** Further studies are needed for ongoing assessment of patients' needs and their psychological distress level to ensure monitoring and intervention to meet various needs of patients during treatment and to confirm this study results.

Keywords: Women with breast cancer; supportive care needs; psychological distress

Introduction:

Breast cancer is a worldwide health issue that most frequently affects women in developed and developing countries. [(1)] Breast cancer affects more than one million patients annually in the world and is a leading cause of mortality. [(2)]

In addition, Arab women develop breast cancer at younger ages than women in Western countries [(3)] the median age for Arab women is 49-52 years compared to 63 years in women in more developed countries. [(4)] Furthermore, breast cancer mortality rates for African women are higher compared to women in Western countries. [(5)]

Supportive care needs can arise at any point along the breast cancer trajectory, from diagnosis, to end of treatment, and even during the palliative phase. [(6)] 1–93% of cancer patients' supportive care needs have been consistently unmet. [(7)] The highest and most varied unmet needs of cancer patients were during treatment. [(8)]

In recent decades, increasing attention has been paid to the subjective dimension of cancer, especially to psychological distress. The most frequent major psychiatric disorders are depression, anxiety, and adjustment disorders. [(9)] Moreover, the presence of psychological distress in the patient is believed to influence cancer survival. Data from several studies have indicated that poor psychological status may influence a patient's immune status and thereby affect the illness duration. [(10)]

Previous researches indicate that many patients diagnosed with cancer express unmet needs in terms of emotional distress [(11)], and greater number of unmet needs was

associated with a greater likelihood of moderate to severe levels of psychological distress. [12]

Nurses are health professionals, who are involved in direct patient care. They take part in patient assessment, patient education, and management of symptoms, and also give supportive care. [13] Nurses also have important role in helping cancer patients in their adjustment process. This role in the treatment process can accelerate healing and contribute to morale and motivation of patients. [14]

Significance of the study

Breast cancer is the most common cancer among Arab women. Breast cancer incidence rates in Arab women have increased during the last 24 years, and women are now being diagnosed with breast cancer at more advanced stages of the disease. [15] In Egypt, breast cancer became a growing public health concern and significant efforts should be directed to addressing the increasing burden of breast cancer in this part of the world. The greatest expected increase in breast cancer caseloads from 2009 to 2015 is among women aged 30–49 years due to population changes. [16] Constituting in certain governorate up to 38.6% and is more prominent among young premenopausal Egyptian women. [17]

The relation between supportive care needs and psychological distress is an important issue in cancer research. However, knowledge on the interrelation between supportive care needs and psychological distress is scarce. A better understanding may improve the design and evaluation of the intervention to fulfill unmet needs of patients and achieve best level from psychological status.

Aim of the study:

The present study aimed to highlight the supportive care needs in relation to psychological distress level among women under treatment for breast cancer.

Research Questions:

1. What are the supportive care needs of women under treatment for breast cancer?

2. What is the level of psychological distress for women under treatment for breast cancer?

3. Is there a relationship between supportive care needs and psychological distress level of women under treatment for breast cancer?

Subjects and methods:

Research design:

A cross sectional descriptive design was used.

Study setting:

The study was conducted at oncology clinics at Zagazig university hospitals.

Study subjects:

A Purposive sample consisted of 200 women under treatment of breast cancer from the above mentioned settings who fulfilled the following inclusion criteria:

- Age 30- ≤ 65
- Free from any cognitive or mental impairment
- Agree to participate in the study

Exclusion criteria

- Chronic disease : hypertension ,diabetes
- Metastasis in other part of body such as bone ,lung ,stomach

Tools of data collection:

Interview questionnaire sheet for data collection composed of three tools:

Tool (I): Demographic characteristics and medical history:

- **A. Demographic characteristics of women with breast cancer:** It Included data about Age, educational level, current occupation, residence, marital status, family size and income
- **B. Medical history:** It included data concerned with medical history of breast cancer. It involved questions about time since diagnosis, family history, type of

current treatment, type of previous treatment, duration of current treatment, duration of previous treatment, cancer stage, knowledge about disease and information sources

Tool (II): A standardized supportive care needs survey short form (SCNS): The SCNS contains 34 items designed to measure patients' perceived care needs in five core domains: psychological needs (10 items); health system and information needs (11 items); physical and daily living needs (5 items); patient care and support needs (5 items) and sexuality needs (3) items. [18,19] The patients indicated their need for help in the last month on a 5-point scale, scoring from no need for help (1), satisfied/ met needs (2), low need (3), moderate need (4), or high need for help (5).

Tool (III): Distress thermometer: Distress thermometer (DT). distress was measured using the original version .The scale is a modified visual analogue scale that looks like a thermometer and ranges from no distress (0) to extreme distress (10). The patients were asked to rate how distressed they had felt in the past week. Studies with cancer patients who completed the DT showed that a cut-off score of 4 had very good sensitivity and specificity. [20, 21]

Scoring system:

For each question, answers ranged between 1 and 5. Therefore for information domain (11 questions) the maximum score for it is 55, for physical & support domains the maximum score is 25 (5 questions), for psychological domain the maximum score is 50 (10 questions) and for sexual domain (3 questions) the maximum score is 15. The higher the score, the higher the unmet needs.

Patients were also classified into "no need" group and "unmet need" group. The "no need" group included the "non applicable and no need" answers in the five points scale while "unmet need" group included the answers of "low, moderate and high need". Patient who scored from zero to 3 was considered free from distress, patient who scored 4 had mild distress, who scored 5-7 had moderate distress and who scored 8 or higher had sever distress. [22]

Content validity:

The tools were tested for content validity by panel of experts of community health nursing department and oncology medicine department. These experts assessed the tools for clarity, relevance, comprehensiveness, applicability, and understanding. Supportive care needs survey -short form, distress thermometer scale were translated into Arabic language using the translate-back-translate technique to ensure their original validity.

