

## Assessment of Supportive Care Needs, Satisfaction, and Quality of Life among Breast Cancer Survivors

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### Abstract:

**Background:** Supportive care needs are significantly associated with poor quality of life. Satisfaction with care theoretically implies fulfillment of expectations which may be affected by the nature, number, or seriousness of patient's health needs. **Objectives:** 1) To assess the types and levels of unmet needs among breast cancer patients, QOL domains, and patient satisfaction with health care at Zagazig University hospitals. 2) To identify the impact of unmet needs on different QOL domains and patients satisfaction. **Methods:** This is a cross sectional study; 259 survivors of breast cancer attending the clinical oncology outpatient clinics in Zagazig University Hospital were interviewed (from June 2020 to end of the year). Validated edition of the Supportive Care Needs Short Form Survey (SCNS-SF34), EORTC QLQ-C30, cancer in-patient satisfaction questionnaire (The EORTC IN-PATSAT32), and EORTC QLQ –BR23 (the Arabic versions) were used to assess the quality of life of cancer patients. **Results:** 54.8% of participants reported that they have unmet needs. The highest unmet supportive care needs were observed in the psychological domain. The total satisfaction rate reached 56.4%. A significant difference was observed between patients having unmet and no needs and different QOL domains. High satisfaction scores were observed among patients with no needs. **Conclusion:** Psychological needs were the most common unmet needs. The level of perceived needs influences the level of QOL and degree of patients' satisfaction.

**Keywords:** Breast cancer, Quality of Life, Satisfaction, Supportive Care Needs.

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### Introduction

Breast cancer is one of the most significant causes of death among women, with a growing incidence of around 1.7 million new cases per year. <sup>(1)</sup> In Egypt, breast cancer cases reaches around 19.3% of total primary malignancies. <sup>(2)</sup>

Recent advancement in diagnosis and treatment have improved the survival rate of breast cancer cases. <sup>(3)</sup> Providing treatment and optimal care to these patients involves evaluation of supportive care needs. <sup>(4)</sup>

Supportive care is described as the care that allows patients and their families to

cope with the cancer experience and meet their physical, mental, psychological, social, and emotional needs as well as their need for information in all disease stages. <sup>(5)</sup>

Despite the unique value of supportive care as a fundamental service, 93% of the supportive needs of cancer patients have been unmet consistently. <sup>(6)</sup>

Breast cancer cases require various needs such as the need for information and psychological support. <sup>(7)</sup> Ignoring unmet needs is associated with psychological problems, physical deterioration, and lower quality of life which can have detrimental effect on the health system of

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these cases.<sup>(8)</sup> Supportive care needs have a major association with quality of life.<sup>(9)</sup>

It is necessary to consider the effect of unmet needs of breast cancer patients on their QOL to deliver efficient treatments.<sup>(10)</sup>

Dissatisfaction with hospital services has been attributed to the unmet needs for information and health system of breast cancer patients.<sup>(11)</sup> Rarely, the relation between care satisfaction and needs has been empirically checked.<sup>(12)</sup>

The current study aimed to assess the types and levels of unmet needs among breast cancer patients, QOL domains, and patient satisfaction with health care at Zagazig University hospitals and identify the impact of unmet needs on different QOL domains and patients satisfaction.

## Subjects and Methods

**Study design and setting:** A cross-sectional study among breast cancer patients at clinical oncology outpatient clinics (Zagazig University' hospitals, Egypt) was conducted throughout a period of 6 months (from June 2020 till the end of the year).

**Sampling technique and sample size:** The following inclusion criteria were considered: Age of eighteen years or older, diagnosis with cancer breast at any stage, undergoing cancer therapy (chemotherapy & radiotherapy), previously getting a

therapy (at least once), being mentally and physically fit to complete a questionnaire, being able to read and write, and being interested in participating in the research.

A sample size of 259 patients was estimated using Epi info version 6 software program in addition to the total number of breast cancer patients/year who attended medical oncology units at Zagazig University hospitals (n=5000). The prevalence of unmet needs was 23% and 95% CI.<sup>(13)</sup>

**Data collection:** 1) socio-demographic and disease characteristics, 2) supportive care needs, 3) health-related quality of life data 4) patient satisfaction (a questionnaire with four sections was used).

