

## Assessment of Supportive Care Needs among Cancer Women Undergoing Chemotherapy

Dina Abd Elatief Beder Kandeel<sup>1</sup>, Shaimaa Fouad Mohammed<sup>2</sup>, Hanan El-Sayed Mohamed El-Sayed<sup>3</sup>



Nursing Specialist- at Samanood General Hospital<sup>1</sup>, Lecturer of Woman's Health and Midwifery Nursing<sup>2</sup>,  
Professor of Woman's Health and Midwifery Nursing<sup>3</sup>, Faculty of Nursing, Mansoura University, Egypt  
Corresponding author email: solyoso484@gmail.com

### 1.ABSTRACT

**Background:** Proper assessment of unmet needs for supportive care in cancer- women undergoing chemotherapy and providing this care in any problem with them is very important to improve their rehabilitation and lifestyle quality. **Aim:** This study aimed to assess the supportive care needs among cancer women undergoing chemotherapy. **Design:** The researchers used a descriptive study design. **Setting:** This research was carried out at Oncology Center in Mansoura University hospitals, Mansoura city, Dakahlia governorate, Egypt. **Sample type:** A purposive sample was utilized. **Study Sample:** The study sample included 354 women with cancer undergoing chemotherapy. **Tools:** Two tools were used; a structured interview questionnaire and Short -form supportive care needs questionnaire (SCNS –SF34). **Results:** More than half of the studied women reported high somatic & daily life and psychological needs, nearly half of them reported high patient surveillance & support and health system & information needs. Nearly half of them reported moderate sexuality needs. The demographic characteristics and medical history of the studied women had a highly statistically significant association with total supportive care needs score. **Conclusion:** Cancer women undergoing chemotherapy reported high need toward somatic & daily life, Psychological, patient surveillance & supportive and health system & information supportive care needs and moderate need toward sexuality. **Recommendation:** Greater attention should be given to provide supportive care needs for cancer women undergoing chemotherapy.

**Keywords:** Cancer women, chemotherapy, supportive care.

### 2.Introduction:

Cancer is one of the greatest significant general health problems in the world & expected to be the major barrier for raising life expectancy throughout the world in the twenty-first century (Khezri, Saveh, Kalhor, Rahnama, Roshani, 2022). Although the disease occurs all over the world, its incidence, death and survival rates vary greatly between different regions of the world which may be caused by a variety of factors such as population structure, lifestyle, genetic factors and environment, obesity, alcohol consumption, infections, ultraviolet radiation (Hariharan, Odjidja, Scott, Shivappa, Hebert, Hodge, 2022).

The statistics on cancer worldwide demonstrate that more than 19 million people were recently diagnosed in 2020 with cancer, moreover, this number is anticipated to enhance to 28 million in subsequent two centuries. In the united states, the expected number of new cancer cases in both males and females in 2022 are 1,918,030 and 609,360 deaths from cancer are anticipated to happen in the united states (Molassiotis & wang 2022). The most prevalent cancers among women are the breast, colon, endometrial, lung, cervical,

skin and ovarian malignancies . Breast cancer is one of the most dangerous malignancies and the primary reason of female cancer-related deaths globally (American cancer society, 2021).

The reported cancer treatment methods include surgery, radiotherapy, and systemic treatments such as chemotherapy, hormonal therapy, targeted therapy and immunotherapy. Cancer-related impacts of treatment can have a major effect on cancer patients including depression, anxiety, fear of relapse, decreased income, sexual dysfunction, interpersonal problems, inability to engage in full-time employment, social events and household duties (Nolden, Hwang, Boltong, Reed, 2019).

Individuals receiving chemotherapy often experience various nutrition-related adverse effects from cancer treatment, including alteration in taste and smell, nausea, diarrhea, appetite loss and discomfort during eating. These adverse effects can significantly affect nutritional status and quality of life ( Milliron, Packel, Dychtwald, Klobodu, Pontiggia, 2022).

Supportive care is a person centered approach which requires determining the patient's care needs to provide the essential assistance for individuals having cancer or dealing with it to satisfy their somatic, psychological, religious, sexual, social, practical and informational requirements through pre-diagnosis, therapy and survival of cancer (Donmez, Alici, Borman, 2021).

Nurses play crucial role in Prospective analysis of variation of unmet supportive care demands of cancer patients and the factors that influence them at various treatment intervals which is in high demand to enhance cancer patients' quality of life and recovery. Evaluating these needs also offers a direct response of the patient preferences for support and lack of services (Mohd Shariff, Azman, Hami, Mujar, Abdullah, 2021).