Field work:

The data collection was done first using interview questionnaire sheet. The average time to complete the interview questionnaire ranged from 30- 40 minutes. Work continued for five days per week, Saturdays and Tuesdays in the University Hospital from 9.00a.m. – 12.00 noon and Sundays, Wednesdays, Thursdays in the heart & Chest Hospital at Sednawy from 1.00 p.m. - 5 p.m. Data were collected through 6 months, starting from the beginning of August 2013 to the end of January 2014.

Pilot study:

Before performing the main study**,** a pilot study was carried out on a sample of 20 women with breast cancer under treatment from oncology clinics in outpatients of zagazig university hospitals. The aim was to test clarity of the instructions, the format of the questionnaire, comprehension of the items, and to estimate the exact time required for filling in the questionnaire sheet. The participants involved in the pilot study were excluded from the main study sample.

Administrative and ethical considerations:

Permission to conduct the study was obtained by submission of official letters issued from the dean of the faculty of nursing at university to the directors of Zagazig university

hospitals. Also informed consent for participation was taken verbally from each woman after full explanation of the aim of the study. They were informed that their participation in this study is voluntarily. The women subjects were given the opportunity to refuse participation, and they were notified that they could withdraw at any stage of the data collection without giving any reason. They were assured that any information taken from them would be confidential and used for the research purpose only.

Statistical analysis:

Data collected were analyzed by computer using the statistical package for social sciences (SPSS) software version 20. Mean and standard deviation, median and percentages were used for data summarization. Student's t test and Chi square test were used for testing significant differences and relations between variables. Pearson's correlation test was used for testing linear relationship between numeric variables. Significant difference was considered if $p \leq 0.05$.

Results:

Results revealed that mean age of breast cancer women was 46.91 ± 8.83 and half of them had low educational level (illiterate, read and write). Additionally more than three fifths of women had insufficient income.

Table (1): Indicates that more than one fifth of women (23.5%) had family history and near half of them (48.2%) got information from their relatives and friends. More than two thirds of women (68%) were taking chemotherapy and radiotherapy, with median duration 8 weeks. More than half of them (56.5%) were diagnosed as stage III.

Figure (1): Demonstrates that more than two fifths of women (44%) had moderate distress and less than one third of them had sever distress (30%).

Table (2): Indicates that the highest scores were in physical and daily living domain (72.7%) followed by health system and information

(66.5 %). On the other hand, the lowest score was in sexual domain (47.9%).

Table (3): Shows that a statistically significant relationship was found between age and unmet needs in all domains ($X^2=5.37$, p= 0.02). It is clear that unmet needs were higher in younger age (38.3%) compared with met needs (18.4%). On the other hand met needs were higher in women age ≥ 45(81.6%) compared with unmet needs (61.7%). A highly statistically significant association was found between unmet needs and social status ($X^2=15.55$, p=0.000). It is evident that unmet needs were more common among the married women (8٠.2%) compared with met needs (60.5%) while met needs were common among unmarried women (single, divorced, widowed). No statistically significant relations could be found with the other demographic characteristics.

Table (4): Reveals that a highly statistically significant association was found between   unmet needs and time of diagnosis (p=0.001), also a highly statistically significant association was found between unmet needs and duration of current treatment (p=0.001).It is noticed also that short time of diagnosis and short period of current treatment were associated with higher unmet needs.

Table (5): Indicates strong statistically significant positive correlations between psychological distress and all the domains of supportive care needs (p value =0.000)

Table (6): Reveals that there was a highly statistically significant association between unmet needs and psychological distress level ($X^2=78.26$, p=0.000). It is clear that women had unmet needs (36.4%) had severe psychological distress level compared to those with met needs (2.6%).On the other hand women with met needs (81.6%) had no/mild psychological

distress compared to those with unmet needs (12.4%).

Discussion:

The assessment of supportive care needs is a crucial step in the development of appropriate interventions that may improve the quality of life of cancer patients, revealing which needs breast cancer patients consider most urgent and the factors related to greater needs will permit the development of improved and targeted supportive care.

Concerning patient's age, the present study results revealed that the mean age of breast cancer women was 46.91±8.83 years .In this respect Najjar and Easson[23] emphasized that 65.5% of patients in Arab nations were diagnosed at age less than 50 years old with an average age of 45.4. In Egypt, This finding was in agreement with *El-Shinawi* et al. [24], who found that mean age of breast cancer patients enrolled in the study was 46.4±9.1

In relation to the educational level, results revealed that half of studied patients were either illiterate or just read and write, this reflected the situation in rural areas that is characterized by low educational level. In Egypt, Denewer et al. [25] found that more than half of Egyptian women had low or nil education level. Moreover, this finding was in accordance with Moursy and Ead [26] who reported that majority of their studied patients were illiterate, read and write.

In relation to monthly income, more than three fifths of the studied patients had insufficient income to cover their needs as stated by patients, this finding reflected the situation of the studied subjects, who belonged to the low income with a family size that may exceed 8 individuals. In Egypt, this finding was on the same line with Hussein [27] who clarified that more than two thirds of women reported that they had insufficient monthly income as mentioned by patients themselves.