### 1- Disease and socio-demographic characteristics

Age, marital status, educational level, employment status, income, and time since diagnosis.

### 2- Supportive care needs

The validated edition of the Supportive Care Needs Short Form Survey (SCNS-SF34) was used.<sup>(14)</sup> A total of 34 items were categorized into 5 domains: 1) physical & daily living (5 items), 2) psychological needs (10 items), 3) patient care & support (5 items), 4) sexual needs (3 items), 5) health systems & information needs (11 items).



Patients were asked to address their level of need for each item throughout the month preceding the study and then, these levels were measured on a likert scale of 5 possible answers: No needs include:

1= not applicable; wasn't a problem as a result of having cancer

2= satisfied; I did not need help with this.

Some unmet needs include:

3= Low need; I had little need for additional help

4= Moderate need; I had little need for additional help

5= High need; I had a strong need for additional help. Each item was deemed to be "no need" (score of 1 or 2) or "some unmet needs" (score 3, 4, 5).

### 3- Quality of life assessment:

The questionnaires of the European Organization for Research and Treatment of Cancer (EORTC) were used to assess the quality of life of cancer patients. In the current study, the investigators used the Arabic versions of both EORTC QLQ-C30 (Version 3) and EORTC QLQ-BR23.<sup>(15)</sup>

EORTC QLQ-C30 incorporates scales and items dealing with the functional aspects of HRQOL and symptoms that are frequently found in cancer patients. QLQ-C30 comprises 30 items (coded Q1-Q30) which include global health status QOL scale, 5 multi-item functional subscales

(physical, role, emotional, cognitive, social functioning), and a number of single multi-item symptomatic subscales (fatigue, pain, dyspnea, insomnia, nausea, and vomiting, appetite loss, diarrhea, constipation, financial difficulties).

The EORTC QLQ-BR23 questionnaire (coded BR1-BR23), a 23-item cancer breast specific module, was used for patients differing in disease stage and treatment style.

This module includes 5 multi-item scales to evaluate systemic side-effects of the therapy, breast symptoms, arm symptoms, sexual functioning, and body image in addition to 3-single items to assess sexual enjoyment, hair loss, and future prospects.

As stated by EORTC guidelines, the scale scores of QLQ-C30 and BR23 questionnaires have been calculated and transformed linearly; all the scales and single item measures ranged in score from zero to one hundred.

A high score for a functional scale indicated a high healthy level of functioning. In contrast, a high score for a symptom scale item indicated a high level of symptoms and further problems.

### 4- Cancer in-patient satisfaction:

The cancer in-patient satisfaction questionnaire (EORTC IN-PATSAT32)



was developed by the European Organization of Research and Treatment of Cancer (EORTC) to evaluate the satisfaction of cancer patients with the quality of human and technical aspects of care given by the doctors and nurses,<sup>(16)</sup> as well as the aspects of the care organization and hospital environment.

The 32-item questionnaire includes 11 multi-item scales and 3-single item scales rating: doctors' technical skills (questions 1–3), interpersonal skills (questions 4–6), information provision (questions 7–9), availability (questions 10–11), nurses' interpersonal skills (questions 15–17), technical skills (questions 12–14), information provision (questions 18–20), availability (questions 21, 22), other hospital personnel's helpfulness, kindness, information provision (questions 24–26), waiting times for medical tests, treatment, and getting test results (questions 27, 28), access to hospital (questions 29, 30), exchange of information (question 23), comfort and cleanliness (question 31), and general satisfaction (question 32). All items are rated on a 5-point Likert scale as follows: 1- indicates poor satisfaction, 2- fair, 3- good, 4- very good, and 5- excellent satisfaction.

A higher score displayed a higher level of satisfaction with care. Likert score was

summed for the main items. Then, the total was classified according to their medians into satisfied if it is more than the median or unsatisfied if less than the median.

A pilot study was performed on 10 patients in order to test for clarity of language, content relevancy, easiness of understanding, and time required to answer the questionnaire.

The reliability was high for all questionnaires and appropriate for scientific purposes. The pilot study results showed no variation from the main results. So, it was incorporated in the main results.

### **Statistical analysis**

The collected data were presented and analyzed using SPSS (Statistical Package for the Social Sciences) version 16.<sup>(17)</sup> Kolmogorov-Smirnov and Levene (homogeneity of variances) tests were used to verify assumption for the use of parametric tests.