### 2.1 Significance of study

Cancer is the major global public health problem. After deaths from cardiovascular diseases and traffic accidents, death due to cancer ranks third (Sheikhalipour, Ghahramanian, Fateh, Ghiahi & Onyeka, 2019) The estimated deaths from cancer in 2019 in women was 285,210. From which 68,350 women died from digestive system cancer, 67,130 from respiratory system cancer, 700 from bones & joints cancer, 10,130 from urinary system cancer, 41,760 from breast cancer, 33,100 from gynecological cancer (Siegel, Miller & Jemal, 2019).

In Egypt, the national and regional incidence rates were estimated. Age-adjusted rate of occurrence per 100,000 people were 166.6 (both sexes), 175.9 for men and 157.0 for women. The liver (23.8%), breast (15.4%), and bladder (6.9%) were the most prevalent locations (both sexes). Men's liver (33.6%) and bladder (10.7%) and women's breast (32.0%) and liver (13.5%) (Ibrahim, Khaled, Mikhail, Baraka & Kamel, 2014). The total number of cases who admitted the Oncology Center, Mansoura University in 2021 was 54323 among them there was 35667 female.

The diagnosis of cancer is accompanied by many negative consequences that have effect on every aspect of a woman's life and the temporary side effects from therapy may also have an impact on patients' quality of life in terms of their health (Hassen, Taye, Gizaw & Hussien, 2019).

The provision of care for women's diverse requirements after cancer detection and throughout the chemotherapy period would result in improved physical and emotional symptoms management, fewer chemotherapy-related side effects and better

life quality. Additionally, it would lessen therapy regimen disruptions and raise fulfilment of patients with the providing care (Shams, Jabbar, Nanji, jan & Tharani, 2018). There is a little research on addressing the supportive care needs of cancer women undergoing chemotherapy so this study was conducted.

### 2.2 Aim of the Study

This study aimed to assess supportive care needs among cancer women undergoing chemotherapy.

### 2.3 Research question:

What are the supportive care needs of women undergoing chemotherapy?

## 3. Method

### 3.1 Study Design:

A descriptive study design was utilized to fulfill this research which is observational studies that explain the patterns of disease occurrence regarding the factors such as person, place and time.

### 3.2 Study Setting:

The research was carried out at Oncology Center in Mansoura University hospitals. Oncology center includes 11 floor, the first floor is divided into three parts; blood withdrawal laboratory, Recording part, Blood donor part, the second includes medical clinics & chemical composition, the third and fourth includes administration offices, the fifth includes laboratory department, the sixth includes Medical and surgical ICU, operational department, the seventh includes pediatric department and ICU, the eighth includes female surgery and medical department, the ninth includes male and female medical department, the tenth includes blood diseases department and male surgical department and the eleventh includes bone marrow implantation units and clinics. Blood diseases clinics works at Saturday and Tuesday from 8 am to 4 pm. Medical clinics works at Sunday, Monday, Wednesday and Thursday from 8am to 4pm. Surgical clinics every day from Saturday to Thursday from 8am to 2pm. The flow rate for cases every day about 6 cases or more at the medical department.

**3.3 Sample type:** A purposive sample was used.

**Study sample:** This study included 354 female with cancer undergoing chemotherapy at medical department of oncology center, Mansoura university they chosen according to the following inclusion criteria (1) women being affected by cancer irrespective of its stage, (2) age  $\geq$  18 years,

(3) undergoing chemotherapy and exclusion criteria as (1) women diagnosed with cancer in less than a month, (2) having multiple malignancies at the same time and undergoing chemotherapy or radiotherapy due to the relapse of the disease.

#### Sample size calculation:

Based on data literature from Williams et al. (2018) to determine needs for supportive care of women facing gynecological cancer, their fulfillment with assistance and explore associations between participant's demographic characteristics and indicated needs. considering power of study of 80% ,to calculate the sample size with precision / absolute error of 5% and type 1 error of 5% : 
$$\text{Sample size} = [(Z_{1-\alpha/2})^2 \cdot P(1-P)] / d^2$$
 Where  $Z_{1-\alpha/2}$  = is the standard normal variate, at 5% type 1 error ( $p < 0.05$ ) it is 1.96. P= the expected proportion in population based on previous studies. d= absolute error or precision. So, Sample size =  $[(1.96)^2 \cdot (0.36) \cdot (1-0.36)] / (0.05)^2 = 354.0$ . Based on the above formula, the sample size required for the study was 354 cancer women undergoing chemotherapy.