Regarding family history of studied patients, results revealed that slightly more than three quarters of the studied patients have negative family history to cancer. In Egypt, this finding was in agreement with Esmat [28] and Yong et al. [29], who reported that the majority of the studied patients had negative family history to cancer. Additionally, more than one fifth of the studied women had family history to cancer; these results might be due to that family history is considered an important risk factor for breast cancer. Similar results were found in Indonesia a by Iskandarsyah et al. [30], who found that more than one fifth of women had a family history of breast cancer.

Concerning knowledge about disease, results revealed that less than three quarters of women under study didn't know any information about disease; this reflected the important role of media, primary health care workers, and health professionals in guiding and educating people toward prevention of disease. In Egypt, this finding is in agreement with Allam and Abdelaziz [31], who reported that majority of studied participants had no or limited knowledge about breast cancer. The source of information for the highest percentage of patients under study was from their relatives and friends. In India, this finding is on the same line with Ahuja and Chakrabarti [32], who stated that the main source of information among their studied sample was from family and friends.

As regards stage of disease, the study results revealed that more than half of women were diagnosed as stage III. This result might be related to lack of widely implemented national screening programs for early detection of cancer breast. In Egypt, this finding was in agreement with Abou El-Nagah et al. [33] who found that stage III was the most common stage of studied patients. Additionally in Lebanon, El Saghir et al. [4], reported that more than two thirds of their studied patients were in stages III or IV of all breast

cancer cases. Furthermore, Hussein et al. [34] found that almost half of breast cancer patients were in stage III.

In relation to current treatment, results revealed that more than two thirds of women were taking chemotherapy and radiotherapy. This is an international treatment schedule. In Australia, this finding is in agreement with Beatty et al. [35], who found that more than half of patients were taking chemotherapy and radiotherapy.

Considering the highest unmet needs' domains, the study results revealed that the first highest unmet' needs domain was physical and daily living needs, these results might be due to the side effects of cancer treatment that cause exhaustion, fatigue, in addition to lacking of available health services. In Egypt, this finding is in agreement with Hussein. [27], who found that the highest affected domain was the physical needs domain.

The study results revealed that the second highest unmet' needs domain was the health system and information needs' domain. Conversely Asian studies, conducted in Taiwan by Liao et al. [36], in Japan by Nakaguchi et al. [37] and in Hong Kong by Au et al. [38] and Li et al. [7], wherein breast cancer patients reported high rates of unmet supportive care needs and unmet needs were the highest in health system and information domain.

The study results revealed that the third highest unmet' needs domain was the psychological needs. Incongruent, researches conducted in Western countries, including in Australia by Hodgkinson et al.[39] and McDowell et al. [11] , in England by Armes et al. [40] and Harrison et al. [41]; in Germany by Lam et al. [42], where in breast cancer patients have moderate levels of supportive care needs and unmet needs were highest in the psychological needs.

This discrepancy might be due to difference in culture in different countries and Middle Eastern women

have a strong relationship with God, which plays an important role in coping with psychological challenges. Patients believe that God is the foremost and the ultimate to refer to, whenever they feel pain. Eventually, religiosity, belief, faith, praying, and other religious orientation consider the best ways for acceptance of the disease and better confrontation with psychological problems. In addition patients said that" they should seek treatment and do their best, but they will heal only if God's will".

The study results revealed that a statistically significant relationship was found between age and unmet needs in all domains. In fact, unmet needs were higher in younger age compared to meet needs. The rationale of this result might be due to that younger people have more responsibilities, young children and duties that lead to overwhelming and distressing in their life. In Denmark, this study finding was on the same line with that of von Heymann-Horan et al. [43], who found that the factor significantly associated with having unmet needs was younger age.

The study results revealed a highly statistically significant association was found between unmet needs and social status. In fact, unmet needs were more common among the married women; this may reflect the load experienced by female patients through their role in caring for their families. This result was on the same line with Matsuyama et al. [44] who found that marital status (married) was significantly associated with higher information needs over time. As well, Brédar et al. [45] found that BC patients who have children significantly predicted differences in psychological needs relative to corresponding difficulties. On the contrary, In Turkey Saatci et al. [46] found that there was no relationship between unmet needs and marital status.

The study results revealed that a highly statistically significant association was found between unmet needs and time of diagnosis, it was

noticed that newly diagnosed patients were associated with higher unmet needs. The explanation of this result might be due to, a patient is unable to adapt with disease, while being anxious about treatment regimen and side effects during recent period of diagnosis. This finding was in accordance with Liao et al. [36] who carried out a study in Taiwan and found that unmet supportive care needs were significantly predicted by time since diagnosis.

The present study results revealed that a statistically significant association was found between unmet needs and current treatment. It was noticed that unmet needs were higher in women who had received chemotherapy. From the researcher point of view, the adverse effects of chemotherapy can be severe and have a significant impact on a person's quality of life which encompasses hair loss, hematological problems, nausea and vomiting, psychological stress and social disturbances. . This finding was on the same line with Hwang and Park [47], who carried out study in Korea, found that among the types of the treatments, patients receiving or having received chemotherapy were more likely to report some needs in physical and daily living need domain.

A highly statistically significant association was found between unmet needs and duration of current treatment of women under study. It was noticed that short time of current treatment was associated with higher unmet needs. This finding may reflect the treatment process that breast cancer patients normally go through; diagnosis, surgery, therapy (chemotherapy, radiation therapy, endocrine therapy) and recovery while or until patients have therapy after surgery, they might experience many physical side effects related to the treatments and be more likely to report some needs both in the physical and daily living domain and the information domain. Therefore, Patients who received short period of treatment had more needs across the domains than

those who had longer period of treatment that are moving into a relatively stable stage.

On the same way, Park and Hwang [48] found that in Korea patients with duration of less than one year since surgery showed significantly higher unmet needs in all needs domains.