Frequency and percentages were used for qualitative data. Mean and standard deviation were used for quantitative data. The suitable statistical tests including chi square test and student t test were performed.

### **Ethical considerations:**

The research protocol was accepted by the ethics committee of the Faculty of



Medicine, Zagazig University, Egypt (number 6061). Official permissions were obtained from the Chairman of Zagazig University Hospitals. Participants were informed that their collaboration is elective; they were empowered to refuse participation and withdraw whenever they wish without providing reasons and without consequences.

## Results

### BC women characteristics:

A number of 259 female breast cancer survivors were included in the current study; 41.3% were between the ages of 50 and 60, with secondary education and below (63.3%), 68.7% were not working, 74.63% were married, and the income of 70.6% of them were not enough. The mean of years since cancer diagnosis was 3.4 (SD=2.0).

### Unmet supportive care needs (self-reported data)

The highest unmet supportive care needs have been reported in the psychological domain (mean 37.7 SD  $\pm$  4.7), followed by health services and information domains (mean 34.5; SD  $\pm$  4.6), then come the physical and daily life needs (mean 16.3; SD  $\pm$  2.5), and patient care and support needs (mean 14.9; SD  $\pm$  2.7).

In the sexual domain, the lowest mean score was observed (9.4  $\pm$  2.0). The mean

score for overall supportive care needs was 110.1 $\pm$ 7.8 (not mentioned in tables). More than half of our respondents (54.8%) reported having unmet needs.

### Females' satisfaction (self reported data)

Regarding the patients' satisfaction with health care, 55.2% of the included patients were satisfied with doctors, 57.9% were satisfied with nurses, and 52.5% were satisfied with other areas.

The total satisfaction rate reached 56.4%. Table (1) shows that the highest satisfaction scores were found in the scales measuring doctors' technical skills and provision of information, nurses' interpersonal and technical skills as well as their provision of information, and finally hospital personnel's kindness, helpfulness, and provision of information.

The lowest satisfaction scores were reported in nurses' availability, exchange of information, comfort, and cleanliness.

### Quality of life among BC women:

Table 2 showed that the total mean score of the global QOL for participants was 59.3 $\pm$ 32.2. In the QLQ-C30, the highest functional score was found for 'physical functioning' and the lowest symptom score was found for 'diarrhea'.

While in the QLQ-BR23, the highest functional score was found for 'body



image' and the lowest symptom score was found for 'arm symptoms'.

### **Relation between supportive care needs, satisfaction with health care, and some personal and medical characteristics**

Table (3) demonstrated that supportive care needs were affected significantly by education, occupation, income, disease stage, and years since cancer diagnosis. Satisfaction was affected by the same factors in addition to age and marital status.

### **Relation between supportive care needs and quality of life**

Low functional and high symptoms scales were observed among the patients with unmet needs. A significant difference was observed between the patients having unmet and no needs in global QOL, physical functioning, nausea/vomiting, appetite loss, diarrhea, financial difficulties, sexual functioning, sexual enjoyment, breast symptoms, and dissatisfaction due to hair loss table (4).

### **Relation between supportive care needs and patient satisfaction with health care**

High satisfaction scores were observed among the patients with no needs with high statistically significant difference table (5).

## **Discussion**

Patients' satisfaction, quality of life, and recognition of their expectations can be enhanced by following and promoting

supportive care needs among cancer patients.<sup>(18)</sup>

In this study, 54.8% of our participants had unmet needs; the highest unmet supportive care needs were identified in the psychological domain, followed by health systems and information domains.

This outcome can be clarified by the doctor-centered care already given for the patients or likely attributing to the high burden on the services rendered (the service given by Zagazig University Hospitals for nearly all the neighboring governorates).

The psychological domain was consistently defined as the highest domain of unmet needs, followed by the health system and information domains.<sup>(11)</sup> Thus, this emphasizes the need for increasing active listening, educating patients about the illness and treatment, or referring patients to social services and psychological therapy.

Health needs were found to be the most popular needs among females with breast cancer in Hong Kong, while physical, everyday life, and psychological needs were recorded as the most demanded needs among German women with breast cancer.<sup>(4)</sup>

On the contrary, in the study of Sanders et al conducted among BC patients in



Western countries, the second and third domains of needs were the health and data system domains, respectively.<sup>(19)</sup> Thus, the need for supportive care appears to be culturally based and can be viewed differently by people in different cultures.