#### 3.4 Tools of Data collection:

Two tools were used to collect data

##### Tool I: A Structured interview questionnaire:

This tool was developed by the researcher after reviewing the national and international relevant literature. It composed of three parts: **Part 1: General characteristics** of the women as age, marital status, working status, women educational level, husband educational level, income status and residence. **Part 2: Obstetric history** as gravidity, parity, age of marriage, use of breastfeeding and family planning methods. **Part 3: Medical history** as hypertension, diabetes mellitus, renal disease, GIT disease, liver disease, heart disease, respiratory disease.

##### Tool II: Short -form supportive care needs, survey questionnaire (SCNS –SF34)

This tool was adopted from Boys (2009) to assess supportive needs for women with cancer and encompassed 34 items that addressed five dimensions such as the supportive needs in the somatic and daily life (5 items), Psychological (10 items), patient surveillance & support (5 items), health system & information (11 items) and sexual (3 items). **Scoring system:** The subjects responded to each section based on a 5 point likert scale including no need - no use, the lack of need, low need, average need and high need ranging from 1 to 5 respectively. Total score is 34 -170. A higher score indicated higher needs. It was categorized as

low need < 50%, moderate need from 50% to 65% & high need  $\geq 65\%$ .

#### 3.5 Validity of the tools:

The content validity of the tools was reviewed by a panel of three experts in Woman's Health & Midwifery Nursing specialty before using it to ensure that the questions were consistently conveyed and carried the anticipated meaning that they were prepared for and no changes were done.

#### 3.6 Reliability of the tool II:

The Cronbach alpha coefficient for internal consistency of the studied women somatic and daily life needs was (0.845). It was (0.832) for psychological needs, (0.857) for patient surveillance & supportive care needs, (0.817) for health system & information needs and (0.876) for the sexuality needs. Also, it was (0.902) for total short form supportive care needs questionnaire. Therefore the questionnaire was determined to be highly reliable.

#### 3.7 Ethical Considerations:

Ethical approval was obtained from the Research Ethics Committee at the Faculty of Nursing in Mansoura University to implement the study. Official permission to carry out the study was obtained from the director of Oncology Center at Mansoura University. Oral consent was obtained from each cancer woman undergoing chemotherapy participated in the study after explanation of the purpose and approach of the research. All cancer women were reassured about the confidentiality of the collected data. In addition, the right to withdraw from the research was permitted.

#### 3.8 Pilot study:

The Pilot study was conducted prior to data collection on 10% (35) of cancer women undergoing chemotherapy to evaluate the clarity and applicability of these tools. Based on the findings of the pilot study no modifications were done and the pilot study was excluded from the study sample.

#### 3.9 Field work

- This study was conducted in the above mentioning setting from the beginning of November 2021 to the end of January 2022.
- Ethical approval was obtained from the Research Ethics Committee at the Faculty of Nursing, Mansoura University to implement the study.

- Official permission to carry out the research was obtained from the director of Oncology Center at Mansoura University hospital.
- After reviewing the relevant literatures, the researcher prepared data collection tools.
- The researcher attended at medical department of Oncology Center, Mansoura University three days per week (Sunday, Monday and Wednesday) from 9Am to 1 Pm until the estimated sample was obtained.
- The researcher introduced themselves to each woman and obtained her oral consent to engaged in the research after explanation of the aim.
- The researchers collected socio-demographic data, obstetric history & medical history from each woman.
- The researcher assessed the needs for supportive care of cancer women undergoing chemotherapy as somatic & daily life needs, psychological needs, patient surveillance & support, health system & information and sexuality needs.
- The researcher stayed about 30 to 45 minutes with every woman to complete the questionnaire.
- This process was repeated until the researcher completed the predetermined sample
- The collected data was stored, categorized, coded, computerized, tabulated and analyzed using statistical package for social sciences (SPSS) version 21.

### 3.10 Data Analysis phase

All statistical analyses were using SPSS for windows version 20.0 (SPSS, Chicago, IL). Continuous data were normally distributed and were expressed in mean  $\pm$  standard deviation (SD). Categorical data were expressed in number and percentage. Chi-square test was used for comparison of variables with categorical data. The reliability (internal consistency) test for the questionnaires used in the study was calculated. Statistical significance was set at  $p \leq 0.05$ .

### 4. Results

**Table 1.** Shows that 44.6% of the studied women aged  $\geq 25$ -40 years with Mean  $\pm$  SD  $25.7 \pm 3.7$ . 39.5% of them had university education & their husbands (42.5%) had secondary education. 66.1% of them were married and 57.3% were from rural areas.