The study results revealed that highly statistically significant association was found between unmet needs and psychological distress level. In fact patients who have unmet needs have severe psychological distress level. The rationale might be due to that those patients who didn't receive physical, information, their psychological needs about treatment regimen become more distressing i.e., the more unmet needs, the more psychological distress. This finding is in agreement with Farrelly et al.[12] who in a similar study conducted in Australia found that

A greater number of unmet needs was associated with a greater likelihood of moderate to severe levels of distress. Similarly Hodgkinson et al. [39] and Akechi et al. [49] in Japan found that the patients' needs were significantly associated with psychological distress.

Furthermore, Okazaki et al.[50] reported that breast cancer patients with psychological needs such as high trait anxiety experienced more psychological distress, than did patients with low trait anxiety after receiving a diagnosis. In addition Gao [51] stated that breast cancer patients with physical needs experienced more psychological distress from being unable to continue with previous roles and activities or anticipatory grief.

Moreover, the main predictors of psychological distress were physical and daily living needs and health system and information needs. However, physical needs and information needs, which are almost inevitable throughout treatment and beyond, were more important predictors of distress as reported by Dyson. [52] On same way, Liu et al. [53]

concluded that there are strong associations between patients' needs and psychological distress with newly diagnosed breast cancer, identifying and addressing that such needs can well prevent patient distress, poor quality of life, and dissatisfaction with care as identified by sanders et al. [54]

Conclusion:
The study results bring about the conclusion that slightly two thirds of the studied sample was at age group ≥ 45 year, with a mean age of 46.91±8.83 years; most of them were married and residing in rural areas. More than two thirds of were taking chemotherapy and radiotherapy, more than half of them were diagnosed in stage III. Regarding supportive care needs domains, the highest affected domain was the physical and daily living domain followed by the health system and information. On the other hand, the lowest need was in sexual domain. Slightly three quarters of patients had moderate to severe distress. There was a highly statistically significant positive correlation between psychological distress level and total supportive care needs.

Recommendations:
On the basis of the current study findings, the following recommendations are suggested:

▪ Health educational program to meet patients' needs is to be considered as one of the possible strategies for ameliorating psychological distress.
▪ Periodical assessment on the psychological distress in breast cancer patients is to be performed which may be helpful for developing appropriate interventions to reduce distress.
▪ Mass media can play an important role in raising awareness of women about early detection of breast cancer.
▪ Further studies are needed for ongoing assessment of patients' needs and their psychological distress level to ensure monitoring and intervention to meet various needs of patients during treatment and confirm this study results.

Table (1): Medical history of the women with breast cancer

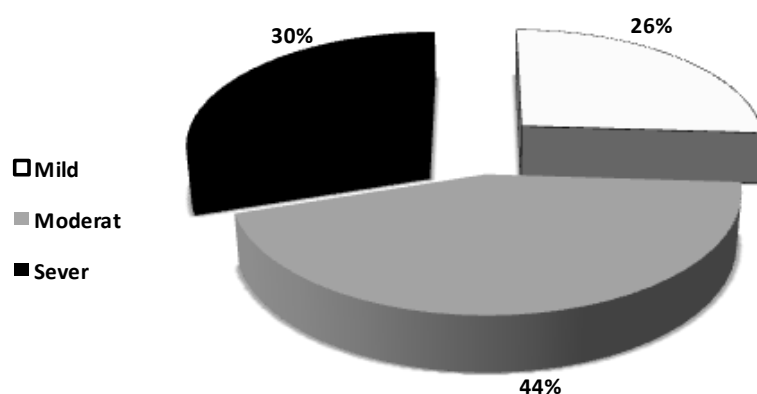| Medical History	No	%
Family history:		
▪ Yes	47	23.5
▪ No	153	76.5
Knowledge about disease		
▪ Yes	56	28
▪ No	144	72
Source of information:		
▪ Doctors	2	1
▪ Media	20	10
▪ Relatives and friends	27	13.5
▪ Previous patients	7	3.5
Time of diagnosis in months(n=200):		
▪ Mean ±SD	17.34±20.35	
▪ Range	2-108	
▪ Median	18	
Current treatment :		
▪ Chemotherapy	74	37
▪ Radiotherapy	62	31
▪ Hormonal therapy, immunotherapy) other types(	48	24
Duration of current treatment in weeks(n=199):		
▪ Mean ±SD	36.24±64.55	
▪ Range	1-312	
▪ median	8	
Stages		
▪ I	12	6
▪ II	58	29
▪ III	113	56.5
▪ IV	5	2.5
▪ Recurrence	12	6

Figure (1): Level of psychological distress among women with breast cancer (n=200)

Table (2): Mean and percentage of supportive care needs domains scores as measured among women with breast cancer (n=200)

supportive care needs Domains	Mean	Standard deviation	Minimum	Maximum	Percent of unmet needs
▪ **Physical**	18.17	3.78	5.00	25.00	72.7
▪ **Health system and information**	36.56	9.03	11.00	55.00	66.5
▪ **Psychological**	32.99	9.17	10.00	50.00	66
▪ **Patient care and support**	13.54	3.71	5.00	25.00	54.2
▪ **Sexual**	7.19	3.78	3.00	15.00	47.9

Table (3): Relationship between met/ unmet supportive care needs and personal characteristics among study sample (n=200)