Low levels of education and low social status among participants may be precluding detailed information to be given by health care workers. In conjunction with these findings, Tucker et al noted that several gaps were recognized in the information given for cancer breast patients as the information about disease state, management of symptoms and side effects, medications, prognosis, and palliation.<sup>(20)</sup>

For patients diagnosed with a chronic or life-threatening illness as cancer that need long medical treatment to control it, patient satisfaction is important. In this study, 56.4% of the included patients were satisfied with the care provided to them; highest satisfaction was reported to be with nurses than doctors.

This can be explained by the longer duration they deal with nurses compared to doctors. Generally, patients were satisfied with doctors' technical skills and nurses' interpersonal skills.

However, the minimal satisfaction was seen in nurses' availability and exchange of

information that may be referred to decreased nurses' number, work overburden, and shortage of proper information system. Lis et al noticed that the most substantial predictors of patients' satisfaction were communication and interpersonal skills.<sup>(21)</sup>

Moreover, Chen found that patients were better satisfied with their physicians and nurses if they were better able to communicate and share their medical information with them.<sup>(22)</sup>

Regarding QOL, the highest functional score in the QLQ-C30 was found for physical functioning, while in the QLQ-BR23, the highest score was found for body image. Similarly, Ferlay et al found that higher physical activity scores were correlated with improved health-related quality of life among survivors of breast cancer.<sup>(23)</sup>

Body image has been described as a complicated post-treatment issue for breast cancer survivors which has a profound effect on QOL.<sup>(24)</sup>

In addition, Miller et al found that both psychological and physical symptoms were correlated with body image and significantly associated with the psychological symptoms of anxiety, depression, fatigue, and fear of recurrence.



Among highly educated working women with adequate income, those with early stages of the disease, and those with time after diagnosis less than 2 years, low levels of unmet needs and high levels of satisfaction were reported. In addition, greater satisfaction was found among older and married women.<sup>(25)</sup>

The above criteria may emphasize the socioeconomic situation role in satisfying the patients and meeting their disease needs. Younger and single females may have more unmet needs and reported less satisfaction because they are more vocal of their needs than older adults who think that it should be better able to cope. Fong and Cheah noted that respondents with age less than 60 years, married, low-educated, and unemployed patients had more unmet needs compared to other patients.<sup>(3)</sup>

In addition, Hwang and Park observed that survivors who are married endorsed higher levels of unmet needs compared to other patients.<sup>(26)</sup>

This was explained by the fact that married survivors have spouse whom they need to confront their sexual needs more frequently. Also, Liao et al concluded that higher education levels were found to be predictors of higher level of unmet needs; highly educated people were more conscious of their underlying circumstances

and more sensitive; this contributed to higher needs and lower satisfaction.<sup>(27)</sup>

In a study conducted by Williams *et al*, they found that an increased perceived need for supportive treatment was associated with the patients who are unmarried, young, received radiation or chemotherapy.<sup>(28)</sup>

Low quality of life scales were noted among patients with unmet needs, especially low functional scales. This may bring attention to psychological support and physical rehabilitation on an ongoing and timely basis.

Putri et al reported almost the same results where they noted that unmet needs for supportive treatment were found to be strongly linked to the quality of life in the global health, functional, and symptoms' fields.<sup>(29)</sup>

In a previous multivariate analysis by (mention the author's name here better), it was found that early breast cancer survivors diagnosed at an advanced stage with greater psychological and physical needs were significantly associated with poorer QOL.<sup>(9)</sup>

Finally, patients with no needs reported higher levels of satisfaction compared to those with unmet needs. Stebbing and Ngan reported that satisfaction at baseline was inversely associated with unmet health information system needs.<sup>(30)</sup>



**Conclusion and recommendations:**

In conclusion, psychological needs were the most common unmet needs, indicating the value of additional help and core improvements for these patients in the offered services. The level of perceived needs influences the levels of QOL and satisfaction of patients.

**Recommendations:**

- Increase the number of psychological counseling sessions for cancer breast patients.
- Increase the numbers of studies focusing on evaluating patients' needs to increase their QOL and satisfaction.
- Greater attention should be paid to low-income survivors with high unmet physical and psychological needs since they are likely to experience a lower quality of life.