**Table 2.** Shows that 67.4% of the studied women married at age  $\geq 20$  years with Mean  $\pm$  SD

$21.8 \pm 3.7$ . 45.7% of them were grvida one to two. 52.3% of them were para one to two. 53.9% of them didn't breastfed their babies and 60.1% of them used family planning methods.

**Figure 1.** Shows that less than one quarter of the studied women had medical history of diabetes mellitus, GIT disease, HTN, renal disease, heart disease, liver disease & respiratory diseases (24.3%, 21.8%, 18.9%, 15.3%, 8.5%, 5.6% 4.5%, respectively).

**Table 3.** Shows that more than one third of studied women reported high supportive care need for pain, lack of energy /tiredness, feeling ill a lot of the time, work in the house & ability to do the usually things (42.4%, 33.9%, 36.4%, 35.0% & 46.6%, respectively).

**Table 4.** Shows that more than one third of studied women reported high supportive care needs for anxiety, feeling down or depressed, fears about the cancer spreading, worry that the results, accepting changes in appearance, concern about the future, experiencing death and concerns regarding worries of those near to them (35.9%, 37.9%, 33.3%, 38.4%, 33.6%, 35.6%, 37.0%, 39.8% respectively). (28.0%, 22.6%, respectively) of them reported moderate supportive care needs for learning to feel in control of situation and maintaining a positive outlook.

**Table 5.** Shows that more than one third of studied women reported moderate supportive care need for the presence of greater selection of cancer specialist they see, the hospital they go to and hospital personnel a cknowledgeed and showed awareness to their feelings and emotional needs (34.2%, 37.9%, 33.3%, respectively). Less than half of them reported high supportive care need for reassurance by health professionals & hospital staff attend to their physical needs (42.1%, 41.0% respectively).

**Table 6.** Shows that (38.7%, 36.2%, 36.2% respectively) of the studied women reported high supportive care need for being adequately informed of advantages & side effects of therapy, regarding items that help themselves to get well and having individual of hospital staff to discuss all aspects of disease, therapy & follow up. More than one third (42.4%, 42.9%, 38.4%, 35,3% respectively) of them reported moderate supportive care needs related to being given explanation of tests, being informed about test results as soon as feasible, having access to professional counseling if necessary and being treated in hospital that is physically comfortable. More than one quarter (25.1%, 28.0%, 26.3% & 28.8% respectively)

reported low need for being given written information about important aspect of care, information about managing illness and adverse effects at home, aspect about cancer which is under control and treated like a person not just a condition.

**Table 7.** Shows that more than one third of studied women reported low supportive care need for changes in their ability to have sexual intercourse, changes in sexual feelings & concerns about fulfilling their role as a partner (36.4%, 36.4%, and 36.7%, respectively).

**Table 8.** Shows that more than half of studied women reported high supportive care needs for somatic & daily life and psychological supportive care needs (57.6%, 58.8%, respectively). Nearly half (46.3%, 49.7%, respectively) of them reported high needs for patient surveillance & support and health system & information needs. 48.6% of them reported moderate sexuality needs.

**Figure 2.** Show that nearly half (46.6%) of the studied women reported high total supportive care needs, 36.2% of them reported moderate supportive care needs, while 17.2% of them reported low supportive care needs.

## 5. Discussion

The current research aimed to assess supportive care needs among women undergoing chemotherapy. This aim was achieved through the present study findings which revealed that approximately half of women in the study reported high supportive care needs while less than one quarter reported low supportive care needs, there was statistical significant association between the studied women sociodemographic characteristics and medical history with their supportive care needs. Consequently, the question of the current research which is; "what are the supportive care needs of women undergoing chemotherapy" was answered.

The present study findings showed that more than half of the studied women reported high somatic & daily life supportive care needs. In agreement with the present study, **Edney, Roseleur, Gray, Koczwara, Karnon. (2022)** study to map the width of evidence for interventions highlighting those with current evidence base as well as those requiring further study. They found that most of the studied women had high need of supportive care regarding somatic and daily life needs.

Also, in parallel to the present study finding, **Depping, Uhlenbusch, Kodolitsch (2021)** to

evaluate needs for supportive care of cancer women. They concluded that more than half of the studied women had relatively high degree of supportive care needs regarding somatic and daily life.

The agreement between the studied results may be due to most of the studied women suffering from lack of energy, tiredness and other side effects of chemotherapy which resulted in decreased physical wellbeing.