Items	All Domains		X2	p-value
	Met needs 38 (%)	Unmet needs 162 (%)		
Age				
▪ <45	7(18.4)	62(38.3)		
▪ ≥45	31 (81.6)	100 (61.7)	5.37	0.021*
Education level :				
▪ Illiterate	20(52.6)	63(38.9)		
▪ Read and write	3(7.8)	14(8.6)		
▪ Primary	4(10.5)	28(17.3)	3.17	0.529
▪ secondary	6(15.8)	38(23.5)		
▪ University	5(13.2)	19(11.7)		
Social status:				
▪ Single	2 (5.2)	0(0)		
▪ Married	23 (60.5)	130(80.2)		
▪ Divorced	5(13.2)	6(3.7)	15.55	0.000*
▪ Widowed	(21.1) 8	26 (16.1)		
Family numbers:				
▪ < 3	8(21.1)	13(8)		
▪ 3-	10(26.3)	57(35.2)		
▪ 5-	17(44.7)	78(48.1)	5.79	0.122
▪ 8+	3 (7.9)	14 (8.6)		
Residence:	27(71.1)	112(69.1)		
▪ Rural				
▪ Urban	11(28.9)	50 (30.9)	0.05	0.817
Occupation:				
House wife	32(84.2)	140(86.4)		
▪ A literal	3(7.9)	5(3.1)		
▪ Literal	0(0)	3(1.9)	2.54	0.636
▪ Employee	1(2.6)	4(2.5)		
▪ profession	2(5.3)	10 (6.2)		
Income:				
▪ Enough and save	0(0)	1(.7)		
▪ Enough	19(50)	54 (33.3)	3.84	0.147
▪ Not enough	19(50)	107(66)		

(*) Statistically significant at P<0.05

Table (4): Mean values of duration of treatment and time of diagnosis in relation to meet/ unmet supportive care needs

Variables	Met needs	Un met needs	T	P
▪ Time of diagnosis in months	28.26 ±4.29	14.78±1.39	3.79	0.001*
▪ Duration of current treatment in weeks	71.68±13.73	27.86±4.41	3.89	0.001*
▪ Duration of previous treatment in months	6.75±1.9	5.86±0.57	0.60	*0.547*

(*) Statistically significant at P<0.05

Table (5): Correlation between supportive care needs domains and psychological distress among breast cancer women

Supportive care need domains	Psychological distress	
	r	P
▪ **Physical and daily living**	.569	0.010*
▪ **Health system and information**	.503	0.010*
▪ **Patient care and support**	.441	0.010*
▪ **Sexuality**	.247	0.010*
▪ **Psychological**	.724	0.010*

(*) Statistically significant at P<0.05

Table (6): Relationship between met / unmet supportive care needs and psychological distress level among breast cancer women

Psychological Distress Level	Total Domains				X^2	p- value
	Met needs		Unmet needs			
	N=38	%	N= 162	%		
▪ **No/ mild**	31	**81.6**	20	12.4	78.26	0.000*
▪ **moderate**	6	15.8	83	51.2		
▪ **Severe**	1	**2.6**	59	36.4		

(*) Statistically significant at P<0.05

References:

1. World Health Organization: Breast cancer: Prevention and control, available at: http://www.who.int/cancer/detection/breastcancer/en/. Accessed October 17, 2014
2. Stuckey A.: Breast cancer: Epidemiology and risk factors. *Clinical Obstetrics and Gynecology*. 2011; 54 (1): 96–102.
3. Lakkis N., Adib S., Osman M., Musharafieh U.& Hamadeh G. :Breast cancer in Lebanon: Incidence and comparison to regional and western countries. *Cancer Epidemiol*. 2010; 34(3): 221-5.
4. El Saghir NS., Khalil MK.& Eid T.: Trends in epidemiology and management of breast cancer in developing Arab countries: A literature and registry analysis. *International Journal of Surgery*. 2007; 5(4): 225–233.
5. Kamangar F., Dores GM. & Anderson WF. : Patterns of cancer incidence, mortality, and prevalence across five continents: Defining priorities to reduce cancer disparities in different geographic regions of the world. *Journal of Clinical Oncology*. 2006; 24 (14): 2137-2150.

6. Abdollahzadeh F., Moradi N., Pakpour V., Rahmani A., Zamanzadeh V. & Mohammadpooras A.: Unmet supportive care needs of Iranian breast Cancer Patients. *Asian Pac J Cancer Prev.* 2014; 15(9): 3933-3938.

7. Li WW., Lam WW. & Au AH. :Interpreting differences in patterns of supportive care needs between patients with breast cancer and patients with colorectal cancer. *Psychooncology.* 2013; 22 (4):792-798.

8. Harrison J., Young J., Price M., Butow P.& Solomon M. :What are the unmet supportive care needs of people with cancer? A systematic review. *Support Care Cancer.* 2009; 17(8): 1117-1128.

9. Mitchell AJ., Chan M., Bhatti H., Halton M., Grassi L., Johansen C. & Meader N.: Prevalence of depression, anxiety, and adjustment disorder in oncological, haematological, and palliative care settings: A meta-analysis of 94 interview-based studies. *Lancet Oncol.* 2011; 12(2): 160–174.

10. Hong JS. & Tian J.: Prevalence of anxiety and depression and their risk factors in Chinese cancer patients. *Support Care Cancer.* 2014; 22 (2) : 453–459.

11. McDowell ME., Occhipinti S., Ferguson M., Dunn J. & Chambers SK.: Predictors of change in unmet supportive care needs in cancer. *Psycho oncology.* 2010; 19 (5): 508–516.

12. Farrelly A., White V., Meiser B., Jefford M., Young MA., Ieropoli S., Winship I.& Duffy J. : Unmet support needs and distress among women with a BRCA1/2 mutation. *Fam Cancer.* 2o13; 12(3), 509-18.