**Conflict of Interest:** The authors declare no conflict of interest.

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**Table (1): Assessment of patients' satisfaction with health care**

| Item               |  | Mean(SD) |
|--------------------|--|----------|
| <b>Doctors</b>     | ▪ Technical skills   | 9.7(1.8) |
|                    | ▪ Interpersonal skills   | 7.9(2.2) |
|                    | ▪ Information provision  | 9.0(2.0) |
|                    | ▪ Availability   | 5.4(1.4) |
| <b>Nurses</b>      | ▪ Technical skills   | 8.1(2.2) |
|                    | ▪ Interpersonal skills   | 8.7(2.1) |
|                    | ▪ Information provision  | 9.1(2.1) |
|                    | ▪ Availability   | 4.6(1.4) |
| <b>Other areas</b> | ▪ Other hospital staff, interpersonal skills and information provision | 9.7(2.1) |
|                    | ▪ Waiting time   | 6.3(2.5) |
|                    | ▪ Hospital access  | 5.3(1.9) |
|                    | ▪ Exchange of information  | 2.9(1.1) |
|                    | ▪ Comfort & cleanliness  | 2.7(1.3) |
|                    | ▪ General satisfaction   | 2.4(1.2) |

**Table (2): Scores of EROTC QLQ –C30 and BR-23 scales of the studied sample**

| Item  | Mean±SD   |
|---|-----------|
| <b>QLQ-C30 Global QOL and Functional Scales</b> |           |
| ▪ Global QOL                                    | 59.3±32.2 |
| ▪ Physical functioning                          | 60.4±28.1 |
| ▪ Role functioning                              | 54.2±23.3 |
| ▪ Emotional functioning                         | 47.1±24.9 |
| ▪ Cognitive functioning                         | 55.6±22.3 |
| ▪ Social functioning                            | 57.3±19.2 |
| <b>QLQ-C30 Symptoms</b>                         |           |
| ▪ Fatigue                                       | 37.7±26.9 |
| ▪ Nausea / vomiting                             | 19.7±17.3 |
| ▪ Pain  | 29.3±24.1 |
| ▪ Dyspnea                                       | 23.6±21.6 |
| ▪ Insomnia                                      | 37.3±23.2 |
| ▪ Appetite loss                                 | 25.1±24.5 |
| ▪ Constipation                                  | 20.4±18.9 |
| ▪ Diarrhea                                      | 11.6±8.7  |
| ▪ Financial difficulties                        | 34.9±25.3 |
| <b>QLQ-BR23 Functional</b>                      |           |
| ▪ Body image                                    | 59.2±22.6 |
| ▪ Sexual functioning                            | 34.1±25.5 |
| ▪ Sexual enjoyment                              | 38.9±23.7 |
| ▪ Future perspective                            | 50.3±20.1 |
| <b>QLQ-BR23 Symptoms</b>                        |           |
| ▪ Systemic therapy side effects                 | 36.4±26.1 |
| ▪ Breast symptoms                               | 33.8±24.7 |
| ▪ Arm symptoms                                  | 29.3±26.5 |
| ▪ Upset by hair loss                            | 52.7±23.1 |