While the finding of the present study were in conflict with **Webb, Murray, Younger (2021)** study to determine and synthesize perceptions of locations expressed by cancer patients where they require assistance throughout their care. They showed that less than half of studied women reported unmet supportive care needs regarding somatic & daily life. This disagreement may be due to the studied women maintains and encompasses "the daily round of activities that keep a functioning family, which also includes the useful activities engaged in the treatment of a disease, combined with attempting to preserve the pre-diagnosis structure of life

The present findings demonstrated that more than half of the studied women reported high psychological needs. In accordance with the present study findings, **Okati-Aliabad, Moghadam, Mohammadi (2022)** they looked into the frequency of anxiety and depression and their associated factors in women with cancer that more than half of the women in the study and concluded that have relatively high degree of supportive care needs regarding psychological needs

Additionally, similar to the results of the present study, a research conducted by **Al Omari, Al-Rawashdeh, Damsees, Ammar, Alananzeh (2021)** to locate gaps in needs for supportive care between adult cancer survivors seen at King Hussein Cancer Center in Amman, Jordan and investigated the indicators of unmet requirements. They found that more than half of the women in the study have relatively high degree of supportive care needs regarding psychological needs.

The agreement between the studied results may be due to the influence of the disease and the psychological symptoms which comprise fear, sadness, and discomfort, despair, anxiety about relapsing, worry about the results of medical therapy, unpredictability of the future, and thoughts upon death. Also, may be due to diagnosis and therapy of cancer impact the patient's life in all ways as well as unhealthy body image substantial



affect individuals' mental health negatively and induce stress and despair.

While the present study findings disagreed with **Sodergren, Wheelwrigth, Permyakova, Patel, Calman. (2019)** who investigated unmet requirement for cancer patients after the course of treatment and if there are any unfulfilled needs gradually get better. They found that approximately one quarter of patients having at least one moderate or serious unmet requirement regarding psychological needs. This disagreement may be due to Patient reported outcome measures (PROMs) centred on enhancing quality of life in relation to health and meeting needs and care, and gathered data on physical or psychological issues that could otherwise go unnoticed..

The results of the present research showed that less than half of the studied women reported high patient surveillance & supportive care needs. In accordance with the present research findings **Menti et al. (2021)** they revealed that nearly half of women in the study had high need regarding patient surveillance and support.

In agreement with the results of the present study, a research done by **Williams, Griffin, Farrell, Rea, Murray. (2018)** they determined needs for supportive care for women in Western Australia suffering from cancer, their appreciation of assistance and investigate associations between participant's demographic characteristics and determined needs. They showed that less than half of the studied women reported high patient surveillance and needs for support as the acknowledgement of hospital staff as well as sensitivity to their requirements on an emotional level.

The agreement between the studied results may be due to patient need to feel more useful within their family and they need to feel more reassured by their relatives & medical staff in hospital and may be due to identified supportive care needs by nurses which determined their preferred service format.

While, the present study finding disagreed with **Husson et al. (2021)**. They found that less than one quarter of the studied women had high, moderate patient surveillance and supportive care needs. This disagreement may be due to health care providers provided them reassurance and responded to their physical & emotional needs.

The current research findings revealed that nearly half of the women who were investigated reported high health system and information supportive care needs. In agreement with the

present study findings **Al-Husban , Obeidat, Shamieh (2021)** study to investigate the unmet supportive care needs and their indicators between Jordanian survivors with patient cancer. They concluded that approximately half of women in the study had high informational and supportive care needs in the health system.

Also, in agreement with results of the current research, **Williams et al (2018)** revealed that nearly half of the women in the study had high health system & information needs. The agreement of the studied results may be due to most of patients wanted to know their test results as soon as possible and need the significance of the outcome be clarified to them, also the information given by healthcare personnel often is good but insufficient & need to emphasize the importance of nursing and provision of care rather than just a dependence on the actual medical treatment.

While, in contrary with the current research findings **Edney, et al. (2022)** revealed that greater than a third of the studied women had high demands for supporting care and the health system. Additionally **Webb, et al. (2021)** found that more than one third had high need regarding health system & information needs. The disagreements between studies results may be due to highest ranked needs were receiving test results information as soon as possible, and being regarded as an individual and not just a case

The present study findings revealed that nearly half of the women in the study reported moderate sexuality supportive care needs. In accordance with the results of the present research, a research done by **Al Omari et al. (2021)** they revealed that nearly half of the women in the study having moderate sexuality needs which was expressed by married participants. Also, In agreement with the present study findings, a research done by **Mawardika et al. (2019)** who revealed that Only a small number of cancer patients need extensive sexual support services.