13. Taranikanti M., Panda S., Dash AK., Yasmeen N.& Siddique AR.: Behara. Knowledge of nurses about breast cancer risk factors, general awareness and screening procedures in South India .*International Journal of Medical Science and Public Health.* 2014; 39 (11): 1-4.

14. Oztunç G., Yeşilh P., Paydaş S. & Erdoğan S.: Social support and hopelessness in patients with breast Cancer. *Asian Pacific J Cancer Prev.* 2013; 14 (1): 571-578.

15. Miller AB. Screening for breast cancer in the eastern Mediterranean region. *East Mediterr Health J.* 2010; 16 (10): 1022-4.

16. Hirko, K., Soliman, A.S., Hablas, A., Seifeldin, I.A., Ramadan, M., Banerjee, M., & Harford, J.B.; 2013. Trends in breast Cancer Incidence rates by age and stage at diagnosis in Gharbiah, Egypt, over 10 Years (1999–2008).Journal of Cancer Epidemiology. Available at: http://www.hindawi.com/journals/jce/2013/916394/.Accessed September 22, 2014.

17. National Cancer Registry Program of Egypt: Reports and Statistics: Aswan. Reports and Statistics: Aswan; 2008. Available at: http://www.cancerregistry.gov.eg/reports.aspx. Accessed June 31, 2014.

18. Bonevski B., Sanson-Fisher R., Girgis A., Burton L., Cook P. & Boyes A.: The Supportive Care Review Team Group. Evaluation of an instrument to assess the needs of patients with cancer. *Cancer.* 2000; 88(1): 217-25.

19. Sanson-Fisher R., Girgis A., Boyes A., Bonevski B., Burton L. & Cook P. :The unmet supportive care needs of patients with cancer. *Cancer.* 2000; 88 (1): 226-37.

20. Roth AJ., Kornblith AB., Batel-Copel L., Peabody E., Scher HI.& Hollandb JC. : Rapid screening for psychological distress in men with prostate carcinoma: A pilot study. *Cancer.* 1998; 82(10): 1904–1908.

21. Jacobsen PB., Donovan KA., Trask PC., Fleishman SB., Zabora J., Baker F.& Holland JC. : Screening for psychological distress in ambulatory cancer patients: A multi-center evaluation of the distress thermometer. *Cancer.* 2005; 103 (7): 1494–1502.

22. Thomas NW., Biondi M. & Costantini A.: Psycho-oncology. United States of America: American Psychiatric Publishing; 2013.

23. Najjar H. & Easson A.: Age at diagnosis of breast cancer in Arab nations. *International Journal of Surgery.* 2010; 8(6): 448- 452.

24. El-Shinawi M., El-Anwar AM., Adel H., Nada MA., Tawab RA.& Osman W. :How to evaluate breast cancer in Egyptian female Patients? *Kasr El Aini Journal of Surgery.* 2009; 10 (3): 53-62.

25. Denewer AF., Mostafa W. & Elsham K.: Social Support and hope among Egyptian women with breast cancer after mastectomy. Breast Cancer:

Basic and Clinical Research. 2011; volume 5: 93–103.

26. Moursy AME. & Ead AY. : Self-care practices of chemotherapy patients. *Life Science Journal.* 2014; 11 (4): 212-222.

27. Hussein RMA. : Assessment of patients' needs and coping strategies post mastectomy, un published thesis, submitted in partial fulfillment of the requirements of master degree, Faculty of Nursing, Ain Shams University, pp. 43, 52, 2013

28. Esmat OM.: Effect of two educated strategies on quality of life of women after mastectomy. Un published Doctoral thesis , Faculty of Nursing , Ain Shams University, pp. 129, 137, 2007

29. Yong HW., Zubaidah J., Saidi M. & Zailina H.: Validation of Malaysian translated distress thermometer with problem checklist among the breast cancer survivors in Malaysia. Asian. *Journal of Psychiatry.* 2012; 5(1): 38–42.

30. Iskandarsyah A., DeKlerk C., Suardi DR., Soemitro MP. & Sadarjoen SS.: The Distress thermometer and its validity: A First Psychometric Study in Indonesian women with breast cancer. *PLoS ONE.* 2013; 8(2):56353.

31. Allam Mf. & Abd Elaziz KM.: Evaluation of the level of knowledge of Egyptian women of breast cancer and its risk factors. A cross sectional study, *J Prev Med Hyg.* 2012; 53(4): 195-198.

32. Ahuja S. & Chakrabarti N.: To determine the level of knowledge regarding breast cancer and to increase awareness about breast cancer screening practices among a group of women in a tertiary care hospital in mumbai, india. *The Internet Journal of Public Health.* 2009; Volume 1, Number1.

33. Abou El-nagah GM., El-fayoumi TA., Gaber EM., Elshinawi IH., Shehab WI. & Ibrahim MG.: Surgery or chemotherapy in locally advanced operable breast cancer: which comes first. *Alexandria Bulletin.* 2006; 42(2): 497- 503.

34. Hussein O., Mosbah M., Farouk O., Farag K., El-Saed A. & Arafa M.: Hormone receptors and age distribution in breast cancer patients at a university hospital in Northern Egypt

. Breast Cancer: *Basic and Clinical Research.* 2013; volume 7: 51-57.

35. Beatty L., Oxlad M., Koczwara B. & Wade TD.: The psychosocial concerns and needs of women recently diagnosed with breast cancer: A qualitative study of patient, nurse and volunteer perspectives. *Journal Compilation.* 2008; 11(4): 331-342.

36. Liao MN., Chen SC., Lin YC., Hsu YH., Hung HC.& Wang CH. : Changes and predictors of unmet supportive care needs in Taiwanese women with newly diagnosed breast cancer. *Oncol Nurs Forum.* 2012; 39(5):380-9.