**Table (3): Comparison of supportive care needs, satisfaction with some personnel and medical characteristics**

| Personnel and medical characteristics | Unmet needs |      | No needs |      | Satisfied   |      | Unsatisfied |      |
|---------------------------------------|-------------|------|----------|------|-------------|------|-------------|------|
|                                       | No=142      | %    | No=117   | %    | No =146     | %    | No=113      | %    |
| <b>Age:</b>                           |             |      |          |      |             |      |             |      |
| ▪ Less than 40                        | 25          | 17.6 | 25       | 21.4 | 37          | 25.3 | 13          | 11.5 |
| ▪ 40-50                               | 43          | 30.3 | 22       | 18.8 | 39          | 26.7 | 26          | 23.0 |
| ▪ 50-60                               | 56          | 39.4 | 51       | 43.6 | 50          | 34.2 | 57          | 50.4 |
| ▪ More than 60                        | 18          | 12.7 | 19       | 16.2 | 20          | 13.8 | 17          | 15.1 |
| Chi square (P value)                  | 4.6(0.1)    |      |          |      | 10.8 (0.01) |      |             |      |
| <b>Education :</b>                    |             |      |          |      |             |      |             |      |
| ▪ Secondary and below                 | 80          | 56.3 | 84       | 71.8 | 107         | 73.3 | 57          | 50.4 |
| ▪ High or above                       | 62          | 43.7 | 33       | 28.2 | 39          | 26.7 | 56          | 49.6 |
| Chi square (P value)                  | 6.5(0.00)   |      |          |      | 14.3(0.00)  |      |             |      |
| <b>Occupation :</b>                   |             |      |          |      |             |      |             |      |
| ▪ Not working                         | 87          | 61.3 | 91       | 77.7 | 89          | 60.9 | 89          | 78.7 |
| ▪ Working                             | 55          | 38.7 | 26       | 22.3 | 57          | 39.1 | 24          | 21.3 |
| Chi square (P value)                  | 8.1(0.00)   |      |          |      | 9.3(0.00)   |      |             |      |
| <b>Marital status:</b>                |             |      |          |      |             |      |             |      |
| ▪ Single                              | 37          | 26.1 | 24       | 20.5 | 22          | 15.1 | 39          | 65.5 |
| ▪ Married                             | 105         | 73.9 | 93       | 79.5 | 124         | 84.9 | 74          | 34.5 |
| Chi square (P value)                  | 1.1(0.14)   |      |          |      | 13.3(0.00)  |      |             |      |
| <b>Income :</b>                       |             |      |          |      |             |      |             |      |
| ▪ Enough                              | 53          | 37.3 | 23       | 19.7 | 58          | 39.7 | 18          | 15.9 |
| ▪ Not enough                          | 89          | 62.7 | 94       | 80.3 | 88          | 60.3 | 95          | 84.1 |
| Chi square (P value)                  | 9.6(0.00)   |      |          |      | 17.4(0.00)  |      |             |      |
| Years since diagnosis<br>Mean ± SD    | 4.5 ±2.1    |      | 2.2±1.8  |      | 2.8±2.1     |      | 3.9±1.9     |      |
| Student t test (P value)              | 9.3(0.00)   |      |          |      | 4.3(0.00)   |      |             |      |



**Table (4): Relation between supportive care needs and QOL among participants.**

| Item  | Unmet needs<br>N=142 | No needs<br>N=117 | T test (P value) |
|---|----------------------|-------------------|------------------|
| <b>QLQ-C30 Global QOL and Functional Scales</b> |                      |                   |                  |
| ▪ Global QOL                                    | 55.1±32.2            | 64.4±31.6         | 2.34(0.02)       |
| ▪ Physical functioning                          | 55.3±27.0            | 66.5±28.3         | 3.27(0.001)      |
| ▪ Role functioning                              | 53.9±21.6            | 54.5±25.3         | 0.196(0.8)       |
| ▪ Emotional functioning                         | 45.6±23.7            | 48.9±26.2         | 1.08(0.2)        |
| ▪ Cognitive functioning                         | 55.7±22.9            | 55.3±21.4         | 0.17(0.8)        |
| ▪ Social functioning                            | 56.9±19.7            | 57.7±18.7         | 0.33(0.7)        |
| <b>▪ QLQ-C30 Symptoms</b>                       |                      |                   |                  |
| ▪ Fatigue                                       | 40.7±25.9            | 35.3±27.4         | 1.6(0.1)         |
| ▪ Nausea/vomiting                               | 23.5±20.3            | 16.0±14.4         | 3.4(0.00)        |
| ▪ Pain  | 30.7±27.4            | 27.5±21.2         | 1.03(0.3)        |
| ▪ Dyspnea                                       | 25.6±23.4            | 21.1±20.2         | 1.6(0.1)         |
| ▪ Insomnia                                      | 37.9±28.7            | 36.7±25.9         | 0.35(0.7)        |
| ▪ Appetite loss                                 | 33.1±32.4            | 18.4±15.1         | 4.5(0.00)        |
| ▪ Constipation                                  | 21.8±20.9            | 18.6±15.8         | 1.4(0.1)         |
| ▪ Diarrhea                                      | 13.8±9.5             | 9.8±7.9           | 3.6(0.00)        |
| ▪ Financial difficulties                        | 43.1±29.3            | 25.2±21.0         | 5.5(0.00)        |
| <b>QLQ-BR23 Functional</b>                      |                      |                   |                  |
| ▪ Body image                                    | 57.4±24.9            | 61.3±20.4         | 1.4(0.1)         |
| ▪ Sexual functioning                            | 30.5±19.1            | 37.1±32.0         | 2.1(0.04)        |
| ▪ Sexual enjoyment                              | 35.6±20.6            | 41.6±26.7         | 2.0(0.04)        |
| ▪ Future perspective                            | 48.9±21.2            | 51.6±19.1         | 1.1(0.2)         |
| <b>QLQ-BR23 Symptoms</b>                        |                      |                   |                  |
| ▪ Systemic therapy side effects                 | 36.9±25.7            | 35.8±26.7         | 0.33(0.7)        |
| ▪ Breast symptoms                               | 37.4±28.7            | 30.4±20.8         | 2.2(0.02)        |
| ▪ Arm symptoms                                  | 30.9±27.2            | 27.2±25.4         | 1.1(0.2)         |
| ▪ Upset by hair loss                            | 52.8±20.9            | 52.6±25.6         | 0.06(0.9)        |