The agreement between the studied results may be due to the majority of patients viewed sexual needs as extremely personal and sensitive and they weren't anticipating receiving supported nursing care for this need and these patients had been focused on other topics that are more important like the metastasis of cancer, controlling side effects of treatment and survival.

While, the present study findings disagreed with **Depping et al . (2021)** who showed that nearly half of the studied women had high sexuality needs. This disagreement may be due to

participants reported to wish for more support than they currently receive in sexual relationships. In response to the open-ended question about encourage wishes, participants identified support needs with respect to sexuality.

The current research findings revealed that nearly half of the women in the study reported high total supportive care needs, while less than one quarter reported low needs for supportive care. In agreement with the present study findings, **Cochrane, Woods, Dunne, Gallagher. (2021)** to thoroughly review the data on the relationship between quality of life and unmet supportive care needs in women with cancer. They found that nearly two thirds of women in this review had been diagnosed with cancer which could explain the high degree of reported needs.

The results of the current study revealed that there was a highly statistical significant association between the studied women of supportive care needs & their sociodemographic features. As women aged  $\geq 25$ -40 years, had university education, their husbands had secondary education, married, housewives, hadn't enough income & from rural areas reported high supportive care needs.

In agreement with the current research, **Al Omari et al. (2021)** revealed that younger participants of cancer women had higher need in somatic and daily life needs & income status especially low income was strongly correlated with higher physical needs. Marital status was strongly connected to physical needs. Higher educational level among cancer survivors was associated with high physical and financial needs.

Also, **Al-Husban et al. (2021)** found that age, marital status, educational level, income and residence were significantly related to supportive care needs. There was higher supportive care needs in patients with low income status and most of them from rural areas. Finally housewives needed more support than working women. While, the present study finding disagreed with **Okati-Aliabad et al. (2022)** who revealed no association between marital status, age, level of education, stage of the disease, type of surgery and treatment with anxiety and depression in cancer women.

The results of the current research revealed that there was statistical significant association between studied women supportive care needs and their medical disease. As women with history of diabetes mellitus, GIT disease and heart disease reported high supportive care needs. In agreement with the results of the current research **Husson et**

**al. (2021)** showed that patients with chronic disease and any other medical disease have significant relation with supportive needs in all 5 domains. The patients are more likely to have increased hospital visits and therefore had higher level of supportive care needs Also, **Webb et al. (2021)** found that unmet needs as informational needs, somatic needs, psychological needs, patient surveillance & support needs and sexuality needs were identified according to the different forms of chronic disease.

Therefore, assessment of supportive care needs among cancer women undergoing chemotherapy helps them to manage the disease during the phases of diagnosis, therapy and post-treatment

## **6. Conclusion**

The present study question was answered where cancer women undergoing chemotherapy reported high somatic & daily life, Psychological, patient surveillance & supportive and health system & information supportive care needs and moderate sexuality needs.

## **7. Recommendations**

- Greater attention should be given to meet supportive care needs for cancer women undergoing chemotherapy.
- Periodic and ongoing assessment of cancer women should be done to determine the somatic and psychological needs and helping them feel in control of situation.
- Reassuring cancer women and allowing them more choice about cancer specialists.
- Providing simple and comprehensive educational booklet about information & health care needs for women and also including how to manage side effects of chemotherapy.
- Health education for cancer women regarding alterations in ability to have sexual intercourse and alteration in sexual feeling.

## **Further studies**

- Conducting an extensive study at different settings
- Educational program is needed for health care providers for training them to meet cancer patient's needs.

## **8. Acknowledgement**

The researcher acknowledged every cancer women for their participation in the research article.

## 9. Conflict of interest

The authors had no conflict to declare.

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**Table 1. Distribution of the studied women according to their socio- demographic characteristics**

Items	no (354)	%
<b>Age (Years)</b>		
18 – 25	95	26.84
≥25 – 40	158	44.63
> 40	101	28.53
<b>Mean ±SD</b>	25.7 ±3.7	
<b>Women educational level</b>		
Can't read or write	59	16.7
Basic	88	24.9
Secondary	67	18.9
University	140	39.5
<b>Husband's educational level (n=341)</b>		
Can't read or write	51	15.0
Basic	88	25.8
Secondary	145	42.5
University	57	16.7
<b>Marital status</b>		
Single	13	3.7
Married	234	66.1
Divorced	52	14.7
Widow	55	15.5
<b>Occupation</b>		
Housewife	252	71.2
Working	102	28.8
<b>Residence</b>		