37. Nakaguchi T., Okuyama T., Uchida M., Ito Y., Komatsu H., Wada M. & Akechi T.: Oncology nurses' recognition of supportive care needs and symptoms of their patients undergoing chemotherapy. *Jpn J Clin Oncol.* 2013; 43(4):369-376.

38. Au A., Lam W., Tsang J., Yau TK., Soong I. & Yeo W. : Supportive care needs in Hong Kong Chinese women confronting advanced breast cancer. *Psycho oncology.* 2013; 22(5): 1144-1151.

39. Hodgkinson K., Buto P., Hunt GE., Pendlebur S., Hobbs KM.& Wain G. : Breast cancer survivors' supportive care needs 2-10 years after diagnosis. *Support Care Cancer.* 2007; 15(5):515-523.

40. Armes J., Crowe M., Colbourne L., Morgan H., Murrells T. & Oakley C. : Patients' supportive care needs beyond the end of cancer treatment: A prospective, longitudinal survey. *J Clin Oncol.* 2009; 27(36):6172-9.

41. Harrison SE., Watson EK., Ward AM., Khan NF., Turner D. & Adams E. : Primary health and supportive care needs of long-term cancer survivors: a questionnaire survey. *J Clin Oncol* . 2011; 29 (15): 2091-98.

42. Lam WW., Au AH., Wong JH., Lehmann C., Koch U.& Fielding R. : Unmet supportive care needs: A cross-cultural comparison between Hong Kong Chinese and German Caucasian women with breast cancer. Breast *Cancer Res Treat.* 2011; 130(2): 531-41.

43. Von Heymann-Horan AB., Dalton SO., Dziekanska A., Christensen J., Andersen .& Mertz BG.: Unmet needs of women with breast cancer during and after primary treatment: A

prospective study in Denmark. *Acta oncol.* 2013; 52(2): 382-90.

44. Matsuyama RK., Kuhn LA., Molisani A. & Wilson-Genderson MC. : Cancer patients' information needs the first nine months after diagnosis. *Patient Education and Counseling.* 2013; 90(1) : 96-102.

45. Brédart A., Kop JL., Griesser AC., Fiszer C., Zaman K. & panes-Ruedin B. :Assessment of needs, health-related quality of life and satisfaction with care in breast cancer patients to better target supportive care. *Annals of Oncology.* 2013; 24(8): 2151-8.

46. Saatci E., Akin S. & Akpinar E. : Do the unmet needs affect the quality of life in breast cancer patients? *West Indian med. J.* 2007; 56(3) , 253- 257

47. Hwang SY. & Park BW. : The perceived care needs of breast cancer patients in Korea. *Yonsei Medical Journal.* 2006; 47(4): 524 – 533.

48. Park BW. & Hwang SY. : Unmet needs of breast cancer patients relative to survival duration. *Yonsei Med J.* 2012; 53(1): 118-125.

49. Akechi T., Okuyama T., Endo C., Sagawa R., Uchida M. & Nakaguchi T. : Patient's perceived need and psychological distress and/or quality of life in ambulatory breast cancer patients in Japan. *Psychooncology.* 2011; 20(5): 497-505.

50. Okazaki S., Iwamitsu Y., Kuranami M., et al. : Trait anxiety and emotional response before and after breast cancer diagnosis. *Jpn Bull Soc Psychiatry.* 2009; 17: 245-56.

51. Gao W., Bennett M., Stark D., Murray S. & Higginson IJ. : Psychological distress in cancer from survivorship to end of life care: Prevalence, associated factors and clinical implications. *Eur J Cancer.* 2010; 46(11): 2036-44.

52. Liu DG., Wang SS., Peng RJ., Qin T., Shi YX. & Teng XY.: Interaction of social support and psychological stress on anxiety and depressive symptoms in breast Cancer Patients. *Asian Pacific J Cancer Prev.* 2011; 12(10): 2523-2529.

53. Dyson GJ., Thompson K., Palmer S., Thomas DM.& Schofield P.: The relationship between unmet needs and distress amongst young people with cancer. *Support Care Cancer.* 2012; 20 (1): 75-85.

54. Sanders SL., Bantum EO., Owen JE., Thornton AA.& Stanton AL. : Supportive care needs in patients with lung cancer. *Psycho Oncology.* 2010; 19 (5): 480-489.

إحتياجات الرعاية الداعمة وعلاقتها بمستوى الضغط النفسى لدى السيدات تحت العلاج بسرطان الثدي

أسماء على السيد (١)، **أمانى صبحى سرور** (٢)،**أمانى رشاد أبوالسعود**(٣)،**عباس محمود سرحان** (٤)

(١) معيد بقسم تمريض صحة المجتمع – كلية التمريض- جامعة الزقازيق، (٢) أستاذ مساعد تمريض صحة المجتمع- كلية التمريض- جامعة الزقازيق، (٣) أستاذ طب المجتمع- كلية الطب– جامعة الزقازيق، (٤) أستاذ علاج الأورام – كلية الطب – جامعة الزقازيق

مقدمة:

مرضى سرطان الثدي الذين يتلقون العلاج يتطلبوا رعاية داعمة للوقاية وعلاج الآثار السلبية الجسدية والنفسية والاجتماعية من السرطان وعلاجة ، والرعاية الداعمة هي جزء مهم من نهج متعدد الوسائل لرعاية مرضى السرطان، الأمر الذي يتطلب من الفريق الصحى توعية للمرضى بخدمات الرعاية الداعمة. تقييم الحاجة هو خريطة هامة للمساعدة فى تلبية الاحتياجات الفعلية. ومن مزاياة يوفر البيانات من المرضى أنفسهم والتى تساعد هيئة التمريض لتحديد الأولويات في رعاية هؤلاء المرضى لتلبية احتياجاتهم، وتلبية احتياجات الرعاية الداعمة يمكن أن تمنع بشكل جيد الضغط النفسى ، وسوء نوعية الحياة، وعدم الرضا عن الرعاية. على النقيض الضغط النفسى الشديد يؤثر على كفاءة العلاج وبالتالى لة عواقب وخيمة على صحة المرضى وعلى مدى البقاء على قيد الحياة .