**Table (5): Relation between supportive care needs and satisfaction among participants.**

| Satisfaction among participants | Unmet needs<br>N=142 | No needs<br>N=117 | T test (P value) |
|---------------------------------|----------------------|-------------------|------------------|
| Doctor satisfaction             | 30.8±3.5             | 33.3±3.8          | 5.5(0.00)        |
| Nurse satisfaction              | 29.7±4.5             | 31.1±3.4          | 2.8(0.00)        |
| Other areas satisfaction        | 28.4±3.6             | 30.4±3.8          | 4.3(0.00)        |
| Total satisfaction              | 88.9±6.3             | 94.8±6.1          | 7.6(0.00)        |

### الملخص العربي

#### تقييم احتياجات الرعاية الداعمة، الرضا و جوده الحياه بين الناجيات من سرطان الثدي

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**الملخص:** ترتبط احتياجات الرعاية الداعمة بشكل وثيق بجودة الحياة. الرضا عن الرعاية المقدمة يعني نظرياً تحقيق التوقعات، وقد تتأثر بطبيعة أو عدد أو جدية الاحتياجات الصحية للمريض. **أهداف الدراسة:** (١) تقييم أنواع ومستويات الاحتياجات غير الملباة بين مرض سرطان الثدي ومجالات جودة الحياة ورضا المريض عن الرعاية الصحية المقدمة في مستشفيات جامعة الزقازيق. (٢) تحديد تأثير الاحتياجات غير الملباة على مختلف مجالات جودة الحياة ورضا المرضى. **طرق البحث:** تم القيام بدراسة مقطعية، وذلك عن طريق إجراء مقابلات مع ٢٥٩ ناجية من سرطان الثدي يترددون على العيادات الخارجية للأورام في مستشفى جامعة الزقازيق. تم استخدام نسخة مصدق عليها من استبيان لاحتياجات الرعاية الداعمة، استبيان رضا مرضى السرطان و اسبيان لتقييم جودة الحياة بين هؤلاء المرضى. **النتائج:** أظهرت النتائج أن (٥٤,٨٪) من المشاركين أفادوا بأن لديهم احتياجات غير ملباة. لوحظت أعلى احتياجات الرعاية الداعمة غير الملباة في المجال النفسي. بلغت نسبة الرضا الإجمالي (٥٦,٤٪). لوحظ ان هناك درجة عالية من الرضا وجودة الحياه بين المرضى اللذين ليس لهم احتياجات داعمه مقارنة بمن لديهم احتياجات. **الخلاصة:** كانت الاحتياجات النفسية هي أكثر الاحتياجات غير الملباة شيوعاً، ويؤثر مستوى الاحتياجات المتصورة على جودة الحياة ومدى الرضا لدى المرضى. **التوصيات:** زيادة عدد جلسات الإرشاد النفسي للمرضى. توجيه اهتمام أكبر للناجين من ذوي الدخل المنخفض ممن لديهم احتياجات جسدية ونفسية عالية غير ملباة، حيث أنهم قد يواجهوا نوعية حياة أقل. ضمان جودة حياة أفضل للمرضى من خلال تقديم خدمات التعافي النفسي والبدني السريعة والفعالة في مجتمع الرعاية الصحية.