Urban	151	42.7
Rural	203	57.3

Table 2. Distribution of the studied women according to their obstetric history

Items	no (341)	%
<b>Marriage age (Years)</b>		
< 20	111	32.6
≥ 20	230	67.4
<b>Mean ±SD</b>	21.8 ±3.7	
<b>Gravidity</b>		
None	31	9.1
One to two	156	45.7
More than two	154	45.2
<b>Parity (n=310)</b>		
One to two	162	52.3
More than two	148	47.7
<b>Breast Feeding (n=310)</b>		
Yes	143	46.1
No	167	53.9
<b>Family Planning</b>		
Yes	205	60.1
No	136	39.9

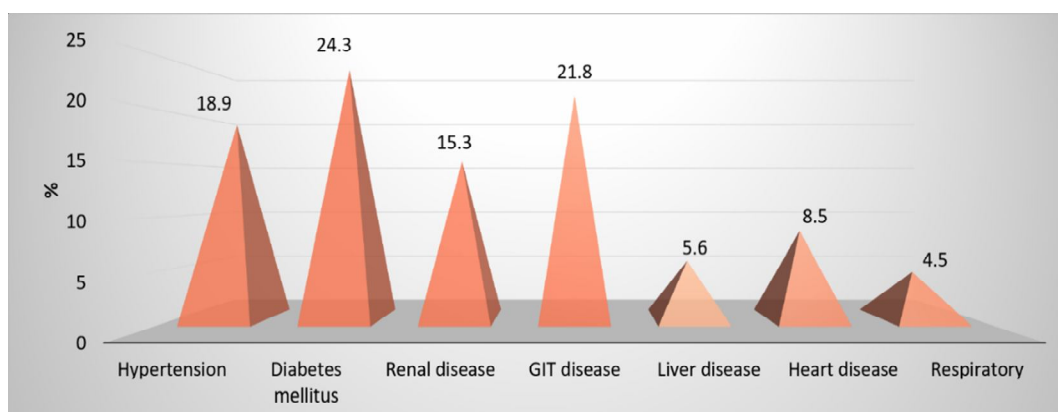


Figure 1. Distribution of the studied women according to their medical history

Table 3. Number and distribution of the studied women according to their somatic and daily life supportive care needs (no= 354).

Items	No need		Lack of need		Low need		Moderate need		High need	
	n	%	N	%	n	%	n	%	n	%
<b>Pain</b>	2	0.6	12	3.4	78	22.0	112	31.6	150	42.4
<b>Lack of energy/ tiredness</b>	0	0.0	18	5.1	99	28.0	117	33.1	120	33.9
<b>Feeling ill a lot of the time</b>	5	1.4	38	10.7	97	27.4	85	24.0	129	36.4
<b>Work in the house</b>	10	2.8	69	19.5	115	32.5	36	10.2	124	35.0
<b>Being able to do the usually things</b>	14	4.0	89	25.1	20	5.6	66	18.6	165	46.6

**Table 4. Number and distribution of studied women according to their psychological supportive care needs (no = 354)**

Items	No need		Lack of need		Low need		Moderate need		High need	
	n	%	N	%	n	%	n	%	n	%
Anxiety	5	1.4	28	7.9	99	28.0	95	26.8	127	35.9
Feeling down or depressed	3	0.8	24	6.8	113	31.9	80	22.6	134	37.9
Worry about the cancer spreading	4	1.1	63	17.8	53	15.0	116	32.8	118	33.3
Worry that the results are beyond control	13	3.7	59	16.7	31	8.8	115	32.5	136	38.4
Accepting changes in appearance	6	1.7	63	17.8	58	16.4	108	30.5	119	33.6
Uncertainty over the future	10	2.8	73	20.6	98	27.7	47	13.3	126	35.6
Learning to feel in control of situation	21	5.9	79	22.3	56	15.8	99	28.0	99	28.0
Keeping a positive outlook	31	8.8	86	24.3	52	14.7	80	22.6	105	29.7
Experiencing death or dying	1	0.3	15	4.2	99	28.0	108	30.5	131	37.0
Concerns about worries of those close to you	10	2.8	43	12.1	95	26.8	65	18.4	141	39.8

**Table 5. Number and distribution of the studied women according to their patient surveillance and support (n=354).**

Items	No need		Lack of need		Low need		Moderate need		High need	
	N	%	N	%	N	%	N	%	N	%
More choice about cancer specialists	115	32.5	27	7.6	89	25.1	121	34.2	2	0.6
More choice about hospital attend	131	37.0	26	7.3	53	15.0	134	37.9	10	2.8
Reassurance by health professionals that the way feel is normal	3	0.8	21	5.9	52	14.7	129	36.4	149	42.1
Hospital staff attending to physical needs	2	0.6	38	10.7	118	33.3	51	14.4	145	41.0
Hospital staff acknowledging, and showing sensitivity to feelings and emotional needs	5	1.4	31	8.8	83	23.4	118	33.3	117	33.1