الهدف من الدراسة:

هدفت الدراسة الى تسليط الضوء على احتياجات الرعاية الداعمة وعلاقتها بمستوى الضغط النفسى لدى السيدات تحت العلاج بسرطان الثدي.
هذا الهدف تحقق من خلال تحديد احتياجات الرعاية الداعمة للسيدات تحت العلاج بسرطان الثدي، وتحديد مستوى الضغط النفسى للسيدات تحت العلاج بسرطان الثدي و استكشاف العلاقة بين احتياجات الرعاية الداعمة ومستوى الضغط النفسى.

التصميم البحثى :
تم استخدام تصميم وصفي مقطعي.

عينة و مكان الدراسة:
عينة مكونة من ٢٠٠ سيدة تتراوح أعمارهن بين ٣٠-٦٥ عاما في عيادات الأورام بمستشفيات جامعة الزقازيق .

أدوات جمع البيانات:
تم تجميع البيانات الخاصة بالدراسة باستخدام استمارة المقابلة الشخصية المكونة من:
- بيانات ديموجرافية والتاريخ الطبى .
- دراسة احتياجات الرعاية الداعمة النموذج المختصر .
- مقياس الضغط النفسى.

وأجريت دراسة تجريبية على عينة من ٢٠ سيدة مصابة بسرطان الثدي تحت العلاج فى عيادات الأورام بمستشفيات جامعة الزقازيق.
تم جمع البيانات فى خلال ٦ أشهر، ابتداء من شهر أغسطس ٢٠١٣ حتى نهاية يناير ٢٠١٤.

النتائج:
أظهرت نتائج الدراسة الآتى :
- ما يقرب من ثلثى عينة الدراسة (٦٥.٥٪) في الفئة العمرية ≤ ٤٥ سنة، ومتوسط أعمارهن ٤٦.٩١ ± ٨.٨٣ سنوات.
- نصف عينة الدراسة (٥٠٪) من الأميين، تقرأوتكتب . كان أكثر من ثلاثة أرباع السيدات (٧٦.٥٪) متزوجات ويقيمن في المناطق الريفية (٦٩.٥٪).
- أكثر من خمس السيدات (٢٣.٥٪) لديهن تاريخ عائلي، وتم تشخيص أكثر من نصفهن (٥٦.٥٪) فى المرحلة الثالثة.
- ان اعلى الاحتياجات هى الاحتياجات الجسمانية ٧٢.٧٪ ، بمتوسط ١٨.١٧± 3.78 يليه الاحتياج من المعلومات ٦٦.٥٪ بمتوسط ٣٦.٥٦±٩.03، من ناحية أخرى كان أقل احتياج في المجال الجنسي ٤٧.٩٪ مع متوسط ٧.١٩ ± ٣.٧٨
- تعاني حوالى ثلاثى ارباع السيدات من ضغط نفسى متوسط الى ضغط نفسى شديد.
- وجدت علاقة ذات دلالة إحصائية بين العمر والاحتياجات الغير ملباة في كافة المجالات .
- هناك علاقة ذات دلالة إحصائية بين الاحتياجات الغير الملباة ووقت التشخيص، وأيضا مدة العلاج الحالى.
- وجدت علاقة ذات دلالة إحصائية بين الضغوط النفسية وجميع المجالات من احتياجات الرعاية الداعمة.

الخلاصة:
خلصت الدراسة الى ان مايقرب من ثلثى عينة الدراسة في الفئة العمرية ≤٤٥ سنة، مع متوسط أعمارهن ٤٦.٩١ ± ٨.٨٣ سنة. معظمهم من المتزوجات والمقيمات في المناطق الريفية. الغالبية منهن يأخذون العلاج الكيميائي والعلاج الإشعاعي، وتم تشخيص أكثر من نصفهن فى المرحلة الثالثة

وفيما يختص بمجالات احتياجات الرعاية الداعمة ، أشارت الدراسة إلى أن أكثر الاحتياجات كانت الاحتياجات الجسمانية يليها الاحتياجات من المعلومات والنظام الصحى ؛ من ناحية أخرى كان أقل الاحتياجات فى المجال الجنسى. ثلاثة ارباع السيدات تقريباً يعانين من ضغط نفسى متوسط الى ضغط نفسى شديد . هناك علاقة ذات دلالة احصائية واضحة بين مجموع الاحتياجات ومستوى الضغط النفسى.

التوصيات:

توصى الدراسة بعمل برنامج تثقيف صحى لتلبية الاحتياجات وضمان كفاءة العلاج والتأهيل النفسى. الاكتشاف المبكر لمستوى الضغط النفسى وذالك لاجراء التدخل المناسب ، واهمية دور وسائل الاعلام فى توعية السيدات باهمية الكشف المبكر لسرطان الثدى ، ويقترح إجراء مزيد من البحوث للتقييم المستمر للاحتياجات ومستوى الضغط النفسى وذالك لتأكيد نتائج هذة الدراسة.