**Table 6. Number and distribution of the studied women according to their health system and information supportive care needs (n=354).**

Items	No need		Lack of need		Low need		Moderate need		High need	
	N	%	N	%	N	%	N	%	N	%
Given written information about the important aspects of care	39	11.0	97	27.4	89	25.1	98	27.7	31	8.8
-Given information about aspects of managing illness and side-effects at home	32	9.0	83	23.4	99	28.0	106	29.9	34	9.6
Given explanation of tests which would like explanations	2	0.6	13	3.7	85	24.0	150	42.4	104	29.4
Adequately informed about the benefits and side-effects of treatments before choose to have them	4	1.1	21	5.9	44	12.4	148	41.8	137	38.7
Informed about test results as soon as feasible	5	1.4	39	11.0	112	31.6	152	42.9	46	13.0
Informed about cancer which is under control	18	5.1	89	25.1	93	26.3	52	14.7	102	28.8
Informed about things that can do to help themselves to get well	11	3.1	29	8.2	101	28.5	85	24.0	128	36.2
Having access to professional counselling if need it	63	17.8	57	16.1	80	22.6	136	38.4	18	5.1
Treated like a person not just a case	14	4.0	74	20.9	102	28.8	111	31.4	53	15.0
Treated in a hospital or clinic that is as physically pleasant as possible	3	0.8	49	13.8	121	34.2	125	35.3	56	15.8
Having one member of hospital staff with whom can talk about all aspects of condition, treatment and follow up	4	1.1	17	4.8	84	23.7	121	34.2	128	36.2

Table 7. Number and distribution of the studied women according to their sexuality supportive care needs (n=354).

Items	No need		Lack of need		Low need		Moderate Need		High need	
	N	%	N	%	N	%	n	%	N	%
Changes in ability to have sexual intercourse	76	21.5	94	26.6	129	36.4	36	10.2	19	5.4
Changes in sexual feeling	101	28.5	78	22.0	129	36.4	38	10.7	8	2.3
Concerns about fulfilling role as a partner	95	26.8	65	18.4	130	36.7	50	14.1	14	4.0

Table 8. Total score of supportive care needs domains among the studied women

Items	Low Need		Moderate Need		High Need	
	N	%	N	%	N	%
The somatic and daily life	51	14.4	99	28.0	204	57.6
Psychological needs domain	38	10.7	108	30.5	208	58.8
Patient surveillance and support	68	19.2	122	34.5	164	46.3
Health system and information needs	38	10.7	140	39.5	176	49.7
Sexuality needs	108	30.5	172	48.6	74	20.9

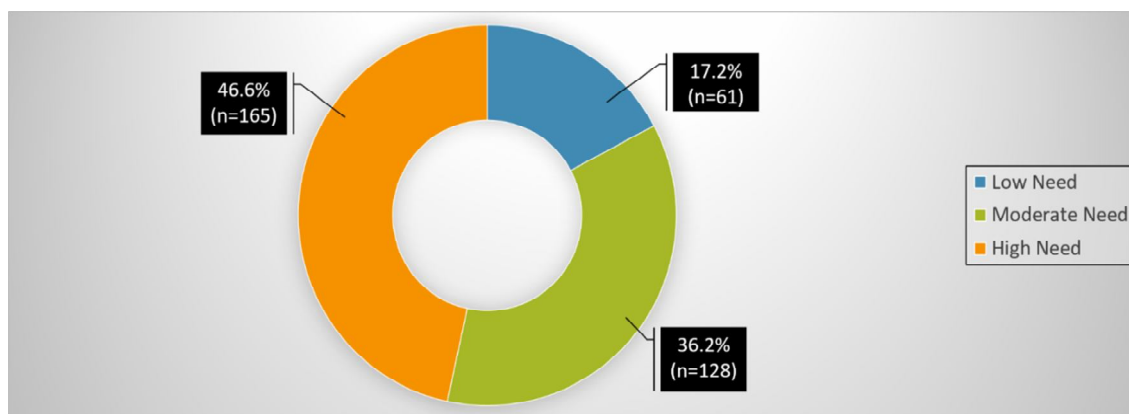


Figure 2. Total score of the studied women's supportive care needs.